

# **Horticultural Development Council**

## **Annual Report and Accounts 2007-08**

Presented to Parliament

Pursuant to Section 7 of the Industrial Organisation and Development Act 1947  
as amended by the Government Resources and Accounts Act 2000 (Audit of Public Bodies) Order 2003

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**Registered Office**  
Tithe Barn  
Bradbourne House  
East Malling  
Kent ME19 6DZ

**Auditor**  
Comptroller and Auditor General  
National Audit Office  
157-197 Buckingham Palace Road  
London SW1W 9SP

**Banker**  
Barclays Bank PLC  
40-46 High Street  
Maidstone  
Kent ME14 1SS

**Solicitors**  
MacDonald Oates  
Square House  
The Square  
Petersfield  
Hampshire GU32 3HT

Drummond Miller  
32 Moray Place  
Edinburgh EH3 6BZ

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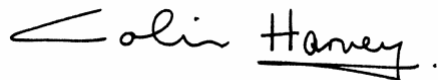
## Chairman's Report

This, the last Annual Report of the Horticultural Development Council reflects another very active year and demonstrates the organisation continues to offer a quality service as it moves to become part of the Agricultural and Horticultural Development Board.

Almost £4.5 million of research and technology transfer projects are in progress and this reflects the continuity that is so important for the needs of growers and the research organisations which serve them. This is particularly important at a time when Defra and other funders are reducing their commitments to research and development in horticulture. It is hoped that the continuing global challenges for sustainable food production and the acknowledged health benefits of both edible and ornamental horticulture will cause Government to reconsider these changes in the future.

The levy system remains very much in place for the short and long term near-market needs of the production industry. As always I want to pay tribute to my fellow Council and Panel members for their past and future contributions for the collective good of the industry and in so doing the health of the nation.

I wish the new Horticultural Development Company every success in the future and maintaining a vital contribution to growers and their businesses.

A handwritten signature in black ink that reads "Colin Harvey". The signature is written in a cursive style with a large initial 'C' and a long horizontal stroke at the end.

**Colin Harvey**  
Chairman



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# Chief Executive's Report

## Introduction

The Council determines the strategies and policies of the HDC, makes critical decisions over funding and other matters, and considers and approves, where appropriate, the recommendations of the committees and executive. In the period covered by this report the Council met four times.

To advise it upon various areas of its functions and to draw on the experience of a wider range of individuals involved in the sectors of horticulture served by the HDC, nine committees report to the Council. The Chairman and Chief Executive are ex-officio members of each committee.

## Activity

The business of the Council has continued to be dominated this year by the Levy Boards reform. In addition, whilst maintaining the core business of the HDC, the Council has commissioned work to investigate new crop opportunities and input to the development of carbon footprinting standards, particularly ensuring horticulture will not be disadvantaged. Pesticides remain a high priority topic for the industry with a programme initiated to ensure that relevant uses are maintained through the issue of new SOLAs when the LTAEU for non-edible crops expire. The issue of parallel imports of pesticides was also discussed. Support for education within the industry has been maintained through the award of two new studentships as well as sponsoring a new Nuffield Scholarship. To assist the industry the Council have developed a number of position papers/policy statements, which clearly set out, in a non technical way, the facts and up to date information in relation to complex or sensitive issues.

## Sector Panels

Seven of its committees constitute sector panels – one for each of the sectors covered by the Council – which select, subject to Council approval, projects for funding. The panels are Bulbs and Outdoor Flowers, Field Vegetables, Hardy Nursery Stock, Mushrooms, Protected Crops, Soft Fruit and Tree Fruit.

Each panel consists of representatives elected by levy payers and, where appropriate, independent experts are co-opted to provide technical advice. Invitations are also extended to appropriate trade body representatives. Every effort is made to ensure a good spread of representation, both geographically and in terms of crops covered. Provision is made on all the panels for the representation of the views of smaller growers. In addition, a Defra science representative is always invited to panel meetings but other commitments generally mean they are too busy to attend. Therefore, to ensure good liaison and co-ordination between the Defra and HDC research programmes panel agendas and minutes are sent to Defra. The elected panel members at the end of the period covered by this report are shown at Annex B.

Each panel examines all research proposals and assesses them against the needs of each sector and the criteria and priorities established by the Council.

## Appeals Committee

The Council Appeals Committee considers cases where a strict application of the rules set out in the HDC Order would result in undue financial hardship. Whilst it cannot exempt growers of their legal obligation to pay the levy it can reduce the levy's financial impact by arranging for payments to be made by instalments over an extended period. The Committee also considers cases where growers dispute the application of the legislation to their situation. The Committee considers cases referred to it by the Chairman in consultation with the Chief Executive. The members of the Appeals Committee were Mr Philip Effingham (Convenor), Mr Derek Jarman and Mr Morris May. The Appeals Committee has considered four cases during the year.

## Audit Committee

The Audit Committee which has set terms and conditions defined by the Council reviews financial issues relating to the business of the HDC, matters brought to the Committee by the Council's auditors and makes appropriate recommendations to the Council. The Audit Committee also provides oversight and advice to the Chief Executive on Governance issues.

Currently all Council members sit on the Audit Committee. However, for the sake of good order the Audit Committee meets separately from the main Council meeting and has its own agenda and papers. The Audit Committee met four times during the year.

# Annual Report

## History and Statutory Background

The Horticultural Development Council ('the HDC') was established by the Horticultural Development Council Order 1986 (SI 1986/1110) made under the Industrial Organisation and Development Act 1947 and came into being on 1 July 1986. The Order was subsequently amended by the Horticultural Development Council (Amendment) Orders 1990 (SI 1990/454), 1992 (SI 1992/1836), 2000 (SI 2000/1975), 2002 (SI 2002/1676) and 2003 (SI 2003/908). The accounts have been prepared in the form directed by the Minister with the approval of the Treasury, under section 7 of the Industrial Organisation and Development Act 1947 as amended by the Government Resources and Accounts Act 2000 (Audit of Public Bodies) Order 2003 and the directions made thereunder. The HDC is a Non-Departmental Public Body sponsored by Defra.

## Mission and Objectives

### Aims

The Horticultural Development Council's aim is: 'To serve British growers by being a top class, efficient and progressive facilitator of near-market horticultural research and development and the associated technology transfer. It should provide clear value for money and be respected as making a major contribution to the profitability of the British horticultural industry.'

### Objectives

To achieve our aims the HDC has the following objectives covering the area of our responsibilities:

- **Within the levy budget, identify the most profit enhancing issues and commission relevant R&D, taking account of the varying needs of individual sectors.**
- **Actively work with the Department for Environment, Food and Rural Affairs (Defra), the Scottish Government and other funding bodies in such a way as to maximise the overall amount and relevance of horticultural research and development.**
- **Establish and maintain two-way communications with growers to ensure that all HDC and other funded research and development is put into profitable practice wherever relevant, taking due account of the disparate needs of the industry.**
- **Where specifically identified as being appropriate, sponsor targeted market research and product promotional activities.**
- **Actively manage the levy collection process and ensure maximum levy collection.**
- **Ensure that all activities, both internal and external are undertaken in a focused and cost effective manner.**

### Principles

In pursuit of our aims and objectives we will be guided by the following principles:

- **Staff** - We recognise that our employees are crucial to the operations of the Council and will continue to ensure they are effectively managed, motivated and equipped with the skills they need.
- **Partnership** - We will seek and act on the views of horticultural growers by maximising the opportunities for dialogue and obtaining regular feedback.
- **Financial prudence** - We will obtain value for money by careful attention to cost control and effective management through maintenance of the highest professional standards.
- **Fairness** - We will collect the statutory levy from every eligible grower in a way that ensures even-handedness and minimises administrative costs.
- **Accountability** - We will maintain accountability to Parliament and the devolved authorities through the Ministers with responsibility for agriculture in accordance with the relevant legislation.



### **Principal Activities**

The functions of the HDC as laid down in Schedule 2 of the Horticultural Development Council Order 1986 (as amended) are as follows. A statement of the mission and objectives of the Council is shown above.

**1. Promoting or undertaking scientific research.**

**2. Promoting or undertaking inquiry as to materials and equipment and as to methods of production, management and labour utilisation, including the discovery and development of new materials, equipment and methods and of improvements in those already in use, the assessment of the advantages of different alternatives and the conduct of experimental establishments and of tests on a commercial scale.**

**3. Undertaking arrangements for making available information obtained and for advising on matters with which the Council are concerned in the exercise of any of their functions.**

**4. Promoting the adoption of measures for securing safer and better working conditions, and the provision and improvement of amenities for person employed, and promoting or undertaking inquiry as to such measures.**

**5. Promoting the production and marketing of standard products.**

**6. Promoting or undertaking research for improving arrangements for marketing and distributing products.**

**7. Promoting or undertaking research into matters relating to consumption or use of goods and services supplied by the industry.**

**8. Promoting or undertaking arrangements for better acquainting the public in the United Kingdom with the goods and services and services supplied by the industry and methods of using them.**

### **Results for the year**

During the year the HDC received levy income of £4,966,592 which when added to other income sources produced total income of £5,308,251. Expenditure on horticultural research, promotion and communications was £4,615,904 out of a total of £5,597,506, the balance covering programme management, administration and Council costs. This resulted in an operating deficit of £289,255 with a retained revenue surplus of £1,390,757.

### **Research and Development**

As noted under the principal activities above, the Council is committed to carry out and give advice on research and development matters relating to the horticultural industry. Details relating to research and development activities are set out in the management commentary on page 12.

### **Membership of the Council**

The Council consists of 15 members appointed jointly by the Agriculture Ministers. Twelve are growers; one represents employees in the industry; one has expertise in marketing and one (the Chairman) is an independent member.

During the period the following served as members of the Council:

#### **Colin Harvey**

Prior to joining the HDC as Chairman in February 2000, he worked for the Royal Dutch/Shell group of companies for 32 years in a number of high profile management jobs in Europe and Asia Pacific and was Managing Director, Downstream, Shell UK Ltd between 1995 and 1998.

#### **Douglas Baird**

Grows climbers and other hardy nursery stock near Oban, west of Scotland. He has an interest in a company working in design, manufacture and sale of nursery equipment. He has served as a member of the Scotgrow Committee.

#### **Clive Baxter**

Runs a 120 Hectare fruit farm near Maidstone. He is a member of the Soil Association and Chairman of the Tree Fruit Panel.

**Andrew Burgess**

Commercial Director of RB Organics Ltd. He has served as Chairman of both the British Carrot Growers Association and Horticultural Export Bureau.

**Peter Cornish**

Farms Director of Loveden Estates Ltd. A member of two Drainage Boards, Defra Organic Vegetable Systems Project Steering Committee and Chairman of the HDC Field Vegetables Panel.

**Phillip Effingham**

Production Director of Marshall Bros (Butterwick) Ltd, Lincolnshire, growers of 4000 hectares of brassicas in the UK, Italy and Spain. He is a member of the Brassica Growers Association R&D Committee.

**David Hand**

Technical Director of Humber VHB, growers of 71 acres of glasshouse crops. Prior to joining Humber VHB he held various research positions with ADAS and Horticulture Research International. He is Chairman of the HDC Protected Crops Panel.

**Derek Jarman**

A horticultural consultant to various companies in the West Midlands growing and retailing perennial and patio plants. He is a member of the NFU West Midlands Board of Horticulture and a NFU grower member of the Agricultural Wages Board.

**Mark Komatsu**

Senior Manager of Oakfield Farm Products Ltd. He is a member of the Soil Association's Producer Committee and Chairman of the HDC Mushroom Panel.

**Morris May**

Produces hardy nursery stock on a small nursery in Surrey. He is chairman of the NFU Surrey Horticultural Group.

**Peter Wensak**

Owns fruit farms in Essex and Norfolk, part of which is used as a model farm for research work, from which he produces strawberries. He was the winner of both the Soft Fruit Grower of the Year and Overall Grower of the Year in January 2001. He is Chairman of the HDC Soft Fruit Panel.

**Roy Willingham**

Has experience in growing and marketing bulbs, cut flowers, brassicas and arable crops in South Lincolnshire. He is Chairman of the HDC Bulbs and Outdoor Flowers Panel.

**John Woodhead**

Nursery Director of Hillier Nurseries Ltd, Hampshire and is responsible for production and marketing hardy nursery stock including herbaceous plants for the retail sector. He is Chairman of the HDC Hardy Nursery Stock Panel.

**Simon Pearson**

Formerly technologist for Marks and Spencer Plc, where he was responsible for the quality of cut flowers and bulbs. Prior to joining Marks and Spencer in 1999 he was a lecturer and research fellow at the University of Reading. Currently working for Winchester Growers.

**Teresa MacKay**

Works on a fruit farm in Suffolk and is a member of the Rural Agricultural and Allied Workers Trade group of the Transport and General Workers Union. She is Chair of the Regional and National Trade Group Committees and Co-Chair of the National Food & Agriculture Sector Committees. She also serves on the Agricultural Industry Advisory Committee of the Health & Safety Executive.

Appointments were until 31 March 2008.

### **Policies of the HDC**

The HDC, as an executive Non-Departmental Public Body adopted the principles set out in the Nolan Report wherever practical and appropriate. This included the implementation of a Code of Conduct for Staff and a Code of Practice for Council Members. Both codes required Council members and staff to conduct all their dealings with the public in an open and responsible way taking account of the Code of Practice on Openness. A Register of Members' Interests was maintained and was available for inspection at the HDC's offices.

The HDC's employment policy was determined on ability and without regard to colour, race, sex, sexual orientation, disability, marital status, working patterns, and age.

The HDC also supplemented staff by means of consultants and contract personnel in order to meet specialised and short term requirements.

It was the HDC's policy to settle all accounts for goods and services, unless subject to a dispute, in accordance with the terms agreed at the time of placing the contracts or orders to which these relate.

### **Management**

Day to day management is under the control of the Chief Executive, Martin Beckenham, and his staff.

### **Going Concern**

Having made appropriate enquiries and reviewed management reports HDC's Chief Executive is satisfied there exists a reasonable expectation that adequate resources exist for the functions of the HDC to continue in operational existence for the foreseeable future. On the 1 April 2008 the functions, together with the assets and liabilities of the HDC were transferred to Agriculture and Horticulture Development Board who will continue to provide the services to the horticultural industry. It has accordingly been considered appropriate to adopt a going concern basis for the preparation of these accounts.

### **Future Developments**

During 2008-09 the functions undertaken by the HDC will be incorporated into the AHDB. To facilitate a smooth transfer AHDB have established shadow boards for each sector to ensure continuity of service and delivery. The shadow horticultural board have set out a business plan which seeks to maintain the strong emphasis on R&D whilst making provision for exploring new opportunities made possible through joint activity within AHDB. This plan has been agreed by the AHDB Board and incorporated into the AHDC Corporate Plan 2008.

The continuous reduction of Defra funding for R&D remains a source of major concern, together with the change of emphasis of Government policy-objectives in this area. These changes only reinforce the need for levy funds to remain directed at activities which directly relate to the improvement in profitability of growers. The horticultural plan is based on continuing with a levy rate of 0.5% of turnover with income and expenditure broadly in balance and a R&D programme of just on £3.5million.

### **Auditors**

The accounts of the HDC are audited by the Comptroller and Auditor General in accordance with section 7 of the Industrial Organisation and Development Act 1947 as amended by the Government Resources and Accounts Act 2000 (Audit of Public Bodies) Order 2003. Services are limited to the statutory audit and the fee for the audit work is £10,500.

### **Disclosure of audit information to the Comptroller and Auditor General**

So far as the Accounting Officer is aware, there is no relevant audit information of which the Comptroller and Auditor General is unaware. The Accounting Officer has taken all steps that he ought to have taken to make himself aware of any relevant audit information and to establish that the Comptroller and Auditor General is aware of that information.




**Martin Beckenham** - Chief Executive (HDC) **Kevin Roberts** - Chief Executive (AHDB)

and Accounting Officer

18 June 2008

# Management Commentary

## Research & Development

### Overview of the R&D programme 2007-08

#### Particular profit enhancing R&D

Delivering sector specific research and development which can be translated into profitable practice remains the central function of the HDC Sector Panels and Managers. The HDC seeks to balance short and long term needs of the industry through both 'immediate' specific and 'forward-looking' generic R&D. Thus the environmental agenda, such as water use efficiency, and sustainable 'low carbon' production with application of new technologies are inherent components of recently updated cross sector HDC strategies. Collaboration with other research funders, levy boards and commercial contributors is also in sharp focus as other sources of, and resources, for applied R&D continue to diminish. Our focus is therefore positively targeted to further maximise output from R&D funds and enhance the profitability of UK horticultural businesses.

Some examples of specific R&D translated into profitable practice during 2007 include enhanced control of tarsonemid mite in strawberries, improved pre- and post-emergence herbicide treatments for bulbs and outdoor flowers and the launch of the 'Aspire' decision support system to help asparagus growers manage crop harvesting to maximise returns.

The wider R&D focus included exploration of new crop opportunities (CP 49) and in recognition of the importance of the issue HDC Council commissioned the study '*Carbon Footprinting and UK Horticulture: Concepts and commercial relevance*' (CP 56). The latter aimed to assist growers to enter into a reasoned debate with buyers on this topic with accurate and proportional representation of the horticultural sector in this potentially controversial arena.

#### Sector specific relevant R&D

Industry relevant R&D programmes are key to HDC's delivery and to achieve this objective the HDC Technical and Communications Managers actively engage with crop associations, grower groups and key industry representatives. Increasingly this engagement is also with policy makers to assist the horticultural industry faced with increasing legislative and global pressures. The HDC team seeks to translate this dialogue to meet sector specific needs by integrating these priority areas into updated R&D strategies and using this information to advise the Sector Panels in their consideration and prioritisation of funding of proposed research. During 2007/08 sub-sector strategies have been developed for the Specialty Produce Growers Association covering spinach and rocket; the British Leafy Salad Association's outdoor lettuce R&D committee and the Plant Propagators Association covering vegetable propagation. Priorities have been determined for organic vegetable growers and new generic strategies have been developed for 'water' and 'energy efficiency/ emissions reduction'.

Sector specific research highlights for 2007/08 included:

- **Bulbs & Outdoor Flowers**  
The establishment of a Cut-Flower trials Centre at W-HRI Kirton to explore and expand UK cut-flower production and new sales opportunities (PC/BOF 268).
- **Field Vegetables**
  - Validation and commercial use of disease detection tests for two key brassica diseases (dark leaf spot and ring spot) – resulting in cleaner crops (FV 233a).
  - Phase 1 of establishment of best practice for phosphate fertiliser use for watercress growers (FV 302)
- **Hardy Nursery Stock**  
The reduction in production time of a standard perennial plant by a whole year (HNS 124).
- **Mushrooms**  
Demonstration of the potential for reduction of level of sciarid flies in cropping rooms using the predatory beetle *Atheta coriaria* (M 44).
- **Protected crops**
  - Preparation and submission of the case for re-examining permissible nitrates and submission to the European Food Standards Agency in support of lettuce and spinach growers (PC 275).
  - Demonstration of the economics and practicalities of renewable 'biomass' heating fuels for UK greenhouses showing that, with careful selection, significant savings were possible particularly for ornamental producers (PC 265).

- Soft Fruit  
Demonstration that Lean management could be applied to soft fruit picking operations with resultant significant cost savings (SF 89).
- Tree Fruit  
Improvements in the storage and shelf-life of plums (TF 159).

#### **Efficient quality delivery of R&D**

Regular liaison and meetings with existing and new contractors during 2007/08 have been employed to ensure that R&D commissioned by the HDC is conducted and delivered in a timely and efficient manner both to HDC and to the industry. Through a process of evaluation and feedback the contractors and Sector Panels also have had opportunity to review delivery and technology transfer targets from the R&D programme and sought to maintain high standards.

#### **Expanding contractor base**

Industry R&D requirements continue to diversify thus HDC needs to ensure that its contractor base adequately meets these requirements. New contractors have been employed during 2007/08 to address topics ranging from 'carbon' issues to consumer preferences. Succession planning and exploration of opportunities to develop international collaboration networks for R&D remains high on the agenda of our liaison meetings with all existing contractors. Current and future resources and expertise is also the topic of on-going high level reviews (such as that being conducted by BBSRC/ Defra and the National Horticulture Forum) from which we will draw relevant information.

HDC Council also support succession planning by training potential future contractors through the studentship scheme. Several students successfully completed and obtained their PhDs during 2007/08 eg at Lancaster University and the Royal Horticultural Society, Wisley and a further two studentships were funded at Imperial College and Lancaster University.

#### **Active engagement with other funding bodies for maximum relevance and returns on R&D**

International networking/ liaison/ opportunity for shared funding is an agenda topic for all HDC contractor liaison meetings. There is a shared view that HDC needs to continue to encourage this and explore further perhaps by setting up other collaboration type arrangements with international research teams (as already exist with HDC & Horticulture Australia).

#### **Defra**

HDC continues to ensure that horticultural industry needs are highlighted within the Defra agenda and stakeholder forums by actively engaging with Defra programme managers (Agriculture and Climate Change, Sustainable Water Management, Food Chain Meeting Consumer Needs, Sustainable Farming Systems, Plant Health). HDC also contributed to the Defra funded Climate Change consultation programme conducted by Warwick HRI during 2007. A spin-off from this engagement had been the opportunity for HDC to co-fund with Defra and the British Potato Council, an investigation of an innovative ground source refrigeration system (CP 57).

#### **Horticulture LINK and Renewables LINK**

HDC is currently engaged in 16 Horticulture LINK projects, 1 Sustainable Arable LINK and 1 Renewable Materials LINK projects. Successful output from these programmes during 2007/08 has included: producing a full gene map for raspberry and identification of genes conferring resistance to raspberry root rot; proving the concept of using thermal imaging to identify dry spots to manage uniform irrigation in container nursery stock production; identifying suitable companion plants for cabbage root fly control in brassicas and demonstrating a steam machine for weed and disease control in field vegetables and soft fruit. HDC confirm the ongoing need for research work undertaken through public-private funded partnerships ie the existing LINK format.

#### **Applied Research Forum**

During 2007-08 the HDC worked together with other levy boards and research funders in agriculture and food to identify strategic needs and collaborative opportunities and address the agenda for the Agricultural and Horticultural Development Board's sub group for collective R&D. HDC has led on the 'soils rotation' collaboration of levy funded R&D, provided input to the 'Forum for the Future' climate change initiatives and contributed to the Applied Research Forum's specific workshops which explored and mapped a matrix of further technical and communications networking opportunities.

#### **The Carbon Trust**

Further stakeholder meetings between HDC representatives and Carbon Trust staff have taken place during 2007/08 including collaboration on energy saving advice, biomass heating systems, carbon labelling and waste heat opportunities. HDC is also contributing to the Carbon Trust/ Defra/ British Standards Institute

consultations on PAS 2050 (Specification for the assessment of the life cycle greenhouse gas emissions of goods and services / Stakeholder Consultation). Funding for technology transfer obtained from Carbon Trust's Networks Programme was used for development of the HDC GrowSave project (see communications section) during 2007-08.

#### **WRAP**

An investigation into the use of green waste compost for use in Brassica module production (FV 303 & FV 320) involved a dialogue with WRAP who kindly nominated one of their own technical co-ordinators to liaise with the project leader and give some technical support to this project.

WRAP funded work carried out on the application of composted green waste as a mulch in both young and established top fruit orchards showed both increased and earlier yields. HDC agreed to fund a continuation of this existing trial to determine the long term effects and conduct a cost benefit analysis (TF 177).

#### **Essential pesticide matters**

The SOLA programme continues to address critical crop protection issues of relevance to growers of all crops. In addition to delivery of 107 SOLAs during 2007/08 HDC has been actively engaged in discussion of the process for transfer of the Long Term Arrangements for Extension of Use (LTAEU) for non-edible crops to minimise impact on industry. This will continue during 2008.

European collaboration and co-operation has been enhanced during 2007 when HDC led the first international minor use residue trial in collaboration with Belgium and Switzerland.

#### **Analysis of the research spend in 2007/2008**

The HDC Sector Panels were active in commissioning new work during 2007-08 with 96 new projects funded (see Table 1). The total spend on research (excluding SOLA) during 2007-08 was £3,544,227 and the expenditure per sector is shown in Table 2.

**Table 1** - Projects funded by the Horticultural Development Council 2007-08

Sector	On-going projects	New projects	Total Projects funded
	(2007-08)	(2007-08)	(2007-08)
Bulbs & Outdoor Flowers (BOF)	8	3	11
Field Vegetables (FV)	29	38	67
Hardy Nursery Stock (HNS)	27	8	35
Mushrooms (M)	2	2	4
Protected Crops (PC)	26	10	36
Soft Fruit (SF)	13	11	24
Tree Fruit (TF)	5	11	16
Cross Panel (CP)	15	13	28
<b>Totals</b>	<b>125</b>	<b>96</b>	<b>221</b>

**Table 2** – Expenditure of research funds by the crop sectors in 2007-08

Sector	Expenditure £	Expenditure %
Bulbs & Outdoor Flowers (BOF)	113,923	3.2
Field Vegetables (FV)	1,058,807	29.9
Hardy Nursery Stock (HNS)	698,046	19.7
Mushrooms (M)	44,912	1.3
Protected Crops (PC)	744,700	21.0
Soft Fruit (SF)	375,749	10.6
Tree Fruit (TF)	140,897	4.0
Cross Panel (CP)	367,193	10.3
<b>Total</b>	<b>3,544,227</b>	<b>100.0</b>

The HDC spend per research category for 2007-08 is shown in Table 3 and the figures are compared with previous spends in 1999-2000 (at the beginning of the 2000 Corporate Plan) and 2002-03 (at the beginning of the 2003 Corporate Plan).

**Table 3** – Funds spent by category during 2007-08

Category	Allocation of funds 2007-08 (%)	Changes from 2002-03 % increase (+) or decrease (-) (figure for 2002/2003)	Changes from 1999-2000 % increase (+) or decrease (-) (figure for 1999/2000)
Crop Protection (CP)	49	-6 (55)	-5 (54)
Labour Utilisation/Ergonomics (LUE)	2	0 (2)	0 (2)
Product Scheduling/Supply Chain (PSSC)	11	+6 (5)	+7 (4)
Substrates/Fertilisers/Seeds/Other Inputs (SFSO)	7	+5 (2)	-3 (10)
Varieties/Product Quality/Market Opportunities (VPQMO)	16	+1 (15)	-7 (23)
Water & Energy Management (WEM)	9	-11 (20)	+3 (6)
Waste Management/Environment (WME)	6	+5 (1)	+5 (1)

## Research Highlights

### Bulbs & Outdoor Flowers Sector

Formaldehyde has been a standard additive to hot water treatment tanks since at least the 1930s, to improve the efficiency of control of stem nematodes that enter the treatment tank in the 'wool' form and to inhibit the cross-infection of bulbs with fungal diseases, especially Fusarium basal rot. However, formaldehyde is not being supported through the EC review of pesticides and is to be withdrawn as a pesticide from the end of 2008. Exposure to hot-water treatment at 44.4°C for 3 hours may be sufficient to control stem nematodes that are in the 'wool' form at the beginning of treatment, with no requirement for additives to enhance the level of control. Hydrogen cyanamide, chlorothalonil and iodophor disinfectants show some promise as biocides that greatly improve the kill of Fusarium basal rot spores in hot water treatment (BOF 61a).

Weed control of lilies is a problem as Simazine, Cyanazine ('Essential Use' derogation for narcissus only) and Terbacil can no longer be used in lilies and other herbicides, such as Lenacil, have a limited weed control spectrum. The project BOF 58 identified safe, effective pre- and post-emergence herbicide treatments that provided season-long weed control in field grown Asiatic lilies and in Asiatic, LA hybrid, Longiflorum and Oriental lilies grown in Spanish tunnels.

Consumer trends show a huge increase in the sales of cut-flowers in the UK over the past 10 years. However, most of these flowers are imported, despite the suitability of the UK climate to successfully grow many of the popular species, either in the open or under Spanish tunnels, and the UK producers' advantage of closeness to the markets. The establishment of a Cut-Flower Trials Centre at Kirton (PC/BOF 268) is aiming to:

- Demonstrate, trial and problem-solve cut-flower production
- Develop 'Best Practice' for the most promising varieties and transfer this knowledge to growers
- Evaluate selected crops on a commercial scale
- Promote UK cut-flower production to consumers
- Stimulate further R&D and promotional projects for the cut-flower sector

### Field Vegetables Sector

Weed control continues to be a major area supported by the FV Panel with an ongoing herbicide screening programme including FV 256a where new herbicides are being screened on 11 different vegetable crops, plus a special focus on transplanted lettuce where a range of active substances were screened at two sites. Two potentially useful herbicides (Springbok and Muster) have been identified for use on Brassica crops, which will be facing a serious gap in the herbicide armoury with the loss of trifluralin in 2009. Carrot and parsnip growers face a serious issue from 2008 in controlling volunteer potatoes following the loss of metoxuron. A programme of work is underway to address this, with a potential new active (flumioxazin) identified in the screening and a novel herbicide applicator (FV 307).

The FV Panel are supporting a programme of work for speciality salad crops including the independent assessment and monitoring of spinach downy mildew races (FV 284) which is informing growers of integrated management strategies in order to protect varietal resistance and thus improve longevity. Project FV 293 has identified a new fungicide (Signum) for downy mildew control in spinach which now has SOLA approval status. Fungal leaf spots have also been in the spotlight and have now been identified and associated with specific seed-borne pathogens (*Stemphylium botryosum*, *Colletotrichum dematium* and *Cladosporium variabile*), which will enable control measures to now be targeted in current work (FV 268a). Preliminary results suggest good control can be achieved using fungicides. Ongoing work on crop covers has demonstrated providing guidance on cover use, re-use and management.

Project FV 233a has completed validation and demonstration of spore detection tests for two key Brassica leaf diseases; dark leaf spot and ringspot. The tests have been used successfully in commercial crops by consultants in 2006 and 2007. This has led to cleaner crops and reduced numbers of sprays in some cases. Project FV 259 has produced the first ever antibody-based detection test for a soil-borne disease, clubroot. The project was also used in a new collaborative initiative with Horticulture Australia Ltd, allowing access to match funding, expertise and a world leading molecular diagnostics.

In order to provide an all year round supply of fresh carrots, feasibility project FV 306 has demonstrated that it is possible to store washed, polished and hydro-cooled carrots in long-term refrigerated storage, with less rotting than field-stored carrots (by May). This method of storage is potentially cheaper than the standard continental standard method of storing ungraded carrots with soil. Taste and sugar content are



preserved, but a significant increase in post-storage polishing is required to restore the skin finish. A complimentary project FV 323 has offered an independent assessment of varieties targeting the winter harvesting.

An industry survey of watercress growers to establish best practice in phosphate fertiliser use (FV 302) gave some key indications which prompted the extension of this work into a phase 2 in 2008. In phase 2 fertiliser regimes will be examined in detail to promote a more sustainable and efficient use of phosphate fertilisers in the watercress industry. An exciting development in the phase 2 work is the collaboration with the Environment Agency presenting great opportunity for HDC funded scientists to work with the Agency on strategies to reduce potential diffuse pollution.

Two key reviews (FV 290 & PC 259) have provided a springboard to the British Herb Trades Association in identified gaps in their R&D strategy. FV 290 targeted factors affecting shelf life, flavour, yield and quality of herbs generally while PC 259 has specifically tackled coriander and the factors affecting its appearance and shelf life. The projects have given the Herb industry some key indicators and good basic information to inform and promote discussion on how improvements in herbs can be further developed and taken forward in 2008/09.

### **Hardy Nursery Stock**

The entomogenous fungus *Metarhizium anisopliae* has provided excellent control of black vine weevil larvae in soil-less substrates and can provide more complete control when used in conjunction with reduced rates of chlorpyrifos or predatory nematodes (HNS 133).

Leaf and bud nematodes, *Aphelenchoides* spp., are common, persistent and damaging pests of a range of economically significant nursery stock plants including *Anemone japonica* (Japanese anemone), Buddleia, Viburnum and Weigela. Control used to depend on the use of Temik 10G (aldicarb) which was not available after 31 December 2007. Vydate 10G (oxamyl) has been identified as a potential cost-effective replacement on both herbaceous and woody HNS host plants (HNS 131).

Following the withdrawal of methyl bromide and the increasing pressure on waste management the industry has to find alternative solutions for recycling plastic pots and trays. Research has indicated that wet heat treatment is the most suitable and efficient alternative method of sterilising used pots, trays etc on the nursery (HNS 147).

Legislative pressures and the increasing cost of mains water make it vital for the Hardy Nursery Stock industry to increase the efficiency of water use. Furthermore, poor irrigation directly affects profitability by inducing variability within batches of plants which adds to labour costs, particularly for order picking and crop wastage due to small/poor quality plants. Scheduling of irrigation according to plant demand, along with an irrigation system designed to maximise irrigation uniformity, has proved to result in substantial water savings, without reducing plant quality (HNS 122). In the second year of a HortLink project (HNS 97b), the researchers have examined the use of irrigation scheduling, plant growth regulation using chemicals and the automation of irrigation through the use of soil moisture sensing and thermography (thermal imaging to assess water-deficit in plants), to identify ways of improving the efficiency of water use and uniformity of water application. A gantry irrigation system coupled to a soil moisture probe (on nursery) which triggers irrigation has been tested and compared with other irrigation scheduling methods. Thermography (the creation of thermal images) has been used to monitor irrigation in an HNS production environment. A handheld thermal imager was not only able to identify individual plants in the early stages of water stress, but was capable of identifying uneven irrigation and specific irrigation failures, even when no variation in foliage was apparent to the naked eye.

To reduce the time taken to produce a standard perennial plant by a whole year, research has indicated that use of early spring warmth allows one year to be removed from the production cycle of hardy nursery stock species (HNS 124).

An investigation into the response of consumers to the concept of locally sourced plants has shown that there is a potential for using the 'Home Grown' logo and the associated marketing messages to promote ornamental plant sales (HNS 160).

## Mushroom Sector

Increasing problems with obtaining and retaining labour and the rising associated costs were the driving factors in the cross panel project CP 22 which is exploring opportunities for process improvement and increased automation in the mushroom harvesting operation. The robotic harvester developed during the project has a picking time of 6.7 seconds per mushroom and a success rate of 87% picked without damage compared with the human rate of 95%.

Reducing odours in mushroom compost production is a high priority for Defra and the public. Previous work (M 3d and the LINK project M 3e) enabled a commercial approach to minimising odour levels to be adopted. Further odour reduction work is underway in project M 43 which is exploring the use of different components to minimise odours in the composting process.

The production of exotic species of mushrooms in the UK has declined for various reasons, the main ones being competition from imports and the difficulties with keeping cadmium levels below the threshold allowed under EU regulations. The project M 45 is trialling different components of compost with the aim of minimising cadmium uptake by the *Agaricus arvensis* (horse mushroom) crop. It is hoped that this will benefit other exotic species as well.

*Trichoderma* green mould was a serious problem on the continent during 2006-07 and there were occasional reports of it appearing in UK crops and reducing yield. Project M 46, a survey of UK sites to determine both the levels of incidence and the *Trichoderma harzianum* biotypes involved, has so far identified 16 of the 20 isolates obtained from nine commercial sites.

The range of products for the control of pests and diseases of mushrooms is limited. The control of sciarid flies is to a large extent achieved by attention to both hygiene and to ensuring that cropping rooms are well sealed but nevertheless other control measures are also sometimes required. Project M 44 explored the potential for the predatory beetle *Atheta coriara* as a biological control agent. It was shown to successfully reduce the pest population by up to 70% and thus offers potential.

## Protected Crops Sector

### *Crop Protection*

Integrated pest management programmes for conventional tomato production are well established, however, robust pesticide-free IPM remains a challenge for organic tomato growers. These challenges are progressively being addressed in project PC 240 with successful management of *Macrolophus* populations using pyrethrins and 'between crop' reductions of mealybug numbers using sticky barriers and early season 'soft sprays'. Severe leafminer foliar damage on susceptible cultivars was the next challenge and has become the subject of a spin-off project (PC 272). Leafminer control was also a challenge for effective IPM in AYR tomato production (PC 251) and has become the focus of Phase 2 of this project.

Finding alternatives to carbendazim, with EC scheduled withdrawal of this important fungicide phased from June 2008 (PC 280) is a high priority for both ornamental and edibles crop producers and the subject of a desk study completed in Feb '08. The aim of this project is to review availability of effective alternative fungicides or related products that have the potential to be used for the control of key pathogens that would normally be controlled by carbendazim. It is likely that further work will be required to evaluate efficacy, check crop safety and secure authorised On- or Off-Label uses on the relevant crops.

Detection, prevalence and control of seed-borne diseases on protected ornamentals is a high priority (PC 252) and in the first step towards addressing this a list of seed-borne diseases of protected bedding and pot plant species has been compiled from worldwide scientific literature. Commercial batches of seed have been tested and tests are underway to identify and test promising chemical and non-chemical treatments for control of the most common seed-borne diseases. In a sister project genetic fingerprints for downy mildew of Impatiens and pansy (PC 230) are being developed as the first steps to identify latent or symptomless infection in seeds and young plants.

### *Waste management/ environmental issues*

Managing nitrate levels in protected lettuce continues to be an issue for growers (PC 263). The UK currently applies a derogation to the limits for nitrate in lettuce and fresh spinach which lasts until 31 December 2008. A request in 2007 to the HDC to fund a submission to the European Food Safety Authority (EFSA) was quickly responded to on behalf of the sector. The submission (PC 275) which argued the case for re-examining the levels of permissible nitrates was prepared and submitted to the EFSA Panel. It evaluated the risks and benefits to consumers from nitrate in vegetables and argued that the scientific evidence showed

that maximum limits for nitrate in lettuce and spinach are not necessary providing the crops are produced under good agricultural practices.

Ongoing discussion with the newly formed Protected Leafy Salad R&D group highlights the continuing concerns of this sector and the need for our ongoing commitment to research in this area to underpin the efforts at the European level.

#### *Water/ energy management*

A sector specific water strategy was developed and agreed by the PC Panel during 2007 including objectives on improving water use efficiency, quality of irrigation water and key technologies and practices to keep the sector ahead of changes in legislation. This strategy will form the basis of a cross sector HDC strategy to be developed in 2008. Whilst this process is underway key work is already progressing in improving management of diffuse pollutants from the sector, including pesticides, through the 'biobeds' initiative which examines the safe disposal and treatment of pesticide waste and washings (PC/HNS 255). This work which is funded jointly with the Hardy Nursery Stock Sector has produced initial results indicating that the biobed matrix material (biomix) is able to degrade relatively high concentrations of a range of pesticides, used by these two sectors, with a low risk of pesticides accumulating in the biobed. Ongoing studies are investigating the impact of pesticide mixtures and also the impact of plant growth regulators and soil sterilant materials on biobed performance. Industry was consulted on a proposed biobed design with a footprint area of approximately 4m<sup>2</sup> and was constructed in the spring/summer 2007.

A cross-sector strategy addressing energy efficiency and emissions reduction was developed during 2007 and highlighted its particular relevance to the protected crops sector.

It was noted that the 'Dutch' closed greenhouse system was not viable in the UK with the lack of suitable aquifers for long-term energy storage being the biggest restriction. Nonetheless some of the technology-fans, ducts and heat exchangers - could deliver significant benefits of energy saving and improved crop performance in UK greenhouses as identified by the greenhouse study tour and desk study (PC 256). This has led to the establishment of a four year industry led project to explore fan- and duct-based environmental control systems in much greater detail on a commercial nursery (PC 278).

The economics and practicalities of renewable 'biomass' heating fuels for UK greenhouses was the subject of a desk based study (PC 265). This demonstrated that, with careful selection of fuel source and supplier significant savings were possible (mainly for ornamentals and young plant production).

#### *Labour/ergonomics*

Task separation of tomato production was identified as a potential route to improved work rates and a flexible workforce (PC 217 and PC 217a) but industry uptake was initially quite limited. Efficiency of labour management using the concept of 'Lean manufacturing' for protected edible crops within PC 257 then clearly identified the potential for significant cost saving and wider application of these tools. This information was subsequently rolled out in a series of workshops during Spring 08.

#### *Product quality/ market opportunity*

Following the model of AYR production in tomatoes there has been some progress towards the same in peppers with a review of the current scientific knowledge and commercial experience of using supplementary lighting for AYR production of sweet peppers (PC 270). The project was one step towards ensuring that UK sweet pepper growers are kept informed about developments in AYR production and identifying any gaps in knowledge and a longer-term R&D strategy for AYR sweet pepper production. The project showed that there were no technical barriers to preventing the use of high pressure sodium supplementary lighting for sweet pepper production in the UK with the current light level recommendation for sweet peppers being 3,500 – 4,000 lux from a fixed light installation. However the level of investment required combined with cost of energy may limit its widespread uptake.

Quantification of plant quality and identification of consumer preferences for pack bedding has been the outcome of a highly successful project (PC 200). Along with an HDC funded studentship (CP 37) this group has developed digital image analysis methods which could be used to automatically assess many aspects of plant quality during production. It is anticipated that these results will have a wide range of application both in glasshouses and in the field.

Consumer preferences have also been the subject of an investigation to determine what motivates consumers to purchase poinsettia (PC 279). This information will be used to provide growers with insight to make more targeted selections of varieties and use appropriate consumer 'care' information.

PC in conjunction with the BOF Panel helped establish the Cut Flower Trials Centre at Warwick HRI Kirton which has demonstrated the potential of several flower types as new crops for UK growers (BOF/ PC 268).

### Soft Fruit Sector

In response to concern that strawberry plants were becoming infected with *Phytophthora cactorum* during the micropropagation phase, research demonstrated that meristem culture was effective in eliminating the pathogen from latently infected stolons of three strawberry cultivars tested using a PCR method (SF 78).

The tarsonemid mite, *Phytonemus (Tarsonemus) pallidus* ssp. *fragariae*, is a serious pest of strawberry. The previously effective insecticide endosulfan (Thiodan) is no longer available, so there is a need to find alternative acaricides to control this pest, which causes stunting and distorting of leaves and buds, reducing yield and quality. Control of tarsonemid mite in commercial strawberry was dramatically improved by the addition of a wetter to acaricides, including Dynamec and a 'novel' compound (SF 79).

With the recent loss of simazine from use in blackcurrants and the impending loss of diuron, two promising new herbicide combinations have been identified which offer viable alternatives to the standard herbicide programme (SF 12).

With the impending loss of the raspberry cane desiccant sodium monochloroacetate, carfentrazone-ethyl (Shark) has been identified as the best alternative for controlling raspberry spawn and a SOLA has been obtained (SF 73).

The steady rise in labour costs coupled to static prices and returns, is currently the biggest threat to the profitability of the soft fruit industry. A case-study on a strawberry farm demonstrated that Lean management could be applied to soft fruit picking and result in significant savings (SF 89).

2007 was the third season in a row in which HDC funding has helped British Summer Fruits to improve and add to their soft fruit marketing and promotional campaign. The plan behind the British Summer Fruits 2007 campaign was to further raise the awareness of the availability and health benefits of berries, with the primary objectives being to increase consumer demand, extend the customer base and drive sales via the media and retailers. This year, British Summer Fruits' campaign activity contributed to the substantial 11.6% increase in British strawberry sales to over 46,000 tonnes and, overall, British berry sales by 9.9% to 55,000 tonnes (PSF 003).

### Tree Fruit Sector

Following the strategic reviews of the breeding and trialling of apple and pear scions and rootstocks and the consequent decision of the Tree Fruit Panel to continue to support rootstock breeding and trialling but withdraw from scion variety work, the East Malling Apple and Pear Breeding Club (APBC) Policy Group agreed to disband the APBC and replace it with the East Malling Root Stock Club (EMRSC). Negotiations continued throughout the year to ensure that all parties were happy with the agreement and objectives of the new club. The evaluation of rootstocks is being undertaken by projects TF 157 & TF 172 and of stone fruit scion selections by TF 170 & TF 176).

Canker continues to be a major cause of losses with current control measures being only partially successful. Project TF 167 is evaluating current control practises and will result in a best practice system for canker control.

Projects aimed at evaluating products for controlling a range of other pests and diseases, particularly pear sucker, blossom wilt, brown rot, Botrytis, light brown apple moth and mussel scale were undertaken (TF 162c, TF 163, TF 174, & TF 178) and some promising potential solutions identified. The Project TF 173 was commissioned to follow on from the interesting joint Defra funded project on developing a sustainable zero residue system for apple production by extending the commercial trialling to additional varieties and geographical areas of the UK.

Potential causes of the problem of diffuse browning disorder (DBD) in Cox have been explored in a number of projects from TF 139 through TF 166a-h. The serious losses to the industry from this disorder during the 2004 season emphasised the importance of this problem. Indications that the disorder is aggravated by the use of triazole fungicides and plant growth regulators continue to be explored and prompted a marked change in industry practice resulting in reduced incidence.

## Cross Panel projects

The British horticultural industry, along with many other businesses, is faced with significant commercial, political and global pressure to reduce their impact on the environment. One aspect of this environmental impact classification is the food-miles debate, 'carbon footprint' calculation, life cycle analysis (LCA) calculation and proposed carbon labelling of products to which various retailers have made commitment. HDC Council sought to establish an informed position that focused not only on the energy balance but also other aspects of sustainability of UK production (local v. global, minimal pesticides/ nutritional quality etc) to facilitate accurate representation of British produce in the marketplace. This 'position paper' and accompanying referenced report (CP 56) was approved by Council in January '08. This 'position paper' was generated so that growers could use it to inform their customers about the relevance of carbon footprinting to their business and engage in reasoned debate with buyers about the practicalities of reducing carbon footprints in the horticultural sector. The report highlighted areas where growers were already addressing energy related challenges for British horticulture and also identified further areas whereby appropriate R&D can support UK growers in their emissions reduction strategy.

The Council commissioned study (CP 49) which reviewed new crop opportunities on a sector by sector basis and has formed the basis of crop association and sector panel discussions. It is now being used to prioritise recommendations for future R&D or knowledge transfer to help industry exploit these opportunities. Highlights included investment in breeding, selection and production trials for new varieties of field vegetables, soft fruit and tree fruit with a view to developing varieties with similar or improved production characteristics in the face of predicted climate change. Links with relevant institutes and commercial partners to develop new opportunities from traditional/endemic flora and fungi for various sectors were recommended. The industry was advised to seek opportunities such that nutrition and health claims are made for fruit and vegetables where possible, by liaising with FSA, research institutes and relevant grower bodies. An expansion of the range of phytochemicals analysed in fresh produce was suggested. Continued exposure to opportunities for using biorenewable energy sources and products - via the National Non-Food Crop Centre - was amongst the other recommendations.

The HDC continued to support its Studentship Scheme throughout 2007/2008, awarding grants to two successful applicants, bringing the total number of HDC supported studentships under this scheme to 10. Of these 10 projects five focus on aspects of crop protection (CP 36, CP 58, CP 45, CP 46 and CP 53) and five on plant physiology and agronomy (CP 26, CP 35, CP 37, CP 43 and CP 54). Two further studentships are supported outside this scheme, namely an engineering PhD on process improvement and automation (CP 22) and consumer insight at the dunnhumby Academy (CP 42). The latter has provided valuable information on consumer purchasing behaviour for a number of crop associations to use for promotional and marketing purposes.

Following the successful outcomes for value chain analysis of the School Fruit and Vegetable Scheme, and a fresh leek chain, an analysis was commissioned (CP 32) for raspberries, comparing the chain in the UK with one from Spain.

Following on from the work on identifying the major characteristics of excellent harvest staff (Champion pickers) in soft fruit, vegetables and tree fruit and successfully transferring these to poorer performers (SF 71, TF 171, FV 298) further work was undertaken to develop a system for pre-selection of staff most likely to perform well (CP 58) and extending the Champion worker model to the selection and training of supervisors (CP 59).

## Specific Off Label Approval (SOLA) Programme and Pesticide Issues 2007-08

The SOLA programme continues to be an important part of the work conducted by HDC on behalf of industry. The SOLA programme is relevant to growers of all crops, and without it many minor crops would not have access to suitable crop protection products.

In 2007/2008 HDC spent £275,133 on SOLA applications, generation of residue data to support approvals, and other supporting data or access of data from other EU Member States. More than 107 SOLAs were obtained during this period, which includes new SOLAs and the re-issue of SOLAs for products which are re-registered in the UK following Annex I listing as part of the EC 91/414 review procedure.

Following the successful transfer of the Long Term Arrangements for Extension of Use (LTAEU) for edible crops, where HDC co-ordinated applications for SOLAs, PSD have advised that the LTAEU for non-edible crops are also to be replaced by SOLAs. HDC is working with industry, NFU and HTA to ensure that all relevant uses are replaced by SOLAs if at all possible. This exercise will continue in 2008 and onwards.

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### **SOLA Highlights for 2007-2008**

- More than 107 SOLAs were successfully obtained during 2007-08
- The Tree Fruit sector benefited from a new SOLA for the use of 'Steward' (indoxacarb) for the control of Light Brown Apple Moth on Plums and Cherries, which was obtained using the emergency SOLA route. In addition, a temporary extension of approval for the use of 'SL567A' was obtained because of problems resulting from adverse weather conditions close to harvest in 2007.
- A new approval for the use of 'Peraat' (dimethomorph) on raspberry and blackberry was obtained for the Soft Fruit sector. The Soft Fruit sector panel authorised residue data generation for the use of 'Shark' (carfentrazone-ethyl) on raspberry following efficacy trials which demonstrated that this product might offer a replacement for the essential use derogation for sodium monochloroacetate which was used for spawn control until approval lapsed on 31 December 2007.
- A new approval for the use of 'Ramrod Flowable' on protected celery was obtained using residues data generated as part of the HDC SOLA programme. A SOLA for the use of 'Fungaflor' (imazalil) was also obtained for use on tomatoes for the Protected Crops Sector
- A number of important SOLAs were obtained for the Field Vegetable Crop sector, including 2 new SOLAs for use on asparagus – 'Signum' (boscalid + Pyraclostrobin) and 'Fusilade Max' (Fluazifop-P-butyl). Sweetcorn growers also obtained new approvals for the use of 'Samson' (nicosulfuron), and an important new approval for the use of 'Tracer' (spinosad) was obtained for lettuce growers.
- The potential to obtain SOLAs for products that are approved in other MS was exploited to benefit a range of crop sectors. For example an approval for use of 'Fusilade Max' (fluazifop-P-butyl) was obtained on a wide range of Tree Fruit and Vegetable crops. An approval for use of 'Nemolt' (teflubenzuron) on protected ornamentals and Field Vegetable Crops was also obtained using this procedure.

### **Global and European Collaboration**

The first Global Summit on Minor Crop Uses for Minor Crops was held in Rome in December 2007. The aim of the summit was to find joint solutions to problems facing minor and speciality crops. HDC staff continue to be involved with efforts towards European collaboration and co-operation, and in 2007, HDC led the first international minor use residue trial, where grower funded organisations in Belgium and Switzerland joined HDC in generating a data package to support the approvals for the use of Spinosad on raspberry.

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## Communications

### Overview of the communications programme 2007/2008

Ensuring effective and timely delivery of the results of HDC's R&D programme to industry has always been the core activity for the Communications Team. For projects that have been on-going during the reporting year, the following targets have been achieved whilst striving to meet this core objective:

- 96% of projects were covered as news items in *HDC News* either at the start or end of the project
- 68% of projects were published as feature articles in *HDC News* or as full colour factsheets
- 57% of projects were presented at industry events
- A significant proportion of projects in the edibles sector identified safe and effective crop protection products which required a SOLA application. These were all communicated to industry within three working days of receiving notification from the Pesticide Safety Directorate (PSD).

However, with greater production and legislative pressures mounting on growers, our initial 'core activity' has widened considerably over recent years. Today, the range of activities and topic areas that HDC can contribute to incorporates everything from the seed to the sale of the final produce and frequently includes issues like labour, energy, microbial contamination, water or waste. However, when dealing with over 300 crop interests, the message has to be specific and is often targeted to only a few growers.

### Identifying the key information to communicate

Pulling together our 'core' and 'wider remit' communication activities into 'Communication Strategies' has enabled the high priority issues of each sector to be clearly identified. As in all HDC activities, this exercise of identifying and prioritising the issues crucially requires the involvement of the crop associations and grower groups to help accurately represent the needs of each sector. Their help in subsequent commissioning and delivery process is also highly valued.

### Identifying the right people to communicate with

HDC relies heavily on its database capability to deliver to industry. By accurately targeting information to the right people within an organisation, and to organisations growing the relevant crop, HDC minimises wastage. In the forthcoming transition to Horticultural Development Company Limited, we will aim to maintain this efficiency of delivery and we will continue to undertake exercises to update grower's crop and information needs where possible.

### Mechanisms for delivery

During 2007-08 HDC capitalised on important advances with its electronic capability in the previous reporting year. These have included the development of new email templates for the Grower Summaries of project reports, for SOLA Notices of Approval and for bespoke emails to industry on key topics. This method allows cost effective, timely electronic delivery of important information.

This year, the HDC website ([www.hdc.org.uk](http://www.hdc.org.uk)) has benefited from the home page being redesigned with a more interactive feel, making it easier to find new information and recently uploaded factsheets, reports and *HDC News* articles.

In addition, an interactive web-based template for 'best practice' publications was developed for protected herbs as part of project PC 210. This has provided the facility for rapid and timely updating by authors and simple and intuitive access for users.

To help further facilitate the uptake and adoption of the 25 energy related projects that HDC has funded over the last 6 years, a new initiative with the Carbon Trust called 'GrowSave' was launched. Using case study nurseries to implement an energy saving technique and making their climate control computer settings accessible to all via the web, this project communicated changes to grower practice in real time. Coupled with discussion meetings and free, on-line consultancy, it was a first of its kind for the HDC and a step change in effectively communicating complex project results.

Key to effective communication with industry has been *HDC News*, the main-stay of HDC's communications activities. During 2007/08 the editorship of *HDC News* will remain the same and we expect a seamless transition under the new governance of the Agriculture and Horticulture Development Board.

### **Monitoring delivery**

The completion of Self Assessment Forms at the end of a research project enables HDC to conduct a final evaluation of the work undertaken, including its delivery and usability by industry. Part of this process is the final listing of all communication activities delivered during the life of that project. The 'exposure' achieved for on-going projects within each sector is recorded and reported to each sector panel annually.

Importantly, we also monitor the percentage of activities that are not project based on the R&D programme demonstrating that the remit of our activities continues to widen.

### **Cross sector activity**

Amongst other mechanisms for getting information out to industry, HDC has distributed several publications and held events on cross sectors issues. These include factsheets for ornamentals on 'Nursery hygiene' and 'Undertaking your own nursery trials', a weed identification guide including images of various key growth stages, and 189 'routine' SOLA's.

We are continuing to work with the Pesticides Safety Directorate on securing crop protection products for the ornamentals sector. As a result of EU legislation, all products used in this sector will have to have a Specific Off Label Approval (SOLA) as the current arrangement of being able to extrapolate from an edible crop, will no longer be allowed. A survey of industry was undertaken towards the end of the reporting year to determine which products growers would like to continue using in the future which therefore need SOLA's to be applied for.

Sector highlights include:

#### **Bulbs & outdoor flowers**

Cut flowers continued to be the main focus for this years activities with the following items being delivered:

- Factsheets on soil disinfestation options for cut flower growers and integrated management of stock Fusarium wilt.
- Grower survey, *HDC News* article and talk to South Holland Growers Club detailing grower experiences without methyl bromide and implementation of HDC project results.
- Grower Open Days for cut flowers in June (weed control) and September (new varieties).

For bulb growers, the following was undertaken:

- Large Narcissus Fly factsheet.
- Establishing links with Dutch bulb researchers and investigating translation of their information for narcissus and tulip growers.

#### **Field Vegetables**

HDC organised or participated in an increase in the number of events for the FV sector. These included crop specific, issue specific and project specific days – amongst the particular highlights were:

- Vision-guided weeder (FV 266) was demonstrated at two events during the summer. This project has led to a commercially available product that advances growers' capability for automated weeding within the rows as well as between rows.



- 'Green issues' featured at several events throughout the year and included specific events on green manures, biofumigants and biodegradable crop covers.
- Irrigation (Alliums) and aphids (Brassicas) focussed in on broad topics of particular relevance to specific groups of vegetable growers

Key publications for field vegetable growers also ranged between general guides and very focussed topics. Well received during the reporting year were:

- Brassica Crop Walkers' guide – covering easy to identify sections on Pests, Predators, Diseases, Nutrient Deficiencies and Physiological Disorders.
- Organic vegetable varieties handbook – updated by NIAB in 2007 and posted out to all HDC Field vegetable members.
- Factsheet on 'Control of volunteer potatoes in vegetable crops' – a particularly important subject as so few products are now available for control within FV crops.

### Hardy Nursery Stock

- A fully revised grower's handbook entitled '*Practical weed control for nursery stock*' was published and distributed to HDC members.
- Pesticide checklist wallcharts were produced for shrubs and herbaceous perennials – these were particularly popular with growers.
- Technical roadshows were presented to growers in Lancashire, Worcestershire, East Anglia and Kent, focussing on the results of two key projects on vine weevil control and reducing production time in nursery stock. A presentation and discussion on avoiding basic mistakes in production was also organised.
- A water open day at East Malling Research provided growers to view the work undertaken on Project HNS 122 at the East Malling Water Centre. The day also provided talks on water saving techniques.
- A study tour to Germany was funded for Tree and Hedging growers to allow them to learn more about production technology that has been developed there.

### Mushrooms

- A factsheet on Mushroom Virus X (MVX) prevention, drawing on five HDC-funded projects together with Defra-funded R&D was delivered to industry in November 2007.

### Protected Crops

This year 25% of our activities were not based on the R&D programme, demonstrating that the remit of our activities continues to widen but also that the on-going R&D programme continues to deliver robust results that can be effectively communicated. Particular highlights from the overall programme include:

- 8 technical events for ornamentals including a Cyclamen Conference (and factsheet on Cyclamen diseases), Electronic Crop Monitoring Open Day using digital images to scan a crop and a Herbaceous Perennials Scheduling Open Day.
- Amongst the conferences held for protected edible crops was a technical seminar in association with the Tomato Growers' Association on new pest, disease and viroid threats of tomato crops. Also for tomato growers, a factsheet was published on energy saving – this collated the findings of 11 Defra and HDC funded research projects, totalling over £1.5M in value.
- 3 'GrowSave' discussion meetings were held on grower holdings helping to implement various energy saving techniques.
- Three protected edible workshops for Lean manufacturing were held in March and accompanied by a grower guide. It is hoped that some of the 40% savings achieved in other sectors will soon become more achievable for protected edibles crops.
- Following the completion of a Defra project, the results were compiled into an easily updateable electronic handbook for growers on pests and diseases of protected herbs. A crop walker's guide will be distilled from this on-line resource next year.
- An A5, laminated Crop Walkers Guide for pot and bedding plant growers was published this year with support from the British Protected Ornamentals Technical Committee.

### **Soft Fruit**

- Harvest workshops were organised for strawberry growers in Worcestershire, Kent and East Anglia to learn about the results of Project SF 71 and to explore ways of improving harvest efficiency on their own farms.
- Two new summer fruiting raspberry varieties Glen Doll and Glen Fyne were released to the industry. Both varieties were bred by the Scottish Crop Research Institute and have been developed through the Scottish raspberry breeding consortium, which is part funded by HDC (Project SF 35a).
- A Strawberry Feed Calculator was produced and distributed to all strawberry growers along with a complementary factsheet on principles of nutrition in soil-less substrates.
- A further eight factsheets were delivered to industry covering variety trials, insect pests of raspberry, Phytophthora root rot in raspberry and strawberry crown rot.

### **Tree Fruit**

The emphasis was on commissioning an update to the apple and pear Best Practice Guides previously funded by Defra. In addition, the following factsheets were produced and delivered at appropriate times:

- Results from HDC-funded cherry variety trials in 2006
- Storage rot control in apples (prompted by the loss of fungicides for the control of storage rots during 2007)

## Promotion

### Overview of HDC's promotion programme 2007-08

#### Starting young

*Fact – Many of our dietary habits and preferences are formed pre the age of eight.*

The Bangor Project (also known as the Food Dudes programme) builds on this premise and, through the use of role-models, repeat tasting and rewards, creates substantial and long-lasting increases in fruit and vegetable consumption amongst children.

Food Dudes has now been rolled out nationally to all primary school children in Ireland: Professor Fergus Lowe, who developed the programme, has been presented with a World Health Organisation (WHO) award for helping to increase consumption of fruit and vegetables. This exciting work is gaining further favour in Europe where substantial finances are being allocated to take forward similar programmes.

HDC has led the development of the Food Dudes initiative in the UK and having encouraged the UK's Schools Food Trust to take part, good progress is being made to put the background infrastructure in place and begin a trial programme in the UK in partnership with some keen Local Education Authorities and individual schools.

#### Making dietary changes in later years

*Fact – Many more people know that they should be eating at least five portions of fruit and vegetables a day than actually eat five portions of fruit and vegetables a day.*

Like all our various habits, changing our own diets is difficult - changing the diets of others, even more so. Understanding the consumer through market research has to be the starting point of any campaign to influence and change diets.

Over the past reporting year, involvement with the dunnhumby Academy has seen several crop associations and other representative groups engage in market data via the HDC-sponsorship of a PhD student. Invaluable insight has been obtained into the consumer purchasing behaviour of a wide range of edible crops including apples, pears, asparagus, brassicas, broccoli, carrots, cherries, fruit and vegetables for schools, herbs, leafy salads, leeks, mushrooms, onions, peppers, plums, raspberries, strawberries, sweetcorn and watercress. In addition, the PhD itself is exploring the purchasing behaviour of pregnant women and the factors influencing their choices.

*Fact - In comparison to the confectionary, breakfast cereal or chip industries, the funds available to promote horticultural produce are currently very modest.*

HDC is currently engaged in two generic campaigns to promotional campaigns aimed at increasing the awareness of the health and wellbeing benefits that a diet rich in fruit and vegetables can bring.

- HDC's own campaign, run by CCD Healthcare, has seen a busy year of activity. One particular initiative has been the launch of the 'I'm in season' website – a site that provides consumers with the knowledge of what specific fruit and vegetables are currently in season and also interesting recipe ideas of what to do with that particular produce. Launched at the Good Food Show in November 2007, and gaining extensive media coverage since, the website is interactive (encouraging people to put forward their own recipe ideas) and encouraging people to think about their food and have a varied diet.
- HDC has also continued to contribute to the Fresh Produce Consortium's 'Eat in colour' campaign. This initiative, which involves many companies in the fresh produce sector, has also taken forward a programme of activity involving all age groups but especially the younger generation.

In creating greater demand for fruit and vegetables – and we are surely all aware of the vast amount of media coverage that this topic receives – there is then a need for individual crop associations to promote 'their' particular produce. HDC has continued to contribute to a few crop specific campaigns, including

carrots and soft fruit, during the reporting year. Measurement of success of these promotional campaigns can then be evaluated through consumer research – such as via the dunnhumby Academy.

### **Ornamental uptake**

HDC funded a study (HNS 160) 'Investigation into the response of consumers to the concept of locally sourced plants'. Using 'Home grown'-branded point of sale material, purchases were significantly increased. Clearly, the local sourcing desire by the public, for a variety of reasons, has potential for all businesses – and is something that should be capitalised upon.

Taking a specific 'crop group' forward, HDC again contributed to the National Conifer Week (HDC project PHNS 004). Like the above project, this initiative has strong HTA involvement and, like previous years, the results have shown increased purchases achieved.

## Finance and Administration

### Levy Collection

With the approval of the Ministers with responsibility for agriculture, for the period 1 April 2007 to 31 March 2008 the Council set the general levy rate at 0.5% of net sales turnover, for mushroom growers at 8p per litre of mushroom spawn purchased and for apple and pear growers at £28.00 per hectare.

As at the date of this report, the position on the twenty-second levy collection period was as follows:

### General Levy

	No of Growers	Amount of levy £
Growers who have registered and paid	1667	4,386,696
Growers invoiced but not yet paid*	28	103,138

### Apple and Pear Levy

	No of Growers	Amount of levy £
Growers who have registered and paid	384	261,599
Growers invoiced but not yet paid*		-

### Mushroom Levy

	No of Growers	Amount of levy £
Growers who have registered and paid	21	104,759
Growers invoiced but not yet paid*	1	1,282

\* - As at 30 April 2008, of the current levies outstanding £27,536 had been received.

In addition 393 growers were required to register with the Council, but were not required to pay a levy. Under the terms of the HDC Order, 53 growers are being pursued to declare their sales for the purpose of assessing the levy.

### Additional Membership

Under arrangements introduced in January 1993 the Council encourages membership of the HDC among companies and individuals who are involved with the horticulture industry, but are not required to pay a levy. These arrangements allow the additional membership categories access to the same information as levy payers.

During the period 39 corporate, 77 consultant, 18 associate, 15 education, and 78 voluntary grower members subscribed to the work of the Council.

### Additional support

As well as the revenues coming from the membership scheme, the HDC receives a great deal of support for the research programme from many companies and consultants in the form of time, equipment, plants or materials. The HDC is very grateful for this kind of support, which enables the funds available to be spread across a greater number of projects.

### Finance

The continuing success of the levy evasion programme together with solid growth in a number of sectors has seen a further 2.3% increase in the levy. The careful management of funds not immediately required for research has continued to enable a significant amount of interest to be earned.

With the accumulated research reserve now almost fully utilised research expenditure decreased by £664k to £3.9m, however the underlying core funding (excluding funds from the research reserve) remained steady at around £3.5m. The Council also increased its expenditure on education and information campaigns to £254k through further support for the campaign on the health and nutrition benefits of fruit and vegetables.

Staff costs increased by £11k as a result of an additional staff member recruited during the year and full year costs for staff members recruited during the previous year although this was partially offset by the reduction in the use of temporary staff. Office costs fell by £33k which related to cost for the development of the computer system in the previous year. Excluding the change in the provision of doubtful debt overall the underlying administrative costs were maintained at previous levels in real terms.

Overall 82.5% of the total expenditure was spent directly on the Council's research, information and communications programmes, with a further 11.2% covering direct support costs. The balance covered administration and Council costs.

**Staff**

Staffing increased by one during the year and at the end of the period there were 17 full time members of staff (2007 –16).

The Council continues to strive to provide an efficient and effective service to the industry, whilst keeping administrative overheads low. However, the Council is mindful of the need to meet its statutory duties and ensure an effective value for money service is maintained. It has to balance prudence with the need to provide the resources to ensure these obligations are met.

## Progress against Targets 2007-08

At the beginning of 2003 the Council put in place its Corporate Plan covering the period until 31 March 2006. With the original initiatives now completed the Council produced a further update at the start of 2006 setting out additional targets, within the original objectives, for the following year. The following pages set out the progress to date made against the various objectives, targets and initiatives set.

A colour-coded indicator has been used to quickly show the stage that each initiative has reached.

- Completed
- ◆ Work is under way
- No significant progress has yet been made.

These are followed by a brief description of activity during the year.

## Research and Development

**Objective - Within the levy budget identify the most profit enhancing issues and commission relevant R&D, taking account of the varying needs of individual sectors.**

### Targets

#### **Maintain and develop effective sector strategies.**

- Produce specific strategies for herbs and leafy salads (including protected lettuce).  
*Two new crop associations have been formed for the PC sector these include the Pepper Technology Group who had their first meeting in July 2007, also the Protected Leafy Salad R&D Group who are part of the British Leafy Salad Association and met for the first time in January 2008. R&D strategies have been updated and agreed with the Outdoor Salad and Radish R&D group and the British Herb Trades Association R&D group.*

#### **Streamline the post project review programme.**

- ◆ Ensure the report backlog is cleared to enable the project review programme to work effectively.  
*Technical guidelines have been updated and circulated to contractors. A concerted effort has been made to clear the backlog of reports.*
- ◆ Annual output and performance will be reported to both panels and contractors.  
*Project performance and feedback to Panels and contractors is underway and is being further reviewed by Technical Managers and Panel Chairmen to provide more effective feedback.*

#### **To investigate and develop new crop opportunities for growers.**

- ◆ Roll out the findings of the desk study (CP 44) and identify topics for the sector panels to take forward to research strategy programmes.  
*Sector summaries are being reviewed by Panels and Crop Associations and future associated R&D requirements considered and incorporated within their individual strategies as appropriate.*

#### **Ensure that the organic research programme is adequately addressed.**

- Further strengthen links with Elm Farm and HDRA through joint organic events.  
*A joint organic event (HDC and Defra) was held in 2007 to review current organic research and to identify R&D priorities for organic vegetable growers. HDC field demonstration events with direct relevance to organic growers presented work on green manures (FV 299), biodegradable plastics (FV 280) and irrigation (FV 326).*
- Following a stakeholder workshop new research priorities for organic growers will be developed by October 2007.  
*An organic vegetable research strategy was developed, discussed with stakeholders and reviewed by the Field Vegetable Panel in December 2007.*

## Cross Sector Issues

### Water

- ◆ Discuss with key agencies and identify current research in this area to avoid duplication and maximise opportunities for collaborative programmes.  
*Liaison with other levy bodies through the Applied Research Forum on water issues has been ongoing during 2007/08 with inclusion of the Environment Agency and NFU to jointly target key areas of concern. HDC have begun a dialogue with the Environment Agency on water issues to increase its awareness of horticulture and attempt to ensure that efforts to improve water use efficiency and diffuse pollution are collaborative in the future.*
- Agree sector specific water strategy with each sector Panel.  
*Sector specific water strategies were completed in the Autumn 2007 and agreed by each sector Panel*
- ◆ Finalise and publish the cross sector water strategy by August 2007.  
*The sector specific water strategies have been used as the basis of developing a HDC cross sector strategy and this is being brought together with the input of key industry contacts during 2008. The HDC strategy will highlight gaps and enable us to target key research and technology transfer in the areas of water use efficiency, water quality and diffuse water pollution in 2009 onwards.*
- ◆ Identify and initiate the key projects.  
*Development of sector specific water strategies in 2007 are now being brought together in new project CP 64 – Development of Water strategy for horticulture (march 08) by Cranfield University Water Science Department. This will allow gaps in our knowledge to be identified for further project development over a 5 year period from early 2009.*

### Waste

- ◆ Commission a review of organic and inorganic waste streams, costs and solutions in order to identify a research programme to address these issues by December 2007.  
*Resubmission of revised proposal deferred until April 2008. A GAP analysis will be carried out following receipt of the waste review (above).  
Following collective input to a workshop HDC Technical and Communication Managers are progressing dialogue with WRAP. Participation in the Agricultural Waste Stakeholders Forum as crops representative of the Applied Research Forum is ongoing.*

### Energy

- Finalise the energy strategy for 2007-2012 (technical and economic consideration of energy saving / environmental technologies) by June 2007.  
*An Energy efficiency / emissions reduction strategy has been completed and several new projects building on this vision have been commissioned. The strategy was circulated to the wider industry and contractors during March 2008.*
- Forward plan and initiate associated priority R&D and TT activities.  
*Project have been completed and communicated to industry, including interactive access via the GrowSave initiative (with funding from the Carbon Trust Networks Programme). A major R&D project was commissioned in November 2007 (PC 278: The development and commercial demonstration of ducted air systems for glasshouse environmental control).*
- ◆ Work with the Carbon Trust and specialist consultants to review low carbon/waste heat business links, biomass and the supply chain opportunities and horticultural applications.  
*HDC have provided input to stakeholder meetings with Carbon Trust staff during 2007/08 including networking information on collaboration on energy saving advice, biomass heating systems, carbon labelling and waste heat opportunities.  
HDC also contributed to the Carbon Trust/ Defra/ British Standards Institute consultations on PAS 2050 (Specification for the assessment of the life cycle greenhouse gas emissions of goods and services / Stakeholder Consultation).*
- Review how future Defra strategies impacts or complements HDC strategy.  
*HDC meetings were organised with Defra programme managers to discuss research priorities and staff attended Defra Stakeholder Consultation event to input to Defra's future strategy development.*



- Initiate trial Carbon footprint cases.  
*Project CP 56: What are the implications of 'Carbon footprinting' for UK horticulture? 'position paper' and associated full report was commissioned by HDC Council to help inform industry debate with buyers and policy makers about the practicalities of reducing carbon footprints in the horticultural sector. The report also identified further areas whereby appropriate R&D could support UK growers in their emissions reduction strategy.*

### Climate Change

- ◆ Identify specific crop R&D requirements linked to climate change (cross reference with new crop opportunities study CP 44).  
*The Council commissioned study (CP 49) which reviewed new crop opportunities on a sector by sector basis and has formed the basis of crop association and sector panel discussions. It is now being used to prioritise recommendations for future R&D or knowledge transfer to help industry exploit these opportunities including exploration in the context of climate change.*
- ◆ Work with Defra/WHRI to identify sector specific issues.  
*Following input to the Defra/ WHRI Climate change survey a new project has been collectively commissioned together with Defra & BPC - CP 57 'Packhouse cooling & crop storage: a commercial demonstration & economic evaluation of ground sink refrigeration'. Via the Applied Research Forum HDC have engaged with the Farming Futures project, managed by Forum for the Future on behalf of the NFU, CLA and Applied Research Forum. Farming Futures focused on translating the science to help farmers and growers prepare for the opportunities and challenges of climate change.*

### Labour/Productivity

- Extend the Lean programme to soft fruit (July 2007) and protected edible crops.  
*The following projects were commissioned: SF 89: Lean production in soft fruit-a case study. PC 257: Lean manufacturing - applying the principles to harvesting tomatoes completed and grower guide is being prepared.*
- ◆ Work with the Warwick Manufacturing Group to encourage uptake of the picking robot in the mushroom industry and explore applications in other sectors.  
*The mushroom harvesting project (CP 22) was completed in March 2008 and has an option to extend for a further year. Automation of Brassica harvesting is being commercially developed (calabrese). Preliminary discussions with WMG have explored potential use of laser trimming for heathers.*
- Investigate application of applied psychology techniques for efficient harvesting of a range of crops including mushrooms.  
*Projects have been completed and a cross sector DVD has been commissioned for communication of the findings. Further work was undertaken to develop a system for pre-selection of staff most likely to perform well (CP 58) and extending the Champion worker model to the selection and training of supervisors (CP 59).*
- ◆ Actively work with the Food Chain Centre on supply chain value analysis on raspberries to be reported in July 2007.  
*The raspberry study (CP 32) was delayed and is due for completion in March 2008. Active participation has taken place in the EU-funded Traceback project on tomatoes to develop a data management system to improve traceability.*

### Continue to maintain and adapt the SOLA programme to ensure growers have adequate chemical and biological crop protection products, particularly against the back-drop of the EU pesticide reviews and ongoing Government and public concerns.

- ◆ Co-operate with PSD in the review of the Long Term Extension of Use Arrangements for ornamentals to ensure minimal impact on industry of the agreed way forward.  
*HDC staff have been closely involved in meetings with PSD to discuss the amendments to the changes to the long term arrangements. HDC are co-ordinating responses from growers following a consultation exercise where growers have been asked to provide detail of key uses.*
- ◆ Work to ensure the cost burden of registration is kept to a minimum.  
*SOLA applications have been co-ordinated to make use of existing residues data and approvals in other Member States, using the Minor Use Mutual Recognition Procedures.*
- ◆ Continue work with PSD and other groups to increase the range of bio-pesticides available to UK growers.

*We are informed that a number of applications have now been submitted to PSD, overall progress is slow, but positive.*

- ◆ Progress the relationships established across Europe to facilitate data exchange and cost sharing for crop protection products for minor crops.  
*HDC staff have attended meetings in Northern Europe with representatives of PSD. As a result of these meetings the first collaborative residue project was developed and led by the UK. At these meetings, the EU database for residues, which was established through HDC funding is promoted and is increasingly being viewed as a positive model to avoid duplication of effort.*

**Identify new contractors within the UK, Europe and Overseas for (i) plant science research in order to maintain an adequate skills base and (ii) non-plant science disciplines (e.g. labour, IT).**

- ◆ Work with all contractors to develop succession plans to maintain current critical skills base.  
*HDC is presently advising the NHF regarding their strategic review of the research base for plant sciences. HDC will also consider the findings of the BBSRC/ Defra succession plans / skills base review which is presently underway.*
- ◆ Expand the range of contractors for energy issues and other cross sector activities.  
*Work ongoing with new contractors as listed. New work also commissioned with Cardiff Business School, Cardiff University (CP 32: Raspberry Value Chain Analysis), the School of the Environment & Natural Resources at University of Wales, Bangor (CP 56: What are the implications of 'Carbon footprinting' for UK horticulture?), Impetus Marketing (HNS 160: Investigation into the response of consumers to the concept of locally sourced plants) and Sensory Dimensions (PC 279: Poinsettia: Commercial evaluation of new varieties and investigation of consumer preferences). HNS Panel at Kew Gardens was used to explore potential contractor expertise relevant to the sector.*
- ◆ Investigate opportunities within EU Framework 7 programme.  
*Most HDC high priority research areas do not match EU framework 7 priorities and blanks have been drawn in some areas e.g. Fusarium research in bulbs and bulb onions. There may be scope for engagement via W-HRI with a new EU project exploring closed greenhouse systems and associated technologies for P&D monitoring.*
- ◆ Develop further collaboration at an international level.  
*A connection between the HDC and French research institutes has been established and potential for collaborative work is being explored.*

## Objective - Actively work with Defra and other funding bodies in such a way as to maximise the overall amount and relevance of horticultural research and development.

### Target

#### Increase the proportion of complementary funding from government and other sources to supplement the levy contribution to horticultural research.

- Work with Defra to ensure their new strategy addresses appropriate issues of significance to horticulture. Ensure productive links are maintained with Defra staff.  
*Detailed discussions have taken place with key Defra personnel including; Head of Sustainable Farming and Food Science, Head of Policy, HortLINK and Sustainable Arable / Renewable Materials project coordinators. HDC obtained funding from the Carbon Trust Networks Programme in an open competition. Following HDC's input to Defra Climate Change study, collaborative funding was awarded via the Defra Innovations Programme. In collaboration with NFU, Defra, other levy bodies and devolved governments, HDC co-funded CP 52: Provision of a study of responsibility and cost sharing mechanisms in the quarantine health sector.*
- Through the Horticulture and Arable LINK programmes seek further opportunities for HDC to maximise returns to growers for investment of R&D funds.  
*Start up discussions within the HortLINK strategy have taken place across most sectors. This has resulted in several new concept submissions and a new project (PC/SF 276: Pheromone technology for management of capsid pests to reduce pesticide use in horticultural crops). A new Sustainable Arable LINK has also been initiated (FV 322: Broad beans: Management and control of Bruchid bean seed beetle).*
- ◆ Actively progress the specific Applied Research Forum joint R&D with other levy bodies.  
*Communications representatives also actively participated in ARF meeting October 2007 to encourage cross levy board cooperation and presented update on HDC's R&D coordination of crop rotations within ARF. Collaborations and information sharing is ongoing for priority cross commodity research areas.*
- Advise Defra of key strategic research priorities.  
*HDC meetings were organised with Defra programme managers to discuss research priorities and staff attended Defra Stakeholder Consultation event to input to Defra's future strategy development. The HDC interfaced with the Environment Agency/ARF events focusing on key strategy areas including Water Use Efficiency and Diffuse Pollution with subsequent ongoing liaison with the EA on these key areas. Liaison ongoing with Defra on water issues including project development and incorporation of HDC thinking in the Defra/EA/NE Catchment Sensitive Farming Initiative.*
- ◆ Through the ARF respond to BBSRC's wish to fund more applied research.  
*Contractor discussions have taken place to explore this 90% (BBSRC):10% (industry) funding scheme but it remains difficult to identify projects which are supported by the Panels.*
- ◆ Develop structured links with EU and international research teams and funders to develop mutually beneficial research projects.  
*HDC organised meeting of European Onion Growers Network (EURONION) to explore potential for collaborative project on Fusarium. Further collaborative opportunities are under discussion with Horticulture Australia.  
Discussions have taken place between UK, Dutch and Irish researchers and despite initial enthusiasm no further progress has been made.*

## Communications

**Objective - Establish and maintain two-way communications with growers to ensure that all HDC and other funded research and development is put into profitable practice wherever relevant, taking due account of the disparate needs of the industry.**

### Targets

**Continue to deliver HDC and other R&D results in a timely and effective manner in a format that is clear, simple to understand and that can be readily adopted.**

- Ensure that the growers crop profiles and technical contacts data on the new computer system are correct and up-to-date and maximise the potential of the system to ensure that R&D results are communicated effectively and rapidly.  
*The new database has been successfully integrated throughout the organisation and has undergone a series of checks to ensure the accuracy of data. These checks will form part of an on-going quality control process.*  
*A number of new protocols have been developed to ensure that HDC staff are fully conversant with the new system to achieve effective delivery.*
- Investigate in-house print options for reducing costs of HDC factsheets.  
*Two in-house print options were explored but not progressed due to announcements regarding the impending changes to the levy boards.*

**Develop the use of electronic communications further to improve service and speed of delivery to levy payers.**

- Produce SOLAs using the newly developed template which allows multiple staff to simultaneously edit/amend one document thus saving staff time and improving efficiency. Use the template for distribution of the finalised SOLA Notices of Approval to industry.  
*A new system for electronic delivery of SOLAs was introduced in May 2007, improving the efficiency of SOLA delivery, and was well received by industry.*
- Following the installation of the new computer system, re-institute the ability to upload Grower Summaries to the HDC Website.  
*Following the introduction of the new computer system, HDC has automated the daily uploading of Grower Summaries, pdfs and event information to the website.*
- ◆ Investigate options for hyperlinking the Grower Summaries mentioned in the Weekly email to the corresponding pdf document on the HDC Website.  
*This has been investigated but is pending further development once user access issues have been fully resolved.*
- Develop an interactive web-based template for 'best practice' publications providing the facility for rapid and timely updating by authors and simple and intuitive access for users. Pilot with apples and protected herbs and incorporate existing Defra funded information.  
*A template has been successfully developed for on-line access to protected herb best practice information (PC 210). This was launched to industry in March 2008.*  
*Specifications for the tree fruit best practice guides have been agreed with the intention of delivering to industry in the next reporting year.*

**Develop and implement a communications strategy to identify knowledge gaps and the needs of the industry outside the core R&D programme.**

- Communicate the recently revised technical and communications strategies for each sector to the industry via a series of articles in *HDC News* inviting comment and additional suggestions from the industry.  
*Five feature articles were published in HDC News during 2007 outlining the main deliverables for each sector over the coming reporting year and inviting feedback from industry. An additional article in the February 2008 HDC News covered our pesticide activities.*  
*HDC communications staff have continued to review sector requirements with Crop Associations and Panels.*
- Distribute sector strategies in a combined strategy document (technical and communications) to current and potential contractors.

*A combined communications strategy document was published in May 2007 and subsequently disseminated to existing and potential contractors.*

**Strengthen the technology transfer aspects of the research programme to improve the uptake/adoption by growers.**

- Following the success of the DVD on product handling in the ornamental sector, scope the need for a similar initiative for the edible supply chain.  
*The potential for a produce handling DVD for the edibles supply chain was investigated. It is unlikely this will be taken forward in the near future due to lack of support from the multiple retailers.*
- ◆ Review all Self Assessment Forms with crop associations to assess industry uptake of R&D output and identify any barriers preventing uptake. Provide an overview of discussions to the relevant sector panel and develop appropriate communications plans to enhance uptake.  
*There has been limited progress in this area though the issue remains current and the methods of achieving this target need to be reviewed.*
- Working with the Carbon Trust and FEC Services, pilot two energy saving focus groups for protected crops growers to optimise adoption of energy saving techniques such as temperature integration and thermal screens.  
*In September 2007, HDC in association with FEC Services Ltd, secured funding from the Carbon Trust to launch an initiative for protected crops growers called 'GrowSave'. This initiative revolved around two case study nurseries that implemented various energy saving techniques and shared their experiences with the group through direct discussion or via the GrowSave website.*
- Consider new methods for delivering complex R&D project results, particularly those resulting from demonstration projects, to industry in readily digestible, bite-size components.  
*The GrowSave discussion groups and detailed web-based information resource have allowed growers to access climate control computer settings of each case study nursery in real-time. Coupled with free, on-line consultancy, it is hoped growers have been implementing the recommended settings on their own nursery in parallel with the relevant case study nursery. In this way, the complex results of HDC funded energy R&D can start to be truly taken up.*
- Re-invigorate activity with the main trade press to increase awareness of HDC-funded initiatives within industry.  
*Four meetings with the trade press were held during the reporting year. A new HDC press policy has been proposed for discussion with the new Board after April 2008.  
HDC delivered an increased number of press releases to the principal trade magazines.*
- ◆ As far as possible, ensure projects that aim to develop diagnostic kits for industry, produce user friendly, affordable and reliable products that can be readily adopted.  
*Meetings were held with Warwick HRI to progress the delivery of diagnostic kits to the field vegetable sector (Clubroot, Dark leaf spot, etc). As progress with these kits is still in the research stage, final delivery to industry is scheduled for 2008.*

**Review decision support systems and their effectiveness as a mechanism for technology transfer.**

- Initiate a study specifically to assess uptake of decision support systems within industry, the provision of on-going staff training, continued telephone support and future development of currently available systems.  
*A meeting was held with Warwick HRI and Glasgow University in January 2008 to further the development of models to industry. Priorities of model development and time scales for delivery of MORPH 5 (December 2008) were both agreed.  
MORPH Newsletters, written by Warwick HRI, were distributed electronically to the HDC membership.*
- Investigate industry's language requirements of currently available DVD's and reproduce in additional languages where necessary.  
*Further discussions with the Tree Fruit and Mushroom Panel were held to assess future language requirements for these DVDs. The eight languages currently catered for were deemed sufficient so no further action was required.  
The HDC Soft Fruit Panel have requested that the Champion Picker DVD is translated into three further languages.*

**Through a variety of techniques obtain feedback on the relevant value and uptake of specific HDC activities.**

- Work with consultancy organisations and corporate HDC members to proactively provide reference packs of factsheets, project reports etc to facilitate the awareness of HDC R&D and to provide feedback on the level of use and uptake.

*86% of corporate and consultant members capitalised on the offer of receiving grower summaries and event handouts electronically, publication order forms for their clients and factsheet archive folders for easy reference.*

- Conduct an exercise to assess if the information gained in the suite of energy training courses for protected crops is now being implemented by industry and if not, identify the reasons why.  
*Information from exit polls at the energy training courses was incorporated into the GrowSave initiative in 2007/08.*

**Actively work with other funding bodies in such a way as to maximise the overall amount and relevance of communications activities.**

- Working with other levy bodies, actively progress Applied Research Forum initiatives such as the Forum for the Future Climate Change project, Food – A Fact of Life, Soil Management training resource.  
*HDC contributed to a number of soil management factsheets which led to a series of articles in Farmers Weekly and a web resource [www.farmingfutures.co.uk](http://www.farmingfutures.co.uk)*
- Further investigate the potential of additional funding streams such as Carbon Trust, Lincolnshire Leader Plus and the England Rural Development Programme.  
*Funding was obtained in 2007 from the Carbon Trust for the 'GrowSave' initiative and from Lincolnshire Leader + to support technology transfer and R&D at the Kirton Cut Flower Centre.*

## Promotion

**Objective – Where specifically identified as being appropriate, sponsor targeted market research and product promotional activities.**

### Targets

**Continue to work with on-going promotional projects within the edibles sector to ensure development and expansion of the market for growers.**

#### Actions

- Actively manage and steer HDC's seasonality campaign to deliver benefits to the edibles sector.  
*During 2007, and following presentations to the sector panels, three industry representatives agreed to sit on HDC's seasonality campaign steering committee.  
A forward programme of events and activities were held during the year, culminating in the launch of the 'I'm in season' website ([www.iminseason.com](http://www.iminseason.com)) at the Good Food Show, NEC, Birmingham, November 2007.*
- Continue support for the 'Eat in colour' project, run by the Fresh Produce Consortium.  
*HDC continued to participate in the FPC-led 'Eat in Colour' project. This avoided duplication of activity between this initiative and the above project led by HDC.*
- Continue to promote the findings of the Bangor Project with the UK Government.  
*Following extensive discussions with the UK Government, the Schools Food Trust (SFT) has embarked on an initiative with the HDC to roll out the Bangor Project in some trial areas of the UK. Financial support for this initiative has been forthcoming from the SFT to put the required resources in place to help Local Education Authorities take up this initiative.  
Following a national roll-out in Ireland, work continued at a European level aiming to get the principles of the Bangor Project taken up more widely.*
- Ensure that all sectors are aware of the benefits arising from working with the dunhumby Academy via the HDC-funded PhD student. Encourage uptake through case studies and events and demonstrate how crop associations can maximise benefit from this valuable opportunity.  
*Panels, Crop Associations and other representative groups have been made aware of the dunhumby student initiative through a series of presentations and follow-up correspondence. This has resulted in twenty-one market research queries being posed by industry (by March 2008).  
Plans were progressed to hold an event for Crop Associations designed to help them make the most of the opportunities offered by this initiative.*

- Communicate HDC's promotional activities to Members via a feature article in *HDC News*.  
*A feature article outlining all of HDC's edible promotion projects was included in the June 2007 issue of HDC News.*

**Work with crop associations and other groups within the ornamentals sectors to identify targeted promotional opportunities.**

**Actions**

- Continue involvement with ornamental crop associations eg British Heather Growers' Association and British Conifer Growers' Association in developing specific promotional campaigns for these crop interests.  
*For the third year running, HDC contributed to National Conifer Week in October 2007.*
- Investigate opportunities for supporting market research and promotional activities for other crop interests within the ornamentals sector e.g. Buying 'home-grown'.  
*HDC funded a market research study to assess the effect of 'home-grown' labelling of ornamental plants. The work indicated a strong consumer preference for locally sourced plants. The results were extensively reported in the trade press, HDC News and at grower events.*

**Develop in-house capabilities to ensure the effective management of promotional activities.**

**Actions**

- ◆ Identify an HDC staff member to receive specific training to oversee the in-house management of HDC's promotion-related projects.  
*This initiative has been delayed until the position on HDC promotional activities is clarified (post April 2008).*
- ◆ Develop a system to measure the effectiveness of funded campaigns.  
*The dunnhumby studentship has been used to measure the success of promotional campaigns for specific edible crops including peppers and carrots.  
Concept notes presented to HDC Panels for promotion-related funding (carrots) have 'measurements' of success included for future evaluation.*

**Work with the NFU and other organisations to promote the Year of Farming and Food.**

**Actions**

- Ensure HDC contribution and involvement, via the ARF Nutrition Group, to the Farming module being developed on the British Nutrition Foundation's 'Food – A Fact of Life' website.  
*An additional module to the Food – A Fact of Life website ([www.foodafactoflife.org.uk](http://www.foodafactoflife.org.uk)), based on food and farming, was launched in September 2007 (to coincide with the Year of Food and Farming).*

## Levy Management

**Objective - Actively manage the levy collection process and ensure maximum levy collection.**

### Targets

**Ensure levy management system is seen by the majority of growers as simple and equitable.**

#### Actions

- Work with Defra to ensure the new Levy Board UK legislation derived from the NERC Bill equitably addresses the needs of the horticulture industry.  
*The Chairman, Council and Executive have all engaged extensively with Defra and AHDB to ensure the legislation met, as much as possible, the requirements of the horticulture industry. Particularly assurances were secured in respect of 'ring-fencing' the horticultural levy.*
- Work with PGRO to simplify levy collection process for pea growers.  
*Discussion with the new PGRO Chief Executive has resulted in the adoption of a simplified system similar to that utilised for the blackcurrant growers / GSK.*

**Reduce levy avoidance.**

#### Actions

- Advertisements will be placed in the Trade Press to remind growers of their obligations in relation to the HDC Order.  
*Advertisements were placed in the trade press, NFU Journal and HTA magazine reminding growers of their obligations in relation to the HDC Order.*
- ◆ Continue dialogue with APS to include a mandatory question on HDC membership.  
*Whilst levy board membership is included within the APS audit it is not currently mandatory. Further dialogue has continued with the APS Board but there remains a reluctance to commit to making the question mandatory.*
- Review arrangements for the field audits.  
*With the impending transfer to AHDB and the illness of the current field auditor the consideration of new arrangements have been deferred until next year.*

**Clear outstanding levy payments during the year**

#### Actions

- Establish a legal programme to clear outstanding balances.  
*A comprehensive programme has been undertaken to reduce the balance from £320k to £41k. Whilst there are still a couple of cases pending, of the remaining balances arrangements have been agreed to clear them through instalments.*



## Finance and Administration

**Objective - Ensure that all activities, both internal and external are undertaken in a focused and cost effective manner.**

### Targets

**Ensure the HDC has an effective outcome from the Levy Board reform process for growers.**

#### Actions

- Ensure ministers and officials in Defra are fully aware of the implications for horticultural growers and growers' views.  
*The HDC has maintained an ongoing dialogue with Defra officials, including attendance by officials at Council, to ensure the implications of proposed changes and the views of growers are conveyed.*
- Actively work with the new chairman and sector boards to ensure that the desired outcomes are achieved.  
*The HDC has worked with all the other levy board, particularly through the Project Board, to ensure a positive outcome from the review process.*
- ◆ Develop clear implementation plans for the way forward once a decision has been taken. These plans must ensure minimum disruption to the delivery of services to growers.  
*Whilst clear plans have been developed to ensure the ongoing delivery of HDC services to growers during the coming year some aspects of the AHDB structure are still unknown. Consequently some areas still remain to be resolved.*

**In real terms maintain internal costs at current levels.**

#### Actions

- Continue to monitor all expenditure to ensure value for money.  
*Careful management of internal costs, including the regular review of service providers, has enabled internal costs to be maintained at current levels in real terms.*

**Maximise benefits from the new computer system.**

#### Actions

- ◆ Review all operations to ensure these are being effectively managed and, where appropriate, have been integrated into the computer system.  
*Both finance and research operations are now fully incorporated into the new system and work on communications, including integration with the website, is near completion.*

**Review the Risk Management strategy**

#### Actions

- ◆ Undertake a comprehensive review of the risk register to ensure potential risks are identified and mitigated.  
*Particularly in light of the transfer to AHDB the Council has reviewed the risk register to ensure strategies are in place to mitigate risks arising and enable the new organisation to continue providing a high quality service to the horticultural industry.*




**Martin Beckenham** - Chief Executive (HDC) **Kevin Roberts** - Chief Executive (AHDB)  
and Accounting Officer

18 June 2008

# Remuneration Report

## Remuneration Committee

The Council does not have a remuneration committee.

The Chairman's salary is currently set by the Government's Senior Salary Review Body and the Chief Executive's and other staff salaries are set by the Chairman on behalf of the Council in lieu of a remuneration committee.

## Remuneration Policy

The main objectives of the Council's remuneration policy are to provide a remuneration package that will attract, retain and motivate individuals of an appropriate calibre.

Salaries are reviewed annually with effect 1 October (Chairman 1 April) and are benchmarked against comparative Defra positions and similar sized organisations. Adjustment may be made to reflect individual performance assessment arising from the annual appraisal scheme, changes in responsibilities and to ensure salary levels remain competitive. The average salary increase for 2007-08 was 4.3% (2006-07 4.3%).

Pensions are provided through contributions to employees personal pension schemes and made at a rate of 4 – 17% of base salary dependent on grade. All these schemes are defined contribution schemes.

## Policy on duration of contracts and notice periods and termination payments

Ministers have the right to terminate the appointment of the Chairman in accordance with the regulations set out in the Industrial Organisation and Development Act 1947 and the Horticultural Development Council Order 1986 (as amended). The Chairman may resign by notice given in writing to the Secretary of State or other Ministers if appropriate. No notice period is required and no termination payments apply.

The notice period for the Chief Executive is determined by the Chairman on behalf of the Council. The Chief Executive's contract is terminable by either party and requires 3 months notice. No termination payments apply.

The remuneration of key management during the year was as follows: (audited)

	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
<b>Chairman</b>		
Salary and allowances	37,456	36,507
Pension	6,367	6,206
	<b>43,823</b>	<b>42,713</b>
<b>Chief Executive:</b>		
Salary and allowances	70,680	67,785
Pension	10,682	10,197
Taxable Benefits	-	-
	<b>81,362</b>	<b>77,982</b>

The Chairman and Chief Executive did not receive any bonuses during the year (2007- nil) or any expense allowance other than those for reimbursement of actual expenses incurred directly (2007 – nil). Pension contributions for the Chairman and Chief Executive were made at a rate of 17%.

Council Members do not receive remuneration but are entitled to claim an honorarium of £100 per day (after tax) for each day devoted to the activities of the Council. No pension contributions are paid for Council Members.



**Kevin Roberts**  
Chief Executive (AHDB) and Accounting Officer  
18 June 2008

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## Statement of the Accounting Officer's Responsibilities

The Accounting Officer of the Department for Environment, Food and Rural Affairs has designated the Chief Executive of the Agriculture and Horticulture Development Board as the Accounting Officer. His relevant responsibilities as Accounting Officer, including his responsibility, in consultation with the devolved administrations, for the propriety and regularity of the finances of the HDC for which he is answerable, and for the proper keeping of records, are set out in the Non-Departmental Public Bodies' Accounting Officer Memorandum.

Under section 7 of the Industrial Organisation and Development Act 1947, the Horticultural Development Council is required to prepare a statement of accounts for each financial year in the form and on the basis determined by the Ministers with responsibility for agriculture, with the consent of the Treasury. The accounts are prepared on an accruals basis and must show a true and fair view of the Council's state of affairs at the year end and of its income and expenditure and cash flow for the financial year.

**In preparing the accounts the Accounting Officer is required to:**

- observe the accounts direction issued by the Ministers, including the relevant accounting disclosures and requirements, and apply suitable accounting policies on a consistent basis;
- make judgements and estimates on a reasonable basis;
- state whether applicable accounting standards have been followed, and disclose and explain any material departures in the financial statements; and
- prepare the financial statements on the going concern basis.
- disclose all relevant audit information to the Comptroller and Auditor General



**Kevin Roberts**  
Chief Executive (AHDB) and Accounting Officer

# Statement on Internal Control

## Scope of responsibility

My appointment as Accounting Officer of AHDB, carries with it responsibility to maintain a sound system of internal control that supports the achievement of the HDC's policies, aims and objectives set by the Council and approved by the Department for Environment, Food and Rural Affairs, safeguards the public funds and the Council's assets for which the Accounting Officer was personally responsible, and accords with the responsibilities assigned to that individual in Managing Public Money.

## The purpose of the system of internal control

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

The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of the HDC's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place in the HDC for the year ended 31 March 2008 and up to the date of approval of the annual report and accounts, and accords with Treasury guidance.

## Capacity to handle risk

Strategic leadership on risk management issues comes from the Audit Committee, which is able to draw on the expertise of the Council with experience of the private sector and other government bodies.

The management of risk within the HDC is formalised in a risk management strategy. As part of this strategy a Risk Register is maintained and reviewed by the Executive and Council, with risks being ranked in terms of probability and impact with appropriate actions being identified. The strategy and register is available to staff. A formal risk management review process has been established which is reviewed by the Audit Committee on an annual basis.

## The risk and control framework

### Governance

The Council consists of 15 members appointed jointly by the Agriculture Ministers. Twelve are growers; one represents employees in the industry; one has expertise in marketing and one (the Chairman) is an independent member. To advise it upon various areas of its functions and to draw on the experience of a wider range of individuals involved in the sectors of horticulture served by HDC, nine committees report to the Council. These are the seven sector panels, comprising of growers elected by their peers; the Audit Committee, currently made up of all the Council members; and the Appeals Committee who consider cases where a strict application of the rules set out in the HDC Order would result in undue hardship.

The Council meets at least four times a year and provides strategic direction, approval of key expenditure and through the annual budget general expenditure. The Audit committee meets twice a year at which the Head of Internal Audit attends to report orally and in writing and receive the committee's instructions. The committee also review the risk register with myself and provide direction as appropriate.

The HDC, as an executive Non-Departmental Public Body has adopted the principles set out in the Nolan Report wherever practical and appropriate. This has included the implementation of a Code of Conduct for Staff and a Code of Practice for Council Members. Both codes require Council members and staff to conduct all their dealings with the public in an open and responsible way taking account of the Code of Practice on Openness. A Register of Members' Interests is maintained and can be inspected at the Council's offices.

### Strategy and Planning

The aims and mission of the Council are set out on page 8. These objectives are translated into outcomes through the Corporate Plan, which sets out the key targets within each objective and the actions necessary to achieve them. This plan is circulated to primary stakeholders for consultation.

With research and technology transfer being the primary functions of the HDC the Corporate Plan draws on the Research Strategies developed by each sector panel which identifies and classifies their research needs. These also draw on issues identified by growers, grower associations, the panel's scientific advisors and researchers. The Research Strategy is very much a living document that is modified, refined and updated as new issues arise and priorities change.

### **Programme and Project Management**

Each sector panel develops a research programme based on the priorities identified in its Research Strategy, which is managed by a Technical Manager and Communications Manager. The panels meet regularly to review the progress of their project portfolio and discuss new proposals, the details of which are recorded.

Each project is covered by a contract which details the time scale, costs, objectives, milestones, delivery requirements and quality parameters. The day to day management of each project is undertaken by the Technical Manager with the support of a grower coordinator who ensures work undertaken is carried out in accordance with current industry practice. The Communications Manager ensures that relevant information is conveyed to the industry during the course of the project and that a plan is in place at the end of the project to communicate the results to the industry in such a way to facilitate the maximum take up.

### **Change Management**

The Council is currently subject to a change in status, as a result of the levy board reform programme, from a Non-Departmental Public Body to becoming part of the Agriculture and Horticulture Development Board (AHDB), although management of the horticultural sector will be undertaken by the newly established Horticultural Development Company, a company limited by guarantee.

This process is now well advanced but has had relatively little direct impact on the Council's operations during the past year, although has significant implication for the future delivery to the horticultural industry. As a member of the Project Board charged with managing the implementation process I have been able to assess any potential implications for the HDC. Areas with implications for internal control or the efficient delivery of services have been identified and appropriate action taken. However, at this stage a significant number of issues remain unresolved and therefore there has been a continuing need to monitor developments and be prepared to take appropriate action when fuller details are available.

With the new structure scheduled to be effective from 1 April 2008 significant resource has been needed to ensure the smooth transition of the changes and that risks to the delivery of services to the growers have been identified and mitigated.

### **Performance Management**

The overall financial performance of levy collection and research expenditure is monitored by the Council at its quarterly meetings. The performance of research projects are monitored by the panels for their sector. Additionally the Chairman and I meet with the technical staff quarterly to review the assessment forms on completed projects. These help provide feedback to the managers, Council and panels about lessons learned for developing future projects and communication.

The Corporate Plan targets are periodically reviewed with staff during the year to ensure these are progressing to plan. The performance against these targets is shown on page 31 of the report.

### **Review of effectiveness**

As Accounting Officer, I have responsibility for reviewing the effectiveness of the system of internal control. My review of the effectiveness of the system of internal control is informed by scrutiny by the Chairman (an independent member of the Council), the Audit Committee, the senior managers within the Council who have responsibility for the development and maintenance of the internal control framework and comments made by the external auditors in their management letter and other reports. I have been advised on the implications of the result of my review of the effectiveness of the system of internal control by the Council and the Audit Committee and a plan to address weaknesses and ensure continuous improvement of the system is in place.



### **Kevin Roberts**

Chief Executive (AHDB) and Accounting Officer  
18 June 2008

# The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament and the Scottish Parliament

I certify that I have audited the financial statements of Horticultural Development Council for the year ended 31 March 2008 under the Industrial Organisation and Development Act 1947. These comprise the Income and Expenditure Account, the Balance Sheet, the Cash Flow Statement and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

**Respective responsibilities of the Horticultural Development Council, Accounting Officer and auditor**  
The Horticultural Development Council and the Accounting Officer are responsible for preparing the Annual Report, the Remuneration Report and the financial statements in accordance with the Industrial Organisation and Development Act 1947 and Ministerial directions made thereunder and for ensuring the regularity of financial transactions. These responsibilities are set out in the Statement of Accounting Officer's Responsibilities.

My responsibility is to audit the financial statements and the part of the remuneration report to be audited in accordance with relevant legal and regulatory requirements, and with International Standards on Auditing (UK and Ireland).

I report to you my opinion as to whether the financial statements give a true and fair view and whether the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Industrial Organisation and Development Act 1947 and the Ministerial directions made thereunder. I report to you whether, in my opinion the management commentary, included in the Annual Report is consistent with the financial statements. I also report whether in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

In addition, I report to you if Horticultural Development Council has not kept proper accounting records, if I have not received all the information and explanations I require for my audit, or if information specified by HM Treasury regarding remuneration and other transactions is not disclosed.

I review whether the Statement on Internal control reflects Horticultural Development Council's compliance with HM Treasury's guidance, and I report if it does not. I am not required to consider whether this statement covers all risks and controls, or form an opinion on the effectiveness of Horticultural Development Council's corporate governance procedures or its risk and control procedures.

I read the other information contained in the Annual Report and consider whether it is consistent with the audited financial statements. This other information comprises the Chairman's Report, the Chief Executive's report, the unaudited part of the remuneration report, the summary of performance and the Annexes. I consider the implications for my report if I become aware of any apparent misstatements or material inconsistencies with the financial statements. My responsibilities do not extend to any other information.

## **Basis of audit opinions**

I conducted my audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. My audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements and the part of the Remuneration Report to be audited. It also includes an assessment of the significant estimates and judgments made by the Horticultural Development Council and Accounting Officer in the preparation of the financial statements, and of whether the accounting policies are most appropriate to the Horticultural Development Council's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements and the part of the Remuneration Report to be audited are free from material misstatement, whether caused by fraud or error, and that in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements and the part of the Remuneration Report to be audited.

**Opinions**

In my opinion:

- the financial statements give a true and fair view, in accordance with the Industrial Organisation and Development Act 1947 and Ministerial directions made thereunder, of the state of the Horticultural Development Council's affairs as at 31 March and of its deficit and cashflows for the year then ended;
- the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Industrial Development Act 1947 and Ministerial directions made thereunder; and
- the management commentary, included within the Annual Report, is consistent with the financial statements

**Opinion on Regularity**

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

I have no observations to make on these financial statements.

T J Burr  
Comptroller and Auditor General  
National Audit Office  
151 Buckingham Palace Road  
London  
SW1W 9SS

3 July 2008

# Financial Statements

## Income and Expenditure Account

for the year ended 31 March 2008

	Notes	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
<b>Gross income</b>			
Levies	2	4,996,592	4,886,316
Other contributions	3	124,870	68,589
Other income	4	186,789	180,996
		<b>5,308,251</b>	<b>5,135,901</b>
<b>Expenditure</b>			
Horticultural research	5	3,866,476	4,529,797
Education and information campaigns		253,951	229,982
Communications	6	495,477	573,094
Research Project Management	7	364,264	377,402
Communications Management	8	262,616	265,241
Administration expenses	9	262,363	211,112
Council expenses	10	67,897	64,018
Enforcement costs	11	24,462	4,293
		<b>5,597,506</b>	<b>6,254,939</b>
<b>(Deficit)/Surplus for the year on ordinary activities</b>			
before taxation		(289,255)	(1,119,038)
Corporation Tax	18		
after taxation		(289,255)	(1,119,038)
Retained surplus brought forward		1,680,012	2,799,050
<b>Retained surplus carried forward</b>	19	<b><u>1,390,757</u></b>	<b><u>1,680,012</u></b>

- (i) There are no recognised gains or losses other than those included in the income and expenditure account.  
(ii) All items included in the income and expenditure account relate to continuing operations.  
(iii) The notes on pages 51 to 56 form an integral part of these financial statements.



## Balance Sheet

As at 31 March 2008

	Notes	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
<b>Tangible fixed assets</b>	14	<b>11,442</b>	<b>18,165</b>
<b>Current assets</b>			
Levies outstanding	15	179,698	320,329
Trade and other debtors	16	80,865	148,478
Prepayments		25,162	13,140
Cash at bank		1,748,398	3,274,688
Cash in hand		100	100
		<b>2,034,223</b>	<b>3,756,735</b>
<b>Creditors</b>			
Amounts falling due within one year	17	(654,908)	(2,094,888)
<b>Net current assets</b>		<b>1,379,315</b>	<b>1,661,847</b>
<b>Total assets less all liabilities</b>		<b><u>1,390,757</u></b>	<b><u>1,680,012</u></b>
<b>Financed by retained revenue surplus</b>	19	<b><u>1,390,757</u></b>	<b><u>1,680,012</u></b>

The notes on pages 51 to 56 form an integral part of these financial statements.



**Kevin Roberts**  
Chief Executive (AHDB) and Accounting Officer

18 June 2008

## Cash Flow Statement

for the year ended 31 March 2008

	Notes	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Net cash flow from operating activities	21	(1,667,288)	(1,570,959)
<b>Returns on investments and servicing of finance</b>			
Interest received		140,998	161,117
<b>Capital expenditure</b>			
Payments to acquire tangible fixed assets		-	(6,555)
Receipts from sale of tangible fixed assets		-	-
Net cash (outflow)/inflow before financing		<b>(1,526,290)</b>	<b>(1,416,397)</b>
Increase in cash and cash equivalents	22	<b><u>(1,526,290)</u></b>	<b><u>(1,416,397)</u></b>

## Notes to the Financial Statements

### 1 Accounting policies

#### Form of the Accounts

The accounts have been prepared in the form directed by the Secretary of State for the Department of the Environment Food and Rural Affairs, the Minister for Environment and Rural Affairs in Scotland, and the Minister for Environment, Planning and Countryside in Wales ('the Ministers') with the approval of HM Treasury in accordance with the Industrial Organisation and Development Act 1947. The accounts are prepared in accordance with generally accepted accounting practice in the United Kingdom (UK GAAP), the Companies Act requirements, and the disclosure and accounting requirements contained in the Financial Reporting Manual (FReM), in so far as they are appropriate to the HDC and are in force for the financial year for which the accounts are prepared. The accounts are prepared under the historical cost convention.

#### Income recognition

Income arising from levy and voluntary contributions is recognised at the point of invoicing. Interest receivable and royalties are accounted for on an accruals basis.

#### Income and Expenditure Analysis

Expenditure on general activities is analysed into the main categories of horticultural research, education and information campaigns, communications, research management, communications management, administration expenses, council expenses and enforcement costs. Staff salaries and expenses, accommodation costs and general office expenses are allocated between research management, communications management and administration expenses by reference to the functions of the staff and the accommodation that they occupy.

Research and development project expenditure is recognised on an accruals basis with the balance of the project expenditure not accrued being disclosed as a commitment.

Research management and communication management expenditure is incurred in the process of commissioning and monitoring research and development and making the results available to the industry. Administration expenses are incurred in the process of collecting the levy and the day to day running of the Council.

As the HDC is not VAT registered, all VAT is treated as irrecoverable expense and is recognised on the income and expenditure statement in the relevant expense category.

#### Fixed Assets

The fixed assets are stated at historical cost less depreciation also calculated on historical cost. The Council considers this treatment to be appropriate in view of the small value involved and does not consider re-stating the figures at current value would materially affect the financial position.

The Council has a capitalisation threshold of £1,000 for fixed assets.

#### Depreciation

Depreciation is provided on all tangible fixed assets at the rates calculated to write off the cost, less estimated residual value, of each asset evenly over its expected useful life on a straight line basis, as follows:

Office furniture and equipment	straight line method over 6 <sup>2</sup> / <sub>3</sub> years
Computer equipment	straight line method over 3 years
Communication equipment	straight line method over 5 years

#### Financial Instruments

The HDC has no borrowings, therefore has no exposure to interest rate risks, and relies primarily on the levy income for its cash requirements and is therefore not exposed to liquidity risks. All material assets and liabilities are denominated in sterling so that it is not exposed to currency risks.

#### Taxation

After taking the advice of legal counsel the Council considers that it is not assessable for taxation on the excess of charges to growers over its expenditure on the basis that it qualified as a Scientific Research Association under section 508 of the Income and Corporation Taxes Act 1988.

#### Leased Assets

Rentals payable under operating leases are charged to the income and expenditure account as incurred.

#### Pension Costs

The Council makes defined contributions to personal pension schemes held by certain employees, the assets of which are held separately from the HDC in independently administered funds. The contribution rates are in line with the equivalent rates within the Civil Service. Therefore the HDC does not administer a separate pension fund and no assets or liabilities are recognised in the balance sheet.

#### Transfer to AHDB

On 1 April 2008 the functions, responsibilities, assets and liabilities of the Horticultural Development Council (HDC) were transferred to its successor, the Agricultural and Horticultural Development Board (AHDB). This transfer was in accordance with the Agriculture and Horticulture Development Board Order 2008 (SI 2008/576) which was made by the Secretary of State in exercise of powers conferred on him by provisions of the Natural Environment and Rural Communities Act 2006 with the approval of the Scottish Ministers (following approval of a draft of the Order laid before the Scottish Parliament), the Department of Agriculture and Rural Development in Northern Ireland and Welsh Ministers. The Order was approved by a resolution of each House of Parliament and came into force on 29 February 2008.

In accordance with the Financial Reporting Manual ('FReM'), these accounts have been prepared on a going concern basis as HDC's services will continue to be provided by AHDB.

**2 Levies and voluntary contributions**

	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
<b>Current levy receipts</b>		
Twenty-second General Levy receipts (2007 – Twentieth-first levy)	4,489,834	4,329,857
Apple and Pear Levy receipts	261,599	256,707
Mushroom Levy receipts	106,041	144,529
<b>Previous levy receipts</b>		
General Levy receipts	135,039	154,462
Apple and Pear Levy receipts	4,079	761
<b>Total</b>	<b><u>4,996,592</u></b>	<b><u>4,886,316</u></b>

- (i) The Horticultural Development Council Order 1986 (as amended) makes provision for the Council to collect an annual levy, not exceeding 0.5%, on the sales turnover of horticultural produce (excluding apples, pears and hops) from growers whose annual sales of their own production exceeds £50,000.
- (ii) A separate levy, not exceeding 15p per litre, is collected from mushroom growers based on the volume of spawn purchased.
- (iii) A separate levy, not exceeding £35 per hectare, is collected from apple and pear growers based on the area of land planted with apple and pear trees.
- (iv) For the period 1 April 2007 to 31 March 2008 the Council set the general rate at 0.5%, 8p per litre for mushroom growers and £28.00 per hectare for apple and pear growers.

**3 Other contributions**

	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Additional Membership Subscriptions	47,809	11,050
Contributions to projects	77,061	57,539
<b>Total</b>	<b><u>124,870</u></b>	<b><u>68,589</u></b>

**4 Other income**

	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Bank interest receivable	140,998	161,117
Royalty	40,853	19,529
Exchange gains	4,938	350
<b>Total</b>	<b><u>186,789</u></b>	<b><u>180,996</u></b>

Levy monies not immediately required to cover expenditure are placed on interest earning short and medium term deposits.

**5 Horticultural research**

The Council's standard terms and conditions of contract provide for payments quarterly in arrears. The figure in the accounts represents payments due on the projects up to 31 March 2008 and panel and other direct costs in connection therewith.

Analysis of research expenditure by crop sector	Research £	SOLA <sup>1</sup> £	Panel <sup>2</sup> £	Total £
Cross Panel	367,193	36,000	9,370	412,563
Bulbs and Outdoor Flowers	113,923	2,245	1,092	117,260
Field Vegetables	1,058,807	114,728	8,886	1,182,421
Hardy Nursery Stock	698,046	10,378	9,024	717,448
Mushrooms	44,912	1,513	1,567	47,992
Protected Crops	744,700	45,566	6,829	797,095
Soft Fruit	375,749	59,254	7,117	442,120
Tree Fruit	140,897	5,449	3,231	149,577
<b>Total 2007/08</b>	<b><u>3,544,227</u></b>	<b><u>275,133</u></b>	<b><u>47,116</u></b>	<b><u>3,866,476</u></b>
<b>Total 2006/07</b>	<b><u>4,200,779</u></b>	<b><u>279,225</u></b>	<b><u>49,793</u></b>	<b><u>4,529,797</u></b>

Many of the contracts are for two or more years duration and present amounts committed to these are:

In the year to 31 March 2009	£2,775,666
In the year to 31 March 2010	£1,543,733
In the year to 31 March 2011	£ 538,744

<sup>1</sup> Specific Off Label Approval programme – This includes staff costs of £63,966 and office costs of £6,590.

<sup>2</sup> Sector Panel Expenses – Cross Panel panel expenses include contributions to the National Horticultural Forum and Applied Research Forum (£4,250)

**6 Communications**

	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Exhibitions and Conferences	11,388	8,259
Open Days and Workshops	127,487	119,422
Publications, Software and Videos	321,994	437,288
Web Site, CD-Rom and Electronic Communications	34,608	8,125
<b>Total</b>	<b><u>495,477</u></b>	<b><u>573,094</u></b>

**7 Research project management**

Year ended	Year ended
------------	------------

	Notes	31 Mar 2008 £	31 Mar 2007 £
Staff costs	12	296,815	302,659
Office costs	13	67,449	72,526
Professional services		0	2,217
<b>Total</b>		<b><u>364,264</u></b>	<b><u>377,402</u></b>

**8 Communications management**

	Notes	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Staff costs	12	209,065	197,115
Office costs	13	53,551	68,126
Professional services		0	0
<b>Total</b>		<b><u>262,616</u></b>	<b><u>265,241</u></b>

**9 Administration Expenses**

	Notes	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Staff costs	12	130,625	125,911
Office costs	13	44,040	58,154
Professional services		42,157	49,209
Auditor's remuneration - for audit services		10,500	10,000
Irrecoverable debts written off		22,155	20,693
Increase/(Decrease) in provision for doubtful debt		11,214	(53,357)
Exchange losses		1,672	502
<b>Total</b>		<b><u>262,363</u></b>	<b><u>211,112</u></b>

The Auditor's remuneration consists of audit services in 2007-08 and amounted to £10,500.  
The Auditor's remuneration consists of audit services in 2006-07 and amounted to £10,000.

**10 Council Expenses**

		Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Chairman		47,950	46,741
Members' honoraria		3,279	3,687
Travelling and meeting expenses		16,668	13,590
<b>Total</b>		<b><u>67,897</u></b>	<b><u>64,018</u></b>

Council Members do not receive remuneration but are entitled to claim an honorarium of £100 per day (after tax) for each day devoted to the activities of the Council. No pension contributions are paid for Council Members.

**11 Enforcement Costs**

		Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Legal Expenses		53,404	43,946
Legal costs recovered		(29,529)	(45,649)
Field Agent Commission and costs		587	5,996
		<b><u>24,462</u></b>	<b><u>4,293</u></b>

The Council has been obliged to incur costs in legal expenses to collect levies from some growers who have failed to comply with the terms of the Order. Also commission was paid to a field agent retained to identify growers not registered with the Council and failing to comply with the terms of the Order.

**12 Staff Costs**

		Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Staff Employment costs		629,165	584,720
Contract Staff		5,885	22,991
Travel and Subsistence		41,994	42,535
Motor Expenses		0	0
Other Staff Related costs		23,427	39,095
		<b><u>700,471</u></b>	<b><u>689,341</u></b>

**Apportioned as follows:**

Research Project Management expenses	296,815	302,659
SOLA Management expenses	63,966	63,656
Communications Management expenses	209,065	197,115
Administration expenses	130,625	125,911
	<b>700,471</b>	<b>689,341</b>

**Staff Employment Costs for the year were as follows:**

Gross salaries	524,092	490,052
Employer's social security costs	56,724	52,734
Pension contributions	48,349	41,934
<b>Total</b>	<b>629,165</b>	<b>584,720</b>

The number of employees at the end of the year was as follows:

	Year ended 31 Mar 2008	Year ended 31 Mar 2007
Chief Executive Office	1	1
Technical – Research Management	7	6
Technical – SOLA Management	1	1
Technical – Communications Management	5	5
Administration - Finance	3	3
<b>Total</b>	<b>17</b>	<b>16</b>

The average weekly number of employees during the period was 16.5 (2007 – 15.5)

**13 Office Costs**

	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
Office accommodation	70,896	62,347
Telecommunications	10,954	11,512
Postage	22,237	20,777
Computer system costs	30,925	64,227
Equipment purchase, rental and maintenance	11,928	18,901
Stationery, printing and reproduction	15,422	19,605
Depreciation	4,214	4,543
General running expenses	5,054	3,016
	<b>171,630</b>	<b>204,928</b>
<b>Apportioned as follows:</b>		
Research Project Management expenses	67,449	72,526
SOLA Management expenses	6,590	6,122
Communications Management expenses	53,551	68,126
Administration expenses	44,040	58,154
<b>Total</b>	<b>171,630</b>	<b>204,928</b>

Office accommodation includes property lease costs of £34,464

Equipment purchase, rental and maintenance includes equipment lease costs of £16,558

**14 Tangible Fixed Assets**

	Office equipment £	Computer equipment £	Communications equipment £	Total £
<b>Cost:</b>				
At 1 April 2007	24,262	16,481	9,644	50,387
Additions	0	0	0	0
Disposals	0	0	0	0
At 31 March 2008	24,262	16,481	9,644	50,387
<b>Depreciation:</b>				
At 1 April 2007	11,423	12,155	8,644	32,222
Provided during the period	4,214	2,009	500	6,723
Disposals	0	0	0	0
At 31 March 2008	15,637	14,164	9,144	38,945
Net book value at				
<b>31 March 2008</b>	<b>£8,625</b>	<b>£2,317</b>	<b>£500</b>	<b>£11,442</b>
<b>31 March 2007</b>	<b>£12,839</b>	<b>£4,326</b>	<b>£1,000</b>	<b>£18,165</b>

**15 Levies Outstanding**

	Year ended 31 Mar 2008	Year ended 31 Mar 2007
	£	£
<b>Current levy</b>		
Twenty-Second levy (2007 – Twenty-First levy)	103,138	139,223
Mushroom levy	1,282	21,882
<b>Previous levies</b>		
General Levy	55,976	141,407
Mushroom levy	19,302	17,817
<b>Total</b>	<b><u>179,698</u></b>	<b><u>320,329</u></b>

As at 30 April 2008, of the levies outstanding, £36,702 had been received.

**16 Trade and Other Debtors**

	Year ended 31 Mar 2008	Year ended 31 Mar 2007
	£	£
Trade Debtors	29,073	4,712
Other Debtors	0	10,681
Accrued Income	51,792	133,085
<b>Total</b>	<b><u>80,865</u></b>	<b><u>148,478</u></b>

**17 Creditors: Amounts Falling Due Within One Year**

	Year ended 31 Mar 2008	Year ended 31 Mar 2007
	£	£
Trade creditors	14,671	30,992
Taxes and social security costs	-	-
Accruals	640,237	2,045,271
Deferred income	-	18,625
<b>Total</b>	<b><u>654,908</u></b>	<b><u>2,094,888</u></b>

**18 Taxation**

The HDC has obtained the opinion of leading Counsel that it is entitled, subject to the completion and submission of the appropriate application, to formal approval from the DIUS for the purposes of section 508 ICTA 1988, which will entitle the HDC to exemption from tax.

**19 Retained Revenue Surplus**

	Year ended 31 Mar 2008	Year ended 31 Mar 2007
	£	£
<b>General Reserve</b>		
Balance at 1 April 2007	750,000	750,000
Movement	-	-
<b>Balance at 31 March 2008</b>	<b>750,000</b>	<b>750,000</b>
<b>Research Reserve</b>		
Balance at 1 April 2007	930,012	2,049,050
(Deficit)/Surplus for the year	(289,255)	(1,119,038)
<b>Balance at 31 March 2008</b>	<b>640,757</b>	<b>930,012</b>
<b>Total</b>	<b><u>1,390,757</u></b>	<b><u>1,680,012</u></b>

To be able to maintain adequate cash flow to continue its operations the Council has established a general reserve. This reserve is used to cover expenditure during the first quarter of each levy year when no levy income is received. The Council annually reviews the level of the general reserve.

During each levy year all income after the deduction of ordinary expenditure is made available to the research programme. Any funds not spent during that year are held in the research reserve and are available to the research programme in subsequent years.

**20 Financial Commitments**

At 31 March 2008 annual lease payments under non-cancellable operating leases falling due within one year amount to £51,291 (31 Mar 2007 - £51,291) and relate to non-cancellable lease payments which will expire:

	31 Mar 2008 Land and Buildings £	Other £	31 Mar 2007 Land and Buildings £	Other £
In under one year	-	16,558	-	-
the second to fifth years	-	-	-	16,558
over five years	<u>34,733</u>	<u>-</u>	<u>34,733</u>	<u>-</u>
	<b>34,733</b>	<b>16,558</b>	<b>34,733</b>	<b>16,558</b>

**21 Reconciliation of Surplus for the Year to Cash Flow from Operations**

	Notes	Year ended 31 Mar 2008 £	Year ended 31 Mar 2007 £
(Deficit) of income over expenditure		(289,255)	(1,119,038)
Interest receivable		(140,998)	(161,117)
Depreciation charge		6,723	8,144
Loss on disposal of fixed asset		0	0
Decrease/(Increase) in levies outstanding		140,631	(155,718)
Decrease/(Increase) in other debtors		67,613	(85,571)
(Increase)/Decrease in prepayments		(12,022)	1,205
(Decrease) in creditors		(1,439,980)	(58,864)
<b>Total</b>		<b><u>(1,667,288)</u></b>	<b><u>(1,570,959)</u></b>

**22 Analysis of Changes in Cash and Cash Equivalents**

for the year ended 31 March 2008

	Year ended 31 Mar 2007 £	Year ended 31 Mar 2007 £
Balance at 1 April 2007	<b>3,274,788</b>	<b>4,691,185</b>
Net Cash (outflow)/inflow	(1,526,290)	(1,416,397)
<b>Balance at 31 March 2008</b>	<b><u>1,748,498</u></b>	<b><u>3,274,788</u></b>

**23 Transactions with Related Parties**

During the year, no Council Members, members of the key management staff or other related parties have undertaken material transactions with the Horticultural Development Council.

**24 Date authorised for issue**

The Accounting Officer authorised the financial statements for issue on 10 July 2008 - the date of despatch to the Department for Environment, Food and Rural Affairs.



## Summary of Performance (Unaudited)

### Income and Expenditure

	31 March 2008	31 March 2007	31 March 2006	31 March 2005	31 March 2004
				£	£
Levy income	4,996,592	4,886,316	4,766,602	4,729,867	4,457,536
Other Contributions	124,870	68,589	74,174		
Other Income	186,789	180,996	208,807	186,888	125,640
	<b>5,308,251</b>	<b>5,135,901</b>	<b>5,049,583</b>	<b>4,916,755</b>	<b>4,583,176</b>
Horticultural research	3,866,476	4,529,797	3,797,654	3,149,935	2,296,678
Promotion	253,951	229,982	118,012	109,900	
Communications	495,477	573,094	782,219	437,790	280,890
Research Project Management	364,264	377,402	321,016	255,311	243,402
Communications Management	262,616	265,241	282,200	206,727	190,053
Administration expenses	262,363	211,112	305,911	203,159	194,941
Council expenses	67,897	64,018	66,275	63,604	65,590
Enforcement costs	24,462	4,293	76,622	60,021	61,011
	<b>5,597,506</b>	<b>6,254,939</b>	<b>5,749,909</b>	<b>4,486,447</b>	<b>3,332,565</b>
Surplus/(Deficit) before taxation	(289,255)	(1,119,038)	(700,326)	430,308	1,250,611
Tax				-	-
Surplus/(Deficit) after taxation	(289,255)	(1,119,038)	(700,326)	430,308	1,250,611
Retained surplus brought forward	1,680,012	2,799,050	3,499,376	3,069,068	1,818,457
<b>Retained surplus carried forward</b>	<b><u>1,390,757</u></b>	<b><u>1,680,012</u></b>	<b><u>2,799,050</u></b>	<b><u>3,499,376</u></b>	<b><u>3,069,068</u></b>

### Balance sheet

Fixed assets	11,442	18,165	19,754	29,752	38,059
Debtors	260,563	468,807	227,518	221,186	255,159
Prepayments	25,162	13,140	14,345	12,533	16,984
Cash	1,748,498	3,274,788	4,691,185	4,430,718	3,684,333
Current liabilities	(654,908)	(2,094,888)	(2,153,752)	(1,194,813)	(925,467)
<b>Net Assets</b>	<b>1,390,757</b>	<b>1,680,012</b>	<b>2,799,050</b>	<b>3,499,376</b>	<b>3,069,068</b>

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# Annex A

## Names and Addresses of Members of the Council

### **Chairman**

Colin Harvey, Horticultural Development Council, Kent to March 2008

### **Members representing growers**

Douglas Baird, Corachie Clematis, Argyll, Scotland to March 2008

Clive Baxter, Westerhill Farm, Kent to March 2008

Andrew Burgess, RB Organics, Cambridgeshire to March 2008

Peter Cornish, Loveden Estates Ltd, Yorkshire to March 2008

Phillip Effingham, Marshall Bros (Butterwick) Ltd, Lincolnshire to March 2008

David Hand, Humber VHB, West Sussex to March 2008

Derek Jarman, Hayloft Plants Ltd, Worcestershire to March 2008

Mark Komatsu, Oakfield Farm Products Ltd, Wiltshire to March 2008

Morris May, Planta Vera, Surrey to March 2008

Peter Wensak, Polehouse Nurseries, Essex to March 2008

Roy Willingham, Lincolnshire to March 2008

John Woodhead, Hillier Nurseries Ltd, Hampshire to March 2008

### **Member representing the interests of employees in the industry**

Teresa Mackay, TGWU, London to March 2008

### **Member with special knowledge relating to the marketing of horticultural produce**

Simon Pearson, Winchester Growers, Lincolnshire to March 2008

## Annex B

### Elected Members of the Crop Panels at 31 March 2008

#### Bulbs and Outdoor Flowers

**Mr Roy Willingham, Wapentake Court, Wood Lane, Moulton, Spalding, Lincs PE12 6QU**

Mr Martin Cessford, Whanland Farm, Farnell, Brechin, Angus, Scotland DD9 6YF

Mrs Sue Lamb, Lamb's Flowers, The Gambles, Herdgate Lane, Pinchbeck, Lincs PE11 3UP

Mr Jim Hosking, FRAGS, Fentongollan, Tressillian, Truro, Cornwall TR2 4AQ

Mr Daniel Maxey, Grooms Bros, Pecks Drove Nurseries, Clay Lake, Spalding, Lincs PE12 6BJ

Mr Brian Taylor, O A Taylor & Sons Ltd, Washway House Farm, Holbeach, Spalding, Lincs PE12 7PP

Mr James Cole, E M Cole (Farm) Ltd, Small Drove Lane, West Pinchbeck, Spalding, Lincs PE11 3NL

Mr James Walkers, Maurice Crouch (Growers) Ltd, Roscarnick Farm, Blackwater, Truro, Cornwall TR4 8JA

#### Field Vegetables

**Mr Peter Cornish, Loveden Estates Ltd, Holmes Farm, Wroot Road, Epworth, Doncaster DN9 1EA**

Dr Tom Davies, Malvern View Herbs, Longdon Hill End, Upton upon Severn, Worcestershire WR8 0RN

Mr Nathan Dellicott, Barfoots of Botley, Seftor Farm, Pagham, West Sussex PO21 3PX

Mr Martin Evans, Fresh Growers Ltd, Inkersall Grange Farm, Bilsthorpe, Newark, Nottinghamshire NG22 8TN

Mr Richard Evenden, H L Hutchinson Ltd, 25 Penway Drive, Pinchbeck, Spalding, Lincs PE11 3PJ

Mr Thane Goodrich, Intercrop Ltd, Broadlane, Betteshanger, Nr Deal, Kent CT14 0LT

Mr Philip Langley, Sandfields Farm Ltd, Manor Farm, Luddington, Stratford upon Avon, Warks CV37 9SJ

Mr Ellis Luckhurst, Chydavas, Idless, Truro, Cornwall TR4 9QS

Mr Chris Molyneux, C Molyneux & Sons, Asmall House Farm, Asmall Lane, Ormskirk, Lancs L40 8JL

Mr Tim Mudge, PVGA, 133 Eastgate, Louth, Lincolnshire LN11 9QG

Mr David Norman, Fresh Produce Consultancy Ltd, 115 Knights End Road, March, Cambs PE15 9QD

Mr Peter Parr, Manor View, 6 Barnards Close, Great Hale, Sleaford, Lincolnshire NG34 9NT

Mr John Sedgwick, Kettle Produce Ltd, Balmalcolm Farm, Cupar, Fife, Scotland KY15 7TJ

Mr Matthew Rawson, Pasture Farm, West End, Kilham, Driffield, East Yorkshire YO25 4RR

Mr Roger White, Westhorpe Flowers & Plants Ltd, Westhorpe House, West End, Boston, Lincs PE22 0EL

#### Hardy Nursery Stock

**Mr John Woodhead, Hilliers Nurseries Ltd, Ampfield House, Ampfield, Romsey, Hampshire SO51 9PA**

Mr Nick Dunn, Frank P Matthews Ltd, Berrington Court, Tenbury Wells, Worcestershire WR15 8TH

Mr David Edge, Forest Edge Nurseries, Woodlands, Wimbourne, Dorset BH21 8LJ

Dr Bill Godfrey, W Godfrey & Sons, Hook Mill Nursery, Hook Mill Lane, Lightwater, Surrey GU18 5UD

Mr Alistair Hazell, Darby Nursery Stock Ltd, Old Felwell Road, Methwold, Thetford, Norfolk

Mr Malcolm Dick, Johns Woods Nurseries Ltd, Main Road, Pettistree, Woodbridge, Suffolk IP13 0HH

Mr John Billington, The Northern Liner Company, Lancaster Road, Out Rawcliffe, Preston PR3 6SR

Mrs Jeanie Gilford, Walberton Nursery, 2 The Waterside, River Road, Littlehampton, W Sussex BN17 5TA

Mr Tom Miles, Miles Nurseries Ltd, Brooksby Road, Hoby, Nr Melton Mowbray, Leicestershire LE14 3EA

Mr John Richards, John Richards Nurseries Ltd, 1 Camp Hill, West Malvern, Worcs WR14 4BZ

Mr David Hooker, Hillier Nurseries Ltd, Ampfield House, Ampfield, Romsey, Hampshire SO51 9PA

Mr Roger Ward, Golden Grove Nursery, Golden Grove, Wigtoft, Boston, Lincolnshire PE20 2PU

Dr Neal Wright, Micropropagation Services Ltd, Kirk Ley Road, East Leake, Loughborough, Leics LE12 6PE

## Mushrooms

### **Mr Mark Komatsu, Oakfield Farm Products Ltd, Bethel, 18 Frome Road, Bradford upon Avon, BA15 2EA**

Mr James Rothwell, Little Hall Mushrooms Ltd, Little Hall Farm, Cottage Lane, Ormskirk, Lancs L39 3NQ

Mr John Clay, Welsh Way, Sunhill, Cirencester, Gloucestershire GL7 5SY

Mr Steve Newton, Leckford Mushrooms, Leckford Estate, Stockbridge, Hampshire SO20 6DA

Mr Richard Gaze, 3 Wisborough Green, Wisborough Green, W Sussex RH14 0DZ

Mr George Pointing, Dorset Down Mushrooms, Poyntington, Sherborne, Dorset DT9 4LF

## Protected Crops

### **Dr David Hand, Humber VHB, West End Nursery, Roundstone Lane, Angmering, West Sussex BN16 1EB**

Mr Alan Davis, Appletree Lodge, Shepherds Lane, Chard, Somerset TA20 1QU

Ms Claire Donkin, Hill Farm, Sunderland Hill, Ravensden, Bedford, Bedfordshire MK44 2SJ

Mr Derek Hargreaves, Derek Hargreaves Horticultural Consultancy Ltd, 111 Copandale Road, Beverley, E Yorks HU17 7BN

Mr Michael Mann, Varfell Farm, Long Rock, Penzance, TR20 8AQ

Mr Mike Opperman, Opperman Plants Ltd, Littleworth Mission, Nicholas, Spalding, Lincs PE11 3EN

Mr John Overvoorde, Delfland Nurseries Ltd, Benwick Road, Doddington, March, Cambs PE15 OUT

Ms Fay Richardson, Coletta & Tyson, 324 Hull Road, Woodmansey, Beverley, East Yorkshire HU17 0RU

Mr Gary Shorland, Double H Nurseries Ltd, Gore Road, New Milton, Hants BH25 5NG

Mr Geoffrey Smith, Mapleton Growers Ltd, Mores Lane, Pilgrims Hatch, Brentwood, Essex CM14 5RZ

Mr Gary Taylor, Valley Grown Nurseries, Paynes Lane, Nazeing, Essex EN9 2EX

Mr Piers Verey, Wight Salads Group, Langstone Technology Park, Langstone Road, Havant, Hants PO9 1SW

## Soft Fruit

### **Mr Peter Wensak, Polehouse Nurseries Ltd, Harwich Road, Lawford, Manningtree, Essex CO11 2LS**

Mr Paul Harrold, Sunclose Farm, Butt Lane, Milton, Cambridgeshire CB4 6DQ

Mr John Clark, 16 Abingdon Road, Barming, Maidstone, Kent ME16 9DP

Mrs Harriet Duncafe, Maltmas Farm, Fridaybridge, Wisbech, Cambs PE14 0HS

Mr Peter Gray, Grays of Wokingham, Grays Farm, Heathlands Road, Wokingham, Berkshire RG40 3AN

Mr Rupert Hargreaves, Hargreaves Plants, Cowpers Gate, Long Sutton, Spalding, Lincolnshire PE12 9BS

Mr Tom Maynard, Windmill Hill, Ticehurst, Wadhurst, East Sussex TN5 7HQ

Mr Stephen McGuffie, New Farm Produce Ltd, New Farm, Elmhurst, Lichfield, Staffordshire WS13 8EX

Mr Tim Place, Place UK, Church Farm, Tunstead, Norwich, Norfolk NR12 8RQ

Mr Peter Thomson, T Thomson (Blairgowrie) Ltd, Bramblebank Works, Blairgowrie, Perthshire PH10 7HY

## Tree Fruit

### **Mr Clive Baxter, Amsbury Farm, East Street, Hunton, Maidstone, Kent ME15 0QY**

Mr Nigel Bardsley, The Old Barn, River Farm, Chart Hill Road, Staplehurst, Kent TN12 0RN

Mr Paul Bennett, Agrovista Ltd, 6 Beckett Street, Faversham, Kent ME13 7JS

Mr Giles Cannon, GSR Fruits Ltd, Roughways Farm, Plaxtol, Kent TN11 9SN

Mr Peter Checkley, Howard Chapman Ltd, Broadwater Farm, Broadwater Road, W Malling, Kent ME19 6HT

Mr Colin Corfield, Owl House Fruit Farm, Lamberhurst, Kent TN3 8LY

Mr Simon Foad, Highland Investment Co Ltd, Highland Court Farm, Bridge, Canterbury, Kent CT4 5HN

Mr Nigel Kitney, HL Hutchinson, 1 Haywood Lane, Ashperton, Ledbury, Herefordshire HR8 2SB

Mr Neil Obbard, 9 Strouts Road, Ashford, Kent TN23 5WB

Mr Sandys Dawes, Mount Ephraim Farms, Mount Ephraim, Hernhill, Faversham, Kent ME13 9TX