

Annual Report 2003

and financial statements



TEAGASC ANNUAL REPORT 2003 & FINANCIAL STATEMENTS

To the Minister for Agriculture and Food
Pursuant to Section 13 of the Agriculture
(Research, Training and Advice) Act 1988,
The Teagasc Authority presents its reports for the
period 1 January 2003 to 31 December 2003.

An Irish language version of this
report is also available.

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About Teagasc

Teagasc – the Agriculture and Food Development Authority – is the national body providing integrated research, advisory and training services to the agriculture and food industry and rural communities. It was established in September 1988 under the Agriculture (Research, Training and Advice) Act, 1988.

Teagasc is governed by an eleven-member Authority. The Chairman and five ordinary members are appointed by the Minister for Agriculture and Food and remaining members are appointed by the Minister following nominations from designated organisations.

In 2003, research services were delivered at nine dedicated centres covering food processing, dairying, beef, sheep, arable crops, horticulture, environmental protection, economics and rural development.

Independent advice to farmers and rural dwellers was provided by local advisers and regional specialists from a network of regional, county and local centres.

Training for young entrants, adult farmers, rural dwellers and the food industry was provided by teachers and technologists at eight colleges as well as local training centres and research centres.

In 2003, Teagasc employed 1,628 staff, including permanent and contract staff. This was comprised of 796 professional staff, 254 technical staff, 268 administrative/clerical staff and 310 farm/domestic staff.



Mission Statement

To provide an independent and authoritative research knowledge base, technology transfer and training services for the sustainable development of agriculture and the food processing industry to enable it to respond profitably to consumer demands and requirements and contribute to a vibrant rural economy and society.

Teagasc Senior Management



Jim Flanagan
Director



Mr Tom Kirley
Director of Administration



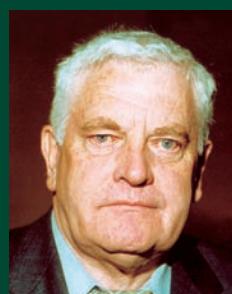
Dr Seamus Crosse
Director of Operations,
Production Research



Dr Vivion Tarrant
Director
National Food Centre



Dr Liam Donnelly
Director, Dairy Products
Research Centre



Mr Michael Galvin
Director, Teagasc South
Advisory/Training Services



Mr Donal Carey
Director, Teagasc North
Advisory/Training Services



Mr Peter Seery
Director of Operations,
Management Services



Tom Gill

Agricultural Development Officer with Teagasc at Westport, Co. Mayo; representing Teagasc staff.



Mr Jim Beecher

Assistant Secretary with the Department of Agriculture and Food



Mr Joe Fitzgerald

Farmer and member of the Administrative Committee and National Council of the Irish Creamery Milk Suppliers Association.



Mr Jerry Henchy

Chief Executive, Dairygold Co-operative Society Ltd.



Dr Tom O'Dwyer

Chairman

Held a number of key positions in the EU Commission in Brussels, including Director of Livestock Products, Director General of Education, Training and Youth and Chef de Cabinet to two EU Commissioners.



Mr Patrick Kelly

Farmer and former National Chairperson of Macra na Feirme



Mr Ruaidhri Deasy

Farmer and Deputy President of the Irish Farmers Association



Mr Michael O'Dwyer

Farmer and former President of the Irish Co-Operative Organisation Society.



Ms Anna May McHugh

Managing Director, National Ploughing Association



Mr James Brett

Managing Director, Brett Group, Callan, Co. Kilkenny



Prof Pat Fottrell

Former President of National University of Ireland, Galway



Director's Review

I am pleased to report another year of solid achievement in the delivery of integrated research, advisory and training services to the agriculture and food industry.

As the key provider of technology, Teagasc continued to play a central role in helping the industry to successfully meet the challenges resulting from an ever-changing policy framework and continuing change in consumer demands and expectations. In addition to underpinning competitiveness and innovation in farm and food production, our services in 2003 were also strongly focused on environmental sustainability, animal welfare and farm and food safety.

Research

A total of 275 research projects were undertaken by 200 scientists, supported by 120 postgraduates. Research covered food safety and quality, food processing, livestock, tillage, horticulture, forestry, environmental control, economic analysis and rural development.

The contribution of Teagasc research to the economy was highlighted by

an independent analysis published during 2003. It showed that the return on investment in agricultural research in Ireland is ten times the level advocated by the Department of Finance for public sector investment projects.

Carried out by Professor Gerry Boyle of NUI, Maynooth, it showed that the average return on investment in seven areas of research was 47%. This compares with a minimum rate of 5% advocated by the Department of Finance for public sector investment projects.

Highlights of our research activities in 2003 included the detailed analysis by our economists of the impact of the agreement on the mid-term reform of the EU Common Agricultural Policy. This analysis helped to guide Ireland's negotiating position and our decision on the most effective implementation strategies for the new policy. It also helped to inform farmers and industry on the impact of the new policies at farm level and on the agriculture and food industry.

As the key provider of technology, Teagasc continued to play a central role in helping the industry.

The Teagasc food research programme had a number of notable successes in 2003. One example was the establishment of the Alimentary Pharmabiotic Centre, a joint venture involving the Teagasc Dairy Products Research Centre at Moorepark and University College Cork (UCC). The awarding of €16.5m to this project by Science Foundation Ireland represents a vote of confidence in the scientific expertise at Teagasc Moorepark and its UCC partners.

Substantial progress was also made during 2003 on the establishment of new research facilities in Teagasc. The new plant biotechnology centre at Oak Park Research Centre was commissioned during the year and the new animal and food biotechnology centre at Moorepark was brought to the near-completion stage. These facilities and the newly recruited scientists will lead to an enhanced research programme and will enable Teagasc to further expand its already strong linkages with the leading research institutes and the foremost scientists in the world.

In production research, our scientists continued to fine-tune blueprints for low-cost, grass-based milk, beef and sheep production. Advances were made on producing the right strain of dairy cow for the Irish grass-based production system while new information gleaned from gene technology has the potential to deliver significant spin-offs for animal fertility.

New gene technology also played a crucial role in diagnosing resistance levels of the major cereal disease, *Septoria Tritici*, to the newer fungicides. Teagasc expertise was vital in devising the most effective strategies to counteract this potentially serious problem for cereal growing in Ireland.

Advisory Services

The Teagasc advisory services continued to provide the necessary technologies for the commercial farming sector to benefit from increased scale, while also adopting the latest cost-reduction technologies and most efficient production systems. The growing

number of part-time farmers, who account for a significant proportion of agricultural output, were also a key target of our advisory services. More flexible services were put in place in order to meet the particular needs of this group.

Following the agreement on the mid-term review of the Common Agricultural Policy in July 2003, our advisers were actively involved in an intensive information campaign on the details of the fundamental changes and their impact on farmers. Towards the end of the year, a specialised 'Planning Post Fischler' advisory programme was established. This is focused on providing the best advice to farmers on adapting to the radical policy changes which come into effect in January 2005.

Education and Training

A total of 16,000 participated in training provided by Teagasc for young entrants to the industry, adult farmers and the food industry in 2003. The number of third-level courses, provided jointly by Teagasc

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and institute of technology partnerships, increased from nine to eleven.

Teagasc entered the area of e-learning for the first time in 2003, with the establishment of an on-line learning website and the provision of a pilot course. Plans were advanced for the development of an on-line learning unit in Teagasc. This, together with more flexible programmes offered at night and weekends, combined with the provision of distance learning, will enable us to more effectively meet the training needs of people who are combining farming with another career.

Rationalisation

Against the background of a significant cutback in Teagasc finances in 2003 and the necessity to protect priority research, advisory and training services, the Teagasc Authority decided to consolidate its resources on fewer centres.

The Head Office in Dublin was sold and plans were made to relocate

staff to the National Tillage Research Centre at Oak Park, Carlow. Staff in the Rural Economy Research Centre, who located at the Dublin Head Office, are being relocated to Mellows Centre, Athenry.

The Soft Fruit Research Centre at Clonroche, Wexford, was also sold during 2003. The soft fruit research activities carried out at Clonroche are being transferred to other larger research centres. The Teagasc facility at Lullymore, Co. Kildare was also sold.

The Authority also decided to discontinue vocational training for young people at Mellows College, Athenry and to transfer the Vocational Certificate in Organic Farming course from Mellows to Mountbellew College. As part of a rationalisation of advisory service facilities, the advisory office at Corduff, Co. Dublin was sold and staff were relocated to the Dublin County Advisory and Training Centre at Kinsealy. A number of small rented advisory offices were also closed.

Capital Investment

Significant capital investment took place in 2003, particularly in the refurbishment of colleges and the provision of new research facilities.

New teaching facilities were erected at Ballyhaise College and Kildalton College. The new crop biotechnology centre was completed at Oak Park Research Centre and the new animal and food biotechnology centre at Moorepark Research Centre was at near-completion by the end of 2003. New office and laboratory facilities were also provided at the National Food Centre.

Quality Customer Services

Following the appointment of a full-time customer services officer at the end of 2002, a number of important initiatives were undertaken in 2003. Surveys were carried out to establish levels of satisfaction with services among students and farmer clients. Pilot projects were undertaken at counties, colleges and research centres and an intensive staff training programme was initiated.



Good progress was made on ensuring that a Teagasc Customer Charter and Customer Service Action Plan would be finalised by the target date of May, 2004.

Programme Evaluation

An Evaluation Unit was established and a full-time Evaluation Officer was appointed in September 2003. Progress was made in the preparation of an Evaluation Unit Business Plan and in the design of the performance measurement system and the development of a cyclical plan for the systematic evaluation of the key Teagasc programmes.

Risk Management

Systems were put in place during 2003 to enable the formal establishment of a risk management programme throughout all units in Teagasc. A Risk Managerial Steering Group was established and training was provided for all managers. From early 2004, each business unit will be required to complete a risk assessment and action plan as an integral part of the business plan.

Information Technology

Following the appointment of a Head of Information and Communications technology (ICT) during 2003, a detailed ICT Business Plan was put in place for the period 2003-2005. The plan is focused on correcting the ICT deficits identified in the comprehensive review carried out in 2002. Progress was made in the establishment of a centralised ICT unit and in increasing the number of qualified staff needed to develop and support effective ICT applications.

Jim Flanagan

Director



Chairman's Statement

Following the difficult weather, markets and income situation in 2002, Irish agriculture experienced a welcome recovery in 2003.

The Teagasc National Farm Survey showed an increase of 0.9% in average farm incomes, with incomes of full-time, commercial farmers increasing by 5%.

Incomes of tillage farmers increased by 22%. Dairy farmers increased their incomes by 7% while incomes from sheep farming increased by 4%. Beef farming experienced a difficult year with average income declining by 5%-15% for the two main beef farming systems.

Estimated gross value added in the agri-food sector was €10.5 billion, accounting for 8.9% of GDP. Total agri-food exports reached €6.8 billion, or 8.3% of total exports.

Employment in the sector at 160,000 was 9% of total employment, down from 9.5% in 2002. This was the result of a small

decline in the numbers employed in the agri-food sector and an increase in total employment in Ireland.

During the year, major changes in the EU Common Agricultural Policy were agreed. The changes, which come into effect in January 2005, involve a complete decoupling of payments from production. Analysis by our economists played an important part in assisting Ireland's negotiating position during the talks leading to the agreement.

Our analysis also helped to inform the industry on the impact of the reforms and on the development of strategies to confront the challenges and exploit the opportunities resulting from the fundamental change in policy. The role which our integrated research, advisory and training services played in the development of an innovative, competitive and sustainable agriculture and food sector are detailed in the Director's review and in the rest of this report.

Teagasc services will have a crucial role to play in the development and

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dissemination of the vital technologies for farmers and the food industry in the transformed policy environment. The necessary organisation structures are now being put in place to enable us to deliver these vital supports in the most effective manner.

Acknowledgements

To effectively deliver its programmes to its stakeholders and clients, Teagasc relies on the support of many individuals and organisations in the public sector and the agri-food industry.

We are again grateful for the invaluable support we received from the Minister for Agriculture and Food, Joe Walsh and Ministers of State, Noel Treacy and Liam Aylward.

We also record our appreciation to the Secretary General of the Department of Agriculture and Food, John Malone, and his officials for their continued commitment and assistance.

We value our linkages with our colleagues in universities and research institutes, at home and abroad, and also with many public bodies in the educational, environmental, heritage, farm safety and food safety areas. These were further enhanced in 2003, leading to an expansion and tighter focusing of our programmes.

Our partnership with industry in the delivery of joint advisory and development programmes in dairying, beef and sheep has ensured the most effective deployment of resources in the public and private sectors. I want to thank all of the co-operatives and companies who operated joint programmes with us. These linkages have added value to our activities and ensure that our programmes are firmly focused on local needs.

Our close relationships with the farming and rural organisations and the bodies representing the inputs, processing and marketing sectors contribute enormously to the

effectiveness of our activities. I thank them for their continued support during 2003.

Staff

Teagasc's key resource is its staff. I wish to record my appreciation to the Director, Jim Flanagan, his management team and all our staff for their commitment and loyalty during 2003.

Finally, I want to record my appreciation to my colleagues on the Teagasc Authority for their continuing commitment and generosity. It is an honour to work with them.

Tom O'Dwyer
Chairman

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Agri-Food Economics

Researchers in the Rural Economy Research Centre undertook 34 projects in 2003. The projects were focused on the impact of policy changes on the agri-food sector and rural areas, assessing the performance of farm enterprises and analysing trends in rural development.

A number of EU funded projects, involving collaboration with EU partners, were brought near to completion. These included projects on building a projection model of the EU agricultural sector, on integrated rural tourism, on factors affecting peripherality and on quarantine disease risk management.

Researchers were also successful in winning three new EU funded research contracts. These projects, on multifunctionality, environment protection schemes and decoupled

farm payments, will commence in 2004 and will involve collaboration with a number of research institutes in other EU member states.

Impact of CAP Reform

During 2003, economists attached to the FAPRI Ireland policy analysis unit published three separate analyses of the potential impact of changes in EU and world agriculture and food policies. The first and second analyses, published in January and May, examined the likely impact of the EU CAP reform proposals combined with EU proposals for World Trade Organisation (WTO) talks. The third analysis, published in October, examined the likely impact of the actual agreement concluded in Luxembourg on reform of the CAP.

The analysis showed that full decoupling of all EU farm payments from 2005 was the best available policy option for the Irish agricultural industry. It concluded that the highest level of farm income would be achieved by full decoupling, or the complete removal of the link between farm production and payment.

It stated that full decoupling, combined with some changes in agriculture trade policies under the World Trade Organisation (WTO) talks, would lead to a 10% increase in aggregate farm income in 2012 compared to the income level that would occur if the original policies agreed under Agenda 2000 were continued.

The results confirmed earlier Teagasc analysis that no change in



policy was the worst option, leading to a decrease of more than 9% in farm income by 2012. Partial decoupling of payments from production, an option allowed under the EU agreement on CAP reform, could deliver an income increase of as little as 4% depending on the payments which were partially decoupled.

The analysis showed that full decoupling of all beef payments from production was overall the best option for income from beef production. Full decoupling would lead to a decline of around 18% in suckler cows, leading to a drop of 7% in the amount of beef produced. However, price increases of around 10% and reduced farm costs would result in the best income prospects for beef producers.

If links between payments and production were maintained, the value of beef output would increase slightly. However this would be more than offset by higher expenditure on inputs by farmers.

The Teagasc analysis showed that the decision by the Minister of Agriculture and Food to decouple dairy compensation payments from production from 2005 would secure the future of the greatest number of dairy farmers.

It would offer a more attractive exit strategy for less efficient dairy farmers and a larger pool of milk for dairy farmers with the means to expand.

The analysis showed that the new arrangements would result in a decline in dairy farmer numbers from just under 27,000 in 2003 to 18,000 in 2012, with an average milk quota of almost 300,000 litres (65,000 gallons). If decoupling of payments was delayed until 2008, as contained in the original EU agreement, the number of dairy farmers in 2012 could be as low as 16,000, the analysis concluded.

The reforms would see milk prices falling by about 5% more than would have happened under the original

policy. However, direct payments and increased scale should result in average dairy farmer incomes keeping pace with inflation.

The analysis showed that, while the national sheep flock was set to decline substantially under the original policy, the introduction of decoupling would accelerate this decline. Sheep numbers in 2012 were projected to be lower than 2003 levels. However, this decline would be offset by increased prices, leading to a slight increase in the value of sheep output by 2012.

Full decoupling would have a small effect on cereals. The area planted would fall, leading to a small decline in the value of output.

CAP Reform and the Environment

Teagasc analysis showed that full decoupling of EU farm payments from production would have the greatest positive impact on the environment.



The reduction in livestock numbers resulting from the complete removal of the link between farm production and payments would substantially reduce the contribution made by agriculture to greenhouse gas emissions from Ireland.

Under the Kyoto agreement, Ireland is committed to an increase of no more than 13% in greenhouse gas emissions by 2010, compared to the 1990 level. The analysis showed that as a result of full decoupling, emissions of greenhouse gases from agriculture by 2010 will have fallen by 14% below the estimated 1990 level.

These cuts in greenhouse gas emissions from agriculture should ease the pressure to reduce emissions in other sectors of the Irish economy, making it more feasible for Ireland to meet the targets set out in the Kyoto agreement.

Performance of Farming Analysed

In a detailed analysis of the major farm enterprises in 2003 and prospects for 2004, economists reported an upturn in margins for beef and tillage farmers but a drop for dairy, sheep and pig producers

Margins for beef increased by around 8% due to a small reduction in costs and additional revenue from higher slaughterings and direct payments. Tillage farmers experienced a substantial improvement on the very poor performance in 2002, with spring barley and winter wheat showing margin increases of 44% and 25% respectively.

Further slippage in milk prices contributed to a decline of about 2% in margins from dairying. This followed a drop of 20% in margins in 2002. While margins in sheep production declined by around 5% in 2003, sheep still returned the second highest margin after dairying and were substantially ahead of beef or cereal growing.

Lower prices and increased costs resulted in a decline of 5% in margins from pig production.

In their analysis of prospects for 2004, Teagasc economists pointed to a small decline in incomes due to lower output and rising costs.

Attitudes to CAP Reform

A Teagasc survey showed that 42% of farmers felt that decoupling of farm payments from production would have no impact on their income. Forty per cent expected their income to decline while 10% expected an increase in income.

The survey was carried out among a representative sample of 1,200 farmers and published in December. Notwithstanding the divided opinion on the impact of the reforms on income, 85% of those surveyed said they were in favour of the new policy direction.

The results showed that around 15% of dairy farmers planned to exit milk production over the next two years. A further 32% said they would exit

over the following 3-10 years. However those intending to remain in dairying planned to substantially increase the size of their business.

The survey showed that almost 50% of beef producers planned to retain their existing stock numbers. Around 10% planned to increase numbers while close on 40% said they would reduce numbers. The results also indicated a drop in sheep numbers, particularly in hill areas where farmers said they would reduce numbers by 40%. While the top 10% of lowland sheep producers said they would increase flock size, the survey pointed to a drop of 6% in total lowland sheep numbers.

It should be stressed that the survey was conducted at a time when farmers did not have complete information on the detail of the new CAP measures. Therefore, the results can only be interpreted as an initial indication of likely farmers' reactions.

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Investment Plans for 2004

The annual Teagasc survey of investment intentions by farmers showed a planned investment of €300m in 2004. Planned investment in machinery and farm buildings was down by 9% and 23% respectively while investment in milk quota was planned to double.

The survey showed that while planned investment for 2003 was €290 actual investment was almost €500m. This indicated that farmers tend to underestimate their planned investment.

Surveys of Income in 2002

The Teagasc National Farm Survey for 2002 showed a decline of 5.8% in farm income, bringing average income per farm to €14,925. Average income in 2001 was €15,840.

The income decline resulted from a drop of over 2% in the value of output. Farm production costs



increased by 3.5%. However, the level of direct payments received by farmers in 2002 increased by 17%, which partially compensated for the decline in returns from the marketplace.

The survey was based on an analysis of accounts kept on almost 1,200 farms. The total numbers of farmers represented was 116,400. Around 20,000 small farmers were excluded, as were pig and poultry producers.

The survey showed an enormous variation in incomes between the larger, dynamic full-time farmers and the smaller part-time group, who are highly dependent on direct payments and off-farm employment.

It showed a total of 44,500 full-time farms - with a minimum of 0.75 labour units. The average income of these farms in 2002 was €27,758, a decline of 10% on their income in 2001.

These full-time farms, which account for 40% of all farms, represent the more dynamic, commercial sector of farming. About 60% are involved in dairying, with the balance involved in tillage, beef and sheep production.

The remaining 60% of farmers had an income from farming of just €6,590 in 2002. The majority are part-time beef/sheep farms and 82% had another source of income.

The survey showed that, on 48% of farms, the farmer and/or spouse had an off-farm income. On 35% of farms, the job was held by the farmer, an increase of 2% on 2001. The largest income decline took place on dairy farms. Average dairy income was €28,100, a drop of 18% on 2001. Income in tillage farming, declined by 9% to an average of €21,900. Larger tillage farmers suffered an income decline of up to 23%.

Average income from beef increased in 2002, albeit from a very low base. Income from cattle rearing systems

increased by 7% to an average of €7,750, while incomes from other beef systems increased by 22%, to an average of €9,520. Income in sheep farming, at €12,350, was 2% up on 2001.

The survey showed a big increase in the contribution of direct payments to farm income. Direct payments made up 90% of average income on all farms represented by the survey, compared with 72% in 2001. The final increases in direct payments under the EU Agenda 2000 agreement were paid in 2002.



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Food Research and Development

The Food Research and Development Programme carried out at the National Food Centre in Dublin and the Dairy Products Research Centre at Moorepark, Fermoy, continued to help the food industry in adopting new process technologies and in expanding the range and quality of products.

A total of 110 food research projects were undertaken, 69 at the National Food Centre and 41 at the Dairy Products Research Centre. Many projects were undertaken in partnership with universities, research institutes and industry partners in Ireland, Europe and the US. Collaboration with overseas research institutes, particularly in the emerging sciences, was expanded further during 2003. This increased collaboration with some of the world's leading scientists is a measure of the international reputation of Teagasc food scientists

and can only be of major benefit to the Irish food industry and Irish consumers.

Two major EU-funded food research projects which are being led by Teagasc scientists got underway in 2003. Both projects involve collaboration with scientific and industrial partners in EU member states and North America.

The following are the highlights of the programme and some key achievements

Research Delivers New Products

The contribution of the Teagasc food research programme to innovation in the food industry was highlighted at a national open day run at the Dairy Products Research Centre at Moorepark in October. More than 20 new food and drink products developed by Irish and multinational companies with assistance from Teagasc food scientists at Moorepark were displayed at the open day.

The new products included a range of value-added cheeses, baby foods, beverages, functional foods, cream liqueurs, Irish coffee as well as ingredients for a variety of snack foods and prepared ready meals. Among the products displayed were:

- A new infant formula manufactured by the multinational, Wyeth, at its plant in Askeaton, Co Limerick and now sold worldwide.
- A new modified cheddar cheese, Carbery Blue, produced by the Carbery Group with the assistance of Teagasc technology.

- A new yeast extract flavour ingredient, also produced by the Carbery Group, which has wide application in snack foods and prepared ready meals.
- A range of natural food colours produced by the innovative Waterford company, Cybercolor. The company has built up a major market in North America for its products.
- A flavour concentrate, produced by another innovative company, National Food Ingredients in Limerick, for use in a range of value-added confectionery products.
- A new probiotic cheese for the Irish Dairy Board and a new probiotic table fat spread for the Kerry Group.
- A flavour concentrate produced from malt and roast barley, produced by the multinational, Diageo, and now being exported to more than 50 countries for use in a range of beverages.
- Farmhouse cheeses, cream liqueurs and Irish coffee produced

by small and medium-sized Irish food companies.

A novel new process for the manufacture of mozzarella cheese, developed by Teagasc scientists, was also featured. Because of its premier status as a pizza topping, mozzarella has experienced unprecedented growth in recent years and the new Teagasc technology has the potential to ensure that Irish manufacturers can meet international competition.

New Research Centre Established

Scientists at the Dairy Products Research Centre are partners in the new Alimentary Pharmabiotic Centre, the establishment of which was announced in 2003.

It involves initial funding of over €20m, of which €16.5m is being provided by Science Foundation Ireland (SFI). The remainder is coming from investment by an Irish biotechnology company, Alimentary Health Ltd, which is linked with a

global multinational pharmaceutical company.

The SFI award is the largest ever to a research project in Ireland and represents a vote of confidence in the scientific expertise at the Dairy Products Research Centre and its partner, University College Cork (UCC).

The new centre which will be located in Teagasc Moorepark's new biotechnology laboratories and in UCC's biosciences institute, will investigate the role of intestinal bacteria in health maintenance and in various diseases. The centre draws together researchers from various disciplines in UCC and Moorepark to focus their research talents on novel approaches to the treatment and prevention of intestinal diseases.

By investigating the mechanisms by which intestinal bacteria and food-grade bacteria, such as probiotics, influence health and disease, the research promises opportunities for



commercial exploitation by both the food and pharmaceutical sectors. The significance of the research for the Irish dairy industry is that it will strengthen claims for efficacy of probiotics foods and hence have an important influence on the development of these foods by Irish companies. For Moorepark, it is a quality partnership that brings to a new level the extensive collaborative linkages that already exist with UCC researchers.

Meat Genomics Research

A five-year research programme was agreed between the Teagasc National Food Centre, and the world-renowned Meat Functional Genomics Group at Michigan State University. This has led to the commencement of the first ever meat genomics and proteomics research programme in Ireland.

The research will establish the relationship between DNA in candidate genes and meat quality traits in Irish beef and pork. The information will be used to develop diagnostic tools for meat quality.

Another significant link was established with the meat proteomics research team at the Clermont-Ferrand research centre in France. Together with the partnership already established with the Conway Institute at University College, Dublin and the National Diagnostics Centre at University College, Galway, the new networks provide unique access to the knowledge, skills and experience in the molecular biology underpinning meat quality.

The success of the Teagasc National Food Centre in winning this contract is testament to the centre's growing international reputation as a centre of excellence for the development of food safety management systems.

The research to date has found DNA polymorphisms for meat tenderness. The genotypes are now being correlated with tenderness values. The work is being extended to other candidate genes affecting tenderness. Genes affecting intramuscular fat are also being examined.

EU Food Safety Initiatives

The Teagasc National Food Centre was awarded a major EU-funded contract to develop European-wide food safety blueprints for farm production, meat processing, retailing and catering.

The project involves a consortium of scientists and industry partners in thirteen EU states as well as Poland, Hungary, US and Canada.

In addition to developing critical safety practices for vital stages in the food chain, the Teagasc-led initiative will review how food poisoning outbreaks are investigated and will also advise on effective communications strategies with consumers on food safety issues.

The success of the Teagasc National Food Centre in winning this contract is testament to the centre's growing international reputation as a centre of excellence for the development of food safety management systems.

Over the last three years, Teagasc has developed and published food safety blueprints for Irish beef, pork and lamb slaughter. Called HACCP (Hazard Analysis Critical Control Point), they detail the critical safety practices which must be undertaken

from the time the animal reaches the factory until the carcass enters the chill room.

A HACCP for poultry production has also been developed and work is underway on developing catering and vegetable safety blueprints, in conjunction with the Food Safety Promotion Board and the University of Limerick. This new international project will enable Teagasc to cover other stages in the food chain and expand its food safety programme into Europe.

Food Safety Breakthrough

A European research team, led by scientists at the National Food Centre, achieved a world-first in the development of a new method to detect the parasite, *Cryptosporidium parvum* in food.

The discovery was the culmination of a three-year European-funded research project, involving eight European research groups.

Cryptosporidium parvum is an emerging parasite in food and infected humans can suffer acute diarrhoea with abdominal pain, accompanied by nausea, vomiting and low-grade fever. The disease usually lasts up to three weeks but, for people with low immunity, it can become chronic and persistent.

The parasite is found in the intestinal tract of cattle and sheep and is excreted in the faeces. It can be transmitted from animal to person, person to person, through ingestion of contaminated water or food or by direct contact with contaminated environmental surfaces.

Using the newly developed detection systems, scientists at the National Food Centre have carried out the first studies on the prevalence and survival rate of *Cryptosporidium parvum* in meat and salads.

The new detection methods will be of considerable benefit in allowing continued research and monitoring of this emerging parasite in foods.

In a further development, the first quantitative risk assessment of a food pathogen in Ireland was carried out by market researchers and microbiologists at the National Food Centre in conjunction with the Food Engineering Department at University College, Dublin. The resulting model will have the capacity to predict the risk to the consumer of consuming beef contaminated with the pathogen *E.coli O157:H7*, identify where risk is highest in the beef chain and where controls are best placed. The expertise and skills gained will then be applied to other food processes.

Research on Food Lifestyle

New research results published by the National Food Centre in 2003 showed that snack and convenience foods play a dominant role in the eating habits of almost half of British consumers.

Using a sophisticated consumer research method, called the Food Related Lifestyle Instrument, researchers segmented British consumers into six groups. The most rapidly growing group are now classified as 'snackers'. Accounting for one in five of British consumers, they are predominantly interested in

convenience foods which offer quick and easy meal solutions.

The research team has also identified two other British consumer categories with limited interest in food. They are described as the 'careless' and 'uninvolved' consumers.

The careless group have least interest in shopping whereas those in the uninvolved group have minimal interest in cooking. Together with the emerging snackers these groups now account for 48% of British consumers.

The research team classified the balance of consumers into 'rational' 'adventurous' and 'conservative'.

The rational group, who account for 26% of British consumers, are particularly interested in quality foods and are largely middle-aged to elderly. The adventurous group, accounting for 17% of consumers, have the greatest interest in new food products and are more likely to shop in specialist stores.

In contrast, the conservative group, accounting for just 9% of consumers, are traditional in food tastes and have little interest in convenience foods or new food products. They contain a higher proportion of older females.

The results of the research have been communicated to Irish food companies in order to help them gear their product development, marketing and advertising strategies to emerging consumer trends.



Irish companies produced over €2.6 billion of convenience food products in 2002, of which €1 billion was exported to the British market, which consumes a total of €20 billion worth of convenience food products per annum.

Mechanical Beef Grading

The ground breaking trials on mechanical beef grading carried out by the National Food Centre in 2000 were a major factor in the EU accepting the principle of mechanical grading systems and in setting realistic targets for their authorisation.

In November 2003, the first authorisation trial was carried out by the Department of Agriculture and Food and the data was analysed by the National Food Centre for EU authorisation. This paved the way for the introduction of mechanical grading into beef export plants during 2004.

Controlling Salmonella in Pigs

Further progress was made in 2003 on the use of probiotics to control salmonella levels in pigs. Researchers had previously identified strains of lactic acid bacteria that suppressed growth of salmonella in the laboratory. In 2003, trials were conducted on live pigs which were deliberately exposed to salmonella to evaluate the effectiveness of probiotic ingestion in combating the pathogen.

The results were encouraging. They showed that the probiotic strains could survive and, in some cases, predominate in the pig's intestine. They also showed that the probiotics substantially reduced the symptoms of salmonella and the level of salmonella carried by the animals. The next phase will involve field trials using a mixture of different anti-salmonella probiotics.

Major Genomics Project

Sequencing the complete genome of a unique cheesemaking bacterium is

the objective of a major project at the Dairy Products Research Centre. This landmark project is the key to building a critical mass in the genomics of starter cultures and will place Teagasc at the forefront of international developments in the rapidly evolving area of applying genomics to traditional and innovative food systems.

During 2003, the complete genome sequence was substantially accomplished, using the services of a specialised gene company and the remainder of the project, the elucidation of the genome map, will be completed in 2004.

The gene sequence data generated in this project will be systematically 'mined' and genes of potential economic significance will be identified. Of particular interest will be genes involved in cheese flavour development, which will be exploited as tools for future starter design.

Developments in gene technology are rapidly changing the landscape

of biological science. The ability to sequence the complete genetic make-up of living organisms has only recently been developed. The best documented application of this technology to date is the human genome project.

Support for Functional Foods

The development of functional foods with the ability to deliver particular health benefits continued as an important component of the research and development programme at the National Food Centre and the Dairy Products Research Centre. One example is the involvement of National Food Centre scientists in the production of gluten-free breads for people suffering from coeliac disease.

About 1% of Irish consumers are allergic to the ingredients in wheat flour. The National Food Centre achieved further success in 2003 in developing breads using non-wheat ingredients.

Research continued on the development of animal nutrition programmes to enhance the levels of conjugated linoleic acid (CLA) in milk and beef. CLA is associated with beneficial health effects, particularly anti-cancer properties, and is present at higher levels in milk and beef produced off grass. Research at Moorepark and Grange Research Centres has found that a further increase in CLA concentration can be achieved by supplementing the animal's diet on grass with specific oils.

The development of functional foods with the ability to deliver particular health benefits continued as an important component of the research and development programme at the National Food Centre and the Dairy Products Research Centre.

Maximising the level of CLA in Irish beef and dairy products has the potential to establish a uniqueness for such products in consumer markets abroad.

Scientists at the Dairy Products Research Centre were also involved in exploring the potential of a special form of biocheese in suppressing harmful bacteria in the mouth, thereby aiding dental health.

The biocheese is made using a unique lactic culture that produces the antimicrobial, lacticin, which has the ability to enhance oral health. Lacticin was the subject of a world-first discovery by a team of Teagasc/UCC scientists a number of years ago. The concept of a biofood for dental health based on lacticin can be extended to functional beverages as well as dairy products.

3

Milk Production

The Teagasc dairy programme in 2003 continued its focus on the development and dissemination of the critical technologies for an internationally competitive milk production sector. Research at Moorepark Research Centre concentrated on producing the right strain of cow for the Irish grass-based production system, combined with continued innovation in grass management and improved labour productivity.

The advisory programme concentrated on the adoption by farmers of the most effective cost-cutting, quality-enhancing and financial management methods in order to maximise incomes from dairy farming. Many of the advisory activities were run in conjunction with dairy processors. A total of 12 joint Teagasc/dairy processor development programmes were run during the year and these acted as a major vehicle for profit and practice improvement on dairy farms.

The use of discussion groups and monitor farms was also a key feature of the dairy advisory programme. Teagasc advisers were involved in the co-ordination of 230 dairy discussion groups nationwide and 120 dairy monitor farms were also serviced. These monitor farms played a crucial role in the adoption, monitoring and dissemination of efficient practices.

Benefits from Milk Protein Campaign

The intensive Teagasc campaign to increase protein levels in milk continued to deliver benefits. Average milk protein level reached 3.3% in 2003, compared with 3.2% in the late 1990s. The leading group of farmers achieved milk protein levels in excess of 3.4% in 2003.

Farmers who maximised milk protein levels and achieved production cost levels of 5c/litre below the national average made an additional profit of €300/cow in 2003. These farmers have benefited enormously from participation in discussion groups and monitor farm walks. They have adopted Teagasc blueprints on financial management, grass management, breeding policy and business growth. They are in a strong position to confront the impending milk price reduction resulting from reform of EU milk policy.

Low Cost Production the Key

Cost of production will be the key survival factor under the new EU dairy reforms. Analysis by Teagasc in 2003 showed a difference of 8c/litre in the cost of production between



the most efficient and least efficient producers.

The 25% of producers with highest costs require 440,000 litres (96,000 gallons) of milk to earn an income of €40,000. They will require 820,000 litres (180,000 gallons) in 2010 to make an income of €40,000. Increased scale alone will not be sufficient to maintain income for these farmers.

In contrast, the 25% most efficient producers made an income of €40,000 last year from an output of 220,000 litres (48,000 gallons). By 2010, they will need to increase their output to just 250,000 litres (55,000 gallon) in order to maintain income.

Results from research at Moorepark show that a cow selected for the Irish grass-based milk production system can increase profit by 2.5c/litre, or up to €6,000 on the average dairy farm. Using this type of cow will be an imperative in a lower milk price scenario. Providing

farmers with this type of genetics is the challenges facing the Irish dairy breeding sector.

Research on Clover-Based Pasture

Research at the Teagasc dairy research farm at Solohead, Co Tipperary has shown that milk production of 12,500 litres/hectare can be achieved from grass and white clover swards receiving just 90kg fertiliser nitrogen/hectare.

The approach involves surface seeding the clover, mixed with fertiliser, after first cut silage or on ground that has been tightly grazed. This low cost system could well prove attractive to some dairy farmers. It was demonstrated to a large group of farmers at a national open day on the Solohead research farm in September 2003.

New Animal Biotechnology Programme

The new biotechnology programme got underway at Moorepark

Research Centre in 2003. The programme involved tracking genes associated with economic traits relevant to the economic breeding index, the investigation of disease susceptibility in animals and the exploration of molecular variants of lactoferrin.

During the year, a number of genes were successfully amplified from the bovine genome and DNA sequencing analysis yielded some promised results.

Highly sensitive methods were developed to facilitate the genotyping of animals. Techniques to amplify genes from somatic cells in milk and mammary tissue were also developed. A DNA bank of every animal in the Teagasc dairy herd has also been established, which will prove to be a valuable resource for future molecular investigations. This bank contains high quality genomic DNA from 1,596 animals, which includes five different breeds of cattle. All samples have been stocked at -20°C and also at -80°C for archival storage.

New Approach to Mastitis Control

Scientists at the dairy production and dairy products research centres at Moorepark made a significant advance in the use of probiotic cultures for control and alleviation of mastitis in dairy cows. The cultures used produce the antimicrobial compound, lacticin, which has been the subject of research at Moorepark for several years. Infusion of probiotic cultures, based on lacticin-producing lactobacilli, into the teat ducts of cows with clinical infections resulted in a marked improvement in the condition and a clear suppression in the numbers of pathogenic microbes.

Preliminary investigations have demonstrated that the antimicrobial protection in the mammary gland is linked to an enhancement of immune responses caused by the introduction of the probiotic bacteria, thus providing the mammary gland with an infective mechanism for the elimination of mastitic pathogens.

These results greatly advance the

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prospects of developing a non-antibiotic approach to the treatment and control of mastitis and go well beyond the scope and potential of using lacticin producing organisms in teat seals, which was the main focus of this project in the past.

The further development of this innovative approach to mastitis treatment, and the detailed investigation of the scientific mechanism of action of the probiotic cultures, were the subject of a successful application for funding to the Enterprise Ireland Commercialisation Fund and a patent submission termed "*PROMAST: Probiotics for mastitis treatment*". This fund is open to applications from university and institutional research organisations across the full range of research topics being pursued by Irish scientists. The Moorepark submission was the top-ranked project in a detailed peer-evaluation that took into account both the technical and commercial criteria.



4

Meat Production

The meat production programme continued to concentrate on the development and on-farm adoption of the vital technologies for cost-efficient beef, sheep and pig production. Priority areas included nutrition, animal housing, reproduction efficiency, animal welfare and financial management and planning. Researchers and advisers worked closely on the development and dissemination of low cost, grass-based production systems for beef and sheep. Substantial resources were devoted to informing farmers of the detail and implications of the new 'decoupled' system of farm payments, which come into effect in January, 2005. This activity included a major public information campaign, run jointly by Teagasc and the Department of Agriculture and Food.

Over 80 beef discussion groups were active in 2003. The majority are associated with the eight joint

beef development programmes, run by Teagasc and meat processors/livestock marts. The programmes have common objectives of better breeding, quality assured beef, improved marketing and increased farmer profits through better technical and financial management.

Research Focus on Grass and Silage

The research focus on the development of production blueprints for grass and silage quality continued during the year. In one major EU-funded project, scientists at Grange Research Centre, in conjunction with research groups from other European countries, examined the merits of grasses bred for elevated levels of water soluble carbohydrates.

Among the potential advantages of these grasses are higher intakes by grazing animals and reduced losses of nitrogen from the animals. Another potential advantage is improved preservation of grass as unwilted silage.

In one experiment in 2003, grasses with higher levels of water-soluble carbohydrates were found to have a higher sugar content and resulted in better-preserved silage.

Work on baled silage included a project on contamination by fungi. A study on a sample of farms in the midlands found fungal growth on 90% of the silage bales examined. The spores of the fungi can cause infections or allergies in farmers handling the bales while reducing the quality and intake of the silage by



animals. The countrywide prevalence of these fungi on baled silage is currently being examined and the ability of the predominant fungi to produce mycotoxins is being investigated.

Examining Dangerous Slurry Gases

A project to measure hydrogen sulphide gas levels during slurry agitation was undertaken by scientists at Grange Research Centre, in conjunction with the Agricultural Research Institute of Northern Ireland. The gas can be fatal for humans and animals. The research concluded that there is no such thing as a safe slurry tank and that operators should assume that dangerous levels of hydrogen sulphide are always produced. The advice is that operators should never enter a building or stand close to slurry pumps during slurry agitation.

Reaction to CAP Reform Measured

A Teagasc survey carried out three months after agreement was

The beef development programmes, run by Teagasc and meat processors/live stock marts have common objectives of better breeding, quality assured beef, improved marketing and increased farmer profits through better technical and financial management.

reached on the reform of the EU Common Agricultural Policy showed that the more progressive and commercial beef farmers intended to maintain or increase stock numbers following the implementation of the new policy in January 2005.

The survey of beef monitor farms, which are used by Teagasc to assess performance at farm level and promote the adoption of new technology, showed that 92% intended to maintain or increase stock numbers. Just 8% intended to reduce their number of stock.

While not representing the attitudes of all beef farmers, the survey reflected a positive reaction from the more progressive and commercial sector, who saw the new policy as providing opportunities to increase income and to get rewarded for quality production geared to the market place.



Progress with Gene Technology

New information emanating from gene technology could have significant spin-offs for animal fertility.

A total of 434 genes have been identified using modern molecular biology techniques. Two-thirds of these are newly identified genes and many can be linked to ovarian function.

Gene expression studies, carried out at Athenry Research Centre, have identified a number of genes involved in the production of progesterone. These results are an essential first step towards an improved understanding of ovarian function and how this may be modified by breed, nutrition and production. Identification and functional characterisation of key ovarian genes regulating bovine fertility also has long-term implications for improving fertility through marker assisted breeding programmes.

In sheep production, work continued on the identification of genes affecting resistance to stomach worms. Earlier Teagasc research at Athenry Research Centre showed large differences between the Texel and Suffolk breeds in resistance levels.

Also in sheep, further discoveries were made regarding novel gene mutations, which have a profound effect on ovarian function. Evidence has emerged for the involvement of another mutation in the Cambridge sheep breed with similar effects to the two genes originally discovered. The natural gene mutations in the Cambridge and Belclare sheep breeds provide an important resource for fundamental studies on the control of follicle development in the ovary and such studies will have implications for human reproduction as well as for ruminants.

5

Tillage and Horticulture

The tillage and horticulture programmes continued to lead the development of more efficient crop production systems designed to increase competitiveness and improve product quality and safety, while facilitating long-term sustainability of production.

Following the difficult tillage season in 2002, cereal crop yields recovered substantially leading to an increase of 44% and 25% in margins for the two main crops, spring barley and winter wheat, respectively.

One of the key challenges during the year was the emergence of resistance of one of the major diseases, *Septoria tritici*, to the newer fungicides. Teagasc technology played a major role in diagnosing resistance levels and in devising the most effective strategies to counteract the problem.

Research at the Teagasc National Tillage Research Centre at Oak Park, Carlow, showed that the application of modern technology can deliver very high yields of cereals. For example, in Oak Park trials, winter wheat crops yielded up to 14 tonnes/hectare or over 2 tonnes/hectare higher than the top yields achieved at farm level in 2003.

Research on low input production systems showed that crops grown with lower levels of agri-chemicals and fertilisers gave 10% lower yields than conventional, high input systems. However, the lower input systems gave higher margins. This shows that there is scope to reduce inputs and increase incomes especially where disease pressure is not severe.

The new plant biotechnology facility at Oak Park was commissioned in June and recently recruited scientific staff commenced work on exciting new research projects.

In the advisory area, critical crop management and financial technologies were disseminated to farmers through discussion groups, monitor farms, demonstrations, conferences, training courses and individual consultation.

The horticultural programme focused on the development and dissemination of the technologies for profitable production of potatoes, mushrooms, vegetables and nursery stock.



Plant Biotechnology Facility

The plant biotechnology facility at Oak Park Research Centre was completed in June 2003 and the new research programme got underway involving four recently appointed scientists with expertise in key areas of biotechnology.

The programme is concentrated on developing molecular-based techniques that will enhance the effectiveness of the already successful Oak Park breeding programme in grass, clover and potatoes.

Other components include plant disease diagnostics which were used to good effect in the study of resistance to *Septoria tritici*, first discovered in Ireland in January 2003. Monitoring by Teagasc staff at Oak Park showed that the resistance was widespread and increased substantially during the year. For example, the average level of resistance in May was 31% and this increased to 73% in June/July. As a

result of research studies carried out in the January–March period it was possible to recommend the most appropriate spraying strategies to combat *Septoria tritici* for the 2003 growing season.

The potential effects of genetically modified crops on the environment is also being studied. New programmes have been initiated with Trinity College, Dublin and the National University of Ireland, Maynooth.

Potential for Triticale

Triticale, a wheat/rye hybrid, was shown in Oak Park trials to have potential in future low cost systems. Triticale, which has greater disease resistance than wheat, out-yielded winter wheat, where take-all root disease was present, without the need for specific seed dressings. It was also shown to have potential as a cost effective alternative forage crop for dairy and beef farmers. Assessment of a number of new varieties indicated a number of promising strains with high yield potential.

Exploitation of the beneficial traits of triticale could lead to reductions in the levels of inputs required for cereal production.

Mycotoxins in Cereals

A study on the occurrence of mycotoxins in cereals, cereal-based animal feedstuffs and food continued in 2003. This is the first major study of mycotoxins in cereals in Ireland. Because mycotoxins can have an adverse effect on the health and wellbeing of animals they are of particular interest to the grain and animal feed processing sector. The results from cereals harvested in 2002 show that the levels of the mycotoxin, *ochratoxin A*, was below proposed EU limits.

Work on Non-Ploughing Systems

A series of replicated experiments and observation trials were carried at Oak Park Research Centre to assess the performance of non-inversion tillage compared with ploughing for cereal crops. A range of measurements were made on crop

development, weed, disease and pest incidence and control, soil structure, nutrient movement and beneficial soil fauna.

Winter wheat and spring barley performed very well under the reduced cultivation regime in 2003 but, in contrast with the previous two years, winter barley yielded poorly relative to ploughing. Poor crop growth and grass weeds contributed to this.

Studies associated with the reduced cultivation project are endeavouring to determine the sources of barley yellow dwarf virus (BYDV), its aphid vectors and the role of beneficial pest predators in controlling the disease. New genetic tools were developed which have the capacity to elucidate the aetiology and biological control of BYDV. This research work will provide information on best practice in non-ploughing systems, which has generated a lot of interest among cereal growers.

More Success in Potato Breeding

The potato breeding programme at Oak Park continued to deliver new varieties for the domestic market and seed export trade. During 2003, three new varieties, Habbi, Kikko and Setanta, were added to the Irish national list of potato varieties.

Rooster, another variety bred at Oak Park, continued to make progress on the home market and accounted for 34% of potato acreage in 2003. It has also replaced 3,000 tonnes of imported potatoes for frozen chip production. The level of import

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substitution is expected to increase further, with additional knock-on effects for growers' incomes. Research on blight control during 2003 confirmed earlier results that the application of fungicides according to a decision support system gave excellent control of blight and involved a reduction of 30% in the amount of fungicide applied. This has significant benefits not only in cost but also from a product quality and environmental sustainability viewpoint.

Grass and Clover Breeding

Two new perennial ryegrass varieties, Glencar and Shandon, were sanctioned for addition to the Irish recommended list. Glencar is a late tetraploid with very good spring and autumn growth. Shandon is an intermediate diploid combining high yields with very good seasonal growth. Both varieties will be on the Irish recommended list in 2005.

Glenstal, another ryegrass bred at Oak Park, completed official trials in the UK and was a candidate for inclusion in the UK list. A further five perennial ryegrass varieties, which were bred at Oak Park, were entered in national and recommended list trials in 2004. Four new white clover varieties, bred at Oak Park, were under consideration by the Department of Agriculture and Food for entry into Irish national and recommended list trials. One of these was entered in the UK trials in 2004.

Increased Nursery Stock Demand

The nursery stock service helped growers respond to the growing demand, particularly for semi-mature and mature plants for instant gardening and landscaping. The continued growth in home ownership and the increased emphasis on leisure and ecology led to a further increase in demand for garden products and landscape services. The growth of lifestyle gardeners has led to a phenomenal growth in demand for patio plants. The growth is coming largely from people in the 35-55 age group who tend to be cash rich and time poor.

The Teagasc nursery stock team worked with the country's 222 production units to increase the output of saleable plants and to improve labour productivity. Emphasis was also placed on greater use of bio-control agents and biological pest control. Nurseries were also given professional assistance in planning new investment under the scheme of investment aid for horticulture.

Research at Kinsealy Research Centre examined the development of peat-free growing media. A range of materials such as sawdust, bark, composted green waste and spent brewer's grain were assessed. The use of disease inhibitors and biocontrol agents in these media were also studied. These trials are being continued in 2004.

A project to develop technology to re-invigorate, micropropagate and grow-on rare and difficult to propagate nursery stock species

started. Twenty-five ornamental shrubs and herbaceous perennials requiring rapid propagation were identified by growers and grown in replicated trials at Kinsealy to test for optimal nutrient requirements. These were used to establish sterile shoot cultures for the initiation of micropropagation.

reducing the number of spray treatments for aphids and caterpillars in summer brassica crops. As part of the vegetable advisory programme, pest and disease monitoring was carried out on selected farms on a weekly basis and the results were disseminated to growers.

Improving Mushroom Efficiency

The necessity for top efficiency in mushroom production was emphasised in 2003, with the drop of 15% in prices to growers. The Teagasc mushroom team focused on increasing compost fill from 20 tonnes to 36 tonnes per mushroom tunnel and increasing the output of mushrooms per tonne of compost from 220Kg to 250Kg, as key drivers of efficiency.

The top 20% of growers who increased compost fill from 30 tonnes to 36 tonnes per tunnel showed an increase of €17,000 in income. Over 10% of growers reached the Teagasc target of 250Kg of mushrooms per tonne of compost in 2003.

In fruit production, Teagasc provided the technical support to an increasing number of growers in switching from outdoor to protected systems of production. Protected cropping leads to better quality, higher output and a longer growing season, resulting in increased income for growers.

A production blueprint for winter vegetable crops was developed at Kinsealy Research Centre. Research was also carried out on the scope for

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Environmental Control

Efficient nutrient management and water quality protection were again the dominant features of the Teagasc environment programme in 2003. A total of 24 research projects were undertaken at Johnstown Castle Research Centre, of which five were new projects. The Teagasc environmental advisory programme concentrated on promoting efficient fertiliser use, effective manure management and maintenance of biodiversity.

Substantial resources were also devoted to delivering professional services to farmers participating in the Rural Environment Protection Scheme (REPS). Teagasc also provided scientific advice to the Government and to farmers on the implementation and impact of the Nitrate Directive.

Research on Nutrient Efficiency

Research on improving the efficiency of nutrients in livestock and crop production systems continued in 2003. Among the new outputs was amended recommendations for nitrogen use that will ensure a better balance between inputs and requirements, particularly in dairy farming.

A new system of nitrogen advice, based on modelling was developed for sugar beet. This will ensure greater precision in the nitrogen supply for optimum yields, thus reducing the potential for losses.

The results of trials on the potential of new slurry spreading techniques, band spreading and shallow injection, to improve the recovery of nitrogen in slurry, were analysed. They showed that both new techniques resulted in an improvement in the recovery of the nitrogen in cattle slurry, compared to the conventional splash plate technique. However, the level of improvement was lower for pig slurry.

The first in a series of field trials on land spreading of spent wood chip from out-wintering pads was initiated. The effect of the applied spent wood chip on silage yields and the quantity of chips recovered in the harvested grass is being assessed in 2004.

The quantity of phosphorus fertiliser purchased by Irish farmers reduced by 30% between 1996 and 2003. The reduction coincided with revised Teagasc advice on phosphorus needs for grassland and tillage and a



concerted advisory campaign on efficient use of phosphorus. The research programme at Johnstown Castle Research Centre continued to focus on fine-tuning the phosphorus requirements for the diversity of soil types and farming systems.

Research on nutrient losses to the environment concentrated on the development of descriptive farm nutrient models to predict nutrient flows in farm systems and the impact of management systems on the flow of nutrients. A mechanical nutrient flow simulation model to enable quantification of nutrient flows, their associated interactions and their interactions with biodiversity is being developed.

Measuring Greenhouse Gas Emissions

Field scale studies on grazed grassland measured the effect of a range of nitrogen fertiliser inputs on nitrous oxide emissions from the soil to the air. Nitrous oxide is a greenhouse gas and contributes up

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to 30% of the total greenhouse gas emissions from agriculture. In 2003, just under 6% of the total nitrogen fertiliser applied was lost as nitrous oxide. This represents an almost doubling of the values recorded in the previous year and was associated with the wet weather in July which created conditions suitable for the release of this gas from soil.

In a parallel lysimeter study, the results showed a significant soil and nitrogen fertiliser effect. Emissions from light free-draining soils were considerably lower compared with those from the heavier, wetter soils.

These new results are highlighting the importance of soil type and weather conditions, as well as increasing rates of nitrogen fertiliser inputs, as drivers of nitrous oxide emissions from Irish agriculture. Their importance lies in the fact that the default value used in the national greenhouse gas emission inventory calculation, which is used to determine compliance with national

commitments under the Kyoto Protocol, may require modification.

Developing National Soils Database

The three year project on the establishment of a national soils database continued at Johnstown Castle Research Centre in 2003. It involves the collection and analysis of soil samples for a range of chemical and biological parameters.

Using strictly defined protocols, soil samples were obtained from pre-determined locations on the national grid. Some 1,000 samples were analysed and these, together with 300 samples collected previously, now constitute the National Soils Database. These soil samples will be available for comprehensive examination into the future.

Servicing Environmental Schemes

A total of 16,300 farmer participants in the Rural Environment Protection Scheme (REPS) received professional support from Teagasc in 2003. REPS advisers also ran 217 training courses and these were attended by over 6,000 participants.

Advisory staff were also involved in providing expert advice on farm building design and planning and in the preparation of nutrient management plans to meet the requirements of agricultural bye-laws, planning permission conditions and to ensure cost-efficient and environmentally sustainable farm production systems.

Advisers and researchers were involved in the collection and analysis

of over 50,000 soil samples. The range and accuracy of much of the analysis was enhanced in 2003, due to the modernisation of the analytical laboratory and the provision of state of the art equipment.

In the area of natural heritage protection, Teagasc advisers and specialists prepared some 1,000 plans for commonage and non-commonage areas. Teagasc specialists were deeply involved in the Task Force Report on the Shannon Callows, which was completed in 2003. The report outlined the cost of implementing effective environmental management prescriptions for the area.

In hedgerow management, a series of four advisory leaflets were published, detailing the best planting, trimming and management techniques for hedgerows as well as outlining important safety measures. Training courses were also conducted for hedge-cutting contractor

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Forestry

With over 1,400 new entrants to forestry each year, the number of farmers and landowners involved in a forestry enterprise is expected to reach 20,000 by 2007. The current 14,000 landowners with a forest enterprise are receiving €50m annually in EU forestry premium payments.

The Teagasc forestry programme is dedicated to developing and disseminating the vital technology for successful and sustainable forests and to providing expert, independent planning and financial advice on the inclusion of forestry as a mainstream farm enterprise.

Research Highlights

Work on the major Forest Soils Classification Project concluded in 2003 and the results were due to be published in 2004. A new project, funded by the Department of Environment, Heritage and Local Government, which commenced in

2002, continued its work in resource mapping of soil parent material, habitats and in providing basic databases for the EU Water Framework Directive's River Basin Catchment Management System. This work contributes directly to the county groundwater protection schemes. It also contributes to the Natural Global Monitoring for Environment and Security Forum and to the National Landslides Working Group.

Another project, funded by COFORD, the forestry research agency, has begun to develop methods suitable for the management of young broadleaf trees under Irish conditions. Mistakes made in management or neglect in the early years of growth cannot be rectified at a later stage. Farmers are planting up to 2000 hectares of broadleaves each year and these young plantations are in urgent need of treatment.

Advisory and Training Priorities

The Teagasc specialist forestry advisory service, working in association with county advisory staff, had two key objectives in 2003

- Including the forestry option, where appropriate, in farm planning.
- Promoting profitable quality timber production using sustainable forest management practices.

A comprehensive programme of advisory and training activities was delivered. This included demonstrations and field evenings on Teagasc monitor farm forests, regional seminars and field days in each county. A nationwide series of special forestry training courses were also held and forestry awareness modules were delivered to over 6,000 participants in REPS training courses and in courses for young entrants to the industry and adult farmers.

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Farm Diversification

The farm diversification and rural enterprise programme involved the provision of research, advisory and training services in sport horse production, deer farming, poultry production, organic farming, rural tourism and dairy goat farming.

Sport Horses

The sport horse programme concentrated on better breeding, management and presentation of horses. Thirteen courses on developing a horse enterprise were held with almost 300 participants. The majority of these participants were in the process of upgrading and enlarging their equine facilities with the aim of producing better animals. Skills training courses were also held with the aim of enabling producers to add value to their horses.

Deer Farming

The number of deer units remained stable, at around 300. The deer farming programme was aimed at improving the profitability of the enterprise as well as providing expert assistance to existing producers who wished to expand their business and to potential new entrants to deer farming. Members of deer discussion groups were encouraged by Teagasc to use the Deer Profit Monitor in order to accurately assess performance and profit trends.

Almost 100 producers are now taking part in a venison quality assurance scheme. A FETAC accredited quality assurance venison module was developed as part of the Teagasc adult farmer training programme. Twenty two deer farmers took part in an introductory course on quality assurance to help them prepare for their first quality assurance inspection. A price differential of 60c/kg was achieved for quality assured venison.

Poultry Production

Through the Teagasc poultry programme, technical assistance was offered to existing producers and to those interested in establishing a poultry enterprise in order to increase family income. Five training courses were run for potential new entrants, with a total attendance of 45.

Another key objective of the programme was to provide technical input to Bord Bia quality assurance schemes and deliver producer training for the schemes. In 2003, chicken quality assurance training was delivered to 20 technical co-



ordinators from processing plants. Training courses were also provided for 320 chicken producers to prepare them for participation in the Bord Bia chicken quality assurance programme.

Organic Farming

Organic production accounts for 1% of the land area and 0.5% of total food sales. A significant increase in production would need to take place if the potential of organic farming is to be realised and a foothold established on the home and export markets.

The main objective of the Teagasc organic programme in 2003 was to support the establishment of a viable organic sector and to help develop its market potential.

The Teagasc organic farming systems established at Mellows Centre, Athenry and Johnstown Castle Research Centre, Wexford are showing an excellent level of performance and are being extensively promoted. Sixty groups visited these units in 2003. The

The main objective of the Teagasc organic programme in 2003 was to support the establishment of a viable organic sector and to help develop its market potential.

open day on the Mellows unit in July attracted an attendance of over 1,000.

Short courses have been developed to meet the needs of organic farmers. Two introductory courses were staged in Galway and Clare; each attended by 30 participants.

Selected county advisers received initial training to equip them to deal with queries on organic farming and provide a basic service to existing organic producers at local level. A list of Teagasc organic clients has been compiled in consultation with the county advisers. These farmers are now better serviced with the provision of a newsletter and specialised support. A Teagasc booklet on guidelines for organic farming was published and circulated to 800 organic farmers.

Rural Tourism

The rural tourism programme focused on supporting rural tourism providers in the development of quality products and in the

improvement of their management and operational skills.

Two 150-hour FETAC accredited Certificate in Rural Tourism courses were provided by Teagasc, in partnership with CERT and institutes of technology, in 2003. A total of 32 such courses have now been provided by Teagasc and its partners in recent years.

Teagasc staff continued to work in partnership with LEADER to guide the development of rural tourism marketing. Technical assistance was also provided to a range of rural tourism initiatives, including the proposed establishment of a National Federation for Rural Tourism.

The objective of the Teagasc dairy goat programme was to improve the efficiency and profitability of production. In 2003, a 25-hour dairy goat husbandry course was delivered to 25 participants at Ballyhaise College. A midlands discussion group continued to meet on a quarterly basis. A meeting of producers was held in Longford and individual clients were supported through farm visits, phone/office consultations and by newsletter. With the delivery of an effective Teagasc advisory and training programme, there is an increasing level of co-operation among producers and the industry is expanding at a steady rate.

Dairy Goat Farming

There are approximately 200 farmers with a dairy goat enterprise in Ireland. Dairy goat farming is a growth area with an increasing demand for its products. At present indigenous production is not able to meet the demand and an average of 10,000 litres of goats' milk per week is imported.



9

Education and Training

Training for young entrants to agriculture and horticulture together with life-long learning programmes for adult farmers and rural dwellers and comprehensive training for executives and operatives in the food industry continued as a key Teagasc priority in 2003.

All Teagasc courses for young entrants to agriculture, horticulture and the agri-food industry are now accredited by the national awarding bodies, the Higher Education and Training Awards Council (HETAC) and the Further Education and Training Awards Council (FETAC). Eleven HETAC-accredited third level courses were offered on the Central Applications Office (CAO) list. These courses are provided jointly by Teagasc colleges and institute of technology partnerships. Participants have the opportunity to progress from certificate to diploma and up to university degree level.

A total of 602 students were participating in third level courses at the end of 2003. A breakdown of enrolment and participation levels in 2003 and the previous two years is given in Table 1.

Table 1: Enrolments and Participation in Third Level Courses

Courses		2001	2002	2003
National Cert in Agriculture	Year 1	54	88	83
	Year 2	0	41	79
	Year 3			21
National Dip in Horticulture	Year 1	87	117	125
	Year 2	0	59	102
	Year 3			14
National Cert in Agricultural Science	Year 1	36	38	20
	Year 2	25	19	20
National Dip in Agricultural Science	Year 3	11	23	21
National Cert in Agri-Business	Year 1	34	45	24
	Year 2	36	34	31
National Cert in Business Studies – Equine	Year 1	16	22	12
	Year 2	4	18	17
National Cert in Agricultural Mechanisation	Year 1	0	17	18
	Year 2	0	0	15
Total – Third Level Courses		303	521	602

Table 2: Enrolments and Participation in Teagasc Vocational Courses

Courses		2001	2002	2003
Vocational Cert in Agriculture	Year 1	551	397	321
	Year 2	759	358	453
	Year 3 ¹	1721	1723	2040
Vocational Cert in Horticulture	Year 1	74	119	105
	Year 2	137	75	92
Dip in Horticulture	Year 3 ²	99	131	
Cert in Horse Breeding & Training	Year 1	28	26	20
	Year 2	16	24	25
Adv Cert in Dairy Herd Management	Year 1	30	42	20
	Year 2	34	28	42
Adv Cert in Machinery & Arable Crops	Year 1	36	26	12
	Year 2	34	37	10
Vocational Cert in Agriculture (Mature Students)	Year 1	30	47	168
	Year 2	165	26	65
	Year 3	195	26	99
Vocational Cert in Horticultural Skills		7	4	26
Vocational Cert in Forestry	Year 1	24	22	18
	Year 2	9	20	17
Advanced Cert in Farm Management	Year 1	24	17	17
	Year 2			27
Total		3973	3148	3577

¹ Participants in the final year of the former Teagasc Certificate in Farming

² Participants in the final year of the former Teagasc Diploma in Horticulture.

A total of 3,577 students were participating in vocational certificate courses, run in nine agricultural and horticultural colleges, at the end of 2003. Courses covered many aspects of agriculture, horticulture, horse production and forestry. All courses are accredited by FETAC and participants have the opportunity to transfer, via the Higher Education Links Scheme, to third level courses. A breakdown of participation levels in vocational courses in 2003 and the previous two years is given in Table 2.

The investment programme aimed at ensuring that facilities in agricultural and horticultural colleges are as good as those available internationally was continued in 2003. A total of €15m has been invested in six agricultural and three horticultural colleges during the past three years.

The consolidation of college facilities continued in 2003. The College of Horticulture at An Grianan, Termonfeckin, Co. Louth ceased to

provide courses. Also, the Teagasc Authority decided to end the provision of vocational certificate courses at Mellows College, Athenry. The remaining course at Mellows, the Vocational Certificate in Organic Farming, was transferred to Mountbellew College.

A number of vocational training courses run at local Teagasc training centres were held at night and weekends and contained significant distance learning components.

Table 3: Teagasc Adult Training Provision in 2003

	No. of courses	No. of participants
Technology and Business modules	67	748
Rural Viability modules	62	724
Information Technology modules	53	514
Environment/Food Safety modules	209	5764
Alternative Enterprise modules	30	638
100/80 Hour courses	44	1352
Advanced Courses	3	40
Other courses	31	379
Total adult participants	499	10,159

With the growing number of part-time farmers, Teagasc is committed to organising training for young entrants and adult farmers at times which suit the work-schedules of participants.

E-Learning

Teagasc entered the area of e-learning for the first time in 2003. An on-line learning website was built and this is linked with the virtual learning environment at Carmarthenshire College in Wales, which has one of the most highly developed e-learning systems. Twenty Teagasc education staff were trained in the provision of e-learning.

A course involving over 40 students was successfully run in 2003 and plans were made to run further courses in 2004. To enable the further development, growth and management of on-line learning, plans are now being advanced for the establishment of an on-line learning unit in Teagasc.

Adult Farmer Training

Over 10,000 adults attended courses runs by Teagasc in 2003. These courses covered technology and business management, rural viability, information technology, environmental protection, food safety, alternative enterprises and advanced management. A breakdown of adult training is given in Table 3.

Special courses in basic agriculture and farm management were run for people under 35 who had not completed formal agricultural training and required training in order to qualify for stamp duty relief, investment aid and quota-based schemes. Many of the participants in these courses, involving 100 hours training in agriculture and 80 hours training in farm management, were in full-time employment outside of farming and were taking over the running of the family farm business on a full-time or part-time basis. A number of the courses were run through distance learning in order to complement the work schedules of participants.

Close on 60% of all adult training programmes were in the areas of environmental control and food safety, reflecting the growing importance of these areas. Information technology was also a very important element of training. Over 500 members of farm families participated in information technology training. They had the benefit of computer laboratories which have been established in colleges and designated local training centres.

Food Industry Training

Over 2,000 food industry personnel participated in training courses in all aspects of food processing in 2003. Among the areas covered were food safety, innovation management, food labelling, new processing technology and new product development. The bulk of training was conducted at the National Food Centre where almost 1,700 personnel completed over 130 training courses. An outline of courses and participation levels is given in Table 4.

Table 4: National Food Centre Training of Food Industry Personnel in 2003

Course title	No. courses	No. participants
Food Hygiene	35	482
HACCP	51	620
Food safety auditing	10	104
Sensory analysis	5	49
Trainer skills in food safety and hygiene	2	18
Training course on EC/2001/471	2	24
Thermal process validation	1	14
Innovation workshop	1	7
Labelling of foodstuffs	1	1
Introduction to food microbiology for non-microbiologists	1	3
Identification of Listeria species	1	2
Food safety and hygiene	1	12
Food technology	1	20
New product development	1	8
Dept Agriculture staff training – Directive 91/497/EC (Annex 3)	20	265
Total	133	1,655



10

Opportunities for Farm Families Programme

The Opportunities for Farm Families Programme was launched by Teagasc in 2002 to service the needs of farm families, arising from the rapid changes that are occurring in the structure of Irish agriculture. The objective of the programme was to assist farm families take a clear and realistic look at their present situation, examine the on-farm and off-farm options open to them and develop a "Way Forward Plan" that will boost income and improve quality of life.

A total of 4,000 farm families had participated in the programme up to late 2003. Over 50% of participants had completed all stages of the programme and were presented with their "Way Forward Plan"

A joint Teagasc/UCD analysis conducted in 2003 showed a high level of satisfaction among programme participants. Over 80% said that, based on their experience, they would recommend the programme to a neighbour. An equally large majority felt participation in the programme helped greatly in assessing their current situation and charting strategies which would improve standard of living and quality of life.

The feedback from participants was incorporated into a review of the Opportunities for Farm Families Programme in autumn 2003. Following agreement on CAP reform, the programme is now being refocused to reflect the impact of the changes in policy on farm families after January 2005 when the new system of decoupled payments is introduced.

The new Planning Post Fischler Programme is being introduced in 2004 and will provide expert support to farmers in assessing the implications of the new policy and in gearing production to real market needs. It will involve a combination of group discussions and individual advice in developing and implementing an action plan for each participating farmer. The programme will retain the key elements of the successful Opportunities for Farm Families Programme.

11

Events and Publications

Teagasc maintained an active programme of public events at local, county, regional and national level in 2003. These included demonstrations, farm walks, open days, discussion group meetings, advisory clinics and a large schedule of conferences on every aspect of the organisation's work. Among the highlights were:

- Two national dairy conferences in Cork and Cavan, which attracted an attendance of 1,500 farmers and industry representatives. A national liquid milk conference was also held. A comprehensive schedule of dairying open days, demonstrations and local conference were held on farms, at Teagasc research and advisory centres and other venues.
- The National tillage conference run by Teagasc in January was again the major indoor event for the tillage sector. County tillage conferences and open days were also held at critical periods of the tillage season.
- Teagasc economists outlined the results of their analysis of the CAP reform proposals at a special conference in May. In December economists reported on the performance of the industry in 2003 and prospects for 2004 at the annual Situation and Outlook Conference.
- A series of open days and conferences was run throughout the year for beef and sheep producers. National open days were also held on award winning farms.
- The Teagasc pig research and advisory service ran three regional conferences which were attended by the majority of pig producers
- The national REPS conference in November provided an important up-dating forum for professionals involved in the scheme.
- In horticulture, national conferences were held on potatoes and nursery stock and regional conferences were organised for vegetable growers.
- A comprehensive schedule of demonstrations and field days was run by the forestry advisory service.

- The national education conference held in February provided an ideal discussion forum on future trends and needs in agricultural and horticultural education.
- Scientist and breeders from the UK, Holland and Teagasc addressed the national horse breeding conference run in April.
- A national open day on organic farming was held at Mellsows Centre, Athenry in July.
- A major demonstration on alternative feeds for livestock was held at Kildalton College in July.
- In addition to the national food industry open day at Moorepark in October, a further 17 conferences and workshops were run by the National Food Centre and the Dairy Products Research Centre during the year.

A comprehensive publications programme was maintained during the year. It included new manuals and workbooks for the training programme and handbooks/leaflets on production, quality management, financial analysis, environmental control, farm safety and food safety to support all aspects of the advisory programme.

A high quality publication on Farming in the Burren and a detailed publication on The Soils of Offaly were published during the year.

Two issues of the Irish Journal of Agricultural and Food Research were produced, together with a range of end of research project reports and other publications covering many aspects of the research programme.

Six issues of the magazine, Todays Farm, were published and distributed to 35,000 farmer clients of Teagasc and to key personnel in the agri-food industry. The research and

development digest, Farm & Food , was also produced.

A substantial new body of information was uploaded on the Teagasc website, www.teagasc.ie, and traffic on the site grew by over 30% during 2003, confirming its growing importance as a source of information nationally and internationally.



12

Statutory Obligations

Equality

Teagasc is committed to ensuring equality of opportunity and its personnel and staff development programmes are geared towards this objective. Teagasc is also committed to the implementation of Government policy on the employment of disabled people in the public sector.

There is a policy on bullying, intimidation and sexual harassment in operation to support and protect the dignity of each staff member.

Ethics in Public Office Act, 1995 and Standards in Public Office Act, 2001

In accordance with the Ethics in Public Office Act, 1995, and the Standards in Public Offices Act, 2001, members of the Teagasc Authority have furnished a statement of interest to the Secretary of the Authority and a copy has been provided to the Standards in Public

Office Commission. In addition, Teagasc staff members holding designated positions have complied with both acts.

Safety, Health and Welfare Act, 1989

In accordance with the Safety, Health and Welfare Act, 1989, Teagasc has prepared safety statements that encompass all factors affecting staff and visitor welfare.

Worker Participation (State Enterprises) Act, 1988

Sub-Board consultative structures have been put in place by Teagasc to support the organisation's communications and consultative processes. A National Participation Forum and four Regional Employee Participation Forums, representative of management and staff, are in operation.

Public Service Management Act, 1997

In accordance with sections 4 and 5 of the Public Service Management Act, 1997, Teagasc submitted its second Statement of Strategy to the Minister for Agriculture and Food in November 2003.

Freedom of Information Act, 1997

The Freedom of Information Act, 1997 was applied in Teagasc with effect from 1 November 2002. The Act establishes three new statutory rights:

- a legal right for each person to access information held by public bodies;
- a legal right for each person to have official information held by a public body relating to him/herself amended where it is incomplete, incorrect or misleading; and
- a legal right to obtain reasons for decisions affecting oneself taken by a public body.

Code of Practice for the Governance of State Bodies, October 2001

The Code of Practice for the Governance of State Bodies, approved by the Government in October 2001, has been adopted by Teagasc and arrangements have been made to ensure that Teagasc complies with the Code in all aspects of its operations.

Prompt Payment of Accounts Act, 1997

Teagasc is included as a listed purchaser of goods in the schedule to the Prompt Payments of Accounts Act, 1997. Since 2 January 1998 the Act has come into operation and Teagasc has complied with the provisions of the Act. In accordance with the Act and guidelines issued by the Department of Enterprise, Trade and Employment, the following information is provided.

Procedures established to ensure compliance with the Act

Teagasc has procedures in place to ensure that all invoices received are paid within the time limits specified on the invoices or the statutory time limit if no period is specified. While the procedures are designed to ensure compliance with the Act, they can only provide reasonable and not absolute assurance against material non-compliance with the Act. These procedures operated in the financial period under review and in the case of late payments, the relevant suppliers were notified and interest was paid to them.

In accordance with the Prompt Payments of Accounts Act, 1997, the following information is provided for the financial period ending 31 December 2003.

a) Payment Practices

Teagasc makes payments to suppliers in accordance with the terms stated on invoices or terms specified in individual contracts if appropriate. The standard terms are 30 days.

b) Late Payments in excess of €300

Number of Invoices	135
Average Period of Delay	24

c) Overall percentage of late payments of total payments and total interest paid

The overall percentage of late payments to total payments was 1.53%.

The total amount of interest paid with respect to late payments was €2,807.55.

Jim Flanagan
Director

Financial Statements 2003

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Report of the Comptroller and Auditor General for presentation to the Houses of the Oireachtas

I have audited the financial statements on pages 56 to 74 under Section 12 of the Agriculture (Research, Training and Advice) Act, 1988.

Respective Responsibilities of the Members of the Authority and the Comptroller and Auditor General

The accounting responsibilities of the Members of the Authority are set out on page 55. It is my responsibility, based on my audit, to form an independent opinion on the financial statements presented to me and to report on them.

I review whether the statement on the system of internal financial control on page 54 reflects the Authority's compliance with applicable guidance on corporate governance and report any material instance where it does not do so, or if the statement is misleading or inconsistent with other information of which I am aware from my audit of the financial statements.

Basis of Audit Opinion

In the exercise of my function as Comptroller and Auditor General, I conducted my audit of the financial statements in accordance with auditing standards issued by the Auditing Practices Board and by reference to the special considerations which attach to State bodies in relation to their management and operation.

An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgments made in the preparation of the financial statements, and of whether the accounting policies are appropriate to the Authority's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations that I considered necessary to provide me with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement whether caused by fraud or other irregularity or error. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements.

Emphasis of Matter

Without qualifying my opinion I draw attention in the Supplement to this Report to certain shortcomings in governance.

Opinion

In my opinion, proper books of account have been kept by the Authority and the financial statements, which are in agreement with them, give a true and fair view of the state of affairs of the Authority at 31 December 2003 and of its income and expenditure and cash flow for the year then ended.



John Purcell

Comptroller and Auditor General

21 September 2004

Supplement to Audit Report

Governance Shortcomings

In the course of the 2003 audit of Teagasc the following matters came to my attention, during a review of internal audit reports, which gave rise to concern about the governance of the Authority. I raised these matters with the Director of the Authority and his responses have been incorporated in this supplement.

1. False Travel and Subsistence Claims

In June 2001, the Authority received an anonymous letter stating that certain staff at a Teagasc Research Centre were receiving "additional free mileage and subsistence payments". This letter was referred to the Director of the Centre who replied to the Director of the Authority the same month to the effect that he was satisfied that all was in order in respect of expense claims at the Centre.

In July 2002 the Administrative Officer at the Centre fortuitously became aware of information that suggested that certain travel claims made by a staff member were not bona fide. He challenged the staff member who accepted that the claims were false and promised that there would be no recurrence. The staff member's Head of Department was informed. He met the staff member and concluded that the false claims did not go back over a long period and that the amount at issue was small. On this basis he decided that no further action was warranted and he did not report the matter to the Director of the Centre.

Another anonymous letter alleging failure to deal with false expense claims by an unnamed staff member at the Centre was received by the Director of the Authority in May 2003. This resulted in the Internal Auditor being asked to carry out an investigation into the allegations.

The Internal Audit investigation revealed that a staff member had been submitting spurious claims, apparently since 1988. The claims fell into two categories

- claims for journeys which had not been undertaken
- inflated claims relating to the daily collection of material by the staff member on his way to work. Such claims ought to have been limited to the cost of additional travel occasioned by the need to collect material over and above the normal travel from home to work. They were not so limited. Instead, the claims were calculated on the basis of a notional return trip from the Centre to the collection point. This resulted in an overclaim, on a weekly basis, in respect of 112 miles.

All the claims had been duly certified by the then Head of Department. The amount calculated as having been paid in respect of claims for journeys not undertaken was €77,636 while no amount was attributed to the inflated claims.

Disciplinary action has been taken against the officer concerned by demoting him within his grading structure and by requiring him to repay the amount claimed for journeys not undertaken plus interest of €52,420 giving a total of €130,056.

In October 2003, the Director of Teagasc instructed Head Office staff to investigate the roles played by the Administrative Officer and the Head of Department at the Centre in relation to the false claims. This investigation took

place in May 2004. Subsequently the Director recommended that the Administrative Officer and the Head of the Department be subjected to disciplinary action. Both the Administrative Officer and the Head of Department are contesting the disciplinary action.

I was concerned that there had been a serious failure in governance in this instance in that:

- an effective system of monitoring, controlling and authorising travel and subsistence expenditure had not been maintained
- managers certifying claims seemed in many instances to have had little knowledge of claimants' travel requirements and so were not in a position to approve such claims in good faith
- the control environment was deficient in that management did not react promptly and appropriately to the original indication of a possible fraud
- management did not deal appropriately with the discovery of the fraud in 2002.

I asked the Director of the Authority:

1. how the control environment at the Centre failed, over a period of almost sixteen years, to detect travel claims for journeys not undertaken.
2. whether Teagasc has written procedures for dealing with the discovery of frauds and irregularities and whether these were followed.
3. whether the anonymous letters were brought to the attention of the Internal Auditor and the Audit Committee promptly, and if so, with what result.
4. why no recovery had been required in respect of the inflated claims.
5. what further action is proposed in terms of
 - strengthening the Authority's reporting of, and reaction to, control failures.
 - ensuring that managers are clear as to their responsibilities in relation to dealing with cases of fraud or suspected fraud.

Director's Response

The Director informed me that the failure in the control environment was attributable to a culture of unwarranted trust in the integrity of some staff by certain key members of management at the Centre. The focus of management was on operations with inadequate attention to financial controls.

The Director stated that Teagasc does not have written procedures for dealing with the discovery of fraud and hitherto relied on local management to initiate appropriate action where fraud was discovered or suspected. In the incident of July 2002, the normal expected procedures were not followed.

The Director informed me that the first anonymous letter was not brought to the attention of Internal Audit in 2001 but was dealt with by the Director through the Personnel Department and the Centre management. The second anonymous letter of May 2003 was promptly brought to the attention of the Internal Auditor who initiated an immediate investigation and issued a preliminary report to management on 8 July 2003. The Audit Committee was informed at the subsequent meeting in October 2003 that the investigation was ongoing and in November 2003 the Internal Auditor issued a report quantifying the false claims. The Audit Committee discussed the issue at the May 2004 meeting and the Director and Director of Administration set out the disciplinary procedures that were being instituted against the officer and two members of management at the Centre.

In relation to the decision not to pursue recovery of overpaid amounts in the case of inflated claims, the Director stated that both the staff member and the Head of Department had acted in the mistaken belief that they were in compliance with the regulation in regard to the amounts claimed. In the circumstances of managerial agreement, it was considered that it would not be possible to pursue the matter.

In relation to further action proposed, the Director stated that:

- During the course of the investigation at the Centre, an audit had been carried out of other officers' claims. Head Office had also requested the Head of Centre to carry out a review of all travel claims at the Centre. This review did not detect any further false claims at the Centre. All internal audit assignments include a comprehensive examination of travel and subsistence claims. The audit plan for 2004, approved by the Audit Committee in February 2004, includes provision for a specific audit of travel and subsistence expenditure.
- Control failures identified in the normal course of the Internal Auditor's work are initially reported to local management who are afforded the opportunity to respond to the points raised on audit before publication of the Internal Audit report and its subsequent distribution to the Audit Committee. The Internal Auditor carries out follow up work after a period of 6 months to ensure that identified weaknesses in the system of control have been acted upon. Teagasc considers this process to be effective.
- Procedures to deal with control failures identified outside of the Internal Audit process will be strengthened.
- Written procedures for dealing with fraud and irregularities will be promulgated and enforced vigorously.

2. Employee conflict of interest

An Authority research centre had outsourced work associated with computerised on-farm data capture, recording, validation and reporting since 1995. The service provider was, until 1999, a partnership in which an employee of the Centre had an interest amounting to at least 50%. From 1999 the service provider was a company in which the employee is a 50% shareholder. The contract for this work was awarded without a tender. An Internal Audit report notes that:

- the employee agreed that he did not declare his interest in the company to the Director of Teagasc but asserts that the Director of Operations and the Head of Centre were aware of his connection with the company/partnership and this has not been denied.
- the employee requisitioned services from and certified payments to the company in 2003.
- the employee carried out quality control work on behalf of the company and was involved in the data analysis.

The amount paid to the company since 1999 was €233,610. The amount paid between 1995 and 1999 was €102,605.

With effect from 30 June 2004, Teagasc has discontinued using the services of this company and it is expected that alternative arrangements will be made. There was no evidence that any disciplinary action had been taken or considered in relation to this matter.

I was concerned that these arrangements appeared

- to represent a breach of the employee's conditions of employment which require that he devote his time fully to his duties as an employee and not to engage in outside employment or business.
- to be incompatible with the Code of Practice for the Governance of State Bodies which requires State Bodies to adopt a code of conduct which, inter alia, will prevent employees being involved in outside employment/business interests in conflict or potential conflict with the business of the body.

I asked the Director of the Authority:

1. Why local management:
 - allowed the employee to requisition services from the company and certify payments to it.
 - did not seek quotations or engage in a competitive tendering process in relation to the services.
 - did not advise the Authority of the conflict of interest arising from the employee's engagement by Teagasc and his connection with the company.
2. What steps the Authority has taken to implement a Code of Business Conduct as required by the Code of Practice.
3. What action has been taken to identify other possible conflicts and to deal with them.

Director's Response

In relation to the actions of local management the Director stated that:

- requisitions raised by an individual have no status in Teagasc unless authorised by the Head of Department or Head of Centre. Following the authorisation of a requisition the purchase order is raised. Payments cannot be certified unless the above procedure is followed in relation to procurement of service. In this case the employee had certified some of the payments because of the nature of the service provided. This should not have been allowed to happen in a situation where management was aware of the involvement of the employee in the provision of the service.
- A quotation was sought initially and a detailed description of the service to be provided was given by the employee's business. Local management at that time considered it to be good value for money. The cost of this service did not go up in line with inflation over the years. It proved very difficult to contemplate involvement in a more broad ranging competitive process because of the very specialised and local nature of the service provided. The service provider was required to have very specialised knowledge of research animal recording systems and needed to use very specialised computer software.
- Management embarked on a number of initiatives to eliminate dependence on the above approach to the capture and validation of farm records. It was not until a system that facilitated the recording and transfer of data over telephone lines to the central database was developed that Teagasc was in a position to discontinue using the services of the employee's business. The services were no longer required as of July 2004.
- The Director of Operations who was initially responsible for this work has retired from Teagasc. There is no record of him advising the then Director or Authority of the conflict of interest between the employee's engagement by Teagasc and his connection with this business. Subsequent managers assumed that this issue had been dealt with in the past and they focussed on removing the dependence of Teagasc for this type of service.

The Director indicated that the Authority plans to prepare and implement a Code of Business Conduct in 2004. He also informed me that a disciplinary process in relation to the staff member concerned, the Head of Centre and the Director of Operations has been initiated.

As regards identifying and dealing with other possible conflicts of interest, the Director stated that in compliance with the Ethics in Public Office Acts 1995 and 2001 specified officers are required each year to furnish a declaration (Statement of Interest) of any interests which could be interpreted to be in conflict with the interests of Teagasc.

All employees on commencement of their assignment with Teagasc are asked to sign a contract of employment. Each contract of employment contains an exclusivity clause in which it is made clear that the officer should not engage in any employment or business other than their employment with Teagasc.

The Teagasc Purchasing and Building Works Regulations (May 2003) cover ethical considerations in dealing with suppliers. Staff who have any connection with actual or potential suppliers to the Teagasc programme are required to declare their interest to the Director and to the Director of Operations concerned and to ensure that they do not influence in any way the placing of Teagasc business with such suppliers.

Internal Audit investigations seek to uncover any potential conflict of interest situations which may exist.



John Purcell
Comptroller and Auditor General
21 September 2004

Statement on Internal Financial Control

On behalf of the Authority of Teagasc I acknowledge our responsibility for ensuring that an effective system of internal financial control is maintained and operated.

Any system of internal financial control can provide only reasonable and not absolute assurance against material error, misstatement or loss. In considering the effectiveness of internal financial controls, the Authority and its Audit Committee have regard, among other things, to the requirements of the Code of Practice for the Governance of State Bodies.

The Authority has taken steps to ensure that an appropriate control environment is in place by:

- clearly defining management responsibilities, authority and accountability;
- establishing formal procedures for monitoring the activities and safeguarding the assets of Teagasc;
- developing a culture of accountability across all levels of the organisation.

The Authority has established processes to identify business risks within Teagasc and is in the process of evaluating these risks.

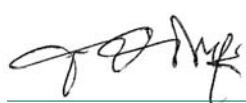
The system of internal financial control is based on a framework of regular management reporting, administration procedures including segregation of duties and a system of delegation and accountability including:

- a comprehensive annual budgeting and financial reporting system which is reviewed and approved by the Authority;
- regular reviews by the Authority of overall strategy, business and financial plans and variances against operating and capital budgets.

Teagasc has an internal audit function, which operates in accordance with the requirements of the Code of Practice for the Governance of State Bodies and with the effectiveness criteria set out in the Teagasc Statement of Strategy published in November 2003. The work of internal audit is informed by analysis of the risks to which Teagasc is exposed and annual internal audit plans are based on this analysis. The internal audit plans are approved by the Audit Committee.

The Authority's monitoring and review of the effectiveness of the system of internal financial control is informed by the work of internal auditor, the Audit Committee which oversees the work of the internal auditor, the executive managers within Teagasc responsible for the development and maintenance of the financial control framework and comments made by the Comptroller and Auditor General in his management letter.

No specific review of the system of internal control was carried out during 2003. The Authority intends to arrange for such a review in 2004.



Dr Tom O'Dwyer, Chairman

14 September 2004

Statement of Responsibilities of the Authority

Under Section 12(1) of the Agriculture (Research, Training and Advice) Act, 1988, the Authority is required to prepare financial statements in such form as may be approved by the Minister for Agriculture and Food with the concurrence of the Minister for Finance. In preparing those financial statements, the Authority is required to:

- select suitable accounting policies and then apply them consistently
- make judgements and estimates that are reasonable and prudent
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that Teagasc will continue in operation
- disclose and explain any material departures from applicable accounting standards

The Authority is responsible for keeping proper books of account which disclose with reasonable accuracy at any time the financial position of Teagasc, and which enable it to ensure that the financial statements comply with statutory requirements. The books of account are kept at the Authority's headquarters at 19 Sandymount Avenue, Dublin 4. The Authority is also responsible for safeguarding the assets of Teagasc and for taking reasonable steps for the prevention and detection of fraud and other irregularities.



Dr Tom O'Dwyer
Chairman



James Beecher
Member of the Authority

14 September 2004

Accounting Policies

For the Year Ended 31st December 2003

The accounting policies adopted by Teagasc are as follows:

(a) Basis of Accounting

The Financial Statements have been prepared in accordance with the historical cost convention, subject to certain assets being included at a valuation (see Note 13).

(b) State Funding

State funding for Research in the Food sector and for the Stimulus collaborative research programme is accounted for on an accrual basis. All other State funding is accounted for on a cash receipts basis.

(c) EU Income

Grants from the European Social Fund are taken to income on the basis of the first and second advances of the current year's claim, together with the final instalment of the previous year's claim.

All other EU Grants are accounted for on an accrual basis.

(d) Operational Income

Advisory service income is accounted for on a cash receipts basis. All other operational income is accounted for on an accrual basis.

(e) Tangible Fixed Assets and Depreciation

(i) Owned Assets

Assets were taken over from An Chomhairle Oiliuna Talmhaiochta and An Foras Taluntais on 8th September 1988 at the closing values in the Balance Sheets of those bodies. Additions are stated at cost.

(ii) Depreciation

Land is not depreciated. The cost or valuation of other owned fixed assets is written off by equal instalments over their expected useful lives as follows:

Farm Buildings	20 years
Other Buildings	50 years
Plant and Vehicles	5 years
Computer Equipment	3 years
Laboratory and Office Equipment	10 years

Assets held under finance leases are depreciated over the lease term, where this is shorter than their expected useful lives.

A half year's depreciation is charged in the years of acquisition and disposal of assets.

(iii) Leased Assets

Fixed assets acquired under finance leases are treated in accordance with the policy noted above under fixed assets. The capital element of related rental obligations is included under liabilities, while the interest element is charged to expenditure over the term of the primary lease period.

Rentals on operating leases are charged to expenditure as incurred.

(f) Capital Account

The balance on this account represents the unamortised value of funds used to purchase fixed assets.

(g) Stocks

Stocks have been valued by Teagasc officials. Livestock and own farm produce are valued at estimated net realisable value. Net realisable value is determined on the basis that animals are sold for slaughter. Gains and losses, which arise from these valuations, are reflected in full in operational income. All other stocks are valued at the lower of cost and net realisable value.

(h) Debtors

Known bad debts are written off as they arise and specific provision is made where recovery is considered doubtful.

(i) Libraries and Publications

No value is placed on the books in Teagasc libraries or on unsold publications. Expenditure on books and publications is written off in the period in which it is incurred.

(j) Superannuation

The pension entitlements of employees of Teagasc and its predecessors are provided for through defined benefit superannuation schemes.

No provision is made for future pensions, and the costs of these schemes are met from current income as they arise. Staff contributions in respect of pensions are offset against this expenditure (see Note 9).

Income & Expenditure Account

For the Year Ended 31st December 2003

	Note	2003 €000	2002 €000
Income			
State Funding	2	123,962	119,708
EU Income	3	1,244	1,825
Operational Income	4	23,867	23,343
Surplus/(Deficit) on disposal of Fixed Assets	23	16,921	(267)
Other Grants, Donations and Voluntary Levies		2,215	2,105
		168,209	146,714
Expenditure			
	5	140,911	144,453
		27,298	2,261
Transfer from /(to) Capital Account	12	(2,863)	(10,258)
Surplus/(Deficit) for the period		24,435	(7,997)
Balance forward from previous year		(8,500)	(503)
Accumulated Balance at 31st December		15,935	(8,500)

The above amounts relate entirely to continuing operations.

There are no recognised gains or losses except as reflected in the above Account.

The Statement of Accounting Policies and notes 1 to 24 form part of these Financial Statements.

Dr Tom O'Dwyer
Chairman

14 September 2004

Jim Flanagan
Director

Balance Sheet

As at 31st December 2003

	Note	2003 €'000	2002 €'000
Fixed Assets			
Tangible Assets	13	69,632	66,953
Financial Assets	14	2	2
		69,634	66,955
Current Assets			
Stocks	15	5,739	5,754
Debtors and Prepayments	16	4,918	5,388
Bank Balances		19,132	622
Short-term Deposits		359	391
		30,148	12,155
Current Liabilities			
(amounts falling due within one year)			
Creditors and Accruals	17	13,337	13,572
Deferred Income	18	365	350
Obligations under Finance Leases	19	106	197
Bank Overdraft		493	6,712
Bank Loans		1	5
		14,302	20,836
Net Current Assets/(Liabilities)		15,846	(8,681)
Total Assets less Current Liabilities		85,480	58,274
Less			
Non Current Liabilities			
(amounts falling due after more than one year)			
Obligations under Finance Leases	19	42	134
Bank Loans		8	6
Other long-term Liabilities		19	22
		69	162
Net Assets		85,411	58,112
Represented By			
Capital Account	12	69,476	66,612
Income and Expenditure Account		15,935	(8,500)
		85,411	58,112

The Statement of Accounting Policies and notes 1 to 24 form part of these Financial Statements.



Dr Tom O'Dwyer
Chairman



Jim Flanagan
Director

14 September 2004

Cash Flow Statement

For the Year Ended 31st December 2003

Reconciliation of Operating Surplus/(Deficit) To Net Cash Inflow From Operating Activities

	Note	2003 €000	2002 €000
Operating Surplus/(Deficit)		24,435	(7,997)
Depreciation		5,102	4,762
Transfer to Capital Account		2,863	10,258
Interest paid		15	56
Interest received		(125)	(71)
(Profit)/Loss on sale of fixed assets		(16,920)	267
(Increase)/Decrease in Stocks		15	(84)
(Increase)/Decrease in Debtors		470	(378)
(Decrease)Increase in Creditors		(238)	2,861
Increase/(Decrease) in Deferred Income		15	(246)
Net Cash Inflow from Operating Activities		15,632	9,428

CASH FLOW STATEMENT

Net Cash Inflow from Operating Activities	15,632	9,428
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Return on Investments and Servicing of Finance

Interest Paid	(15)	(53)
Interest received	125	131
Net Cash Outflow from Returns on Investments and Servicing of Finance		
Investments and Servicing of Finance	110	78

Investing Activities

Payments to acquire tangible fixed assets	(8,583)	(15,077)
Receipts from disposal of tangible fixed assets	17,743	88
Net Cash Inflow/(Outflow) from Investment Activities	9,160	(14,989)

Financing

Property Loan repayments	(2)	(5)
Capital Element of Finance Lease payments	(203)	(293)
Net Cash Outflow from financing	(205)	(298)
Increase/(Decrease) in Cash	22	24,697

Reconciliation of net cash flow to movement in net funds/(debt)

Increase/(Decrease) in cash	22	24,697	(5,781)
Net (debt)/funds at 1st January		(5,699)	82
Net funds/(debt) at 31st December		18,998	(5,699)

Notes to the Financial Statements

For the Year Ended 31st December 2003

1. Teagasc (the Agriculture and Food Development Authority)

Teagasc (the Agriculture and Food Development Authority) was established under the Agriculture (Research, Training and Advice) Act, 1988. Under Section 21 of the Act, the assets and liabilities of An Chomhairle Oiliuna Talmhaiochta and An Foras Taluntais were transferred to Teagasc upon its establishment.

Section 12 of the Act requires that Accounts shall be kept in such form as may be approved by the Minister for Agriculture and Food with the concurrence of the Minister for Finance. This approval was given on 14th August 1998.

2. State Funding

The total amount shown under the above heading is made up as follows:

	2003 €000	2002 €000
Vote 31: Agriculture and Food		
Grant-in-Aid for general expenses	93,280	88,951
(including Grant for capital purposes, €4,066,487 (2002: €8,466,000)		
Grant-in-Aid for superannuation purposes	15,999	13,880
Grant-in-Aid for human resources purposes	11,100	12,700
Grant-in-Aid for food research	3,155	2,788
Grant for Stimulus collaborative research programme	116	129
Vote 30: Communications, Marine and Natural Resources		
Grant for Forestry Publicity and Awareness	160	850
Grant for Forestry Training	152	410
	123,962	119,708

3. EU Income

In 2003 EU funding was as follows:

	2003 €000	2002 €000
Operational Programme for Agriculture, Rural Development and Forestry 1994 -1999		
	(5)	549
Framework Programme V 1998 – 2002	1,224	1,276
Framework Programme VI	25	-
	1,244	1,825

Notes to the Financial Statements

For the Year Ended 31st December 2003

4. Operational Income

	Authority, Headquarters & National Receipts €000	Northern Advice & Training Division €000	Southern Advice & Training Division €000	Production Research Division €000	National Food Centre €000	Dairy Products Centre €000	Moorepark Dairy Products Centre €000	TOTAL €000	TOTAL €000
Advisory Service Fees	6	5,692	5,554	-	3,028	1,835	-	11,252	10,746
Other fees	65	582	1,274	3,028	1,393	2	332	7,116	6,682
Livestock Trading (See Note 7)	-	473	352	-	-	-	-	2,220	2,380
Other Farming Operations	-	227	410	1,576	-	-	13	2,226	2,292
Canteen Receipts	-	57	102	102	27	-	83	371	350
Publications and Miscellaneous	273	175	141	96	-	-	(3)	682	893
	344	7,206	7,833	6,195	1,864		425	23,867	23,343

5. Expenditure

Pay (see Note 8)	4,565	19,101	21,499	23,979	5,185	-	3,536	77,865	73,793
Pensions and Superannuation (see note 9)	19,347	-	-	-	-	-	-	19,347	20,116
Travelling and Subsistence	985	1,933	1,975	1,018	301	164	6,376	7,041	
General Operating Expenses (see note 6)	3,594	3,695	4,540	7,811	2,356	2,495	24,491	29,255	
Interest and Lease Charges	62	11	23	73	-	-	-	169	186
Depreciation (see Note 13)	227	805	1,036	1,801	635	598	5,102	4,762	
Grants to Private Colleges	4,767	-	-	-	-	-	4,767	4,477	
Grants to Farm Apprenticeship Board	-	-	-	-	-	-	-	190	
Other Grants	589	48	123	1,330	440	264	2,794	2,663	
	34,136	25,593	29,196	36,012	8,917	7,057	140,911	144,453	

Notes to the Financial Statements

For the Year Ended 31st December 2003

6. Analysis of General Operating Expenditure

Authority, Headquarters & National Receipts €000	Northern Advice & Training Division €000	Southern Advice & Training Division €000	Production Research Division €000	National Food Centre €000	Moorepark Dairy Products Centre €000	TOTAL	
						2003	2002 €000
Farming supplies/services	-	468	722	2,101	-	55	3,346
Maintenance/repairs	743	673	851	940	462	462	4,131
Rents/rates/insurances	208	540	607	969	97	302	8,012
Postage/telephones	330	620	690	297	82	58	2,723
Power/fuel/petrol	36	308	311	612	140	139	2,256
Laboratory supplies	36	6	112	813	627	632	1,937
Printing/stationery/publicity	668	398	310	207	105	66	1,591
Seminar/classroom/library supplies and services	121	180	280	187	421	24	2,008
Services of external agencies	-	47	91	187	31	216	1,390
Student and staff canteen supplies	66	210	288	130	39	114	1,407
Data processing supplies/services	456	149	51	225	34	137	1,205
Legal/professional fees (see note 10)	933	8	19	338	20	72	1,226
Miscellaneous Programme Costs	-	34	104	776	289	195	1,229
Miscellaneous	(3)	54	104	29	9	23	229
	3,594	3,695	4,540	7,811	2,356	2,495	24,491
							29,255

Notes to the Financial Statements

For the Year Ended 31st December 2003

7. Livestock Trading Surplus

	2003 €000	2002 €000
Sales	2,519	2,745
Grants and subsidies	562	520
	3,081	3,265
Opening Stock	4,021	4,102
Purchases	795	804
	4,816	4,906
Less: Closing Stock	(3,955)	(4,021)
	861	885
Surplus to Income and Expenditure Account (See Note 4)	2,220	2,380

8. Staff

The average number of staff employed during the year was as follows:

	2003	2002
Professional	796	792
Technical	254	262
Administrative/clerical	268	263
Farm/domestic	310	324
	1,628	1,641

9. Superannuation

Section 9 of the Agriculture (Research, Training and Advice) Act, 1988 provides for the establishment of schemes for the granting of superannuation benefits in respect of staff appointed by Teagasc and staff transferred to Teagasc from An Chomhairle Oiliuna Talmhaiochta and from An Foras Taluntais.

Pending the approval of draft superannuation schemes by the Minister for Agriculture and Food, the Minister for Finance and the Oireachtas, Teagasc operates superannuation schemes on an administrative basis.

Teagasc also administers two superannuation schemes (the Agricultural Colleges Staff Superannuation Scheme 1985 and the Agricultural Colleges Spouses' and Children's Contributory Pension Scheme 1985) in respect of certain staff employed by privately-owned Colleges of Agriculture and Horticulture, the cost of whose salaries is borne by the Exchequer through the agency of Teagasc.

Notes to the Financial Statements

For the Year Ended 31st December 2003

The above Schemes are defined benefit superannuation schemes. Superannuation entitlements arising under the schemes are paid out of Teagasc current income and are charged to the Income and Expenditure Account, net of employee superannuation contributions, in the year in which they become payable. No separate fund is maintained, and no assets are held, to finance the payment of pensions and gratuities. No provision is made in the financial statements in respect of any liability accruing in regard to future benefits.

Superannuation Costs

The average number of monthly pensions paid during the year was 1,178 (2002 - 1,114).

The charge for superannuation in the Financial Statements is made up as follows:

	2003 €000	2002 €000
Pensions and gratuities paid	23,241	23,341
Payments under Voluntary Early Retirement Scheme	213	202
	23,454	23,543
Less: Staff Contributions	(4,107)	(3,427)
	19,347	20,116

Superannuation Benefits

For the purposes of reporting in accordance with Financial Reporting Standard 17, Retirement Benefits (transitional arrangements), Teagasc has been advised by a qualified actuary. A valuation has been prepared by the actuary in order to assess the liabilities of the superannuation schemes at 31 December 2003.

The major financial assumptions used to calculate liabilities under FRS 17 are as follows:

	2003 % per annum	2002 % per annum
Inflation rate increase (a)	2.25	2.00
Salary rate increase	3.50	4.00
Pension rate increase	3.50	4.00
Scheme liabilities discount rate	5.25	6.00

On the basis of these and other assumptions and applying the projected unit method prescribed in FRS 17, the present value of pension scheme liabilities is as follows:

	2003 €000	2002 €000
Accumulated liabilities in respect of active Scheme members	356,008	299,000
Liabilities in respect of existing pensioners and deferred pensions	298,576	283,000
Total accrued pension liability	654,584	582,000

Notes to the Financial Statements

For the Year Ended 31st December 2003

Analysis of amount which would be charged to operating profit:

	€000
Current Service Cost	5,906
Past Service Cost	-
Settlements and Curtailments	-

Analysis of the amount which would be credited to other finance income:

	€000
Interest on Scheme liabilities	34,592
Expected return on Scheme assets	-

Analysis of the amount which would be recognised in a statement of total recognised gains and losses (STRGL):

	€000
Actual return less expected return on Scheme assets	-
Experience gains and losses	14,132
Changes in assumptions	34.724
Actuarial loss which would be recognised in STRGL:	48,856

Analysis of the movement in deficit during the year is as follows:

	€000
Deficit at 1.1.2003	(582,000)
Current service cost	(5,906)
Contributions	16,770
Past service costs, settlements and curtailments	-
Other finance income/(loss)	(34,592)
Actuarial gain/(loss)	(48,856)
Deficit at 31.12.2003	(654,584)

(a) As pension increases under the Teagasc schemes are based on salary increases rather than on price increases, a price inflation assumption is not necessary for the purposes of this valuation. However, since FRS 17 requires reference to an assumed rate of inflation, the above rate would be appropriate for this purpose.

Notes to the Financial Statements

For the Year Ended 31st December 2003

10. Audit Fee

A provision of €40,150 has been included in expenditure in respect of auditor's remuneration for 2003 (2002 - €40,150).

11. Authority Fees and Emoluments

The following emoluments were paid to the members of the Authority:

	2003 €000	2002 €000
Chairman	15	15
Other Authority members	91	89
	106	104

These amounts are included in the total Pay expenditure included under Note 5 above.

12. Capital Account

	2003 €000	2002 €000
Balance at 1st January	66,612	56,354

Transfers from/(to) Income and Expenditure Account

Amount capitalised in respect of purchased assets	8,583	15,077
Net amount released on disposals	(823)	(355)
Property loan repayments	2	5
Capital element of payments in respect of leased assets	203	293
	7,965	15,020

Less:

Amortised in line with asset depreciation	(5,102)	(4,762)
	2,863	10,258
Balance at 31st December	69,476	66,612

Notes to the Financial Statements

For the Year Ended 31st December 2003

13. Tangible Fixed Assets

	Land €000	Buildings €000	Plant & Equipment €000	TOTAL €000
Cost Or Valuation				
At 1st January 2003	5,829	70,827	39,245	115,901
Additions		4,345	4,259	8,604
Disposals	(19)	(1,406)	(1,206)	(2,631)
At 31st December 2003	5,810	73,766	42,298	121,874
Accumulated Depreciation				
At 1st January 2003		23,575	25,373	48,948
Charged during period		1,468	3,634	5,102
Disposals during period		(713)	(1,095)	(1,808)
At 31st December 2003	24,330	27,912	52,242	
Net Book Value 31st December 2003	5,810	49,436	14,386	69,632
Net Book Value 31st December 2002	5,829	47,252	13,872	66,953

Included in the opening balances is land totalling 612.3 ha (1,513 acres) transferred by the Department of Agriculture and Food at nominal values, and certain other assets which were revalued at 31st December 1975 or 1st July 1980.

Teagasc has the use of 85 ha (210 acres) of land owned by the Department of Agriculture & Food, while the Department has the use of 16.2 ha (40 acres) owned by Teagasc. There is no charge to either party arising from these arrangements.

Certain fixed assets entrusted to Teagasc are protected by statute, and may not be sold.

The net book value of assets includes the following amounts in respect of leased assets:

Plant and Equipment

€000

2003	171
2002	392

The depreciation charge for the year on these assets was as follows:

2003	242
2002	276

Notes to the Financial Statements

For the Year Ended 31st December 2003

14. Financial Assets

(a) Moorepark Technology Limited

Teagasc has a 59% holding in the paid up share capital of Moorepark Technology Limited (5,100 shares at €0.127). The Company, which was incorporated on the 18th January 1991, is a joint venture between Teagasc and various agriculture co-operatives. Separate audited financial statements have been prepared in respect of the Company and its results for the year ended 31st December 2003 were as follows:

	2003 €000	2002 €000
Turnover	980	941
Operating Profit before Depreciation, Interest and Tax	246	233
Depreciation (net of grants amortised)	(242)	(223)
Interest (charges)/receipts	5	8
Tax	(1)	(1)
Profit/(Loss) after Taxation	8	17
Accumulated Losses forward at 31 December	(209)	(217)

The Company's Memorandum of Association provides that shareholders are entitled to avail of the Company's services at preferential rates.

Trading transactions between Teagasc and Moorepark Technology Limited (which consists of consultancy, analyses and use of technical and other facilities) were as follows:

	2003 €000	2002 €000
Moorepark Technology Limited sales to Teagasc (included in Company's turnover)	267	354
Other recoupments from Teagasc (deducted from Company's cost of sales)	76	91
Total	343	445
Balance unpaid at 31 December	110	24
Teagasc sales to Moorepark Technology Limited Balance unpaid at 31 December	136 40	114 54

Notes to the Financial Statements

For the Year Ended 31st December 2003

Under the terms of the Moorepark Technology Limited Promoters' Agreement, Teagasc has undertaken to provide from its own resources specified staff requirements in Moorepark Technology Limited, as well as underwriting the Company's utility, stores, accounts and effluent overheads. These costs were as follows:

	2003 €000	2002 €000
Staff	183	155
Other	109	122

These totals are included in Teagasc expenditure under the Moorepark Dairy Products Centre (see notes 5 and 6 above)

Moorepark Technology Limited utilises assets owned by Teagasc as follows:

	2003 €000	2002 €000
Original Costs	1,196	1,082
Net Book Value at 31st December	369	348

These amounts are included under Plant and Equipment (see note 13 above)

In accordance with the Promoters' Agreement, Teagasc has also leased to Moorepark Technology Limited at a nominal rent of €127 per annum its existing processing hall at Moorepark Dairy Products Centre together with an adjoining site on which the Company has constructed additional facilities.

It was not considered appropriate to consolidate the results of the Company.

(b) Other Investments

Teagasc has two small investments in agricultural co-operatives costing in total €1,890 (2002 - €1,890).

Notes to the Financial Statements

For the Year Ended 31st December 2003

15. Stocks

	2003 €000	2002 €000
Livestock	3,955	4,021
Farm produce, fertilisers and feeding stocks	596	582
Laboratory and veterinary supplies	187	230
Building materials	31	32
General supplies	970	889
	5,739	5,754

16. Debtors

	2003 €000	2002 €000
Trade Debtors	1,161	2,586
EU Income	2,131	2,163
Other Debtors and Prepayments	1,626	639
	4,918	5,388

Included in EU Income are amounts receivable from the EU in respect of training grants totalling €2,130,416 (2002 – €2,163,542)

Notes to the Financial Statements

For the Year Ended 31st December 2003

17. Creditors

	2003	2002
	€000	€000
Trade Creditors	2,560	3,553
Other Creditors and Accruals	10,777	10,019
	13,337	13,572

The total shown under this heading includes the following amounts due in respect of taxation and pay-related social insurance:

	2003	2002
	€000	€000
P.A.Y.E and P.R.S.I.	1,711	1,631
Value Added Tax	2,195	142
Construction Industry Tax	9	8
Withholding Tax	70	30
	3,985	1,811

The total for Creditors also includes an amount of €358,574 (2002 - €391,358) which represents euro short-term deposits being held pending distribution to sub-contractors in other EU States in respect of research contract work.

18. Deferred Income

Public funded research is carried out in accordance with contracts with other State Institutions, principally the Department of Agriculture and Food. Under these contracts advances received at the commencement of projects are not taken into account as income until the projects are completed.

At 31st December 2003 the source and amount of such deferred income was as follows:

	2003	2002
	€000	€000
National Development Plan: Productive Sector		
Operational Programme 2000-2006	197	150
Dept of Agriculture & Food - advance for analyses	168	200
	365	350

Notes to the Financial Statements

For the Year Ended 31st December 2003

19. Finance Leases

- (a) Finance charges incurred during the year under finance leases amounted to €24,115 (2002 - €38,296)
- (b) Future obligations under finance leases are due as follows

	€000
Within one year	106
Within two to five years	42
	<hr/> 148

- (c) At 31st December 2003 Teagasc had no commitments to enter into further finance leases in respect of plant and equipment (2002 - €24,684).
- (d) The movement in finance leasing obligations was as follows:

	2003 €000	2002 €000
Obligations at 1st January	331	382
New finance leases	21	242
Capital element of finance lease payments	(204)	(293)
Obligations at 31st December	<hr/> 148	331

20. Capital Commitments

Capital commitments outstanding at 31st December 2003 amounted to €1,002,675 (2002 - €1,035,065)

21. Operating Leases

At 31st December 2003 Teagasc had annual commitments under non-cancellable operating leases as set out below:

	Land and Buildings €000	Plant and Machinery €000	Total €000
Leases which expire			
- within one year	368	36	404
- between two and five years	7	2	9
- after five years	236	-	236
	<hr/> 611	38	<hr/> 649

Notes to the Financial Statements

For the Year Ended 31st December 2003

22. Analysis of Changes in Cash and Cash Equivalents During the Year

	At 1st January 2003	Cashflows	At 31st December 2003
	€000	€000	€000
Cash at Bank and on hand	622	18,510	19,132
Bank overdraft	(6,712)	6,219	(493)
Short-term deposits	391	(32)	359
	<hr/> (5,699)	<hr/> 24,697	<hr/> 18,998

23. Property Disposals

During 2003 the following Teagasc properties were sold:

	Cost €000	Written down Value €000	Proceeds less costs €000
Headquarters, 19 Sandymount Avenue, Dublin 4	959	450	15,103
Soft Fruit Research Station, Clonroche, Co. Wexford	107	48	1,182
Lullymore Research Centre, Rathangan, Co. Kildare	231	101	772
Advice & Training Centre, Corduff, Lusk, Co. Dublin	127	73	595
	<hr/> 1,424	<hr/> 672	<hr/> 17,652
Utilisation of proceeds to fund Teagasc capital works, 2003:			6,568
 Balance			 11,084

24. Authority Members - Disclosure of Transactions

The Authority has adopted procedures in accordance with the guidelines issued by the Department of Finance in relation to the disclosure of interest by Authority members and the Authority has adhered to these procedures. There were no transactions in the year in relation to the Authority's activities in which board members had an interest.

NOTES

NOTES

Tuarascáil Bhliantúil 2003

agus ráitis airgeadais



TEAGASC TUARASCÁIL BHLIANTÚIL 2003 & RÁTIS AIRGEADAIS

Don Aire Talmhaíochta agus Bia
De réir ailt 13 den Acht Talmhaíochta (Taighde,
Oiliúint agus Comhairle), 1988 tíolacann Teagasc –
An tÚdarás Forbortha Talmhaíochta agus Bia – a
thuarascáil don tréimhse 1 Eanair 2003 go dtí 31
Nollaig 2003.

Is féidir leaganacha Bearla den
Tuairisc seo a fháil.

Teagasc,
Oak Park,
Carlow.

Ph: 059 917 0200
Fax: 059 918 2097
e-mail: publications@hq.teagasc.ie

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Eolas faoi Theagasc

Is é Teagasc – an tÚdarás um Fhorbairt Talmhaíochta agus Bhia – an eagraíocht náisiúnta a chuireann seirbhísí taighde comhtháite, seirbhísí comhairleacha agus seirbhísí oiliúna ar fáil don tionscal talmháiochta agus bia agus do phobail tuaithe. Bunaíodh Teagasc i mí Mheán Fómhair 1988 faoin Acht Talmhaíochta, 1988 (Taighde, Oiliúint agus Comhairle).

Tá Údarás aon bhall déag i gceannas ar Theagasc. Is é an tAire Talmhaíochta agus Bia a cheapann an Cathaoirleach agus cúigear gnáthbhalla; agus, anuas air sin, ceapann sé na baill eile tar éis dó moltaí a fháil ó eagraíochtaí sonraithe.

Sa bhliain 2003 cuireadh seirbhísí ar fáil i naoi gcinn d'ionaid lántiomnaithe i dtaca le: próiseáil bhia, déiríocht, mariteoil, caoirigh, barra arúla, gairmeoireacht, cosaint chomhshaoil, eacnamaíocht agus forbairt tuaithe.

Chuir comhairleoírí áitiúla agus speisialtóirí réigiúnacha ó líonra d'ionaid réigiúnacha, d'ionaid chontae agus d'ionaid áitiúla comhairle neamhspleáach ar fáil d'fheirmeoirí agus do chónaitheoirí tuaithe.

Chuir múinteoirí agus teicneolaithe oiliúint ar fáil d'ionráláithe óga, d'fheirmeoirí aosacha, do chónaitheoirí tuaithe agus do thionscal an bhia in ocht gcinn de choláistí, in ionaid áitiúla oiliúna agus in ionaid taighde.

Sa bhliain 2003 bhí foireann 1,628 ag obair do Theagasc, idir fhostaithe buana agus fhostaithe faoi chonradh. Ina measc siúd bhí foireann ghairmiúil 796, foireann theicniúil 254, foireann riarracháin/chléreachais 268 agus foireann feirme/tís 310.



Ráiteas Misin

Bonn neamhspleách údarasach taighdeolais, mar aon le seirbhísí aistrithe teicneolaíochta agus oiliúna, a chur ar fáil i dtaca le forbairt inbhuanaithe an tionscal talmhaíochta agus próiseála bia, ionas go mbeidh an tionscal sin in ann freagairt go tairbheach d'éilimh agus do riachtanais tomhaltóirí agus freastal a dhéanamh ar shochaí agus ar eacnamaíocht bheo na tuaithe.

Bainistíocht Shinsearach Theagaisc



Jim Flanagan

Stiúrthóir



Mr Tom Kirley

Stiúrthóir Riaracháin



Dr Seamus Crosse

Stiúrthóir Oibríochta,
Taighde Táirgíochta



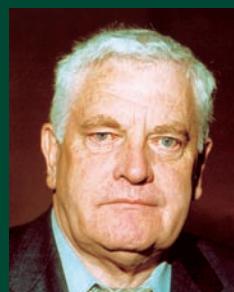
Dr Vivion Tarrant

Stiúrthóir, Ionad Náisiúnta
Bia



Dr Liam Donnelly

Stiúrthóir, Ionad Taighde
Táirgí Déiríochta



Mr Michael Galvin

Stiúrthóir, Seirbhísí
Comhairleacha/Oiliúna an
Deiscirt



Mr Donal Carey

Stiúrthóir, Seirbhísí
Comhairleacha/Oiliúna an
Tuaiscirt



Mr Peter Seery

Stiúrthóir Oibríochta,
Seirbhísí Bainistíocha

Baill an Údaráis



Tom Gill

Oifigeach Forbartha Talmhaíochta le Teagasc i gCathair na Mart, Co.Mhaigh Eo; ag feidhmiú ar son fhoireann Teagaisc



Mr Jim Beecher

Rúnaí Cúnta sa Roinn Talmhaíochta agus Bia



Mr Joe Fitzgerald

Feirmeoir agus ball de chuid An Choiste Riarracháin agus de chuid Chumann Soláthraithe Bainne Uachtarainne



Mr Jerry Henchy

Príomhfeidhmeannach Chomharchumann Dairygold Teo.



Dr Tom O'Dwyer

Cathaoirleach D'oibrigh sé i roinnt post lárnach i gCoimisiún an AE sa Bhruiséil: Stiúrthóir Táirgí Beastoic; Príomhstiúrthóir Oideachais, Oiliúna agus Óige; agus Chef de Cabinet do bheirt Choimisínéirí AE



Mr Patrick Kelly

Feirmeoir agus lar-Chathaoirleach Náisiúnta Mhacra na Feirme



Mr Ruaidhri Deasy

Feirmeoir agus Uachtaráin Ionad Chumann Feirmeoirí na hÉireann



Mr Michael O'Dwyer

Feirmeoir agus lar-Uachtaráin Ollscoil Náisiúnta na hÉireann, Gaillimh



Ms Anna May McHugh

Stiúrthóir Bainistíochta, Cumann Treafa Náisiúnta



Mr James Brett

Stiúrthóir Bainistíochta, Grúpa Brett, Callainn, Co. Chill Chainnigh



Prof Pat Fottrell

Iar-Uachtaráin Ollscoil Náisiúnta na hÉireann, Gaillimh



Aithbhreithniú an Stiúrthóra

Tá lúcháir orm a bheith in ann a chur in iúl go raibh bliain thairbheach ghnóthachtála eile againn i dtaca le seirbhísí taighde chomhtháite, seirbhísí comhairleacha agus seirbhísí oliúna a chur ar fáil do thionscal na talmhaíochta agus an bhia.

Mar sholáthróir lárnach teicneolaíochta, ghlac Teagasc ról lárnach maidir le cabhair a thabhairt don tionscal chun dul i ngleic leis na dúshláin a éiríonn i ngeall ar shórathruithe sa chreatlach polasaithe agus in éilimh agus in ionchais tomholtóirí. Chomh maith le béim a leagan ar chumas iomaíochta agus nuálaíochta i dtáirgeacht feirme agus bhia, leagadh béim faoi leith sa bhliain 2003 ar inbhuanaitheacht chomhshaoil, ar leas ainmhithe agus ar chúrsaí sábháilteachta feirme agus bia.

Taighde

Ghlac 200 eolaí, mar aon le 120 iarchéimí, páirt i 275 tionscnamh taighdeach. Mar chuid den taighde sin, clúdaíodh sábháilteach agus ardchaighdeán bia, próiseáil bhia, beostoc, curaíocht, gairneoireacht, foraoiseacht, rialú timpeallachta, anailís eacnamaíoch agus forbairt tuaithe.

De réir anailíse neamhspleáach a foilsíodh le linn na bliana 2003, ba mhór an soláthar a rinne Teagasc ar

son an gheilleagair. Léiríodh, san anailís sin, go bhfuil an teacht isteach eacnamaíoch ar infheistíocht deich n-oiread níos airde ná an leibhéal atá leagtha síos ag an Roinn Airgeadais do thionscnaimh infheistithe san earnáil phoiblí.

Léirigh an tOllamh Gerry Boyle (Ollscoil Náisiúnta na hÉireann, Maigh Nuad), san anailís sin, go raibh 47% de theacht isteach eacnamaíoch i seacht gcinn de réimsí taighde – i gcomparáid leis an íosráta 5% atá leagtha síos ag an Roinn Airgeadais do thionscnaimh infheistithe san earnáil phoiblí.

I measc na mórgnáimháíochtaí taighde a rinneamar sa bhliain 2003, bhí an mhionanailís a rinne ár gcuid eacnamaithe i dtaca le héifeacht an chomhaontaithe ar leasú meántearma Pholasaí Chomóntha Thalmhaíochta an AE. Chuidigh an anailís seo leis an Rialtas seasamh láidir idirbheartaíochta a ghlacadh agus straitéisí feidhmithe i leith an

Mar sholáthróir lárnach teicneolaíochta, ghlac Teagasc ról lárnach maidir le cabhair a thabhairt don tionscal.

pholasáí nua a úsáid. Chomh maith leis sin, coinníodh feirmeoír agus lucht an tionscail ar an eolas maidir le héifeacht na bpolasaithe nua ar chúrsáí feirmeoreachta agus ar thionscal na talmhaíochta agus an bhia.

D'éirigh that barr le clár taighde bia Theagaisc sa bhliain 2003. Mar shampla, bunaíodh lonad Cógasbheathach an Bhia, comhfhiontar de chuid lonad Taighde Táirgí Déiríochta Theagaisc (Páirc Uí Mhórdha) agus de chuid Choláiste Ollscoile Chorcaí (UCC). Ba vótá muiníne i saineolas eolaíoch Theagasc Pháirc Uí Mhórdha agus a chuid compháirtithe i UCC í an dámhachtain €16.5m a bhronn Fondúireacht Eolaíochta Éireann ar an tionscnamh seo.

Ba mhór an dul chun cinn é bunú áiseanna nua Theagaisc sa bhliain 2003. Coimisiúnaíodh an t-ionad nua gléasra biteicneolaíochta in lonad Taighde Pháirc na Darach le linn na bliana. Chomh maith leis sin tá an t-ionad nua bia d'ainmhithe agus do theicneolaíocht bhia i bPáirc Uí Mhórdha beagnach curtha chun

críche. Tiocfaidh barr feabhas ar an gclár taigdhe i ngeall ar na háiseanna seo agus i ngeall ar na heolaithe nua-earcaithe; agus tabharfar deis do Theagasc cur leis na naisc atá aige cheana féin le mórintítiúidí taighde agus le móreolaithe an domhain.

Ó thaobh taighde táirgíochta de, lean ár gcuid eolaithe orthu ag mionchoigeartú gormphriontaí do bhaiinne neamhchostasach, do mhairteoil agus do sholáthar caorach. Rinneadh dul chun cinn maidir leis an gcineál ceart bó déiríochta a chur ar fáil do chóras taigthe féarbhunaithe na hÉireann agus, i ngeall ar an eolas nua atá ar fáil ó ghéinteicneolaíocht, tá seans mór ann go dtiocfaidh athruithe móra chun na maitheasa ar rátaí torthúlachta ainmhithe.

Ba mhór an ról a ghlac géinteicneolaíocht maidir le diagnóisiú léibhéal fhriotaíochta Septoria Tritici, galar na ngránbharr, i gcoinne na bhfungaicídí is déanaí. Ba mhór an tábhacht a bhí ag saineolas Teagaisc i dtaca le teacht ar na straitéisí ab éifeachtaí chun

déileáil leis an bhfadhb chontúirteach seo do shaothrú gránbharr in Éirinn.

Seirbhísí Comhairleacha

Lean seirbhísí comhairleacha Theagaisc orthu ag cur teicneolaíochtaí riachtanacha ar fáil sa chaoi go mbainfeadh an earnáil fheirmeoreacht tráchtála tairbhe as scála níb airde agus, ag an am céanna, a bheith in ann na teicneolaíochtaí laghdaithe costais ba dhéanaí agus na córais táirgíochta ab fhéarr a thabhairt ar bord. Leag na seirbhísí comhairleacha béim faoi leith ar an lón mór feirmeoír páirtaimseartha, a bhfuil baint acu le céadán mór de tháirgí talmhaíochta na tíre. Cuireadh seirbhísí solúbtha ar fáil chun freastal faoi leith a dhéanamh ar riachtanais an ghrúpa sin.

Tar éis an chomhaontaithe i dtaca le hathbhreithniú meántearma an Pholasáí Chomóntha Thalmhaíochta i mí lúil 2003, ghlac ár gcomhairleoirí páirt ghníomach i mórfheachtas eolais i dtaca le sonraí na n-athruithe bunúsacha agus ar an éifeacht a bheadh acu ar fheirmeoírí. Tamall gairid roimh dheireadh na bliana

Ba sa bhliain 2003 a ghlac Teagasc páirt i réimse na ríomhfhoghlama den chéad uair. Dá bharr sin beidh deis againn freastal éifeachtach a dhéanamh ar riachtanais daoine atá ag brath ar an bhfeirmeoireacht agus ar ghairm bheatha eile araon.

bunaíodh an clár comhairleach speisialaithe 'Pleanáil i ndiaidh Fischler'. Tá sé d'aidhm againn sa chlár seo an chomhairle is fearr atá ar fáil a thabhairt d'fheirmeoíri i dtaca leis na hathruithe fréamhaí polasaí atá le teacht i bhfeidhm i mí Eanáir 2005.

Oideachas agus Oiliúint

Ghlac 16,000 duine páirt san oiliúint a chuir Teagasc ar fáil do thosaitheoirí sa tionscal, d'fheirmeoíri aosacha agus do thionscal an bhia sa bhliain 2003. Ardaíodh líon na gcúrsaí tríú leibhéal a chuir Teagasc ar fáil, i gcomhpháirtíocht le hinstítiúidí teicneolaíochta, ó naoi gcinn go dtí aon cheann déag.

Ba sa bhliain 2003 a ghlac Teagasc páirt i réimse na ríomhfhoghlama den chéad uair, nuair a bunaíodh suíomh gréasáin fhoghlama ar líne agus nuair a cuireadh treoirchúrsa ar fáil. Cuireadh pleannanna chun cinn i dtaca le haonad ríomhfhoghlama ar líne a fhorbairt mar chuid d'obair Theagaisc. Dá bharr sin agus de bharr chúrsaí solúbtha óiche agus deireadh seachtaine atá á gcur ar

fáil, mar aon le cúrsaí cianfhoghlama, beidh deis againn freastal éifeachtach a dhéanamh ar riachtanais daoine atá ag brath ar an bhfeirmeoireacht agus ar ghairm bheatha eile araon.

Cuichóiriú

Nuar a cuireadh san áireamh an ciorrú suntasach i gcúrsaí airgeadais Teagaisc sa bhliain 2003, mar aon leis an ngá le taighde tosaíochta agus le seirbhísí comhairleacha agus oiliúna a chosaint, bheartaigh Teagasc a chuid acmhainní a dhaingniú i níos lú ionad.

Díoladh an Príomh-Oifig i mBaile Átha Cliath agus rinneadh pleannanna chun an fhoireann a athshuíomh san ionad Náisiúnta Taighde Curaíochta i bPáirc na Darach. I láthair na huaire tá foireann an ionad Taighde um Gheilleagar Tuaithe, a bhí ag obair sa Phríomh-Oifig i mBaile Átha Cliath, á n-athshuíomh in ionad Mhic Mhaoilíosa i mBaile Átha an Rí.

Chomh maith leis sin díoladh an ionad Taighde Bogthorthaí i gCluain an Róistigh, Co Loch Garman sa

bhliain 2003. Tá an obair thaighde bogearraí a bhíodh ar siúl i gCluain an Róistigh á haistriú go hionaid mhóra taighde eile. Díoladh saoráid Theagaisc i Lullymore, Co. Chill Dara freisin.

Chomh maith leis sin bheartaigh an tÚdarás deireadh a chur leis an oiliúint ghairme do dhaoine óga a bhí á cur ar fáil aige i gColáiste Mhic Mhaoilíosa, Baile Átha an Rí agus an cúrsa don Teastas Gairme i bhFeirmeoireacht Orgánach a aistriú go Coláiste an Chreagáin.

Mar chuid de chuichóiriú áiseanna seirbhísí comhairleacha, díoladh an oifig comhairleach ar an gCorr Dhubh, Co. Bhaile Átha Cliath agus aistíodh an fhoireann go dtí ionad Comhairleach agus Oiliúna Átha Cliath i Kinsealy. Dúnadh roinnt oifigí beaga comhairleacha a bhí ar cíos freisin.

Infheistíocht Chaipitiúil

Rinneadh méid suntasach infheistithe chaipitiúil sa bhliain 2003, go háirithe i dtaca le hathchóiriú coláistí agus le háiseanna nua taighde a chur ar fáil.



Tógadh áiseanna nua teagaisc i gColáiste Bhéal Átha hÉis agus i gColáiste Chill Daltúin. Cuireadh ball críche ar an ionad nua biteicneolaíochta barr in ionad Taighde Pháirc na Darach agus bhi an obair ar an ionad nua biteicneolaíochta ainmhithe agus bia in ionad Taighde Uí Mhórdha cóir a bheith críochnaithe faoi dheireadh na bliana 2003. Chomh maith leis sin cuireadh áiseanna nua oifige agus saotharlainne ar fáil san ionad Náisiúnta Bia.

Seirbhísí Fiúntacha do Chustaiméiri

Anuas ar an oifigeach lánimseartha a ceapadh ag deireadh na bliana 2002 le cúram a thabhairt do sheirbhísí custaiméiri, cuireadh túis le roinnt tionscnamh tábhachtach le linn na bliana 2003. Rinneadh suirbhéithe chun leibhéal sástachta seirbhísí a mheas i measc mac léinn agus cliantfheirmeoiri. Cuireadh treoirthionscnaimh ar bun i gcontaetha éagsúla, i gcoláistí agus in ionaid taighde agus cuireadh túis le dianchlár oiliúna foirne. Rinneadh dul chun cinn suntasach maidir lena

chinntíú go mbeadh Cait Seirbhísí do Chustaiméiri agus plean gníomhaíochta i leith Seirbhísí do Chustaiméiri curtha i gcrích roimh an spriodhdáta, Bealtaine 2004.

Clármheatóireacht

Bunaíodh Aonad Meastóireachta agus ceapadh Oifigeach Meastóireachta i mí Mheán Fómhair 2003. Rinneadh dul chun cinn maidir le Plean Gnó don Aonad Meastóireachta a ullmhú, le córas meastóireachta feidhmiúcháin a dhearadh agus le plean timthriallach a fhorbairt chun meastóireacht chórasach a dhéanamh ar mhórchláir Theagaisc.

Bainistíocht Rioscaí

Cuireadh córais i bhfeidhm le linn na bliana 2003 chun clár bainistíocha rioscaí a chur ar bun i ngach aonad de chuid Teagaisc. Bunaíodh Grúpa Stiúrtha Bainistíochta Rioscaí agus cuireadh oiliúint ar fáil do na bainisteoirí go léir. Go luath sa bhliain 2004 beidh ar gach aonad gnó meastóireacht rioscaí agus plean gníomhaíochta a chur i bhfeidhm mar chuid shuimeálach den phlean gnó.

Teicneolaíocht an Eolais

Nuair a ceapadh Ceannasaí Teicneolaíochta Eolais agus Cumarsáide (TEC) le linn na bliana 2003, cuireadh Plean Gnó sonraithe TEC i bhfeidhm don tréimhse 2003-2005. Is éard is aidhm don phlean ná na heasnaimh TEC a aithníodh in athbhreithniú na bliana 2002 a cheartú. Rinneadh dul chun cinn maidir le hAonad lárnach TEC a bhunú agus chun cur leis an líon daoine cáilithe a bheadh ag teastáil ar an bhfoireann chun feidhmchláir TEC a fhorbairt agus a chaomhnú.

Jim Flanagan
Stiúrthóir

1

Eacnamaíocht Thalamhbhia

Chuaigh taighdeoirí ón lonad Taighde um Gheilleagar Tuaithe i mbun 34 tionscnamh sa bhliain 2003.

Leagadh béis sna tionscnamh sin ar éifeacht athruithe polasaí ar earnáil an talamhbhia agus ar cheantair tuaithe; agus rinneadh meastóireacht agus analís ar fheidhmiúchán fhiontair fheirmeoireachta agus ar threochtaí i bhforbairt tuaithe.

Trí chomhoibriú le compháirtithe san AE, tugadh roinnt tionscnamh a bhí faoi chistíú an AE, beagnach chun críche. Ina measc siúd bhí tionscnaimh a raibh sé d'aidhm acu múnla teilgthe a chur le chéile d'earnáil talmhaíochta an AE ar thurasóireacht chomhtháite tuaithe, ar chuínsí a mbeadh tionchar acu ar fhormeallú agus ar bhainistíocht rioscaí i leith galar coraintín.

Chomh maith leis sin d'éirigh le taighdeoirí trí cinn de chonarthaí

taighde nua a bhaint amach agus iad faoi chistíú an AE. Cuirfear túis leis na tionscnamh sin – ar ilfheidhmiúlacht, ar scéimeanna caomhnaithe comhshaoil agus ar íocaíochtaí díchúplaithe feirme – sa bhliain 2004; agus beidh comhoibriú le roinnt institiúidí taighde i dtíortha eile de chuid an AE i gceist.

Tionchar Leasú an CAP

Le linn na bliana 2003 d'foilsigh eacnamaíthe de chuid aonad anailís polasaí FAPRI Éireann trí anailís éagsúla ar an éifeacht a d'fhéadfadh a bheith ag athruithe i bpolasaithe an AE agus i bpolasaithe talmhaíochta agus bia ar fud an domhain orainn. Sa chéad agus sa dara anailís, a foilsíodh i mí Eanáir agus i mí Bealtaine, rinneadh staidéar ar an éifeacht a d'fhéadfadh a bheith ag moltaí i leith leasú CAP san AE, mar aon le moltaí an AE i leith cainteanna leis an Eagraíocht Dhomhanda Trádála (WTO). Sa tríú anailís, a foilsíodh i mí Dheireadh Fómhair, rinneadh staidéar ar an éifeacht a d'fhéadfadh a bheith ag an gcomhaontú féin a síniódh i Lucsamburg ar leasú an CAP.

Léiríodh san anailís sin gurbh í díchúpláil iomlán íocaíochtaí feirme an AE ón mbliain 2005 ar aghaidh an polasaí ab fhéarr a bhí ar fáil do thionscal na talmhaíochta in Éirinn. Cinneadh go mbainfí amach an leibhéal ab airde ioncam feirme trí dhícupláil iomlán a chur i bhfeidhm, nó trí dheireadh iomlán a chur leis an nasc idir táirgeadh feirmeoireachta agus íocaíochtaí.

Dúradh gurbh é an toradh a bheadh le díchúpláil iomlán, mar aon le roinnt athruithe i bpolasaithe trádála



talmhaíochta i ngeall ar chainteanna leis an Eagraíocht Dhomhanda Trádála (WTO), ná go dtiocfadh méadú 10% ar ioncam comhiomlán feirmeoireachta faoin m bliain 2012 i gcomparáid leis an leibhéal a bheadh i gceist dá leanfaí leis na polasaithe a beartaíodh faoi Chlár Gnó 2000.

Cruthaíodh, mar sin, go raibh an ceart ag anailíseoirí Theagaisc nuair a dúirt siad roimhe sin gurbh é an rogha ba mheasa ná gan polasaithe a athrú ar chor ar bith nó go dtiocfadh laghdú 9% ar ioncam feirmeoireachta faoin m bliain 2012. D'fhéadfadh páirt-díchúpláil, rogha atá ceadaithe faoi chomhaontú an AE ar leasú CAP, méadú ioncaim chomh híseal le 4% a chur ar fáil, ag brath ar na híocaíochtaí a ndéanfaí páirt-díchúpláil orthu.

Léirigh an analís gurbh í díchúpláil iomlán ar íocaíochtaí mairteola ó thairgeacht an rogha ab fhéarr i dtaca le hioncam ó thairgeacht mhairteola. Thiocfadh laghdú 18% ar líon na mbó cíche, agus dá thairbhe sin thiocfadh laghdú 7% ar tháirgí

mairteola. Ach, ag am céanna, dá dtabharfaí isteach laghdú 10% i bpraghnsanna, mar aon le laghduithe i gcostais fheirmeoireachta, bheadh ionchas ioncaim níb fhéarr ag táirgeoirí mairteola.

Dá leanfaí ar aghaidh le naisc idir íocaíochtaí agus táirgí, thiocfadh méadú beag ar luach aschur mairteola. Ach d'fhéadfá an méid sin a chlúdach trí chaiteachas níb airde a dhéanamh ar ionchur feirmeoirí.

Léirigh anailís Theagaisc gur chinntigh cinneadh an Aire Talmhaíochta agus Bia, íocaíochtaí cúitimh déiríochta ó tháirgeadh a dhíchúpláil ón m bliain 2005 ar aghaidh, go mbeadh todhchaí níb fhéarr i ndán do níos mó feirmeoirí déiríochta.

Chuirfeadh sé sin straitéis éalaithe níb fhéarr ar fáil d'fheirmeoirí neamhéifeachtacha agus chuirfí linn bainne ní ba leithne ar fáil d'fheirmeoirí a mbeadh sé d'acmhainn acu an gnó a leathnú. Léirigh an analís go dtiocfadh laghdú

ar líon na bhfeirmeoirí déiríochta i ngeall ar na socruthe nua, ó bheagán faoi 27,000 sa bhliain 2003 go dtí 18,000 sa bhliain 2012, le meánuota beagnach 300,000 lítear (65,000 galún). Dá gcuirfí moill ar dhíchúpláil íocaíochtaí go dtí an bhliain 2008, de réir mar a bhí leagtha síos i gcéad chomhaontú an AE, rachadh líon na bhfeirmeoirí déiríochta síos a fhad le 16,000, de réir na hanailísé.

Faoi na leasuithe nua thitfeadh praghás an bhainne 5% ní ba mhó ná mar a tharlódh faoin bpolasáí bunaidh. Is é an toradh a bheadh ar íocaíochtaí díreacha agus ar scála méadaithe, áfach, ná go bhfanfadh ioncam feirmeoirí déiríochta ar aon chéim leis an ráta boilscithe.

Léirigh an analís, nuair ba léir go dtiocfadh titim shubstaintiúil ar an tréad náisiúnta caorach faoin bpolasáí bunaidh, go gcuirfeadh an díchúpláil deireadh leis an titim sin. Cuireadh in iúl go mbeadh líon na gcaorach sa bhliain 2012 níb ísle ná mar a bhí sa bhliain 2003.



Leigheasadh ardú praghsanna an fhadhb sin, áfach, sa chaoi go dtiocfadhl ar luach aschur caorach faoin m bliain 2012.

Is beag éifeacht a bheadh ag díchúpláil ionlán ar ghránbharra. Thiocfadhl laghdú beag ar an limistéar curaíochta agus, dá bharr sin, thiocfadhl titim bheag ar luach an aschuir.

Leasú CAP i dtaca leis an Timpeallacht

Léirigh anailís Teagaisc go mbeadh tionchar lánearfach ag díchúpláil ionlán íocaíochtaí feirme an AE, ó tháirgeadh, ar an timpeallacht.

I ngeall ar an titim a thiocfadhl ar an lín beastoic de bharr an nasc idir táirgeacht feirmeoireachta agus íocaíochtaí a bheith briste, thiocfadhl laghdú substaintiúil ar astuithe ceaptha teasa ó thionscal na talmhaíochta in Éirinn.

Faoi chomhaontú Kyoto, ní mór dúinn anseo in Éirinn astuithe ceaptha teasa a choinneáil faoi bhun 13% faoin m bliain 2010, i gcomparáid le leibhéal na bliana

1990. Léirigh an anailís go dtiocfadhl laghdú 14%, i gcomparáid le leibhéal measta na bliana 1990, ar astuithe ceaptha teasa ó thionscal na talmhaíochta faoin m bliain 2010.

De thoradh na laghduithe in astuithe ceaptha teasa, ba chóir go mbainfí den bhrú, atá ar earnálacha eile de chuid gheilleagar na hÉireann, astuithe ceaptha teasa a laghdú, sa chaoi go mbeidh sé indéanta spriocanna chomhaontú Kyoto a bhaint amach sa tír seo.

Anailís ar Ghníomhaíocht na Feirmeoireachta

De réir mionanailís a rinneadh ar mhórfhiontair fheirmeoireachta sa bliain 2003 agus ar fhéidearthachtaí na bliana 2004 thuairiscigh eacnamaithe brabús méadaithe d'fheirmeoirí mairteola agus curaíochta, ach titim chorrlaigh do thairgeoirí caorach agus muc.

Tháinig méadú tuairim is 8% ar chorrlaigh mháirteola i ngeall ar laghdú beag i gcostais agus ar ioncam breise ó ardú sa ráta maraithe beithíoch agus ó íocaíochtaí díreacha. Bhráith feirmeoirí

curaíochta feabhas substaintiúil ar chúrsaí i gcomparáid le drochbhliain 2002, go háirithe i ngeall ar mhéaduithe corrlaigh 44% agus 25% faoi seach ar eorna earraigh agus ar chruthneacht gheimhrídh.

Chuir an laghdú i bpraghhsanna bainne go mór leis an titim 2% i gcorrlaigh dhéiríochta. Ina dhiaidh sin tháinig titim 20% sa bliain 2002. Cé gur tháinig laghdú tuairim is 5% ar chorrlaigh thraigthe chaorach sa bliain 2003, ba ó chaorigh a tháinig an corrach – le tionscal na déiríochta sa chéad áit – agus bhí siad go mór chun tosaigh ar thionscal na mairteola agus ar thionscal na ngránach freisin.

Tháinig laghdú 5% i gcorrlaigh thraigthe mhuc i ngeall ar phraghsanna ísele agus ar chostais arda.

De réir anailís i leith féidearthachtaí na bliana 2004, leag eacnamaithe Theagaisc béis faoi leith ar laghdú beag ioncaim i ngeall ar aschur íseal agus ar phraghsanna arda.

Tuairimí i Leith Leasú CAP

Léirigh suirbhé de chuid Teagaisc gur bhraith 42% d'fheirmeoí nach mbeadh tionchar ar bith ag díchúpláil íocaíochtaí feirme ó tháirgí ar ioncam. Bhraith 40% go dtiocfadhl aghdú ar ioncam agus bhraith 10% go dtiocfadhl ardú ar ioncam.

Rinneadh an suirbhé ar shampla ionadach 1,200 feirmeoir agus foilsíodh é i mí na Nollag. In ainneoin éagsúlacht na dtuairimí éagsúla i dtaca le tionchar na leasuithe ar ioncam, dúirt 85% díobh siúd a ghlac páirt sa suirbhé go raibh siad i bhfabhar aidhm an pholasáí nua.

Léiríodh go raibh sé i gceist ag 15% d'fheirmeoí déiríochta éirí as táirgeadh bainne taobh istigh de dhá bhliaín. Anuas air sin, dúirt 32% go n-éireoidís as le linn na 3-10 bliain ina dhiaidh sin. Ach ag an am céanna, bhí sé de rún acu siúd a raibh sé i gceist acu leanúint leis an déiríocht cur go substaintíúil le méid a ngnó.

Léirigh suirbhé de chuid Teagaisc gur bhraith 42% d'fheirmeoí nach mbeadh tionchar ar bith ag díchúpláil íocaíochtaí feirme ó tháirgí ar ioncam.

Bhraith 40% go dtiocfadhl aghdú ar ioncam agus bhraith 10% go dtiocfadhl ardú ar ioncam.

Léirigh an suirbhé go raibh sé i gceist ag 50% de tháirgeoirí máirteola líon a gcuid stoic a choinneál mar a bhí sé. Bhí sé i gceist ag tuairim is 10% cur leis an líon stoic agus bhí sé de rún ag beagnach 40% an líon stoic a íslíú. Cé go ndúirt 10% de tháirgeoirí caorach ísealchríche go gcuirfidís le líon an tréada, ba léir ón suirbhé go dtiocfadhl titim 6% ar líon na gcaoirigh ísealchríche.

Ní mór a chur in iúl go ndearnadh an suirbhé le linn tréimhse nuair nach raibh eolas iomlán ag feirmeoirí faoi mhionsonraí leasuithe nua CAP. Dá bhí sin, ní féidir a rá ach go léiríonn na toortháí luath-thuairimí na bhfeirmeoíri.

Pleananna Infheistithe don Bhliaín 2004

Léirigh suirbhé bliantúil Theagaisc ar phleananna infheistithe feirmeoirí go raibh sé i gceist acu €300m a infheistiú sa bhliaín 2004. Tháinig laghdú 9% agus 23% faoi seach ar infheistíocht phleanáilte i leith innealra agus fhoirgnimh fheirme



agus bhí an chosúlacht ar an scéal go dtiocfadh méadú faoi dhó ar infheistíocht sa chuóta bainne.

Léirigh an suirbhé, cé go raibh €290m i gceist maidir le hinfheistíocht phleanálte don bláthain 2003, gur infheistíodh €500m ar deireadh thiar. Is léir ón méid sin go mbíonn sé de nós ag feirmeoirí meastóireacht ró-íseal a dhéanamh ar a gcuid infheistíochta pleánálte.

Suirbhéithe Ioncaim sa bláthain 2002

Léirigh Suirbhé Náisiúnta Feirmeacha Theagaisc gur tháinig laghdú 5.8% ar ioncam feirmeacha sa bláthain 2002, rud a chiallaíonn gurbh é €14,925 meánioncam gach feirme. €15,840 a bhí mar mheánioncam sa bláthain 2001.

Tharla an titim san ioncam i ngeall ar laghdú os cionn 2% i luach an aschuir. Tháinig méadú 3.5% ar chostais táirgí feirmeoireachta. Ach, ag an am céanna, tháinig méadú 17% ar leibhéal na n-íocaíochtaí díreacha a fuair feirmeoirí sa bláthain 2002, rud a thug cúiteamh éigin dóibh ar an laghdú in aischtuir ón margadh.

Bunaíodh an suirbhé ar analís chuntas a coinníodh ar bheagnach 1,200 feirm. 116,400 feirmeoir ar fad a bhí gceist. Bhí tuairim is 20,000 feirmeoir nár cuireadh san áireamh, mar aon le táirgeoirí muiceola agus circeola.

Léirigh an suirbhé go raibh comhathrú ollmhór i gceist idir mórfheirmeoirí bríomhara lánaímseartha agus an grúpa beag páirtainmseartha, a bhíonn ag brath

go mór ar íocaíochtaí díreacha agus ar obair lasmuigh den fheirm. Léiríodh go raibh 44,500 feirm lánaímseartha i gceist – agus íosmhéid 0.75 aonad iontu. Ba é €27,258 meánioncam na bhfeirmeacha sin sa bláthain 2002, laghdú 10% ar ioncam na bliana 2001.

Seasann na feirmeacha lánaímseartha sin, i.e. 40% d'fheirmeacha na tíre, d'earnáil bhríomhar tráchtála na feirmeoireachta. Oibríonn 60% diobh i dtionscal na déiríochta agus bíonn baint ag an gcuid eile le tionscal na curaíochta, le tionscal na máirteola agus le táirgeacht caorach. Maidir leis an 60% eile d'fheirmeoirí, ní raibh d'ioncam ón bhfeirmeoireacht acu sa bláthain 2002 ach €6,590. B'fheirmeoirí máirteola/caorach formhór na bhfeirmeoirí eile agus bhí foinsí ioncaim de chineál éigin eile ag 82% diobh.

Léirigh an suirbhé go raibh ioncam taobh amuigh den fheirm ag an bhfeirmeoir agus/nó ag a c(h)éile ar 48% d'fheirmeacha. Ba ag an bhfeirmeoir féin a bhí an t-ioncam breise sin i gcás 35% d'fheirmeacha, méadú 2% ar an scéal céanna sa bláthain 2001. Ba ar fheirmeacha déiríochta a tharla an meath ba mhó. €28,100 an meánioncam a bhí i gceist, laghdú 18% ar fhigiúr na bliana 2001. Thit meánioncam fheirmeoireacht churaíochta go dtí €21,900, laghdú 9%. Tháinig titim suas go 23% ar ioncam mhórfheirmeoirí curaíochta.

Tháinig méadú ar ioncam máirteola sa bláthain 2002, ach ba ó bhonn an íseal a tháinig an méadú sin. Tháinig

méadú 7% ar chórais bheathaith eallaigh go dtí meánioncam €7,750 agus, ag an am céanna, ardaíodh an meánioncam ó chórais mháirteola eile 22% go dtí €9,520. Bhí €12,350 le fail ar fheirmeoireacht chaorach, méadú 2% i gcomparáid leis an mbliain 2001.

Léirigh an suirbhé gur tháinig méadú mór ar íocaíochtaí díreacha i leith ioncam feirme. B'íocaíochtaí díreacha iad 90% de mheánioncam na bhfeirmeacha go léir a ndearnadh suirbhé orthu, i gcomparáid le 72% sa bláthain 2001. Íocadh na méaduithe deireanacha in íocaíochtaí díreacha faoi chomhaontú Chláir an AE 2000 sa bláthain 2002.

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Taighde agus Forbairt Bhia

Lean an Clár um Thaighde agus Forbairt Bhia, a cuireadh i bhfeidhm ag an Ionad Náisiúnta Bia i mBaile Átha Cliath agus ag an Ionad Taighde Táirgí Déiríochta i bPáirc Uí Mhórdha, Mainistir Fhear Maí, ag cuid le tionscal an bhia trí theicneolaíochtaí nua próiseála a chur in oiriúint agus trí mhianach agus réimse na dtáirgí eagsúla a leathnú.

Rinneadh obair ar 110 tionscnamh taighde bia, 69 díobh ag an Ionad Náisiúnta Bia agus 41 ag an Ionad Taighde Táirgí Déiríochta. Rinneadh cuid mhór den obair ar na tionscnaimh sin i gcompháirtíocht le hollscoileanna, le hinstítiúidí taighde agus le compháirtithe tionsclaíochta in Éirinn, san Eoraip agus sna Stáit Aontaithe. Cuireadh go mór leis an gcomhoibriú le hinstítiúidí taighde thar lear, go háirithe sna heolaíochtaí fairsingíocha, le linn na bliana 2003.

Is comhartha é an comhoibriú méadaithe seo, le cuid de mhóreolaithe an domhain, den chlú atá ar bhia-eolaithe Theagaisc; agus is mór an tairbhe é sin do thionscal an bhia in Éirinn agus do thiomholtóirí Éireannacha i gcoitinne.

Cuireadh túis le dhá mhórthionscnamh de chuid eolaithe Theagaisc, agus iad cistithe ag an AE, sa bhliain 2003. I gcás an dá thionscnamh seo beidh comhoibriú i gceist le compháirtithe eolaíochta agus tionsclaíochta i mballtíortha an AE agus i Meiriceá Thuaidh.

Is iad seo a leanas buaicphointí an chláir, mar aon le roinnt mórghníomhartha.

Cuireann Taighde Táirgí Nua ar fáil

Chonacthas go soiléir an chaoi ar chuir clár taighde bia Theagaisc le nuálaíocht i dtionscal an bhia ag lá oscailte náisiúnta in Ionad Taighde Táirgí Déiríochta i bPáirc Uí Mhórdha i mí Dheireadh Fómhair. Cuireadh níos mó ná 20 táirge nua bia agus dí ar taispeáint ag an lá oscailte – iad go léir forbartha ag comhlachtaí Éireannacha agus ag comhlachtaí ilnísiúnta le cabhair ó eolaithe bia de chuid Teagaisc

I measc na dtáirgí a bhí ann bhí réimse leathan cáiseanna breislacha, bianna do leanaí, bianna feidhmiúla, licéir uachtair, caife gaelaigh, mar aon le comhbáhair do réimse leathan bianna sneaice agus do bhéilí réamhullmhaithe. I measc na dtáirgí a bhí ar taispeáint bhí:

- Foirmle nua do leanaí de dhéantús an chomhlachta ilnísiúnta, Wyeth,

ón monarcha in Eas Géitine, Co. Luimnigh, atá ar díol ar fud an domhain anois.

- Cáis chéadair nua-mhodhnaithe, Carbery Blue, de dhéantús an Carbery Group le cabhair ó theicneolaíocht Teagaisc.
- Comhbáhar nua blaistithe giostúisc, de dhéantús an Carbery Group freisin, a bheidh an-úsáideach do bhianna sneaice agus do bhéilí réamhullmhaithe.
- Réimse biadhathanna nádúrtha de dhéantús nuálaíoch an chomhlachta Waterford. Tá margadh mór dá chuid tárgí i Meiriceá Thuaidh ag an gcomhlacht seo cheana féin.
- Tiúchán blaistithe de dhéantús comhlachta nuálaígh eile, National Food Ingredients i Luimneach, le húsáid i réimse tárgí breislacha milseogra.
- Cáis nua forbheathach ó Bhord Déisíochta na hÉireann agus saill-leathán nua forbheathach ón Kerry Group.
- Tiúchán blaistithe déanta ó bhraich agus ó eorna rósta, de dhéantús

an chomhlachta ilnáisiúnta, Diageo, atá á easportáil go dtí níos mó ná 50 tír le húsáid i réimse deochanna.

- Cáiseanna theach feirme, licéir uachtair agus caife gaelach arna ndéanamh ag comhlachtaí beaga agus ag comhlachtaí meánmhéide ar fud na tíre.

Rud eile a bhí ar taispeáint ná próiseas speisialta nua chun cáis mozzarella a dhéanamh, forbartha ag eolaithe Theagaisc. I ngeall ar an úsáid leathan a bhaintear as mozzarella le barrán a chur ar phíotsa, tháinig borradh as cuimse faoi dhíolachán mozzarella le tamall de bhlianta anuas agus, le cabhair ó theicneolaíocht Teagaisc, tá déantóirí Éireannacha in ann dul in iomaíocht le comhlachtaí móra ar an margadh idirnáisiúnta.

Bunú Ionad Nua Taighde

Is compháirtithe iad eolaithe an ionad Taighde Tárgí Déisíochta san ionad nua Cóegasbheathach Bia, ar fógraíodh a bhunaithe sa bhliain 2003.

Beidh cistíú tosaigh os cionn €20m i gceist, €16.5m den mhéid sin á chur ar fáil ag Fondúireacht Eolaíochta Éireann (SFI). Beidh an chuid eile á cur ar fáil ag Sláinte Bia Teo (Alimentary Health Ltd), comhlacht biteicneolaíoch Éireannach a bhfuil ceangal aige le comhlacht ilnáisiúnta cógaisiochta domhanda.

Is í dámhachtain SFI an ceann is mó a bronnadh ar thionscnamh taighde in Éirinn riamh agus is comhartha muiníne é sa saineolas eolaíochta atá ar fáil san ionad Taighde Tárgí Déisíochta agus ina chompháirtí, Coláiste Ollscoile Chorcaí (UCC).

Beidh sé de chuspóir ag an ionad nua, a bheidh suite i saotharlanna nua biteicneolaíochta Theagaisc i bPáirc Uí Mhórdha agus san institiúid eolaíochtaí bitheacha i UCC, scrúdú a dhéanamh ar an ról a imríonn baictéir stéigeacha i gcothabháil sláinte agus i ngalair éagsúla. Tiocfaidh taighdeoirí ó dhisciplíni éagsúla i UCC agus i bPáirc Uí Mhórdha le chéile san ionad chun a gcuid scileanna a dhíriú ar



mhodhanna nua chun galair
stéigeacha a chóireáil agus a chosc.

Trí staidéar a dhéanamh ar na meicníochtaí trína mbíonn tionchar ag baictéir stéigeacha agus ag baictéir bhia ar chúrsaí sláinte agus galraithe, cuirfidh an taighde seo deiseanna dúshaothraithe tráchtala ar fáil do na hearnálacha bia agus cógaisíochta. Is é an tábhacht a bhaineann leis an taighde seo ó thaobh thionscal na déiríochta in Éirinn de ná go ndéanfaidh sé éilimh ar éifeachtúlach bhianna forbheathacha a dhaingníu agus, dá thoradh sin, go mbeidh tionchar tábhachtach aige ar fhorbairt na mbianna sin i gcomhlacthaí Éireannacha. Ó thaobh Pháirc Uí Mhórdha de, is éard atá ann ná compháirtíocht ardchaighdeáin a thugann na naisc láidre comhoibrithe atá aige le taighdeoirí UCC cheana féin go dtí leibhéal níos airde.

Taighde ar Ghéanómacht Feola

Thángthas ar chomhaontú i dtaca le clár taighde cúig bliana idir ionad Náisiúnta Bia Theagaisc agus an Meat Functional Genomics Group in Ollscoil Stát Michigan. Dá thoradh sin, cuireadh tús leis an gcéad chlár taighde um ghéanómacht agus phróiteoimeacht riamh in Éirinn.

Déanfar taighde ar an ngaol idir DNA i ngéinte samplacha agus tréithe caighdeáin feola i máirteoil agus i muiceoil in Éirinn. Bainfear úsáid as an eolas sin chun uirlís diagnóiseacha a fhorbairt i leith caighdeán feola.

Bunaídhe nasc tábhachtach eile leis an bhfoireann taighde um phróiteoimeacht feola in ionad

**Is comhartha é an conradh seo,
a bronnadh ar ionad Náisiúnta
Bia Theagaisc, den cháil mhór
idirnáisiúnta atá air mar ionad
ardchaighdeán feabhas chun
córais
bhainistíochta um
shábháilteacht bia a fhorbairt.**

taighde Clermont-Ferrand sa Fhrainc. Mar aon leis an gcompháirtíocht atá bunaithe cheana féin le hInstitiúid Uí Chonbhuí i gColáiste Ollscoile Bhaile Átha Cliath agus leis an ionad Náisiúnta Diagnóiseach i gColáiste Ollscoile na Gaillimhe, cuireann na lónraí nua seo modh sainiúil ar fáil chun teacht ar eolas, ar scileanna agus ar thaithí ar an mbitheolaíocht mhóilíneach a bhaineann le caighdeán feola.

Fuarthas polamorfachtaí DNA i leith frithireacht feola ón taighde cheana féin. Is éard atá á dhéanamhanois ná na géinitíopá a chomhghaolú le caighdeáin fhrithireachta. Táthar ag déanamh staidéir freisin ar ghéinte a

mbíonn tionchar acu ar shaill idirmhatánach.

Tionscnaimh Shábháilteachta Bia san AE

Bronnadh mórchonradh le cistiú ón AE ar ionad Náisiúnta Bia Theagaisc chun gormphrontaí sábháilteachta bia a fhorbairt i leith tárgí feola, próiseáil feola, miondíola agus lónadóireachta ar fud na hEorpa.

Béidh an tionscnamh seo á dhéanamh i gcompháirtíocht le cuibhreannas eolaithe agus compháirtithe i dtí cinn déag de thíortha an AE, mar aon leis an bPolainn, an Ungáir agus Ceanada.

Chomh maith le cleachtais sábháilteachta a fhorbairt i leith céimeanna tábhachtacha sa bhiashlabhra, déanfaidh tionscnamh Theagaisc athbhreithniú ar an gcaoi is fearr le fiosrú a dhéanamh ar ráigeanna nimhithe agus, anuas air sin, tabharfar comhairle i dtaca le cumarsáid éifeachtach a dhéanamh le tomholtóirí ar nithe a mbíonn baint acu le cúrsai sábháilteachta bia.

Is comhartha é an conradh seo, a bronnadh ar ionad Náisiúnta Bia Theagaisc, den cháil mhór idirnáisiúnta atá air mar ionad ardchaighdeán feabhas chun córais bhainistíochta um shábháilteacht bia a fhorbairt.

Le trí bliana anuas, d'éisigh le Teagasc gormphrontaí sábháilteachta bia i leith márteola, muiceola agus marú caorach a fhorbairt agus a fhoilsíú. Faoin teideal HACCP (Hazard Analysis Critical Control Point), tugann siad

mionsonraí faoi na cleachtais thábhachtacha sábhálteachta nach mór a chur i bhfeidhm ón am a sroicheann an t-ainmhí an mhonarcha go dtí go dtéann an conablach isteach sa seomra reoite.

Chomh maith leis sin forbraíodh HACCP do tháirgeacht chirceola agus tá obair ar bun cheana féin chun gormphriontaí sábhálteachta lónadóireachta agus glasrai a fhorbairt, i gcomhpháirtíocht leis an mBord um Chur Chun Cinn Sábhálteachta Bia agus le Coláiste Ollscoile Luimnígh. Tabharfaidh an tionscnamh nua idirnáisiúnta seo deis do Theagasc céimeanna eile sa bhiashlabhra a chlúdach agus an clár sábhálteachta bia a leathnú isteach san Eoraip.

Sprioc bainte amach i gCúrsaí Sábhálteachta Bia

Rinne foireann taighde Eorpach, faoi stiúir eolaithe de chuid an lonad Náisiúnta Bia, éacht mór domhanda le déanaí, nuair a d'éirigh leo an seadán, Cryptosporidium parvum, a aimsiú i mbianna.

Thángthas ar an bhfionnachtain seo tar éis tionscnamh taighde trí bliana faoi chistiú an AE, a raibh ocht gcinn de ghrúpaí taighde Eorpacha páirteach ann.

Is seadán é Cryptosporidium parvum atá ag teacht chun cinn i mbianna. Tagann buinneach, pianta sa bholg, masmas, babhtaí urlacain agus fiabhras ísealghráid orthu siúd a bhíonn fabhtaithe. Maireann an galar ar feadh suas le trí seachtaíne de ghnáth, ach d'fhéadfadh sé a bheith ainsealach agus dianseasmhach i

gcás daoine ar imdhíonacht íseal.

Tugtar an seadán seo faoi deara i gconair stéigeach eallaigh agus caorach agus is tríd an bhfaecas a dhéantar é a eisfheardadh. Is féidir é a tharchur ó ainmhí go duine, ó dhuine go duine, trí uisce nó trí bhia éillithe nó trí theagmháil dhíreach le dromchlaí éillithe sa timpeallacht.

Trí úsáid a bhaint as na córais bhráite nuafhorbartha, tá staidéar déanta den chéad uair ag eolaithe san lonad Náisiúnta Bia ar leitheadúlacht agus ar ráta marthanais Cryptosporidium parvum i bhfeoil agus i sailéid.

Beidh na modhanna nua braite ina mbuntáiste mór chun tuilleadh taighde a dhéanamh agus chun monatóireacht a dhéanamh ar an seadán seo atá ag teacht chun cinn i mbianna.

Anuas air sin, rinne taighdeoirí margaidh agus micreabhitheolaithe ón lonad Náisiúnta Bia, i gcomhpháirtíocht leis an Roinn Innealtóireachta Bia i gColáiste Ollscoile Bhaile Átha Cliath, an chéad mheasúnú cainníochtúil priacail riamh ar bhiaphataigín in Éirinn. Beidh sé de chumas ag an tsamhail, a rinneadh de thoradh na hoibre sin, an priacal a bhaineann le feoil éillithe ar bith a itheann an tomhaltóir a thuar agus an áit sa bhiashlabhra ina bhfuil an priacal is airde agus na háiteanna is fearr le rialúchán a chur i bhfeidhm a aithint. Beidh sé indéanta ansin an saineolas seo agus na scileanna a bhaineann leis a chur i bhfeidhm ar phróiséis bhia eile.

Taighde ar Stíleanna Maireachtála Bia

De réir torthaí taighde a d'fhoilsigh an tlonad Náisiúnta Bia sa bliain 2003, bíonn páirt mhór ag bianna sneice agus ag bianna caoithiúla i nósanna itheacháin beagnach leath de thomhultaigh na Breataine.

Trí úsáid a bhaint as modh taighde sofaisticiúil tomholtóirí, a dtugtar Food Related Lifestyle Instrument air, roinn taighdeoirí tomhultaigh na Breataine i sé ghrúpa. 'Snaiceoirí' a thugtar ar an ngrúpa is mó a bhfuil fás faoi. Clúdaíonn an grúpa sin duine amháin as gach grúpa tomholtóirí sa Bhreatain agus tá díil mhór acu i mbianna caoithiúla a chuireann béisí ar fáil go tapa caoithiúil.

D'aithin an foireann taighde dhá ghrúpa tomholtóirí eile sa Bhreatain nach raibh mórán suime acu i gcúrsaí bia. Deirtear go bhfuil na tomhultaigh seo 'míchúramach' agus 'scartha amach'.

Níl mórán suime ag an ngrúpa 'míchúramach' i gcúrsaí siopadóireachta agus níl ach beagán suime sa chócaireacht acu siúd atá 'scartha amach'. Nuair a chuirtear an dá ghrúpa seo in éineacht leis na sneiceoirí atá ag teacht chun cinn, is ionann sin agus 48% de chomhultaigh na Breataine.

Roinn an foireann taighde fuilleach na dtomholtóirí i dtrí ghrúpa: 'réasúnach', 'eachtrúil' agus 'coimeádach'.

Bíonn suim faoi leith ag an ngrúpa réasúnach, i.e. 26% de thomhultaigh na Breataine, i mbianna



ardchaighdeán agus is daoine meánaosta nó seandaoine a bhformhór. Bíonn suim ag an ngrúpa eachtrúil, i.e. 17% de thomhaltaigh, i dtáirgí nua bia agus bíonn sé de nós acu a gcuid siopadóireachta a dhéanamh i siopaí speisialaithe.

Os a choinne sin tá an grúpa coimeádach, i.e. 9% de thomhaltaigh. Bíonn siad seo traidisiúnta maidir leis an rogha a dhéanann siad i gcúrsaí bia agus ní bhíonn mórán suime acu i mbianna caoithiúla ná i dtáirgí nua bia. Tá cuid mhór ban aosta ina measc.

Tugadh tortaí an taighde do chomhlachaí bia in Éirinn chun cabhrú leo a gcuid táirgí bia, a gcuid margáiochta agus a gcuid straitéisí fógraíochta a chur in oiriúint do threochtaí tomholtóirí atá ag teacht chun cinn i láthair na huairé.

Rinne comhlachaí Éireannacha os cionn €2.6m de tháirgí bianna caoithiúla sa bhliain 2002. Easportáladh 1 billiún de sin go margadh na Breataine, a ídionn

luach €20 milliún de tháirgí bianna caoithiúla in aghaidh na bliana.

Grádú Meicniúil Feola

Bhí baint mhór ag na trialacha nua a rinneadh ar ghrádú meicniúil feola san Ionad Náisiúnta Bia le glacadh an AE le prionsabal na gcóras grádaithe meicniúil agus le spriocanna réadúla a leagan síos chun iad a cheadú.

I mí na Samhna 2003 rinne an Roinn Talmhaíochta agus Bia an chéad triail údaraithe agus rinne an tlonad Náisiúnta Bia analís ar na sonrá, a bhí le húdarú ag an AE. Ar an gcaoi sin ceadaíodh grádú meicniúil i monarchana easportála márteola sa bhliain 2004,

Smachtú Salmonella i Muca

Sa bhliain 2003 rinneadh tuilleadh dul chun cinn maidir le húsáid ábhar forbheatheach chun leibhéal salmonella a smachtú i muca. Roimhe sin d'aithin taighdeoirí tréithchineálacha baictéaracha aigéid lachtaigh, a bhí in ann fás salmonella a shocntadh,

sa tsaotharlann. Sa bhliain 2003 rinneadh trialacha ar mhuca beo agus noctadh do shamonella iad d'aon ghnó chun éifeachtúlacht ionghabhála forbheatheá i gcoinne na pataigine a mheas.

Ba mhór an tuar misnígh iad na tortaí. Thaispeáin siad go raibh na tréithchineálacha forbheatheacha in ann maireachtáil agus, i roinnt cásanna, go raibh siad in ann an lámh in uachtar a fháil i stéig na muice. Taispeánadh freisin gur laghdaigh na hábhair fhorbheatheacha go mór ar airónna an tsalmonella agus ar leibhéal an tsalmonella a bhí sna hainmhithe. Déanfar trialacha allamuiugh sa chéad chuid eile de na trialacha seo agus bainfear úsáid as meascán d'ábhair fhorbheatheacha chun salmonella a smachtú.

Mórthionscnamh Géanómach

Is éard is cuspóir do cheann de na mórtionscnaimh san Ionad Taighde Táirgí Déiríochta ná seicheamhú géanóm iomlán baictéar uathúil déanta cáise a dhéanamh. Is é an

rud is suntasaí faoin tionscnamh seo ná gur eochair é chun mais ghéarchéimneach a thógáil i dtaca le géanómacht chultúr tosaithe agus beidh Teagasc go mór chun tosaigh i bhforbairt idirnáisiúnta sa réimse móréabhlóideach a bhaineann le géanómacht a chur in oiriúint do chórais bhia traidisiúnta agus nuáláiocha.

Le linn na bliana 2003 rinneadh dul chun cinn mór maidir le seiceamhú iomlán an ghéanóim, trí úsáid a bhaint as seirbhísí comhlachta géinte; agus táthar ag súil go gcuirfear barr críche leis an tionscnamh, i.e. mapa géanóm a shoiléiriú, roimh dheireadh na bliana 2004.

Déanfar na sonraí a bhaineann le seiceamhú géinte sa tionscnamh seo a chur le chéile go córasach agus géinte a bhfuil tábhacht féidearthá eacnamaíoch ag baint leo a aithint. Cuirfear suim faoi leith i ngéinte a úsáidtear i bhforbairt bhlaistithe do cháiseanna agus úsáidfear iad le haghaidh dearadh tosaithe amach anseo.

Tá forbairtí sa ghéinteicneolaíocht ag déanamh síorathruite ar thírdhreach an eolaíocht bitheolaíochta. Ní go dtí le déanaí a thángthas ar an gcumas le comhshuíomh géiniteach iomlán orgánach beo a sheiceamhú. Go dtí seo is é an tionscnamh géanóm daonna an sampla cáipéisithe is fearr den teicneolaíocht seo.

Tacaíocht do Bhianna Feidhmiúla

Leanadh le forbairt bhianna feidhmiúla a mbeadh sé de chumas acu leasa áirithe sláinte a chur ar fáil

Leanadh le forbairt bhianna feidhmiúla a mbeadh sé de chumas acu leasa áirithe sláinte a chur ar fáil mar chuid thábhachtach de chuid an chlár taighde agus forbartha san Ionad Náisiúnta Bia agus san Ionad Taighde Táirgí Déiríochta.

mar chuid thábhachtach de chuid an chlár taighde agus forbartha san Ionad Náisiúnta Bia agus san Ionad Taighde Táirgí Déiríochta. Sampla amháin de sin ná an pháirt a ghlac eolaithe an Ionad Náisiúnta Bia i bhforbairt aráin, saor ó ghlútan, do dhaoine a mbíonn galar céiliach orthu.

Tá tuairim is 1% de thomhaltaigh na hÉireann ailléirgeach leis na comhbáhair i bplúr cruithneachta. Sa bhliain 2003 d'éisigh leis an Ionad Náisiúnta Bia cineálacha áirithe aráin a fhobairt gan chomhábhair chruthneachta ar bith iontu.

Leanadh le taighde forbartha ar chláir chothaithe ainmhithe chun

leibhéal aigéid líonoiléach chomhchuiningh (CLA) i mbainne agus i máirteoil a bhrefisiú. Deirtear go mbíonn éifeacht thairbheach ag CLA ar an tsláinte, go háirithe i ngeall ar na buanna frithailseacha a bhíonn ann, agus go mbíonn leibhéal níos airde de i mbainne agus i máirteoil féarthaírgthe. Fuarhas amach ó thaighde a rinneadh in ionaid Taighde Pháirc Uí Mhórdha agus an Ghráinsigh gur féidir cur le tiúchan CLA trí aiste bia an ainmhí a fhorlionadh le féar a mbíonn olaí speisialta ann.

Má uasmheadaítéar leibhéal an CLA i máirteoil agus i dtáirgí déiríochta Éireannacha beidh sé de chumas againn uathúlacht a chruthú do tháirgí den chineál sin i margáí tomhaltacha thar lear.

Anuas ar an obair sin go léir rinne eolaithe san Ionad Taighde Táirgí Déiríochta fiosrúchán ar an gcumas a bheadh ag fóram speisialta ar bhithcháis chun baictéir dhochracha sa bhéal a shocntadh agus, ar an mbealach sin, obair thairbheach a dhéanamh ar son sláinte déadaí.

Déantar an bhithcháis trí úsáid a bhaint as cultúr lachtach a tháirgeann an t-ábhar miocróbach, lacticin, a bhfuil sé de chumas aige sláinte bhéil a brefisiú. Bhí lacticin ina ábhar fionnachtana domhanda ag foireann eolaithe de chuid Teagaisc/UCC roinnt blianta ó shin. Is féidir coincheap an bhithbhia le haghaidh sláinte déadaí a leathnú go dtí deochanna feidhmíúla chomh maith le táirgí déiríochta.

3

Táirgeadh Bainne

Sa bhliain 2003 lean clár déiríochta Theagaisc air ag leagan béime ar fhobairt agus ar chraobhscaoileadh teicneolaíochtaí tábhachtacha d'earnáil iomaíoch idirnáisiúnta bhainne. Leagadh béis faoi leith in ionad Taighde Pháirc Uí Mhórdha ar an gcineál ceart bó a tháirgeadh do chóras tárgthe féarbhunaithe Éireannach, mar aon le nualáiocht leanúnach i mbainistíocht féir agus i dtairgeadh feabhsaithe ó lucht oibre.

Chomhairligh an clár comhairleach d'fheirmeoirí na modhanna bainistíocha airgeadais ab éifeachachaí, ba shaoire agus ab ardchaighdeáin a chur in oiriúint chun ioncam ó fheirmeoireacht déiríochta a uasmhedadú. Reáchtáileadh cuid mhór de na gníomhaíochtaí comhairleacha i gcomhar le próiseálaithe déiríochta. Reáchtáileadh 12 comhchlár Theagaisc/forbartha próiseálaithe le linn na bliana agus ba mhór an tairbhe a bhain leo sin i dtaca le feabhas a chur ar chúrsaí brabús

agus cleachtais ar fheirmeacha déiríochta.

Anuas air sin ba ghné thábhachtach iad na pléighrúpaí agus na feirmeacha monatóireachta de chuid an chláir chomhairligh déiríochta. Rinne comhairleach Theagaisc comhordú ar 230 pléighrúpa déiríochta ar fud na tíre agus chabhraigh siad le 120 feirm monatóireachta freisin. Bhí ról tábhachtach ag na feirmeacha monatóireachta sin maidir le cleachtais éifeachtacha a chur in oiriúint, a mhonatóiriú agus a chraobhscaoileadh.

Tairbhe an Fheachtais um Phróitéisín Bhainne

Ba mhór an tairbhe a rinneadh mar gheall ar dhianfheachtas Teagaisc prótíeinleibhéal bhainne a ardú. D'éirigh prótíeinleibhéil an bhainne go 3.3% ar an meán sa bhliain 2003, i gcomparáid le 3.2% i nójaidí deireanacha na haoise seo caite. D'éirigh le feirmeoirí a bhí chun tosaigh prótíeinleibhéal os cionn 3.4% a bhaint amach sa bhliain 2003.

D'éirigh le feirmeoirí a rinne lánardú ar phróitíeinleibhéal bhainne agus a bhain amach leibhéal chostais tárgí 5c/lítéar faoi bhun an mheáin náisiúnta brabús breise €300/bó a dhéanamh sa bhliain 2003. Ba mhór an buntáiste do na feirmeoirí sin an pháirt a ghlaic siad i bpléighrúpaí agus i gcainteanna monatóireachta feirme. Chuir siad gormphriontaí Theagaisc in oiriúint do bhainistíocht airgeadais, do bhainistíocht féir, do pholasaithe póraithe agus d'fhás gnó. Anois beidh siad in ann seasamh láidir a ghlacadh i gcoinne an laghdaithe i



bpraghas an bhainne atá pleanált i leasú pholasáí bhainne an AE.

Tairgeadh ar Chostas Íseal – Sin an Réiteach

Beidh costais tárgí ina ngné thábhachtach fhadsaoil faoi leasuithe nua an AE. Léirigh analís de chuid Teagaisc difríocht 8c/lítar i gcostais tárgí idir na táirgeoirí ab éifeachtaí agus na táirgeoirí ba neamhéifeachtaí sa bliain 2003.

Bíonn 440,000 lítar (96,000 galún) bainne de dhíth ar an 25% de thairgeoirí, a mbíonn na costais is airde orthu, chun ioncam €40,000 a shaothrú. Beidh 820,000 lítar (180,000 galún) de dhíth orthu sa bliain 2010 chun ioncam €40,000 a shaothrú. Ní leor scála méadaithe amháin chun ioncam a chothabháil do na feirmeoirí seo.

Os a choinne sin, d'éirigh leis na táirgeoirí ab éifeachtaí (i.e. 25%) ioncam €40,000 a shaothrú anuraidh ó tháirgeacht 220,000 lítar (48,000 galún). Faoin mbliaín 2010 ní bheidh orthu ach an tairgeadh a ardú go dtí 250,000 lítar (55,000 galún) chun

a gcuid ioncaim a choinneáil ar an leibhéal céanna,

Léiríonn torthaí ó thaighde a rinneadh i bPáirc Uí Mhórdha gur féidir le bó, roghnaithe don tairgeadh féarbhunaithe Éireannach, ardú 2.5c/lítar, nó suas go dtí €6,000, a chur le brabús na gnáthfheirme déiríochta. Beidh sé den riachtanas bó den chineál sin a úsáid má thiteann praghnsanna bainne. Tá sé de dhúshlán ar earnáil phóraithe déiríochta na hÉireann an cineál sin géineolaíochta a chur ar fáil d'fheirmeoirí.

Taighde ar Fhéarach Seamairbhunaithe

Léirigh taighde a rinneadh ar fheirm thaighde déiríochta Theagaisc i Solohead, Co Thiobraid Árann gur féidir tairgeadh bainne 12,500 lítar/heicteár a bhaint amach ó fhéar agus ó mhínligh sheimre báine gan ach 90kg de nítrigin leasacháin/heicteár.

Is éard a bhíonn i gceist ná an tseamair a shíolú, measctha le leasachán, tar éis an chéad

ghearrtha sadhlais nó ar thalamh a ndearnadh féarach daingean air.

Seans go dtaitneodh an córas ísealchostais seo le roinnt feirmeoirí déiríochta. Léiríodh do ghrúpa móré feirmeoirí é ag lá oscailte náisiúnta ar feirm thaighde Solohead i mí Mhéan Fómhair 2003.

Clár Nua Biteicneolaíochta Ainmhithe

Cuireadh túis leis an gclár nua biteicneolaíochta in ionad Taighde Pháirc Uí Mhórdha sa bliain 2003. Is éard a bhí i gceist sa chlár ná géinte a bhíonn gaolmhar le tréithe eacnamaíocha a mbíonn baint acu leis an innéacs eacnamaíoch pórála a rianú, so-ghabháilacht i leith galar in ainmhithe a fhiosrú agus staidéar a dhéanamh ar athraithigh mhóilíneacha lactoferrín.

Le linn na bliana rinneadh roinnt géanóm a aimpliú ón ngéanóm buaibheach agus thángthas ar roinnt torthaí a rabhamar ag súil leo trí anailís a dhéanamh ar sheicheamhú DNA. Rinneadh forbairt ar mhodhanna ardíogair chun géinitiopáil ainmhithe

a éascú. Anuas air sin forbraíodh teicnící chun géinte ó chealla sómacha bainne agus ó fhíochán mamach a amplíú. Chomh maith leis sin bunaíodh carnán DNA de gach ainmhí i dtréad déiríochta Theagaisc agus beidh sé sin ina acmhainn luachmhar d'aon iniúchadh móilíneach a dhéanfar amach anseo. Tá DNA géanómach ardchaighdeán ó 1,596 ainmhí sa charnán seo, ina measc cúig chineál éagsúla bó. Tá na samplaí go léir á gcoineáil ag -20°C agus ag -80°C le haghaidh stóráil chartlainne

Cur Chuige Nua i leith Smachtú Maistítis

Rinne eolaithe sna hionaid taighde táirgthe déiríochta agus tárgí déiríochta i bPáirc Uí Mhórda dul chun cinn an-mhór maidir le húsáid a bhaint as cultúir fhorbheathacha chun maistíteas a smachtú agus a fhuascailt i mba déiríochta. Tairgeann na cultúir ar baineadh úsáid astu an chomhdhúil fhrithmhiocróbach, lacticin, a bhí ina ábhar taighde i bPáirc Uí Mhórda le tamall de bhlianta anuas. Trí chultúir fhorbheathacha, bunaithe ar lachtbhachaillíní a thairgeann lacticin, a chur isteach i nduchta shiní bó a mbíonn infabhtuithe cliniciúla orthu, chonacthas gur tháinig feabhas mór ar riocht na mbó agus go ndearnadh

Rinne eolaithe sna hionaid taighde táirgthe déiríochta agus tárgí déiríochta i bPáirc Uí Mhórda dul chun cinn an-mhór maidir le húsáid a bhaint as cultúir fhorbheathacha chun maistíteas a smachtú agus a fhuascailt i mba déiríochta.

sochtadh soiléir ar líon na miocrób pataigíneach iontu.

Léirigh réamhfhiosruithe go bhfuil ceangal idir cosaint fhrithmhiocróbach san fhaireog mhamach agus breisiúchán freagairt imdhíonacha a tharlaíonn i ngeall ar bhaictéir fhorbheathacha a bheith tugtha isteach agus, ar an gcaoi sin, go gcuirtear meicníocht éifeachtach

ar fáil don fhaireog mhamach chun pataiginí maistíteacha a dhíbirt. I ngeall ar na tortaí seo, táthar an-dóchasach go mbeidh sé indéanta cur chuige neamh-antaibheatheach a fhorbairt chun maistíteas a chóireáil agus a smachtú agus dul i bhfad taobh amuigh den scóip agus den phoitéinseal atá ann cheana féin chun orgánaigh lacticininghinte i séalaí siní a úsáid, faoi mar a bhí fócas an tionscnaimh seo san am atá that.

Ba mar gheall ar thuilleadh forbartha ar an gcur chuige nuálaíoch seo i leith chóireáil maistítis agus ar mhionscrúdú ar mheicníocht eolaíoch ghníomhaíocht na gcultúr forbheathach, a d'éirigh leis an iarratas cistithe ar son an Enterprise Ireland Commercialisation Fund agus le haighneacht phaitinne dar teideal "PROMAST: Probiotics for mastitis treatment". Ceadaitear iarratais ar an gcistíú seo ó eagraíochtaí taighde ollscoileanna agus institiúidí i dtaca le réimse iomlán topaíci taighde a bhfuil suim ag eolaithe Éireannacha iontu. Bhí aighneacht Pháirc Uí Mhórda ar an tionscnamh ba mhó aicme faoi choinníollacha mion-phiarmheastóireachta a rinne scrúdú ar chritéir theicneolaíochta agus tráchtála.



4

Táirgeadh Feola

Leagadh béis sa chlár táirgthe feola ar theicneolaíochtaí costaséifeachtacha chun mairteoil, tárgi caorach agus muc a fhorbairt ar fheirmeacha. Leagadh béis faoi leith ar chothú, ar thithíocht ainmhithe, ar éifeachtacht atáirgthe, ar leas ainmhithe agus ar bhainistíocht agus phleanáil airgeadais. Rinne taighdeoirí agus comhairleoirí obair faoi leith i dtaca le córais táirgthe féarbhunaithe do mháirteoil agus do chaoirigh, ar chostas íseal, a fhorbairt agus a chraobhscaoileadh. Úsáideadh acmhainní substaintíula chun feirmeoirí a chur ar an eolas maidir leis an gcorás nua 'díchúplaithe' focaíochtaí feirmeacha atá le teacht i réim i mí Eanáir 2005. Mar chuid den obair seo cuireadh mórfheachtas eolais phoiblí ar bun, faoi chomhstiúir Theagaisc agus an Roinn Talmhaíochta agus Bia.

Bhí os cionn 80 pléighrúpa mairteola ag gníomhú le linn na bliana 2003.

Tá baint ag a bhformhór leis an 8 comhchlár forbartha mairteola, atá á reáchtáil ag Teagasc agus ag próiseálaithe feola/marglanna beostoic. Is iad cuspóiri na gclár sin ná pórú feabhsaithe, mairteoil ardchaighdeáin, margáocht fheabhsaithe agus brabús mhéadaithe d'fheirmeolírí, trí bhainistíocht fheabhsaithe teicneolaíochta agus airgeadais.

Fócas Taighde ar Fhéar agus ar Shadhlás

Leanadh le fócas taighde ar fhorbairt gormphriontaí i leith ardchaighdeán feir agus sadhlais le linn na bliana. Mar chuid de mhórthioncnamh amháin, arna cistiú ag an AE, rinne eolaithe in ionad Taighde an Ghráinsigh, i gcompháirtíocht le grúpaí taighde ó thíortha Eorpacha eile, staidéar ar bhuntáistí cineálacha éagsúla féir a fásadh le haghaidh leibhéal ardaithe carbaihiodráití uisce-thuaslagtha.

I measc na mbuntáistí poitéinsiúla a bhaineann leis na cineálacha seo féir, d'fhéadfaí ionghabhálacha níos airde a chur ar fáil d'fhéaránaigh maraon le níos lú cailliúintí nítrigine ó na hainmhithe céanna. Buntáiste poitéinsiúil eile a bhaineann leo ná leasú feabhsaithe féir mar shadhlás neamhsheargtha.

I dturgnamh amháin a rinneadh le linn na bliana 2003, fuarthas amach go raibh ábhar ard siúcra sna cineálacha féir a raibh leibhéal arda carbaihiodráití uisce-thuaslagtha iontu agus gurbh é an toradh air sin ná gur tháinig sadhlás leasaithe ardchaighdeáin uathu.

Rinneadh tionscnamh ar éilliu ó



fhungais mar chuid den obair ar shadhlas burlálaithe. De thoradh staidéir a rinneadh ar bhurláí sadhlais ar roinnt feirmeacha i lár na tíre fuarthas amach go raibh fás fungasach ar 90% de na burláí. D'fhéadfadh spóir na bhfungas a bheith ina n-údar ionfabhtaithe nó ailléirgí d'fheirmeoirí a leagfadh lámh orthu nó caighdeán agus ionghabháil an tsadhlais a laghdú ó thaobh na n-ainmhithe de. Táthar ag déanamh staidéir i láthair na huaire ar leitheadúlacht na bhfungas seo ar fud na tíre agus ar an gcumas atá ag na cinn is flúirsí miceatocsainí a tháirgeadh.

Scrúdú ar Gháis Bhaolacha Sciodair

Chuaigh eolaithe in ionad taighde an Ghráinsigh i mbun tionscnaimh chun gásleibhéal hidriginsuifíde a mheas, i gcompháirtíocht le hInisitítúid Taighde Talmhaíochta Thuaisceart Éireann. Tig leis an ngás seo a bheith marfach i gcás daoine agus ainmhithe. De réir an taighde, níl a leithéid de rud agus umar sciodair atá slán sábhálte agus ba chóir

An 8 comhchlár forbartha máirteola, atá á reáchtáil ag Teagasc agus ag próiseálaite feola/marglanna beostoic. Is iad cuspóirí na gclár sin ná pórú feabhsaithe, máirteoil ardchaighdeáin, margaíocht fheabhsaithe agus brabúis mhéadaithe d'fheirmeoírí, trí bhainistíocht fheabhsaithe teicneolaíochta agus airgeadais.

d'oibreoirí glacadh leis go dtáirgtear leibhéal bhaolacha hidriginsuifíde i gcónaí. Comhairltear d'oibreoirí gan dul isteach i bhfoiggneamh ná seasamh gar do chaidéil sliodair le linn suaitheadh sliodair.

Meastóireacht ar Fhreagairtí do Leasú CAP

De réir Suirbhé de chuid Teagaisc trí mhí i ndiaidh an chomhaontaithe ar leasú Pholasáí Chomóntha Talmhaíochta an AE, bhí sé ar intinn ag feirmeoirí máirteola forchéimnítheacha tráchtala an lín stoic a chothabháil nó a mhéadú nuair a chuirfí an polasaí nua i bhfeidhm i mí Eanáir 2005.

Léirigh an suirbhé ar fheirmeacha monatóireachta máirteola, a úsáideann Teagasc chun gníomhaíocht a mheas ag leibhéal na feirme agus chun oiriúnú nuatheicneolaíochta a chur chun cinn, go raibh sé ar intinn ag 92% an lín stoic a chothabháil nó a mhéadú. Ní raibh sé ar intinn ach ag 8% an lín stoic a laghdú.



Cé nach léiríonn an taighde tuairimí na bhfeirmeoirí máirteola go léir, ba léir gur tháinig freagairt dhearfach ón earnáil fhorchéimnitheach agus tráchtála, a thuig go gcuirfeadh an polasaí nua deiseanna ar fáil chun ioncam a mhéadú agus chun tairbhe a bhaint as ardchaighdeán taighde ar an margadh.

Dul chun cinn i dtaca le Géinteicneolaíocht

Tá seans maith go dtiocfaidh torthaí suntasacha i leith thorthúlacht ainmhithe ón eolas nua atá á fháil ón ngéinteicneolaíocht.

Aithníodh 434 géin trí úsáid a bhaint as teicnící nua-aimseartha bitheolaíochta móilíní. Is géinte nua-aitheanta iad dhá thrian diobh sin agus is féidir cuid mhór diobh a nascadh le feidhmiúchán ubhagánach.

D'aithin staidéar ar léiriú géinte, a rinneadh in ionad Taighde Bhaile Átha an Rí, roinnt géinte a mbíonn baint acu le táirgeadh prógaistéaróin. Is céim thábhachtach chun tosaigh é

seo i dtreo tuiscint níos fearr a bheith agaínn ar fheidhmiúchán ubhagán agus ar an gcaoi ar féidir é sin a chur in oiriúint trí phórú, trí chothú agus trí tháirgeadh. Anus air sin tiocfaidh impleachtaí fadtéarmacha ó aithint agus ó thréithriú géinte tábhachtacha ubhagánacha i dtaca le torthúlacht a fheabhsú trí úsáid a bhaint as cláir phóraithe le cabhair ón margadh.

Leanadh leis an obair ar tháirgeadh caorach chun géinte a mbíonn tionchar acu ar fhriotháíocht i gcoinne péisteanna goile a aithint. Roimhe sin léirigh taighde de chuid Teagaisc in Ionad Taighde Bhaile Átha an Rí difríochtaí móra idir pór Texel agus pór Suffolk ó thaobh leibhéal fhriotaíochta de.

Chomh maith leis sin thángthas ar chuid mhór eolais i dtaca le hathruithe suntasacha géinte, a mbíonn éifeacht an-mhór ar fad acu ar fheidhmiúchán ubhagánach. Tháinig fianaise chun cinn, a léiríonn go bhfuil baint ag athrú eile i bpór caorach Cambridge le hiarmhairtí

cosúil leis na cinn a bhí ag an dá ghéin a fionnadh i dtosach báire. Maidir leis na hathruithe nádúrtha géinte a tharlaíonn i bpór chaorach Cambridge agus Belclare, cuireann siad acmhainn thábhachtach ar fáil chun staidéar bunúsach a dhéanamh ar smachtú thorbairt fhalacailí san ubhagán agus beidh impleachtaí ag an staidéar sin i dtaca le hatáirgeadh daonna agus le hathchogantaigh.

5

Curaíocht agus Gairneoireacht

Lean na cláir churaíochta agus ghairneoireachta orthu ag forbairt chórais fheabhsaithe tárgthe barr chun cumas iomaíochta a dhéanamh níos éifeachtaí, chun caighdeán agus sábhálteachta tárgí a mhéadú, agus, ag an am céanna, chun inbhuanaitheacht fhadtéarmach tárgthe a éascú.

Tar éis dianséasúr curaíochta na bliana 2002, rinneadh athshlánú substaintiúil ar thárgí gránbharr sa mhéid is gur tháinig méadú 44% agus 25% ar chorraigh don dá phríomhbharr, eorna earraigh agus cruithneacht gheimhrídh faoi seach.

Ceann de phríomhdhúshláin na bliana ba ea an chaoi ar tháinig friotaíocht Septoria tritici, ceann de na mórghalair, chun cinn i gcoinne na bhfungaicídí nua-aimseartha. Ghlac teicneolaíocht Teagaisc ról mór i dtaca leis na leibhéal fhriotaíochta a

dhiagnóisiú agus le straitéisí a cheapadh chun an fhadhb a réiteach.

Léirigh taighde in ionad Náisiúnta Taighde Theagaisc i bPáirc na Darach, Ceatharlach go gcuireann an teicneolaíocht nua-aimseartha taigí fiorarda gránach ar fáil. Mar shampla, táirgeadh suas le 14 tonna/heicteár de chruithneacht gheimhrídh le linn na bliana 2003, i.e. 2 tonna/heicteár níos mó ná na tárgí ab airde ar leibhéal na feirme.

Léirigh taigde ar chórais tárgthe íseal-ionchuir go bhfuarthas 10% níos lú tárgí ó bharra nár cuireadh mórán ceimiceán ná leasachán iontu ná mar a fuarthas ó ghnáthchórais ard-ionchuir. Tháinig corraigh níb airde ó chórais íseal-ionchuir, áfach. Léiríonn an méid sin gur féidir ionchur a laghdú agus ioncam a mhéadú, go háirithe nuair nach mbíonn mórán baoil ó ghalair.

Ba i mí an Mheithimh a coimisiúnaíodh an áis nua biteicneolaíochta i bPáirc na Darach agus thosaigh foireann eoláioch, a earcaíodh le déanaí, ag obair ar thioncnaimh nua taighde ann.

Maidir le cúrsaí comhairle, rinneadh craobhscaoileadh teicneolaíochtaí i leith bhainistíocht ghéarchéimneach barr agus airgeadais, trí úsáid a bhaint as: pléighrúpaí, feirmeacha monatóireachta, taispeántais, cúrsaí oiliúna agus comhairliúchán aonair.

Leagadh béim sna cláir churaíochta ar fhorbairt agus ar chraobhscaoileadh teicneolaíochtaí i leith táirgeadh brabúsach prátaí, beacán, glasraí agus stoc plandlainne.



Áis Bhiteicneolaíochta Plandáí

Cuireadh barr críche leis an áis biteicneolaíochta plandaí in ionad Taighde Pháirc na Darach i mí an Mheithimh 2003 agus cuireadh tús leis an gclár nua taighde faoi stiúir ceathrar eolaithe nua-cheaptha, a bhfuil saineolas acu ar réimsí tábhachtacha de chuid na biteicneolaíochta.

Leagann an clár béim ar fhorbairt teicnící móilínbhunaithe, a chuirfidh le héifeachtacht an chlár rathúil póraithe, atá i bpáirc na Darach cheana féin, i dtaca le féar, le seamair agus le prátaí.

I measc na rudaí eile a bhfuil staidéar á ndéanamh orthu tá diagnóiscí ghalar plandaí a úsáideadh go héifeachtach sa staidéar ar fhriotaíocht i gcoinne Septoria tritici, a tugadh faoi deara den chéad uair in Éirinn i mí Eanáir 2003. Léirigh monatóireacht a rinne foireann Teagaisc i bpáirc na Darach go raibh an fhriotaíocht go forleathan agus gur tháinig méadú substaintiúil uirthi le linn na bliana. Mar shampla, ba é 31% meánleibhéal na friotaíochta i

mí na Bealtaine agus d'éirigh sé sin go dtí 73% i Meitheamh/lúil. De thoradh staidéar ar thaighde a rinneadh le linn na tréimhse Eanáir-Márta bhíothas in ann straitéisí oriúnacha spraeála a mholadh chun Septoria tritici a smachtú le linn séasúr fáis na bliana 2003.

Chomh maith leis sin tá staidéar á dhéanamh ar thionchar poitéinsiúil barr géinathraithe ar an timpeallacht. Cuireadh tús le clár nua i gcompháirtíocht le Coláiste na Tríonóide, Baile Átha Cliath agus le hOllscoil Náisiúnta na hÉireann, Maigh Nuad.

Poitéinseal do Thriteacál
Léirigh trialacha a rinneadh i bpáirc na Darach go mbeidh úsáid phoitéinsiúil ag triteacál, hibrid chruthneachta/seagail i dtaca le córais ísealchostais amach anseo. Tá friotaíocht níos airde sa triteacál ná mar atá sa chruthneacht agus tugadh faoi deara go raibh táirgeadh níb airde uaidh freisin, nuair a bhí galair tógálach fréamhacha i láthair, gan ghá ar bith le híocleasuithe síl. Léiríodh freisin go raibh poitéinseal ann mar bharr foráiste ionadúil

costaséifeachtach d'fheirmeoirí déiriúchta agus mairteola. Chonacthas, ó mheastóireacht ar chineálacha nua éagsúla, go raibh poitéinseal ardtáirgthe i gcuid diobh.

Trí úsáid a bhaint as gnéithe tairbheacha de chuid triteacáil tá sean maith ann go mbeifear in ann leibhéal ionchuir a laghdú i dtaca le táirgeadh gránach.

Miceatocsainí i nGránbharra

Leanadh le staidéar ar mhiceatocsainí i ngránbharra, in ábhar bia gránbhunaithe d'ainmhithe agus i mbia sa blhain 2003. Ba é seo an chéad mhórstaidéar riamh in Éirinn ar mhiceatocsainí i ngránbharra. Ós rud é gur féidir le miceatocsainí drochéifeacht a bheith acu ar shláinte agus ar leas ainmhithe, tá suim faoi leith ag an earnáil próiseála gránbharr agus bia d'ainmhithe iontu. Léiríonn tortháí ó ghránbharra na bliana 2002 go raibh leibhéal na miceatocsaine, *ochratoxin A*, níb ísle ná na teorainneacha a moladh san AE.

Obair ar Chórais Neamhthreafa

Rinneadh sraith turgnamh macasamhlaithe agus trialacha breathnadhóireachta in ionad Taighde Pháirc na Darach chun gníomhaíocht churaíochta neamh-inbhéartaithe a mheas i gcomparáid le treabhadh do ghránbharra. Rinneadh réimse tomhas i dtaca le: forbairt bharr; ionsaitheacht agus smachtú fialí, galar agus lotnaidí; struchtúr ithreach; gluaiseacht chothaitheach; agus fána tairbheach ithreach.

D'éirigh go maith le cruithneacht gheimhríd agus le heorna earraigh faoin gcóras saothraithe laghdaithe sa bliaín 2003, ach neamhchosúil leis an dá bliaín roimhe sin, bhí táirgeadh íseal ón eorna i gcoibhneas le treabhadh. Bhí baint ag drochfhás barr agus ag fialí féir leis sin.

Tá sé d'aidhm ag staidéir a bhaineann leis an tionscnamh saothraithe laghdaithe foinsí víreas eolas a fháil i dtaca le: BYDV (abhabaí na heorna), na veicteoirí aifide a bhaineann leis; agus ról chreachadóirí lotnaidí i smachtú an ghalair. Forbraíodh urlísí géiniteacha nua a bhfuil sé de chumas acu cúiseolaíocht agus smachtú bitheolaíoch BYDV a shoiléiriú. Cuirfidh an obair thaighde seo eolas ar fáil i dtaca leis na córais chleachtais neamhthreafa is fearr agus is ábhar mór suntasach é sin i measc saothraithe gránbharr.

Tuilleadh dul chun cinn i bPórú Prataí

Lean an clár páraithe prátaí i bPáirc na Darach air ag cur cineálacha nua prátaí ar fáil don mhargadh in Éirinn agus don tionscal easportála síl. Le

Lean an clár páraithe prátaí i bPáirc na Darach air ag cur cineálacha nua prátaí ar fáil don mhargadh in Éirinn agus don tionscal easportála síl. Le linn na bliana 2003 cuireadh trí chineál nua, Habbi, Kikko agus Seatanta, le liosta na gcineálacha prátaí in Éirinn. Rinne Rooster, cineál eile a forbraíodh i bPáirc na Darach, dul chun cinn i margadh na hÉireann agus bhí baint aige le 34% d'acraíocht na bprátaí sa bliaín 2003. Chomh maith leis sin úsáideadh iad in áit 3,000 tonna de phrátaí iomportáilte i dtaca le táirgeadh sceallóg reoite. Táthar ag súil go dtiocfaidh tuilleadh méadaithe ar an leibhéal ionadaithe iompórtálacha agus, dá thoradh sin, go mbeidh éifeacht iarmhartach ar ioncam saothraithe.

Le linn na bliana 2003 dheimhnigh taighde ar smachtú dúchana torthaí a

bhí againn roimhe sin, a thaispeáin go dtiocfadh ardchaigdeán smachtaithe dúchana ó chóras tacaíochta cinnte, trí úsáid a bhaint as fungaicídí agus go bhféadfáí méid na bhfungaicídí a d'úsáidfí a laghdú 30%. Is mór an tairbhe é sin, ní hamháin ó thaobh costais de, ach ó thaobh an chaighdeán taigthe agus ó thaobh inbhuanaitheacht na timpeallachta de chomh maith.

Pórú Féir agus Seimre

Ceadáodh Glencar agus Shandon, dhá chineál nua seagalaí ilbhliantúla, le cur ar liosta molta na hÉireann. Is teitreaplóideach déanach é Glencar a mbíonn fás iontach faoi san earrach agus san fhómhar. Is dioplóideach idirmheáchanach é Shandon, a chomhcheanglaíonn tárgí arda le fás maith séasúrach. Beidh an dá chineál sin ar liosta molta na hÉireann sa bliaín 2005.

Rinneadh trialacha oifigiúla sa Ríocht Aontaithe ar Glenstal, seagalach eile a forbraíodh i bPáirc na Darach, agus bhí sé le cur ar liosta na Ríolta Aontaithe. Cuireadh cúig chineál seagalaí ilbhliantúla eile, a forbraíodh i bPáirc na Darach, isteach i dtrialacha le haghaidh liostáí náisiúnta agus liostáí molta sa bliaín 2004. Bhí ceithre chineál nua seimre báine, a forbraíodh i bPáirc na Darach, á meas ag an Róinn Talmhaíochta agus Bia le cur isteach i dtrialacha le haghaidh liostáí náisiúnta Éireannacha agus liostáí molta. Cuireadh ceann amháin díobh sin isteach i dtrialacha na Ríolta Aontaithe sa bliaín 2004.

Tuilleamh Éilimh ar Stoc Plandlainne

Ba mhór an chabhair a thug an

tseirbhís um stoc plandlainne do shaothraithe chun déileáil leis an ardéileamh, go háirithe ar phlandáí leathaibí agus ar phlandáí aibí garraíodóireachta agus tírdreachtaithe. Bhí baint mhór ag úinéireacht tithe agus agus ag an mbéim a leagtar ar chúrsaí fóilliochta leis an méadú a tháinig ar thárgí garraíodóireachta agus ar sheirbhísí tírdreachtaithe. I ngeall ar an méid daoine a bhfuil an gharraíodóireacht ina stíl mhaireachtála acu tá éileamh an-mhór ar fad ar phlandáí patio i láthair na huaire. Baineann an t-éileamh seo, den chuid is mó, le daoine san aoisgrúpa 35-55, a mbíonn neart airgid agus ganntanas ama le spárail acu.

D'oibrigh foireann stoc plandlainne Theagaisc leis an 222 aonad táirgthe atá sa tir chun cur le táirgeadh plandaí indíolta agus chun táirgeadh oibre a fheabhsú. Chomh maith leis sin leagadh béim faoi leith ar úsáid a bhaint as gníomhaite bithshrianaithe agus as srianadh bitheolaíoch lotnайдí. Anus air sin tugadh tacáiocht ghairmiúil do phlandanna i dtaca le hinfeistiú nua a phleanáil faoi choinníollacha scéim thacaíochta infheistithe atá ar fáil don ghairneoireacht. Rinneadh taighde in ionad Taighde Kinsealy ar fhobairt mheán saor ó mhóin. Rinneadh meastóireacht ar ábhair mar mhin-

sáibh, choirt, mhúirín glasdramhaíola agus arbhar ídithe ó ghrúdlanna. Anus air sin rinneadh staidéar ar an úsáid ar féidir a bhaint as coscaír galair agus as gníomhaithe bithshrianaithe sna meáin sin. Táthar ag leanúint leis na trialacha sin sa bliain 2004.

Cuireadh túis le tionscnamh chun teicneolaíocht a fhobairt i dtaca le cineálacha stoc neamhghnách plandlainne do-iomadaithe a athspreagadh, a mhicreathorleathú agus a phás. D'aithin saothraithe fiche is a cúig thor ornáideacha agus ilbhliantóig luibheacha a raibh forleathú tapa de dhíth orthu agus cuireadh ag fás iad i dtrialacha macasamhlaithe chun riachtanais optamacha chothaithe a thástáil. Baineadh úsáid astu sin chun cultúir fhréamhacha steiriúla a bhunú le micreathorleathnú a thionscnamh.

Feahbsú Éifeachtacht Bheacán

Thuig saothraithe go raibh gá le hardchaighdeán éifeachtachta i dtáirgeadh beacán sa bliain 2003 nuair a tháinig laghdú 15% i bpraghnsanna. Thuig foireann bheacán Teagaisc, mar threoraithe éifeachtachta, go gcaithfí an méid műirín a mhéadú ó 20 tonna go 36 tonna in aghaidh gach tullán beacán agus an táirgeadh beacán in aghaidh

gach tonna műirín a mhéadú ó 220Kg go 250Kg.

Bhí ardú ioncaim €17,000 ag an 20% de shaothraithe ab airde a d'ardaigh an lón műirín ó 30 tonna go 36 tonna in aghaidh gach tolláin. Shroich níos mó ná 10% de shaothraithe sprioc Theagaisc sa bliain 2003 – i.e. 250Kg beacán in aghaidh gach tonna műirín.

Maidir le táirgeadh torthaí, chuir Teagasc tacáiocht theicniúil ar fáil do lón mór saothraithe athrú ó chórais táirge lasmuigh go córais chosanta. Is é an buntáiste a bhaineann le fás cosanta ná gcuireann sé le caighdeán, le haschur agus le fad an tséasúr fáis agus, ar deireadh thiari, le hioncam na saothraithe.

Forbraíodh gormphrionta le haghaidh barra glasrái geimhridh in ionad Taighde Kinsealy. Chomh maith leis sin rinneadh taighde i dtace le laghdú ar chóireálacha spraeála d'aifidí agus do chruimheanna cabáiste i mbarra tornapaí samhraidh. Mar chuid den chlár comhairleach glasrái, rinneadh monatóireacht sheachtainiúil ar lotnайдí agus ar ghalair ar feirmeacha roghnaithe agus tugadh na torthaí do shaothraithe.

6

Rialú Comhshaoil

Ba mhórghnéithe de chuid chlár comhshaoil Teagaisc arís iad bainistíocht éifeachtach chothaithé agus cosaint chaighdeán uisce sa bhliain 2003. Rinneadh 24 tionscnamh taighde in ionad Taighde Chaisleán Bhaile Sheáin, cúig cinn dióibh siúd ina dtionscnaimh nua. Rinne clár comhairleach comhshaoil Teagaisc iarracht mhór úsáid éifeachtach leasachán, bainistíocht éifeachtach aoiligh agus cothabháil bhithéagsúlachta a chur chun cinn.

Baineadh úsáid as acmhainní substaintiúla chun seirbhís ghairmiúil a chur ar fáil d'fheirmeoíri a bhí páirteach sa Scéim um Chosaint Chomhshaoil Tuaithe (REPS). Chomh maith leis sin chuir Teagasc comhairle eolaíoch ar fáil don Rialtas agus d'fheirmeoíri i dtaca le cur i bhfeidhm agus le tionchar an Treoir Níotráite.

Taighde ar Éifeachtacht Ábhair Chothaithe

Leanadh le taighde ar an gcaoi ab fhéarr le feabhas a chur ar éifeachtacht ábhair chothaithe i gcórais bheostoic agus tárgthe barr sa bhliain 2003. I measc na n-aschur nua bhí moltaí leasaithe i leith úsáid nítrigine chun cothromáocht níos fearr a chinntíú idir aschuir agus riachtanais, go háirithe i gcás fheirmeoireacht déiríochta.

Forbraíodh córas nua comhairle nítrigine do bhiatas siúcra, bunaithe ar shamhadtú. Cuirfidh sé sin cruinneas níos fearr ar fáil sa soláthar nítrigine chun tárgthe optamacha a bhaint amach agus, ar an gcaoi sin, laghdófar ar phoitéinseal cailliúintí.

Rinneadh analís ar thortháí trialacha i leith teicnící nua leathaithe sciodair – bandaleathú agus instealladh éadomhain – chun gnóthú nítrigine i sciodar a fheabhsú. Chonacthas gur éirigh leis an dá theicníc feabhas a chur ar ghnóthú na nítrigine i sliodar eallaigh, i gcomparáid le teicníc an ghnáth-splancphláta. Ach, ag an am céanna, níor tháinig an feabhas céanna i gcás sliodar muice.

Cuireadh túis leis an gcéad sraith trialacha ar shlseanna adhmaid ídithe a leathadh ar an talamh ó ionaid gheimhrithe lasmuigh. Beidh éifeacht na sliseanna admhaid ídithe ar tháirgí sadhlais agus lón na sliseanna a gnóthaíodh san fhéar bainte á meas sa bhliain 2004.

Tháinig laghdú 30% ar an lón leasachán fosfarach a cheannaigh feirmeoíri Éireannacha idir 1996



agus 2003. Tharla an laghdú sin i ngeall ar chomhairle leasaithe a thug Teagasc ar riachtanais phosfair i leith féarthalite agus curaóchta agus ar mhórfeachtas comhairleach. Theagaisc ar an gcaoi cheart le húsáid éifeachtach a bhaint as fosfar. Lean clár taighde ionad Taighde Chaisleán Bhaile Sheáin ag leagan béisme ar an gcaoi cheart le riachtanais phosfair a mhionchoigeartú i dtaca le héagsúlacht chineálacha ithreach agus le córais fheirmeoireachta.

Leagadh béisim sa taighde a rinneadh ar chailliúintí ábhair chothaithe sa timpeallacht ar fhobairt shamhlacha tuairisciúla cothaithe feirme chun sreabha ábhair chothaithe i gcórais fheirme agus tionchar chórais bheinistíochta ar shreabha ábhair chothaithe a thuar. Tá samhail mheicniúil sreabha ábhair chothaithe á forbairt i láthair na huaire, chun cainníochtú ábhair chothaithe, an idirghníomhaíocht a bhaineann leo agus an idirghníomhaíocht a dhéanann siad le bithéagsúlacht a éascú.

Forbraíodh córas nua comhairle nítrigine do bhiatas siúcra, bunaithe ar shamhadtú. Cuirfidh sé sin cruinneas níos fearr ar fáil sa soláthar nítrigine chun táirgthe optamacha a bhaint amach agus, ar an gcaoi sin, laghdófar ar phoitéinseal cailliúintí.

Astuithe Ceaptha Teasa a Thomhas

Rinneadh scálastaidéar allamhúig ar fhéarthalite féaraigh chun thionchar réimse ionchuir leasaithe nítrigine ar astuithe ocsaíde nítriúla ón ithir go dtí an t-aer a mheas. Is gás ceaptha teasa í an ocsaíd nítriúil agus baineann sí le suas le 30% de na hastuithe ceaptha teasa go léir a thagann ó thionscal na talmhaíochta. Sa bhliain 2003 cailleadh beagnach 6% den leasachán nítrigine a úsáideadh mar ocsaíd nítriúil. Is ionann sin beagnach agus dúbait na luachanna a ndearnadh taifead orthu an bhliain roimhe sin agus dúradh go raibh baint aige le haimsir fhliuch mhí lúil, a chruthaigh cionníollacha a bheadh oiriúnach chun an gás seo a scoileadh amach as an ithir.

Léiríodh éifeacht shubstaíntíúil ithreach agus nítrigine i staidéar lísiméadaí a rinneadh ag an am céanna. Bhí astuithe ó ithreacha draenála réasúnta íseal i gcomparáid leis na cinn ó ithreacha tromáiliucha.

Léiríonn na torthaí seo an tábhacht a bhaineann le cineálacha ithreach agus le coinníollacha aimsire, chomh maith leis an tábhacht a bhaineann le hionchuir leasachán nítrigine a mhéadú mar nithe a mbíonn baint acu le hastuithe ocsaíde nítriúla ó thionscal na talmhaíochta in Éirinn. Tá siad tábhachtach sa mhéid is go bhfuil seans maith ann go gcaithfear leasuithe a dhéanamh ar an loicluach a chuirtear san áireamh chun an fardal náisiúnta astuithe ceaptha teasa a oibriú amach, de réir na gceangaltais náisiúnta atá orainn faoi phrótacal Kyoto.

sa Scéim um Chosaint Chomhsaoil Tuaithe (REPS) sa bhliain 2003. Chomh maith leis sin reáchtáil comhairleoirí REPS 217 cursa oiliúna agus ghlac os cionn 6,000 feirmeoir páirt iontu.

fhearr, mar aon le cur síos ar straitéisí sábháilteachta.

Chomh maith leis sin chuir an fhoireann sainchomhairle ar fáil i dtaca le dearadh fhoirgnimh feirme agus le hullmhúchán pleananna bainistíochta ábhair chothaithe de réir fodhlíthe talmhaíochta agus coinníollacha cead pleanála agus chun córais tárgthe feirme inbhuanaithe comhshaoil a chinntiú.

Bhí baint ag comhairleoirí agus ag taighdeoirí le bailiúchán os cionn 50,000 samplá d'ithreacha éagsúla. Cuireadh le réimse agus le cruinneas chuid mhór den analís sa bhliain 2003 i ngeall ar nuachóiriú na saotharlainne analísí agus ar an bhfearas ealaíne a chuir an stát ar fáil.

I dtaca le cosaint na hoidhreachta nádúrtha, d'ullmhaigh comhairleoirí agus speisialaithe Theagaisc tuairim is 1,000 pleann i leith limistéir choimíneachta agus neamhchoimíneachta. Bhí baint mhór ag speisialaithe Theagaisc le Tuairisc an Tascfhórsa um Thalamh Calaidh na Sionainne, a críochnaíodh sa bhliain 2003. Thug an tuairisc breac-chuntas ar an gcostas a bhainfeadh le pleananna éifeachtacha bainistíocta comhshaoil a chur i bhfeidhm don cheantar.

Forbairt Bhunachar Náisiúnta Sonrai Ithreacha

Leanadh leis an tionscnamh trí bliana chun bunachar náisiúnta sonraí ithreacha a bhunú in Ionad Taighde Chaisleán Bhaile Sheáin sa bhliain 2003. Mar chuid den obair sin ní mó samplá d'ithreacha éagsúla a bhailíú agus analís a dhéanamh orthu i dtaca le réimse paraiméadar ceimiceach agus bitheolaíoch.

Trí úsáid a bhaint as prótacail shainmhíniithe, fuarthas samplaí d'ithreacha éagsúla ó shuímh réamhchinntithe ar an eangach náisiúnta. Rinneadh analís ar 1,000 sampla agus tá siad sin, mar aon le 300 sampla a bailíodh roimhe sin, ina gcuid den Bhunachar Náisiúnta Sonrai Ithreacha. Beidh na samplaí sin ar fáil chun iniúchadh cuimsitheach a dhéanamh orthu sa todhchaí.

Foilsíodh ceithre bhileog chomhairleacha i dtaca le bainsistíocht fálta sceach, ag cur síos ar na teicnící plandála, maisithe agus bainistíochta fálta sceach ab

Cothabháil Scéimeanna Comhshaoil

Chuir Teagasc tacaíocht ghairmiúil ar fáil do 16,300 feirmeoir a ghlac páirt

7

Foraoiseacht

I geall ar an 1,400 duine nuá a ghlaicann páirt i bhfiontair foraoiseachta gach uile bliain, beidh tuairim is 20,000 feirmeoir agus úinéir talún páirteach iontu faoin mbliaín 2007. Tá an 14,000 úinéir talún atá páirteach i bhfiontair foraoiseachta i láthair na huaire ag fáil €50m in aghaidh na bliana in íochtaiochtaí bisigh foraoiseachta ón AE.

Tá sé d'aidhm ag clár foraoiseachta Theagaisc teicneolaíocht thábhachtach i leith foraoiseachta rathúla inbhuanaithe a forbairt agus a chur ar fáil agus, mar aon leis sin, sainchomhairle neamhspleáach pleánaí agus airgeadais a chur ar fáil i dtaca leis an bhforaoiseacht a bheith aitheanta mar ghnáthfiontar feirme.

Buaicphointí Taighde

Cuireadh críoch leis an mó-r Thionnamh Alcmithe Ithreacha Foraoise sa bhliain 2003 agus bhí na torthaí le foilsíú sa bhliain 2004.

Lean tionscnamh eile, arna chistiú ag an Róinn Comhshaoil agus Rialtais Áitiúla, ag dearadh mapaí acmhainní ábhair ithreach bhunaíd agus gnáthóg, agus ag cur bunachair bhunúsacha sonraí ar fáil don Chóras Bainistíochta Dobharcheantar de réir Treoir Chreatlái Uisce an AE. Bíonn baint dhíreach ag an obair seo leis an bhFóram Monatóireachta Nádúrtha Domhanda Comhshaoil agus Slándála agus leis an nGrúpa Náisiúnta Oibre um Sciortáil Talún.

Thosaigh tionscnamh eile, arna chistiú ag COFOR, an ghníomhaireacht taighde foraoiseachta, ag forbairt modhanna chun crainn leathanduilleacha a bhainistíu faoi choinníollacha Éireannacha. Ní féidir neamhcúram ná botúin bhainistíochta a dhéantar sna blianta fáis tosaigh a cheartú níos faide anonn. Tá 2,000 heicteár in aghaidh na bliana á bplandál ag feirmeoirí agus tá cóireáil de dhíth go géar ar na plandálacha sin.

Tosaíochtaí Comhairleacha agus Oiliúna

Bhí dhá phríomhchuspóir ag seirbhís speisialach chomhairleach foraoiseachta Theagaisc, agus í ag obair i gcomhpháirtíocht le foirne comhairleacha contaetha, sa bhliain 2003.

- Rogha na fóraoiseachta a chur chun cinn i bpleanáil fheirmeoireachta, de réir mar a oireann.
- Táirgeadh brabúsach adhmad ardchaighdeáin, trí úsáid a bhaint as cleachtais inbhuanaithe bhainistíochta foraoiseachta, a chur chun cinn.

Cuireadh clár cuimsitheach gníomhaíochtaí comhairleacha agus oiliúna ar bun. Ina measc sin bhí taispeántais agus tráthnóntha allamuigh ar fheirmeacha monatóireachta foraoiseachta Theagaisc, mar aon le seimineáir réigiúnacha agus laethanta allamuigh i ngach contae. Chomh maith leis sin reáchtáileadh sraith cursáil speisialta oiliúna foraoiseachta ar fud na tíre agus cuireadh modúil fheasachta foraoiseachta ar fáil do níos mó ná 6,000 duine ar chúrsaí oiliúna REPS agus ar chúrsaí d'fheirmeoirí aosacha agus do dhaointe óga a bhí ag glacadh páirte i dtionscal na foraoiseachta den chéad uair.

8

Éagsúlú Feirme

Mar chuid den chlár um éagsúlú feirme agus fhiontar tuaithe rinneadh taighde agus cuireadh seirbhísí comhairleacha agus oiliúna ar fáil do tháirgeadh chapaill spóirt, d'fheirmeoireacht fia, do tháirgeacht éanlaith clóis, d'fheirmeoireacht orgánach, do thurasóireacht tuaithe agus d'fheirmeoireacht ghabhair déiríochta.

Capaill Spóirt

Leagadh béisim, sa chlár um chapaill spóirt, ar an gcaoi ab fhearr le feabhas a chur ar phórú, ar bhainistíocht agus ar chur i láthair capall. Ghlac beagnach 300 duine páirt i dtír cinn déag de chúrsaí forbartha fiontar chapall. Bhí an chuid ba mhó de na daoine sin ar tí a gcuid áiseanna eacháí a uasghrádú agus a mhéadú ionas go mbeidís in ann ainmhithe níb fhearr a tháirgeadh. Reáchtáileadh cursaí oiliúna scileanna chomh maith, chun cabhrú le táirgeoirí cur le luach a gcuid capall.

Feirmeoireacht Fianna

D'fhan líon na n-aonad fianna go seasmhach ag tuairim is 300. Ba é cuspóir an chlár déiríochta fianna ná feabhas a chur ar bhrabúsacht an fhontair agus tacaíocht shainedelach a chur ar fáil do tháirgeoirí ar mhian leo a ngnó a leathnú agus do dhaoine eile a raibh sé ar intinn acu tabhairt faoin bhfeirmeoireacht fianna. Thug Teagasc spreagadh dóibh siúd a ghlac páirt sna pléighrápaí úsáid a bhaint as an Monatóir um Bhrabús Fianna chun meastóireacht chruinn a dhéanamh ar ghníomhaíocht agus ar threochtaí brabús.

Tá beagnach 100 táirgeoir ag glacadh páirte i scéim dhearbhaithe cálíochta fiafheola i láthair na huairé. Forbraíodh modúl dearbhaithe cálíochta fiafheola, arna chreidiúnú ag FETAC, mar chuid de chlár oiliúna d'fheirmeoíri aosacha faoi stiúir Theagaisc. Ghlac fiche is a dó feirmeoir páirt i gcúrsa réamhléiritheach ar dhearbhú cálíochta chun cabhrú leo féin ina gcuid ullmhúcháin do chigireacht dearbhaithe cálíochta. Fuarhas praghásdireáil 60c in aghaidh gach Kilo ar fhiachfheoil dearbhaithe cálíochta.

Táirgeadh Éanlaith Clóis

Mar chuid de chlár éanlaith clóis Teagaisc cuireadh tacaíocht theicniúil ar fáil do tháirgeoirí agus dóibh siúd a raibh sé ar intinn acu tabhairt faoi fhiontar éanlaith clóis chun cur le hioncam teaghlaigh. Reáchtáileadh cúig chúrsa oiliúna d'iontrálaithe poitéinsiúla nua agus d'fhreastail 45 duine ar na cursaí sin.



Mórchuspóir eile de chuid an chláir ba ea ionchur teicniúil a chur ar fáil do scéimeanna dearbhaithe cálíochta Bhord Bia agus oiliúint taighdeoirí a chur ar fáil i leith na scéimeanna sin. Sa bhliain 2003 cuireadh oiliúint dearbhaithe cálíochta sicní ar fáil do 20 comhordaiteoir teicniúil ó monarchana próiseála. Chomh maith leis sin cuireadh cúrsáil oiliúna ar fáil do 320 táirgeoir sicní chun iad a ullmhú le páirt a ghlacadh i gclár dearbhaithe cálíochta sicní Bhord Bia.

Feirmeoireacht Orgánach

Baineann táirgeadh orgánach le 1% d'achar talún na hÉireann agus le 0.5% de dhíolachán bia. Bheadh méadú substaintiúil de dhíth chun poiténseal na feirmeoireachta orgánaí a fhíorú agus chun áit sheasmhach a bhaint amach ar mhargaí in Éirinn agus ar mhargaí easportála.

Ba é príomhchuspóir chlár orgánach Theagaisc sa bhliain 2003 ná tacaíocht a thabhairt i leith earnáil

Ba é príomhchuspóir chlár orgánach Theagaisc sa bhliain 2003 ná tacaíocht a thabhairt i leith earnáil orgánach inmharthana a bhunú agus cabhair a thabhairt chun poiténseal margaíochta na hearnála sin a fhorbairt.

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Tá córais fheirmeoireachta orgánaí Theagaisc in Ionad Mhic Mhaoilíosa, Baile Átha an Rí agus in Ionad Taighde Chaisleán Bhaile Sheáin, Loch Garman ag feidhmiú ar chaighdeán an-ard agus á gcur chun cinn go forleathan. Thug seasca grúpa cuairt ar na hionaid sin sa bhliain 2003. Bhí níos mó ná 1,000 duine i láthair ag an lá oscailte in aonad Mhic Mhaoilíosa i mí Iúil.

Forbraíodh gearrchrúsaí chun freastal ar riachtanais fheirmeoirí orgánacha. Reáchtáileadh dhá chúrsa réamhléiritheacha i gCo. na Gaillimhe agus i gCo. an Chláir agus bhí 30 duine i láthair ag gach ceann díobh.

Tugadh oiliúint tosaigh do chomhairleoirí contae roghnaithe chun cabhrú leo déileáil le ceisteanna ar fheirmeoireachta orgánach agus chun seirbhís bhunúsach a chur ar fáil go háitiúil

do thairgeoirí orgánacha. Cuireadh liosta cliant orgánach de chuid Teagasc le chéile i gcomhairle le comhairleoirí contae. Tá seirbhís níos fearr ag na feirmeoirí sin anois, go háirithe ó cuireadh nuachtí agus tacaíocht speisialaithe ar fáil dóibh. D'fhoilsigh Teagasc leabhrán treoirlínte i leith feirmeoireachta orgánaí agus scaipeadh an leabhrán sin ar 800 feirmeoir orgánach.

Turasóireacht Tuaithe

Leagadh béis sa chlár um thurasóireacht tuaithe ar thacaíocht a chur ar fáil do sholáthróirí thurasóireacht tuaithe táirgí ardchaighdeáin a fhorbairt agus a gcuid scileanna bainistíochta agus gníomhaíochta a fheabhsú.

Sa bhliain 2003, i gcomhpháirtíocht le CERT agus le hinstiúidí teicneolaíochta, chuir Teagasc dhá chúrsa 150 uair an chloig don Teastas i dTurasóireacht Tuaithe, arna chreidiúnú ag FETAC, ar fáil. Tá 32 cursa den chineál sin curtha ar fáil ag Teagasc agus ag a chuid compháirtithe le tamall de bhlianta anuas.

Lean foireann Teagaisc orthu ag obair i gcomhpháirtíocht le LEADER chun margaocht turasóireacht tuaithe a fhorbairt. Cuireadh tacáiocht theicniúil ar fáil do réimse tionscnamh a raibh baint acu le turasóireacht tuaithe, ina measc Cónaidhm Náisiúnta Turasóireachta Tuaithe, faoi mar atá molta.

Feirmeoireacht Ghabhair Dhéiríochta

Tá tuairim is 200 feirmeoir i mbun fiontar le gabhair dhéiríochta in Éirinn. Tá fás agus forbairt faoi gcineál sin feirmeoireachta agus faoi na táirgí a bhaineann leis. I láthair na huaire ní féidir le táirgeadh dúchasach freastal ar an éileamh atá ann agus déantar tuairim is 10,000 lítear de bhainne gabhair a iomportáil in aghaidh na seachtaine.

Ba é cuspóir chlár ghabhair dhéiríochta Theagaisc ná feabhas a chur ar éifeachtacht agus ar bhrabúsacht táirgthe. Sa bhliain 2003 tugadh cursa bainistíochta 25 uair an chloig i leith gabhair dhéiríochta do 25 duine i gColáiste Bhéal Átha hÉis. Reáchtáileadh

cruinnithe ráithiúla i lár na tíre chomh maith. Chomh maith leis sin reáchtáileadh cruinniú táirgeoirí i Longfort agus eagraíodh cuairteanna ar fheirmeacha, comhairle oifige/teileafóin agus nuachtí agus cabhrú le daoine éagsúla. I ngeall ar chlár éifeachtach comhairleach oiliúna Theagaisc tá cursaí comhoibrithe i measc táirgeoirí ag dul i bhfeabhas agus tá fás agus forbairt faoin tionscal.



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Oideachas agus Oiliúint

Bhí sé de mhórchuspóir ag Teagasc sa bhliain 2003 oiliúint a chur ar fáil d'iontrálaithe óga i dtionscal na talmhaíochta agus i dtionscal na gairmeoireachta, mar aon le cláir foghlama saoil d'fheirmeoíri aosacha agus do chóinéitheoirí tuaithe agus oiliúint chuimsitheach d'fheidhmeannaigh agus d'oibritheoirí i dtionscal an bhia.

Tá na cúrsaí go léir a chuireann Teagasc ar fáil d'iontrálaithe óga i

dtionscal na talmhaíochta, i dtionscal na gairmeoireachta agus i dtionscal an talambhia arna chreidiúnú ag na boird náisiúnta dámhachtana, an Chomhairle Dámhachtana Ardoideachais agus Oiliúna (HETAC) agus an Chomhairle Dámhachtana Breisoideachais agus Oiliúna (FETAC). Cuireadh 11 cúrsaí tríu leibhéal, arna gcreidiúniú ag HETAC, ar liosta an CAO. Cuireann coláistí Theagaisc agus compháirtíochtaí na n-institiúidí teicneolaíochta na cúrsaí seo ar fáil i gcompháirtíocht le chéile. Bionn deis ag rannpháirtíthe dul ar aghaidh ó leibhéal an teastais go dtí leibhéal an dioplóma agus uайдh sin go dtí leibhéal céime san ollscoil.

Bhí 602 mac léinn ag glacadh páirte i gcúrsaí tríu leibhéal faoi dheireadh na bliana 2003. Tugtar briseadh síos leibhéal rollaithe agus leibhéal pháirteachais don bhliain 2003 agus don dá bhliain roimhe sin i dTábla 1.

Tábla 1: Lón Rollaithe agus Páirteachais i gCúrsaí Tríú Leibhéal

Cúrsaí	2001	2002	2003
Teastas Náisiúnta Talmhaíochta	Bliain 1	54	88
	Bliain 2	0	41
	Bliain 3		21
Dioplóma Náisiúnta Gairmeoireachta	Bliain 1	87	117
	Bliain 2	0	59
	Bliain 3		14
Teastas Náisiúnta in Eolaíocht Talmhaíochta	Bliain 1	36	38
	Bliain 2	25	19
	Bliain 3		20
Dioplóma Náisiúnta in Eolaíocht Talmhaíochta	Bliain 1	11	23
	Bliain 2		21
	Bliain 3		
Teastas Náisiúnta i nGníomhaíochta	Bliain 1	34	45
	Bliain 2	36	34
	Bliain 3		24
Teastas Náisiúnta i Staidéar Gnó – Eachaí	Bliain 1	16	22
	Bliain 2	4	18
	Bliain 3		17
Teastas Náisiúnta i Meicniú Talmhaíochta	Bliain 1	0	17
	Bliain 2	0	0
	Bliain 3		15
Iomlán – Cúrsaí Tríú Leibhéal	303	521	602

Tábla 2: Rollú agus Rannpháirtíocht i nGairmchúrsaí Theagaisc

Cúrsaí		2001	2002	2003
Gairmheastas Talmhaíochta	Bliain 1	551	397	321
	Bliain 2	759	358	453
	Bliain 31	1721	1723	2040
Gairmheastas Gairneoreachta	Bliain 1	74	119	105
	Bliain 2	137	75	92
Dioplóma Gairneoreachta	Bliain 32	99	131	
Teastas Póraithe agus Oiliúna Capall	Bliain 1	28	26	20
	Bliain 2	16	24	25
Ardteastas Bainistíochta				
Tréada Déiríochta	Bliain 1	30	42	20
	Bliain 2	34	28	42
Ardteastas Inneallra agus Barr Arúil	Bliain 1	36	26	12
	Bliain 2	34	37	10
Gairmheastas Talmhaíochta (Mic Léinn Aosacha)	Bliain 1	30	47	168
Bliain 2	165	26	65	
Bliain 3	195	26	99	
Gairmheastas Scileanna Gairneoreachta		7	4	26
Gairmheastas Foraoiseachta	Bliain 1	24	22	18
	Bliain 2	9	20	17
Ardteastas Bainistíochta Feirme	Bliain 1	24	17	17
	Bliain 2			27
Iomlán		3973	3148	3577

¹ Rannpháirtithe sa bliain dheireanach de shean-Teastas Feirmeoireachta Theagaisc.

² Rannpháirtithe sa bliain dheireanach de shean-Dioplóma Gairneoreachta Theagaisc.

Bhí 3,577 mac léinn ag glacadh páirte i gcúrsaí Teastas Gairmchúrsaí, a bhí á réachtáil i naoi gcinn de choláistí talmhaíochta agus gairneoreachta, faoi dheireadh na bliana 2003. Clúdaíodh cuid mhór gnéithe a bhain le cúrsaí talmhaíochta, le cúrsaí gairneoreachta, le táirgeadh capall agus le cúrsaí foraoiseachta. Tá na cúrsaí go léir arna gcreidiúnú ag FETAC agus bíonn deis acu siúd a ghlacann páirt iontu aistrú tríd an Scéim um Naisc Ardoideachais go dtí

cúrsaí tríu leibhéal. Tugtar staitisticí i dtaca le leibhéal rannpháirtíochta i ngairmchúrsaí sa bliain 2003 agus sa dá bliain roimhe sin i dTábla 2.

Leanadh leis an gclár infheistíochta, a bhfuil sé de chuspóir aige a chinntí go bhfuil áiseanna i gcoláistí talmhaíochta agus gairneoreachta ar aon dul leis na cinn atá ar fáil thar lear, sa bliain 2003. Infheistiodh €15m i sé cinn de choláistí talmhaíochta agus i dtrí cinn de choláistí gairneoreachta le trí bliana anuas.

Leanadh le comhdhlúthú áiseanna coláistí sa bliain 2003. Cuireadh deireadh leis na cúrsaí a bhí á gcur ar fáil sa Choláiste Gairneoreachta ar an nGrianán, Tearmann Feichín, Co. Lú. Chomh maith leis sin bheartaigh Teagasc deireadh a chur leis na cúrsaí gairmheastais i gColáiste Mhic Mhaoiliosa, Baile Átha an Rí. Aistríodh an t-aon chúrsa a bhí fós ar fáil i gColáiste Mhic Mhaoiliosa go Coláiste an Chreagáin.

Tábla 3: Oiliúint Aosach curtha ar fáil ag Teagasc sa bhliain 2003

	Líon cúrsai	Líon rannpháirtithe
Modúil Teicneolaíochta agus Ghnó	67	748
Modúil Inmharthanachta Tuaithe	62	724
Modúil i dTeicneolaíocht an Eolais	53	514
Modúil Chomhshaoil/Sábháilteachta Bia	209	5764
Modúil Fhiontair Chomhroghnaigh	30	638
Cúrsaí 100/80 Uair an Chloig	44	1352
Ardchúrsáí	3	40
Cúrsaí Eile	31	379
Iomlán Rannpháirtithe Aosacha	499	10,159

Reáchtáileadh roinnt gairmchúrsáí oiliúna óiche agus deireadh seachtaine in ionaid áitiúla Theagaisc agus bhí cianfhoghlaim mar chuid shubstaintiúil de na cúrsaí sin. I ngeall ar an méadú mór ar líon na bhfeirmeoír páirtaimseartha, tá sé i gceist ag Teagasc cúrsaí a chur ar fáil d'iontrálaithe óga agus d'fheirmeoír aosacha ag amanna a oireann do sceidil oibre na ndaoine a ghlacann páirt iontu.

Ríomhfhoghlaím

Sa bhliain 2003 ghlac Teagasc páirt i réimse na ríomhfhoghlaíma den chéad uair riamh. Bunaíodh suíomh gréasáin ar líne agus tá nasc idir é sin agus timpeallacht foghlaíma samhalta Choláiste Carmarthenshire sa Bhréatain Bheag, a bhfuil córas foghlaíma samhalta den scoth ann. Tugadh oiliúint i réimse na ríomhfhoghlaíma do fiche ball de chuid fhoireann oideachais Teagasc ann.

Reáchtáileadh cúrsa ar ghlac 40 mac léinn páirt ann sa bhliain 2003 agus tá sé i gceist cúrsaí eile a reáchtáil

sa bhliain 2004. Chun tuilleadh forbartha agus dul chun cinn a dhéanamh i réimse bainistíochta na ríomhfhoghlaíma, tá pleannána á gcur le chéile i láthair na huaire chun aonad foghlaíma samhalta ar líne a bhunú.

Oiliúint Fheirmeoírí Aosacha

D'fhreastail os cionn 10,000 aosach ar chúrsaí de chuid Teagasc sa bhliain 2002. Chlúdaigh na cúrsaí sin ábhair mar: bhainistíocht teicneolaíochta agus gnó; inmharthanacht tuaithe; theicneolaíocht an eolais; chosaint chomhshaoil; shábháilteachta i gcúrsaí bia; fhiontair chomhroghnacha agus ardbhainistíochta. Tugtar staitisticí i leith oiliúint aosach i dTábla 3. Reáchtáileadh cúrsaí speisialta i mbuntalmhaíocht agus i mbainistíocht feirme do dhaoine faoi bhun 35 bliana d'aois nach raibh oiliúint fhormíúil talmhaíochta orthu agus a raibh oiliúint de dhíth orthu ionas go mbeidís cáilithe i leith faoiseamh a fháil ó dhleacht stampála, i leith cúnamh infheistithe

agus i leith scéimeanna bunaithe ar chuotáí. Cúrsaí 100 uair an chloig in oiliúint talmhaíochta agus 80 uair an chloig in oiliúint bhainistíochta feirme ba ea iad agus bhí poist lánaimseartha taobh amuigh den talmhaíocht ag cuid mhór de na daoine a ghlaic páirt iontu agus bhí sé i gceist acu gnó feirme an teaghlaigh a bhainistí ar bhonn lánaimseartha nó páirtaimseartha. Reáchtáileadh cuid de na cúrsaí ar bhonn cianfhoghlaíma chun sceidil oibre na rannpháirtithe a chomhlánú.

Bhí baint ag beagnach 60% de na cláir fhoghlaíma aosacha le rialú comhshaoil agus le sábháilteachta bhia, rud a léiríonn an tábhacht mhór a bhaineann leis na réimsí sin. Ba ghné shubstaintiúil de chuid na gcúrsaí sin í teicneolaíocht an eolais freisin. Rinne os cionn 500 duine ó theaghlaigh fheirmeoireachta cúrsaí oiliúna i dteicneolaíocht an eolais. Ba mhór an buntáiste dóibh na saotharlanna ríomhaireachta sna coláistí agus sna hionaid sonraithe áitiúla oiliúna.

Oiliúint i dTionscal an Bhia

Sa bhliain 2003 ghlac os cionn 2,000 oibrí páirt i gcúrsa oiliúna idtaca le gach gné den phróiseáil bhia. Ar na hábhair a clúdaíodh bhí sábháilteacht bhia, bainistíocht nuálaíochta, lipéadú bia, nuatheicneolaíocht phróiseála, agus forbairt táirgthe nua. Rinneadh an chuid ba mhó den oiliúint san ionad

Náisiúnta Bia, áit a ndearna 1,700 oibrí os cionn 130 cúrsa oiliúna. Tugtar cuntas ginearálta ar na cúrsaí agus ar an rannpháirtíocht iontu i dTábla 4.

Tábla 4: Oiliúnt Phearsanra Thionscal an Bhia san Ionad Náisiúnta Bia, 2003

Teideal an Chúrsa	Líon Cúrsaí	Líon Rannpháirtithe
Sláinteachas Bia	35	
482		
HACCP	51	620
Iniúchóireacht Sábháilteacht Bhia	10	104
Anailís Chéadfach	5	49
Scileanna Oiliúnóra i Sábháilteacht Bhia agus Sláinteachais	2	18
Cúrsa Oiliúna ar EC/2001/471	2	24
Bailmheas Próiseála Teirmí	1	14
Ceardlann Nuálaíochta	1	7
Lipéadú Ábhair Bhia	1	1
Réamheolas ar mhicreabhitheolaíocht do neamh-mhicreabitheolaithe	1	3
Aithint Specis Listeria	1	2
Sábháilteacht agus Sláinteachas Bia	1	12
Teicneolaíocht an Bhia	1	20
Forbairt Táirgí Nua	1	8
Oiliúint Fhoireann an Roinn Talmhaíochta – Treoir 91/497/EC (larscríbhinn 3)	20	265
Iomlán	133	1,655

10

Clár Deiseanna do Theaghlaigh Feirme

Chuir Teagasc túis leis an gClár Deiseanna do Theaghlaigh Feirme sa bhliain 2002 chun freastal ar a gcuid riachtanas ag am a bhfuil cuid mhór athruiithe ag tarlú i struchtúr na talmhaíochta in Éirinn. Ba é cuspóir an chlár ná tacú le theaghlaigh scrúdú soiléir réadúil a dhéanamh ar a ndála féin, ar roghanna atá acu ar an bhfeirm agus taobh amuigh den fheirm agus "Plean don Todhchai" a fhorbairt, a chuirfidh feabhas ar ioncam agus ar chálíocht bheatha.

Ghlac 4,000 teaghlaigh feirme páirt sa chlár roimh dheireadh na bliana 2003. Rinne os cionn 50% de na rannpháirtithe an clár iomlán agus tugadh "Plean don Todhchai" dóibh sin go léir.

Léirigh comhanailís de chuid Teagaisc/UCD, a rinneadh sa bhliain 2003, go raibh leibhéal ard sástachta i measc rannpháirtithe sa chlár. Dúirt os cionn 80%, bunaithear a gcuid taithí féin, go mbeidís sásta an cursa a mholadh dá gcuid comharsan. Shíl an méid céanna díobh gur chabhraigh an clár go mór leo meastóireacht a dhéanamh ar a ndála féin agus straitéisí a phleanáil chun feabhas a chur ar a gcaighdeán maireachtála agus ar a gcáilíocht bheatha.

Usáideadh an t-aiseolas ó na rannpháirtithe mar chuid d'athbhreithniú ar chlár deiseanna do theaghlaigh feirme i bhfómhar na bliana 2003. Ó thángthas ar chomhaontú maidir le leasú CAP, is éard is cuspóir don chlár anois ná tionchar na n-athruithe polasaithe i leith teaghlaigh feirme tar éis mhí Eanáir 2005, nuair a thabharfar isteach an córas nua díchúplála íocaíochtaí, a chur san áireamh.

Tabharfar isteach Clár um Phleanáil i ndiaidh Fischler sa bhliain 2004 agus cuirfidh sé sin saineolas ar fáil d'fheirmeoírí chun cabhrú leo meastóireacht a dhéanamh ar impleachtaí an pholasaí nua agus táirgí a chur in oiriúint do riachtanais mhargaidh. Beidh idir ghrúpchainteanna agus chomhairle phearsanta i gceist do gach aon duine de na rannpháirtithe. Beidh mórmhíreanna de chuid an Chlá Rathúil Deiseanna do Theaghlaigh Feirme mar ghné thábhachtach de chuid an chláir sin.

11

Ócайдí agus Foileascháin

Lean Teagasc air ag reáchtáil chlár gníomhach ócайдí poiblí ar bhonn áitiúil, ar bhonn contae, ar bhonn réigiúnach agus ar bhonn náisiúnta sa bliain 2003. Ina measc sin bhí taispeántais, siúloidí feirme, laethanta oscailte, cruinnithe pléighrúpaí, clinicí comhairleacha agus sceideal leathan comhdhálacha i dtaca le gach gné d'obair na heagraíochta. Ba iad seo a leanas cuid de na buaicphointí:

- Dhá comhdháil náisiúnta déiríochta i gCorcaigh agus ar an gCabhán, a ndearna 1,500 feirmeoir agus ionadaí tionscail freastal orthu. Chomh maith leis sin reáchtáileadh comhdháil náisiúnta um bainne leachtach. Reáchtáileadh sceideal cuimsitheach laethanta oscailte déiríochta, taispeántais agus comhdhálacha áitiúla ar fheirmeacha, in ionaid taighde agus comhairleacha de chuid Teagaisc agus in áiteanna eile.

- Bhí an comhdháil náisiúnta curaíochta, a reáchtáil Teagasc i mí Eanáir, ar cheann de mhórócaídí an earnáil churaíochta arís. Chomh maith leis sin reáchtáileadh comhdhálacha curaíochta agus laethanta oscailte ar bhonn contae ag amanna tábhachtacha le linn séasúr na curaíochta.
- Rinne eacnamaithe Theagaisc cur síos ar thorthaí a gcuid analíse ar mholtáí i leith leasú CAP ag comhdháil speisialta i mí na Bealtaine. I mí na Nollag thug eacnamaithe tuairisc ar ghníomhaíocht an tionscail sa bliain 2003 agus ar ionchais na bliana 2004 ag an gComhdháil Dálaí agus Réamhdhearcaidh.
- Reáchtáileadh sraith laethanta oscailte agus comhdhálacha do tháirgeoirí márteola agus caorach le linn na bliana. Chomh maith leis sin reáchtáileadh laethanta náisiúnta oscailte ar fheirmeacha a raibh dámhachtana bainte amach acu.
- Reáchtáil seirbhís mhuc agus seirbhís chomhairleach Theagaisc trí comhdháil réigiúnacha a ndearna formhór na dtáirgeoirí muc freastal orthu.
- Chuir comhdháil náisiúnta REPS, a bhí ar siúl i mí na Samhna, fóram tábhachtach nuashonraithe ar fáil do ghairmithe a raibh baint acu leis an scéim.
- Ó thaobh na curaíochta de, reáchtáileadh comhdhálacha náisiúnta ar phrátaí agus ar stoc

plandlainne agus, anuas air sin, cuireadh comhdhálacha ar bun do shaothraithe glasraí.

- Reáchtáil an tseirbhís chomhairleach fhoraoiseachta sceideal cuimsitheach taispeántas agus laethanta allamuigh.
- Chuir an chomhdháil náisiúnta oideachais, a bhí ar siúl i mí Feabhra, pléfhóram idéalach ar fáil i dtaca le treochtaí agus le riachtanais in oideachas talmhaíochta agus curaíochta sa todhchaí
- Labhair eolaithe agus póraithe ón Ríocht Aontaithe, ón Ollainn agus ó Theagasc ag an gcomhdháil náisiúnta póraithe capall a chuir Teagasc ar siúl i mí Aibreáin.
- Reáchtáileadh lá oscailte náisiúnta ar feirmeoireacht orgánach in Ionad Mhic Mhaoilíosa, Baile Átha an Rí i mí lúil.
- Reáchtáileadh mórtuaispeántas ar bhianna comhrognacha do bheostoc i gColáise Chill Daltún i mí lúil.
- Anuas ar an lá oscailte don tionscal náisiúnta bia, a bhí againn i bpáirc Uí Mhórdha i mí Dheireadh Fómhair, reáchtáileadh 17 comhdháil agus ceardlann i rith na bliana, faoi stiúir an ionad Náisiúnta Bia agus an ionad Taighde Táirgí Déiríochta

Coinníodh clár cuimsitheach foileachán ar bun i rith na bliana. Mar chuid den obair sin foilsíodh

lámhleabhair nua agus leabhair shaothair don chlár oiliúna, mar aon le lámhleabhair/bileoga a raibh baint acu le táirgíocht, le hardchaighdeán bainistíochta, le hanailís airgeadais, le rialú comhshaoil, le sábháilteacht feirme agus le sábháilteacht bhia – chun cur le gach gné den chlár comhairleach.

Cuireadh amach foileachán ardchaighdeáin dar teideal *Farming in the Burren*, mar aon le sainfhoileachán dar teideal *The Soils of Offaly* le linn na bliana.

Foilsíodh dhá eagrán den *Irish Journal of Agricultural and Food Research*, mar aon le tuairiscí a raibh baint acu le tortaí tionscnaimh thaighde agus le foileachán eile a raibh baint acu le réimse iomlán an chlár taighde.

Foilsíodh sé eagrán den *Today's Farm*, agus scaipeadh iad ar 35,000 cíantfheirmeoí de chuid Teagaisc agus ar phearsanra tábhachtach a raibh baint acu leis an tionscal talamhbhia. Chomh maith leis sin foilsíodh an dlútheagrán taighde agus forbartha, *Farm & Food*.

Rinneadh meall substaintiúil eolais nua a uaslódáil ar shuíomh gréasáin Teagaisc, www.teagasc.ie, agus tháinig méadú os cionn 30% ar thrácht ar an suíomh le linn na bliana 2003, comhartha den tábhacht bhisiúil a bhaineann leis mar fhoinsí eolais náisiúnta agus idirnáisiúnta.

12

Dualgais Reachtúla

Comhionannas

Tá sé de chuspóir ag Teagasc comhionannas deiseanna a chur ar fáil agus is chuige sin a leagadh síos an clár forbartha pearsanra agus foirne. Chomh maith leis sin tá sé de chuspóir ag Teagasc polasaí an Rialtais i dtaca le fostáiocht daoine míchumasaithe san earnáil phoiblí a chur i bhfeidhm

Tá polasaí i leith maistíneachta, imeaglaithe agus ciaptha gnéasaigh curtha i bhfeidhm againn chun dínit gach ball foirne a chaomhnú agus a chosaint.

An tAcht um Eitic in Oifigí Poiblí, 1995, and an tAcht um Chaighdeán in Oifigí Poiblí, 2001.

De réir an Acharta um Eitic in Oifigí Poiblí, 1995, agus an Acharta um Chaighdeán in Oifigí Poiblí 2001, chuir baill Údarás Teagaisc ráiteas comhleasa ar fáil do Rúnaí an Údarás agus, anuas air sin, cuireadh cíop ar fáil don Choi misiún um Chaighdeán in Oifigí Poiblí. Chomh

maith leis sin, chomhlíon baill ar bith de chuid Teagaisc, a bhfuil poist sonraithe acu, coinníollacha na n-achtanna sin.

An tAcht um Shábháilteacht, Shláinte agus Leasa, 1989

De réir an Acharta um Shábháilteacht, Shláinte agus Leasa, 1989, d'ullmhaigne Teagasc ráitis sábháilteachta chun gach gné de chuid leasa foirne agus cuairteoirí a chlúdach.

An tAcht um Rannpháirtíocht Oibrithe (Fointair Stáit), 1988

Chuir Teagasc struchtúir chomhairliúchán Fho-Bhoird i bhfeidhm chun tacú le próisis chumarsáide agus chomhairliúcháin na heagraíochta. Tá Fóram Náisiúnta Rannpháirtíocha agus ceithre Fhoram Réigiúnacha Rannpháirtíthe Fostaithe, a ghníomhaíonn ar son lucht bainistíochta agus ar son foirne, curtha i bhfeidhm.

An tAcht um Bainistíocht Seirbhísí Poiblí, 1997

De réir ailt 4 agus 5 den Acht um Bainistíocht Seirbhísí Poiblí, 1997, chuir Teagasc an dara Ráiteas Straitéise uaidh ar fáil don Aire Talmhaíochta agus Bia i mí na Samhna 2003.

An tAcht um Shaoráil Faisnéise, 1997

Chuir Teagasc an tAcht um Shaoráil Faisnéise, 1997, i bhfeidhm ón 1ú Samhain 2002 ar aghaidh. Cuireann an tAcht trí cinn de chearta reachtúla ar fáil:

- ceart dleathach do gach duine eolas atá ag comhlacthaí poiblí a rochtain;
- ceart dleathach do gach duine eolas oifigiúil atá ag comhlacht poiblí ar bith a bhaineann leis/léi féin a leasú má bhíonn sé neamhmiolán nó mícheart nó míthreorach; agus
- ceart dleathach do gach duine na cúiseanna a bhaineann le cinneadh ar bith, a dhéanann comhlacht poiblí, a mbíonn tionchar aige air/uirthi féin, a fháil.

Cód Cleachtais i leith Rialachas Comhlacthaí Stáit, Deireadh Fómhair 2001

Ghlac Teagasc leis an gcód cleachtais um Rialachas Comhlacthaí Stáit, a cheadaigh an Rialtas i mí Dheireadh Fómhair 2001 agus rinneadh socruithe lena chinntí go gcomhlíonfaidh Teagasc gach gné den chód sin ina chuid gníomhaíochtaí.

An tAcht um Prapíocaíochtaí ar Chuntais, 1997

Áirítear Teagasc mar cheannaitheoir liostaithe earraí faoi sceideal an Acharta um Prapíochaíochtaí ar Chuntais, 1997. Cuireadh an tAcht i bhfeidhm ar 2ú Eanáir 1998 agus comhlíonann Teagasc na forálacha a bhaineann leis. De réir an Acharta agus de réir treoirínte a d'eisigh an Róinn Fiontar, Trádála agus Fostaíochta, cuirtear an t-eolas seo a leanas ar fáil.

Modhanna imeachta a bunaíodh chun géilliúlacht don Acht a chinntiú

Tá modhanna imeachta curtha i bhfeidhm ag Teagasc lena chinntiú do ndéantar íocaíochtaí ar shonraisc taobh istigh de na teorainneacha ama a bhaineann leo nó taobh istigh den teorainn ama reachtúil mura mbíonn tréimhse shonraithe ar bith i gceist. Cé gur cuireadh na modhanna imeachta sin le chéile chun géilliúlacht don Acht a chinntiú, ní féidir leo ach forchinntiú réasúnta, seachas dearbhfhochinntiú, a chur ar fáil maidir le neamhghéilliúlacht ábhartha don Acht. Cuireadh na nósanna imeachta sin i bhfeidhm le linn an tréimhse airgeadais a bhí faoi léirmheas; agus, i gcás mallíocaíochtaí, tugadh an t-eolas cuí do na soláthraithe a bhí i gceist agus íocadh ús leo.

De réir an Acharta um Prapíocaíochtaí ar Chuntais, 1997, cuirtear an t-eolas seo a leanas ar fáil i dtaca leis an tréimhse airgeadais dár chríoch 31ú Nollaig 2003.

a) Nósanna Imeachta Íocaíochta

Íocann Teagasc soláthraithe de réir téarmaí sonraithe ar shonraisc nó de réir téarmaí sonraithe ar chonarthaí aonair más cuí. Tréimhse 30 lá a bhíonn i gceist de ghnáth.

b) Mallíocaíochtaí os cionn €300

Lón sonrasc	135
Méantréimhse Moille	24

c) Céatadán foriomlán mallíocaíochtaí mar chuid d'íocaíochtaí iomlána agus ús iomlán a íocadh

Ba é 1.23% an céatadán foriomlán de mhallíocaíochtaí mar chuid d'íocaíochtaí iomlána.

Ba é €2,807.55 an t-iomlán a íocadh mar ús ar mhallíocaíochtaí.

Jim Flanagan
Stiúrthóir

Ráitis Airgeadais 2003

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Tuarascáil an Ard-Reachtaire Cuntas agus Ciste le cur i láthair do Thithe an Oireachtais

Tá na ráitis airgeadais ar leathanaigh 58 go dtí 74 iniúchta agam faoi Alt 12 den Acht Talmhaíochta (Taighde, Oiliúint agus Comhairle), 1988.

Freagrachtaí Chomhaltaí an Údarás agus an Ard-Reachtaire Cuntas agus Ciste faoi seach

Tá freagrachtaí cuntasáiochta an Údarás leagtha amach ar leathanach 55. Tá sé de fhreagracht ormsa tuairim neamhspleách a dhéanamh, bunaithe ar m'iniúchadh, i leith na ráitis airgeadais a cuireadh i mo láthair agus tuarascáil a fhoiliú orthu.

Scrúdaím an ráiteas ar leathanach 54 ar an gcóras um rialú inmheánach airgeadais le féachaint an léirítéar ann gur chomhlíon an túdarás treoir infheidhmithe maidir le rialachas corporáideach agus tuairiscí ar aon chás ábhartha nach ndéanann an túdarás amhlaidh, nó más rud é go bhfuil an ráiteas míthreorach nó nach dtagann sé le faisnéis eile atá ar eolas agam de bharr na ráitis airgeadais a bheith iniúchta agam.

An Bunús atá le mo Thuairim ar na Ráitis

I mbun m'fheidhme mar Ard-Reachtaire Cuntas agus Ciste, rinne mé m'iniúchadh ar na ráitis airgeadais de réir na gcaighdeán iniúchóireachta arna n-eisiúint ag an mBord um Chleachtais Iniúchóireachta agus trí thagairt a dhéanamh do na nithe ar leith is gá a chur san áireamh agus a ghabhann le comhlacthaí Stáit i ndáil leis an mbealach a bhainistítear agus a oibrítear na comhlacthaí sin.

Déantar scrudú mar chuid den iniúchadh, ar bhonn tástála, ar fhianaise a bhaineann leis na suimeanna agus leis an méid a fhoilsítear sna ráitis airgeadais. Chomh maith leis sin, cuimsíonn an t-iniúchadh measúnacht ar na meastacháin agus ar na breitheanna suntasacha a rinneadh agus na ráitis airgeadais á n-ullmhú, agus measúnacht le féachaint an oireann na beartais chuntasaíochta don bhail atá ar chúrsaí an Údarás, ar feidhmíodh na beartais sin ar bhealach leanúnach agus ar foilsíodh iad ar bhealach sásúil.

Phleánail mé agus rinne mé m'iniúchadh sa chaoi is go bhfaighinn an fhaisnéis agus na mínithe ar fad a mheas mé a bheith riachtanach ionas go mbeadh leordhóthain fianaise agam a d'fhágfadh cinnteacht réasúnach ann go bhfuil na ráitis airgeadais saor ó mhíráiteas ábhartha, cibé acu calaois nó neamhrialtacht eile nó earráid is cúis leis sin. I dteacht ar mo thuairim, rinne mé meastóireacht ar a shásula is a cuireadh faisnéis i láthair sna ráitis airgeadais san iomlán freisin.

Béim an Ábhair

Ní hionann é seo agus aon mhaolú a dhéanamh ar mo thuairim, ach tarraingím suntas san Fhorlónadh leis an Tuarascáil seo ar easpaí áirithe i rialachas.

Thuairim

Is é mo thuairim go raibh leabhair chuntais chuí coinnithe ag an Údarás agus go dtugann na ráitis airgeadais, a chomhaontaíonn leo, léargas fiorcheart ar staid chúrsaí an Údarás ar an 31 Nollaig 2003 agus ar a ioncam agus ar a chaiteachas agus ar a shreabhadh airgid thirim don bláthain dar críoch sin.



John Purcell

Ard-Reachtaire Cuntas agus Ciste

21 Meán Fómhair 2004

Forlónadh leis an Tuarascáil Iniúchta Easpaí Rialachais

Le linn iniúchta 2003 ar Theagasc tháinig na nithe seo a leanas chun m'aird, i rith athbhreithnithe ar thuarascálacha iniúchta inmheánaigh, a tharraing imní maidir le rialachais an Údarás. D'ardaigh mé na nithe seo le Stiúrthóir an Údarás agus tá a fhreagraí curtha isteach san fhorlónadh seo.

1. Éilimh Bhréagacha Taistil agus Cothaithe

I mí an Mheithimh 2001, fuair an tÚdarás litir gan ainm léi á rá go raibh "focaíochtaí breise saormhíleáiste agus cothaithe" á bhfáil ag comhaltaí áirithe den fhoireann ag Ionad Taighde de chuid Teagasc. Cuireadh an litir seo faoi bhráid Stiúrthóir an Ionaid a d'freagair Stiúrthóir an Údarás an mhí chéanna agus ba é éirim a bhí le rá aige ná go raibh sé sásta go raibh gach rud in ord maidir le hélimh speansas ag an ionad.

I mí lúil 2002 tháinig an tOifigeach Riaracháin ag an ionad ar eolas le seans a thug le tuiscint nach éilimh bona fide iad éilimh taistil áirithe a rinne comhalta den fhoireann. Chuir sé forrán ar an gcomhalta den fhoireann a ghlaic leis go raibh na hélimh bréagach agus a gheall nach dtarlódh a leithéid arís. Cuireadh Ceann Rannóige an chomhalta den fhoireann ar an eolas. Bhuaile seisean leis an gcomhalta den fhoireann agus tháinig sé ar an tuairim nach ndeachaigh na hélimh bhréagacha siar thar thréimhse fhada agus gur bheag an tsuim a bhí i gceist. Ar an mbonn seo chinn sé nach raibh aon ghníomh breise de dhíth agus níor chuir sé tuairisc faoin scéal chuig Stiúrthóir an Ionaid.

Fuair Stiúrthóir an Údarás litir eile gan ainm léi i mí na Bealtaine 2003 ag cur failí i leith maidir le déileáil le hélimh bhréagacha speansas i gcás comhalta den fhoireann, nár ainmníodh, ag an ionad. Mar thoradh air seo iarradh ar an Iniúchóir Inmheánaigh fiosrú a dhéanamh faoi na líomhaintí.

Nochtaigh an fiosrú Iniúchta Inmheánaigh go raibh éilimh bhréagacha á gcur isteach ag comhalta den fhoireann ó 1988. Bhí na hélimh i dhá chatagóir

- éilimh i leith turas nach ndearnadh
- éilimh mhéadaithe a bhain le hábhar á bhailíú go laethúil ag an gcomhalta den fhoireann ar a bhealach chun oibre. Ba chóir na hélimh sin a theorannú go dtí an costas a bhain leis an taisteal breise ba shiocair ag an ngá chun ábhar a bhailíú sa bhaile chun oibre. Ní dhearnadh iad a theorannú amhlaidh. In áit sin, rinneadh na hélimh a chomhairimh ar bhonn turais fhillte bharúlaigh ón ionad go dtí an ionad bailithe. Mar thoradh air sin bhí ró-éileamh, seachtainiúil, ar 112 míle.

Dheimhnigh Ceann na Rannóige a bhí ann ag an am sin na hélimh go léir go cuí. Comhairíodh an tsuim i leith éileamh do thurais nach ndearnadh ag €77,636 agus níor luadh aon tsuim le hélimh mhéadaithe.

Glacadh gníomh smachta i gcoinne an oifigigh i gceist trí íslíú céime a thabhairt dó laistigh dá struchtúr gráid agus trí iachall a chur air an tsuim a héliodh i leith turas nach ndearnadh a aisíoc móide ús de €52,420 rud a thug an t-iomlán go dtí €130,056.

I mí Dheireadh Fómhair 2003, threoraidh Stiúrthóir an Údarás foireann na hArdoifige fiosrú a dhéanamh maidir leis na páirteanna a bhí ag an Oifigeach Riarachán agus ag Ceann na Rannóige i dtaca leis na hélimh bhréagacha. Rinneadh an fiosrú seo i mí na Bealtaine 2004. Ina dhiaidh sin mhol an Stiúrthóir go nglacfaí gníomh smachta i gcoinne an Oifigigh Riarachán agus i gcoinne Cheann na Rannóige. Tá an tOifigeach Riarachán agus Ceann na Rannóige araon ag cur i gcoinne an ghníomh smachta.

Bhí imní orm go raibh faillí thromchúiseach i rialachas sa chás seo sa mhéid:

- nár coimeádadh córas éifeachtach mhonatóireacht, rialú agus cheadú chostas taistil agus cothaithe
- gur chosúil gur bheag eolais a bhí ag bainisteoirí a bhí ag deimhniú éileamh ar riachtanais taistil éilitheoirí agus mar sin nach raibh siad i staid chun na hélimh sin a údarú le hintinn mhaith
- go raibh an staid rialithe easnamhach i gcaoi nár fhrithghníomhaigh an bhainistíocht go pras agus go cuí maidir leis an gcomhartha bhunaidh go bhféadfadh calaois a bheith ann
- nár dhéileáil an bhainistíocht go cuí leis an scéal nuair a fuarthas amach go raibh calaois ann i 2002.

D'fhiagraigh mé de Stiúrthóir an Údarás:

1. conas ar theip ar an staid rialithe ag an lonad, thar thréimhse sé bhliana déag beagnach, teacht ar élimh taistil do thuras nach ndearnadh.
2. cé acu an raibh nósanna imeachta i scribhinn ag Teagasc chun déileáil le calaoisí agus mírialtachtaí a aimsíodh agus cé acu ar leanadh iad sin.
3. cé acu ar tugadh na litreacha gan ainm chun aird an Iníúchóra Inmheánaigh agus an Choiste Iníúchta go pras, agus má tugadh, cén toradh a bhí leis sin.
4. cén fáth nár iarradh aon aisghabhál maidir leis na hélimh mhéadaithe.
5. cén gníomh breise a bheartaitear i dtéarmaí
 - tuairisciú an Údarás ar, agus frithghníomhú ar, theipeanna rialithe a neartú.
 - a chinntí go bhfuil bainisteoirí soiléir maidir lena ndualgais i dtaca le déileáil le cásanna calaoise nó le hamhrs calaoise.

Freagra an Stiúrthóra

Chuir an Stiúrthóir in iúl dom go raibh an teip sa staid rialithe inchurtha i leith chultúr muiníne nach raibh tuillte a bhí ag comhalaí tábhachtacha áirithe den bhainistíocht ag an lonad in ionrachas roinnt den fhoireann. Bhí an fócas bainistíochta ar oibríochtaí le haird easpach ar rialithe airgeadais.

Dúirt an Stiúrthóir nach bhfuil nósanna imeachta i scribhinn ag Teagasc chun déileáil le calaois a aimsítear agus go rabhthas ag brath go dtí seo ar an mbainistíocht áitiúil chun túis a chur le gníomh cuí nuair a aimsíodh calaois nó go raibh barúil ann gur tharla a leithéid. In eachtra lúil 2002, leanadh na gnáthnósanna imeachta a mbeifí ag súil leo.

Chuir an Stiúrthóir in iúl dom nár tugadh an chéad litir gan ainm chun aird an Iníúchóra Inmheánaigh in 2002 ach gur dhéileáil an Stiúrthóir léi trí an Rannóig Phearsana agus trí bhainistíocht an lonaid. Tugadh an dara litir gan ainm a fuarthas i mí na Bealtaine 2003 chun aird an Iníúchóra Inmheánaigh go pras a chuir túis le fiosrú láithreach agus a d'eisigh réamhthuarascáil don bhainistíocht ar 8 lúil 2003. Cuirreadh in iúl don Choiste Iníúchta ag an gcruiinniú ina dhiaidh sin i mí Mheán Fómhair 2003 go raibh an fiosrú ar siúl i cónaí agus i mí na Samhna 2003 d'eisigh an tIníúchóir Inmheánaigh tuarascáil ag cur méide ar na hélimh bhréagacha. Phléigh an Coiste Iníúchta an cheist ag cruinniú mhí na Bealtaine 2004 agus leag an Stiúrthóir agus an Stiúrthóir Riarachán amach na nósanna imeachta smachta a bhí á dtionscnamh i gcoinne an oifigigh agus dhá chomhalta den bhainistíocht ag an lonad.

Maidir leis an gcinneadh gan leanúint ar aghaidh le haisghabháil na méideanna iomarcacha a íocadh i dtaca le hélimh mhéadaithe, dúirt an Stiúrthóir gur ghníomhaigh an comhalta agus Ceann na Rannóige araon ar an mbarúl éigeart go raibh siad ag déanamh de réir an rialacháin maidir leis na méideanna a éilíodh. I dtosca aontú bainistíochta a bheith ann, measadh nach bhféadfaí an cheist a leanúint.

Maidir le gníomh breise beartaithe, dúirt an Stiúrthóir:

- go ndearnadh iniúchadh ar élimh oifigeach eile le linn an phiosraithe ag an Ionad. D'iarr an Ceannoifig freisin ar Cheann an Ionaid athbhreithniú a dhéanamh ar na hélimh taistil go léir ag an Ionad. Níor tháinig an t-athbhreithniú seo ar aon élimh bhréagacha bhereise ag an Ionad. Cuimsíonn gach tasc iniúchta inmheánaigh scrúdú cuimsitheach ar élimh taistil agus cothaithe. Áirítear sa phlean iniúchta le haghaidh 2004, a cheadaigh an Coiste Inmheánach i mí Feabhra 2004, soláthar d'iniúchadh sonrach ar chaiteachas taistil agus cothaithe.
- Tuairiscítear teipeanna rialaithe a aithnítear sa ghnáthshlá le linn obair an Stiúrthóra Inmheánaigh chuit ag mbainistíocht áitiúil ar dtús agus tugtar deis dóibh freagra a thabhairt ar na pointí a ardaíodh san iniúchadh sula bhfoilsítear an tuarascáil Iníúchta Inmheánaigh agus sula scaptear í ar an gCoiste Iníúchta ina dhiaidh sin. Déanann an tIníúchóir Inmheánach obair leanta tar éis tréimhse sé mhí lena chinntí go ndeachtas i gcion ar laigeachtaí a aithníodh sa chórás rialaithe. Measann Teagasc go bhfuil an próiseas seo éifeachtach.
- Neartófar nósanna imeachta chun déileáil le teipeanna rialaithe a aithnítear lasmuigh den phróiseas Iníúchta Inmheánaigh.
- Scaipfear nósanna imeachta i scribhinn chun déileáil le calaois agus le mírialtachtaí agus curfear i bhfeidhm iad go fuinniúil.

2. Coimhlínt leasa fostáí

D'úsáid ionad taighde de chuid an Údarás foinse eiseach chun obair a dhéanamh a bhain le gabháil, breacadh, déanamh bailí agus tuairisciú sonraí ríomhaireachta "ar an bhfeirm" ó 1995. Ba pháirtíocht an soláthraí seirbhíse, go dtí 1999, ina raibh leas ag fostáí de chuid an Ionaid de 50% ar a laghad. Ó 1999 ba chuideachta é an soláthraí seirbhíse ina bhfuil 50% de na scaireanna ag an bhfostáí. Tugadh an conradh don obair seo gan tairiscint. Nótáonn tuarascáil Iníúchta Inmheánaigh:

- gur aontaigh an fostáí nár nochtaigh sé a leas sa chuideachta do Stiúrthóir Teagasc ach go ndearbhaíonn sé go raibh an Stiúrthóir Oibríochtaí agus Ceann an Ionaid ar an eolas faoina nasc leis an gcuideachta/leis an bpáirtíocht agus nár séanadh é seo.
- go ndearna an fostáí foréileamh ar sheirbhísí ón gcuideachta agus gur dhearbaigh sé íocaíochtaí di in 2003.
- go ndearna an fostáí obair rialú cálíochta thar ceann na cuideachta agus go raibh baint aige leis an analís ar shonráí.

Ba é an tsuim a íocadh leis an gcuideachta ó 1999 ná €233,610. Ba é an tsuim a íocadh idir 1995 agus 1999 ná €102,605.

Le héifeacht ó 30 Meitheamh 2004 d'éirigh Teagasc as úsáid a bhaint as seirbhísí na cuideachta seo agus táthar ag súil leis go ndéanfar socrutithe eile. Ní raibh aon fhianaise ann gur glacadh aon ghníomh smachta ná gur breithníodh a leithéid maidir leis an gceist seo.

Bhí imní orm go raibh an chosúlacht ar an scéal maidir leis na socruthe seo

- gur sárú iad ar choinníollacha fostáiochta an fhostáí a éilíonn go dtugann sé a chuid ama ar fad dá dhualgais mar fhostáí agus nach mbíonn sé ag gabháil d'fhostáiocht sheachrach nó do ghnó seachtrach.
- go raibh siad contrártha leis an gCód Cleachtais do Rialachas Chomhlachtaí Stáit a éilíonn go nglacann Comhlachtaí Stáit cód iompair a chuirfidh cosc, inter alia, ar bhaint a bheith ag fostaithe le fostaiocht sheachtrach/ leasanna gnó seachtracha atá i gcoimhlínt le gnó an chomhlachta nó go bhfuil an cumas coimhlinte ann.

D'fhiadraigh mé de Stiúrthóir an Údarás:

1. Maidir leis an mbainistíocht áitiúil cén fáth
 - ar lig siad don fhostaí seirbhísí a phróiseas iomaíoch tairsceana maidir leis na seirbhísí.
 - nár iarr siad luachanaí nó nár thug siad faoi phróiseas iomaíoch tairsceana maidir leis na seirbhísí.
 - nár chuir siad an choimhlint leasa ag eascrait as fostú an fhostaí ag Teagasc agus as an mbaint a bhí aige leis an gcuideachta in iúl don Údarás.
2. Cad iad na céimeanna atá glactha ag an Údarás chun Cód lompar Gnó a chur i gcrích mar a éilíonn an Cód Cleachtais.
3. Cén gníomh atá glactha chun coimhlintí eile a d'fhéadfadh a bheith ann a aithint agus chun déileáil leo.

Freagra an Stiúrthóra

Maidir le gníomhaíochtaí na bainistíochta áitiúla dúirt an Stiúrthóir:

- nach bhfuil aon stádas i dTeagasc ag forélimh a dhéanann duine aonair mura n-údaraíonn an Ceann Rannóige nó Ceann an Ionaid é. I ndiaidh údarú forélimh déantar an t-ordú ceannaigh. Ní féidir iocaíochtaí a dhearbhú mura leanatar an nós imeachta thusa maidir le fáil na seirbhise. Sa chás seo dhearbháigh an festaí roinnt de na híocaíochtaí mar gheall ar nádúr na seirbhise a soláthraíodh. Níor chóir go ligfí do seo tarlú i gcás go raibh an bhainistíocht ar an eolas faoin mbaint a bhí ag an bhfostaí le soláthar na seirbhise.
- Lorgaíodh luachan ar dtús agus thug gnóthas an fhostaí léargas mionsonraithe ar an tseirbhís a bhí le soláthar. Mheas an bhainistíocht áitiúil ag an am sin gur luach maith ar airgead a bhí ann. Níor mhéadaigh costas na seirbhise seo de réir boilscithe thar na blianta. D'éirigh sé an- deacair smaoineamh ar lámh a bheith i bpróiseas iomaíoch níos forleathana mar gheall ar nádúr fíorshainfheidhme agus fíor-logánta na seirbhise a soláthraíodh. Bhí sé ag teastáil ón soláthraí seirbhise go mbeadh eolas fíorshainfheidhme aige ar chórais thaifeadta thaighde ainmhithe agus ba ghá dó bogearraí ríomhaireachta fíorshainfheidhme a úsáid.
- Chuaidh an bhainistíocht i mbun roinnt tionscnamh chun deireadh a chur leis an spleáchas ar an gcur chuige thusa maidir le fáil agus déanamh bailí thaifid feirme. Ní go dtí go raibh córas chun taifeadadh agus aistriú sonrai thar línte teileafóin go dtí bunachar sonrai lárnach forbartha a bhí Teagasc i rocht chun éirí as feidhm a bhaint as seirbhise ghnóthas an fhostaí. Ní raibh gá leis na seirbhisi a thuilleadh ó lúil 2004.
- Tá an Stiúrthóir Oibríochtaí a bhí freagrach as an obair seo ar dtús éirithe as Teagasc. Níl aon chuntas ann gur chuir sé in iúl don Stiúrthóir a bhí ann ag an am nó don Údarás go raibh coimhlint leasa ann idir fhostú an fhostaí ag Teagasc agus an bhaint a bhí aige leis an ghnóthas seo. Ghlac bainisteoirí a tháinig ina dhiaidh sin gur déileáladh leis an gceist seo san am a bhí thart agus dhírigh siad ar spleáchas Teagasc ar an gcineál seo seirbhise a chur as an tsíli.

Dúirt an Stiúrthóir go bhfuil sé beartaithe ag an Údarás Cód lompar Gnó a ullmhú agus a chur i gcrích in 2004. Chuir sé in iúl dom freisin go bhfuil tú curtha le próiseas smachta maidir leis an gcomhalta den fhoireann i gceist, maidir le Ceann an Ionaid agus maidir leis an Stiúrthóir Oibríochtaí.

Maidir le coimhlintí leasa eile a d'fhéadfadh a bheith ann a aithint agus déileáil leo, dúirt an Stiúrthóir gur gá d'oifigigh shonraithe de réir na nAchtanna um Eiticí in Oifig Phoiblí 1995 go 2001 dearbhú (Ráiteas Leasa) a chur ar fáil gach bliain maidir le haon leasanna a d'fhéadfá an bhí a bhaint astu go raibh siad i gcoimhlint le leasanna Teagasc.

Larrrtar ar gach festaí ar thosach a chuid oibre le Teagasc conradh festaíochta a shíniú. Tá clásal leithleachais i ngach conradh festaíochta ina ndéantar soiléir nár chóir don oifigeach bheith i mbun aon fhostaíochta nó ghnóthais seachas a gcuind festaíochta le Teagasc.

Clúdaíonn Rialachán Cheannach agus Oibreacha Tógála Teagasc (Bealtaine 2003) cúinsí eitice maidir le déileáil le soláthróirí. Is gá don fhoireann a mbíonn aon bhaint acu le soláthróirí iarbhír nó le soláthróirí a d'fhéadfadh a bheith ann a leas a chur in iúl don Stiúrthóir agus don Stiúrthóir Oibríochtaí i gceist agus a chinntíú nach dtéann siad i gcion ar bhealach ar bith maidir le gnó Teagasc a thabhairt do na soláthróirí sin.

Féachann fiosraithe Inniúchta Inmheánaigh le haon staideanna a raibh ann ina bhféadfadh coimhlint leasa éirí astu a nochtú.



John Purcell
Ard-Reachtaire Cuntas agus Ciste
21 Meán Fómhair 2004

Ráiteas um Rialú Inmheánach Airgeadais

Ar son Údarás Teagaisc admhaímse go bhfuil sé de dhualgas orainn a chinntíú go ndéanfar córas éifeachtach rialaithe airgeadais inmheánaigh a chothabháil agus a oibriú.

Ní féidir le córas rialaithe airgeadais inmheánaigh ar bith ach dearbhú réasúnach – seachas dearbhú daingean – a chur ar fáil i gcoinne earráide ábhartha ná ráiteas éithigh ná cailliúna. Ag cur éifeachtacht rialaithe airgeadais inmheánaigh san áireamh, tugann an tÚdarás aitheantas do na riachtanais a bhaineann leis an gCód Cleachtais um Ríalachas Comhlacthaí Stáit, i measc nithe eile.

Thóig an tÚdarás céimeanna lena chinntíú go mbeidh timpeallacht oiriúnach rialithe i gceist trí:

- sainmhíniú soiléir a thabhairt ar dhualgais, ar údarás agus ar fhreagracht lucht bainistíochta.
- nósanna imeachta foirmíula a leagan síos i dtaca le monatóireacht agus le cosaint sócmhainní Theagaisc.
- cultúr freagrachta a forbairt i dtaca le gach leibhéal den eagraíocht.

Tá próisis curtha ar bun ag an Údarás chun rioscaí gnó taobh istigh de Theagasc a aithint agus tá monatóireacht á déanamh ag an Údarás ar na rioscaí sin i láthair na huaire.

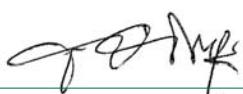
Tá an córas rialaithe airgeadais inmheánaigh bunaithe ar chreatlach de thuairisciú rialta bainistíochta, de nósanna imeachta riarcháin (leithscaradh dualgas san áireamh) agus de chóras tarmligin agus freagrachta. Ina measc sin tá:

- córas cuimsitheach tuairisciú bliantúil buiséadaithe agus airgeadais a ndéanann an tÚdarás athbhreithniú agus faomhadh ina leith;
- athbhreithnithe rialta a dhéanann an tÚdarás ar straitéis fhioriomlán, ar phleananna gnó agus airgeadais agus ar athraithis i gcoinne buiséid ghníomhaíochta agus chaipítil.

Tá feidhm inmheánach iniúchta ag Teagasc, a ghníomhaíonn de réir riachtanais an Chód Cleachtais um Ríalachas Comhlacthaí Stáit agus de réir na gricitéir éifeachtachta faoi mar atá leagtha síos i Ráiteas Straitéise Theagaisc, a foilsíodh i mí na Samhna 2003. Coinnítear obair an iniúchta inmheánaigh ar an eolas trí analís a dhéanamh ar na rioscaí a bhaineann le Teagasc agus bunaítear pleannanna an iniúchta inmheánaigh bhliantúil ar an analís sin. Is é an Coiste Iniúchta a cheadaíonn na pleannanna iniúchta inmheánaigh.

Coinnítear monatóireacht agus athbhreithniú an Údarás, i leith éifeachtacht an chóras rialithe um airgeadas inmheánach, ar an eolas, trí obair an iniúchóra inmheánaigh, trí obair an Choiste Iniúchta a dhéanann maoirseacht ar obair an iniúchóra inmheánaigh, trí obair bhainisteoirí feidhmiúcháin Teagaisc a bhíonn freagrach as forbairt agus as cothabháil an chreatlach rialithe airgeadais agus trí ráitis a eisíonn an tArd-Reachtaire Cuntas agus Ciste ina litir bhainistíochta.

Ní dhearnadh athbhreithniú sainiúil ar bith ar rialú inmheánach sa bliain 2003. Tá sé i gceist ag an Údarás athbhreithniú a chur ar bun sa bliain 2004.



Dr Tom O'Dwyer, Cathaoirleach
14 Meán Fómhair 2004

Ráiteas i leith Dualgais an Údaráis

Faoi Alt 12 (1) den Acht Talmhaíochta (Taighde, Oiliúint agus Comhairle), 1988, ní mór don Údarás ráitis airgeadais a ullmhú sa chaoi go mbeidh an tAire Talmhaíochta agus Bia in ann iad a cheadú i gcomhar leis an Aire Airgeadais. Le linn dó na ráitis airgeadais sin a ullmhú, ní mór don Údarás:

- polasaithe oiriúnacha cuntasaíochta a roghnú agus iad a chur i bhfeidhm go comhsheasmhach;
- breithiúnais agus meastachán réasúnacha stuama a thabairt;
- ráitis airgeadais a ullmhú ar bhonn gnóthais leantaigh, ach amháin má bhíonn sé neamhoiriúnach a bheith ag toimhdiú go leanfaidh Teagasc de bheith ag feidhmiú.
- imeacht ábhartha ar bith ó chaighdeáin infheidhmithe chuntasíochta a chur in iúl agus a mhíniú.

Tá an tÚdarás freagrach as leabhair chuntasíochta a choinneál de réir mar is ceart agus cuntas réasúnta a choinneáil iontu faoi staid airgeadais Teagaisc ag aon am ar bith, agus a bheith in ann a chinntiú go gcomhlíonann na ráitis airgeadais ceanglaíseachta. Coimeádtar na leabhair chuntasíochta i gceanncheathrú an Údaráis ag 19 Ascall Dumbach Thrá, Baile Átha Cliath 4. Anuas air sin tá an tÚdarás freagrach as sócmhainní Theagaisc a chosaint agus as céimeanna réasúnacha a thógail chun cosc a chur ar chalaois agus ar ghníomhartha neamhrialta eile agus iad a aimsiú.



Dr Tom O'Dwyer
Cathaoirleach



James Beecher
Ball Údaráis

14 Meán Fómhair 2004

Polasaithe Cuntasáiochta

Don bhliain dár chríoch 31ú Nollaig 2003

Is iad seo a leanas na polasaithe cuntasáiochta atá uchtaithe ag Teagasc:

(a) Bonn Cuntasáiochta

Ullmhaíodh na Ráitis Chuntasáiochta de réir an ghnás costais stairiúil, faoi réir sócmhainní áirithe a bheith san áireamh ag am luachála (féach Nótá 13).

(b) Cistiú Stát

Tugtar cuntas ar Chistiú Stát i leith Taighde in earnáil an Bhia agus i leith an chláir um thaighde comhoibrithe Spreagthaí ar bhonn fabhraithe. Tugtar cuntas ar chistiú ar bith eile ón Stát ar bhonn fáltais airgid.

(c) Ioncam AE

Tógtar deontais ó Chiste Sóisialta na hEorpa i dtaca le hioncaim ar bhonn an chéad agus an dara híocaíocht de chuid éileamh na bliana reatha, mar aon le tráthchuid dheireanach na bliana roimh sin.

Tugtar cuntas ar dheontais AE eile ar bhonn fabhraithe.

(d) Ioncam Oibriúcháin

Tugtar cuntas ar ioncam i leith seirbhísí comhairleacha ar bhonn fáltais airgid. Tugtar cuntas ar ioncam oibriúcháin eile ar bhonn fabhraithe.

(e) Sócmhainní Seasta agus Dímheas Inláimhsithe

(i) Sócmhainní Úinéara

Glacadh seilbh ar shócmhainní ón gComhairle Oiliúna Talmhaíochta agus ón bhForas Talúntais ar 8ú Meán Fómhair 1988 de réir na luachanna dúnta a léiríodh ar chláir chomhardaithe na n-eagraíochtaí sin. Luitear suimithe de réir an bhunhostais.

(ii) Dímheas

Ní thagann dímheas ar thalamh. Déantar costas luachála sócmhainní seasta a chealú de réir tráthchodanna comhionanna os cionn a n-ionchas saoil úsáidigh mar seo a leanas:

Foigrnimh Fheirme	20 bliain
Foigrnimh Eile	50 bliain
Gléasra agus Feithicí	5 bliain
Fearas Ríomhaireachta	3 bliain
Fearas Saotharlainne agus Oifige	10 bliain

Déantar sócmhainní a mbíonn seilbh orthu faoi léasanna airgeadais a dhímheas thar an tréimhse léasaithe, nuair a bhíonn sé sin níos gairide ná a n-ionchas saoil úsáidigh.

Déantar táille dímheasa leathbhliana a ghearradh in aghaidh gach bliain éadála agus diúscartha sócmhainní.

(iii) Sócmhainní Léasaithe

Déantar sócmhainní seasta faoi léasanna airgeadais a láimhseáil de réir an pholasaí thuasluaithe faoi 'sócmhainní seasta'. Cuirtear an ghné chaipitiúil a bhaineann le dualgais chíosa san áireamh faoi 'dliteanais'; agus déantar gné an úis a chur le 'caiteachas' thar thréimhse an bhunléasa.

Déantar cíos ar léasanna a bhíonn i bhfeidhm a chur le 'caiteachas' de réir mar a éiríonn sé.

(g) Stoc

Rinne oifigigh Theagaisc luacháil ar stoc. Déantar beostoc agus táirgeadh pearsanta feirme a mheas de réir glanluach inréadaithe. Déantar glanluach inréadaithe a oibriú amach ar bhonn ainmhithe a dhíolfáí chun a maraithe. Déantar léiriú iomlán gnóthúchan agus caillteanais, a éiríonn ón luacháil sin, mar ioncam oibriúcháin. Déantar stoc ar bith eile a luacháil ar bhunchostas nó ar ghlanluach inréadaithe.

(h) Féichiúnaithe

Déantar drochfhiacha aitheanta a chealú de réir mar a éiríonn siad agus curtlear soláthar sainiúil ar fáil má bhíonn amhras i gceist maidir le gnóthú.

(i) Leabharlanna agus Foilseacháin

Ní chuirtear luach ar bith ar na leabhair i leabharlanna Theagaisc ná ar fhoilseacháin nár díoladh. Déantar caiteachas ar leabhair agus ar fhoilseacháin a chealú sa tréimhse ina dtarlaíonn sé.

(j) Aoisliúntas

Déantar teidlíochtaí fhostaithe Theagaisc agus a chuid réamhtheachtaithe a sholáthar trí scéimeanna aoisliúntais leasa sainmhínithe.

Ní dhéantar soláthar ar bith i leith pinsean amach anseo, agus glantar costais na scéimeanna sin ó ioncam reatha de réir mar a éiríonn siad. Déantar íocaíochtaí foirne i leith pinsean a fhriotháireamh i gcoinne an chaiteachais sin (féach Nóta 9).

Cuntas loncaim agus Caiteachais

Don bhliain dár chríoch 31ú Nollaig 2003

Nóta	2003 €000	2002 €000
Ioncam		
Cistiú Stáit	2	119,708
Ioncam AE	3	1,825
Ioncam Oibriúcháin	4	23,343
Farasbarr/(Easnamh)		
ar diúscairt Sócmhainní Seasta	23	(267)
Deontais, Bronntanais agus Tobhach Deonach Eile		2,105
	168,209	146,714
Caiteachas		
Aistriú ó/(go) Cuntas Caipitiúil	5	144,453
Surplus/(Easnamh) don tréimhse		2,261
Comhardú tugtha ar aghaidh ón mBlain Roimhe		(10,258)
	27,298	(7,997)
	(2,863)	(503)
Comhardú Carntha ar 31ú Nollaig	15,935	(8,500)

Baineann na suimeanna thusas go hiomlán le hoibríochtaí leanúnacha.

Faoi mar atá léirithe sa Chuntas thusas níl gnóthachain ná cailleantas aitheanta ar bith i gceist.

Is cuid de na Ráitis Airgeadais seo iad an Ráiteas um Polasaithe Cuntasáiochta agus nótaí 1 go 24.

Dr Tom O'Dwyer
Cathaoirleach

Jim Flanagan
Stiúrthóir

Clár Comhardaithe

Ar 31ú Nollaig 2003

	Nóta	2003 €'000	2002 €'000
Sócmhainní Seasta			
Sócmhainní Inláimhsithe	13	69,632	66,953
Sócmhainní Airgeadais	14	2	2
		69,634	66,955
Sócmhainní Reatha			
Stoc	15	5,739	5,754
Féichiúnaithe agus Réamhíocaíochtaí	16	4,918	5,388
Comharduithe Bainc		19,132	622
Taiscí Gearrthéarmacha		359	391
		30,148	12,155
Dliteanais Reatha <i>(suimeanna dlite taobh istigh de bhliain)</i>			
Creidiúnaithe agus Suimeanna Fabhráithe	17	13,337	13,572
Ioncam larchurtha	18	365	350
Oibleagáidí faoi Léasanna Airgeadais	19	106	197
Rótharraingt Bainc		493	6,712
Lasachtaí Bainc		1	5
		14,302	20,836
Sócmhainní Reatha Glana/(Dliteanais)		15,846	(8,681)
Sócmhainní Iomlána lúide Dliteanais Reatha		85,480	58,274
Lúide			
Dliteanais Neamhreatha <i>(suimeanna dlite tar éis bliana)</i>			
Oibleagáidí faoi Léasanna Airgeadais	19	42	134
Lasachtaí Bainc		8	6
Dliteanais Fhadtéarmacha Eile		19	22
		69	162
Sócmhainní Glana		85,411	58,112
Arna Léiriú Trí:			
Cuntas Caipitiúil	12	69,476	66,612
Cuntas Ioncaim agus Caiteachais		15,935	(8,500)
		85,411	58,112

Is cuid de na Ráitis Airgeadais seo iad an Ráiteas um Polasaithe Cuntasáiochta agus nótaí 1 go 24.



Dr Tom O'Dwyer
Cathaoirleach



Jim Flanagan
Stiúrthóir

Ráiteas i leith Sreabhadh Airgid Thirim

Don bhliain dár chríoch 31ú Nollaig 2003

Réiteach Farasbarr/(Easnamh) Oibriúcháin i gcoinne Glansreabhadh Airgid Thirim ó Gníomhaíochtaí Oibriúcháin

Nóta	2003 €000	2002 €000
Farasbarr/(Easnamh) Oibriúcháin	24,435	(7,997)
Dímheas	5,102	4,762
Aistriú go Cuntas Caipitiúil	2,863	10,258
Ús Íocatha	15	56
Ús Faichte	(125)	(71)
(Ús)/Caillteanas ar dhíolachán sócmhainní seasta	(16,920)	267
(Méadú)/Laghdú Stoic	15	(84)
(Méadú)/Laghdú Féichiúnaithe	470	(378)
(Laghdú)Méadú Creidiúnaithe	(238)	2,861
Méadú/(Laghdú) ar loncam larchurtha	15	(246)
Insreabhadh Airgid Ghlan ó Gníomhaíochtaí Oibriúcháin	15,632	9,428

RÁITEAS SREABHADH AIRGID THIRIM

Sreabhadh Airgid Ghlan ó Gníomhaíochtaí Oibriúcháin	15,632	9,428
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Toradh ar Infheistíochtaí agus ar Chothabháil Airgeadais

Ús Íocatha	(15)	(53)
Ús Faichte	125	131

Eis-Sreabhadh Airgid Ghlan ó Thortháí ar Infheistíochtaí agus ar Chothabháil Airgeadais	110	78
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Gníomhaíochtaí Infheistithe

Íocaíochtaí um ghnóthú sócmhainní inláimhsithe	(8,583)	(15,077)
Admhálacha um dhiúscairt sócmhainní inláimhsithe	17,743	88

Insreabhadh (Eis-Sreabhadh) Airgid Thirim ó Gníomhaíochtaí Oibriúcháin	9,160	(14,989)
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Maoiniú

Aisíocaíochtaí ar lasachtaí Maoine	(2)	(5)
Gné Chaipitiúil de chuid íocaíochtaí Léasanna Airgeadais	(203)	(293)
Eis-Sreabhadh Airgid Ghlan ó Mhaoiniú	(205)	(298)

Méadú/(Laghdú) Airgid Thirim	22	24,697	(5,781)
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Réiteach Sreabhadh Airgid Ghlan i dtaca le gluaiseacht chistí glana/(fiacha)

Méadú/(Laghdú) airgid thirim	22	24,697	(5,781)
Cistí/(fiacha) glana ar 1ú Eanáir		(5,699)	82

Cistí/(fiacha) glana ar 31ú Nollaig	18,998	(5,699)
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Nótaí a théann leis na Ráitis Airgeadais

Don bhliain dár chríoch 3ú Nollaig 2003

1. Teagasc (An tÚdarás um Fhorbairt Talmhaíochta agus Bhia)

Bunaíodh Teagasc (an tÚdarás um Fhorbairt Talmhaíochta agus Bhia) faoin Acht Talmhaíochta (Taidhe, Oiliúint agus Comhairle), 1988. Faoi Alt 21 den Acht sin, aistríodh sócmhainní agus dlísteanaíseán an Chomhairle Oiliúna Talmhaíochta agus an Fhoras Talúnais go Teagasc nuair a bunaíodh é.

Faoi Alt 12 den Acht ní mó Cuntas a choimeád sa chaoi go mbeidh an tAire Talmhaíochta agus Bia in ann iad a cheadú i gcomhar leis an Aire Airgeadais. Ceadaíodh iad dá réir sin ar 14ú Lúnasa 1998.

2. Cistiú Stáit

Léirítear an t-iomlán faoin gceannteideal thusa mar seo a leanas:

	2003 €000	2002 €000
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Vóta 31: Talmhaíocht agus Bia

Deontas i gCabhair do chostais ghinearálta (Deontas caipitiúil , €4,066,487 san áireamh) (2002: € 8,466,000)	93,280	88,951
Deontas i gCabhair d'aoisliúntas	15,999	13,880
Deontas i gCabhair d'acmhainní daonna	11,100	12,700
Deontas i gCabhair do thaighde bia	3,155	2,788
Deontas do chlár taighde comhoibrithe Spreagtha	116	129

Vóta 30: Acmhainní Nádúrtha Cumarsáide agus Muirí

Deontas i leith Poiblíocht agus Feasacht Fhoraoiseachta	160	850
Deontas i leith Oiliúint Fhoraoiseachta	152	410
	123,962	119,708

3. Ioncam AE

Ba mar seo a leanas a bhí cistiú AE sa bhliain 2003:

	2003 €000	2002 €000
Clár Oibriúcháin Talmhaíochta, Fhorbairt Tuaithe agus Foraoiseachta 1994-1999	(5)	549
Clár Creatlaigh V 1998 – 2002	1,224	1,276
Clár Creatlaigh VI	25	-
	1,244	1,825

Nótaí a théann leis na Ráitis Airgeadais

Don bhliain dár chrioch 31ú Nollaig 2003

4. Ioncam Oibriúcháin

Admhálacha, Údarás, Comhairle & Ceanncheathrún agus Náisiúnta	Roinn Oiliúna an Tuaiscirt	Roinn Comhairle & Oiliúna an Deiscirt	Roinn Taighde Táirgí	Ionad Náisiúnta Bia	Ionad Déiriochta Pháirc Úi Mhórdha	TOTAL	TOTAL
€000	€000	€000	€000	€000	€000	€000	€000
Tálli i leith Seirbhís Comhairleacha Tálli Eile	6 65	5,692 582	5,554 1,274	- 3,028	- 1,835	- 332	10,746 6,682
Trádáil Bheastoic (Féach Nóta 7)	- -	473	352	1,393	2	- -	2,380
Oibriúcháin Feirmeoireachta Eile Admhálacha Ceainfín Foileacháin agus Ilghnéitheacha	- - 273	227 57 175	410 102 141	1,576 102 96	- 27 -	13 83 (3)	2,292 350 893
344	7,206	7,833	6,195	1,864	425	23,867	23,343

5. Caiteachas

Pá (Féach Nóta 8) Pinsin agus Aoisliúntais (Féach Nóta 9)	4,565 19,347	19,101 -	21,499 -	23,979 -	5,185 -	3,536 -	77,865 19,347	73,793 20,116
Costais Taistil agus Chothaithe Costais Ghinearálta Oibriúcháin (Féach Nóta 6)	985 3,594	1,933 3,695	1,975 4,540	1,018 7,811	301 2,356	164 2,495	6,376 24,491	7,041 29,255
Tálli Úis agus Léasa Dímheas (Féach Nóta 13)	62 227	11 805	23 1,036	73 1,801	- 635	- -	169 598	186 5,102
Deontais do Choláistí Priobháideacha Deontais do Bhord Printíseachta Feirme Deontais Eile	4,767 - 589	- - 48	- - 123	- - 1,330	- - 440	- - 264	- 4,767 2,794	4,762 6,447 190
34,136	25,593	29,196	36,012	8,917	7,057	140,911	144,453	

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6. Anailís ar Chaiteachas ar Oibriúchán Ginearálta

Admhálacha, Údaráis, Ceanncheathrún agus Náisiúnta	Roinn Comhairle & Oiliúna an Tuaiscirt	Roinn Comhairle & Oiliúna an Deiscirt	Roinn Taighde Táirgí	Náisiúnta Bia	Ionad Táirgí Úi Mhórdha	TOTAL	TOTAL
€000	€000	€000	€000	€000	€000	2003	2002
Soláthairtí/seirbhísí feirme Cothabhláil/deisiúcháin	-	468	722	2,101	-	55	3,346
Ciosanna/rátaí/árachas	743	673	851	940	462	462	8,012
Post/teileafón	208	540	607	969	97	302	2,723
Cumhacht/breosta/peitreal	330	620	690	297	82	58	2,256
Soláthairtí saotharlainne	36	308	311	612	140	139	1,937
Clódóireacht/páipéarachas/fógraíocht	36	6	112	813	627	632	1,546
Soláthairtí seimineár/seomra rangá/leabharlaine	668	398	310	207	105	66	1,591
Soláthairtí ceaintín mac léinn agus foirne	121	180	280	187	421	24	2,008
Soláthairtí/seirbhísí próiseála sonrai Táillí díl/gairmíúla (Féach Nóta 10)	-	47	91	187	31	216	1,226
Costais Chláir Ilghnéitheacha	66	210	288	130	39	114	847
Ilghnéitheacha	456	149	51	225	34	137	882
Táillí díl/gairmíúla (Féach Nóta 10)	933	8	19	338	20	72	1,433
Costais Chláir Ilghnéitheacha	-	34	104	776	289	195	1,205
(3)	54	104	29	9	23	216	1,407
3,594	3,695	4,540	7,811	2,356	2,495	24,491	29,255

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7. Farasbarr Trádála Beostoic

	2003 €000	2002 €000
Díolacháin	2,519	2,745
Deontais agus Fóirdheontais	562	520
	3,081	3,265
Stoc Oscailte	4,021	4,102
Ceannacháin	795	804
	4,816	4,906
Lúide: Stoc Dúnta	(3,955)	(4,021)
	861	885
Farasbarr ar Chuntas Ioncaim agus Caiteachais (Féach Nóta 4)	2,220	2,380

8. Foireann

Ba mar seo a leanas a bhí meánlíon na foirne a fostáidh le linn na bliana:

	2003	2002
Gairmiúil	796	792
Teicniúil	254	262
Riarachán/cléiriúil	268	263
Feirme/Tís	310	324
	1,628	1,641

9. Aoisliúntas

Faoi Mhír 9 den Acht Talmhaíochta (Taighde, Oiliúint agus Comhairle) 1988, tugadh cead scéimeanna a bhunú chun leasa aoisliúntais a chur ar fáil do bhaill foirne Theagaisc agus do bhaill foirne, aistríthe go Teagasc ón gComhairle Oiliúna Talmhaíochta agus ón bhForas Talúntais.

Got dtí go mbeidh dréachtscéimeanna aoisliúntais ceadaithe ag an Aire Talmhaíochta agus Bia, ag an Aire Airgeadais agus ag an Oireachtas, tá scéimeanna aoisliúntais á gcur i bhfeidhm ag Teagasc ar bhonn riacháin.

Anuas air sin riarrann Teagasc dhá scéim aoisliúntais (Scéim Aoisliúntais i leith Foirne sna Coláistí Talmhaíochta 1985 agus Scéim Phinsin Ranníocaigh Chéile agus Pháistí na gColáistí Talmhaíochta 1985) i leith baill áirithe foirne a bhíonn ag obair i gColáistí príobháideacha Talmhaíochta agus Gairneoireachta, a n-íocatar a gcuid tuarastal ón Státhiste faoi ghníomhaireacht Teagasc.

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Tugtar scéimeanna aoisliúntais ar na scéimeanna thuaslauite. Is as ioncam reatha Theagaisc a íoctar teidlíochtaí faoi na scéimeanna sin agus déantar iad a shonrú ar an gCuntas loncaim agus Caiteachais, glan ar íocaíochtaí aoisliúntais fostaithe, i leith na bliana a mbíonn siad iníoctha. Ní dhéantar ciste speisialta ar bith a chothabháil, ná ní bhíonn sócmhainní ar bith ar fáil, chun pinsin ná aiscí a íoc. Ní dhéantar soláthar ar bith sna ráitis airgeadais i leith dliteanas a éirionn i dtaca le leasa a bheidh i gceist san am atá le teacht.

Costais Aoisliúntais

Ba é 1,178 (2002 – 1,114) meánlín na bpínsean míosúil a íocadh le linn na bliana.

Déantar costas an aoisliúntais a áireamh sna Ráitis Airgeadais mar seo a leanas:

	2003 €000	2002 €000
Pinsin agus aiscí iócta íocaíochtaí faoi Scéim Dheonach Scoir Luath	23,241 213	23,341 202
Lúide: Ranníocaíochtaí Foirne	23,454 (4,107)	23,543 (3,427)
	19,347	20,116

Leasa Aoisliúntais

Le tuairisc a thabhairt de réir Caighdeán Tuairiscithe Airgeadais 17 i leith Leasa Scoir (socruthe idirthréimhseach), chuaigh Teagasc i gcomhairle le hachtúire cálithe. D'ullmhaigh an tAchtúire luacháil chun dliteanas na scéimeanna aoisliúntais a mheas ar 31ú Nollaig 2003.

Glacadh leis na réamh-mheastacháin mhóra airgeadais seo a leanas chun dliteanas faoi CTS 17 a mheas:

	2003 % sa bhliain	2002 % sa bhliain
Méadú sa ráta boilscithe (a)	2.25	2.00
Méadú sa ráta tuarastail	3.50	4.00
Méadú sa ráta pinsin	3.50	4.00
Ráta lascaine i leith dliteanas scéime	5.25	6.00

Bunaithe orthu seo agus ar réamh-mheastacháin eile agus trí úsáid a bhaint as modh aonadach fortheilgthe CTS 17, is mar seo a leanas atá luach na ndliteanas i leith scéimeanna pinsin:

	2003 €000	2002 €000
Dliteanas charntha i leith baill ghníomhacha Scéime	356,008	299,000
Dliteanas i leith pinsinéirí láithreacha agus i leith pinsean iarchurtha	298,576	283,000
Dliteanas iomlán fabhraithe pinsin	654,584	582,000

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Anailís ar an méid iomlán táillí a ghearrfaí ar bhrabús oibriúcháin:

	€000
Costas Seirbhísí Reatha	5,906
Costas Seirbhísí don am atá thart	-
Socruthe agus Teorannuithe	-

Anailís ar an méid a d'áireofaí mar chreidmheas i leith ioncam airgeadais eile:

	€000
Ús ar dhlisteanais Scéime	34,592
Aisíoc ionchais ar shócmhainní Scéime	-

Anailís ar an méid a dtabharfaí aitheantas dó i ráiteas iomlán gnóthachain agus cailleanais aitheanta (STRGL):

	€000
Teacht isteach iarbhír lúide teacht isteach ionchais ar shócmhainní Scéime:	-
Gnóthachan agus cailleanas ó thaithí:	14,132
Athruithe i réamh-mheastacháin	34.724
Cailleanas achtaireach a dtabharfaí aitheantas dó faoi STRGL	48,856

Anailís ar ghluaiseacht easnaimh le linn na bliana:

	€000
Easnamh ar 1.1.2003	(582,000)
Costais seirbhísí reatha	(5,906)
Ranníocaíochtaí	16,770
Costais seirbhísí san am atá thart, socruthe agus teorannuithe:	-
Ioncam (cailleanas) airgeadais eile:	(34,592)
Brabús (cailleanas) achtaireach:	(48,856)
Cailleanas ar 31.12.2003	(654,584)

(a) Ós rud é go mbíonn méaduithe pinsin faoi scéimeanna Theagasc bunaithe ar mhéaduithe tuarastail seachas ar mhéaduithe praghscanna, ní gá réamh-mheastachán boilscithe praghscanna a thabhairt i leith na luachála seo. Ach ós rud é nach mór tagairt a dhéanamh do réamh-mheastachán boilscithe faoi CTS 17, bheadh an rátá thuslauite oiriúnach sa chás seo.

Nótaí a théann leis na Ráitis Airgeadais

Don bhliain dár chríoch 3ú Nollaig 2003

10. Táille iniúchta

Cuireadh soláthar €40,150 san áireamh i dtaca le caiteachas ar luach saothair iniúchóra don bhliain 2003 (2002 €40,150).

11. Táillí agus Sochar Oifige an Údaráis

Íocadh na sochair oifige seo a leanas do bhaill an Údaráis:

	2003 €000	2002 €000
Cathaoirleach	15	15
Baill Eile	91	89
	106	104

Cuirtear na figiúirí seo san áireamh i dtaca le caitheachas ar Phá faoi Nótá 5 thusa.

12. Cuntas Caipitiúil

	2003 €000	2002 €000
Comhardú ar 1ú Eanáir	66,612	56,354

Aistrithe ó/(go) Chuntas Ioncaim agus Caiteachais

Méid caipitlithe i leith sócmhainní ceannaithe	8,583	15,077
Méid glan ligthe saor ar dhiúscairtí	(823)	(355)
Aisíochtaíochtaí ar iasachtaí maoine	2	5
Gné chaipitiúil i leith íocaíochtaí ar shócmhainní léasaithe	203	293
	7,965	15,020

Lúide:

Maite de réir dímheas sócmhainní	(5,102)	(4,762)
	2,863	10,258
Comhardú ar 31ú Nollaig	69,476	66,612

Nótaí a théann leis na Ráitis Airgeadais

Don bhliain dár chríoch 31ú Nollaig 2003

13. Sócmhainní Seasta Inláimhsithe

	Talamh €000	Foignimh €000	Gléasra agus Fearas €000	IOMLÁN €000
Costas Nó Luacháil				
Ar 1ú Eanáir 2003	5,829	70,827	39,245	115,901
Íocaíochtaí Breise		4,345	4,259	8,604
Diúscairtí	(19)	(1,406)	(1,206)	(2,631)
Ar 31ú Nollaig 2003	5,810	73,766	42,298	121,874
Dímheas Carntha				
Ar 1ú Eanáir 2003	23,575	25,373	48,948	
Charged during period	1,468	3,634	5,102	
Disposals during period	(713)	(1,095)	(1,808)	
Ar 31ú Nollaig 2003	24,330	27,912	52,242	
Luach Glan de réir na Leabhar	5,810	49,436	14,386	69,632
31ú Nollaig 2003				
Luach Glan de réir na Leabhar 31ú	5,829	47,252	13,872	66,953
31ú Nollaig 2003				

Cuirtear san áireamh, sna comharduithe oscailte, talamh de luach 612.3 ha (1,513 acra), a d'aistrigh an Roinn Talmhaíochta agus Bia ar luachanna ainmniúla, mar aon le sócmhainní áirithe eile a ndearnadh athluacháil orthu ar 31ú Nollaig 1975 nó ar 1ú lúil 1980.

Bíonn sé de chead ag Teagasc 85 ha (210 acra) talún de chuid an Roinn Talmhaíochta agus Bia a úsáid agus, ag an am céanna, úsáideann an Roinn 16.2 ha (40 acra) de chuid Teagaisc. Ní ghearrann ceachtar den dá chompháirtí táille ar bith ar a chéile ina leith seo.

Tá sócmhainní áirithe atá faoi chúram Theagaisc faoi chosaint reachtúil agus ní féidir iad a dhíol.

Áirítear na figiúirí seo a leanas, i leith sócmhainní léasaithe, sa luach glan sócmhainní de réir na leabhar:

Gléasra agus Fearas €000

2003	171
2002	392

Is mar seo a leanas a bhí táille dímheasa na bliana ar na sócmhainní seo:

2003	242
2002	276

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Don bhliain dár chríoch 31ú Nollaig 2003

14. Sócmhainní Airgeadais

(a) Teicneolaíocht Pháirc Uí Mhórdha Teoranta

Tá sealúchas 59% ag Teagasc i scairchaipiteal lániochta Theicneolaíocht Pháirc Uí Mhórdha Teoranta (5,100 scair ar €0.127). Is comhfhiontar é an Comhlacht, a ionchorpraíodh ar 18ú Eanáir 1991, idir Teagasc agus comharchumainn talmhaíochta eagsúla. Ullmháodh ráitis iniúchta airgeadais eile i leith an Chomhlachta agus b'íad seo a leanas torthaí na bliana dár chríoch 31ú Nollaig 2003:

	2003 €000	2002 €000
Láimhdeachas	980	941
Brabús Oibriúcháin roimh Dhímheas, Ús agus Cháin	246	233
Dímheas (glen ar dheontais mhaite)	(242)	(223)
Ús (táillí)/admhálacha	5	8
Cáin	(1)	(1)
Brabús/(Caillteanas) tar éis Cánachais	8	17
Caillteanas Carntha tugtha ar aghaidh ar 31ú Nollaig	(209)	(217)

De réir meabhrán comhlachais an Chomhlachta tá scairshealbhóirí i dteideal úsáid a bhaint as seirbhísí an Chomhlachta ar rátaí tosaíochta.

Is mar seo a leanas a bhí idirbhearta trádála idir Teagasc agus Teicneolaíocht Pháirc Uí Mhórdha Teoranta (idir chomhairliú, analís agus úsáid a baineadh as áiseanna teicniúla agus áiseanna eile):

	2003 €000	2002 €000
Díolacháin Teicneolaíocht Pháirc Uí Mhórdha Teoranta le Teagasc (curtha san áireamh i láimhdeachas an Chomhlachta)	267	354
Aisghabhálacha eile ó Theagasc (asbhainte ó chostais díolacháin an Chomhlachta)	76	91
Iomlán	343	445
Comhardú gan ioc ar 31ú Nollaig	110	24
Díolacháin Teagaisc le Teicneolaíocht Pháirc Uí Mhórdha Teoranta Comhardú gan ioc ar 31ú Nollaig	136	114
	40	54

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De réir téarmaí Comhaontaithe Tionscnóirí Theicneolaíocht Pháirc Uí Mhórdha Teoranta, geallann Teagasc go gcuirfidh sé ar fáil óna chuid acmhainní féin riachtanais shonraithe foirne do Theicneolaíocht Pháirc Uí Mhórdha Teoranta, mar aon le forchostais áiríulachta, stórála, cuntas agus eisiltigh a fhriúglachta. Is iad seo a leanas na costais sin:

	2003 €000	2002 €000
Foireann	183	155
Eile	109	122

Áirítear na figiúirí suimithe seo i gcaiteachas Teagaisc faoi Ionad Táirgí Déiríochta Pháirc Uí Mhórdha (Féach Nótáí 5 agus 6 thusa).

Is mar seo a leanas a bhaineann Teicneolaíocht Pháirc Uí Mhórdha leas as sócmhainní Theagaisc:

	2003 €000	2002 €000
Costais Bhunaidh	1,196	1,082
Luach Glan de réir na Leabhar ar 31ú Nollaig	369	348

Áirítear na figiúirí suimithe seo faoi Ghléasra agus Fearas (Féach Nótáí 13 thusa).

De réir Chomhaontú na dTionscnóirí, tá halla próiseála Theagaisc in Ionad Táirgí Déiríochta Pháirc Uí Mhórdha, mar aon le suíomh tadhla a bhfuil áiseanna breise tógha ag an gComhlacht air, curtha ar léas ag Teicneolaíocht Pháirc Uí Mhórdha Teoranta ar cíos ainmniúil €127 in aghaidh na bliana.

Níor ceapadh go mbeadh sé oiriúnach torthaí an Chomhlachta a chomhdhluthú.

(b) Infheistíocht Eile

Tá dhá mhion-infheistíocht eile ag Teagasc i gcomharchumainn talmhaíochta, a chosnaíon ar an iomlán €1,890 (2002- €1,890).

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15. Stoc

	2003	2002
	€000	€000
Beostoc	3,955	4,021
Tárgí feirme, leasacháin agus stoic bheathaithe	596	582
Soláthairtí saotharlainne agus tréidliachta	187	230
Ábhair foirgníochta	31	32
Soláthairtí ginearálta	970	889
	5,739	5,754

16. Féichiúnaithe

	2003	2002
	€000	€000
Féichiúnaithe Trádála	1,161	2,586
Ioncam AE	2,131	2,163
Féichiúnaithe Eile agus Réamhíocaíochtaí	1,626	639
	4,918	5,388

Áirítear suimeanna €2,130,416 (2002– €2,163,542), infhála ón AE i leith deontais trádála, faoi Ioncam AE.

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Don bhliain dár chríoch 31ú Nollaig 2003

17. Creidiúnaithe

	2003 €000	2002 €000
Creidiúnaithe Trádála	2,560	3,553
Creidiúnaithe agus Fabhraithe Eile	10,777	10,019
	13,337	13,572

Áirítear na suimeanna seo a leanas, atá dlite i leith cánachais agus árachas sóisialach pá-choibhneasa, san iomlán a thaispeántar faoin gceannteideal seo:

	2003 €000	2002 €000
ÍMAT agus ÁSPC	1,711	1,631
Cáin Bhreisluacha	2,195	142
Cáin Thionscal na Foirgniochta	9	8
Cáin Shiarchoinneálach	70	30
	3,985	1,811

Anuas air sin áirítear i dtaca le hiomlán na gCreidiúnaithe méid €358,574 (2002- €391,358), a sheasann do thaiscí gearrtéarmacha euro atá á gcoinneáil ar feitheamh le dáileadh ar fhochonraitheoirí i dtíortha eile de chuid an AE i leith obair thaighde chonraithe.

18. Ioncam iarchurtha

Déantar taighde faoi chistiú pobail de réir conarthaí le hInsititúidi eile de chuid an Stáit, go háirithe leis an Roinn Talmhaíochta agus Bia. Faoi théarmaí na gconarthaí sin ní áirítear réamhíocaíochtaí a fhaightear ag túis tionscnamh mar ioncam go dtí go gcuirtear críoch leis na tionscnaimh sin.

B'iad seo a leanas foinsí agus méid an ioncaim iarchurtha sin ar 31ú Nollaig 2003:

	2003 €000	2002 €000
Plean Forbartha Náisiúnta: Earnáil Tháirgeach		
Clár Oibriúcháin 2000-2006	197	150
Roinn Talmhaíochta agus Bia – reamhíocaíocht i leith analíse	168	200
	365	350

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19. Léasanna Airgeadais

- (a) Ba é €24,115 (2002- €38,296) iomlán na dtáillí airgeadais faoi théarmaí léasanna airgeadais le linn na bliana.
 (b) Tá oibleagáidí faoi théarmaí léasanna airgeadais amach anseo dlite mar seo a leanas:

	€000
Taobh istigh de bhliain	106
Taobh istigh de dhá bhliain nó cúig bliana	42
	148

- (c) Ar 31ú Nollaig 2003 ní raibh ceangaltais ar bith ar Theagasc tabhairt faoi léasanna airgeadais ar bith eile i dtaca le gléasra ná le fearas (2002- €24,684).
 (d) Ba mar seo a leanas a bhí an ghluaiseacht i dtaca le hoibleagáidí léasanna airgeadais:

	2003 €000	2002 €000
Oibleagáidí ar 1ú Eanáir	331	382
Léasanna nua airgeadais	21	242
Gné chaipitiúil d'íocaíochtaí ar léasanna airgeadais	(204)	(293)
Oibleagáidí ar 31ú Nollaig	148	331

20. Ceangaltais Chaipitiúla

Ar 31ú Nollaig 2003 bhí ceangaltais chaipitiúla gan íoc €1,002,675 (2002 – 1,035,065) ag Teagasc.

21. Léasanna Oibriúcháin

Ar 31ú Nollaig 2003 bhí ceangaltais bhliantúla faoi léasanna oibriúcháin neamh-inchealaithe de réir mar atá leagtha amach anseo thíos:

	Talamh & Foirgnimh €000	Gléasra & Inneallra €000	Iomlán €000
Léasanna a éagann			
- taobh istigh de bhliain	368	36	404
- idir dhá bhliain agus cúig bliana	7	2	9
- tar éis cúig bliana	236	-	236
	611	38	649

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22. Anailís ar Athruithe a tharla i leith Airgid agus i leith Coibhéisigh Airgid le linn na Blíana

	Ar 1ú Eanáir 2003 €000	Sreabhadh Airgid €000	Ar 31ú Nollaig 2003 €000
Airgead sa Bhanc agus idir lámha	622	18,510	19,132
Rótharraingt Bhainc	(6,712)	6,219	(493)
Taiscí Gearrthéarmacha	391	(32)	359
	(5,699)	24,697	18,998

23. DIÚSCAIRTÍ MAOINE

Sa bhliain 2003 dhíol Teagasc an mhaoin seo a leanas:

	Costas €000	Luach Scríofa síos €000	Fáltais lúide costais €000
Ceanncheathrú, 19 Ascaill Dumhach Thrá, Áth Cliath 4	959	450	15,103
Stáisiún Taighde Bogthorthaí, Cluain an Róistigh, Co. Loch Garman	107	48	1,182
Ionad Taighde Lullymore, Ráth Iomgháin, Co. Chill Dara	231	101	772
Ionad Comhairle agus Oiliúna, An Chorr Dhubh, Lusca, Co. Bhaile Atha Cliath	127	73	595
	1,424	672	17,652
Fáltais a úsáideadh chun oibreacha caipítíula Theagaisc a chistiú, 2003:			6,568
Comhardú			11,084

24. Baill an Údarás - Nochtadh Dirbheart

Tá glactha ag an Údarás le nósanna imeachta de réir treoirínte an Roinn Airgeadais i leith nochtadh spéise bhaill an Údarás agus cloíonn an tÚdarás go huile is go hiomlán leis na nósanna imeachta sin. Ní dhearnadh idirbhearta ar bith i dtaca le gníomhachtaí an Údarás le linn na bliana a mbeadh spéis ag baill an bhoidh iontu.

NOTAÍ

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