

A Case Study Analysis and Overview of the UK Horticultural Production
Industry and its Future over the Next 10-20 Years

Prepared for the National Horticultural Forum

January 2006

THE FUTURE OF UK HORTICULTURE

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CONTENTS

FOREWORD FROM THE NATIONAL HORTICULTURAL FORUM..... 5

1. INTRODUCTION 7

2. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS..... 9

 2.1 Summary 9

 2.2 Conclusions 11

 2.2.1 Industry Background..... 11

 2.2.2 Today’s Industry 12

 2.2.3 Today’s Market..... 12

 2.2.4 Issues Affecting the Future..... 13

 2.2.5 The Future 17

 2.2.6 Industry Structure..... 18

 2.3 Recommendations..... 19

3. OVERVIEW 25

 3.1 The UK Horticulture Sector 25

 3.1.1 Scale of Production..... 25

 3.1.2 Imports..... 26

 3.1.3 Industry structure 28

 3.1.4 Analysis of costs and returns..... 30

 3.2 Competitor Country Profile..... 32

 3.3 Key Issues Facing the Industry to 2020..... 35

 3.3.1 Cost and Margin Pressure..... 36

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

3.3.2	Technological Development.....	36
3.3.3	Labour	37
3.3.4	Consumer Trends.....	43
3.3.5	Energy	48
3.3.6	Transport and Distribution.....	48
3.3.7	Currency	50
3.3.8	Global Procurement.....	50
3.3.9	Climate Change	53
3.4	Financial Overview.....	54
3.5	Future Industry Structure: Scenario Planning.....	55
4	SECTOR ANALYSIS	61
4.1	Brassicas.....	61
4.2	Hardy Nursery Stock (including reference to other Ornamentals)	69
	HNS Costs per £100 Net Output to 2010.....	81
4.3	Protected edibles.....	83
4.4	Soft Fruit.....	91
	SOURCES OF INFORMATION.....	102
	ACKNOWLEDGEMENTS	104
	ACRONYMS.....	105

FOREWORD FROM THE NATIONAL HORTICULTURAL FORUM

The National Horticultural Forum (NHF) was established in 2002 following a series of recommendations contained within the Defra-commissioned Review of Horticultural R&D (2002), entitled a “Vision for Horticulture” (the ‘Spedding Report’).

Since its inception, the NHF Steering Group¹ has provided the only opportunity for the leading organisations in the UK outside government, with interests in horticultural R&D, to develop consensus viewpoints on key issues. The NHF’s mission statement for its activities is:

“The NHF has the mission to provide a clear and consistent view of wider horticultural research and development issues and their context.”

The future of UK Horticulture

In 2004, the NHF focused its attention on the need to create an overview of the future UK horticultural industry and its R&D needs. Although a number of organisations (e.g. the HDC, Defra) have assembled their own corporate strategies/perspectives on R&D needs, the NHF’s remit is to provide a national overview to evaluate how well-integrated are these individual strategies and priorities, and, critically, to link them with the most likely scenarios, challenges and opportunities that the industry faces in the long-term. The NHF has initiated a three-phase approach to deliver this vision of horticulture.

The first phase was a detailed analysis by the NHF of the main issues currently facing the UK horticultural industry. The generic issues faced by the UK horticultural ‘industry’ (in its widest sense) were grouped within the Curry Commission criteria of ‘Economic Sustainability’, ‘Environmental Sustainability’ and ‘Social Sustainability’ and the key drivers in horticulture for each issue were identified. This analysis is currently being up-dated in the light of the recent strategy developments within Defra and will be re-cast to reflect the key impact areas for sustainable farming and food identified by Defra.

¹ The NHF Steering Group was established in 2002 under the chairmanship of Dr Andrew Colquhoun (Royal Horticultural Society) and now counts amongst its other members, senior representatives of the Horticultural Development Council (HDC), the Horticultural Trades Association (HTA), the Institute of Horticulture (IOH), the National Farmers Union (NFU), and two representatives from the UK horticultural R&D community. These organisations, together with the East Malling Trust for Horticultural Research, and members of the NHF R&D Providers Group (established in 2004), provide the funding for NHF operating costs and activities.

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

The second phase was the commissioning in 2005 of Promar International to undertake a study “to develop a robust view of how the UK horticultural industry will look, bearing in mind a timeframe of 10-20 years”. Promar was asked to present a case study analysis and overview of the UK horticultural production industry and its likely future over this time period.

We are now pleased to make this report publicly available for discussion and comment, the outcomes of which will inform the third phase of our approach. The third phase will identify the future strategic R&D requirements that the UK horticultural industry will need to address in order to deal successfully with the challenges and opportunities identified in the first two phases. It is expected to be completed in 2006.

The National Horticultural Forum
February 2006

I. INTRODUCTION

The Steering Group of the National Horticultural Forum (NHF) has recognised the need to identify the key issues and opportunities facing the UK horticultural industry over the next 10 years, and to interpret these issues in terms of implications for the future structure of the industry. This work is part of an ongoing exercise being carried out by the NHF to assess the strategic requirement for horticultural R & D in the UK.

To this end, the NHF commissioned Promar International (Promar), in May 2005, to “develop a robust view of how the UK horticultural sector will look” over the next 10-20 years, and to provide a Report of this analysis. The initial Terms of Reference for this Report included a general analysis of issues that impact on all areas of the UK horticultural sectors, to cover:

- the nature of the labour market in the UK and Eastern Europe
- key margins and other costs of production in the supply chain
- customer requirements
- real and environmental costs of production and transport for UK and imported crops
- trends in procurement of crops by key customers on a local and/or global basis
- macro trends at consumer level, including diet etc.
- the impact of climate change
- the potential impact of new technology
- the development of a hierarchy of forces for change, and how these are interlinked
- identification of the key areas of sensitivity, how these will impact on the UK horticultural sector, and over what period of time
- other factors as identified in the course of the research, such as the impact of the UK joining the € zone.

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

This general analysis was to be complemented by specific case studies in four sectors of horticultural production, namely soft fruit, brassicas, hardy nursery stock (HNS) and protected edibles.

The following Report presents Promar's analysis, conclusions and recommendations in Section 2.

Each crop sector is explored in a dedicated section of the report (see Section 4), with attention given to changes in production over the last 10-15 year period (value of production, farm gate prices, home production marketed as a percentage of total supply), ranking and exploration of key issues affecting the sector, SWOT analysis of the industry today, estimated impact of changing input costs on financial performance and recommendations for the future.

These separate chapters are supported by the overview (see Section 3), which provides a cross-comparison of the crop sectors under consideration and attitudes to the various challenges they face and examines the implications for the horticultural industry of three potential scenarios modelled around the evolution of identifiable player types.

2. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

2.1 Summary

Many of the issues currently faced in the UK horticultural sector, and which will impact on it over the next 15 years or so, have been around for some time. There is a series of complex relationships between a number of these key factors and it is clear that there are no easy answers. The traditional response to these issues has been for some in the sector to struggle on and deal with each issue as the impacts begin to be felt.

It should be noted that the UK industry, often due to its relatively unsupported nature *vis a vis* the Common Agricultural Policy (CAP) regime² has also already gone through a good deal of change in the last 10 years. There has been an increase in the overall level of professionalism amongst growers and suppliers alike, particularly in order to meet the technical and commercial demands of the major retail multiples. In the fresh produce sector, the major retailers now account for c. 80% of the overall market in the UK. Although in the ornamentals sector the structure of the market is more diverse, the emergence of large customers operating at the point of sale (POS) is making the same sorts of demands on producers and suppliers alike.

UK horticulture has been put under a great deal of pressure from both customers and competitors alike and the industry has, in many ways, been remarkably resilient. In the future, however, clearer strategies for the development of a horticultural business will be required. Many of the leading players in the UK industry have begun to put these into place and there is a need for others to continue to follow suit.

There are simply too many issues impacting at too great a scale for them to be ignored and it is likely that the industry will need to look very different from its current state if it is to survive, let alone prosper in the future. Even the most professional of operations in the UK are normally thinking in terms of strategic planning 3–5 years ahead, while some of the issues that influence the sector will impact over a much longer time-frame.

This Report should be seen as something of a “wake up call” for players in UK horticultural production that have not already achieved a high level of professionalism through the supply chain. The time has come to address head-on the many serious challenges facing the horticulture sector.

² Compared to other sectors such as meat, dairy, cereals, sugar and oil seeds etc.

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

There are still many opportunities for the UK horticultural sector to take advantage of. There are a number of things that need to happen to create a different outlook to that which the statistics might currently convey. An attitude of the glass being half full rather than half empty needs to be adopted.

Key future success criteria will include:

- No attempt to limit imported labour
- Better training within the sector
- More willingness to use advanced technology and automation where applicable
- Further consolidation of the industry combined with better co-operative ventures
- More benchmarking to keep in touch with competitor performance
- Better understanding of the consumer and customer profile
- Maintenance of the current R&D base
- No further cuts to horticultural education
- Representation by the industry to the educational establishment to at least maintain current availability of educational opportunities
- Build on trend towards UK production and local sourcing. This is a real opportunity which should not be missed
- Build on retailer relationships to enhance appreciation of the benefits of UK production
- Better industry promotion in general
- Continued investment in non UK businesses by UK businesses to permit continuity of supply to retailers
- More added value production than commodity driven production

None of the above are beyond implementing, but will require strong industry leadership to effect change in a reasonable time frame. There is an opportunity to do things differently in order to take advantage of new market opportunities, however, this requires the changes

seen in the UK sector over the last 10 years to be seen as a start, not an end, to competing in an increasingly competitive international market.

Some of the messages contained in this report may be unpalatable, but there is an opportunity to address the changes we see happening in the sector. The key is to act now. Some players will choose to struggle on as they have in the past, but in many cases they will be fighting a losing battle.

For those that can reach 'best in class' standards, the future prospects are much better, although even these businesses will not be immune from a range of national and international forces for change. Ongoing business improvements will be fundamental for the future.

A number of industry-leading businesses already exist in the UK across the horticultural supply chain: the future challenge will be to produce more of them.

The future of UK horticulture will inevitably be based on a smaller group of players, but one which is: more professionally run; better educated; more internationally aware; more attuned to market needs; more environmentally aware and more grounded in added value activity. Production of commodities in the UK will have a limited future. Strong supply chain relationships will be of paramount importance.

2.2 Conclusions

2.2.1 Industry Background

- The last 15-20 years has seen a year-on-year decline in planted areas, with the ornamentals sector being the main exception. However, while planted areas have decreased for fruit and vegetables, the value of fruit production per unit area has often increased as a result of new technology, cost reductions, better yields, and premium prices paid for speciality varieties. The value of commodity varieties on a per hectare basis has been less encouraging, with little price increase over many years
- Consumption of fresh produce in the UK has remained relatively static in the past 10 years. Growth has often come from imported exotics and snack products rather than from more traditional fruit and vegetable products
- Attempts in the past to boost consumption of fresh produce in the UK have often met with mixed success and have suffered from a lack of appropriate funding, a lack of industry co-ordination as well as a lack of product innovation from the supply base
- Ornamental products have shown the greatest growth in value over the last few years

2.2.2 Today's Industry

- The UK horticultural sector has some excellent companies and individuals operating within it
- The UK retail multiples and other major players at the POS drive a hard bargain with all their suppliers, but their operations and way of doing business are admired around the world
- However, with over 50% of all horticultural holdings in the UK being of less than one hectare in size, the future prospects for small scale producers, unless they can access niche market opportunities, looks especially difficult. The average size of holdings does not present the full story: there has already been a good deal of consolidation of holdings amongst growers. The HDC now report that there are some 1,800 commercial businesses based in the UK with an annual turnover in excess of £50,000
- The trend towards consolidation in terms of numbers of holdings and an increase in their size should not be resisted and in some cases should be actively encouraged
- Based on the analysis we have carried out in this research, profitability for many is currently quite marginal and even relatively small increases in some of the key cost areas such as labour and energy could see a significant fall out from the UK industry
- Although the UK R&D sector has taken a buffeting in the last 10 years, UK education, training and services are all, we believe, well regarded internationally. In the UK however, there has been an on-going reduction in the numbers of students and relevant courses in recent years

2.2.3 Today's Market

- The polarisation of the consumer base in the UK presents a number of exciting market opportunities for higher added value products aimed at the increasing number of consumers with higher disposable incomes. On the flip side, there will also be a larger number of consumers who buy solely on the basis of price, with fewer consumers set to occupy the middle ground in the future
- The retail market for fresh produce has already begun to reflect this with 4 retail groups now accounting for a massive 74% of all food sold through retail in the UK. A group of smaller niche players hold market shares of around 5%, but there are few operators in the middle ground

- The market for the ornamentals sector is less consolidated than for fresh produce and has been less price sensitive. It is still growing relatively strongly. The wholesale sector is still expanding and the retail base is more diverse, with major retailers, DIY operations, garden centres and retail nurseries all still important outlets. However, further consolidation at the POS is expected. The competition to the UK industry will continue to strengthen from the likes of Holland who have been investing heavily in market research and analysis
- With the consolidation and then further polarisation of markets, it follows logically that UK production will fragment in a similar fashion, with a split between large market-focused operations and a series of much smaller, equally professional producers, even part-time farmers, supplying niche markets
- UK consumers want much more than just “food as fuel” and expect a range of criteria from fruits and vegetables. Although for many price is the most important criterion, convenience, safety, functionality, ethical standards of production and trade, image, new eating experiences as well as the ability to experience both local and global products all drive consumer choice. Horticulture in the UK could deliver against many of these consumer needs, but better understanding of consumer behaviour is required, as well as better marketing
- UK retailers will not be immune from further international influences: international consolidation and rationalisation of the customer base will be ongoing. This will increase international competition, but will also present new opportunities. The days of UK horticulture operating in isolation are well and truly over
- The major UK retailers and DIY chains will remain dominant despite any potential growth in a number of niche market areas

2.2.4 Issues Affecting the Future

Labour

- The decline in employment of indigenous UK labour is a stark fact of life. All successful horticultural countries around the world are now basing their competitiveness on the use of relatively cheap labour, which is often imported as and when needed. Attracting UK labour back into the horticultural sector has proved to be very difficult, despite the best efforts of many
- From analysis undertaken in our work and based on data available from the Farm Accounts Data Network (FADN), it would appear that while Spain has considerably

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

lower labour costs compared to the UK (as might be expected), labour costs would also appear to be higher than in other North European countries, such as the Netherlands

- In the future, use of imported labour will continue to be the norm, but the attraction of other service- based industries should not be underestimated. However, for the future development of the UK industry, it is critical that the use of imported and migrant labour must be sustained
- The use of migrant labour is not specific to UK horticulture, extending across many primary industries as the UK moves towards a more service-based economy. The UK horticultural sector has, like agriculture, suffered from a long-term disconnection from the rest of the UK population
- Horticulture has a negative employment image linked to hard work, low pay and limited career prospects. Unless this is reversed, then the prospects for attracting labour in the sector remain limited. A radical change might be required in terms of the use of higher levels of technology, better pay, better career prospects and training to achieve this

Policy Change

- The reform of the CAP will only have a limited direct financial impact on the UK horticultural sector: payments claimed by field scale vegetable producers are negligible in relation to their overall business. Although a combination of overall market pressures might speed up this process, the real impact of the entry into the EU of countries such as Poland, Hungary and the Czech Republic will only be really felt in the mid to long term. They are not yet massive producers of fruits and vegetables compared to EU giants such as France, Spain and the Netherlands. Production remains fragmented, equipment is often outdated and post harvest infrastructures are weak

Technology

- In order to benefit from long term market opportunities, producers will benefit from ongoing investment in technology in areas such as production and yield increases, post-harvest technology, alternative energy sources, distribution and marketing and automation of harvesting and packaging. Cost of investment, however, will mean that small-scale production units will often struggle to participate
- It is likely that the UK will not be the automatic source of new technology. Implementing new technical developments can be costly and take a long time to achieve. Investment must be aimed at high value end markets and not at commodity production projects. Incremental change can prove more effective than holding out for life-altering technology,

but will require a distinct culture of innovation to be developed within companies and key stakeholder organisations

Production Methods

- It is estimated that some 75% of businesses in the UK fresh produce sector are signed up to some form of quality assurance scheme through the Assured Produce Scheme (APS). This still leaves 25% not involved. In the future, such are the concerns over food safety and quality assurance that all UK producers should be involved in such schemes. Those that remain outside do so at their peril. The figure signed up to the ornamental sector equivalent scheme is much lower and further efforts to improve this situation need to be made
- It is difficult to see that GM technology will be adopted widely in the international fresh foods sector in the lifespan of this project, but there might be some applications in non-edible crops

Global Trading

- The UK has traditionally been a large-scale importer of a wide range of horticultural products from an equally wide range of supply sources. This is unlikely to change in the future. Exporters world-wide still see the UK as a highly attractive potential market, although there are some concerns over both the technical and commercial pressures exerted over them by the main supermarkets. However, in the final analysis, the UK market is one they would rather be active in than not
- The UK is regarded as a premium destination, even if technical and commercial standards, set by major customers, are exacting. Entry to the € zone by the UK, if this does eventually take place, will only serve to make the UK market even more attractive
- However, it is highly likely that, as well as targeting export opportunities in the UK market, growers in emerging economies will be looking to service their own domestic markets and will have their own industry shake out to contend with over the next 10 years
- The build up to accession saw many EU trade agreements formed and so, although the pace of change in the East will accelerate, production will still often be of a commodity nature. The key relationship with the Eastern markets is likely to be based around the export of technology, goods, services and know-how as well as the use of imported labour, not just the trading of horticultural products

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

- Exports from African and Central American suppliers outside of Europe have continued to increase, regardless of increased fuel costs over the last 10 years. There have been major investments in the production and post-harvest infrastructure in many of these countries of supply
- All major UK retailers currently source products from these countries but predominantly for out of season produce and “exotics”
- While fuel costs are an important consideration for growers and exporters in East Africa, for example, increases in fuel rates will see exporters look to renew efforts to capture Fair Trade markets and absorb cost in this manner
- It is unlikely that EU governments will want to introduce prohibitive taxes on fuel used for air freight and so disadvantage hard pressed African farmers in high value international markets at the very time that major commitments are being made to relieving international poverty
- An even bigger threat to the UK and other West European horticultural sectors comes in the next 5 – 10 years from China. China already accounts for some 50% of global vegetable production and some 35% of global apple production. A similar situation exists in many other horticultural categories and across other agri- food commodity sectors. Of course, there is a huge domestic market to satisfy, but China has also shown it is ready to flex its muscles in international markets too
- To date, most Chinese produce exports have often been to the Russian Far East, other Asian and Pacific Rim markets. EUREPGAP has just signed a Memorandum of Understanding with the Chinese government and some of the leading operators in China operate to international standards already
- It is likely that the EU markets, including the UK, will be targeted by the Chinese export sector sooner rather than later. China has huge advantages in terms of cost of labour and technical competence on the farm and in the pack house will only improve over the next few years
- The food miles issue, presenting an opportunity to market horticultural products as being overtly “British” and “local”, should be regarded as a useful marketing tool that will appeal to the ethical consumer base. UK retailers have a basic loyalty to the UK horticulture sector, but only for as long as it can supply customers with the best quality at competitive prices

- The UK has traditionally been a net importer of horticultural products. And of course not all imports should be seen as detrimental to the UK industry. A good proportion of imports are of products that cannot climatically be produced in the UK and/or are in some cases procured by UK companies to service retail customers on an all year round (AYR) basis

2.2.5 The Future

- Imports will remain a key part of the UK market: the likes of Spain and Holland are likely to continue to be major suppliers to the UK market. We have already seen the indigenous UK mushroom sector decline substantially over the last 10 years and the danger is that other sectors could follow suit
- Promoting produce as being local and/or “British” will mean little if high levels of professionalism and responsiveness to the market are not achieved
- Food, including fresh fruit and vegetables purely as “nourishment” is no longer a differentiating characteristic – it is a given one – and careful selection of a truly winning growth platform is the key to successful business development
- In the future, a segmented approach to market opportunity will become more important, as a means of catering to the needs of different consumers and eating occasions and a strong customer service and consumer market focus will be required to tap into premium market opportunities
- For the UK based grower this will mean:
 - working closely with retailers and marketing organisations
 - engaging in an ongoing programme of R&D and product innovation
 - some new opportunity will emerge on the back of public procurement, but marketing initiatives must go beyond the generic
 - British grown produce is attractive in the UK marketplace, but it must be supplemented by other benefits for the buyer/consumer

2.2.6 Industry Structure

The challenges facing the horticulture sector changes in industry structure inevitable. Potential outcomes include:

- Increasing input costs, ongoing margin pressure and a predominantly defensive producer approach result in the eradication of commercial UK horticulture production
- Large numbers of producers are forced out of business, and/or under-performing crop sectors disappear from the market, due to a combination of producer inertia and a lack of support from government/trade organisations
- The erosion of the UK horticulture sector is limited, as the majority of producers across sectors adopt a more proactive and innovative approach. All stakeholders from the public and private sectors work together to address major commercial and environmental concerns, resulting in a more market-focused and efficient horticulture sector

Each of these scenarios is a possible outcome, based on the structure and positioning of the industry today. It is certain that a movement in the structure of the producer base is necessary to safeguard a long-term future.

Grouping player-types with a view to characterising key groups of horticultural producers by market orientation we find:

- **Traditionalists** are estimated to represent the majority of production holdings in 2005. Growers falling into this category take a defensive approach to the marketplace and have very limited involvement in R & D or innovation. This group is also likely to be comprised predominantly of ageing growers, many of whom have no line of succession in place to ensure the continuation of the business. They will be internally focussed on their production, rather than being driven by market needs
- **Realists** whilst not category leaders, demonstrate a greater level of flexibility and an awareness of the need to become more proactive and market responsive. Some element of R&D is likely to be incorporated into business strategy in response to market demands. These growers are more likely to recognise the need to form co-operative ventures with each other or the Pioneers, in order to capitalise on their specialisms
- **Pioneers** are today's industry leaders. Whether large-scale or niche players, these producers have strong relationships with marketing companies, retailers and major players in the foodservice sector. They are in touch through those relationships with end user needs and evolve their businesses in sympathy with market requirements. Pioneers have a

proactive approach to market and an innovative and constantly evolving product range. They will have implemented measures to improve production efficiencies and reduce costs where possible

- **Communicators** such as specific products and trade associations, retailers and government organisations, whilst not producers themselves, have a crucial role to play in supporting the industry, providing advice and guidance as required

Increasingly, there will be no room in the market for **traditionalists**. Whether as a result of a retiring grower base, pressure on the bottom line or ongoing rationalisation of the retail supplier base, the die-hard industry component will shrink considerably in the medium term. Indeed, if it fails to shrink significantly, then the future of the horticulture sector as a whole will be placed in jeopardy.

2.3 Recommendations

These are as follows:

- If smaller players in the UK horticulture sector are to compete successfully in a challenging and dynamic marketplace, they will require the help and guidance of industry support agencies.
- In the short term, Defra/HDC should seek to construct a more accurate picture of the grower base, segmented by business size and core product area. This should be undertaken as quickly as possible, in order to monitor effectively the fall-out of smaller companies from the marketplace. An understanding of the activities of all players will facilitate identification of gaps in industry/ market knowledge and lay the foundations for addressing support requirements.
- Ongoing consolidation in the grower base should be embraced
- A more consistent message is required from key industry stakeholders as to the way that market forces will operate in the future and what this means for UK horticulture: the segmentation of the consumer and retail market must be reflected at grower level
- Growers will either need to scale up and operate with major customers at the POS or look for small-scale niche markets and size their business accordingly. Being caught in the middle ground will be an uncomfortable experience

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

- The industry is relatively well served by R&D and information structures, but further cuts to R&D should be resisted, if the sector is to go forward. There are a number of technical challenges ahead which will require significant R&D input
- As well as technical R&D there will be an ongoing need for better training and understanding of the dynamics of the UK horticultural market, and the development of a more commercial business culture
- Short-term issues such as the cost of labour and energy are critical for the sector. Unless they are addressed, many parts of the UK horticultural sector might not be around to witness the impact of longer-term factors such as climate change and entry into the €
- The future will be based on the survival of the fittest. Small-scale players in the UK horticultural sector are most vulnerable. From work undertaken on this study, it would appear that many are already in a marginal position. None of the factors discussed in this report are going to go away
- The pressure on UK horticulture will only intensify, as it continually feels the pressure from other EU suppliers and from further afield (Turkey, Eastern Europe, China and Africa). Whilst UK horticulture can respond to internal market factors, it cannot exert any influence over what is happening in these increasingly dynamic export markets
- Commercial companies must stay abreast of customer and consumer needs and requirements and respond with appropriate near-market R&D in order to differentiate products from low value, commodity offerings
- Production and marketing efficiencies should be harnessed where possible: in many cases industry partnerships and/ or mergers and acquisitions will be the way forward. This has been happening for some time in the industry already and will be on going in its nature
- A well defined business strategy allied to unique and effective selling propositions will both need to be developed especially in mass retail markets. Niche markets are by their very nature more difficult to service and in this sector of the market, stronger product and service differentiation is less an option, more of a necessity for survival.

Ideally, those players that are **traditionalists** today should capitalise on their specialisms and implement the corporate change necessary to convert to **realists**. The share of this player group should be pushed up from 40% today to 75% by 2020. In order to meet this target **traditionalists** must:

- Consolidate: form partnerships with other, like-minded traditionalists, or realists
- Take a more professional approach to dealing with large-scale customers (appointing dedicated account management resource where required)
- Become more environmentally aware: implementing ICM systems where these are lacking and seeking compliance with major industry crop protocols
- Seek greater efficiencies in production, logistics and marketing to ease pressure on the bottom line and free-up finance for future investment into R&D
- Adopt a more customer/ consumer-focused approach, addressing gaps in employee skills and market insights to build a more service-orientated image

A significant reduction in the number of **traditionalists** will boost the chance of survival of the horticulture sector. In order for it to become truly successful, however, the **pioneer** constituency must also be increased. Ideally, pioneers should account for some 25% of players by 2020.

The move from **realist** to **pioneer** is more difficult to achieve than the shift from traditionalist to realist in that genuine cultural change is required. Pioneers can be large-scale commercial players or niche entrepreneurs, but in either case, exceptional market and client focus and strong financial management are givens. The pioneer must:

- Maintain close working relationships with customers across a range of distribution channels
- Prioritise the development of understanding and insight into the client business, which should be viewed as an extension of the grower's own interests
- Invest in market research and deliver on the findings
- Ensure that sufficient finance is channelled into R&D and product/service innovation
- Balance high volume/low margin market opportunity with involvement in more attractive premium market sectors where viable.

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

In terms of specific crop recommendations, these are as follows:

Brassicas

- A further need for consolidation of companies and crop production: this should create economies of scale and so free up finance for investment in technology required to reduce input costs
- Embrace customer rationalisation as a means of developing stronger relationships and securing demand; closer relationships with key customers are still needed and the implications of these driven by Category Captains back down the supply chain to growers
- Invest in premium market opportunities, for example with either NPD, new packing formats, convenience based products, new routes to market, e.g. premium retailers
- Co-ordinate key stakeholders from HDC with a number of small scale industry support organisations which individually lack scale of resource to make significant inroads to the market and/or in terms of R & D efforts.

HNS

- Improve management of market information and production planning in association with key customers
- Develop a more co-operative minded spirit in the sector vis a vis production, marketing, planning and logistics in the future
- Need to compete with foreign imports
- Seek further supply chain efficiencies to control transport and logistics costs
- Focus on application of technology to reduce production costs
- Work on educating and marketing to the consumer
- Lobby for industry-wide approach to soaring energy costs: tax relief would be advantageous and exploration of alternative energy sources

Protected edibles

- UK producers need to differentiate in areas other than price in order to secure retailer loyalty
- Investigate alternative energy sources: need to lobby government/industry support and direct research capability to addressing major challenges facing the industry
- Where possible, plan varietal mix with an eye to most efficient labour usage
- Do not resist sector consolidation, which offers the potential to reduce costs through increased scale and specialisation, in the mould of the successful Dutch model

Soft fruit

- Growers and marketing companies should continue to work as closely as possible with multiple retailers, anticipating customer needs and effectively managing market information in order to safeguard against competition from imports
- British provenance is perceived as an advantage on the back of perceived quality and freshness: this should be marketed effectively
- Labour costs and potential water shortages are major considerations for the future. Research should be undertaken at this stage to develop an industry-wide strategy
- Innovation and research should focus on investigation of premium varieties with enhanced margin potential

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3. OVERVIEW

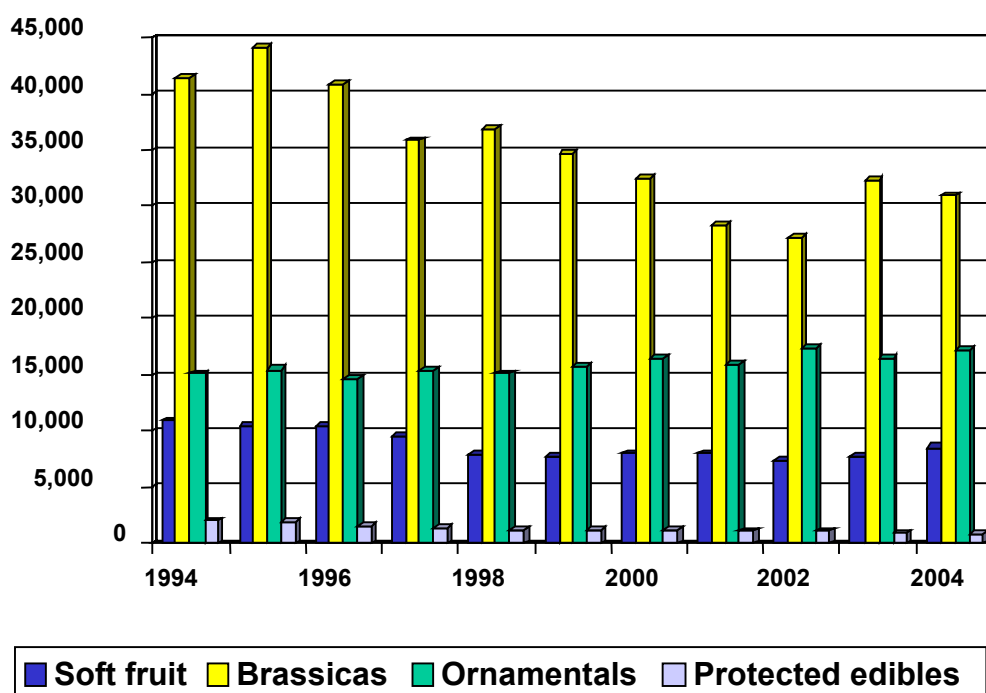
3.1 The UK Horticulture Sector

3.1.1 Scale of Production

Over the 10-year period 1994-2004, the value of home production marketed in the UK increased slightly from £1.9bn to £2bn. The main growth areas have been soft fruit and HNS, offsetting some declines in other crop sectors.

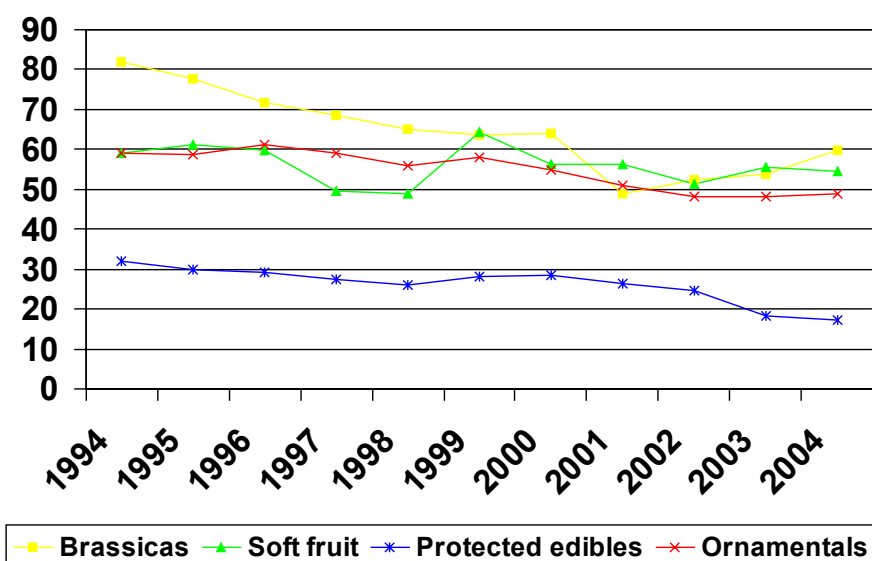
Over the last decade, the total planted area of UK horticultural crops (see Figure 1) has declined from 207,867 hectares to 168,348 hectares across the fruit, vegetable and ornamentals sectors, although as the individual sector analyses demonstrate (see Section 4 and Figure 2), this reduction in planted area has been offset in many cases by improved productivity per unit area.

Figure 1
Planted Hectares by Major Horticultural Crop: 1994-2004



Source: Defra

Figure 2
Home Production Marketed as % Total Supply by Crop



Source: Defra

3.1.2 Imports

On the whole, imports have dramatically gained strength in the UK market, showing an increase from £2.4bn to £4bn over the last decade (Table 1). An increase of 79% in vegetable imports has had the greatest impact on the value of the domestic market, but the highest growth in imports, of 93%, is evident in the ornamentals sector. Some ground has also been gained in exports which experienced an overall increase of £49m, albeit from a low base, with strongest growth attributable to the ornamentals sector.

Table 1
Value of UK Imports, 1994-2004 (£'000)

	1994	1996	1998	2000	2002	2004
Total vegetables	781,647	940,553	1,006,759	1,063,301	1,268,752	1,400,766
Total fruit	1,202,604	1,472,709	1,508,509	1,399,726	1,612,494	1,768,268
Total ornamentals	458,083	465,399	556,833	589,166	868,974	883,738
Total	2,442,335	2,878,661	3,072,100	3,052,193	3,750,221	4,052,772

Source: Defra

Not all UK imports should be seen as negative. A good deal of fresh produce is imported which, for climatic reasons, cannot be grown in the UK and, in some cases, produce is imported to specifically supplement UK production and enable UK based supply companies to service major customers on an AYR basis. The key danger is when UK production is being replaced by imports when the UK industry is still in its main season of production and/or at the start and end of season.

Some sectors in the UK have fared better than others here:

- the **soft fruit sector** through the use of protected production systems has managed to extend its season in an expanding market, although the level of imports has also continued to increase too. As a result, the overall proportion of soft fruit as a % of the total UK market has remained much the same
- the **top fruit** sector has seen UK production continue to fall and imports show a year on year increase. As a result the proportion of fruit that is domestically sourced as a % of the overall market has been in decline. Competition comes from the likes of France as well as long distance sources of supply such as South Africa and Chile who are investing in new storage and quality control systems. China, with 35% of the world's apple production could well be a major threat in the future if the UK market is specifically targeted. To date, most Chinese apple exports to the EU are made through the Dutch auction system, but it is likely that direct supply links to major UK importers and retailers will be made in the future
- the **tomato** sector in the UK has been put under long term pressure from the likes of both Spain and the Netherlands which has seen UK based production made uneconomic especially for commodity varieties. A recent major investment in the North of England using 24 hour production and artificial lighting systems and production of high value varieties aimed at specifically displacing imports from Spain, is something to date of a "one off". Not least, the financial costs involved are very high and the level of technical skills required exceptionally demanding. It is also aimed at the top end and relatively small sector of the consumer market. It is openly supported by a major retail customer and other key project stakeholders alike

To 2020, no significant increase in UK planted area is anticipated. Any increase in interest in more dynamic crop sectors (soft fruit, for example) is likely to be the result of switching from less attractive crops, rather than through new growers entering the horticulture sector

Overall, greater consolidation should be expected: in brassicas, extension of pan-European interests will help boost profitability; in protected edibles, mergers between growers will help fund the investment in technology required to extend growing seasons and maximise

production efficiencies (water and energy usage etc.); in ornamentals, larger organisations will be better positioned to deal with a consolidating customer base

The UK horticulture sector should seek to embrace this change, taking advantage of opportunities to supply more consolidated distribution channels.

3.1.3 Industry structure

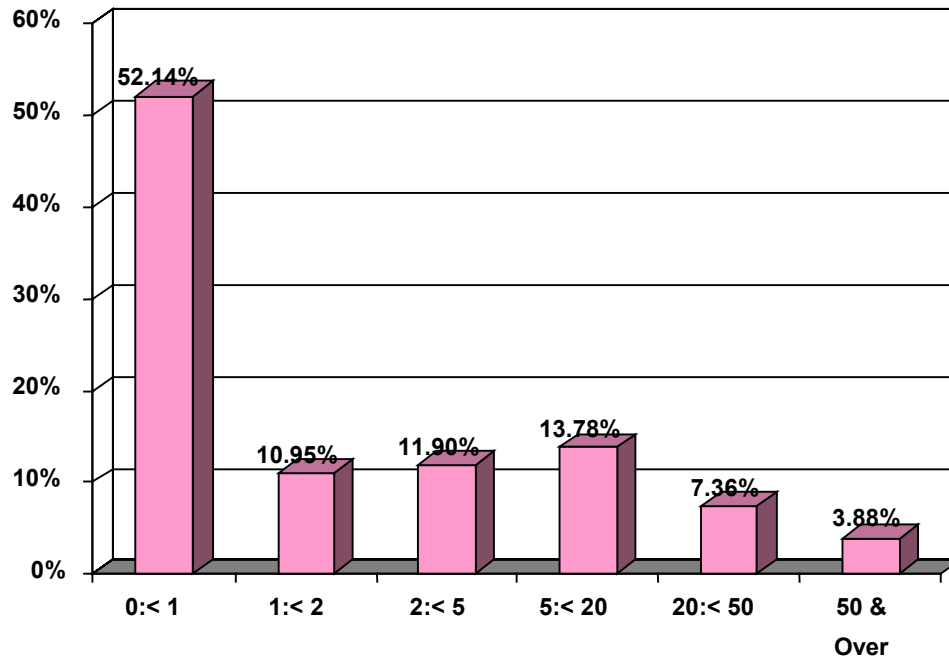
The UK horticulture sector currently lacks an accurate picture of its grower base. Whilst Defra data suggest that just over 50% of holdings are under one hectare in size, it is clear that holding numbers do not correlate with actual business units³.

HDC data for example suggest that there are in the region of 1,800 commercial horticultural businesses in the UK and there has been a good deal of consolidation in the sector over the last 10 years. As a result of this, a number of highly effective co-operative and producer/marketing organisations (PMOs) have emerged. These will include in some cases relatively small individual growers. This trend is expected to continue and should in most cases not be discouraged. That being said, size is not the only determining factor in terms of business success and there are some very successful small businesses throughout the UK.

However, relationships with major retailers are managed mainly by larger producers and PMOs, but existing information provides no indication as to the nature of each producer business. It is suspected that a significant number of smaller farm businesses are either winding down (particularly in the case of older growers with no family member in line to take over the business) or are operated by “part-time farmers” with no desire to extend commercial production. The prevalence of such businesses stands to exert a considerable influence over the future development of the industry.

³ An interview with LANTRA revealed that the number of holdings (as calculated by Defra) does not correlate with number of actual businesses. In many cases, an individual business unit may account for multiple holdings.

Figure 3
Breakdown of English Horticultural Holdings by size, 2004 (hectares)



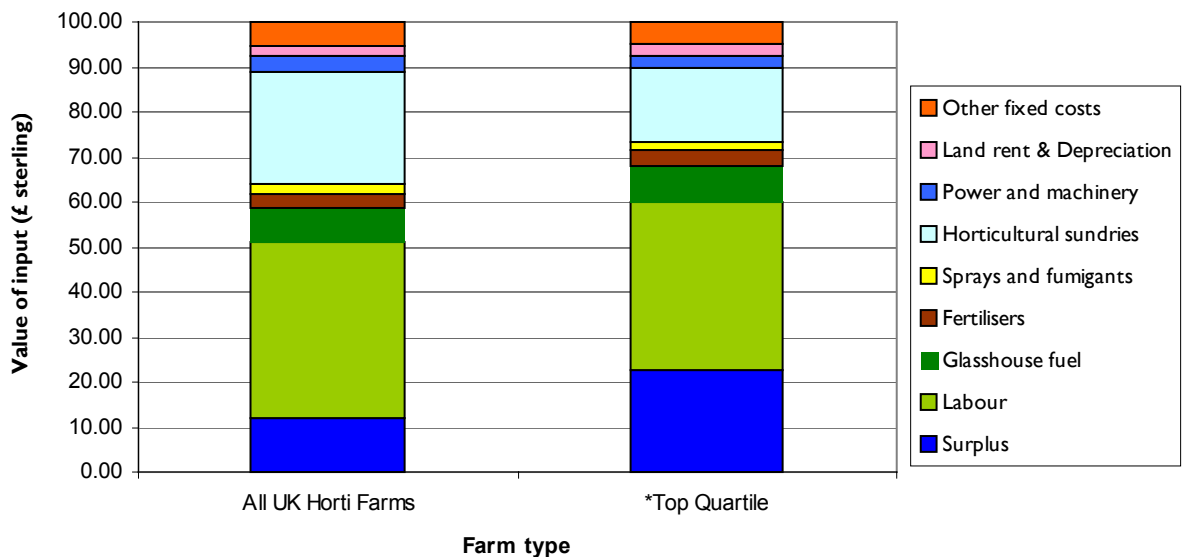
Source: Defra

If smaller players in the UK horticulture sector are to compete successfully in a challenging and dynamic marketplace, they will require the help and guidance of industry support agencies. In the short term, Defra/HDC should seek to construct a more accurate picture of the grower base, segmented by business size and core product area. This should be undertaken as quickly as possible, in order to monitor effectively the fall-out of smaller companies from the marketplace. An understanding of the activities of all players will facilitate identification of gaps in industry/ market knowledge and lay the foundations for addressing support requirements.

3.1.4 Analysis of costs and returns

Data to provide differentiation between the more successful growers and the UK overall picture are hard to find. However, by using UK Farm Business Survey data, an analysis of the returns of the top quartile of businesses, compared with the average business, can be made. If we look at the input profiles of the average UK horticultural business compared to the top quartile of businesses (based on return on tenant type capital before debts), we see a 10% difference in margin between the two groups (Figure 4).

**Figure 4
Overview Horticultural Input Costs per £100 Net Output
UK Growers, Average Grower vs Top Quartile 2003**



*The Top Quartile of FBS horticultural farms are estimated on the basis of returns to tenant-type capital.

Source: Farm Business survey 2003

It is of interest that of all the cost categories, horticultural sundries⁴ appear to show the most significant difference between the average grower and the top quartile, accounting for 26% of

⁴ Horticultural sundries as far as the FBS data are concerned consist of: the Horticultural Sundries code from the FBS farm return (these are specific to horticultural holdings only - they are not marketing costs or packing – they include propagation pots, HDC levy, grading, peat, fleece etc., plus seeds and young plants).

the input costs for the “All” UK grower profile compared to 15% for the top quartile. Variation in labour costs, which remains a key input cost, represented just 2% difference between the two groups.

Clearly, growers need to push themselves into the top tier of performer measures; there is no room in today’s market for an “average” grower, the retail market is focussing on reliable, cost effective, optimal performance. The growers meeting those criteria will be the future backbone of the industry.

It should be noted that the financial data are from a different source from that used in the sector-specific examples illustrated in Section 4 in that the data in Figure 5 include all UK horticultural sectors.

Based on FBS data in 2002, the overall average margin was as follows:

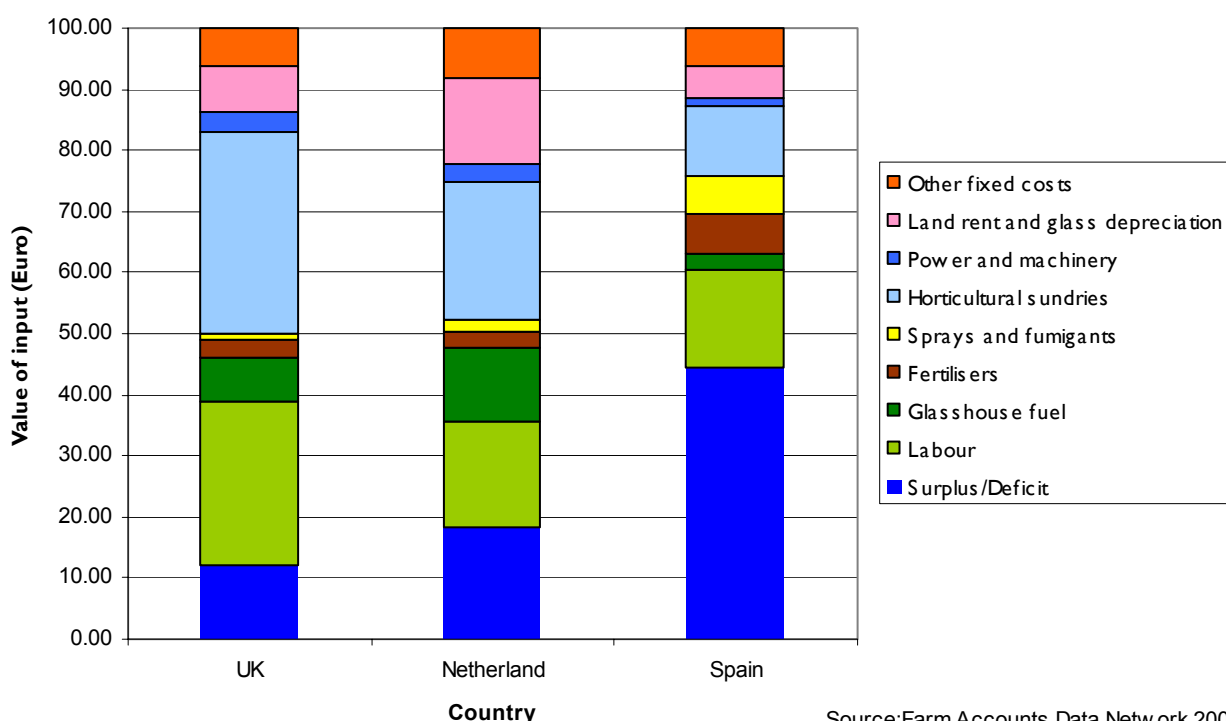
- **Brassicas:** - 9%
- **HNS:** 10%
- **Protected edibles:** 13%
- **Soft fruit:** - 4% (but which includes fruit not grown under polytunnels)

However, when a longer term view is taken based on our analysis, the profit margins are reduced across all sectors due to the increases in costs of key inputs such as labour and fuel. This is discussed in more detail in the individual crop profiles in Section 4.

3.2 Competitor Country Profile

There are numerous international competitors in the UK horticultural market which makes it impractical to do a detailed analysis for all sectors, even if the data were available. We have used in our example the Netherlands and Spain as two examples with somewhat different profiles: Holland with its high tech, high cost production versus Spain's lower cost, lower tech, approach (Figure 5).

Figure 5
Overview of Horticultural Input Costs and Margin per €100 Net Output Country Comparison (average grower), 2003



Source: Farm Accounts Data Network 2003

The cost breakdown for the UK in Figure 5 is slightly different from that given in Figure 4 as the source of data is different – in Figure 5, data from the EU Farm Accounts Data Network is used to compare the UK against Spain and the Netherlands. Data from the FADN is weighted to reflect production from all farm sizes, whereas data from the UK Farm Business Survey is skewed somewhat to reflect the larger farm sizes. Some caution should, therefore, be exercised when drawing direct comparisons between FADN and FBS data. FADN data does not allow for analysis of the top and average performer in the way the FBS does.

In 2003, the date for the dataset being used, UK growers on average were making a 12% margin (the margin measure roughly approximates to Cash Income, being Gross Output, less

Gross Input, but in this case also less Depreciation) per €100 net output, compared to 18% in the Netherlands and 44% in Spain.

Labour and horticultural sundries are key inputs which are both of higher cost in the UK than the other countries, resulting in an erosion of margin. In Spain, where there is more use of polytunnels and outdoor growing, combined with an increased pest intensity, spend on sprays is unsurprisingly higher than in the UK or the Netherlands.

Transport costs to the UK from Spain (and the Netherlands) are not included, but the margin differentiation between Spain and the UK cushion the costs of transporting produce from Spain into the UK market.

Any significant increase in key inputs, such as energy and labour, will present further difficulties for many in the UK horticultural sector. However, it is recognised that for some of the main competitors to the UK industry, especially those based in Northern Europe, this type of impact might well be much the same. Such a situation would accentuate the ability of low cost producers in areas of the world such as Eastern Europe, the Mediterranean Basin and North Africa, to look even more closely at the UK and other West European markets. Most vulnerable are those that are either small, do not have a strong control over their cost base and/or are not seen as being “best in class”.

Strengths and Weaknesses of Competitor Countries

- **Spain**

A strengths and weaknesses analysis of the Spanish horticultural sector is summarised below.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Larger volume wide range of products • Low cost of production • Cheap labour • Lower capital costs • Reputation and importance of horticultural sector in Spain 	<ul style="list-style-type: none"> • High pesticide use • Production of some crops may be more-exposed to adverse climatic events • Distance from UK market • Climate change: recent exposure to frosts • Not solely focussed on UK market

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Public sector support organisations • Co-operative mentality amongst growers • Active in all EU Markets, including UK, France, Germany and Eastern Europe 	<ul style="list-style-type: none"> • Strong commodity focus with variable quality • Strong internal competition between growers and co operatives

• The Netherlands

A strengths and weaknesses analysis of the Netherlands horticultural sector is summarised below.

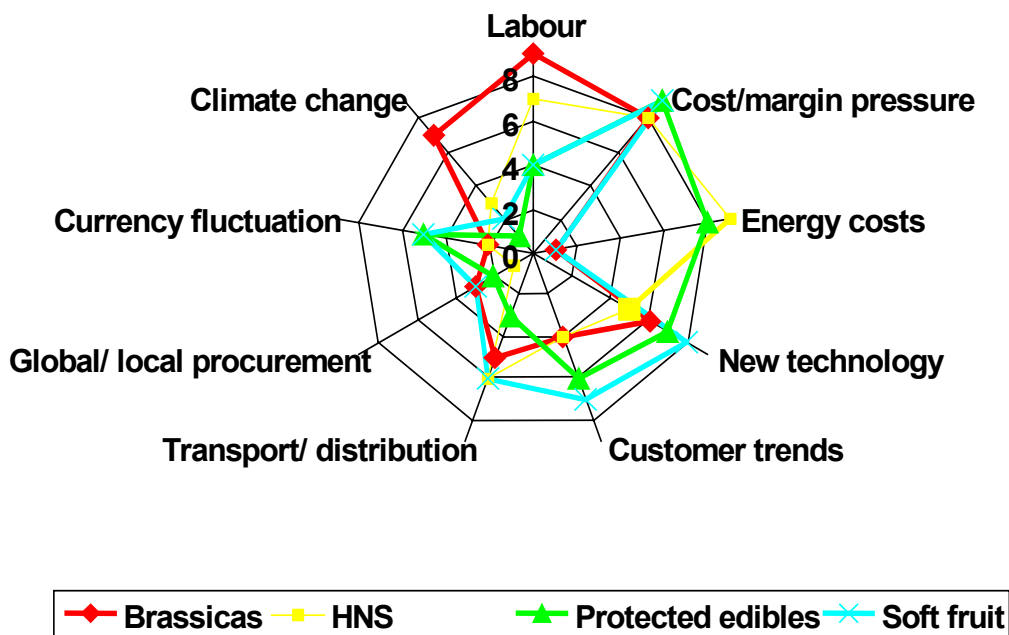
STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Built on strong R&D infrastructure • Large producer/good industry support via commodity board • Integrated nature of industry • Proximity to UK market • Wide range and assortment of crops • Strong track record of co-operation between growers 	<ul style="list-style-type: none"> • Lack of specific focus on the UK • Costs increasing, labour, land, heat etc. • Auction system no longer relevant to the UK market, especially for fresh fruits and vegetables and cut flowers, but less so for HNS

3.3 Key Issues Facing the Industry to 2020

Our analysis of the key issues facing the UK industry was developed through a combination of interviews with key stakeholders, and through desk research. Figure 6 illustrates the level of concern by crop sector for the major issues under consideration, information that was largely obtained from our interviews. A high score equates to a high level of concern.

Across crop sectors, the top three areas of concern for the future are cost and margin pressure, new technology and labour issues. Consumer trends, energy costs (despite ranking highest in protected crop sectors, where the greatest impact of energy price increases is felt); transport and distribution issues ranked as second-tier concerns. Currency fluctuations, climate change and global/local procurement were generally viewed as longer term issues and aspects over which individual growers have less influence. These issues are considered in more detail below.

Figure 6
Concerns Facing the Horticulture Sector: Overall Ranking



3.3.1 Cost and Margin Pressure

Cost and margin pressure is the single greatest challenge facing growers in all crop sectors, and one that is unlikely to diminish in the years ahead. Pressure on costs is driven primarily by competition from strong exporting markets operating from a lower cost base. This situation stands to be exacerbated by EU expansion in the longer term.

The globalisation of the horticultural market means that consolidated and powerful retail customers have the ability to source produce from lowest cost suppliers across a plethora of international markets. Across crop sectors, future survival will be dependent on ability to compete on areas other than price. Innovation is, then, closely linked to margin success.

Development and marketing of new varieties is a valid means of defending profitability in the face of low margins in commodity sectors, but in most cases it is the road to survival rather than the road to riches. Although margins on speciality varieties and other added value products can be higher than on commodity products, additional packaging and marketing costs need to be taken into consideration. Alongside innovation and R & D, effective harnessing of new technology will have a clear role to play.

Commercial companies must stay abreast of customer and consumer needs and requirements and respond with appropriate near-market R&D in order to differentiate products from low value, commodity offerings.

Production and marketing efficiencies should be harnessed where possible: in many cases industry partnerships and/ or mergers and acquisitions will be the way forward. This has been happening for some time in the industry already and will be on going in its nature.

A well defined business strategy allied to unique and effective selling propositions will both need to be developed especially in mass retail markets. Niche markets are by their very nature more difficult to service and in this sector of the market, stronger product and service differentiation is less an option, more of a necessity for survival.

3.3.2 Technological Development

Improvements in technology can play a central role in addressing major areas of concern within the horticultural sector:

- Concern over rising energy costs has raised interest in research into alternative energy sources. There is also potential to address additional resource issues through research into improved irrigation methods and developments in growing compost (particularly peat-based compost)

- Escalating labour costs are being tackled through increased mechanisation where possible (although to some extent, degree of mechanisation is limited by the scale of the industry). In the soft fruit sector, specifically, harvesting rigs and multi-bay tunnels are successfully being used to drive labour efficiencies
- Research into new planting systems and root stocks to achieve higher yield and ongoing varietal development addresses consumer demand for variety and superior taste, as well as securing improved return on investment
- Developments in packaging are being exploited in order to add value to fresh produce and ornamentals. Examples include biodegradable and self-watering packaging and advances in printing
- Poor planning exacerbates margin pressure: improved IT systems and enhanced market information can improve communication and customer relationships
- Reducing product wastage to improve margins (i.e. more effective crop scheduling, improved pest and disease forecasting etc)

In an environment where low operating margins are the norm, investment in state-of-the-art technology will not be an option for many producers.

Major areas of concern will require an industry-wide approach (rising energy costs, water usage)

For some market-aligned businesses, moving towards greater processing/ packaging of goods will change the volume and nature of labour required, potentially yielding cost savings. Invariably, larger scale production units will be best placed to exploit these developments. Smaller producers are likely to be forced into ever-smaller niches.

3.3.3 Labour

The UK horticulture sector is almost entirely dependent on migrant labour on an AYR basis. Eastern Europe is the primary source for recruitment, and, assuming that there will be no radical policy changes, this is not perceived by growers as an area of concern. The accession of the new EU Member States has facilitated recruitment at source, making it easier for individual commercial companies to control their own hiring.

As more sectors open their doors to migrant labour (i.e. construction, catering and so on), concerns have been raised that the horticultural sector may lose its appeal, but to date such fears have proved unfounded. The UK continues to offer an attractive working environment

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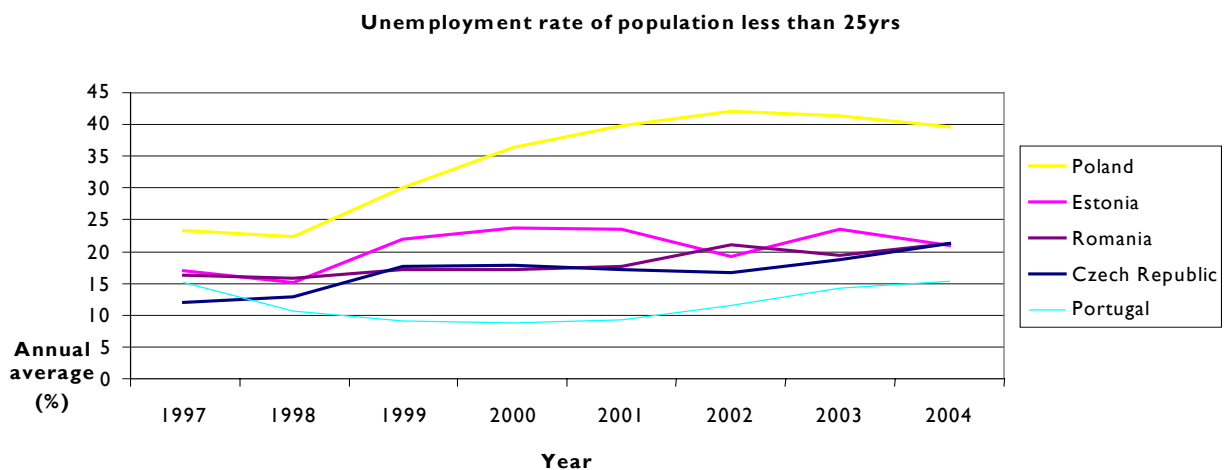
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and conditions for migrant workers. Even assuming the ongoing strengthening of developing economies in Eastern Europe, this is expected to be the case in the mid to long term. Portugal is another often favoured source of migrant labour for the UK horticultural sector.

Many companies are, indeed, promoting foreign workers to supervisory positions and encouraging their long-term career development in the UK. The reality is that in many cases, the UK horticultural sector needs the continued influx of migrant labour from Eastern Europe to continue functioning.

Figure 7 illustrates the level of unemployment in Eastern Europe and Portugal amongst the under 25 age group which is often the key age range that might come to the UK to work in the horticultural sector.

Figure 7
Unemployment in Eastern Europe & Portugal



Source: Eurostat

It should be noted that:

- Increasing unemployment in Eastern Europe, especially among the more mobile younger generation, and the freedom of movement across borders, will encourage a migration of workers to the more prosperous regions of the world, including the UK
- The Seasonal Agricultural Workers Scheme (SAWS) currently assists the support of UK horticulture. With participants usually in the 18-25 age range, they are organised via agents who hold contracts with UK businesses as “multiple operators”

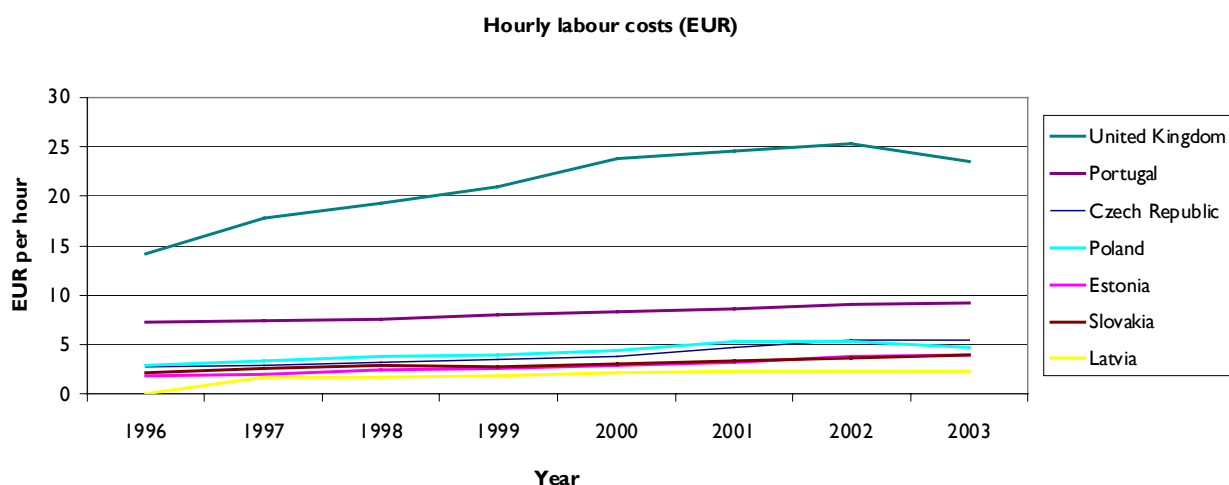
- The staff recruited are typically from East European countries, Poland, Lithuania, Estonia, Czech Republic, Romania and Hungary. The scheme is under review, but currently a quota for SAWS of 16,250 places exists for 2005
- With labour costs being a significant component of input costs, growers need to source the most cost-effective labour to minimise costs. Although, under the regulations governing SAWS, workers should be paid as a minimum the UK national minimum wage, wages do vary and employers benefit from other savings on the costs of employment, together with the general enthusiasm of the foreign worker which in turn boosts productivity
- Combined with cost efficiencies is the convenience of recruitment for key periods without the entrapment of permanent overheads associated with full time employees.

Again, it should be noted that:

- Unemployment in Eastern Europe combined with the very significant difference in wages will continue to draw more workers towards the UK. Wage costs in Portugal in 2003 were around €9/hr compared to the UK average of €23/hr
- If we reference the 2003 Eurostat, published data and benchmark several Eastern European countries against a static 2003 UK labour cost of €23/hr, we can see that Portugal, with the nearest cost of €9/hr, would need an 11% per annum increase over 10 years before a UK equivalent figure was reached (Figure 8; Table 2)

Clearly, it is unlikely that such rises will occur. It can therefore be concluded that the UK market will remain an attractive option for employment opportunities for the foreseeable future.

Figure 8
Hourly Costs of UK & East European Labour (€ per hour)



Source: Eurostat

Table 2
Labour Costs in the UK & Selected Other European Markets

Labour cost, rate rises to equate to current UK costs										
	2003 (Yr 1)	2004 (Yr 2)	2005 (Yr 3)	2006 (Yr 4)	2007 (Yr 5)	2008 (Yr 6)	2009 (Yr 7)	2010 (Yr 8)	2011 (Yr 9)	2012 (Yr 10)
UK	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56	23.56
Portugal (€/hr)	9.21	10.22	11.35	12.60	13.98	15.52	17.23	19.12	21.22	23.56
Hour rate rise		11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Czech republic (€/hr)	5.47	6.43	7.55	8.87	10.43	12.25	14.40	16.91	19.87	23.35
Hour rate rise		17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%
Poland (€/hr)	4.7	5.62	6.71	8.02	9.58	11.45	13.69	16.36	19.55	23.36
Hour rate rise		19.5%	19.5%	19.5%	19.5%	19.5%	19.5%	19.5%	19.5%	19.5%
Estonia (€/hr)	4.01	4.88	5.93	7.22	8.78	10.68	13.00	15.81	19.23	23.40
Hour rate rise		21.7%	21.7%	21.7%	21.7%	21.7%	21.7%	21.7%	21.7%	21.7%
Slovakia (€/hr)	4.02	4.89	5.95	7.25	8.82	10.73	13.06	15.89	19.34	23.54
Hour rate rise		21.7%	21.7%	21.7%	21.7%	21.7%	21.7%	21.7%	21.7%	21.7%
Latvia (€/hr)	2.37	3.06	3.94	5.09	6.56	8.47	10.92	14.09	18.17	23.45
Hour rate rise		29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%

Source: Eurostat

In the light of the rising cost of labour, many larger growers are seeking to reduce labour usage through greater automation and setting goals for labour reduction of up to 30% over the next decade. Increasing yield through ongoing varietal development is also viewed as a

means of reducing labour usage and producing more revenue from the same basic infrastructure.

In the UK, LANTRA takes a skills-based approach and is considering the means of managing increasing labour costs if moves towards greater automation prove insufficient. One innovative approach concerns the possibility of linking up with other sectors to “share” employees. An example may be linking up retail with horticulture: over the Christmas period when the horticulture sector is slow, retail sales are generally higher and more temporary staff are employed. There are other good examples that can be quoted: on the South Coast for instance, the HTA are aware that a group of ornamental and fresh produce growers have begun to share casual labour requirements as different crop seasonality allows the facilitation of this.

Securing continuous employment for staff across the year, and so increasing the possibility that they would return to the horticulture sector the following year, could also limit expenditure on retraining and refresher courses. In reality, however, even new approaches to recruitment are unlikely to entice any significant level of UK labour back into the horticulture sector: competition from other industries is too strong.

The nature of UK horticulture in the years ahead may yet dictate even higher labour costs, as demand for sustainable production methods increases and growers seek to further process goods in order to tap into premium market opportunities. Demand for compliance with environmental policy and responsible use of waste and pest control products is already placing an increased burden on employers to ensure that staff have the necessary skills and understanding to manage processes in an environmentally friendly way. A move towards further processing may require a shift in wages to reflect a shift from an unskilled to a semi-skilled environment. Twenty-four hour production would also imply a need for shift work, requiring higher salaries.

The age profile of the horticultural labour force is another salient issue. With some 5% of employees aged under 26, in comparison with the estimated 40% of workers within 20 years of retirement, there is a need to generate interest in the sector amongst younger workers. There must be a dual focus on the training needs of new workers entering the sector and on the ongoing skills requirements of the 80% of existing workers predicted to still be working in the sector in 10 years time.

The rate of economic development in EU-accession countries implies that the UK will remain an attractive destination for migrant labour in the longer term. If availability of labour will not be a problem, however, labour costs are unlikely to fall. Efficient use of labour, managed through well-planned crop scheduling, harvesting methods (the degree to which automation is possible will be dictated by scale of production, but the example of raised beds in soft fruit is

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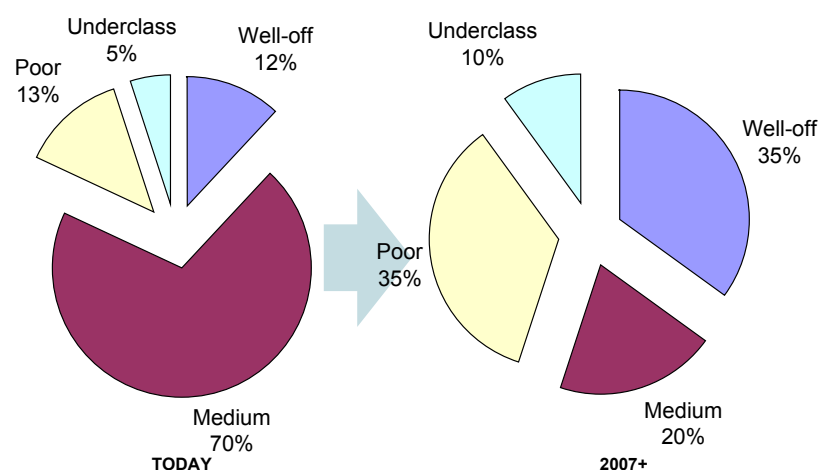
one example of lower cost improvements) and a move towards greater processing, will prove the most effective means of cost control.

3.3.4 Consumer Trends

Future market structure, as defined by consumer trends and developments will define the nature of opportunity available to the horticulture sector. It is forecast that in the next decade, the horticultural market will experience a further decline in the sale of mass market goods, in favour of greater consumer polarisation between economy-positioned and value-added products, in line with changing distribution of consumer income.

The proportion of middle-income consumers is expected to shrink from 70% of the consumer base today to 20% over the next 10-15 years, with a corresponding increase in poor (18% to 45%) and wealthy consumers (12% to 35%). For the producer, this will mean dealing with at least three groups of consumers with distinct needs and desires. At the lower end of the spectrum, price will be the all-important factor. For wealthy consumers, the onus will be on product quality, traceability, differentiation and experiential offering.

Figure 9
Consumer Percentage Segmentation, Today and Tomorrow



Source: Eurostat, Promar International “Where Next in Food”, 2004

This represents a fundamental change in the way that the UK market will operate in the future. The implications of this increasingly fragmented market for the UK horticultural sector means:

- A breakdown of the mass middle market which sees the vast majority of consumers behave in a homogeneous fashion in terms of what they buy, when and where they buy it and how much they are prepared to pay for it
- Supermarkets will not go away, but will be forced to invest in new ways of reaching consumers

THE FUTURE OF UK HORTICULTURE

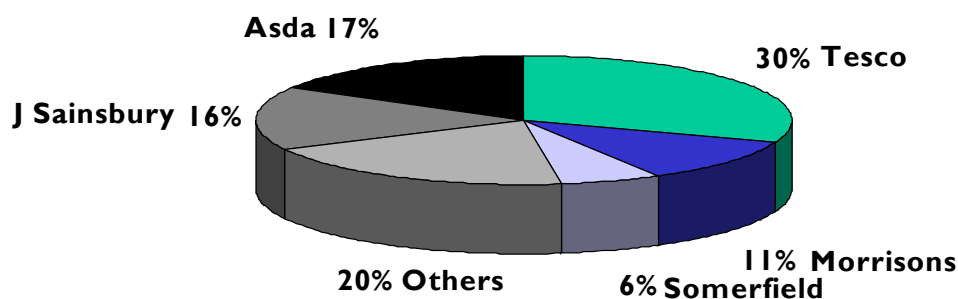
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- The growth of niche markets such as organic, Farmers Markets, Fair Trade, fresh cut and convenience based products
- The growth of new routes to market such as the foodservice and catering sector, electronic and internet based shopping systems
- More clearly defined consumer types: those that are able and willing to pay for horticultural products of high quality and those that are not
- The attractiveness of the high income consumer segment will be such that many other suppliers from around the world will be attracted to it and as a result competition to service this sector of the market will increase: commodity products and suppliers will be forced to serve the low income market segments and low costs of supply will be a key feature of success here

Understanding consumer behaviour will become increasingly demanding and a new level of skills analysis will be required in this area from that achieved to date.

The multiple retailers will continue to dominate the UK fresh food market in the future, as they do at present (Figure 10).

Figure 10
UK Retail Food Market: Player Share, 2005



It is worth noting though that in the HNS sector, the market is more fragmented with retailers, DIY operators, wholesalers, garden centres etc. all still significant in terms of market distribution, although even in this sector further consolidation is expected over the

foreseeable future. There is also, of course, a considerable non retail amenity market in the UK for ornamental products.

With consumer segmentation tools already firmly established (e.g. the division of most retailer product ranges into 'good', 'better' and 'best' brands), the future is most likely to see an exacerbation of existing tension between increasing producer costs and downward cost and margin squeeze on the part of multiple retailers, particularly at the lower end of the market. For suppliers to be successful in a premium market environment, however, a greater focus on customer service and consumer marketing will become apparent.

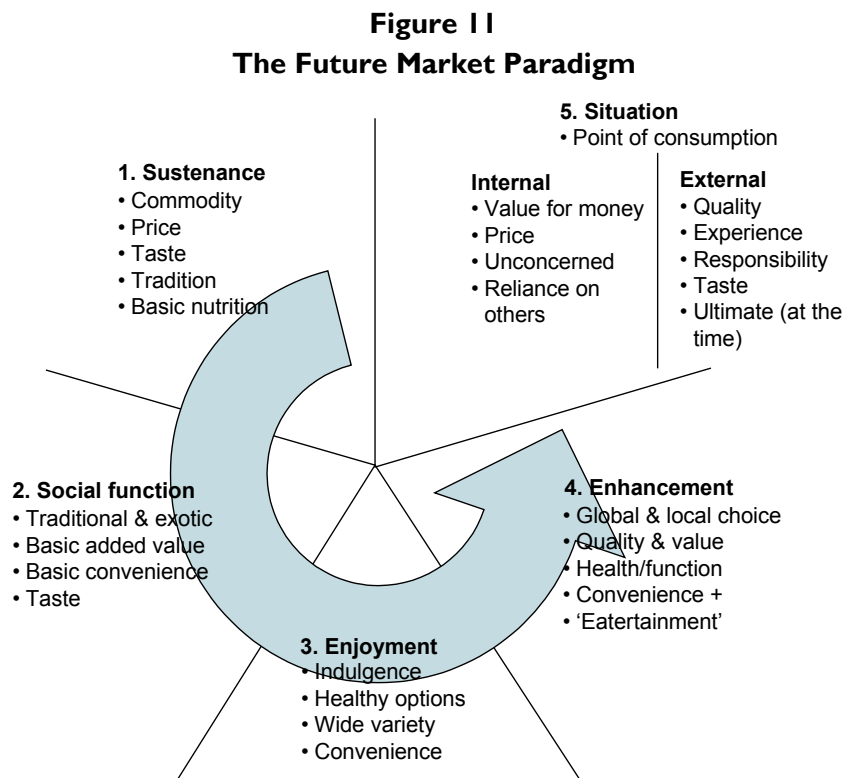
Multiple retail, whilst accounting for a significant proportion of consumer food spend, is clearly not the only route to market. The UK foodservice sector has been experiencing considerable growth and consolidation in recent years, with the result that the market is now split between large, highly organised channels/players (major contract caterers such as Compass and Sodexo, delivered wholesalers such as Brakes and 3663, for example) and more fragmented ones (e.g. full service restaurants, local gastro pubs).

Whilst the sector clearly presents its own challenges in terms of supply chain and product requirements, it presents two clear types of opportunity for fresh produce suppliers:

- High volume, mass market opportunity with organised, large-scale operators (that are becoming increasingly similar to multiple retailers with regard to purchasing structures and supplier relationships)
- Niche specialist opportunity with independent operators (with many of the same requirements as top tier retailers: e.g. quality, traceability, differentiation).

The foodservice sector may also safeguard the future of wholesale markets for some years. Although over 30 wholesale markets exist in the UK, their future role is being cast into doubt as a result of the growing trend towards direct relationships between growers and their retail customers. Whilst direct relationships are also a reality in the foodservice sector, there remains a suitably large number of small scale operators to justify purchasing from wholesale markets.

Figure 11 below sets out how we see the UK food market developing over the next 5 – 10 years.



Source: Promar International “Where Next In Food”, 2004

Over the years, food in the UK market, including fresh produce has evolved a long way from a pure “fuel” to having considerably wider social and interactive roles. However, this process is far from over. The future market model will concentrate on the situation/setting around which food consumption is wrapped, away from its enhancement element as is the case today.

The UK market today sits at Level 4 of the model. Within the next 5-10 years, consumers will move towards Level 5, where consumer motivations will appear to vary widely in and out of the home. In an “internal” (i.e. eating in the home) setting, consumers will place their trust in familiar retailers and brands and price/value will take precedence over ethics. In an “external” (i.e. eating away from home) foodservice environment, the opposite will be true: quality and experience will be key and ethical trading will be a point of difference.

In these conditions, correct identification of future growth platforms becomes a strategic issue. Food, including fresh fruit and vegetables, purely as “nourishment”, is no longer a differentiating characteristic – it is a given one – and careful selection of a truly winning growth platform is the key to successful business development.

In the UK, consumer demand for intrinsically healthy and beneficial food products sustains the market for organic and functional foods. Whilst clearly a niche sector, organic production presents some differentiated opportunity for producers, although additional costs in terms of labour should not be underestimated. Fruit and vegetable box schemes, often linked to organic produce, offer the potential for more direct consumer contact and improved margins, albeit on a comparatively small scale. Alongside the opportunity for vitamin-enriched, health enhancing fresh produce, the concept of functionality could represent a positive marketing platform for producers based on the natural functional characteristics of fresh fruit and vegetables.

From a horticultural standpoint, the fruit and vegetable sectors stand to benefit from government initiatives aimed at overcoming increasing obesity levels in the UK and generally making consumers more health aware. The decision to move towards public procurement of fresh produce represents a new area of opportunity to boost sales, particularly for those growers not tied into relationships with major retailers. The limited scope of this opportunity should be recognised, however; for most producers there is a clear need to look beyond generic campaigns when considering future marketing activity. Heavier marketing of British provenance is viewed as a possible way forward in the edibles sectors, but this message can be harder to convey in ornamentals.

One of the greatest challenges facing the HNS sector in terms of consumer trends is the move from DIY to “DFY” (done for you). This consumer attitude presents an opportunity in terms of pricing, with instant gratification taking precedence over cost and variety as purchase drivers, but it does place pressure on the supply chain in terms of demand for plants in flower. There is constant demand for NPD in plants, and fashion and lifestyle are becoming important buzzwords.

3.3.5 Energy

For glasshouse producers in particular, rising energy costs are set to be the single greatest challenge to future profitability. As many growers are locked into long term energy supply contracts, the true impact of rising costs has yet to be felt, but with some forecasts estimating that energy costs could double in the next year, a significant effect on cost structures is inevitable.

The problem will not be limited to the UK, however, as the European industry is utilising the same finite pool of resources. It is impossible to estimate future price rises with any level of accuracy, but the fact remains that it will be difficult to pass any of these costs further down the supply chain to the end consumer. It is likely that the trial of alternative energy sources will become a priority in the next 5-10 year period. The high level of investment that this will require means that a joint industry approach will be crucial to ensure the survival of smaller players.

3.3.6 Transport and Distribution

Transport and distribution costs will also be influenced by rising fuel prices. In recent years, distribution costs have remained static, or have even dropped slightly, benefiting from increased retail consolidation and the consequent establishment of regional distribution depots. In the HNS sector, however, with a more fragmented customer base, high UK distribution costs are making it more difficult to compete on price with Dutch suppliers.

As a percentage of overall costs, transport and distribution generally account for around 5-10%, although this varies by product sector, with lower volume, higher value products such as soft fruit clearly proving more cost effective to transport than higher volume crops such as HNS, and other bulk products such as onions and potatoes. At the time of writing this report, high and rising fuel prices are a topical and contentious issue, in the wake of hurricane Katrina, but industry analysts predict a stabilising of prices in the medium term.

In terms of any advantage enjoyed by the UK horticultural sector over the immediate competition *vis a vis* transport costs, Table 3 sets out the basic costs of moving horticultural products around the UK and from two key EU locations. Accurate data are somewhat difficult to obtain, not least because of the huge number of permutations that exist in terms of product specification, routes and other logistical considerations.

Table 3
Comparison of UK & other EU Transport Costs (£ per 44 tonne truck)

Route	Cost
Kent – Scotland	700
Amsterdam – Birmingham	1,100
Southern Spain – Birmingham	1,700

Source: Promar International, based on trade research

Based on this analysis, it would appear that UK growers would enjoy a significant advantage in terms of costs of transport in comparison to their Continental counterparts. It can cost twice as much to bring produce from the Netherlands and Spain than it does to move produces around the UK internally. However, a number of other factors need to be taken into account, which might include the following:

- heating costs for UK growers have increased significantly in the last few years and while transport costs have also increased, these have not been by as much
- transport costs as a proportion of the overall costs of supply are not as high as heating costs and so offer an incentive to procure from international sources of supply: a number of the leading UK horticultural producers have their businesses in southern Europe (or have contracted suppliers) in order to supply customers on an AYR basis
- retailers while often encouraging UK sourced supply, invariably also underpin UK production with imports: this often leads to initiatives to source from the likes of Spain and Holland as required and sees the transport costs absorbed into the value of the retail account as part of the benefit of gaining more overall business with a retailer
- for HNS, bulkier plants come under more pressure from increased transport costs rather than less bulky products such as cut flowers

A key challenge for the future will be the efficient management of transport facilities from more than one destination and there are already some good examples of this being put into practice.

3.3.7 Currency

Currency fluctuations are generally not perceived by UK growers as a major area of concern for the future. The initial weakness of the € is felt to have given major exporters, such as France, Spain and the Netherlands, a stronger foothold in the marketplace that has subsequently proved difficult to dislodge. It is highly unlikely that the UK will enter the € zone in the short to medium term.

If this were to prove the case, there is some concern that, whilst creating a greater level of transparency in the marketplace, converting to the € would be to the benefit of competitors, rather than UK growers, as the latter have a poor track record as regards trading in Europe, often emerging as insufficiently price-competitive and insular in outlook.

Across crop sectors, ornamentals are amongst the hardest hit by exchange rate fluctuations. The amenity sector, in particular, can experience huge imports of trees from Holland, although such competition is not driven by exchange rates alone:

“.....there is continued pressure from the Continent, irrespective of exchange rate fluctuations.....”

In the decade ahead, generating stronger loyalties amongst multiple retailers for the purchase of UK horticultural products will be essential in the light of potentially ongoing currency fluctuation and increased international participation. Notably, in today's market, the negative impact of long shipping distances on produce quality is currently stemming the flow of produce from Eastern Europe in certain sectors, but varietal development and improvements in logistics could overcome this disadvantage in the longer term.

3.3.8 Global Procurement

The reality of global procurement is entrenched in the UK horticultural sector and the threats and challenges it represents are unlikely to alter. Multiple retailers and food-service operators are committed to sourcing produce with an optimum price-quality balance and often this favours international suppliers.

Over the past 14 years, we have seen variations in the price of oil due to the Gulf war, 9/11 and OPEC quota increases; however, despite these fluctuations, there appears no correlation between oil price and the volume of imports of fruit and vegetables into the UK.

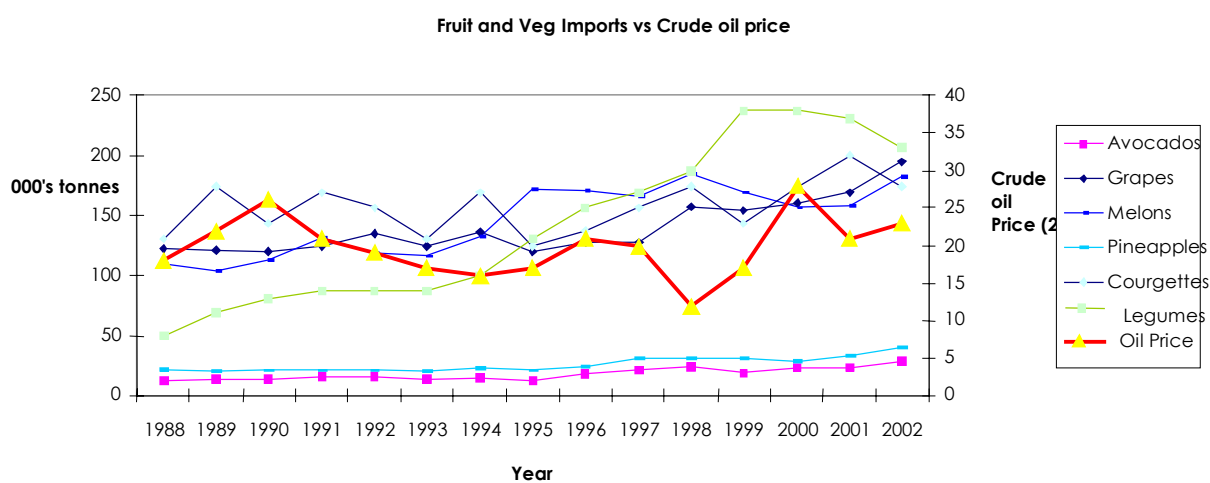
The UK was once largely self-sufficient in fruit and vegetables, but as consumers become exposed to more exotic fruit and vegetables, and in turn, become ever more discerning in their shopping habits, the trend for imported produce continues to rise. This trend shows no

sign of halting, despite potential increases in the cost of transportation with fuel costs and taxes being imposed.

The reach of global markets in turn puts pressure on the UK grower to become ever more cost effective if they are to compete effectively. A “point of difference” that can be passed onto the retailer to secure a higher margin is the only way of justifying increased costs and defending the foundation of the domestic grower.

The following analysis in Figure 12 of levels of fruit and vegetable imports into the UK in relation to crude oil price reveals a limited direct association between the two. Many horticultural products being exported from worldwide sources to the UK, have continued to soar over the last 15 years almost regardless of the oil price. Even with oil prices at their currently very high levels, imports continue to be sent to the UK and other key EU markets. While high fuel costs will exert further pressure on growers and exporters in these regions of the world, it is not expected that they will stop sending produce to international markets in the short to mid term, at least.

Figure 12
UK Fresh Produce Imports & Crude Oil Price, 1998 – 2002



Source: Eurostat

Of more importance than just the crude oil price with regards to the import of fruits and vegetables will be a combination of other factors, which include the following:

- procurement policies of major supermarkets to stock exotic and imported fruits and vegetables
- consumer trends to consume more “exotic” produce *per se*

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- in-country investment in production and post-harvest facilities
- the fact that in many countries of supply, such as those in East Africa, there has been substantial investment (including UK/EU industry sources) in horticultural industries that have developed specifically to supply the export market (there is only a limited domestic market and growers have to export what they produce to get any return at all).

The idea that high transport costs will stop suppliers from outside of Europe sending to the UK and other EU markets seems somewhat fanciful. However, if they are faced with higher costs *per se*, it might push producers down the route of marketing their produce more overtly as a “Fair Trade product”. It is unlikely that European governments will push for the introduction of non-tariff barriers such as prohibitive taxes on aviation fuel for imported products from developing countries. There is a good deal of attention at the moment in terms of political focus on the need to open up EU markets for African and other third world farmers and to alleviate rural poverty in these countries.

As strong price competition from Eastern Europe and other emerging markets continues, an on-going increase in the import of horticultural products into the UK is expected. Some evidence of growing interest in regional products at the top end of the retail market and in niche distribution channels may boost opportunity for premium producers, but overall, strong supplier relationships with multiple retailers will be the most effective protection mechanism against strengthening imports. Investment in technology, customer service and marketing will be required to support this.

Leading commercial UK producers are of the opinion that “locally sourced produce” will never amount to more than a small percentage of the overall market. Whilst mass market channels inevitably exert cost and margin pressure, high levels of consolidation and supply chain organisation offer economies of scale in terms of distribution costs. For the majority of producers, long term relationships with large-scale customers offer a more secure future than a series of more fragmented deals with local customers. Fragmented distribution channels offer some attractive margin opportunity for smaller scale producers, but will offer limited scope in terms of volume.

The concept of “local sourcing”, for many of the major commercial production and distribution groups in the UK, also faces difficulties because of the specialisation of production across the UK. Breaking down the critical mass of horticultural production into small production areas is economically unsound and unsustainable in the light of increased production costs. In addition, there is a question mark, from a consumer perspective, over the authenticity of local farmers’ markets, where the produce for sale is not entirely locally grown.

3.3.9 Climate Change

The potential impact of climate change varies significantly by crop sector. The soft fruit, HNS and protected edibles sectors are well placed to deal with climate change as it occurs, benefiting from their ability to switch to more suitable varieties in response to changes in temperature or rainfall within a few seasons. Increased use of plastic tunnels in the soft fruit sector, in particular, has increased the ability of the sector to protect itself from the impact of more unpredictable weather patterns. For the brassicas sector, however, climatic change raises more wide-ranging questions as to where (in the UK) crops can be grown in the future. This could also be more of an issue for top fruit producers due to time lag in introducing new varieties.

Nonetheless, for most producers today, climate change sits towards the bottom of the list of priority issues, behind other more pressing commercial concerns. As this is not something that can be influenced directly by individual companies, any generic research and assistance provided by R&D funding agencies is particularly welcome. The horticulture industry will attempt to focus on the potential opportunities presented by climate change rather than on the difficulties. These opportunities might include the extension of production seasons and the generation of more AYR production. Crops such as brassicas might in particular benefit from this but more R & D is required. Defra is seen as the obvious source of generic industry R & D into such topics and has been recognised by Defra as one of its priority research areas.

Overall, future water supply is a more pressing issue than climate change, although there is still a lack of urgency, if not a lack of awareness of the issues at stake, at industry level. As water becomes more limited, costly and legislated, it is certain to place an additional cost burden on producers that will prove hard to bear in the current climate. The detail of such costs, including those likely to be incurred by the EU Water Framework Directive are unclear at the moment but any additional costs, especially for small-scale operators, would be unwelcome.

Larger, more professionally run operations have historically shown a better ability to deal with these sorts of issues, but there does seem to be a general lack of awareness and/or even concern about the possible implications of the Directive. The need to make more efficient use of available water supplies in itself requires significant investment in research and equipment. The roll-out of the EU Water Framework Directive will also have an impact on producers not just in terms of added cost, but through associated administration.

3.4 Financial Overview

Table 4 provides a comparison of forecast margin expectations by crop sector to 2020. The data should be treated with some caution, based, as it is, on 2002 Reading University Farm Business Survey figures with estimated growth rates applied (as suggested by desk research and trade interviews).

The basic assumptions we have applied are as follows:

- Short term increases in the costs of energy, power and machinery and then a return to levels which have been seen in the past (i.e. initially increasing at 10% but then returning to 6%)
- Labour increasing at a rate as advised by the NFU (i.e. 3.5%)
- All other costs have been inflated at 2%

The data for soft fruit, especially, may not give a true reflection of actual market conditions, as the data includes both produce grown under polytunnels and that which is not. Industry based evidence does not suggest that soft fruit and protected edibles are in a negative margin situation in 2005. In the course of this research, we were unable to access specific data on polytunnel based production, although it should be noted that organisations such as the Food Chain Centre are at the early stages of benchmarking this form of production and more pertinent data will be forthcoming at some stage in the future.

**Table 4
Forecast of Margins by Crop Sector**

	2002	2008	2014	2020
HNS	£9.95	-£13.19	-£41.63	-£79.24
Protected Edibles	£13.00	-£12.79	-£44.84	-£87.31
Soft Fruit	-£4.00	-£31.92	-£66.28	-£110.88
Brassicas	-£9.00	-£38.82	-£76.24	-£124.60

Source: University of Reading/Promar International

Overall, HNS despite being predicted to slip into the red by 2005, emerges as potentially the best performing sector to 2020. This can be attributed, in part, to lower energy consumption, which shields the sector from the full extent of the impact of predicted cost increases in this area. Labour costs will remain a challenging issue for HNS, but, with correct

planning and application of technology, costs could be better managed in the future. Protected ornamentals, by contrast, are likely to feel the brunt of both increased energy costs and cheap imports.

Contrary to the projected figures above, trade evidence suggests that soft fruit, and to some extent protected edibles, will not under-perform to a significant extent in the future. The widespread use of polytunnels has improved performance in soft fruit significantly in recent years. Nonetheless, energy costs in these sectors are significant, and unless alternative energy sources can be explored with sufficient haste, then players stand to be hard hit by price increases in traditional energy sources.

The brassicas sector is also calculated as facing negative margins, but it should be noted that this model is intended as a “ready reckoner”, and does not take into account the overseas activities of some major UK producers/ packers, which contribute significant financial benefits. UK brassica production is likely to be amongst the hardest hit by changing cost structures. Labour costs in the sector are considerable and low margin returns have led to limited investment in research and technology. Further industry consolidation and some international activity will have a key role to play in defending the future of the industry.

3.5 Future Industry Structure: Scenario Planning

The lack of correlation between the number of holdings and number of business units complicates the task of constructing a reliable image of the structure of the UK horticulture sector. Market statistics show an estimation that over 50% of holdings are less than one hectare and only 25% of holdings are over 5 hectares. These figures do however, mask the profile of actual businesses/decision makers.

What perhaps can be assumed is that successful, large-scale commercial companies are the exception rather than the rule in today’s marketplace. Within the smaller holding size profile there will be a divergence between very efficient specialist growers who run viable businesses, marketing either directly or in association with others, and a very large number of businesses which have not changed with the times and are less viable.

Grouping player-types with a view to characterising key groups of horticultural producers by market orientation we find:

- **Traditionalists** are estimated to represent the majority of production holdings in 2005. Growers falling into this category take a defensive approach to the marketplace and have very limited involvement in research and development or innovation. This group is also likely to be comprised predominantly of ageing growers, many of whom have no line of

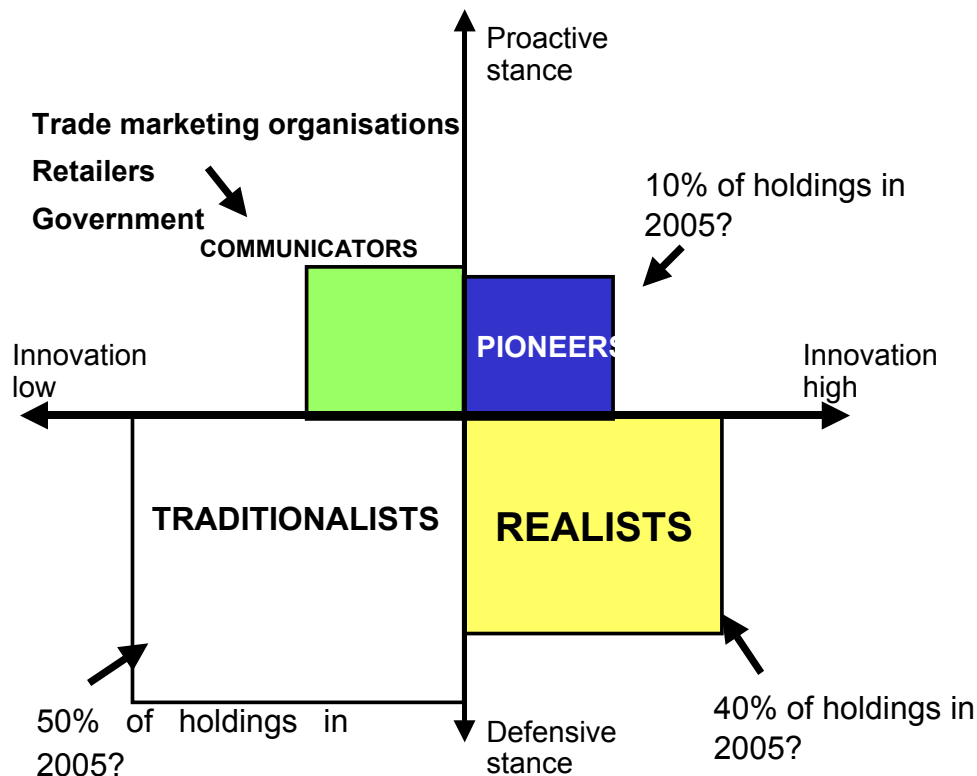
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succession in place to ensure the continuation of the business. They will be internally focussed on their production, rather than being driven by market needs

- **Realists** whilst not category leaders, demonstrate a greater level of flexibility and an awareness of the need to become more proactive and market responsive. Some element of R&D is likely to be incorporated into business strategy in response to market demands. These growers are more likely to recognise the need to form co-operative ventures with each other or the Pioneers, in order to capitalise on their specialisms
- **Pioneers** are today's industry leaders. Whether large-scale or niche players, these producers have strong relationships with marketing companies, retailers and major players in the foodservice sector. They are in touch through those relationships with end user needs and evolve their businesses in sympathy with market requirements. Pioneers have a proactive approach to market and an innovative and constantly evolving product range. They will have implemented measures to improve production efficiencies and reduce costs where possible
- **Communicators** such as specific products and trade associations, retailers and government organisations whilst not producers themselves, have a crucial role to play in supporting the industry, providing advice and guidance as required

Figure 13
Structure of the UK Horticulture Sector by Player Type, 2005



The challenges facing the horticulture sector make changes in industry structure inevitable. Potential outcomes include:

- Increasing input costs, ongoing margin pressure and a predominantly defensive producer approach result in the eradication of commercial UK horticulture production
- Large numbers of producers are forced out of business, and/or under-performing crop sectors disappear from the market, due to a combination of producer inertia and a lack of support from government/trade organisations
- The erosion of the UK horticulture sector is limited, as the majority of producers across sectors adopt a more proactive and innovative approach. All stakeholders from the public and private sectors work together to address major commercial and environmental concerns, resulting in a more market-focused and efficient horticulture sector

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Each of these scenarios is a possible outcome, based on the structure and positioning of the industry today. It is certain that a movement in the structure of the producer base is necessary to safeguard a long-term future.

Increasingly, there will be no room in the market for **traditionalists**. Whether as a result of a retiring grower base, pressure on the bottom line or ongoing rationalisation of the retail supplier base, the die-hard industry component will shrink considerably in the medium term. Indeed, if it fails to shrink significantly, then the future of the horticulture sector as a whole will be placed in jeopardy.

Ideally, those players that are **traditionalists** today should capitalise on their specialisms and implement the corporate change necessary to convert to **realists**. The share of this player group should be pushed up from 40% today to 75% by 2020. In order to meet this target traditionalists must:

- Consolidate: form partnerships with other, like-minded traditionalists, or realists
- Take a more professional approach to dealing with large-scale customers (appointing dedicated account management resource where required)
- Become more environmentally aware: implementing ICM systems where these are lacking and seeking compliance with major industry crop protocols
- Seek greater efficiencies in production, logistics and marketing to ease pressure on the bottom line and free-up finance for future investment into R&D
- Adopt a more customer/ consumer-focused approach, addressing gaps in employee skills and market insights to build a more service-orientated image

A significant reduction in the number of traditionalists will boost the chance of survival of the horticulture sector. In order for it to become truly successful, however, the pioneer constituency must also be increased. Ideally, pioneers should account for some 25% of players by 2020.

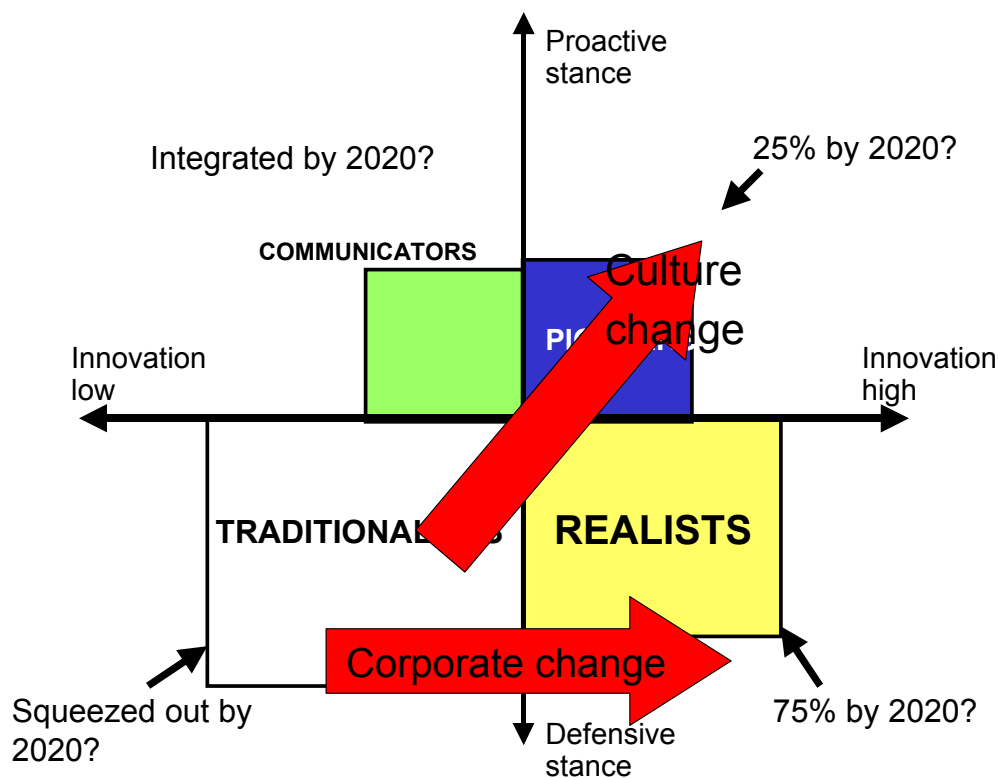
The move from **realist** to **pioneer** is more difficult to achieve than the shift from traditionalist to realist in that genuine cultural change is required. Pioneers can be large-scale commercial players or niche entrepreneurs, but in either case, exceptional market and client focus and strong financial management are givens. The **pioneer** must:

- Maintain close working relationships with customers across a range of distribution channels

- Prioritise the development of understanding and insight into the client business, which should be viewed as an extension of the grower’s own interests
- Invest in market research and deliver on the findings
- Ensure that sufficient finance is channelled into R&D and product/service innovation
- Balance high volume/low margin market opportunity with involvement in more attractive premium market sectors where viable

Figure 14 illustrates the anticipated structure of UK horticulture in 2020.

Figure 14
Structure of the UK Horticulture Sector by Player Type, 2020



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4 SECTOR ANALYSIS

4.1 Brassicas

Summary

- Declining UK market (production and consumption)
- A decline in crop value between 1996 and 2001 has been reversed
- Ongoing price pressure
- Labour costs at 66% of input costs and rising
- Difficult to generate further efficiencies in the UK due to high technology costs

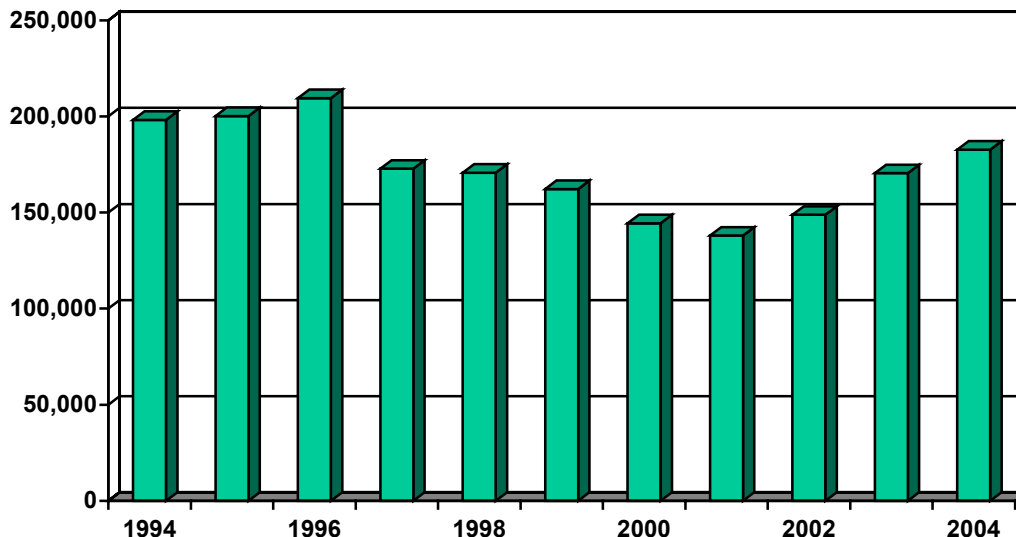
After a decline in production value between 1997 and 2001, the value of brassica production has risen since 2002, and the value of 2004 (£183m) slightly short of the value a decade ago (£198m). The lowest value this decade was in 2001 with £138m.

Over the last 10 year period, UK production of brassicas has decreased in terms of planted hectares from 41,458 hectares in 1994 to 31,048 hectares in 2004. In the same period, Defra statistics show that cabbage has shown the greatest decline in planted area, of around 72%, followed by brussel sprouts with a 63% decline. Cauliflower has fared better, with a decline of 41%, but the only significant growth in planted area has been experienced by calabrese. Planted area of calabrese has increased five fold in the period 1985-2004.

Overall, Defra statistics suggest that farm gate prices for brassicas have risen steadily from 1985-2004, with an average increase of 180% over that period. Within this, however, cauliflower prices have dropped by 7%. Cauliflower prices fell significantly between 1999-2003. Some small recovery was seen in 2004.

Industry sources suggest that, despite decreasing production costs, real prices have decreased by around 5% in recent years, mainly as a result of competitive pressure from multiple retailers.

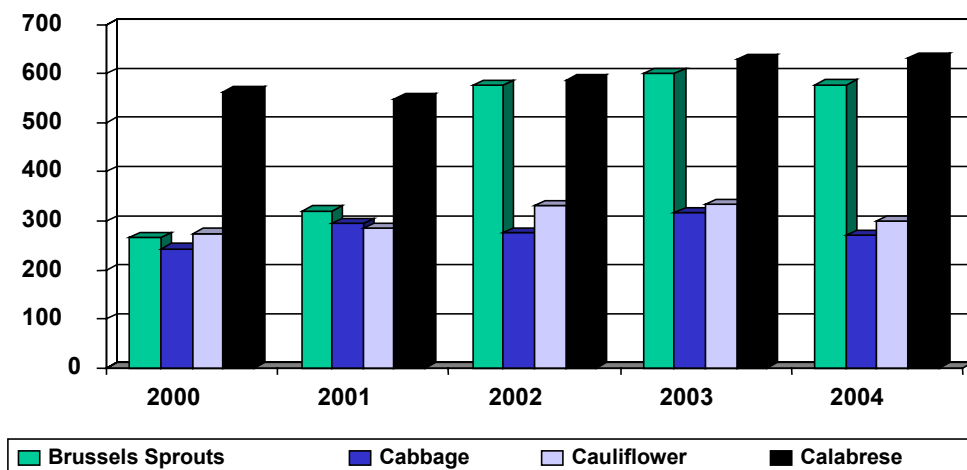
Figure 15
UK Brassicas: Value 1994-2004 (£'000)



Recent farmgate prices have remained flat for most commodities, although brussels sprouts showed a substantial increase in value between 2001 and 2002 (Figure 16)

“...the only way to survive is to work on the margin. We must accept that sales price is falling and try to generate economies of scale and more efficient marketing strategies”.

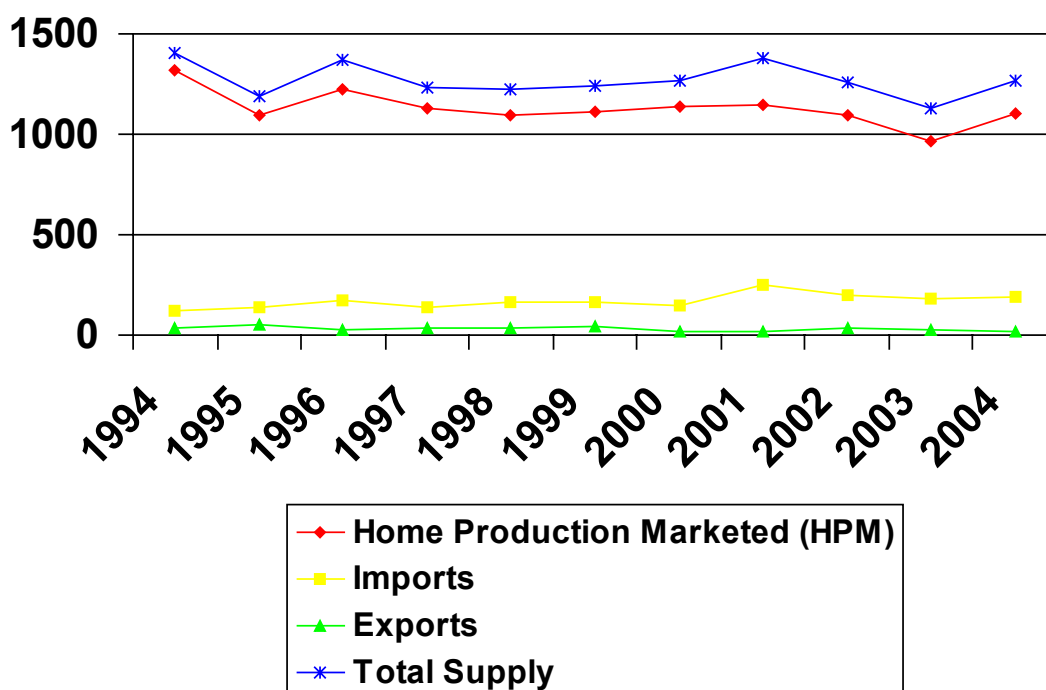
Figure 16
UK Brassicas: Average Farm Gate Prices, £ per Tonne



Source: Defra

Defra figures reveal that the level of home production marketed in the brassicas sector as a whole has declined from 94% in 1994 to 87% in 2004. Total market supply diminished by 10% over the 10-year period. The market has been characterised by a reduction in home production marketed and in exports, with uplift in imported produce (Figure 17). On an individual crop level, total supply of cabbages and cauliflower declined by over 20%, with both sectors experiencing a significant increase in imports.

Figure 17
Supply of the UK Brassicas Market ('000 tonnes)



Source: Defra

Key Issues Affecting the UK Brassicas Sector

The following table illustrates a ranking of the key issues facing the brassicas sector over the next 10 - 20 years, as prioritised by major industry players:

1)	Labour
2)	Cost and margin pressure
3)	Climate change
4)	New technology
5)	Transport and distribution
6)	Customer and consumer trends
7)	Global vs. local procurement
8)	Currency fluctuations

Source: Promar International,
based on trade interviews

Labour ... Labour is the single largest input cost for brassica growers today, accounting for 66% of total costs. Unlike the soft fruit and protected sectors, which (according to Reading University data) have already made progress in steadying labour costs, labour costs in brassicas are still rising at just over 3% per year. The brassica industry has set itself a target to reduce labour usage by 50% in the next 10 years, but this will require significant investment in technology from a sector with poor return on capital. Currently a significant percentage of labour is sourced from Eastern Europe, but the expectation is that workers for hard manual labour will become harder to find in the long term.

Cost and margin pressure ... Despite reductions in production costs, real prices for brassicas are in decline. There is constant pressure to find more efficient means of producing and marketing crops. Margin pressure has been stepped up in line with retailer consolidation and supplier rationalisation. The industry anticipates that the next degree of pressure will be generated by a consolidating grower base, resulting in price pressure on the supply of a wide range of fresh produce, rather than on a single crop sector.

Climate change ... Climate change is taken more seriously in the brassica sector than in any other horticultural crop sector. Many crops are climate sensitive, with ideal growing temperatures of between 6-28°C. As forecast temperature increases are brought to bear, production may be forced northwards. Growers are considering the potential impact of new water-use legislation and recognise the need to become more efficient. Money is already

being committed to research into climate change, but there is an industry desire that such research should focus on the potential opportunities presented by climate change, as well as the threats.

New technology ... Whilst technology is seen as a key means of reducing major input costs, there is concern that the cost of new developments may prove prohibitive. Automation, for example, has resulted in reduction of labour for cutting produce and transporting it on packing units, but necessary investments are:

“.....easily into six figure sums.....”

- making it difficult for smaller growers to tap into potential cost savings.

Transport and distribution ... In general, retailer consolidation and supplier rationalisation has led to supply chain savings, not least in the area of distribution. Major industry players are leveraging the benefits of centralised distribution depots by delivering produce from other regional growers to maximise vanloads. As further, inevitable, industry consolidation occurs, further cost savings can be expected, although these must be played off against potentially higher fuel costs.

Customer and consumer trends ... The most evident consumer trend is the move towards convenient, prepared produce. The onus is on the industry to invest in high care facilities and to move from a commodity to an added value focus. Major players recognise the need to anticipate and react to changing market demand.

Global vs. local procurement ... Whilst the brassica sector is aware of the potential for increased imports from Eastern Europe, it is clear that there are a number of obstacles to be overcome before this becomes a reality. To date, supply chain infrastructure is lacking and Eastern European producers are generally not yet aligned with retailer protocols. It is also perceived that the competitive advantage of cheaper labour in Eastern Europe counties will wane in the medium term (as economies strengthen and salaries are adjusted) and may be partially offset by increased transport costs. The threat of global procurement should not be overlooked, but procurement on a very local scale is unlikely to succeed either, due to geographical specialisation of production in the UK. UK sourcing is a desirable goal, but on a more localised level, fragmented distribution will be channelled through farmers markets and the like, which are unlikely to account for a significant share of the market.

Currency fluctuations ... Currency has a significant bearing on the brassica business and affects margins quite considerably. Joining the € could be a benefit for the UK in terms of transparency of costing. Currency not only influences invoicing, but energy costs, which are

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priced in US\$. Growers with interests in other European markets are currently in a better position to play currency markets, by invoicing in € or in Sterling.

Other issues: organics, pesticide usage, GM technology ... There is considerable concern in the industry at the rate at which pesticide active ingredients are being driven out of the market. The need for research into non-pesticide alternatives is clear. Where possible, larger players are seeking to leverage experience gained from organic production to the 'conventional' production side of their businesses.

The issue is likely to come further to the fore as the effects of climate change become evident, potentially resulting in more serious and prolonged pest infestations, and increasing importance of previously non-pest species. There should be an emphasis on communication between growers/agronomists and retail customers regarding the implications of reduced pesticide usage. Where pesticides are not used, for example, alternative strategies for pest management are likely to grow. Genetic modification could bring a number of benefits to the sector, but public perception is the greatest barrier to acceptance. GM could stand more chance of acceptance if it could deliver positive health benefits to the consumer.

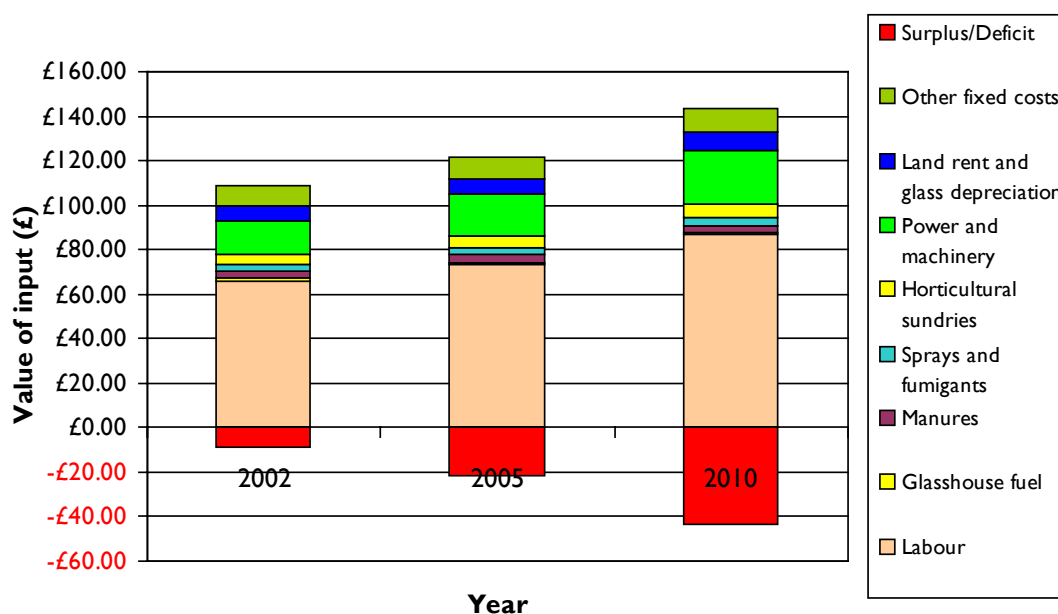
A SWOT analysis of the UK brassica sector is given below.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Advances in automation (leading to reduced energy consumption) • Rationalisation in the retail sector has led to reduced transport and distribution costs • Limited threat from Eastern Europe in the short-medium term due to lack of infrastructure 	<ul style="list-style-type: none"> • Poor return on capital impairs technological investment • Deflation in fresh vegetable sector has led to a reduction in real prices over the last 5-year period • Specialisation of production in the UK (by region) rules out local sourcing
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Search for economies of scale and more efficient marketing methods (to boost margins) • Transfer relevant experience from organic side of the business to conventional production • Opportunities in GM from point of view of health benefits – e.g. cancer reduction and pest resistance 	<ul style="list-style-type: none"> • Continued pressure on supplier base (leading to consolidation and rationalisation) • Climate change – crops may suffer from rising temperatures and changes in water availability • Pest control becoming an issue as pesticide active ingredients are being lost

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> Government health campaigns have potential to drive up consumption 	

The following model illustrates the breakdown of input costs into the UK brassicas sector and estimates the potential impact of changing cost structures to 2020. Calculations have been based on Reading University’s current horticultural business data, combined with estimated annual growth rates based on industry estimates and Promar research. Growth rates for the main components of labour and energy costs have been estimated at 3.5% and a short term increase of 10% followed in subsequent years by a more modest 6% respectively. All other inputs have been inflated at 2%.

Figure 18
UK Brassicas Costs per £100 Net Output to 2010 (Average)



Source: University of Reading/ Promar International

Published data on the brassicas sector paints a negative picture from 2002 with a 9% loss being recorded. From such a base, it is clear that improvements must be made to protect exposed businesses. Clearly, anything that can be done to either reduce labour input or

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

increase the productivity, yield or end price of the crop must be a priority to securing the short-term viability of UK production.

The winners in tomorrow's brassica industry are likely to be those large, professionally run companies that can afford to invest in research and in the necessary equipment to simultaneously reduce costs and improve product quality. The UK brassica sector is not intrinsically profitable, but examples exist of companies that have successfully extended their operations to Spain and other European markets in order to generate cost efficiencies and satisfy customer and consumer demand for consistently high quality, year round produce.

Reducing labour expenditure through greater automation and/or more efficient labour usage will be central to the future success of the brassica sector. If labour costs continue to rise at the current rate, it will be impossible to protect margins. Automation could also indirectly help to reduce energy costs. For example, using automated equipment to harvest crops at night when temperatures are lower results in less energy usage for cooling.

Conclusions and Recommendations

- A further need for consolidation of companies and crop production: this should create economies of scale and so free up finance for investment in technology required to reduce input costs
- Embrace customer rationalisation as a means of developing stronger relationships and securing demand; closer relationships with key customers are still needed and the implications of these driven by Category Captains back down the supply chain to growers
- Invest in premium market opportunities, for example with either NPD, new packing formats, convenience based products, new routes to market, e.g. premium retailers
- Co-ordinate key stakeholders from HDC with a number of small scale industry support organisations which individually lack scale of resource to make significant inroads to the market and/or in terms of R & D efforts.

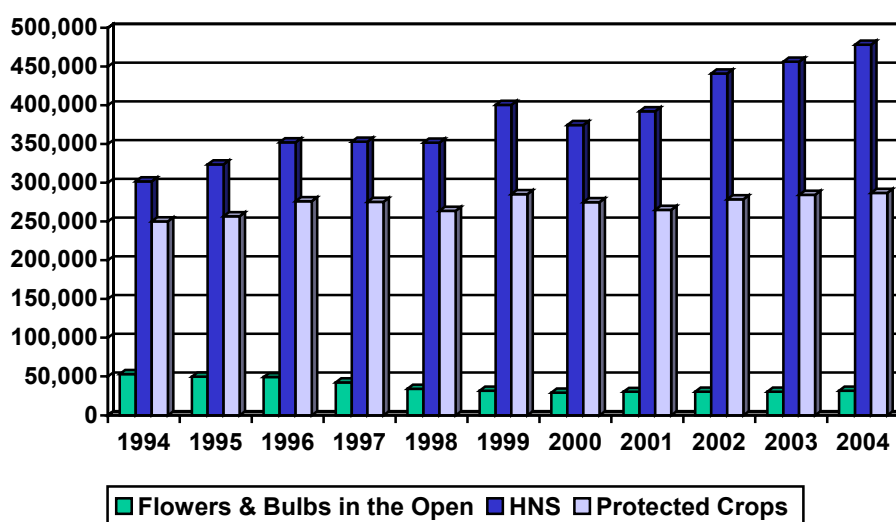
4.2 Hardy Nursery Stock (including reference to other Ornamentals)

Summary

- Ongoing increase in planted area in a sector dominated by hardy ornamental nursery stock (57%), which has shown attractive value growth in recent years
- The protected sector represents an area of high value opportunity (6% share of planted area, 36% of sector value)
- Major competition from the Dutch in terms of exports
- Threat of rising energy costs looms large for producers of protected ornamentals

Over the last five-year period, the sector as a whole has seen value rise by 12%. The greatest increase in value, of 18% has been experienced in HNS (Figure 19). Trade interviews indicate that some growers have increased their interest in HNS in order to take advantage of attractive margin opportunities in the sector. It is felt, however, that growth may now have peaked, leaving limited opportunity for new players. In addition, increasing costs are beginning to erode profits, with the garden centre market the first to be hit.

Figure 19
Ornamental Horticultural Products: Value 1994-2004 (£'000)



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In terms of value of production, HNS and protected crops are the key players in the ornamental sector. Whereas the value of protected crops has settled down at around £250m, HNS has risen steadily from £302m in 1994 to £478m in 2004. Flowers and bulbs grown in the open are a niche product decreasing in value.

The amenity supply sector has benefited from strong performance in the housing market in recent years. Whilst this growth would now appear to be slowing, a major new opportunity is likely to arise as a result of the London Olympic Games in 2012. Government plans to encourage new housing developments could further stimulate the market *per se*.

However, Dutch based suppliers are a major competitive force in the UK due to an attractive price and service offering. Dutch suppliers are perceived as responsive and have access to a wide range of products. They have also managed to establish a major presence in all of the key routes to market in this sector which are more varied and diverse than in, for example, the fresh fruit and vegetable sector which are dominated by supermarket supply. In the HNS sector, major retailers are also important but so are other outlets such as garden centres, DIY operators and nurseries. More details of the retail markets for products in this sector are given later in this section of the report

Dutch growers are seen as more specialised than in the UK and the industry as a whole is well structured, with excellent internal communication. Specialisation leads to consistent quality and enables greater mechanisation. Widespread use of co-operatives is another strength. Dutch growers are not immune to the problems of oversupply that are common in the industry, but they appear to be better equipped to cope:

“...they don't have it easy either, but they have the advantage of being more organised. They are better placed to deal with the problems because they have a better history of working together and co-operating.....”

If the UK industry could improve its overall performance, there should be no reason why it should not capture at least some of the growth that is being envisaged in this area. Both the amenity and landscaping sector are seen as having good market prospects for the future. But it will require the UK production sector to be more specialised in the future and to be co-operatively minded in terms of relations with other growers and with key customers. The Dutch will however continue to prove to be strong competition: not least, they invest a good deal of time and effort in undertaking a range of market research and strategic thinking with regards to the UK market. They also have maintained a strong tradition of R & D and education in this sector.

The UK is seen as a top priority for the Netherlands industry alongside the German market. The UK is regarded as such because it is still seen as being relatively high value, easy to access, with an identifiable customer base and with the Netherlands sector having invested

considerable sums of money in terms of promotion to both key customers and consumers alike.

However, only by looking to match, if not exceed the Dutch (in terms of excellent product quality, service, investment in understanding key market and customer trends and being prepared to back this up with some form of promotional support), will the UK sector be able to find any lasting success. The Dutch are the acknowledged masters in this trade and have a long track record of quality supply and service. Their weak point has been to date the reluctance to abandon the use of the traditional auction systems, but now some of the more progressive exporters are beginning to deal on a more direct basis with UK customers.

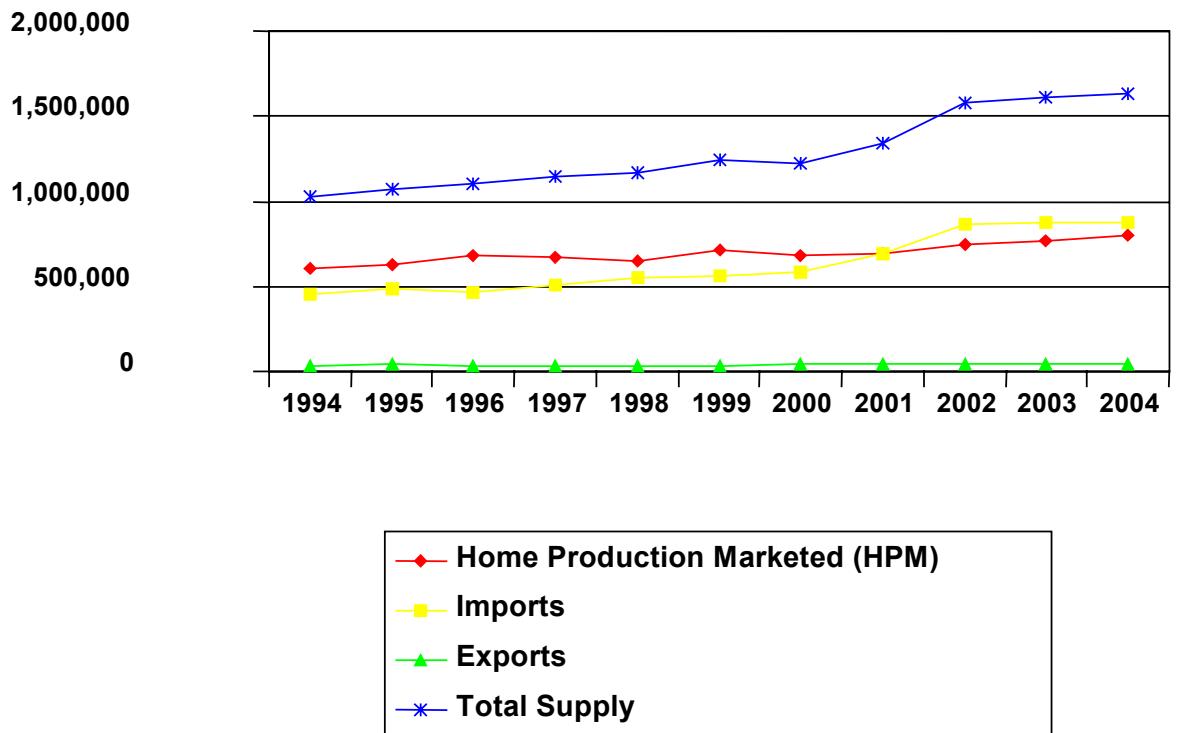
Improved marketing and communications should play a major role in confronting competition from imports. Marketing on the basis of British provenance is one option, but the situation is complicated by the fact that many growers are selling products that they have imported in the first place. HTA research shows that consumers do not automatically see local provenance as a genuine point of “added value”, but better branding and marketing of British produced products is still an area where improvements should and could be made.

Further research into consumer perceptions of added value will also be crucial in order to understand the relative importance of factors such as price/quality balance and the merits of different distribution channels.

Demand in the ornamentals sector as a whole increased by 60% over the last 10-year period. Whilst domestic supply increased by 32% and exports by 22%, the strongest performance has been in imports, which have increased by 94%. Imports of cut flowers have shown the most marked growth, with value increasing from £237mn in 1994 to £552mn in 2004.

Figure 20 provides more details.

Figure 20
Supply of the UK Ornamentals Market (£'000)



Source: Defra

As can be seen from Table 5 below, the HNS category within this sector is absolutely vital:

- it is the largest category per se, along with bedding plants
- it has shown stronger growth than any other category bar one

HTA data to 2003 indicates year-on-year growth in the overall market, with 2003 seeing a 9% rise on the previous year. This sector represents some 37% of the total retail expenditure on garden products. All product categories with the exception of house plants saw an increase between the 2003 and 2002 seasons.

Table 5
Retail Sales: Break Down by Category

Product Category	1999-2000		2001-2002		2002-2003		% Change	
	£	Share	£	Share	£	Share	4 years	Last Year
HNS	£625m	38%	£710m	38%	£797m	39%	27%	12%
Bedding Plants	£557m	34%	£611m	32%	£660m	32%	18%	8%
Bulbs	£161m	10%	£239m	13%	£241m	12%	50%	1%
Seeds	£65m	4%	£64m	4%	£70m	3%	7%	10%
Young Plants	-	-	£25m	1%	£31m	2%	-	22%
House Plants	£155m	10%	£169m	9%	£168m	8%	8%	-1%
Other Plant Products	£69m	4%	£64m	3%	£82m	4%	20%	28%
Total	£1,632m	100%	£1,882m	100%	£2,048m	100%	25%	9%

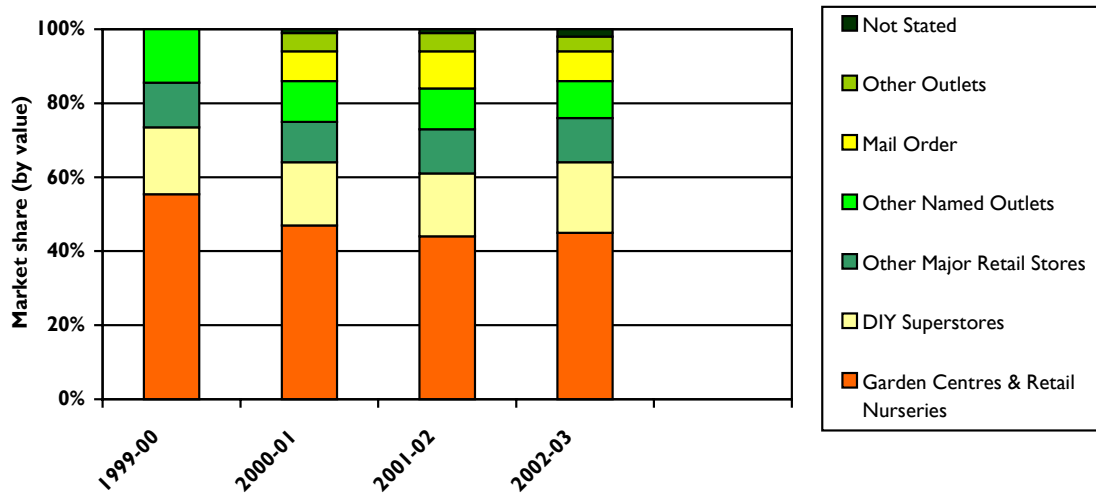
Source: HTA - Garden Industry Monitor

Garden centres and retail nurseries maintain a significant position in the distribution of HNS over the four years represented, with 12% year-on-year increase in expenditure. On a regional level, variations from this national picture exist in the significance of one channel over another. This will be partly due to the availability of some outlets in various regions, as well as demographic differences in shopping habits. Figures 21 provides more detail.

For example:

- In the Greater London area and the North West, garden centres and retail nurseries account for around 40% of sales, whereas in East Anglia and the West Midlands the percentage is nearer 55%
- On a national level, DIY stores have seen an increase of 2% year-on-year, major retail stores (including supermarkets) have maintained a more stable share year-on-year. The share of mail order dropped in 2002-3, but was the same as in 2000 – 1

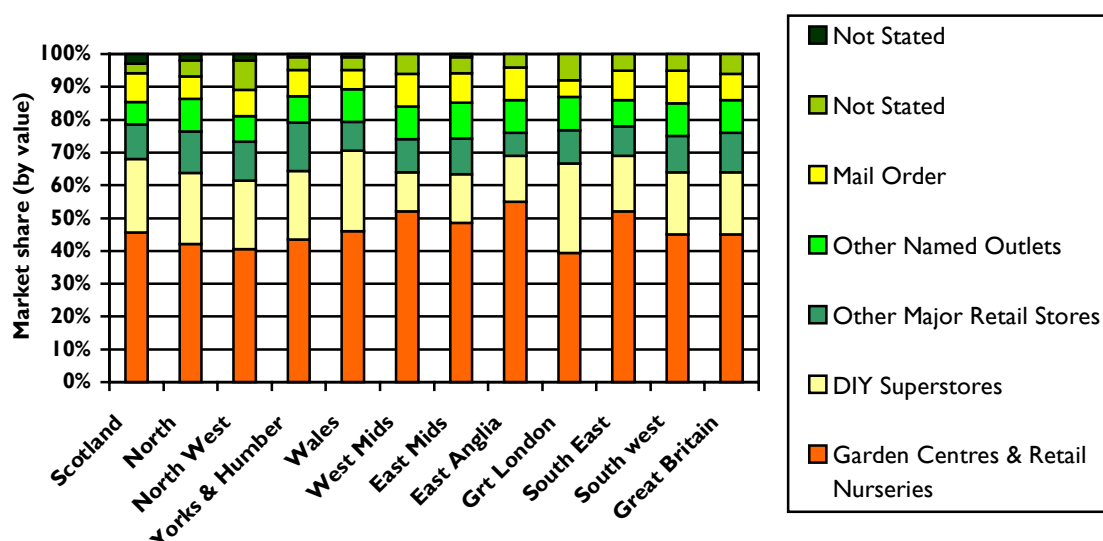
Figure 21
Percentage Share of Retail Spend on HNS by Distribution Channel



Source: HTA - Garden Industry Monitor

Regional data illustrate the variation in distribution channels across regions and it is apparent that the East Anglia region spends more in garden centres and retail nurseries than any other region. Of the expenditure in DIY superstores, Greater London holds the greatest share and the West Midlands the least. Figure 22 provides more detail.

Figure 22
Market Share of HNS by Distribution Channel and Region



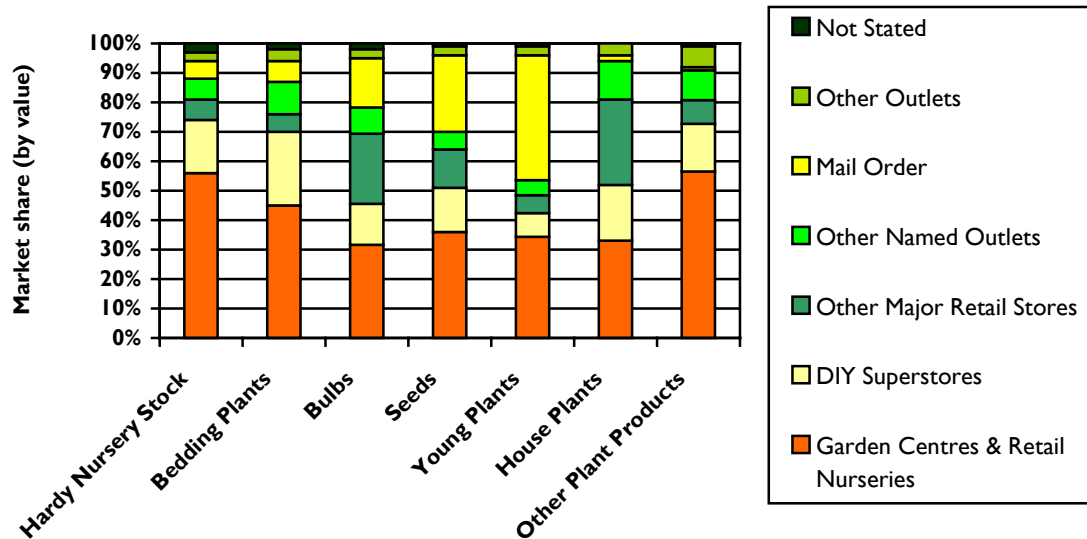
Source: HTA - Garden Industry Monitor

In terms of the HNS sector, the following applies:

- The dominance of garden centre and retail nurseries, together with DIY superstores, is a consistent theme over the past 3 years. In 2003 they represented approximately 74% of the value of sales in the HNS sector
- Garden centres and retail nurseries have managed to maintain their share at between 53% and 57% over the past 4 years. Market share at DIY superstores has grown by 50% over the past three years and now represents 18% of market value
- The other significant sector in terms of market-share movement is the mail order sector, which fell by 4%.

Figure 23 provides more detail.

Figure 23
Market Share of Ornamental Commodities by Distribution Channel, 2003



Source: HTA – Garden Industry Monitor

Key Issues Affecting the HNS Sector

The following table illustrates a ranking of the key issues facing the HNS sector over the next 10 - 20 years, as prioritised by major industry players:

1)	Cost and margin pressure
2)	Labour
3)	Transport and distribution
4)	New technology
5)	Customer and consumer trends
6)	Climate change
7)	Currency fluctuations
8)	Global vs. local procurement

Source: Promar International,
 based on trade interviews

Cost and margin pressure ...

“.....there is continued and increased pressure on cost. The industry is facing the second very poor and difficult trading season, largely influenced by the weather. There is a lot of pressure on margin and there is substantial surplus of stock.....”

*Labour ...*Labour currently accounts for around 50% of total input costs in the HNS sector and is viewed as making a significant contribution to the UK market's inability to compete on price. To some extent, the industry views itself as being locked into a catch 22 situation: there is a high labour requirement due to product diversity and a consequent lack of uniformity in production systems, but customers are constantly demanding further increased variety. Source of labour is less of a concern than cost.

The supply of labour from Eastern Europe is viewed as secure in the medium term. The solution to achieving economy of scale, while coping with the demand for varietal diversity would seem to come, based on work carried out in this project via the Dutch attributes of specialisation and co-operation amongst producers.

*Transport and distribution ...*Alongside distribution costs, supply chain logistics are a major issue for the HNS sector. There is a pressing need to ensure that costs are competitive in relation to import costs

“.....we still need to sort ourselves out in terms of getting our own product around our own country. It's ridiculous that it's cheaper to bring in plants from Holland.....”

On a UK retail level, centralised distribution depots have resulted in a productivity gain and there is opportunity to further maximise the effectiveness of regional distribution hubs.

*New technology ...*Management of market information and production planning will be amongst the most important uses of technology in the HNS sector in the future. Poor production planning is resulting in high wastage due to speculative growing and to the purchasing methods of the multiple retailers. Working to reserves is more efficient than speculating, but still leaves growers open to risk (retailers such as Homebase and B&Q may make reserves at the beginning of the season, but they will not commit to purchasing the full volume).

Technology is being used to improve quality standards through developments in growing compost, propagation techniques, pruning and water usage. The development of reliable peat replacement products is highlighted as a particular research need. Any opportunity to reduce input costs through better application of technology should also be investigated, particularly with regard to reducing labour input.

THE FUTURE OF UK HORTICULTURE

Prepared for the National Horticultural Forum

Customer and consumer trends ... The most notable consumer trend in recent years has been a move away from DIY in favour of “DFY” – done for you. Many consumers are seeking instant gratification from plants and this takes precedence over price and variety. The industry must respond by appealing to the impulse market (influenced by the media and by promotions and displays in garden centres).

Efforts can be supported through consumer education and value-based marketing. In a market where there is now a generation of older, more affluent consumers, and an upcoming generation of young, affluent consumers with a predilection for “DFY”, there is a particular need for targeted marketing.

New consumers are less knowledgeable and less discerning.

“.....they want a nice garden, but they don’t know what it means. They’ll be influenced by whatever is around at the time.....”

On a more positive note, many new consumers are also more inclined to spend money on convenience-orientated products. HTA campaigns (such as Plant for Life) are already underway to enhance interest amongst consumers, but the onus is on growers to respond. There is a clear need to boost communication throughout the supply chain in order to improve customer and consumer understanding – *“.....there needs to be a better flow of information. Wholesalers and retailers need to communicate on educational issues and work together more.”*

Customers are primarily seeking quality products, competitively priced. The degree of price pressure varies by product and by time of year -

“...what they really want is quality plants delivered within the same week they order them and they want you to do what you say you’re going to do”.

Climate change ... Climate change is on the agenda in the HNS sector, but any implied need to change production methods would require a lot more planning and investment than a simple change in varietal focus. Varieties can be switched in a season or two in response to changes in growing conditions if required. Global warming could be advantageous to the UK industry, but,

“.....it depends what goes with it!”

– there could be an effect on the range of plants that can successfully be grown.

Currency fluctuations ... UK growers are negatively affected by currency fluctuations that make them less price competitive than rival European growers. In the retail sector, pressure from lower-priced plants from the continent is ongoing and less linked to exchange rates. Joining the € would be likely to act more in favour of competitors than the UK industry, not least due to the insular outlook of UK growers and a lack of proficiency in dealing in mainland Europe.

Global vs. local procurement ... Genuinely local procurement is only feasible for sales through fragmented distribution channels such as farmers markets and 'farm' shops, which represent a potentially valuable niche for smaller growers. Larger players, however, are compelled to trade in a global marketplace and to respond to the many challenges this invokes.

Other issues: GM, peat reduction, environmental concerns ... It is perceived that genetic modification is unlikely to have a major role to play in the future of the HNS sector. Not only is there general consumer sensitivity about the whole issue of GM (although markedly less than in the edibles sector), but costs are likely to be prohibitively high –

“...there are established methods for creating new varieties without using genetic modification”.

The government has set targets for peat reduction of 90% by 2010, but this is largely viewed as an unattainable target by the industry. Peat reduction of 30-40% is the maximum that has been achieved whilst still maintaining product quality. Any moves to enforce peat reduction targets could have a serious impact on the industry.

Water tops the agenda in terms of environmental concerns. Water is already becoming more costly and more limited in areas such as East Anglia. Increasing legislation seems set to increase pressure –

“.....water is a big deal for the future, I'm sure of it”.

Energy costs ... For growers in the HNS sector, rising energy costs are the single biggest issue affecting the industry. There is a fear that energy costs could double in the next year, forcing many players out of business. Many growers have been sheltered by rising energy costs to date due to long term contracts, so the real impact of price increases has yet to be appreciated.

The problem is one of availability of energy as well as of cost –

“.....the European industry is dipping from the same pool of finite resources.....”

It is expected that Northern Europe will be hit harder than the south.

THE FUTURE OF UK HORTICULTURE

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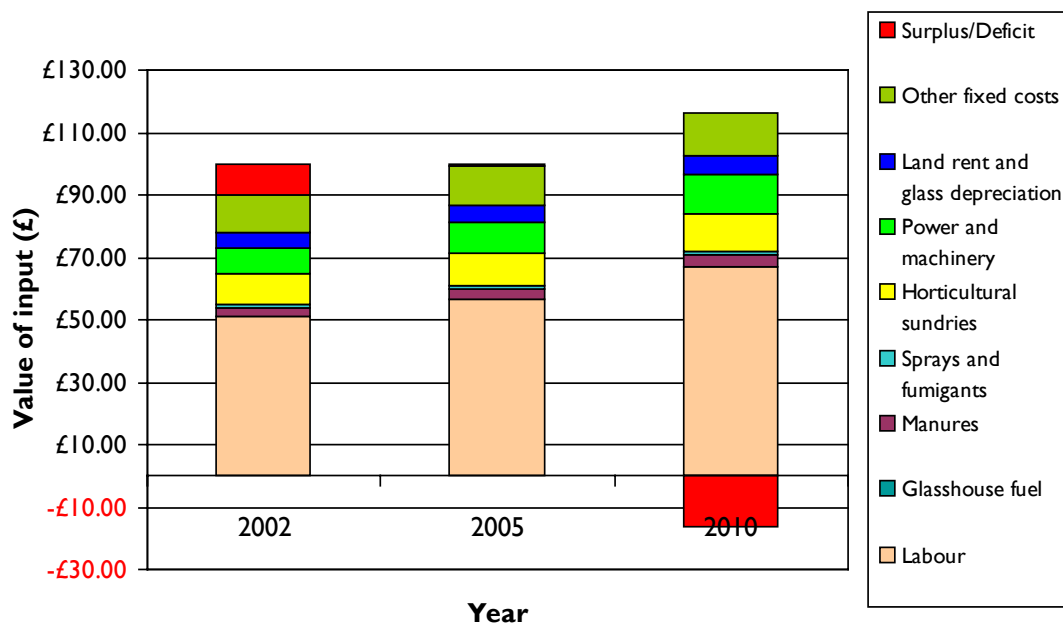
A SWOT style analysis for the HNS sector is given below.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Improving quality standards in the UK due to investment in technology • UK position as “best garden market in Europe” • Diverse market place – not totally controlled by retail multiples • Market seen as less price sensitive than other areas of horticulture 	<ul style="list-style-type: none"> • Price competition from other Northern European markets • Difficult operating environment in multiple retail channel – margin pressure means limited opportunity • Industry distanced from end consumer by retailer. Need for better information flow/supply chain communication
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Investigate means of reducing wastage and lowering labour costs as a means of keeping costs down • NPD in line with customer demand • Better and improved logistics • Co-operation amongst UK producers • More producer specialisation • Develop automated technology – lighting, watering 	<ul style="list-style-type: none"> • Labour costs • Climate change – lack of water could result in increased energy costs • Competition from imports – lower production costs and climatic advantage • Growing cost margin pressure and surplus of stock • Risk of increased pressure from the anti-peat lobby • Fluctuating exchange rates favour competitors • Waning consumer market/ understanding – dying breed of gardener • Reduction of active chemicals making production more difficult • Rising transport costs & energy costs (for protected crops) • Non indigenous pest and disease problems (i.e. recent experience with Sudden Oak Death)

In the HNS sector as a whole, labour represents the most significant output cost. In all HNS sub-sectors, the continuation of labour cost increases at the current rate represents a real challenge to future survival. In protected ornamentals this situation is exacerbated by the added pressure of increasing energy costs. Whilst the protected sector has some opportunity to shield itself from losses in the short term by writing off depreciation costs, this situation is unsustainable.

Figure 24 illustrates the breakdown of input costs into the HNS sector and estimates the potential impact of changing cost structures to 2010. Calculations have been based on Reading University's current horticultural business data, combined with estimated annual growth rates based on industry estimates and Promar research. Growth rates for the main components of labour and energy costs have been estimated at 3.5% and then initially 10% (but then reduced to 6%). All other costs have been inflated at 2%.

Figure 24
HNS Costs per £100 Net Output to 2010



Source: University of Reading/ Promar International

The pressures of increasing labour and energy costs are not exclusive to the HNS sector. Ironically, the current lack of specialisation, supply chain inefficiency and lack of communication and marketing in the HNS sector hint at the possibility of future success: product quality is generally excellent and other negative factors can be relatively easily

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addressed. Major players in the industry are positive about the solidity of the UK ornamentals business –

“...what we have in this country is the best garden market in Europe and probably in the world, and that is a great asset to us. There is a longstanding history and success in ornamental horticulture. The UK is very attractive to imports from elsewhere for that very reason.....”

Clearly, there are a number of long term issues to be addressed, namely efficiency improvements and cost reduction. Commercial operators feel that the HNS sector should not be viewed differently to any other UK manufacturing company – without cost reduction and the removal of non-value-adding processes, there can be no future. Nonetheless, if supply chain efficiencies are achieved, cost structures addressed and sales and marketing strategies reassessed, then there is opportunity for future success.

Conclusions and Recommendations

- Improve management of market information and production planning in association with key customers
- Develop a more co-operative minded spirit in the sector vis a vis production, marketing, planning and logistics in the future
- Need to compete with foreign imports
- Seek further supply chain efficiencies to control transport and logistics costs
- Focus on application of technology to reduce production costs
- Work on educating and marketing to the consumer
- Lobby for industry-wide approach to soaring energy costs: tax relief would be advantageous and exploration of alternative energy sources

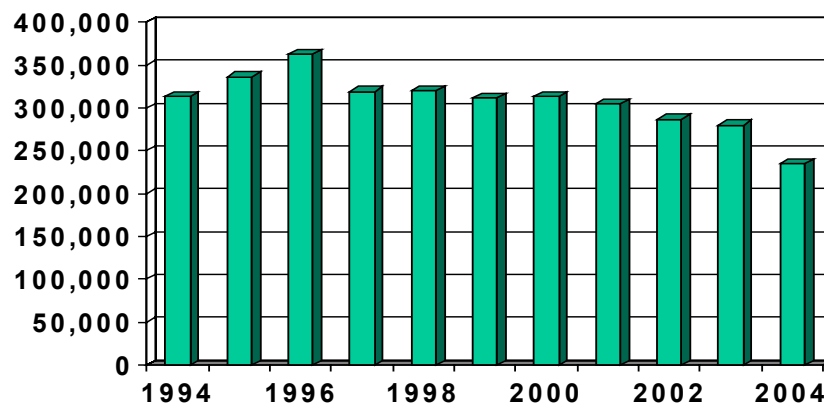
4.3 Protected edibles

Summary

- Overall planted area has reduced over the last decade, but the effect of this has been counteracted by improved yields
- The sector is experiencing tough competition from other European suppliers with a lower cost base: UK imports have increased significantly over the last decade
- Spiralling energy costs exacerbate the situation, placing additional pressure on margins

The value of production of protected edibles in the UK has decreased, since 1996 from £363m in 1996 to £235m in 2004, albeit remaining close to £300m between 1997 and 2002. UK production of protected edibles has decreased in terms of planted hectares from 1,928 hectares in 1994 to 749 hectares in 2004.

Figure 25
Protected Edibles: Value (£'000) 1994-2004

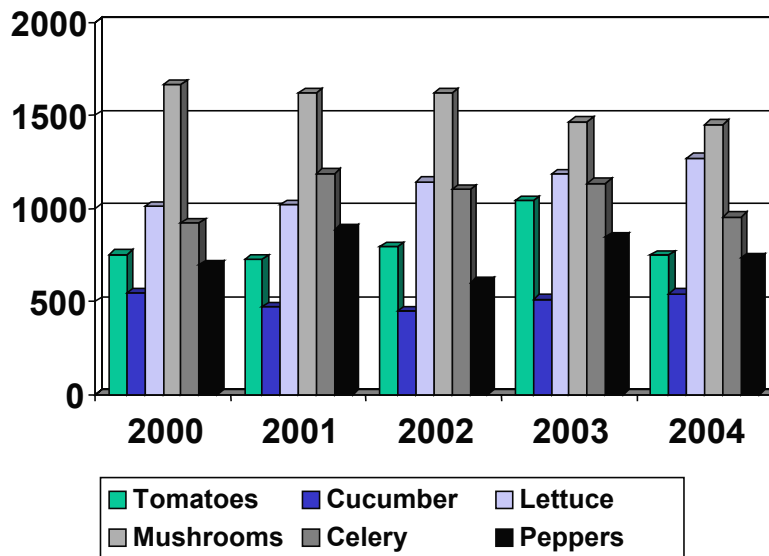


Source: Defra

The single greatest pressure impacting the sector has been increasing pressure on costs and margins, driven by ongoing consolidation in the retail sector and tough price competition

from imports. Whilst UK growers have successfully increased yields and maintained excellent product quality, European competitors have largely extended their growing seasons and many have the advantages, based on research from the FADN figures and feedback from respondents of lower energy costs and cheaper labour. For the most part, farm gate prices have not kept pace with increasing input costs.

Figure 26
Protected Edibles: Average Farm Gate Prices £ per Tonne, 2000 – 2004

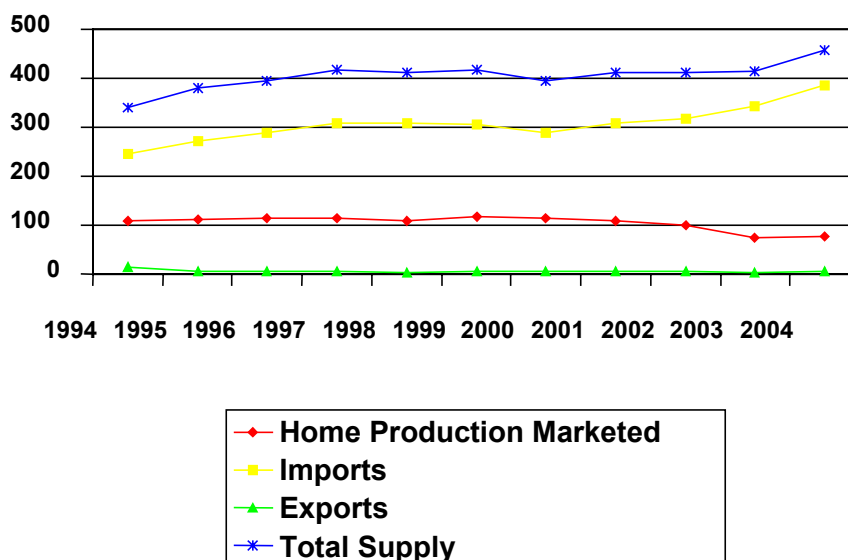


Source: Defra

However, tomatoes as well as cucumbers have decreased strongly from their peak value production years. Annual tomato production reached a value of £86m in 1996 but had dropped to £59m 2004; The value of cucumber production in 2004 (£33m) is less than half of what it was in 1995 (£68m).

Defra figures reveal that the level of home production of tomatoes, as an example, has continued to decline in relation to imports, dropping from 31.9% of total supply in 1994 to an estimated 17.1% in 2004. Total supply increased by 34%, but home production declined by 18%, whilst imports grew significantly, by 56% (Figure 27).

Figure 27
Supply of the UK Tomatoes Market ('000 tonnes)



Source: Defra

Looking ahead, the UK industry is faced with a number of uncertainties, many of which cannot be directly influenced. Net prices, largely influenced by product availability, can fluctuate year-on-year. Adverse weather conditions in mainland Europe can be to the advantage of UK producers, but are unlikely to be sustainable. Energy costs are another variable that is proving increasingly challenging to manage, albeit some competitors (e.g. the Netherlands) will face similar problems.

As most growers have long term contracts with energy suppliers, the impact of recent gas price increases has yet to be felt. Electricity prices could also escalate. With electricity prices in some markets already at double those in the UK, any moves towards European harmonisation of prices could have serious implications for UK growers.

Key Issues Affecting the Protected Edibles Sector

The following table illustrates a ranking of the key issues facing the protected edibles sector over the next 10 - 20 years, as prioritised by major industry players:

1)	Cost and margin pressure
2)	Energy costs
3)	New technology
4)	Customer and consumer trends
5)	Currency fluctuations
6)	Labour
7)	Transport and distribution/ Global vs. local procurement
8)	Climate change

Source: Promar International,
based on trade interviews

Cost and margin pressure ... Pressure on producer prices is the biggest challenge facing growers. Prices have been impacted by increased imports of lower cost produce from other European markets, many of which have successfully extended their growing season and therefore compete directly with UK growers. Weather conditions can also have a significant impact on product demand, and consequently on price, making it difficult to construct accurate revenue projections. If UK growers are to ward off margin pressure in the future, it will be essential to continue to differentiate British produce in areas other than price.

Energy costs ... The true cost of energy price increases has yet to be felt by growers, as long-term contracts come to an end. Rising energy costs in conjunction with rising labour costs would make it difficult for UK growers to stay in business. There is a need to revisit viable alternative energy sources such as CHP and biogas. An ideal scenario would be increasing the scale of UK tomato production and investing in new technology applications, but this is very challenging without a long-term commitment from government and the market.

New technology ... New technology will be crucial in generating efficiencies in labour and energy usage. Growers are willing to tackle these issues, but industry organisations believe that there is a need for greater government support programme. There is a tendency within the industry to focus on customer-specific, near market research. This is clearly essential to individual commercial success, but a more cohesive, long term view will be required to deal with the threat posed by labour and energy issues.

Customer and consumer trends ... Retail customers are constantly seeking new products and varieties to differentiate themselves in the marketplace and attain a market-leading position. If suppliers cannot compete on price, then they are expected to offer something representing higher value to the consumer. Freshness and flavour are perceived as key consumer points of value.

Currency fluctuations ... In today's marketplace, currency fluctuations are not having any considerable impact on the sector. The issue of UK cost structures is front of mind. Some players consider that joining the € would have a positive effect on the sector by facilitating greater transparency of transactions.

Labour ... Labour costs in the protected edibles sector, particularly in tomatoes, have been affected by a shift towards production of a number of speciality varieties, many of which are more labour intensive than traditional varieties. Labour costs are forecast to continue rising in the short to medium term. Sourcing of labour is not currently perceived as a problem, though as the UK gradually becomes a less attractive destination for workers in EU accession countries, recruitment is expected to move further East:

"Timescales for cheap labour are becoming shorter".

Transport and distribution ... Is not perceived as a major area of concern. Increasing prevalence of supermarket regional distribution depots has generated economies in logistics. Rising fuel costs could be an issue in the future, but not on the scale of rising energy costs.

Global vs. local procurement ... The level of sophistication of supermarket distribution networks makes it impossible to consider procurement on a truly local level. 'Local' interpreted as 'British' is viewed as a feasible concept, although product provenance is not always clearly visible to the consumer. To date, internet shopping facilities do not enable selection by country of origin. Until this facility is available, the growth of online shopping arguably represents an additional threat to British produce.

On a global level:

".....there are always cheaper products available elsewhere".

Price-focused multiple retailers like Tesco and Asda are setting the benchmark for low cost products, and this inevitably has a knock-on effect on competitors, who are expected to price match. In today's marketplace, there is limited loyalty amongst retailers to UK suppliers, particularly in commodity crop areas. Where there is no tangible additional product benefit, lowest cost will secure supply contracts. This situation is not sustainable in the longer term.

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As emerging economies develop and production costs escalate, there will ultimately be no cheap suppliers left in the market.

Climate change ... Climate change/global warming is not expected to have any significant impact on the industry in the short to medium term –

“...if we continued to have summers like 2003, where it was so hot on the continent that their crops were damaged, it would be to our advantage, but in terms of its impact on our production systems, I just can’t see it”.

Other issues: GM ... Future prospects for the adoption of GM technology have been weakened as a result of insensitive handling of the issue in the early days. Certain benefits offered by GM technology could have a positive impact on the industry (disease resistance, improved nutrient content), but other attributes, such as prolonged shelf life, could benefit competitors rather than English growers.

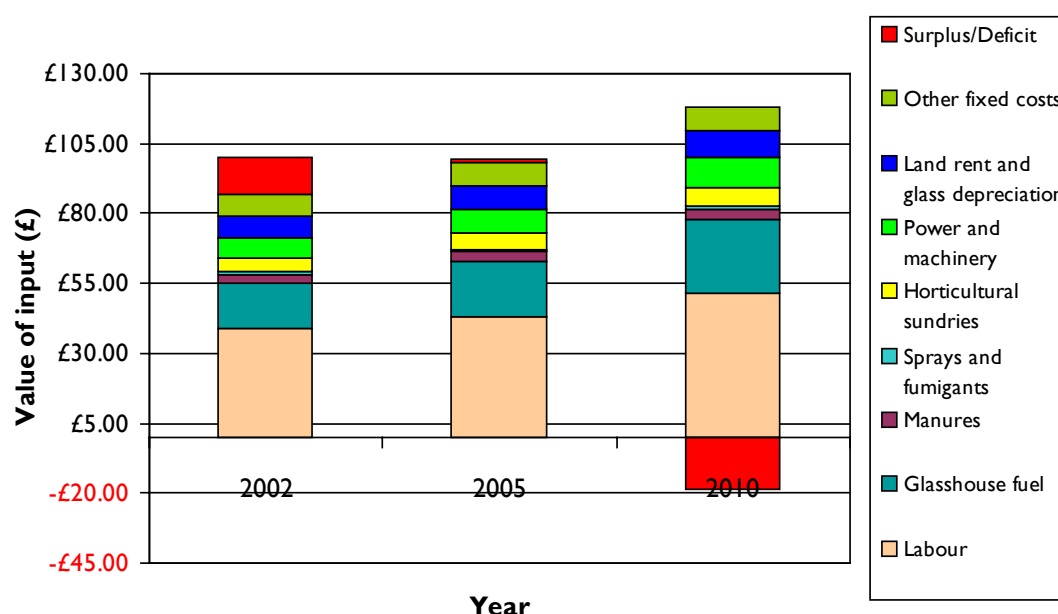
A SWOT analysis of the UK protected edibles sector is given below.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Excellent product quality • Improved yield 	<ul style="list-style-type: none"> • Small scale production • Lack of specialisation • High costs • Energy inefficiency
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • More “British” marketing • Improved energy efficiency using CHP or other technology • Planned reduction in labour usage • Extended growing area to generate economies of scale 	<ul style="list-style-type: none"> • Ongoing pressure on costs and margins – cheaper imported product (often poorer quality, which can hit British suppliers in an undifferentiated marketplace) • Rising energy costs • Breadth of product range creates inefficiencies

The following model illustrates the breakdown of input costs into the UK protected edibles sector and estimates the potential impact of changing cost structures to 2010. Calculations have been based on Reading University’s current horticultural business data, combined with estimated annual growth rates based on industry estimates and Promar research. Growth rates for the main components have been estimated as labour at 3.5% and then energy costs initially 10% before being reduced to 6%.

Reading University statistics estimate that producers of protected edibles are at a break even point today. Growth in labour and energy costs of around 4-6% per annum would however, place a question mark over future profitability, and energy costs in the short-term are likely to be even greater than this. Whilst dynamic (and well-financed) operators are investing heavily in technology to extend growing seasons (and garner retail support), the financial burden of such activities means that most players will be excluded from technological developments in the short term. An industry-wide approach may prove the only means of securing future profitability.

Figure 28
Protected Edibles: Cost of Inputs per £100 Net Output to 2010



Source: University of Reading/ Promar International

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Protected edibles are less reliant on labour than some of the other sectors with just 39% of the input costs being attributed to labour. Glasshouse fuel is the second most significant input at 16%. Fuel is one of the most variable cost inputs and these growers are particularly exposed to fluctuations in this basic commodity. Many businesses may have combined heat and power (CHP) units to attempt to manage this cost, but this system is still reliant on a fuel source. Fuel price increases during 2004-2005 and the uncertainty of the future will impact on these operations.

On the whole, the protected edible sector is confident in its ability to face future market challenges, provided individual growers and the industry as a whole respond proactively. As cost and margin pressures are unlikely to abate in the future, it will be essential to raise UK-produced protected vegetables above the realm of price competition alone.

Efforts must be made to differentiate products on the basis of quality, taste, freshness and provenance and to market these benefits effectively to a clearly segmented consumer base. The role of technology will be crucial in establishing optimum labour and energy usage and so generating cost savings.

Conclusions and Recommendations

- UK producers need to differentiate in areas other than price in order to secure retailer loyalty to UK produce
- Investigate alternative energy sources: need to lobby government/industry support and direct research capability to addressing major challenges facing the industry
- Where possible, plan varietal mix with an eye to most efficient labour usage
- Do not resist sector consolidation, which offers the potential to reduce costs through increased scale and specialisation, in the mould of the successful Dutch model

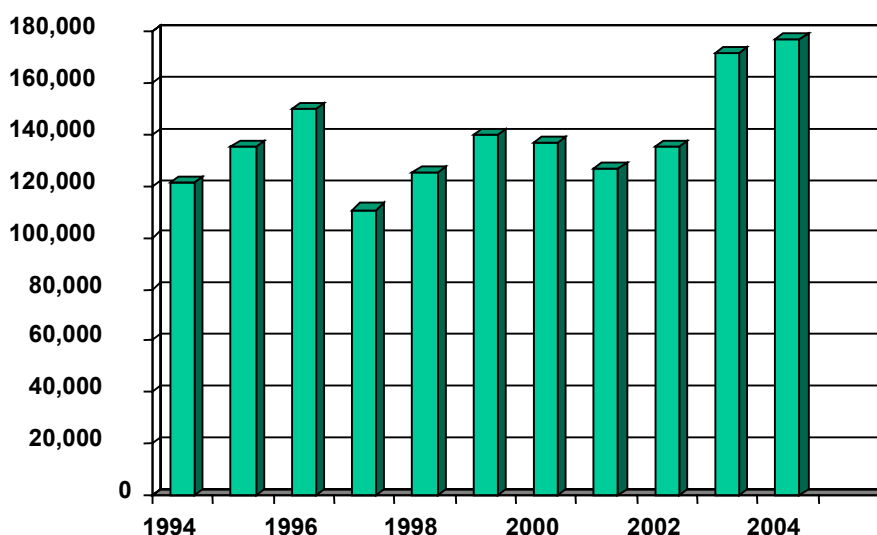
4.4 Soft Fruit

Summary

- The last decade has seen a reduction in planted hectares of strawberries and raspberries, but strawberry yields in particular have improved dramatically
- Increased use of polytunnels has had a tremendous impact on the success of the sector, but future problems in the form of planning constraints are anticipated
- UK suppliers remain competitive in season, but the threat of low cost supply of fresh produce from China and Poland is real, following on from the current success of these suppliers in the processing sector

Defra statistics demonstrate that the value of home-produced soft fruit has increased by some 78% in the period 1985-2004 (Figure 29). Value growth in strawberries has been strong, at 65%.

Figure 29
UK Soft Fruit: Value 1994-2004 (£'000)



Source: Defra

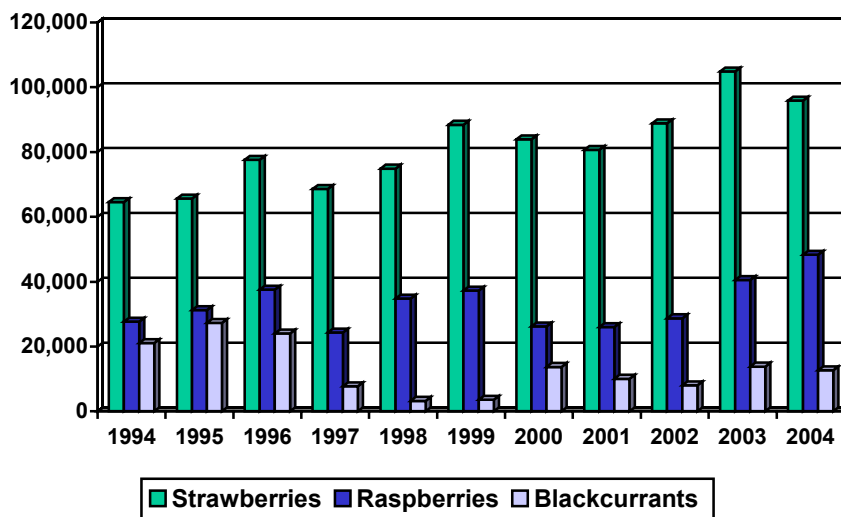
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As shown in Figure 30, regarding the niche products, the value of the raspberry production has risen substantially over the last three years and annual production in 2004 (£48m) was nearly double its value in 1994 (£28m). Blackcurrants are on the rise again (£13m in 2004) after hitting a low point in 1998/1999 (£3m).

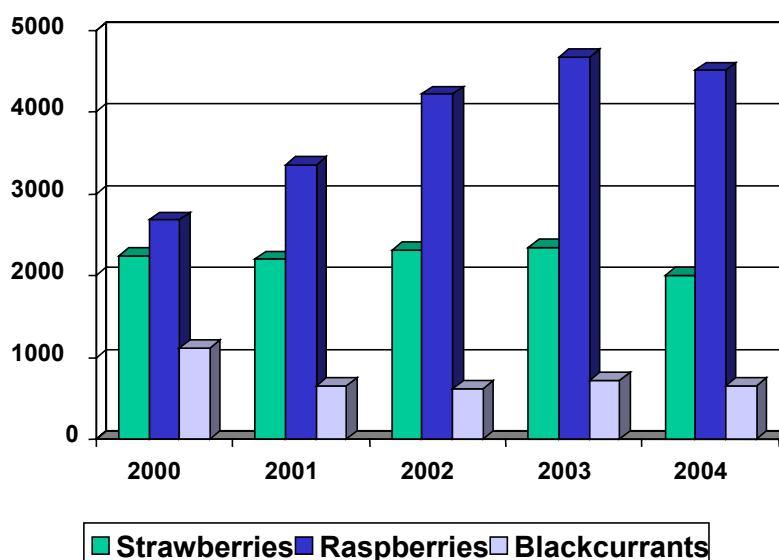
“.....there is more profit in growing strawberries than there is in growing raspberries. Raspberries are very expensive to grow. If you develop a new raspberry, but you can't get a grower to grow it because he's not making money out of raspberries, you can do all the best research in the world, but you can't find anyone to buy your plants.....”

Figure 30
UK Soft Fruit: Value by Crop 1994-2004 (£'000)



Source: Defra

Figure 31
UK Soft Fruit: Average Farm Gate Prices £ per Tonne



Source: Defra

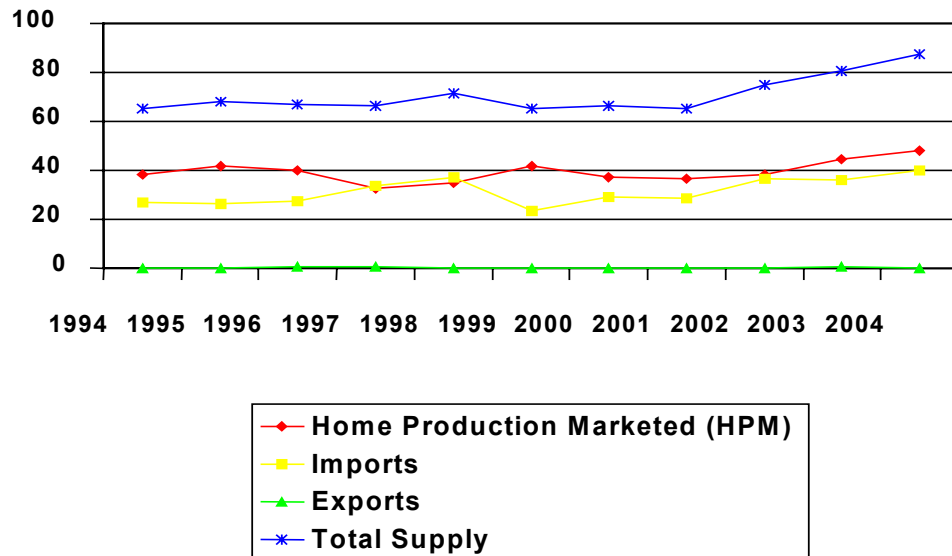
The UK soft fruit market has remained roughly equally divided between home-produced and imported fruit over the last decade. In 2004, home production accounted for 55% market share. Most soft fruit imports are contra-seasonal. The UK cannot produce effectively from mid-October through to late March-April, but is highly competitive from May to September.

Price competition from other EU markets such as Holland and Belgium is limited, as these markets have similar cost structures to the UK, but Eastern European markets such as Poland are starting to enter the UK market and this will have an impact in terms of cost competitiveness in the short to medium term.

To date, the impact of soft fruit production in Poland and China has been most evident in the processing sector. In the UK, it costs around £1,000 per tonne to freeze, package and distribute strawberries for the industrial market. The Chinese are currently selling at around £450 per tonne, effectively locking UK producers out of the market.

Figure 32 shows the overall situation regarding strawberries in the UK between 1994 –2004.

Figure 32
Supply of UK Strawberries ('000 tonnes)



Source: Defra

Key Issues Affecting the Soft Fruit Sector

The following table illustrates a ranking of the key issues facing the soft fruit sector over the next 10 - 20 years, as prioritised by major industry players:

1)	Polytunnel issue/ Cost and margin pressure
2)	New technology
3)	Customer and consumer trends
4)	Transport and distribution/ Energy costs
5)	Currency fluctuations
6)	Labour
7)	Global vs. local procurement
8)	Climate change

Source: Promar International, based on trade interviews

Polytunnels ... The use of polytunnels has enabled the UK soft fruit sector to extend its growing season and improve crop quality. Concerns regarding the future use of polytunnels are centred on recent planning issues. Whilst most polytunnels are situated on traditional farming areas, attempts on the part of some growers to construct tunnels in non-traditional, semi-residential areas, has led to speculation as to future restrictions. Major growers are prepared for a period of consultation, but are concerned that usage restrictions could mean

“.....curtains for the UK industry”.

It will be essential for the UK soft fruit sector to continue to be able to use polytunnels and an imaginative method of communicating this is needed, to all key stakeholders. This will range from key retail customers, government organisations, lobby and consumer groups and is required, not least if consumers and retailers want to be able to stock and purchase high quality British grown fruit for extended periods of the year.

Cost and margin pressure ... Price pressure from major retailers, combined with easy access to produce, means that grower margins are being driven down. As ‘everyday low pricing’ (EDLP) strategies become the norm, major retailers are publicly competing to offer consumers best value for money. As cheaper sources of produce emerge, retailers’ loyalty to UK growers is put to the test, with the result that customers will generally no longer pay more for a standard quality product on the basis of provenance alone.

For the grower, the cost of inputs is steadily rising, but the price paid by retailers is not. It should be noted, however, that the most successful growers and marketing companies are working as closely as possible with retailers, viewing them as a valuable route to market rather than a rival for margin. With careful planning, growers can also benefit from occasional crop shortages. One leading player comments that volume sales are more important than price, and that provenance can be a strong marketing tool –

“....prices haven’t risen in the last 2-3 years, but price isn’t really the issue. It is more important to be selling all of the crop that can be sold and to increase yield. If yield is increased, growers can afford to take a lower price. English provenance does add value. Consumer expectations of English fruit are higher than expectations of imported fruit – if it doesn’t deliver then they won’t expect to pay a premium, but English growers start with an advantage over other people. English fruit is perceived to be fresher and of better quality.....”

New technology ... Soft fruit technology is developing rapidly and is evident across a number of functions, from harvesting and irrigation to packaging. Multi-bay tunnels is cited as a significant development, alongside high raised beds, water management and irrigation, varietal development, mechanics (harvesting rigs) and packaging and cooling advances.

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Customer and consumer trends ... Alongside consistent product quality and competitive pricing, retail customers are demanding good information management. Suppliers are expected to contribute to analyses of market data in order to assist retailers with marketing and promotions. A partnership relationship with major retail customers is perceived as the way forward:

“...the more they ask of us, the better, as it helps us differentiate ourselves in the marketplace. They expect an open and honest relationship, they want to be told the truth all the time. They expect a high level of service.”

Transport and distribution/energy costs ... To some extent, transport costs are controlled by virtue of the fact that most UK growers are aligned with one or two main customers. Produce is sent to the nearest regional distribution centre. In the soft fruit sector, fuel costs account for 5-10% of total costs and are increasing. Growers are aware of a potentially more difficult situation in the future –

“...we can't ignore the fact that diesel is in short supply and will carry on that way”.

Currency fluctuations ... It is widely perceived that fresh produce prices are more influenced by availability and by auction systems (particularly in the Netherlands and Belgium) than by currency fluctuations. It is therefore anticipated that the potential entry of the UK into the Eurozone would not have any significant impact on the sector.

Labour ... Labour is the highest single cost facing the soft fruit sector, accounting for around 40-50% of total costs. The sector is almost fully dependent upon migrant labour, sourced through Concordia and the SAWS scheme. The role of foreign labourers -

“... has gone beyond harvesting to become an integral part of the industry as supervisors and middle managers”.

Poland is a major source of labour today, -

“Polish managers are still more affordable than English ones”,

- but it is anticipated that labour will be sourced from more easterly European markets (such as Bulgaria and Romania) in the future. The minimum wage is regarded by some as a pressure on the industry, and one that is not expected to diminish over the next 15 - 20 years –

“...you need to pay more and more to get people to do hard manual labour”.

Global vs. local procurement ... Local procurement is widely viewed as something that will not be feasible for multiple retailers. As such, it will be limited to fragmented distribution channels, expected to account for less than 5% of the market. There is also a feeling that the best suppliers are teamed with multiple retailers, whilst second tier growers target fragmented channels –

...the only ones supplying farmers' markets are those that can't supply the supermarkets".

It is recognised, nonetheless, that there is increasing consumer desire to purchase local produce. Provenance is becoming more important at the top end of the market and this is where multiple retailers may become involved. Many of the leading retailers are actively promoting British produce, not least through the Red Tractor scheme, which has been re-launched in 2005.

Import levels are unlikely to change in the future, not least due to the strength of other European producers. Spain, for example, competes on the basis of scale: a typical Spanish grower might produce 2,500mt, whereas the largest UK grower supplies 1,500mt. It is easier to do business in a more consolidated marketplace -

"...its easier to deal with Spain because you're only dealing with one exporter, as opposed to 14 growers".

Climate change ... Climate change is not perceived to be an issue requiring immediate action. As new varieties can be quickly established, growers are focused on Northern European varieties today, but could switch to alternative, more Mediterranean varieties if the need arises. The ultimate impact of climate change will depend on the nature of the change. Rainfall has no effect, as crops are grown under plastic for 6 months of the year. Possible shortage of water would be more of a problem, particularly in the light of restrictions being put in place by the Environment Agency.

Other issues: GM and organic production, environmental concerns ... Consumer resistance to GM production is expected to continue in the longer term. Conventionally produced food is sufficiently cheap and accessible to undermine any price advantage offered by the uptake of GM technology. It is conceivable that GM food products could eventually find a niche in the lower end of the food market, particularly if they could be engineered to offer some nutritional benefit. Genetic modification has some benefits to offer, especially in terms of pesticide reduction, but there is no pressing need to have GM technology in the sector, although genetic marker techniques are proving valuable in reducing the timescale of conventional breeding programmes.

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Organic production is not viewed as a major area of future opportunity. The UK climate is not conducive to organic production (crops are susceptible to a range of fungal diseases) and eating quality is no better than that of conventionally produced fruit. In order to succeed, therefore, organic produce must either taste better or charge only a modest premium.

Increasingly, consumers are becoming more interested in how products have been grown and how much pesticide has been used. Retailers have responded to this interest by adding their own protocols on top of industry-led schemes such as the APS, FWAG and LEAF.

A SWOT analysis of the UK soft fruit sector is given below.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Excellent market growth in fresh strawberries • Managing more efficient labour usage – introduction of rig harvesting • Working on increasing yield/varietal development • Polytunnels have enabled longer growing seasons • Strong relationship between marketing companies and retailers • High level of organisation and a good grower age profile • English fruit perceived as fresh/high quality 	<ul style="list-style-type: none"> • Demise of the processing market due to low cost imports from China, Eastern Europe and South America • Minimum wage putting pressure on the industry – retailers unwilling to increase price paid • Price inflation unlikely due to supply from markets such as Poland • Smaller scale than European exporters (Spain)
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Marketing provenance • Premium products backed by strong marketing • Reduced pesticide usage • Climate change 	<ul style="list-style-type: none"> • Potential restrictions on use of polytunnels • Wage and cost inflation • Failure to increase yield will result in reduced profits, given constant prices • Rising fuel costs

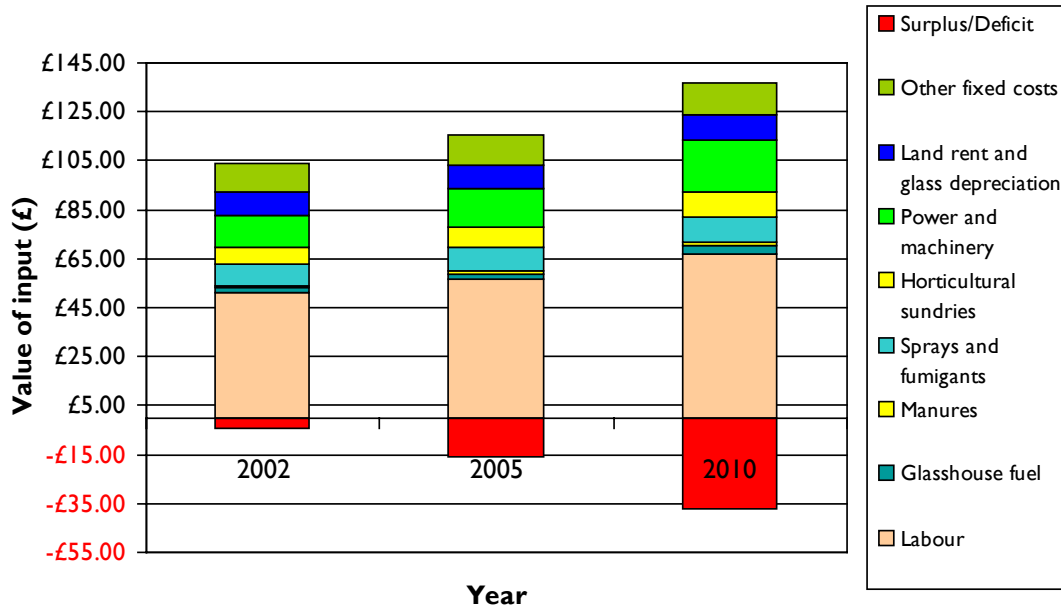
The soft fruit sector recognises that those factors exerting most influence on future business are wage and cost inflation (zero selling price inflation and continued cost inflation). There is a need to develop further efficiencies if the sector is to remain profitable. If the producer base ceases to operate profitably, then production will contract. Alongside managing efficiencies in the production of volume crops, there should be a focus on developing new, premium varieties that can be sold at a higher price to maintain better margins. The industry recognises the need for strong marketing at the top end of the market, and estimates that a 20% premium may be achievable.

To an extent, the UK soft fruit industry has adopted some successful elements of the Dutch production model, including excellent communication both within the industry and with retailers (marketing groups share information on stocks and speak to supermarkets on a weekly basis to give performance updates). The grower age profile is younger than in other areas in UK horticulture and growers are generally highly professional and IT literate.

“I am very confident about the future. You never know what’s round the corner, but there are more times in our six month season that we are short of fruit than we are long. The industry is very well organised. The marketing companies are very high quality and they work very well together. It’s a success story.”

The following model illustrates the breakdown of input costs into the UK soft fruit sector and estimates the potential impact of changing cost structures to 2010. Calculations have been based on Reading University’s current horticultural business data, combined with estimated annual growth rates based on industry estimates and Promar research. Labour costs have been increased at 3.5%, energy costs at between 6-10% over a period of time and all other costs at 2%.

Figure 33
Soft Fruit: Cost of Inputs per £100 Net Output to 2010



Source: University of Reading/Promar International

The available data implies that soft fruit growers are struggling to make a profit from their businesses, but it should be noted that this also includes fruit, which is not grown under polytunnels, which will distort the figures somewhat. In the course of this research, we were unable to access specific data on polytunnel based production, although it should be noted that organisations such as the Food Chain Centre are at the early stages of benchmarking this form of production and more pertinent data will be forthcoming at some stage in the future.

As with other sectors, labour represents 50% of the input costs and therefore has to be the key input to manage. The combined effect of the other inputs clearly equates the labour costs, but individually they are less significant. In the last 2-3 years, the soft fruit sector has managed to reduce labour input costs on the back of improved yields and technological advances. There have also been savings on sprays and fertilisers and power and machinery costs, although it is not expected that further efficiencies in these areas will be sustainable in the years ahead.

Conclusions and Recommendations

- Growers and marketing companies should continue to work as closely as possible with multiple retailers, anticipating customer needs and effectively managing market information in order to safeguard against competition from imports
- British provenance is perceived as an advantage on the back of perceived quality and freshness: this should be marketed effectively
- Labour costs and potential water shortages are major considerations for the future. Research should be undertaken at this stage to develop an industry-wide strategy
- Innovation and research should focus on investigation of premium varieties with enhanced margin potential

SOURCES OF INFORMATION

In the course of our research, we reviewed a wide range of documents related to the key subjects connected to this project. The main sources of information we accessed included the following:

Defra. *Agriculture in the United Kingdom 2004*. 2005

Defra. *Basic Horticultural Statistics 1994-2004*. 2005

Jamieson, B. *Skills Audit of Horticultural R&D – Report to the National Horticultural Forum*. 2004

HTA. *Annual Research Report – Grower Market Analysis 2003*. 2004

HTA. *Retail Market Analysis 2003*. 2004

HTA. *Strategy for UK Producers of Ornamental Crops*. 2005

Mason, R. & Simons, D. *Wise Moves Modelling Report*. 2002

NFU. *Growing Great Britain: Horticulture Facts and Figures*. 2002

NFU. *Policy Statement on Climate Change*. 2005

NFU. *Submission to the Agricultural Wages Board*. 2005

Nix, J. (ed). *Farm Management Pocketbook*. 2004

Promar International. *Impact of the Mid-Term Review on the North West Region* (prepared for Northwest Development Agency). 2004

Rabobank. *The new EU: Outlook for farmers, processors and traders*. 2004

Reading University. *Horticultural Business Data – Orchard Fruit & Field Vegetables*. 2004

Report of the Economic Adviser to the Agricultural Wages Board for England and Wales. 2005

Spedding, C. et al. *A Review of Horticultural R&D*. 2002

Thorne, F., Kelly, P.W., Maher, M et al. "A Comparative Assessment of the Competitiveness and Cost Structures of Hardy Nursery Stock Production in Ireland, the Netherlands and the UK", *Farm Management*, vol. 11 (4). 2002

Wye College University of London. *A Comparative Study of Agricultural Marketing in the Netherlands and the United Kingdom*. 1993

ACKNOWLEDGEMENTS

Where quotes have been used in the report, we have protected as far as possible the identity of the respondent by not making a reference to the type of respondent from whom it originated.

We would like to thank the following organisations, amongst others, all of whom contributed time and background research materials to the project:

- Defra
- Haygrove Tunnels
- Hilliers
- Horticultural Development Council
- Horticultural Trade Association
- HSBC
- J Sainsbury
- KG Fruit
- LANTRA
- Marshalls of Butterwick
- National Farmers Union
- Needham Growers
- Syngenta
- The Poupart Group
- The Tomato Growers Association
- University of Reading
- World Wide Fruit

We would especially like to thank Professor CC Payne for his support and contribution throughout the project.

ACRONYMS

The following are used throughout the report on a regular basis:

APS	Assured Produce Scheme
AYR	All Year Round
CAP	Common Agricultural Policy
CHP	Combined Heat & Power
Defra	Department for Food, Environment & Rural Affairs
DFY	Done For You
DIY	Do It Yourself
EDLP	Every Day Low Prices
EU	European Union
EUREPGAP	European Retailer Protocol (EUREP) Good Agricultural Practice (GAP)
FBS	Farm Business Survey
FWAG	Farming Wildlife Advisory Group
GM	Genetic Modification
HDC	Horticultural Development Council
HNS	Hardy Nursery Stock
HTA	Horticultural Trade Association.
HONS	Hardy Ornamental Nursery Stock
ICM	Integrated Crop Management
LEAF	Linking Environment & Farming
NPD	New Product Development
PMO	Produce Marketing Organisations
POS	Point of Sale
R&D	Research & Development
SAWS	Seasonal Agricultural Workers Scheme
UK	United Kingdom