Improving market intelligence for organic horticulture in Wales

A report prepared for Organic Centre Wales

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Executive summary

The organic market in the UK reached a value of £1.015 billion during the 2002/2003 financial year. The market for organic food and drink in Wales and the surrounding counties is estimated to account for 6.3 per cent of this, a total of £64 million. Assuming the proportion of sales of organic fruit and vegetables in Wales is the same as the UK as a whole then the market for organic fruit and vegetables in Wales can be valued at £20.5 million for the financial year 2002/03.

The area of fully organic horticultural land in Wales in April 2003 was 513 hectares with 102 producers involved in organic fruit and vegetable production. Of these producers, over 60 per cent were mixed farms encompassing livestock and/or cereals alongside horticulture. The estimated farm-gate value of Welsh produced organic fruit and vegetables was £1.8 million, approaching 5 per cent of the total UK farm-gate value of £43.96 million.
Organic horticultural production accounts for a significant proportion - 10 per cent - of the total horticultural land in Wales. In comparison, organic horticulture in the UK as a whole accounts for just 4 per cent of the total horticultural land.

Interviews with Welsh growers identified a number of key challenges facing them including market access, lack of producer co-operation, increased competition (particularly from within the UK) and availability of labour.

At the beginning of 2003, 103 licensed organic processing operations were operating in Wales with approximately one-third handling fruit and vegetables. The main constraints to increasing the utilisation of domestic produce were identified as continuity, quality, accessibility and reliability of supply.

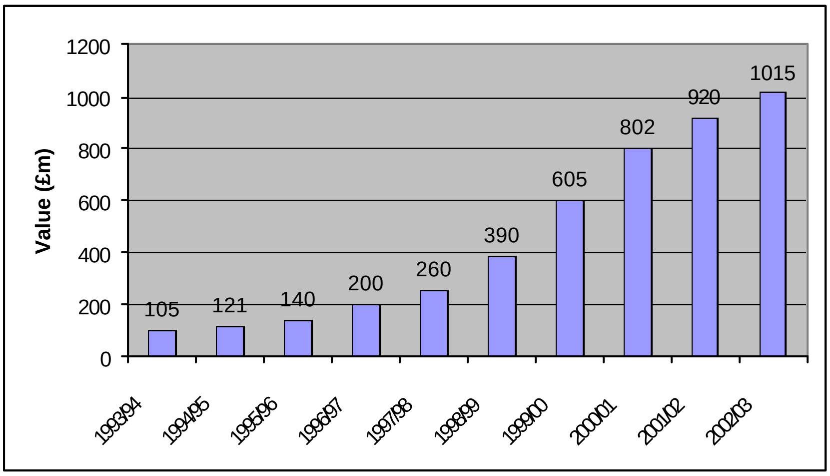
Key recommendations to help overcome many of the challenges identified are included in Chapter 6 - Conclusions and Recommendations.

Fruit and vegetables are a key entry point for consumers beginning to buy organic food.
Welsh consumers are less 'put-off' by the price of organic food than consumers across the UK as a whole. Supporting the local farmers is particularly important to the Welsh consumer, with 35 per cent of the Welsh organic buying public stating that it was important to support local farmers, compared to 16 per cent in the UK overall.

1. Background and policy developments

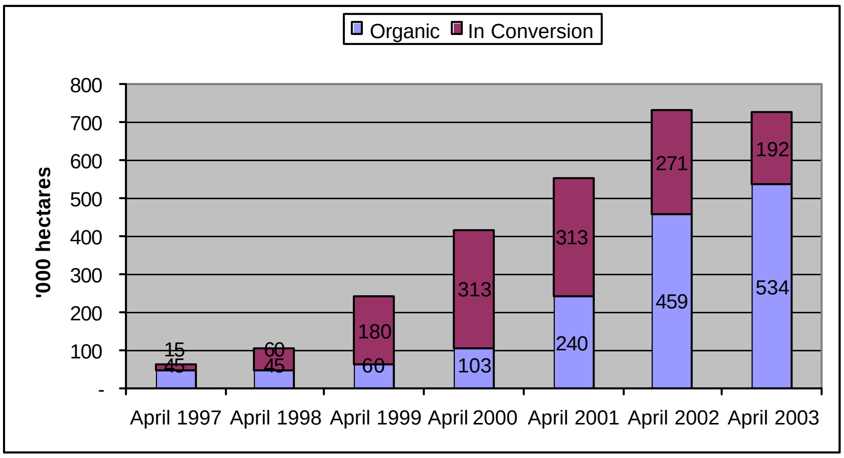
The organic market in the UK has grown considerably in the last five years expanding by a factor of ten from a little over £100 million in 1993/04 to £1.015 billion in the 2002/03 financial year (Figure 1). In response to growing consumer demand and elevated levels of government support for organic management, many farms in the UK have converted to organic production. The area of organically managed land in the UK in April 2003 amounted to 726,400 ha, approximately four per cent of the UK's total farmland (Figure 2). Of this 726,400 ha 73.6 per cent, or 534,300 ha, was fully organic.

Figure 1 Growth in retail sales of organic food and drink in the UK, 1993/94 to 2002/03



Source: Haward and Green, 2003

Figure 2 Growth in organically managed land in the UK, 1997 to 2003



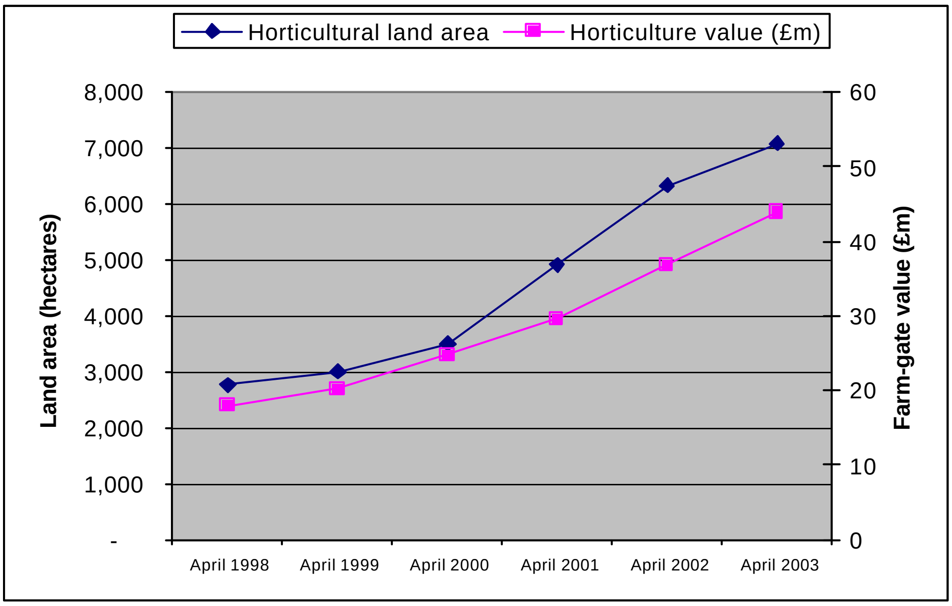
Source: Haward and Green, 2003

In the context of UK organic farmland as a whole, horticulture accounts for a relatively small area - 7,084 ha, or 1.3 per cent, of fully organic land. However, the contribution towards the total market value at the retail and farm-gate level is substantial. In 2002/03 the value of organic horticultural produce at the farm-gate was £43.96 million, 24 per cent of a total farm-gate value for UK products in the year of £180.85 million. At the retail level the value of organic fruit and vegetables was estimated at £325 million, 32 per cent of all retail sales. However, a significant proportion of these sales, approximately 65 per cent, can be attributed to imported produce.

The value and area of organic horticulture in the UK has increased year-on-year since 1997 (Figure 3).

With this increase in horticultural production has come a number of key developments, both positive and negative, that are shaping the future trajectory of organic horticulture in all nations within the UK.

Figure 3 Growth in the land area and value of organic horticulture in the UK, 1998 to 2003



Source: Haward and Green, 2003

Key positive developments include:

1. Increased supply of UK organic fruit and vegetables

The growth of the organic horticultural land area has lead to an expected increase in the domestic production of organic fruit and vegetables

2. Quality of UK produce has improved

The technical competence of growers has improved with the expansion of organic horticulture in the UK. This is linked to a marked improvement in the quality of UK produced fruit and vegetables

3. Reduced reliance on imports

As a consequence of the greater availability and improvements in quality, retailers have been able to replace some imports with UK supplies. As a consequence, reliance on imports has dropped in the last three years from 85 to 66 per cent by value

4. Sales of local organic food have also grown

Sales of organic food and drink through box schemes, farmers' markets and farm shops have grown considerably in recent years. In 1999, £58 million of organic food was sold direct from the farm to the consumer via these three routes. By 2002/03 this had increased to £93.31 million. A substantial proportion of direct sales are fruit and vegetables meaning that this is a particularly important sales outlet for organic growers.

Key challenges include:

1. Decreasing returns to growers

The price received by growers for most organic vegetables and fruit have declined over the last five years. This has made it increasingly difficult for small and medium scale producers to be able to meet supermarket requirements while remaining profitable

2. Rationalisation of the supply base

Hand-in-hand with decreasing returns to growers comes the rationalisation of the supply base. Over 80 per cent of organic produce is sold through the supermarkets, this is therefore an important market outlet for many organic growers. As more producers have converted, supermarkets have been able to rationalise the supplier base to save on cost. This is having major ramifications for producers without the economies of scale to meet the increasingly stringent requirements of the supermarkets given the returns on offer

3. Lack of producer co-operation

It is notoriously difficult to encourage farmers and growers to co-operate in a meaningful way. This is true of both the organic and non-organic sector. However, increased competition within the sector is meaning that co-operation or specialisation are likely to be requisites for survival in the future. Many models of specialisation exist – whether product or market related

4. Inadequate provision of market intelligence – particularly projected production data

A number of sources of information relating to the organic sector do exist. However, there is no structure in place to collate, analyse and disseminate information on projected horticultural production. This is regarded as essential information to help plan supply and demand, avoiding gluts of produce during periods of over-supply.

2. Organic horticulture in Wales

2.1 Policy developments and support

The organic movement of today has its roots in west Wales. There is still a strong and influential collection of well-established organic producers in the country. In recent years, many more farms have converted in response to consumer demand and government support.

Within the UK as a whole, policy developments have increasingly favoured organic management in recognition of the environmental benefits of organic farming and growing. In 1999 the Welsh organic sector action plan was published with the aim of expanding the organic sector in Wales, fully exploiting market opportunities and establishing the role of organic agriculture in the context of wider food and farming policy. In order to achieve these aims, work has been focused on three main areas - policy, marketing and information.

Provision of market intelligence to support the development of organic horticulture in Wales fits into each of these three areas. Market intelligence has been recognised as essential in developing government policy and a requisite of successful marketing and stable sector development. This project reviews the current and historic development of organic horticulture in Wales and makes recommendations for measures that could be adopted to help develop organic horticulture further in Wales. Within these recommendations measures to improve the collection and dissemination of market intelligence have been identified.

The Organic Farming Scheme in Wales has been furnished with a budget of approximately £3 million since 2000 to be allocated to organic and converting farmers and growers. The level of support provided for producers in conversion and then for subsequently managing land organically is shown in Table 1. Since the launch of the scheme in 1999 the uptake of the scheme has fluctuated, being influenced by market forces and the foot and mouth crisis. The level of support provided for small scale dedicated organic horticultural units is low - £480 per hectare during conversion over 5 years and £175 for maintaining organic management. The relatively low level of support means that direct public support has little influence over growers' business plans or decisions to convert to organic management.

Table 1 Financial support for organic farmers in Wales (£ per hectare over 5 years)

	Arable	Grassland	Unenclosed
Organic Aid Scheme (1994-1998)			
Standard	250	250	-
LFA (less favoured area)	50	50	50
Organic Farming Scheme (1999 onwards)			
Conversion (to 2003)	450	350	50
Conversion (from 2003)	480	390	65
Maintenance (from 2003)	175	175	50

Source: Organic Centre Wales, 2003

2.2 Land area

The growth in organically managed land in Wales is shown in Table 2 and Figure 4. The total area of organically managed land has increased from 5,331 ha in April 1999 to 54,306 ha in April 2003, growth of over 900 per cent (Haward and Green, 2003). Whilst there has been growth in fully organic land in Wales from April 2002 to April 2003, the total organically managed land area saw a decline from 5,8100 ha to 54,306 during this period.

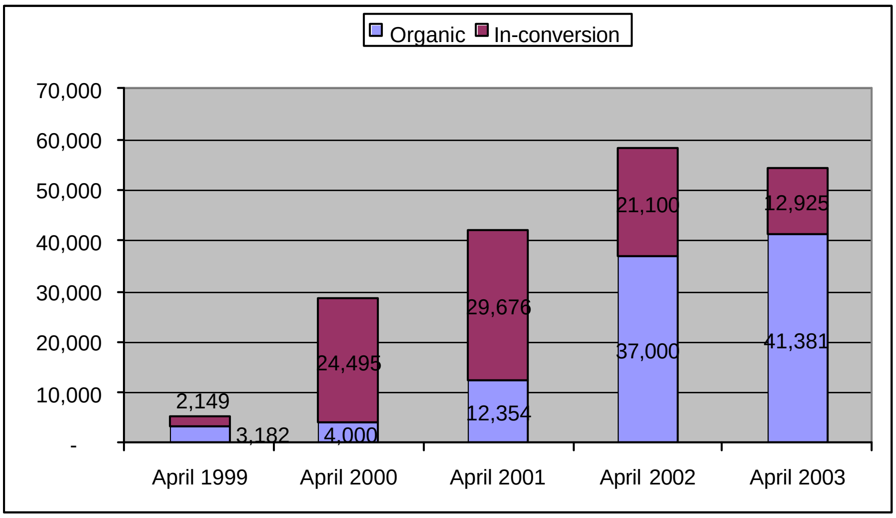
This apparent anomaly could be explained by a number of producers applying to join the Organic Farming Scheme (OFS) in early 2002 and becoming certified, but then subsequently choosing not to follow through with the application resulting in an apparent drop in the organic land area. There is evidence to suggest that this was caused by long delays in processing OFS applications for the and farmers waiting for the outcome of CAP reforms before committing themselves to organic farming, thus bringing about a temporary 'flattening' of the land area figures. OFS data indicates that there has been a continuing uptake of organic farming in Wales, with around 9,200 ha entering the scheme during 2002/03, suggesting that there is a sustained interest in organic farming in Wales despite this temporary 'blip'. Further discussion and information on Welsh organic farming statistics can be found on the Organic Centre Wales website at www.organic.aber.ac.uk, as well as Defra, http://statistics.defra.gov.uk

Table 2 National distribution of organically-managed land in the UK, April 2000 to April 2003 (hectares)

	April 2001	April 2002	April 2003	Change from 2002 to 2003 (%)	Proportion of total UK organic land 2003 (%)
England					
In-conversion	132,000	101,300	60,979	- 39.8	8.4
Organic	87,200	150,000	188,339	25.6	25.9
Total	219,200	251,300	249,318	- 0.8	34.3
Wales					
In-conversion	29,700	21,100	12,925	- 38.7	1.8
Organic	12,350	37,000	41,381	11.8	5.7
Total	42,050	58,100	54,306	- 6.5	7.5
Scotland					
In-conversion	148,000	145,500	116,639	- 19.8	16.1
Organic	140,000	270,000	300,240	11.2	41.3
Total	288,000	415,500	416,880	0.3	57.4
N Ireland					
In-conversion	2,800	3,000	1,547	- 48.4	0.2
Organic	450	1,650	4,307	161.0	0.6
Total	3,250	4,650	5,854	25.9	0.8
UK Total					
In-conversion	**312,500**	**270,900**	**192,090**	**- 29.1**	**26.4**
Organic	**240,000**	**458,650**	**534,267**	**16.5**	**73.6**
Total UK organically managed land	**552,500**	**729,550**	**726,357**	**- 0.4**	**100.0**

Source: Haward and Green, 2003

Figure 4 Growth in the area of organically managed land in Wales, April 1999 to April 2003 (hectares)



Source: Haward and Green, 2003

Table 3 Fully organic farmed area by enterprise in Wales and the UK, April 2003 (hectares)

	Wales	% of total Welsh organic land	UK	% of total UK organic land	Wales as a % of UK
Grassland/pasture	36,536	88.3	469,499	87.9	7.8
Arable	1,648	4.0	44,413	8.3	3.7
Horticulture	513	1.2	7,084	1.3	7.2
Woodland	421.9	1.0	4,923	0.9	8.6
Other*	2,263	5.5	8,348	1.6	27.1
UK Total	**41,381**		**534,267**		7.7

Source: Defra, 2003 and Haward and Green, 2003

Of the fully organic land in Wales, 513 ha, or 1.2 per cent, was employed in organic horticulture production (Table 3). This is similar to the proportion of organic horticultural land in the UK as a whole, the majority of which is also pasture – around 88 per cent in both Wales and the UK.

The breakdown of fully organic land in Wales is similar to the rest of the UK. Grassland is the predominant land use, accounting for approaching 90 per cent of fully organic land. Horticulture makes up only 1.2 per cent. The proportion of non-organic land employed in crop production (either combinable crops or horticultural crops) is much higher than in the organic sector. However, this can be attributed to an imbalance between grazing land and cereal production in the organic sector. Total horticultural land – including organic and conventional - accounts for 1 per cent of total agricultural land, whilst organic horticulture accounts for 1.3 per cent of the total organic land.

2.3 Production

In April 2003, there were 102 producers involved in horticultural production in Wales, 16 per cent of the total number of producers in the country (618). The total number of horticultural producers in Wales was 1148, 7 per cent of which were organic. The structure of Welsh horticulture tends towards small numbers of growers producing on a relatively large scale, concentrating on a fairly narrow crop range, supplying to wholesalers/packers and supermarkets. Whilst the majority are small-scale supplying local markets with a wide range of crops.

Table 4 shows the breakdown of horticultural land in Wales. Crop area data has been collected from certification bodies and Defra and has been consolidated by grower interviews. Crops like peas, beans, swedes etc intended for fodder are often encompassed within the horticultural crop category from these sources. Table 5 highlights this area of crops - 137 ha intended for fodder - leaving 376 ha of organic land in Wales employed in fruit and vegetable production at the beginning April 2003. This amounts to 10 per cent of the total horticultural land use in Wales (3910ha) (Welsh Assembly, 2002). In contrast, for the UK as a whole, organic horticulture accounts for only 4 per cent of the total horticultural land area. This highlights the significance of organic horticulture in Wales.

Of the 376 ha used for organic fruit and vegetable production, 30 ha were employed in fruit production with a further 346 ha growing vegetables. Root vegetables, excluding potatoes, accounted for 39 ha (11 per cent) of all organic horticultural land. Potatoes were the predominant crop, accounting for 145 ha (42 per cent) of fruit and vegetable land. A further 70 ha (20 per cent) was employed in brassica production.

Table 4 Breakdown of organic horticultural land use in Wales and the UK, April 2003

	Welsh land area (ha)	**% Welsh horticultural area**	**UK land area (ha)**	**% UK horticultural area**
Root vegetables and alliums	49	9.5	1,588	22.4
Potatoes	145	28.3	1,860	26.3
Green vegetables	129	25.1	1,396	19.7
Salads, protected crops and herbs	15	3.0	288	4.1
Fodder crops (not for human consumption)	137	26.6	N/A	N/A
Total vegetables	**474**	**92.5**	**5,133**	**72.5**
Top fruit	24	4.6	1,574	22.2
Soft fruit	6	1.2	181	2.6
Total fruit	**29**	**5.7**	**1,755**	**24.8**
Flowers and ornamentals	7	1.4	146	2.1
Plant propagation, seedlings and vegetative reproductive material	2	0.4	50	0.7
Total land area	**513**	**100.0**	**7,084**	**100.0**

Note: Top fruit includes apples and pears, soft fruit includes strawberries, raspberries and vineyards.
N/A - No equivalent UK data available for comparison.
Source: Defra, 2003, Haward and Green, 2003 and grower survey

Table 5 Estimated land area of organic horticultural crops in Wales, April 2003

	Fully organic land area (ha)
Alliums - Onions	7
Alliums - Other	3
Brassicas - Cabbage	32
Brassicas - Cauliflower	14
Brassicas - Broccoli	14
Brassicas - Other	10
Green vegetables - other	59
Roots - Carrots	20
Roots - Swedes and turnips	10
Roots - Other	9
Potatoes	145
Protected crops	3
Salads and herbs	13
Top fruit	24
Soft fruit	6
Plant propagation, seedlings and vegetative reproductive material	2
Flowers and ornamentals	7
Total fruit and vegetables for human consumption	**376**
Swedes and turnips	34
Peas	17
Beans	43
Pulses - other	42
Fodder crops (not for human consumption)	**137**
Total fully organic land area	**513**

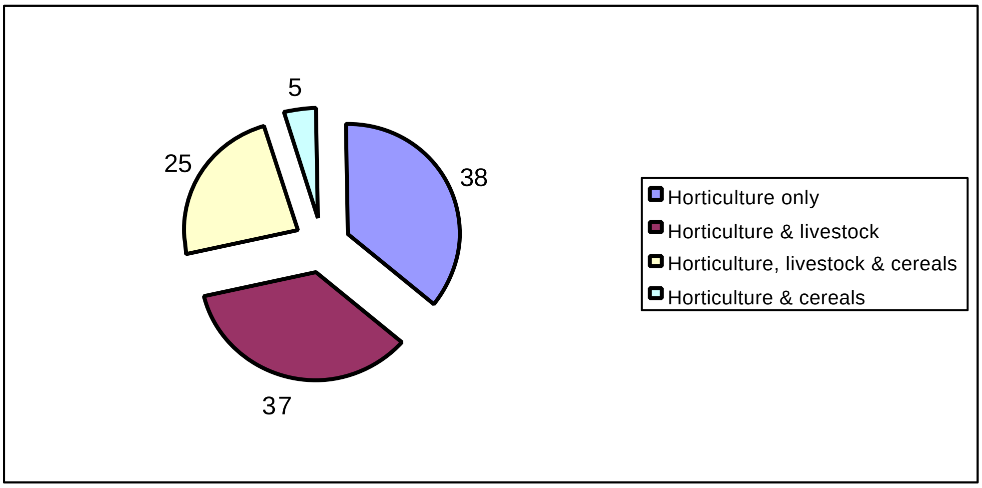
Source: Defra, 2003, Haward and Green, 2003 and grower survey.

A number of horticultural producers in Wales operate mixed holdings also involved in livestock or cereal production. Figure 5 shows the breakdown of enterprise types involved in growing organic fruit and/or vegetables in Wales in April 2003 based on SA Cert data. This could be regarded as both a major strength and weakness of Welsh horticulture in the face of UK and global competition. The mixed nature of over 60 per cent of Welsh horticultural units is fully compatible with the sustainable principles of organic production and is likely to sit more favourably with the general public's perception of an organic farm. However, this lack of specialisation restricts producers' ability to allocate substantial investment to specific areas of production. This places Welsh producers at a difficult crossroads.

- On the one hand, should horticulture look to specialise and gain economies of scale to compete, losing traditional and arguably more sustainable practices?
- Or, on the other hand, should it build on existing production patterns by working to connect with the public and encourage recognition of the value of the farming systems from which Welsh organic produce originates?

The latter would appear to be a more challenging but ultimately more sustainable approach, which will require time and resources for public education and brand development.

Figure 5 Breakdown of organic horticulture producers in Wales, April 2003



Source: Soil Association, 2003

Co-operation between Welsh growers also has the potential to support horticulture in the face of increased competition and growing pressure on prices. There are a number of examples of growers co-operating in Wales to save on costs and improve marketing opportunities. *Mon Organics* is a producer group operating in Anglesey. The group consists of around 12 local organic vegetable growers each with approximately 3 to 6 hectares. The co-operative structure enables growers in the group to share land, equipment and skills, enabling the production of a range of high quality crops. The group helps with crop planning on the farm and supports the stable operation of the businesses involved. *Frontline Organics*, a producer group, wholesaler and box scheme based in South West Wales has recently been purchased by *Calon Wen*, an organic milk co-operative. It has now expanded to the whole of Wales and now includes dairy and other products in its' box schemes. Lampeter-based *Organic Farm Foods* have recently obtained support from the Welsh Development Agency to form producer groups which could contribute to the growth of the organic vegetable growing area in Wales. They are planning to employ a technical officer for this initiative. *Clettwr Organic Producers* near Lampeter consists of about 10 growers producing a wide range of vegetables primarily for sale at farmers' markets. The average hectarage per grower is around 10 hectares. The group reports very high demand for the wide crop range produced including strawberries, raspberries, peas, French beans, roots and peppers. The group is also considering the potential to get involved in public procurement contracts but recognises that the volume required would requires involvement from additional producers. See Section 5 for more information on public procurement initiatives.

2.4 Farm-gate sales

The farm-gate value of organically produced fruit and vegetables represents the potential return to growers of total production during the year. It is based on market prices obtained through grower interviews, the *Organic Farm Management Handbook* and the 'Eye on the Market' column in *Organic Farming* magazine.

The farm-gate value for the key organic horticultural crops was an estimated £1.8 million in the 2002/03 financial year, a total of 6,100 tonnes.[1] This accounts for a little over 4 per cent of the total farm-gate value of all organic fruit and vegetables produced in the UK. Potatoes and cabbage were the most financially significant crops in Wales, together accounting for 55 per cent of the farm-gate value of Welsh organic fruit and vegetables.

Table 6 Estimated farm-gate value and tonnage of key Welsh produced organic fruit and vegetables, 2002/03

	Volume traded (t)	Value traded (£)	Welsh crops as a % of UK (volume)	Welsh crops as a % of UK (value)
Potatoes	3,580	716,300	7.7	7.0
Carrots	720	144,000	4.4	3.6
Onions	140	35,000	3.5	3.5
Swedes and turnips	200	40,000	N/A	N/A
Brassicas - Cauliflower	140	76,540	7.0	7.1
Brassicas - Cabbage	640	254,130	16.0	15.9
Brassicas - Broccoli	60	54,740	3.3	3.0
Protected crops	150	180,000	1.9	1.9
Salads	130	136,880	5.0	5.0
Total vegetables	**5,760**	**1,637,590**	**5.9**	**4.4**
Top fruit	160	82,330	2.4	1.7
Soft fruit	30	61,960	4.0	4.0
Total fruit	**190**	**144,300**	**2.6**	**2.3**
Total key Welsh crops	**5,960**	**1,781,890**	**5.7**	**4.1**

Source: Soil Association, 2003

Table 7 Estimated farm-gate value and tonnage of main UK-produced organic vegetables, 2002/03

	Volume (t)	Value (£m)
Potatoes	46,500	10.23
Carrots	16,200	4.05
Onions	4,000	1.00
Swedes	3,750	0.75
Beetroot	1,800	0.36
Parsnips	1,200	0.54
Other root vegetables	1,500	0.53
Leeks	2,400	1.92
Cauliflower	2,000	1.08
Cabbages and broccoli	5,800	3.44
Other green vegetables	1,125	0.63
Fresh peas and fresh beans	750	0.75
Protected crops	8,000	9.60
Salads	2,600	2.73
Total vegetables	**97,625**	**37.60**
Top fruit	6,570	4.81
Soft fruit	746	1.55
Total fruit	7,316	6
Total fruit and vegetables	**104,941**	**43.96**

Source: Haward and Green, 2003

[1] The figures for farm-gate and wholesale value for the key Welsh crops accounts for approximately 75 per cent of the total vegetables traded by Welsh organic growers. The remainder is largely green vegetables, as well as root vegetables and herbs for which detailed production data is unavailable.

2.5 Grower survey

Face-to-face and telephone interviews were carried out with around one-third (30)of horticulture growers in Wales. The following questions were discussed:

1. What has been your overall **organic production** for the year (tonnes)? How does this compare to previous years?
2. Can you provide an indication of **yields** per hectare for these crops.
3. How have **prices fluctuated** over the last 5 years?
4. Who are the main enterprises that you **supply?**

   What proportion is **sold direct** to the public, compared to **packers**?
5. How has the Welsh market been developing; What has been the **increase/decrease in production?**
6. What are the key **constraints** to increasing Welsh production for key crops?
7. When is the market **under/oversupplied** (which months)? Any issues behind this?
8. **Imports** – what is their impact on the Welsh market? Availability , prices, quality etc.
9. **Your predictions for the future**

   How do you see the market for Welsh organic horticulture developing in the future? Growth, imports…
10. **Market Intelligence**

    What information would you like to have available for your marketing needs?

    How would you like access to this information?

Growers marketing to a range of outlets were interviewed. Many issues raised are appropriate across all holding type and marketing structures while others are more specific to the particular outlet that the enterprise utilises. Table 8 identifies the key issues and, where appropriate identifies which market outlet the issue is associated with.

Table 8 Key issues identified from survey of Welsh organic growers, October 2003

Subject	Grower views	Outlet to which the views relate
General trends, developments and issues	• Welsh growers are struggling more in the face of increasing competition, and eastern UK counties dominated the horticultural market in the UK	Supermarket and wholesale
	• The general consensus amongst growers was positive with regards to future potential. This was particularly notable for growers marketing directly. Supermarket suppliers expected slow growth linked with an increasingly consolidated supply base	Supermarkets, wholesale and direct
	• Distance to market is a major constraint coupled with a lack of packers throughout Wales	Supermarket and wholesale
	• The insecurity of supplying the wholesale trade was highlighted with many wholesalers requesting produce from growers speculatively, rather than via a reliable programme	Wholesale
	• The availability of labour was repeatedly identified as an obstacle	Supermarket, wholesale and direct
	• Increasingly stringent supermarket requirements on quality in combination with 'low' prices make it difficult to meet the supermarkets requirements. Many growers felt that the level of grade-out they are experiencing is increasing despite improvements in crop quality	Supermarkets
	• Mixed feelings were demonstrated in relation to producer co-operation. Examples of successful producer co-operatives in Wales do exist, with numerous benefits for the businesses involved. However, growers recognised the difficulties in establishing meaningful co-operative relationships, especially in light of heightened competition	Supermarkets, wholesale and direct
	• Despite the historical roots of organic horticulture in Wales it appears from interviews that the growers base within the country has become increasingly disparate with little contact between producers	All
	• The availability of organic seed was recognised as a majority hurdle within the organic standards	
Price issues	• There was a consensus amongst producers that prices have remained relatively static in the last couple of years at levels that make it difficult to cover costs of production and also allow for investment. However, over the last five years prices have fallen compared to the highs of	Supermarkets, wholesale and direct

	1998 and 1999. For example, on average prices were suggested to be down by between 25% and 50% compared to 1999	
	• Economies of scale experienced on many large farms in the eastern UK counties are not emulated in the smaller more diverse farms that are traditional to Wales	Supermarket and wholesale
	• Some growers expressed concern about the release of price data suggesting that this can be used by buyers to force down returns to growers. Others felt that regular updates on prices are valuable for business planning. A few growers proposed an internet based price dissemination system to insure up-to-date information	Supermarket and wholesale
Yield trends	• It is very difficult to draw any concrete conclusions on yield from grower interviews as experiences vary significantly from one farm to the next. 2001 was widely cited as experiencing poor yields associated with weather, pests and disease problems. This had detrimental effects on yields. However, most growers recognised a general trend towards improved quality of product in line with increasingly stringent market expectations	Supermarkets, wholesale and direct

3. Wholesale value of organic fruit and vegetables produced in Wales

The wholesale value represents the value of Welsh produce having left the farm-gate to be processed at a licensed wholesaler for distribution to either another processor or a retailer. This has been calculated by contacting wholesalers and by assessing the added value for each product from the farm-gate to the wholesaler, as well as adjustments in volume due to grade-outs.

The total wholesale value of organic fruit and vegetables produced in Wales during 2002/03 was estimated at a little over £2.2 million. This accounts for just over 4 per cent of the total wholesale value of all UK produced organic fruit and vegetables. Over the course of the year it was notable that not all crops destined for the wholesale market were successful. For potatoes in particular, large increases in the volume of supply across the UK meant that many potato growers struggled to secure markets. Quality and continuity are essential for growers to compete in the marketplace. Developments in the organic sector over the last four years have highlighted the importance of not producing speculatively. All growers must secure markets before planting crops. Table 10 shows the total tonnage and value of fruit and vegetables traded at the wholesale level across the UK.

Table 9 Estimated wholesale value and tonnage of key Welsh produced organic fruit and vegetables, 2002/03

	Volume traded (t)	Value traded (£)	Welsh crops as a % of UK (volume)	Welsh crops as a % of UK (value)
Potatoes	2,870	859,560	7.7	8.6
Carrots	610	153,000	4.4	3.7
Onions	120	38,680	3.5	3.5
Swedes and turnips	190	47,500	N/A	N/A
Brassicas - Cauliflower	130	101,000	6.8	8.9
Brassicas - Cabbage	580	321,470	15.3	16.6
Brassicas - Broccoli	60	61,180	3.5	2.8
Protected crops	150	249,900	1.9	1.9
Salads	120	173,390	4.9	5.0
Total vegetables	**4,840**	**2,005,670**	**5.8**	**4.6**
Top fruit	140	114,770	N/A	N/A
Soft fruit	30	86,380	N/A	N/A
Total fruit	**170**	**201,150**	**2.7**	**2.3**
Total key Welsh crops	**5,000**	**2,206,820**	**5.6**	**4.2**

Source: Soil Association, 2003

Table 10 Estimated wholesale value and tonnage of UK-produced organic fruit and vegetables, 2002/03

	2002/03		Growth in value from
Crop	**Tonnes traded**	**Value (£m)**	**2001/2 (%)**
Potatoes	37,200	10.04	-20
Carrots	13,770	4.13	31
Onions	3,400	1.11	-11
Swedes	3,563	0.89	-16
Beetroot	1,530	0.38	55
Parsnips	1,020	0.55	-48
Other root vegetables	1,425	0.50	-
Leeks	2,280	2.51	14
Cauliflower	1,900	1.14	21
Cabbages and broccoli	5,510	4.13	11
Other green vegetables	1,069	0.78	-
Fresh peas and fresh beans	713	0.64	-49
Protected crops	7,840	13.33	37
Salads	2,470	3.46	172
Total vegetables	**83,689**	**43.59**	**14**
Fruit	6,219	8.86	55
Total fruit and vegetables	**89,908**	**52.45**	**19**

Source: Haward and Green, 2003

4. Organic fruit and vegetable processing in Wales

Processing enterprises within the context of this report range from those repackaging organic produce to businesses adding value through food manufacturing.

4.1 Number and type of processing outlets

By April 2003 there were 103 licensed organic processors in Wales (Defra, 2003). Around one-third of these businesses handle horticultural produce of some description, either as fresh produce packing, manufacturing, retailing, or wholefood and commodity wholesaling and importing. Due to the wide variety of enterprises in Wales it is difficult to make generalisations about the type of activities undertaken by organic processors. Interviews with a range of processors handling horticultural produce reveal that the majority of this is not produced in Wales. On the one hand, manufacturers of food ingredients or soft drinks naturally tend to buy in fruit concentrates from overseas since these are not produced in Wales. But on the other hand, there is evidence of a number of successful manufacturers using local organic produce. Businesses most likely to be using a high proportion of Welsh or local vegetables and fruit including box schemes and independent retailers, as well as a number of specialist manufacturers. From a packing perspective, Welsh horticulture has been historically supported by *Organic Farm Foods* based in Lampeter. The majority of Welsh fruit and vegetables produced for wholesale or the supermarkets is handled by *Organic Farm Foods*.

There are a number of small organic food manufacturers producing a range of added-value products including meat, dairy products, soft drinks and alcoholic beverages. For instance, the *Knobbly Carrot Food Co.* in Lampeter have been manufacturing fresh organic soup, salads and sandwich fillings for around one year. Initially arising from a café/deli, the business has been developed with support that includes a *Welsh Development Agency* Process Marketing Grant using a combination of Welsh Assembly and European funding. Partly set up as a processing outlet for *Organic Farm Foods* grade-outs, this factor is worthy of consideration regarding the preparation of vegetables for catering facilities in public procurement initiatives. The *Knobbly Carrot Food Co* aims to source as many ingredients as possible from Wales, including cheese and mayonnaise. However, fruit and vegetables such as oranges and tomatoes are imported from outside the country due to a lack of information on the source of produce and availability of Welsh supply. They sell around half of their produce within Wales, including local farmers' markets.

Processor survey

Telephone interviews were carried out with Welsh organic food processors making use of organic fruit and vegetables. The survey focused on marketing activity and procurement with an aim of understanding how easy processors find it to:

- Source Welsh ingredients of the quality and continuity required
- Find a market for their products

Owing to the very diverse nature of processors it is difficult to draw generalised conclusions from the survey. However, certain messages were repeated amongst a number of businesses –these points have been highlighted in Table 11.

Table 11 Key findings from Welsh organic processor interviews

	Comments from interview	**Processor requirements**
Sourcing	All processor interviews expressed a preference for using Welsh produce. However, most seemed heavily reliant on imports for the following reasons: - Unreliable supply in terms of quality and continuity - Lack of knowledge on the local supplier base - Difficulties in tracing produce through the packers/wholesalers to insure it is of Welsh origin - Distance to suppliers	Database of producers searchable locally and by product type. Commitment for growers to produce for the market to insure quality and continuity. Improved dialogue between processors and suppliers to be sure of product origin.
Marketing	Reports of growth and market development were very positive. Many small processors in Wales have established brands/businesses and loyal local markets and do not appear to need to invest heavily in marketing. Access to large population centres was a constraint to market growth for some of the larger processors (alongside difficulties procuring adequate Welsh supplies)	Collection and distribution centres to services processors and retailers and to act as a hub to transport Welsh organic products to major conurbations and cities

5. The market and the consumer: a focus on Welsh horticulture

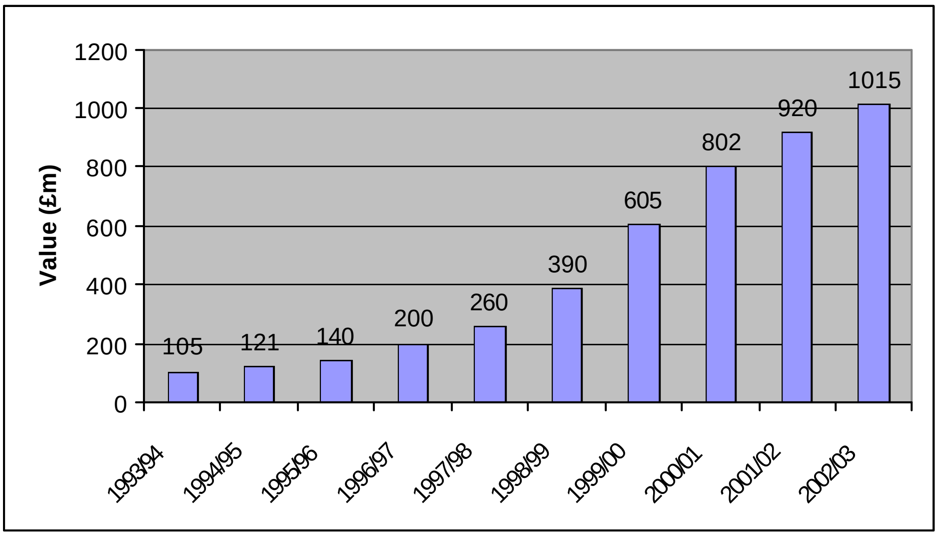
5.1 Sales

Between April 2002 and April 2003 sales of organic food in the UK grew by 10.4 percent, from £920 million to an estimated £1.015 billion (Figure 6). Research by Taylor Nelson Sofres indicates that sales of organic food and drink in Wales and the West of England[2] account for 6.3 per cent of the UK organic retail market value – an estimated £64 million in 2002/03. Within the UK, fruit and vegetables account for 32 percent of all organic sales (Table 12). If this proportion is assumed to be the same in Wales then the value of fruit and vegetables sold in Wales amounts to an estimated £20.5 million. Of the total sales of organic fruit and vegetables within the UK, 66 per cent by value is accounted for by imported produce – both exotic and out of season. Assuming a similar proportion for Wales, this would leave a fruit and vegetables retail sales value of approximately £7 million that could potentially be satisfied by Welsh-grown organic fruit and vegetables.

However, the problem of distribution remains. It is clear that not all produce grown in Wales will be destined for sale in Wales. Future development must therefore focus on ensuring that the Welsh market for organic fruit and vegetables is satisfied by as much Welsh produce as possible and that Welsh growers also have access to population centres outside of Wales. It is likely that the majority of expenditure is focussed in towns and cities (Cardiff, Swansea etc) and the challenge remains for Welsh growers to really take advantage of these markets.

Organic consumers in Wales have characteristic spending patterns which is discussed in more detail in Section 5.5, see Table 15.

Figure 6 Growth in retail sales of organic food and drink in the UK, 1993/94 to 2002/03



Source: Haward and Green, 2003

[2] The regional organic penetration data is collected by TNS which uses a category that incorporates both Wales and some West of England counties.

Table 12 Estimated organic food and drink retail sales in relation to total food and drink sales in the UK – by product category, 2002/03

	Organic market		Total market		
	Value (£m)	Proportion of organic market (%)	Value (£m)	Proportion of total market (%)	Organic share of total market (%)
Baby foods	66	6.5	163	0.2	41.0
Bread and baked	122	12.0	8,820	9.0	1.4
Beverages	96	9.5	44,884	45.8	0.2
Meat and fish	81	8.0	14,700	15.0	0.6
Dairy and eggs	234	23.0	7,840	8.0	3.0
Fruit and vegetables	325	32.0	12,740	13.0	2.6
Other	91	9.0	8,820	9.0	1.0
Total UK	**1,015**	**100.0**	**98,000**	**100.0**	**1.0**

Source: Haward and Green, 2003

Table 13 Estimated value of UK retail sales of organic food and drink, 2000/01 to 2002/03

	2000/01		2001/02		2002/03		
	Sales (£m)	Proportion of total market value (%)	Sales (£m)	Proportion of total market value (%)	Sales (£m)	Proportion of total market value (%)	Growth from 2001/02 to 2002/03 (%)
Supermarkets	641.00	80	755.00	82	821.00	81	8.7
Direct sales	71.00	9	73.00	8	93.31	9	27.8
Independent retailers	90.00	11	92.00	10	101.00	10	9.8
Total UK	**802.00**		**920.00**		**1,015.31**		**10.4**

Source: Haward and Green, 2003

Table 14 Outlets for direct sales of organic food in Wales and the UK, 2003

	Number in Wales	Number in UK	% in Wales
Farmers' markets	25	450	6
Box schemes and home delivery	22	471	5
Farm shops	30 to 40	Data unavailable	

Source: Soil Association, 2003

5.3 Direct sales

For the UK as a whole, direct sales from the farm to the consumer increased by 27.8 per cent during 2002/03, to £93.31 million (Table 13). This exciting and positive development organic food sales is being supported through policy objectives. Outlets for direct sales include farm shops, home deliveries, box schemes, community supported agriculture and farmers' markets.

In Wales, there is no data available for the value of organic sales direct from the farm to the consumer. However, there is evidence of significant activity in the local food sector, including around 25 farmers' markets in the country, accounting for five per cent of farmers' markets in the UK (450), see Table 14. Over 40 per cent of which are in the Glamorgan/Southeast Wales region. There are around 30 organic box schemes and home delivery services – six per cent of the UK total (471). Whilst the majority of box schemes are quite small and only selling locally, there are a number of larger businesses and franchises selling fresh organic fruit and vegetables to consumers more widely. It is difficult to be confident of the number of farm shops selling organic food in Wales, however, there are an estimated 30 to 40 organic farm shops varying greatly in size and focus. Communication with growers during interviews would suggest that there is still plenty of potential for an expansion in direct sales of organic food in Wales. However, businesses taking on this route should not be complacent. Market planning, professional production, presentation and good service are essential in order to be successful. Access to an adequate population base to make the business worthwhile is also important.

5.4 Public procurement

Public procurement is recognised as a major potential growth area for organic farmers and growers across the UK. A number of initiatives are being embarked upon to encourage local organic food in schools, hospitals and local authorities.

Organic Centre Wales is involved in supporting a number of initiatives, as well as the *Interreg* organic public education programme.

- *Interreg* covers a number of European regions and is due to run from mid-2004 to mid-2007. In Wales, discussions have taken place with procurers in Cardiff Schools, Welsh Universities and the Powys Health Authority. *Interreg* aims to maximise opportunities for innovative public education initiatives to increase consumer understanding of nutrition, health, social and environmental impacts and organic food production and consumption.

- The most developed public procurement initiative was the *Powys Public Procurement Partnership*. The partnership consisted of Powys Health Care NHS Trust, Cardiff University, Powys Health Authority and Powys Health Alliance, Powys Food Links and NFU Wales. Support and facilitation was provided from the Soil Association Local Food Links department. During 2002, the Partnership worked to demonstrate the potential for locally produced food, organic where available, to deliver social, environmental and economic benefits and therefore meet the 'best value' needs of public sector catering. The overall aim of their work was to inform policy makers within Wales and the UK of the opportunities and barriers that exist for local and local organic food procurement and to contribute to creative change.
  There were four main areas of work:

  - Demonstrating that procurement of local food, organic where available, represents 'best value' for the NHS locally and for the Local Authority
  - Research into EU legislation on public procurement
  - Exploring practical opportunities for the supply of local food, organic where available, to local schools and hospitals.
  - Awareness raising and gaining political influence

The full 'Powys Public Procurement Partnership Report' can be downloaded from the Local Food Works website: http://www.localfoodworks.org

A number of local regions also hold potential for forthcoming initiatives:

- *Cardiff Schools*. Procurers at Cardiff County Council have been involving organic suppliers in the tendering process for catering contracts to local schools
- *Higher Education Purchasing Consortium Wales (HEPCW)* Discussions are taking place with a number of Universities to offer Welsh organic produce to students and staff
- *North Wales/Bangor*. Bangor University, as well as other public institutions, have expressed an interest in procuring Welsh organic food
- *Western Counties*. Existing interest within local authorities needs to be harnessed in order to introduce fresh, healthy, local organic food into public institutions
- *North east Wales/Denbighshire*. There is potential to make links between local organic businesses and schools in the area.

For further information on any of these initiatives please contact *Organic Centre Wales*: Dave Frost, David.Frost@adas.co.uk or Michael Green, mgreen@soilassociation.org

5.5 The consumer

Consumer trends and attitudes amongst organic consumers have been investigated using Taylor Nelson Sofres (TNS) Superpanel data. Superpanel is Europe's leading continuous consumer panel. It polls 15,000 households, each providing purchasing information from every shopping trip via an electronic terminal in the home. All family members are trained to scan any grocery products they bring home. The sample is both demographically and regionally representative of the UK marketplace. In March 2000, TNS Superpanel developed a consumer panel database on organic foods and much of the data presented in this chapter is derived from this database. Superpanel acts as a market-tracking vehicle and as a data set to analyse consumer purchasing behaviour. It has been used for both of these functions in this report.

In addition, the Soil Association commissioned TNS to carry out a specific survey to further investigate general attitudes to organic food, entry points and category-specific reasons for purchases. The study surveyed 4,000 adults from across the UK with in-home interviews and was part-funded by the Welsh Development Agency and South West Development Agency. The survey period lasted two weeks in January and February 2003.

The Superpanel and the Soil Association-commissioned survey have both been used to investigate consumer trends in the UK and Wales.

5.5.1 Trends in organic purchasing in the UK, 2002/03

Glossary of terms

Penetration = the proportion of UK households purchasing organic food and drink

Spend = how much each UK household spent on organic food and drink

Frequency = the number of shopping trips per year in which organic purchases were made per UK household

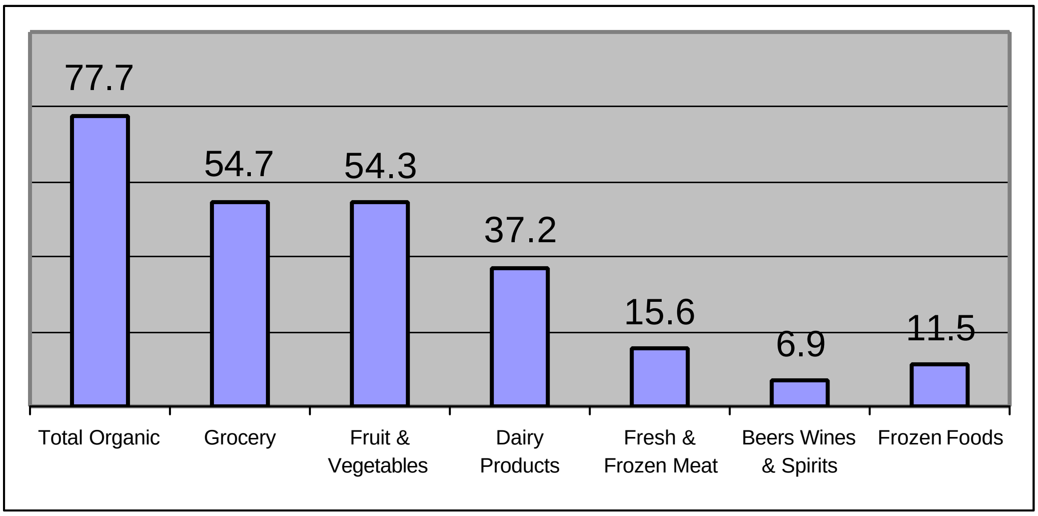
In order to understand trends in growth and to plan for future market development, it is important to understand consumer trends and attitudes.

In previous years, market growth was driven by all three key consumer measures – penetration, frequency, and spending. This means that, year on year, more people were buying organic food, more frequently, and spending more. Of these three measures, penetration was the most significant driver with a substantial increase in the number of UK households buying organic food. This increased from 33 per cent in 1999, to 80 per cent in 2002.

However, despite continued market growth over the last year, consumer penetration in the UK dropped marginally from 80 per cent to 77.7 per cent. In Wales and the West of England,[3] penetration is slightly lower than the UK average, with 75 per cent of consumers buying organic food.

Growth in UK organic retail sales can therefore be attributed to the increase in average yearly spending per household, which rose from £48.40 to £53.34. Furthermore, there has been a marginal increase in the average number of organic purchases per household from 12.5 to 12.8 per annum. According to Superpanel data, the product category with the highest level of penetration is fruit and vegetables at 54.3 per cent. In other words, 54 per cent of UK households purchased organic fruit or vegetables at least once in the year (Figure 7). The lowest level of penetration is for beers, wines and spirits at 6.9 per cent.

Figure 7 Proportion of UK households buying different organic products, 2002 (per cent)



Source: Taylor Nelson Sofres, 2003

[3] The regional organic penetration data is collected by TNS which uses a category that incorporates both Wales and some West of England counties.

Table 15 Estimated organic retail value and consumer segmentation in Wales and the UK, 2002/03

	Wales & West		UK total			
	Expenditure on organics (£m)	% total expenditure on organics	Expenditure on organics (£m)	% total expenditure on organics	No. households consuming organics (m)	% of households
Heavy buyers Most 'committed' consumers of organics	50.78	79.2	849.82	83.7	4.40	23.1
Medium buyers Moderate consumers of organics	9.57	14.9	123.87	12.2	6.04	31.7
Light buyers Occasional consumers of organics	3.78	5.9	41.63	4.1	8.61	45.2
Total organic consumers	64.13		1015.31		19.04	

Note: Data is unavailable for the number of households consuming organic food in Wales.
Source: Soil Association, 2003 and Taylor Nelson Sofres, 2003

5.5.2 Consumer commitment and expenditure in Wales and the UK

The UK organic market can be sub-divided in terms of consumer commitment. Organic consumers can be segmented into different groups in relation to their level of spending (see Table 15). The **heavy buyers** account for 23 per cent of all consumers, but make up 84 per cent of total expenditure. These are clearly a very important group within the market. In contrast, the largest single group is the **light buyers**, with 45 per cent of the organic buying public but accounting for only 4 per cent of spend on organic food. The remaining 32 per cent of the general public, the **medium buyers**, account for 12 per cent of spend.

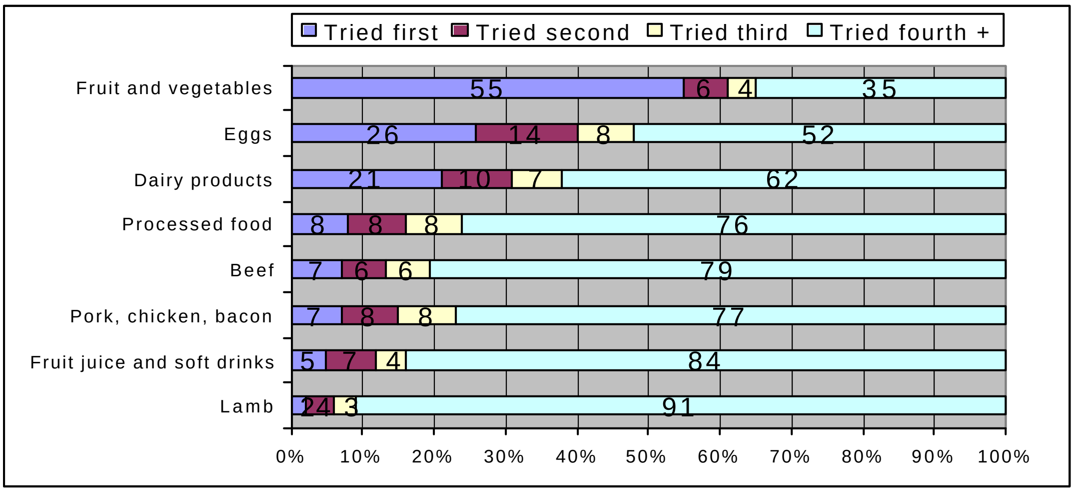
In Wales and the West, the proportion of spending on organics is skewed more towards the medium and light buyers than for the UK as a whole. Twenty one per cent of all expenditure on organics is made by these segments, compared to 16.3 per cent in the UK. Seventy nine per cent of expenditure is made by heavy buyers, five per cent less than the UK overall. However, the fact still remains that a low proportion of the organic buying public account for the majority of expenditure (79 per cent) on organics in Wales.

5.5.3 Key organic entry point categories in the UK

Key entry point categories represent those products that first attract formerly non-organic buying members of the public into making an organic purchase. Investigating entry points gives an indication of what first attracts people to organic food and helps to identify how to encourage consumers to expand their purchasing into other categories. The organic food and drink market was broken down into eight product categories shown in Figure 8.

The different entry points for organic consumers in the UK are outlined in Figure 8. When consumers were asked what products they tried first, second, and third, 55 per cent declared that they had tried vegetables and fruit first.

Figure 8 Entry points for the organic consumer in the UK, January 2003



Source: Taylor Nelson Sofres, 2003

5.5.4 Welsh organic consumers express a preference for 'local' food

Organic consumers in Wales express a preference for buying local food, and supporting local farmers and retailers. Their responses to a number of questions are illustrated below:

1. 'I like to buy local foods in season where possible'

The majority – 73 per cent – of organic consumers in Wales like to buy locally-produced food which is in season. This follows the trend for the UK as a whole, although four per cent more organic consumers in Wales agree with the above statement than the UK as a whole.

2. 'I believe in supporting local farmers'

Occasional or frequent organic consumers were asked what was most important to them about organic food and drink. In Wales, more people than anywhere else in the UK stated that it was important to support local farmers – 35 per cent, compared to 16 per cent in the UK overall.

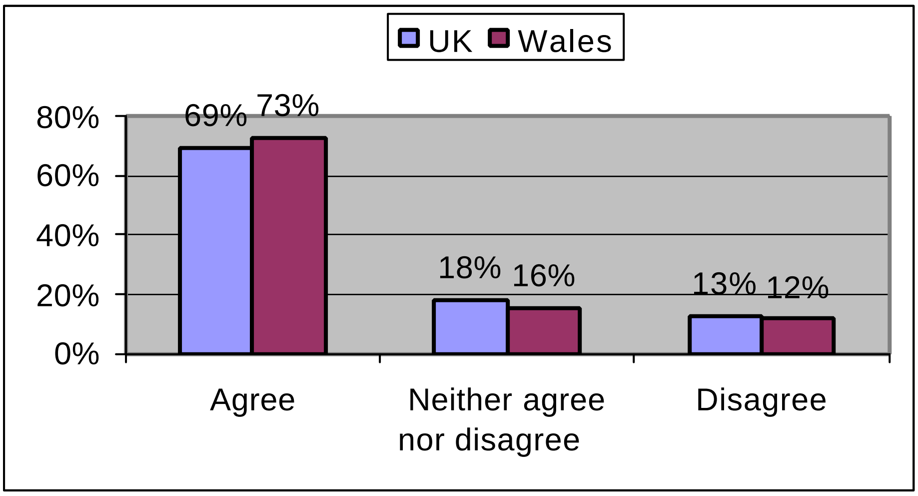
3. 'I like to buy my food from smaller local shops'

In Wales, 40 per cent of organic consumers indicated a tendency to buy their food from smaller shops, four per cent higher than the trend for the UK as a whole.

4. 'Farmers use too many chemicals and fertilisers these days'

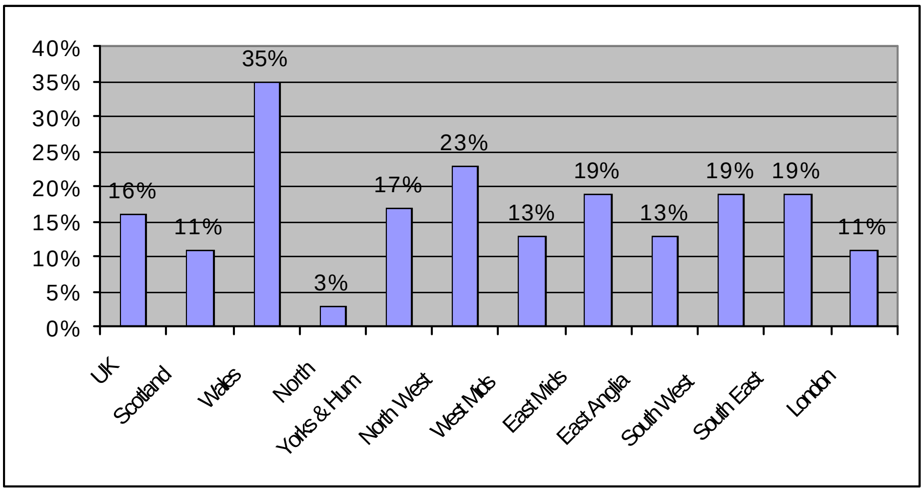
Organic consumers in Wales express a significant concern towards the use of chemicals and fertilisers in modern non-organic farming, with 70 per cent agreeing with the above statement. Wales has the lowest proportion of organic consumers who *disagreed* with the statement that chemicals and fertilisers are used too excessively – only 4 per cent – compared with Scotland and the Yorkshire region where 10 per cent disagreed with the statement.

Figure 9 UK organic consumers who 'like to buy local foods in season where possible'



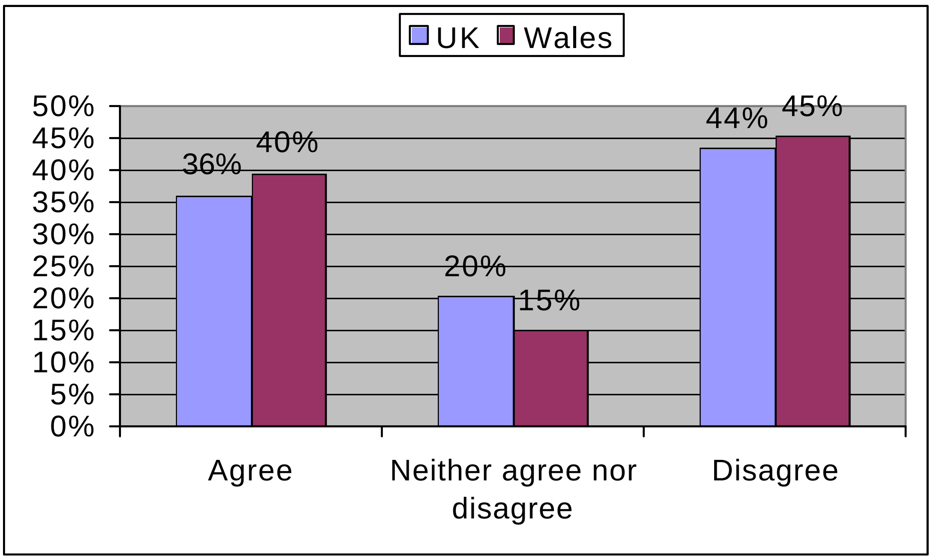
Source: Taylor Nelson Sofres, 2003

Figure 10 UK organic consumers who 'believe in supporting local farmers'



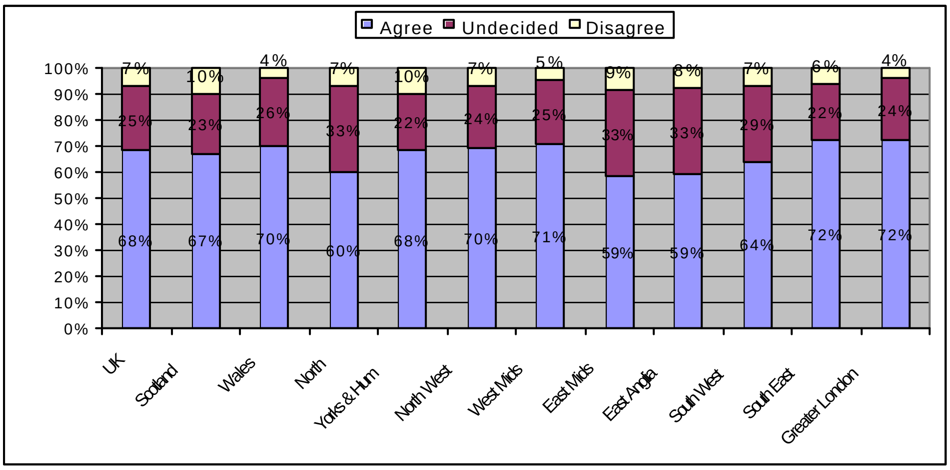
Source: Taylor Nelson Sofres, 2003

Figure 11 UK organic consumers who 'like to buy food from smaller shops'



Source: Taylor Nelson Sofres, 2003

Figure 12 UK organic consumers who believe that 'farmers use too many chemicals and fertilisers'



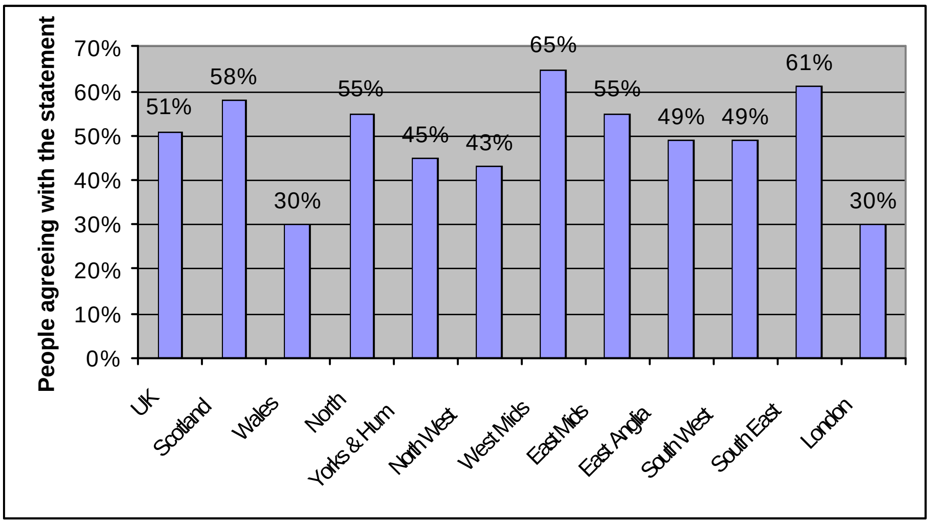
Source: Taylor Nelson Sofres, 2003

Barriers to purchasing

Of those surveyed who did not buy any organic products, over half of UK consumers stated that the price of organic products put them off buying organics. In contrast, only 30 per cent of the non-organic buying public in Wales said that price was a barrier – the joint-lowest of all regions together with London. The 'price barrier' issue is closely linked to consumer understanding. This indicates that the level of awareness in relation to organic food amongst the people of Wales is probably higher than in many other parts of the UK. This is a consequence of the historic development of organic farming in Wales and the close association of the Welsh public to farming. As a result, price is not regarded as such a major obstacle to buying organic food, despite Wales being a nation with a low overall income per household compared to England.

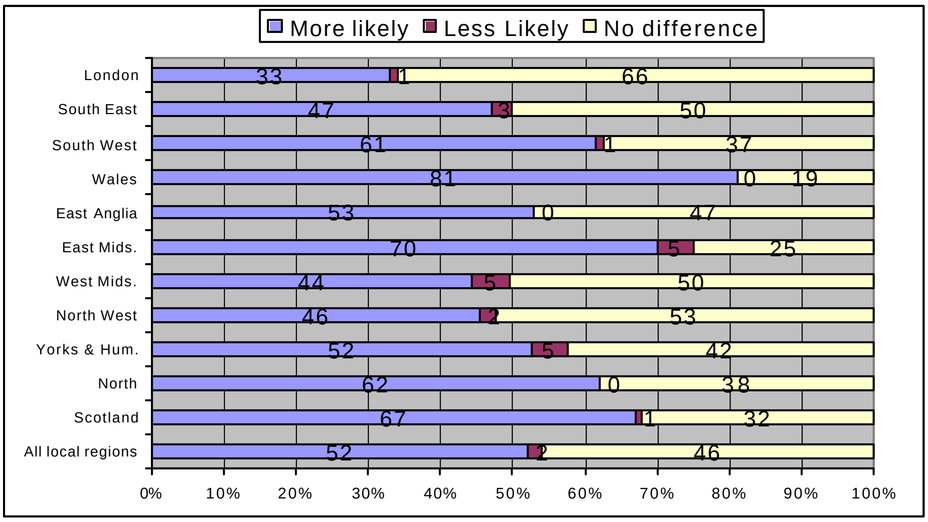
Furthermore, there is a particularly strong local identity for Welsh products with 81 per cent of Welsh organic consumers being more likely to buy if the product is of Welsh origin (Figure 14). Seventy-two per cent of these people would also be willing to pay more for Welsh organic food. This compares to the UK as a whole, where over 60 per cent were more likely to buy if the product is from the UK (Figure 15).

Figure 13 Non-organic consumers agreeing with the statement 'I would like to buy these products but they are too expensive'



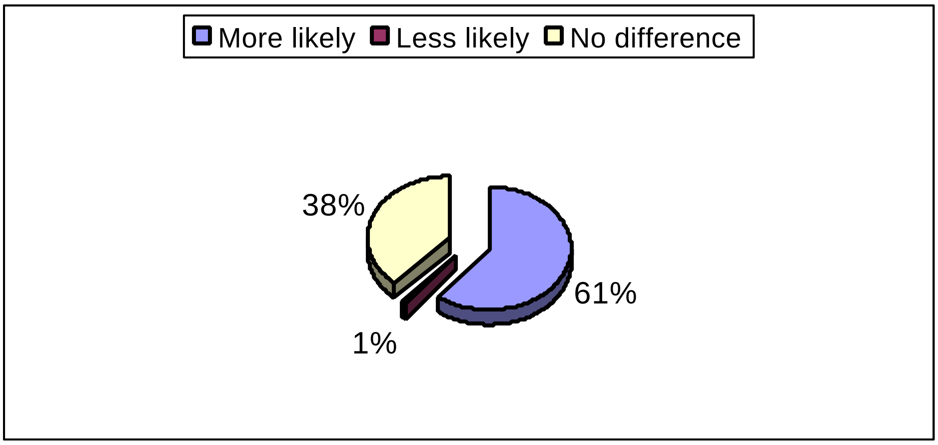
Source: Taylor Nelson Sofres, 2003

Figure 14 Organic consumers who are more likely to purchase organic food produced in the area in which they live



Source: Taylor Nelson Sofres, 2003

Figure 15 Consumer purchase likelihood for UK-origin organic food and drink



Source: Taylor Nelson Sofres, 2003

6. Conclusions and recommendations

Needs for organic horticulture in Wales

6.1 Marketing

- In line with the recommendations in the ARD Committee report on organic farming, the WAG should support a **well-funded public education campaign** on organic food and farming. The campaign should begin by the end of 2004, building on the experience with public education from the proposed OCW pilot procurement projects. This should draw on best practice from other member states, especially Germany – examples of possible activities include school projects, open farms website etc.
- Maximum use should be made of opportunities provided by the CAP reform agreement for the WAG to provide financial support to producer groups for **promotional initiatives**
- Development of a clear message associated with Welsh horticultural produce (analogous to Welsh livestock products) capitalising on the extensive nature of production of many horticultural units in the country
- To facilitate this, the WAG and WDA should work with the Organic Strategy Group, organic sector businesses and key multiple and independent retailers to help promote and **develop the market for Welsh organic products**. This should include support at Ministerial level for high-level meetings with retailer and organic sector representatives
- The Welsh Assembly Government (WAG) should encourage the **sustainable procurement** of organic food, locally produced where possible, within public sector catering. Assistance is needed in co-ordinating supply to meet contract requirements. For instance, the WAG and Welsh Development Agency (WDA) should encourage their catering contractors to increase the provision of organic meals and snacks in their canteens and meetings. A proportion of organic food should regularly be on the menu by the end of 2004
- Organic food and farming should form a specific focus of the **Food Tourism Action Plan** currently under development by the Welsh Tourist Board and WDA, to investigate the potential of supplying the tourist trade (restaurants, hotels etc) alongside greater clarity with regards organic standards
- Organic food and farming should continue to be a central focus of WDA initiatives to re-establish a quality **food culture** in Wales, through Food Festivals and True Taste branding
- The work of the Food Centres in Wales in supporting new **product development** and related training for organic product innovation should be maintained and developed
- **Support for marketing** for individual growers, as time is often limited to dedicate to this side of business operation

6.2 Supply chain

- Work towards developing the opportunities highlighted in the 2003 Horticulture Strategy for Wales, WDA Horticulture Strategy Group
- A strategic plan for **connecting growers in Wales**. This will help to share ideas, information and knowledge and ultimately develop a more cohesive national supply base
- Affordable and co-ordinated transports system from distribution centres to markets, as well as a system enabling Welsh growers to access population centres like Birmingham and Cardiff to market high volumes of produce

- In order to increase production in the sectors in under-supply, the different **payments offered to converting and converted farmers** need to be examined. Specific attention should be paid to reviewing the level of payments for horticultural (including top fruit) holdings and to addressing the needs of young farmers and new entrant
- Stable prices reflecting true costs of production
- Fair and robust **relationships with supermarket buyers**. This may require the development of codes of conduct between suppliers and buyers
- Supermarket adoption of a more **relaxed approach to product specification** to allow mis-shapen/non-uniform product on to the market. In addition, the sale of loose produce in supermarkets would be of value
- Supermarkets also need to balance consumer requirements with technical constraints when selecting the varieties of particular crops that they want grown organically. It is recognised that varieties on the shelf in store must be attractive to the consumer but they must also be possible to grow under organic conditions
- **Improved access** to labour, machinery and innovative developments. A database acting as an easily accessible central site containing this information would be of value to growers in Wales. This would require development of a new system of collecting and disseminating this information

6.3 Market intelligence

- WAG and Organic Centre Wales (OCW) should work closely with the Defra Statistics division to ensure that **statistics** relating to prices, production, processing consumption, and trade are disaggregated to the Wales level
- Improved **information on crop production areas** and livestock numbers disseminated regularly to the sector. This will require an improved system of data collection and capture between certification bodies. Building on work carried out by the Soil Association and Defra certification bodies need to enter annual data in a standardised format including livestock data, all by region. This information should be analysed, summarised and made available in a user friendly format for the benefit of stakeholders
- OCW should continue to develop a web-based **trade directory** database of producers and suppliers available over the internet. Working with the WDA, a searchable suppliers guide will be key to developing a more cohesive national supply base and supporting public procurement initiatives
- Knowledge of **local/alternative outlets** e.g. local fruit and vegetable shops or organic food processors, to supplement primary outlets would be of value
- Information on who is producing what and when to **avoid duplication** causing the development of gluts. This information will also help co-ordinate programming of supply to meet market needs. In order to achieve this a publicly available database of producers and processors will need to be implemented
- Provision of **guide pricing for key products**. This would require the development of a reliable price collection system that can be used to update producers regularly. Currently UK prices are collected for the Soil Association quarterly journal '*Organic Farming'*

Appendix: Methodology

The reporting period refers to the 2002/03 financial year, running from 1 April 2002 to 31 March 2003. This is for the purpose of consistency and comparability with existing UK data for the same period.

1. Organic land area and production data

- Statistics for the organic land area in Wales were collected directly from the key organic certification bodies in the UK, including Soil Association Certification Ltd, Organic Farmers & Growers, the Biodynamic Agriculture Association, as well as the Defra Statistics Department
- The number of organic producers and processors in Wales was derived from Defra Statistics Department with a more detailed breakdown of horticulture producers from Soil Association Certification data
- The crop-by-crop breakdown of horticultural land area was derived from this data as well as data collected through grower interviews. Regular consultation took place with the Defra Statistics Department in order to assure accuracy, consistency and data protection
- Figures for farm-gate and wholesale values of key Welsh organic fruit and vegetables were calculated using cropping areas from the certification bodies, Defra Statistics Department, and grower interviews. Average yields and prices were based upon the *2002/03 Organic Farm Management Handbook* and grower interviews, whilst also accounting for grade-outs and on-farm usage of crops not reaching the market. Due to the poor availability of production data, the value and volume of organic vegetables produced in Wales accounts for approximately 75 per cent of total production at the farm-gate and wholesale level
- UK-level data for land area and production is derived from the Soil Association *Organic Food & Farming Report 2003* (Haward and Green, 2003) which followed a similar methodology of raw data collection and extensive consultation within the organic sector.

2. Consultation with growers and processors

An extensive survey of organic growers and processors in Wales was undertaken in order to gather primary information on production, prices, trends in the marketplace, and their marketing needs. A full list of questions is listed in Section 2. Interviews were conducted with around 30 growers – one-third of organic horticulture growers in Wales. The survey aimed to be representative of Welsh organic growers and accounted for most large and medium growers supplying to supermarkets and wholesalers, as well as several small growers selling locally. Similar interviews were also carried out with a range of organic processors handling horticultural produce, ranging from fresh produce packers, to food manufacturers and wholesalers.

3. Retail and consumption trends

- Organic retail sales in Wales are based upon Welsh sales as a proportion of the total UK organic market, using data from Taylor Nelson Sofres (TNS) and the Soil Association *Organic Food & Farming Report 2003*
- Information on Welsh direct sales was gathered from the Farm Retail Association, National Association of Farmers' Markets, www.farmersmarketsinwales.co.uk, and *The Organic Directory 2002-2003*
- Retail data for the UK organic market was derived from the Soil Association *Organic Food & Farming Report 2003*

- TNS data was used to analyse consumption trends in organic consumers within Wales and the UK. TNS Superpanel, Europe's leading continuous consumer panel polls 15,000 households, which provides purchasing information from every shopping trip via electronic terminal in the home. All family members are trained to scan any grocery products they bring home. The sample is both demographically and regionally representative of the UK marketplace
- In addition, the Soil Association commissioned TNS/Omnimas to carry out a specific survey to further investigate general attitudes to organic food, entry points and category-specific reasons for purchases. The study surveyed 4,000 adults from across the UK with in-home interviews and was part-funded by the Welsh Development Agency and South West Development Agency. The survey period lasted two weeks in January and February 2003.

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