



Market Review of the Organic Dairy Sector in Wales, 2007

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Executive summary

In the UK, in January 2006, the total area of organic and in-conversion land was 619,852 ha. This represents a decrease of 8% compared to January 2005.

In Wales, in January 2006, the area of fully organic land increased to 5% of the total area of agricultural land. The number of organic producers and growers, including those in-conversion, increased from 618 in 2003 to 688 in 2006.

Organic producers represent approximately 4% of all farmers in Wales.

Welsh organic producers represent 16.6% of the UK total number of organic producers and growers.

UK organic milk production increased from 17 million litres in 1997/8 to over 300 million litres in 2005/6.

In Wales, in 2005, dairy and milk products represented 26% of the total gross product of Welsh Agriculture.

In March 2007, according to data supplied to ADAS by certification bodies, there were 86 fully-organic dairy producers in Wales and 12 in conversion. This represents 4% of the total number of dairy producers in Wales.

In 2005, an estimated 50 million litres of milk were produced on 108 organic farms with ca. 9,500 dairy cattle – the number of holdings is higher than the ADAS 2007 figure, but some may have been in suspended conversion due to the lack of a market, or have subsequently withdrawn from milk production.

The 12 producers who started conversion in 2006 will supply an estimated additional 12 million litres/pa of organic milk when converted.

There has been a marked increase in requests for OCIS advice from dairy farmers. These increased from 4 in 2004 to 71 in 2006.

Key challenges facing organic dairy farmers in Wales include milk price, forage production and optimising milk from forage.

The UK dairy sector holds the second-largest share of the organic market with an estimated £294m sales at retail level in 2005 and 22% of the overall organic market. The majority of organic milk enters the liquid market.

Organic dairy consumers are primarily ABC1. They have diverse shopping habits, use a variety of retail outlets and want information to assist in purchasing decisions and to justify price premiums.

There appears to be a positive correlation between increases in sales of organic milk and dairy products and the publicity given to research findings about the health benefits of organic milk.

Sales of organic liquid milk in the UK grew from 73.8 million litres in 2004 to 158 million in 2006. Because of increased demand, the UK market moved from oversupply to seasonal undersupply. Projected growth in demand, if fulfilled, will create new opportunities for producers willing to convert.

Key market drivers identified by stakeholders were publicity on the health benefits of organic milk, animal welfare concerns and increased interest from major retailers. Main constraints on the development of the organic dairy market were under-supply, lack of promotion, distribution issues, seasonality of production, increased feed costs and lack of processing facilities.

The main strategies needed to develop the organic dairy market identified by stakeholders were co-operation, increased conversions, consumer education, a higher profile for organic food and long term supply chain agreements.

The Welsh Organic Dairy sector has seen considerable product innovation since 2003.

Recommendations

1. A joint effort by the whole organic dairy industry is required to plan ahead to ensure that the number of dairy farm conversions will not lead to a repetition of the oversupply problem experienced in the past.
2. Consideration should be given to setting up an Organic Dairy Sub-Group in Wales.
3. The numbers of farms converted and in-conversion needs to be accurately monitored.
4. Advice and technical knowledge on organic dairy farming needs to be made available through Organic Centre Wales.
5. The industry needs to look into ways of encouraging more organic cereal and alternative protein crops to be grown in order to prevent the shortage of organic feed.
6. Continued research is needed to address the issues identified in this report.
7. It is important that organic dairy farming research should be continued at Ty Gwyn, Trawscoed.
8. There is a need to continue to increase the public awareness of organic farming and agriculture as a whole.
9. Welsh branding of organic products should be developed.
10. The Welsh organic dairy industry should examine ways of increasing sales particularly through outlets other than the multiple retailers.

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1 Introduction

This report was commissioned by Organic Centre Wales (OCW) with funding from the Welsh Assembly Government (WAG) Agri-Food Development fund. It is part of a series of four Welsh organic sector reviews, covering dairy, meat, arable and horticulture. These reviews are intended to:

- update similar reviews commissioned by OCW four years previously;
- identify changes in UK and Welsh market supply and demand conditions;
- identify sector development priorities linked to 2nd Welsh organic action plan, the 2007-2013 Rural Development Plan (RDP) as well as other activities that fall within the scope of WAG Food and Marketing Development Division;
- to update the Welsh organic trade directory as a resource for potential buyers.

The specific objectives of this market review of the Welsh Organic Dairy sector are:

- 1 To review the market developments in the organic dairy sector
- 2 To examine the gap between supply and demand
- 3 To identify the time scale for the closure of the current supply gap
- 4 To provide projections for future demand /supply growth
- 5 To identify specific actions needed to support the dairy sector
- 6 To review the second organic action plan for Wales provisions in light of sector developments
- 7 To update the Organic Trade Directory with respect to dairy suppliers
- 8 To make recommendations

To address the objectives of the project, a combination of primary and secondary data collection methods were used.

Review of published studies

ADAS consultants reviewed a range of published data and reports on the organic dairy market. The majority of these focussed on the UK market, but where possible developments across Europe were included. The reports were summarised and key facts distilled from these. Key trends were charted and used to update the previous OCW report *Improving Market Intelligence for Organic Dairy production in Wales*, produced in 2003. This desk research aimed to identify key developments in the markets over the last five years, such as changes in demand and supply, suppliers and competitor trends, retailer developments, product development and consumer trends.

Along with this review of published reports, ADAS consultants examined changes which have taken place in the organic dairy industry since the OCW report *Improving market intelligence for organic dairy production in Wales* in 2003. Key data sources were reports from the Institute for Rural Sciences (2006); Keynoted Ltd (2006); Milk Development Council (2006 & 2007); Organic Centre Wales (2006); OMSCo (2006 & 2007); TNS (2003); Organic Monitor (2006): and Soil Association (2005 & 2006). A full list is provided in the bibliography. The report of the Marketing Strategy Workshop for the Welsh Organic Dairy Sector held on 7th December 2005 was also considered.

Primary stakeholder research

To build on the desk research and gather the views of those involved in the market, ADAS consultants conducted a series of interviews with key stakeholders and with appropriate suppliers and processors. Through these interviews, ADAS gathered the

respondents' views on the key issues relating to the organic market. In so doing, the discussion focussed in particular on ***market drivers and constraints, opportunities for development*** and ***organic sector development***.

ADAS developed a structured discussion guide for all stakeholder interviews, with the same set of questions asked of each interviewee. In common with most qualitative interviewing, the consultant adopted a flexible approach to pursue appropriate lines of questioning according to how the discussion developed.

The interviews were conducted by telephone, except for one conducted face-to-face.

2 Production of organic milk

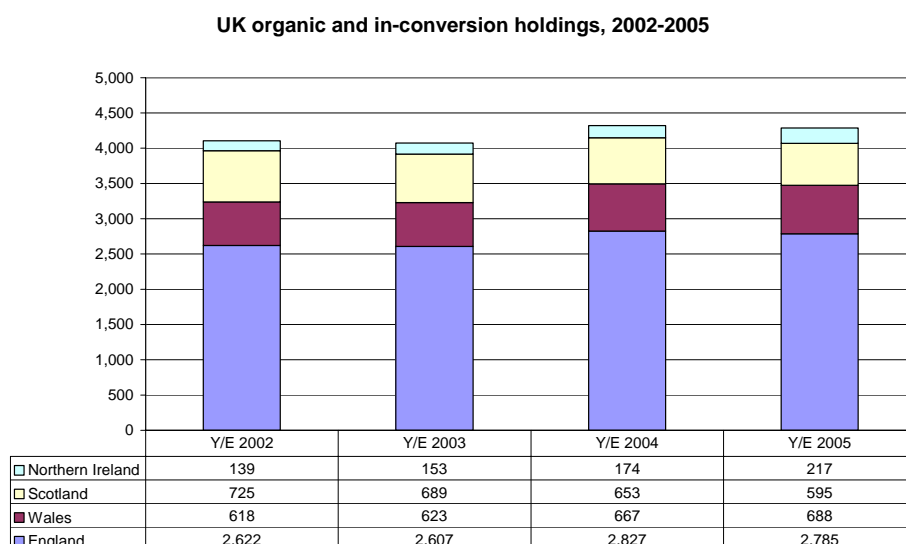
2.1 Number and type of organic holdings in Wales and the UK

The period since 2002 has been one of slow growth and consolidation for the organic sector, following the very rapid expansion phase in 1999/2000.

In the UK in 2005 there were 4,285 organic producers and growers and 2,128 organic processors and/or importers (Defra, 2006). Overall compared to 2004, there was a small decrease in the number of producers and growers (1%) but an increase in the number of processors (31%). As Defra note, the overall area has increased so it would suggest that organic producers and processors are growing in size.

In Wales, the number of organic holdings has increased steadily, in contrast to Scotland and to some extent England where the number of holdings declined in 2005. There were also 112 organic processors and/or importers in Wales. The number of organic producers and growers in Wales represents over 16% of the UK total. Although 2006 data are not yet available, a significant increase to 750+ holdings in Wales is anticipated, on the basis of information available from Organic Conversion Information Service and Organic Farming Scheme returns.

Figure 2.1 UK organic and in-conversion holdings, 2002-2005



Y/E=year ending - values published typically as January following year

Source: Defra (2006)

2.1.1 Dairy producers

UK dairy farming, both organic and conventional, has seen a contraction in recent years. According to the Milk Development Council, the number of producers in England and Wales in February 2007 was 13,125 – 877 (6%) down on February 2006.

Between February 2006 and February 2007 the number of milk producers in Wales fell by 143 to a total of 2,499, a fall equivalent to 5.7%. The area in South West Wales represented by the old county of Dyfed lost the most (73) dairy farmers during

this period, however as Dyfed is the region with the most dairy farmers in Wales this only represented a 5% decline year on year¹.

The exit rate from dairy farming in England and Wales is similar to EU countries such as Finland, Sweden, Ireland and Italy at 6-7% (MDC, 2007²). Factors affecting the decline in numbers of milk producers include the low prices paid to producers and low farm profitability, the age of producers and the issues of retirement and farm succession, labour costs, and on-farm environmental conditions and the cost of new buildings, milking parlours and dairy equipment.

2.1.1.1 Organic dairy producers

From information supplied by the organic certification bodies, ADAS calculates that in March 2007, there were 822 licensed organic dairy producers in the UK and a further 92 in conversion. According to OMSCo, there will be 40 'returning' in-conversion farms in 2006/07 and a further 10 returning to conversion in 2007/08 (OMSCo, 2007) in the UK.

From information supplied by the certification bodies, ADAS calculates that in March 2007 there were 86 licensed (fully) organic dairy producers in Wales and 12 in conversion. This represents just under 4% of the total number of dairy farmers in Wales. However, this estimate is lower than the 108 farms classified as lowland or LFA dairy by WAG on the basis of the Defra organic statistics for 2005, which may indicate some producers in suspended conversion, or a loss of dairy producers in the intervening period:

Table 2.1 Distribution of Welsh organic holdings by farm type/share of all holdings, 2005

<i>Farm type</i>	<i>Organic holdings</i>	<i>All Welsh holdings</i>	<i>Organic share</i>
Cereals	0	232	0.0%
General cropping	11	132	8.3%
Horticulture	28	497	5.6%
Specialist pigs	0	48	0.0%
Specialist poultry	7	336	2.1%
LFA dairy	64	2871	3.8%
Lowland dairy	44		
LFA cattle and sheep	317	11203	2.8%
Lowland cattle and sheep	66	2730	2.4%
Mixed (cropping, cattle and sheep)	26	646	4.0%
Other	85	2484	4.7%
Unclassified	32	-	-
Total	688	24330	2.8%

LFA=less favoured area;

Source: WAG/Defra (2006)

Wales has 10.5% of the total number of organic dairy producers in the UK, and 13% of all in-conversion organic dairy producers. Wales represents one of the largest concentrations of organic dairy producers, along with the South West of England, in the UK - as can be seen from Figure 2.2.

2.1.1.2 Organic Conversion Information Service requests

The Organic Information Conversion Service (OCIS) Wales, co-ordinated by Organic Centre Wales, is a free service funded by the Welsh Assembly Government. OCIS

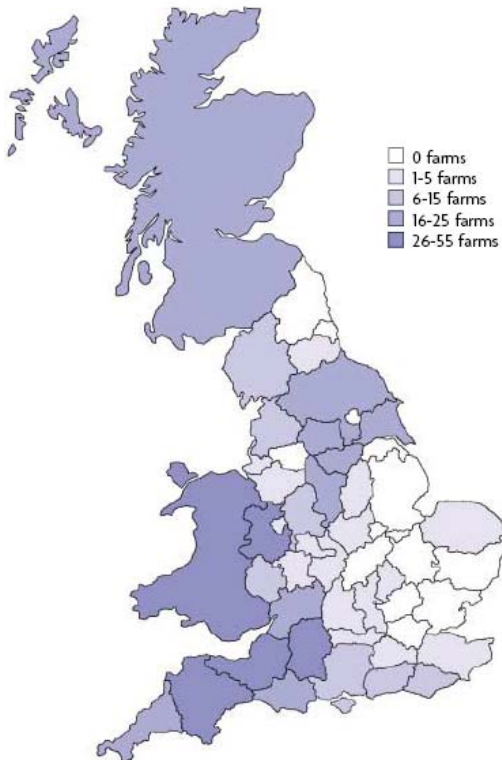
¹ <http://www.mdcdatum.org.uk/wales/walesproducernumbers.html>

² <http://www.mdcdatum.org.uk>

Wales aims to provide farmers with the information they need to make an informed decision about whether to convert. It includes an information pack and up to two on-farm advisory visits from experienced advisors from ADAS and the Organic Advisory Service

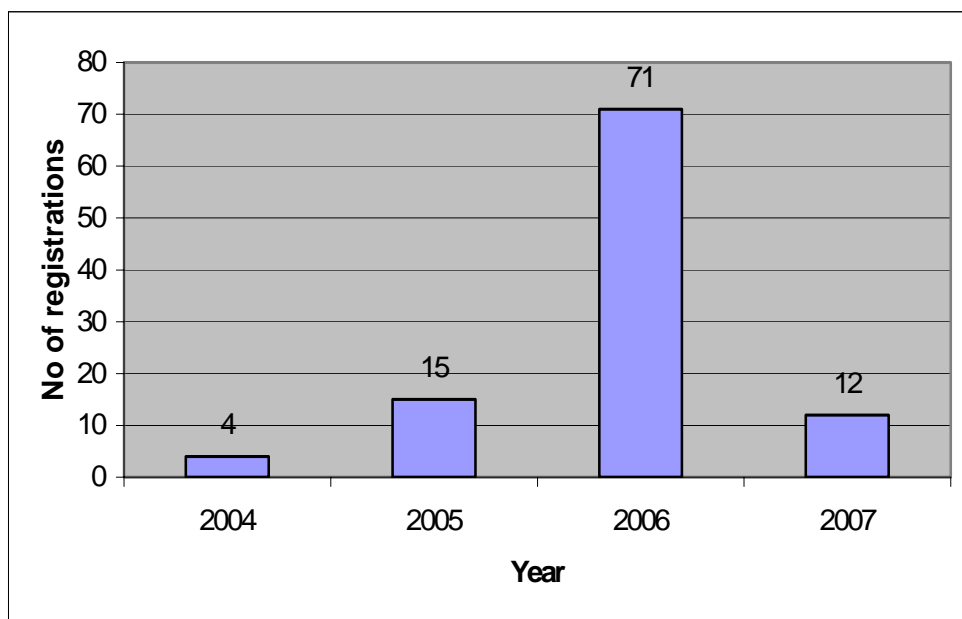
There has recently been a marked increase in requests for OCIS requests from dairy farmers. These have increased from four in 2004 to 71 in 2006 (Figure 2.3). So far up to the end of February 2007 there have been 12 new OCIS dairy registrations.

Figure 2.2 Principal organic dairy production regions



Source: OMSCo (2006)

Figure 2.3 Registrations for OCIS visits from dairy producers, 2004 - 2007



Note: 2007 figures are for January and February only

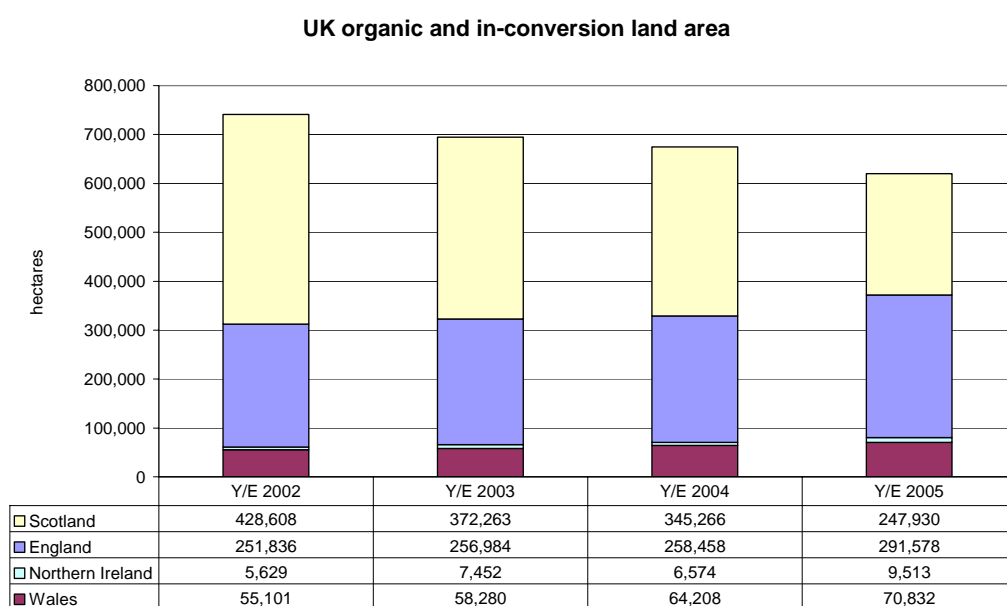
Source: Organic Centre Wales, pers comm.

2.2 Land area

In the UK at the end of 2005, the total area of organic and in-conversion land was 619,852 ha. This represents a decrease of 8% compared to 2004. Of the 2005 total, 85,951 ha (14%) was in-conversion and 533,902 ha (86%) was fully organic (Defra, 2006). The area of fully organically managed land decreased by 14% from 2004 to 2005, whereas the area of land in conversion rose by 63%. The total area represents just under 4% of the total agricultural area (excluding common grazing) in the UK.

The areas in England, Wales and Northern Ireland all increased slightly, but the area in Scotland decreased by over 97,000 ha (28%) compared to 2004. According to the Soil Association (2006) this decrease was attributable to a continued decline in the area of fully organic land in Scotland as some extensive hill farms withdrew from organic production at the end of the Organic Aid agreements.

Figure 2.4 UK organic and in-conversion land area, 2002-2005



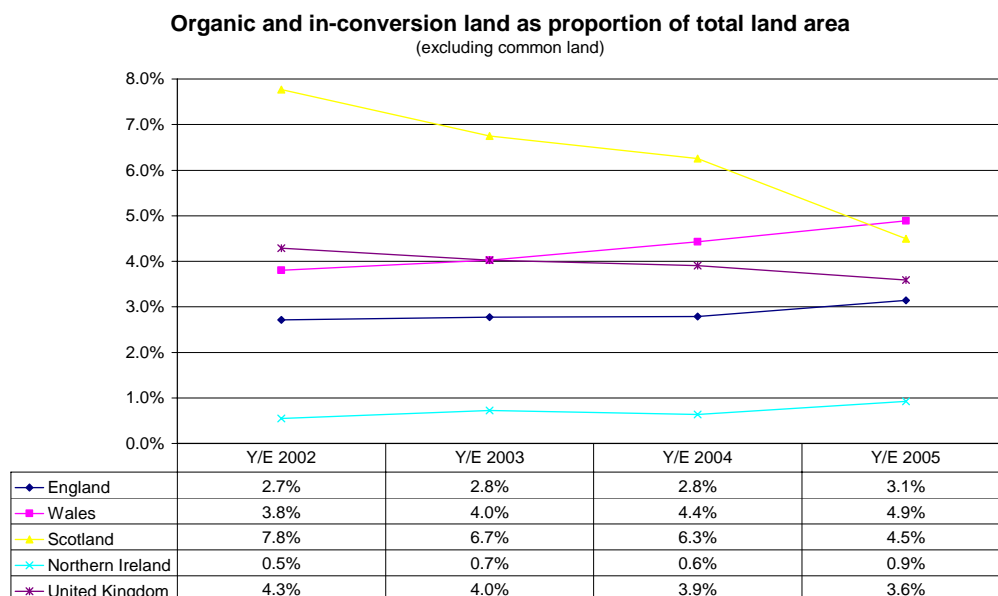
Y/E=year ending - values published typically as January following year

Source: Defra (2006)

In terms of proportion of the total agricultural area, Wales has overtaken the other parts of the UK, reaching 5% by the end of 2005 (Figure 2.5). While significantly short of the original action plan target of 10% by 2005, this is a significant increase on the 0.3% in 1998 (120 holdings, 5331 ha) and well ahead of the English average of 3.1%.

The slow down in conversion rates in Wales can be seen with respect to the years ending 2003 and 2004 (Figure 2.6). There were signs of renewed interest in conversion in 2005, as a result of improving market conditions and the final implementation of the single farm payment. Although statistical data are not yet available for the year ending 2006, evidence from the Organic Conversion Information Service and reports from the organic certification bodies indicate a significant expansion in 2006, due to strong market demand, though this may have slowed in 2007 due to the temporary suspension of the Organic Farming Scheme in Wales.

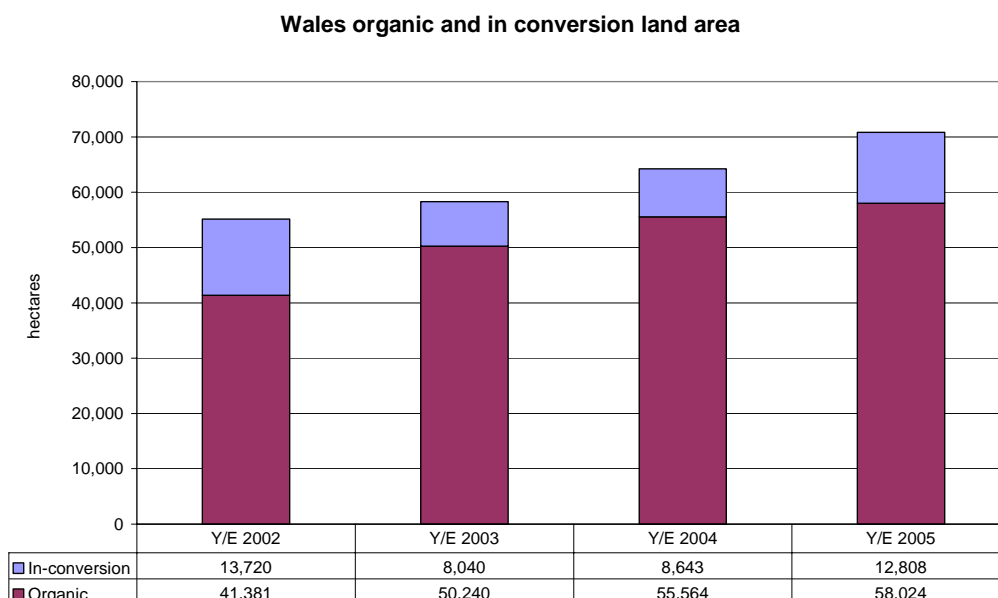
Figure 2.5 Organic and in-conversion land area as proportion of total land area, 2002-2005



Y/E=year ending - values published typically as January following year

Source: Defra (2006)

Figure 2.6 Wales organic and in-conversion land area, 2002-2005

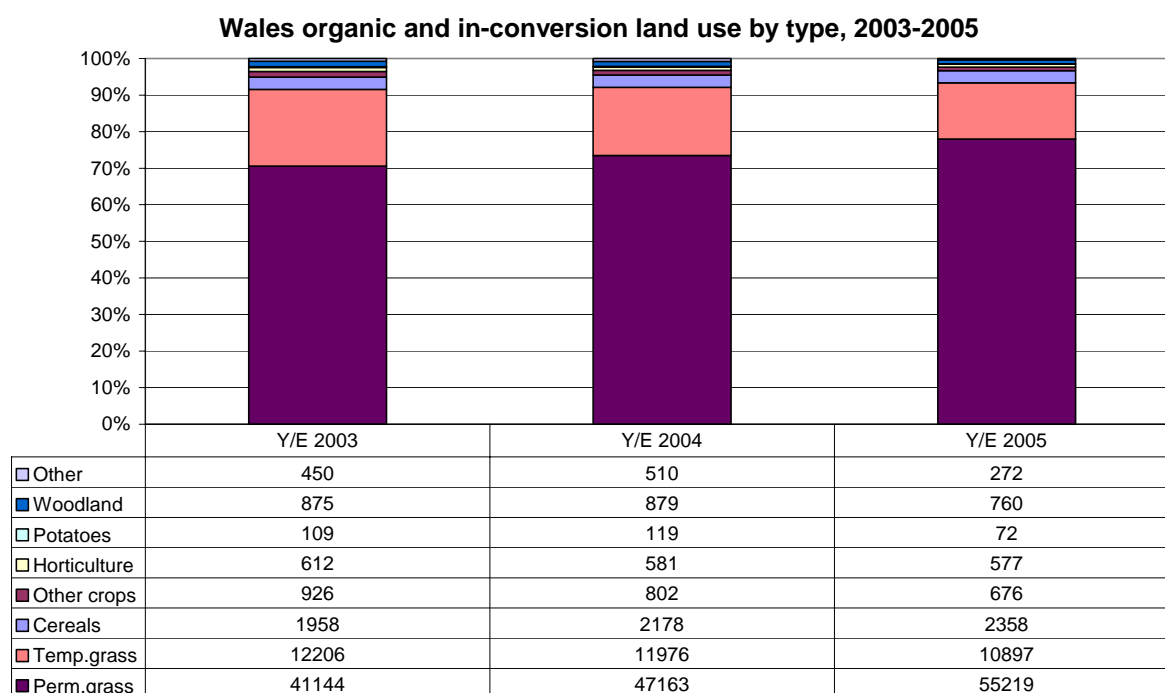


Y/E=year ending - values published typically as January following year

Source: Defra (2006)

The Welsh organic and in-conversion land area is dominated (more than 90%) by temporary and permanent grassland, with arable and horticultural cropping accounting for around 5% (Figure 2.7). The main types of land use have shown continued growth, although there has been a slight decline in horticulture, woodland and other crops.

Figure 2.7 Wales organic and in-conversion land use by type, 2003-2005



Y/E=year ending - values published typically as January following year

Source: Defra (2006)

Compared with overall Welsh agricultural land use, cereals, temporary grass and especially horticulture are over-represented on organic holdings, although the horticulture data should be treated with caution due to the possible inclusion of crops not intended for human consumption (see Hitchings et al., 2007). The Welsh organic share is significantly higher than the UK organic share of total agriculture in most cases.

Table 2.2 Organic share of total agricultural areas by main crop, Wales and UK, 2005

	Welsh organic (ha)	All Wales (thousand ha)	Organic share	UK organic (ha)	All UK (million ha)	Organic share
Cereals	2358	41.5	5.7%	47694	2.9	1.6%
Other arable	676	20.9	3.2%	14531	1.2	1.2%
Potatoes	72	2.2	3.3%	2025	0.1	1.5%
Horticulture	577	1.2	48.7%	14196	0.2	8.4%
Total tillage	3683	65.7	5.6%	78446	4.6	1.7%
Temp grass	10897	115.1	9.5%	97907	1.2	8.2%
Arable land	14580	180.8	8.1%	158414	5.8	3.1%
Perm. grass	55219	1203.1	4.6%	428330	10.1	4.3%
Wood/other	1032	64.7	1.6%	15169	1.4	1.1%
Total	70832	1448.7	4.9%	619852	17.3	3.6%

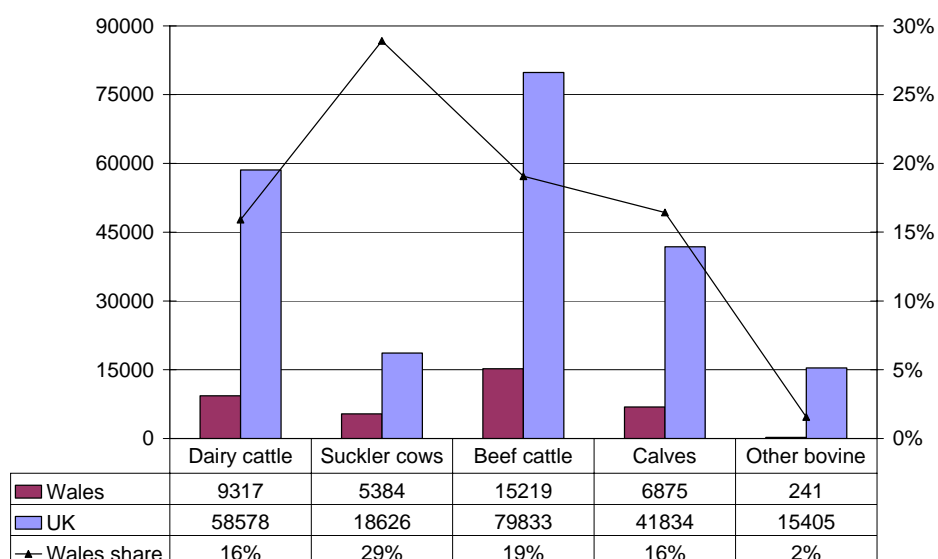
Excluding common land

Source: Defra (2007); Welsh and UK agricultural statistics

2.3 Number of organic dairy cattle and milk output in Wales and UK

Defra data for 2005 show nearly 9,500 dairy cattle in Wales, or 16% of the UK total of nearly 60,000. At an average annual yield per cow of a bit over 5000 litres, this would suggest that some 50 million litres were produced in Wales in 2005.

Figure 2.8 Organic and in-conversion cattle numbers by type, Wales and UK, 2005



Source: Defra (2007)

As with land area, Wales has a higher organic share of total livestock numbers than the UK, with 3.5% of all dairy cows and ca. 2.5% of other cattle and sheep. The average size of Welsh organic dairy herds is also higher than the overall average.

Table 2.3 Organic share of total livestock numbers by type, Wales and UK, 2005

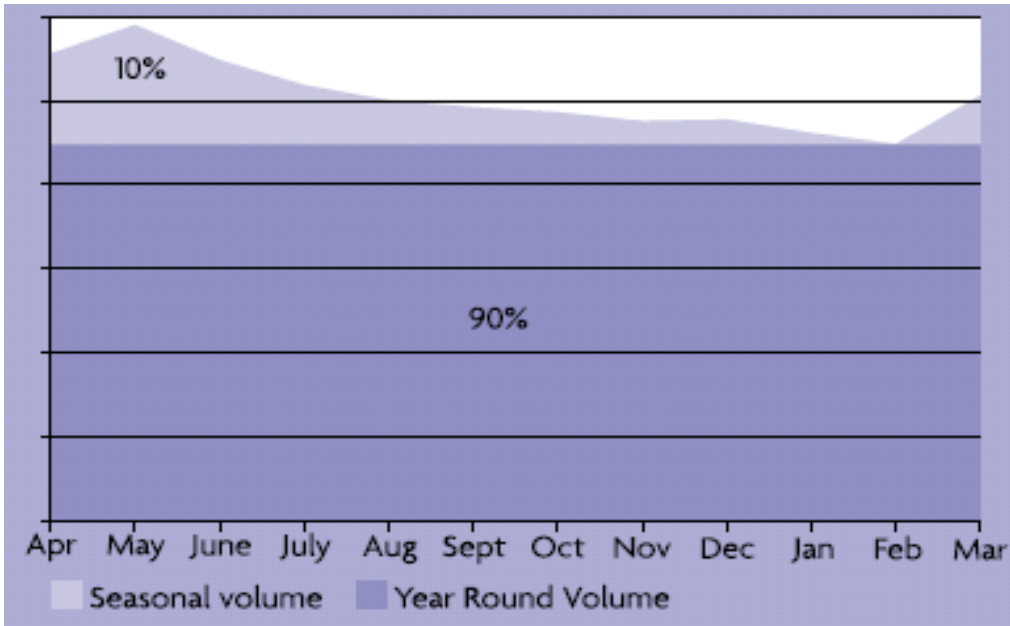
	Welsh organic	All Wales (thousand)	Organic share	UK organic	All UK (million)	Organic share
Dairy cows	9317	264.4	3.5%	58578	2.1	2.8%
Herd size	86	75	115.0%			
Beef cows	5384	220.7	2.4%	18626	1.8	1.1%
All cattle	37036	1240.8	3.0%	214276	10.4	2.1%
Sheep/lambs	248242	9510.4	2.6%	691000	35.4	2.0%
Pigs	161	3.9	4.1%	29995	4.9	0.6%
Poultry	99139	7191.8	1.4%	3439548	173.9	2.0%

Source: Defra (2007); Welsh and UK agricultural statistics

2.3.1 Seasonality of production

In line with higher availability of grass during the summer and the use of spring calving in organic herds, UK organic milk production shows a seasonal pattern, characterised by a peak in May and shortages in Winter. In particular, liquid milk sales, which now account for nearly 2/3rds of all UK organic milk sales, are vulnerable to seasonality (Lampkin, Measures & Padel, 2006)

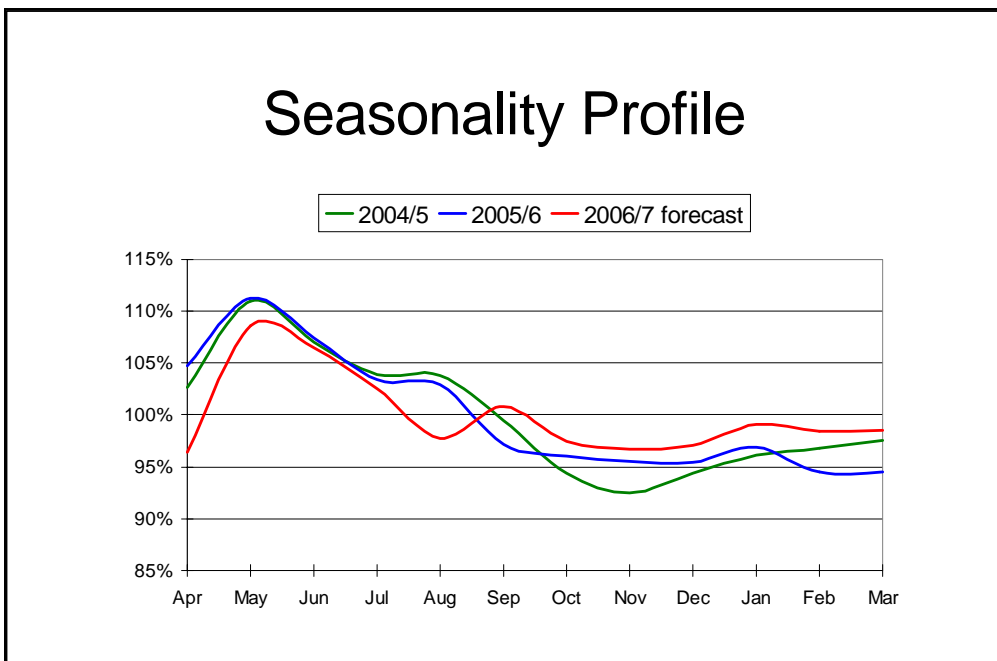
Figure 2.9 Typical OMSCo organic milk production profile, 2005



Source: OMSCo (2006)

Dairy Farmers of Britain aim to level out their organic supply seasonality profile (Figure 2.10).

Figure 2.10 Dairy Farmers of Britain organic milk seasonality profile

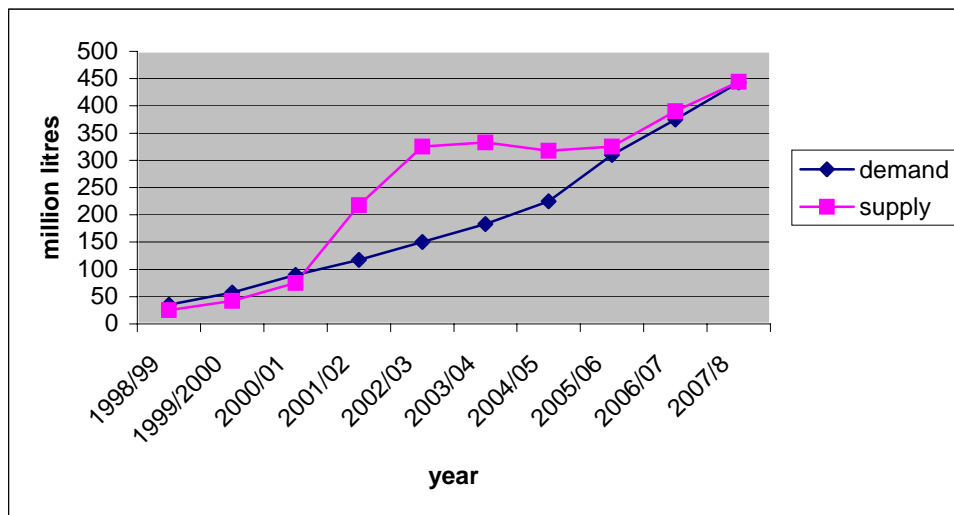


Source: Dairy Farmers of Britain

2.3.2 Future production forecasts

According to OMSCo, the UK market for organic milk will move from a 15% deficit in 2005/06 to a surplus of 2% in 2008/09.

Figure 2.11 Total market supply and demand (million litres)



Source: OMSCo (2007)

Table 2.4 Total market supply and demand

	05/06	06/07	07/08	08/09
Demand volumes (m litres)	312	375	443	543
Gross supply available (m litres)	330	390	444	556
Utilisation %	90	95	96	98
Total utilisable UK supply (m litres)	297	370	426	545
Imports	0	7	20	0
Total available supply (m litres)	297	377	446	545
Revised Market supply / deficit %	-15	2	3	2

Source: Adapted from OMSCo (2007)

From information provided by SACert, the 12 in-conversion producers in Wales will supply an estimated additional 12 million litres per annum of organic milk when they have converted. Of these 12 in-conversion producers in Wales, six are registered with SACert. The projected supply from these six producers is provided below. Comparable figures for the six in-conversion farms registered with other certifiers are not available.

Table 2.5 Anticipated future production from Soil Association licensed in-conversion producers in Wales

Organic status due	Million litres
Mid 2008	1.6
End 2008	1.6
Mid 2009	1.9
Total	5.1

Source: SACert

OMSCo identify four factors which make it difficult to balance supply with demand:

- The relative lack of balancing market in the organic system; organic milk supplies go to organic liquid milk, yoghurt and cheese. The relative sizes of each sector are very different from the non-organic milk market and there is less flexibility in usage for organic milk.

- The disproportionate cost of winter organic milk production
- The lead time to convert new producers
- The regulatory constraint of the organic farming system

These factors reflect the constraints identified by the stakeholders in the telephone interviews reported below (see Section 3).

2.3.3 Increasing supply

In line with the findings of the Stakeholder interviews and despite the OMSCo projections that supply and demand are coming into balance, recently published market reports are concerned with the need to source additional supply for the organic liquid milk market. A number of approaches have been proposed:

- Increasing supply from existing organic dairy farms;
- Increasing the number of farms converting to organic production;
- Encouraging in-conversion farms to return to organic production;
- Importing liquid milk
- Flattening the organic production profile
- Building up confidence among potential and existing organic dairy producers by establishing long-term contracts.

A number of companies are offering incentives to help producers convert to organic production. For example, **First Milk** are offering interest free loans to their members of up to 2ppl during the conversion period and **Dairy Crest** announced it will increase the price paid to its farmers on organic contracts by 0.75ppl from 1 April 2007. This increases the base price payable to 27.75ppl. Based on the MDC's standard litre this would result in a total price of 29.69 ppl.³ (By comparison, in April 2007 the multiple retailer Tesco announced that it was increasing the amount it pays dairy farmers for conventional milk to 22p per litre, up from 17p⁴.) Dairy Crest also plans to build on relationships with Waitrose, Marks and Spencer and Sainsbury's and to strengthen links between dairy farmers and consumers. Dairy Crest are recruiting a specialist organic milk supply manager to oversee its growing number of organic milk suppliers.⁵

2.4 Farm production and economics

Organic dairy herd yields are 10-20% lower than on conventional farms. They also feed less concentrates but the price is higher. Concentrate costs are expected to increase further to more than double the conventional price when 100% organic feed is required from 1 January 2008. A major feed compounder quoted £320 per tonne for a 95% organic feed (November 2006). Feed input costs have a major impact on margins for organic milk production, as shown in Table 2.6. OCW benchmarking data for 2005/6 provide the first indications of the effect of increasing prices, but also show that these are balanced by higher fixed costs (due to lower production per ha) to produce similar net margins per litre as conventional holdings (Table 2.7).

³ <http://www.mdcdatum.org.uk/PDF/30%20March%2007.pdf> and

⁴ See *Today's News* 4 April 2007 <http://www.soilassociation.org/todaysnews>

⁵ [Http://www.fwi.co.uk/Articles/2007/02/27/101921/dairy-crest-strengthens-milk-purchasing-team.html](http://www.fwi.co.uk/Articles/2007/02/27/101921/dairy-crest-strengthens-milk-purchasing-team.html)

2.5 Key challenges identified by producers

A sample survey of organic dairy producers in Wales was undertaken in March 2007 to investigate the possibilities of adding value to organic milk (Diepen and Frost, 2007). The dairy farmers interviewed felt that the main challenges they faced at present were milk price, forage production and optimising milk from forage.

Table 2.6 Gross margins for organic and conventional dairy herds

	2003/2004		2004/2005	
	Organic	Conventional	Organic	Conventional
Yield l/cow	5,233	6,431	5,326	6,188
Price (ppl)	19.55	18.05	19.14	18.15
Values £/cow				
Financial out put	1028	1160	1058	1165
Purchased feeds	207	241	231	441
Other costs	95	122	155	155
Total variable costs	302	363	354	386
Gross Margin	726	797	703	780
At conventional prices	648	-	613	-
At 2006 organic price (26ppl)	1,064	-	1,068	-
Forage costs	68	96	75	89
GM inc forage £/cow)	659	701	628	691
Assumed stocking rate	1.6	2.2	1.6	2.2
GM inc forage £/ha	1,054	1,541	1,005	1,520
At 2006 organic price (26ppl)	1,702	-	1,709	-

Source: Institute of Rural Sciences, UWA (OCW Factsheet no13 July 2006)

Table 2.7 Welsh organic and conventional milk production costs and net margins (p per litre), 2004/5 and 2005/6

Year Production system	2004/5		2005/6	
	Organic	FBS	Organic	FBS
Holdings (n)	17	132	11	115
Feeds	3.5	3.7	4.5	3.9
Vet and meds	0.5	0.6	0.5	0.6
Forage	1.1	1.5	1.8	1.6
Other variable	1.6	1.4	1.6	1.5
Herd replacement	1.1	1.0	1.3	1.1
Total variable costs	7.8	8.2	9.8	8.6
Labour	0.7	0.9	1.2	0.7
Power and machinery	2.8	2.2	2.4	1.9
Land and buildings	1.0	0.5	1.3	1.0
General farm costs	1.3	1.3	1.3	0.9
Rent and finance	2.1	0.9	1.4	1.1
Total fixed costs	8.2	5.7	7.6	5.6
Total costs	16.0	13.9	17.4	14.2
Sales (of which milk)	20.8 (20.3)	21.6 (18.1)	22.1 (22.2)	18.7 (18.0)
Net margin on sales	4.8	7.7	4.8	4.5
Imputed land, labour, capital costs	5.6	n/a	4.2	n/a
Net margin incl. imputed costs	-0.8	n/a	0.6	n/a
Misc revenue and by-products	0.4	n/a	0.3	n/a
Tir Mynydd, OFS, agri-environment	0.9	n/a	0.8	n/a
Single farm payment	--	n/a	1.6	n/a
Net margin incl. other income	0.5	n/a	3.3	n/a

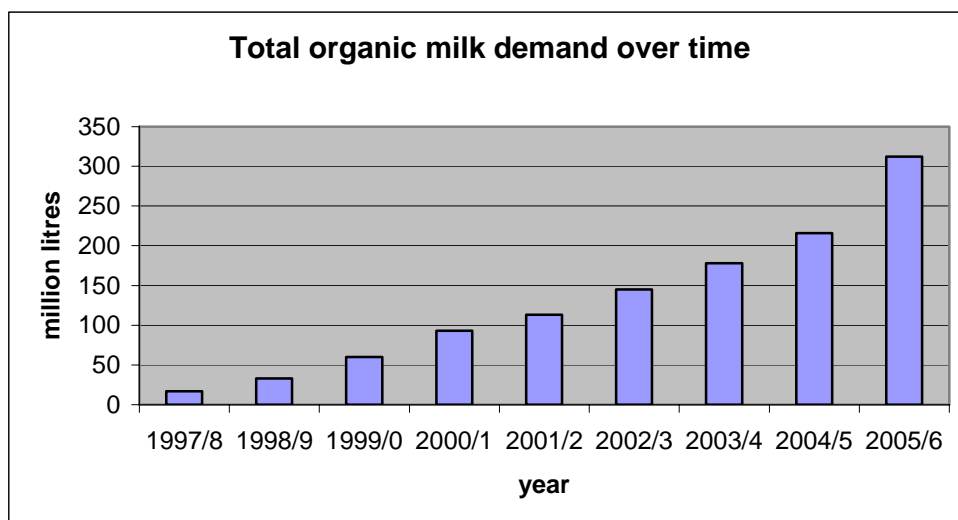
Source: OCW Factsheet 23 (2007)

3 The market for organic milk

3.1 Organic milk production

Total UK organic milk production has increased from seventeen million litres in 1997/8 to over 300 million litres in 2005/06, of which 50 million litres is estimated to come from Wales (see section 2.3)

Figure 3.1 Organic milk production, 1997-2005



Source: OMSCo (2007)

The *volume* of organic milk produced as a percentage of total milk production has remained constant at 2.3% between 2003 and 2005, however the *value* of organic milk in 2005 represents 3.8% of the total value of milk sold in the UK.

Table 3.1 Organic milk as a proportion of total milk in the UK, 2003-2005

Year	Production quantity (million litres)			Production value (£ million)
	2003	2004	2005	2005
Total	14,577	14,208	14,147	2,601
Organic	335	322	330	100
% organic	2.3%	2.3%	2.3%	3.8%

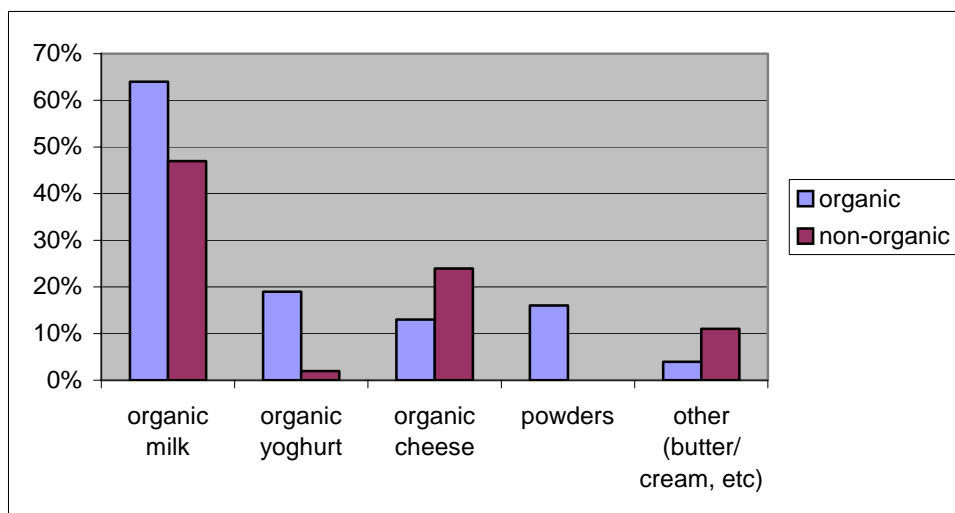
Source: SA (2006)

3.2 Market sectors

Dairy products accounted for 16% of the UK organic market in 1998/99, but sales have grown with the increase coming mainly from increased sales of organic liquid milk, yoghurts and to a smaller extent, ice cream and cheese. The UK dairy sector (comprising milk, cheese and butter, yoghurts, eggs and ice cream) now holds the second-largest share of the total UK organic market⁶. Organic dairy represented an estimated £294m sales at retail level in 2005 and a currently static 22% of the overall organic market. The majority of organic milk enters the liquid market.

⁶ For suppliers of organic dairy produce in Wales, see Annex 1 or the *Welsh Organic Trade Directory*, <http://www.organic.aber.ac.uk/tradedirectory/dairy.pdf>

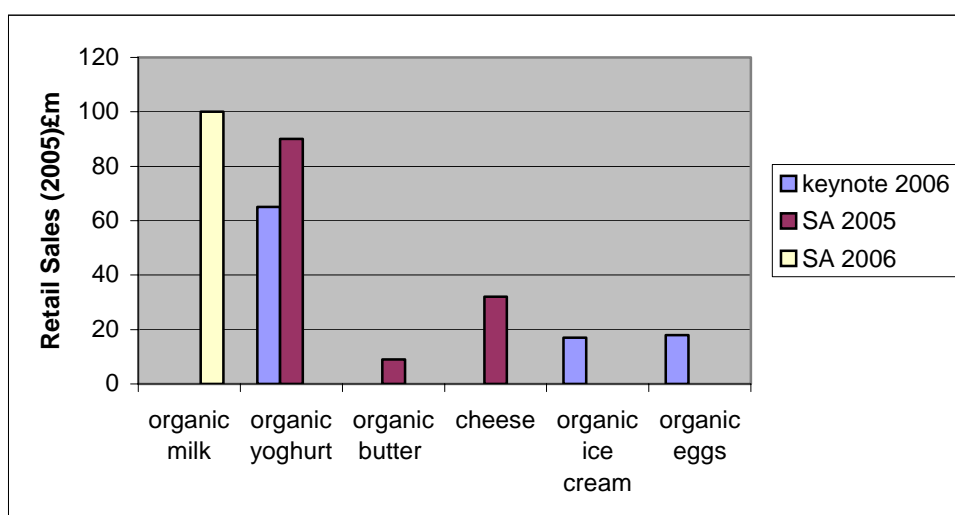
Figure 3.2 Percent of organic/non-organic dairy products by sector, 2005



Source: OMSCo (2006)

The value of organic milk by each sector is shown in Figure 3.4.

Figure 3.4 Retail value of selected organic dairy products, 2005/6



Source: Soil Association (2005 and 2006) and Keynote (2006)

3.2.1 Liquid milk

In Wales, organic liquid milk production (i.e. not including milk used for processing) is 7.5% of the total volume of organic milk sold and also 7.5% of the total value as measured by expenditure on milk. However, this represents only about 25% of the total organic milk production in Wales estimated at 50 million litres (see section 2.3)

Table 3.2 Organic liquid milk production and value, Wales and UK, 2007

	Volume		Expenditure	
	million litres	%	£ million	%
Wales	11.26	7.5	8	7.5
UK	150.38	100	107	100

Source TNS and MDC⁷

⁷ <http://www.mdcdatum.org.uk/Retailer%20Data%20&%20Prices/tnsliquidmilk.html>

A much higher proportion of organic milk is sold through the major supermarkets than conventional milk. Very little organic milk is sold through independent outlets, e.g. garages and service stations or through doorstep deliveries/

Table 3.3 UK liquid milk retail sales, 2006

	<i>Non-organic</i>	<i>Organic</i>
Multiple Retailers	75%	94.5%
Independent retailers	14.2%	3.9%
Doorstep deliveries	10.8%	1.6%

Source: OMSCo (2007)

Of the major retailers, Tesco and Sainsbury have the highest market share of organic liquid milk sales. Sales of organic milk over the last twelve months have increased in all multiple retailers, with the exception of Asda.

The multiple retailer with the highest proportion of organic milk as a proportion of total sales is Waitrose at 16.1%. The Co-op has the lowest proportion at 1.2%.

Table 3.4 Multiple retailer shares of organic liquid milk sales, 2006

	<i>Shares of organic milk sales by volume (%)</i>	<i>Annual sales growth (%)</i>
Tesco	35	19.4
Sainsbury's	28.3	41.5
Asda	7.4	-3.6
Somerfield	1.5	0.4
Morrisons	9.7	17.4
Waitrose	13.5	39.3
Marks & Spencer	1.9	16.4
Co-op	2.6	108.9

Source: OMSCo (2007)

3.2.2 Yoghurt

As shown in Figure 3.3 above, organic yoghurt sales represent a higher proportion of the total market than conventional yoghurt. The retail value of organic yogurt in 2005 was £65m. Of the organic yoghurt sector, Yeo Valley Organic has 80% value share and Rachel's Organic nearly 20% value share of the market.

3.2.3 Cheese and butter

In 2004, there was a small but significant growth in sales for organic cheese (Keynote, 2006). In 2006, organic cheese represented 1% of the total UK cheese market (MDC, 2006). A high proportion of organic cheese sold through the supermarkets is sold as retailers' own label. Important suppliers of branded organic cheese are:

- Alvis Bros (Lye Cross brand)
- Organic Matters Dairy
- Arla Foods (harmony brand)
- Simply Organic
- North Downs dairy
- Cumbria organics
- Coombe Farm
- High Weald Dairy

There are no major manufacturers of organic cheese in Wales, but a number of organic farmhouse cheeses have been developed:

- Penbryn Organic Cheese (organic)
- Caerfai Cheese (organic)
- Llanboidy Cheesemakers (organic)
- Caws Cenarth (organic)

Organic butter is produced by

- Arla
- Rachel's Organic
- Yeo Valley
- Castle Dairies
- Calon Wen
- Evan Rees (Butter) Ltd

Rachel's Organic, Castle Dairies, Calon Wen and Evan Rees are based in Wales.

A full range of organic cheese and butter suppliers in Wales is listed in Annex 1, see also

http://www.foodwales.com/index.cfm/developing_your_business/welsh_agrifood_sector/food_wales/welsh_cheese/the_cheese_trail/en3350

3.2.4 Ice-cream

Sales of organic ice cream were worth £17m in 2005. The main manufacturers are Yeo Valley Organics. Other manufacturers include:

- Green and Black
- September Organic dairy
- Rachel's Organic
- Mackies/s and Duchy originals
- Plas Farm

3.3 The European organic dairy market

In Europe, the organic dairy sector is dominated by large European dairies. Supply of organic milk is controlled by large conventional dairies in all continental European countries except Germany, Austria and Switzerland.

Currently, the European market is experiencing a similar trend to the UK. Demand is rapidly catching up with supply. European supplies have additional haulage costs, but the main factor affecting the supply situation is infrequent farm collections.

Organic milk comprises around 5 percent of total milk sales in Western Europe. The highest market share is in Scandinavian and Alpine countries where it comprises up to 10 percent of milk sales. The main exporter of organic milk to the UK is Denmark⁸. According to the Danish Agricultural Advisory Service, Denmark exported organic products to the total value of 267 million Danish Kroner (35.8 million Euros) in 2006⁹.

⁸ For an account of the fluctuation in supply and demand for organic milk in Denmark over a twenty year period, see K S C Lynnggard (2001) "The farmer within an institutional environment: Comparing Danish and Belgian organic farming" *Sociologia Ruralis* 41 (1) 85 –111.

⁹ Tomas Norfelt (2006) "Commercialisation of Organic Products - Country Case Denmark" *Workshop on the Commercialisation of Organic Products*, Leadership Consulting, Madrid.

Organic dairy (including eggs) represented the largest proportion of this total, at 71 million DKK (9.5 million Euros)

Germany has the largest market for organic produce in Europe. In 2005, the total organic market in Germany grew to 3,900 million Euros¹⁰. In 2006, according to data from the A C Nielsen trade panel, sales of organic milk and organic dairy products grew more than the total organic market with a 38% rate of growth. Although there is a shortage of organic milk, few dairy farmers in Germany are converting to organic production. The current price for organic milk is not sufficiently attractive to encourage conversion¹¹ although there are signs that producer prices are increasing in 2007.

3.4 Consumers of organic dairy produce

According to market research carried out by Keynote, NEMS Market Research and Taylor Nelson Sofres (TNS), consumers of organic dairy produce have the following characteristics:

- Organic has a 17% market penetration among women and 16.4% among men
- Organic dairy products tend to be regularly bought most by those in the 16 to 24 age group, followed by the 55 to 64 year-olds
- Organic dairy products tend to be equally bought by those in the B , C1 and C2 categories
- Regular purchasing is high among students, the unemployed and the retired
- Geographically, regular purchase is highest in the North West, Greater London and the South West. (see table below)
- In Wales, 5.6% of households regularly purchase organic dairy products and market penetration is nearly 15%
- Respondents living in households with children also show relatively high penetration levels for regular purchasing of organic dairy produce.

In 2005, OMSCo conducted consumer research which indicated two broad types of organic milk consumer.

1. The first group are committed consumers and supporters of organic. They are responsible for over half of all sales. This group represents only 8% of organic liquid milk buyers.
2. The second - and largest - group of organic milk buyers is made up of 'dabblers' who have begun to buy organic food on an occasional basis. Concerned primarily with their own health and the health of their families, they are motivated by nutrition-related arguments and recent food scares. As the name suggests, 'dabblers' are notoriously difficult to track and accurately profile.

In their 2007 Report, OMSCo have added a third category,

3. The third group is the 'unwittingly organic', those that buy a super premium product, which also happens to be organic.

¹⁰ Ulrich Hamm (2006) "Commercialisation of Organic Products - Country Case Germany" *Workshop on the Commercialisation of Organic Products*, Leadership Consulting, Madrid.

¹¹ See BioFach Newsletter, April 2007. For full details see 'Bio-Milch und -Molkereiprodukte wachsen stärker als Gesamtmarkt' at, http://www.zmp.de/agrarmarkt/branchen/oekomarkt/meldung_010.asp

Overall, market research suggests that organic dairy consumers,

- Are primarily ABC1, with a significant southern bias, although consumption figures are also high in the North West
- Have diverse shopping habits; Use a variety of outlets including supermarkets, box schemes and farmers' markets.
- Want information to assist in purchasing decisions and to justify price premiums.
- Currently buy organic food for a variety of reasons, to which they are not necessarily strongly committed, and which may be contradictory¹².

Table 3.5 Regular purchasers of organic dairy products, Dec 2005

<i>Region</i>	<i>Purchasing profile (%)</i>	<i>Penetration (%)</i>
East Anglia	8.8	17.7
East midlands	0.9	7.0
Greater London	19.6	23.0
North	4.3	11.6
North west	15.4	24.4
Scotland	3.4	6.7
South east	12.2	16.1
South west	10.9	20.3
Wales	5.6	14.8
West midlands	11.5	14.2
Yorkshire and Humberside	7.4	14.3

Source: Keynote/NEMS Market Research, Keynote 2006

Consumers have also been encouraged to buy organic milk as result of the publicity surrounding the publication of research findings. Studies carried out by the University of Aberdeen, the Institute of Grassland and Environmental Research (IGER) and others in between 2004 and 2006 found that organic milk contains a higher level of Omega 3 fatty acid than non-organic milk. This helps to maintain the heart, joints, bones and teeth. It also contains more vitamin E and beta carotene, due to the high clover diet of organic herds. In its 2007 Report, OMSCo has plotted milk sales and shown the close association between sales increases and the publicity given to these research findings.

Table 3.6 Publicity and health claims for organic milk, 2004-2006

<i>Date</i>	<i>Source</i>	<i>Claims/findings</i>
February, 2004	IGER Research	Organic milk shown to have higher levels of Omega 3 essential nutrients than non-organic milk
December, 2004	University of Aberdeen Research	Confirms higher levels of Omega 3 essential nutrients in organic milk
January, 2005	Soil Association/QLIF Conference Research findings	Highlights higher levels of vitamin E, antioxidants, and Omega 3 essential fatty acids in organic milk
August, 2005	Channel 4 Dispatches TV programme	Expose of intensive dairy production methods and highlights health claims of organic milk
August, 2006	University of Liverpool Research	Organic milk shown to contain on average 68% more total Omega 3 fatty acids than non-organic milk

Source: Adapted from OMSCo (2007)

¹² In the early stages of 'dabbling', it is common to be committed to certain sectors but ignore others. For example, a consumer may be committed to always buying organic fruit and vegetables but only buy organic meat or dairy as a treat

3.5 Supply and demand

According to market research company Taylor Nelson Sofres¹³, which closely monitors the market, sales of organic liquid milk grew from 73.8 million litres in 2004 to 158 million in 2006. Though that represents rapid growth, it has slowed down considerably in recent months and no growth occurred in the 12 weeks to February 2007.

Because of considerable increases in overall demand for organic milk during the last two years the UK market has moved from a situation of oversupply to approaching seasonal under supply. The nominal milk price has returned almost to pre-2001 levels of around 28 ppl. The projected growth in demand of about 25% per year (OMSCo, 2006) creates new opportunities for producers willing to convert. But the current slow down in the rate of growth introduces a note of caution – planning is necessary to ensure that there is no repetition of the oversupply problem experienced in the past.

The major supplier of organic milk to retailers and food manufacturers is the co-op OMSCo (300 organic livestock farmers) which supplies a claimed 75% share of the market. However, Calon Wen, Dairy Farmers of Britain, Arla Foods, Dairy Crest and Robert Wiseman are also suppliers – although Arla receives part of its organic milk from Omsco.

In February 2006, there were approximately 100 organic dairy producers in Wales. Of the milk sold as organic in 2005, approximately 90% was sold through a producer group or co-operative, for an average of 23.4 pence per litre and 8% was sold directly to a processor for an average of 24 pence per litre. Overall, it is estimated that 25% was sold within Wales, with the remaining 75% being sold to a producer group or processor in England. (OCW, 2006).

3.6 Stakeholder interviews

In order to obtain more detail on market developments, in-depth telephone interviews were carried out with 5 stakeholders

- Rachel's Organic
- Calon Wen
- OMSCo,
- Dairy Farmers of Britain (DFB)
- Trioni

The findings from these stakeholder interviews are summarised below:

3.6.1 Major developments in the organic dairy sector

According to the stakeholders interviewed, there have been a number of key market drivers over the last 5 years and the market has moved from over-supply and associated low prices to a growth in 2005 well in excess of 50%. This has resulted in shortages of milk which are still apparent.

The key market drivers identified by stakeholders were:

- Publicity on the health benefits of organic milk
- Animal welfare concerns.
- Increased interest from major retailers

¹³ 'Is our love affair with organic milk curdling?' the Daily Telegraph February 2007

Stakeholders noted that the number of brands operating in the market is growing and that increasing consumer awareness of the health benefits of organic milk has been the major factor driving penetration. New products and positive press have also had an influence.

All stakeholders felt that the market had potential for growth, particularly liquid milk which has only 5% market penetration compared to 79% for other organic sectors, such as yoghurt and cheese. It was felt that liquid milk could be expected to achieve 10% -15% market penetration, with one stakeholder expecting up to 25% growth.

The cheese sector was still felt to be under-developed, as consumers are attracted to price promotions and therefore it is difficult for organic cheese to compete.

Flavoured milk is in a competitive sector, with flavoured organic milk competing against smoothies and 'on the go' products.

Stakeholders felt that the market will benefit from further strongly branded products such as Yeo Valley and a generic advertising campaign – but there needs to be a greater clarity of approach.

3.6.2 Constraints

The main constraints on the development of the organic dairy market identified by stakeholder interviews were:

- *Under-supply*. This was the major constraint identified by stakeholders.
- *Lack of promotion*. Stakeholders felt that the increased maturity of the market has resulted in the need for processors to invest in publicity and advertising to compete with major brands such as Danone.
- *Distribution* was felt to be a major constraint. 60% of conventional milk is sold through supermarkets, which compares with 90% of organic milk. Stakeholders felt that the organic market was too dependent on the major multiples.
- *Seasonality of production and increased feed costs* were identified as factors influencing production patterns.
- *Lack of processing facilities* for organic supply was thought to be a key constraint.

All stakeholders felt that there was no need for a dedicated supply chain for organic milk – the process is generally heavily audited and a dedicated supply chain would only increase costs.

Other factors mentioned by stakeholders were,

- Funding for farmers who wish to convert is currently inadequate
- The sector is too fragmented and so fails to give a single message to the outside world
- The lag time for conversion results in the delay in increasing supply.
- The price differential between conventional and organic price can be too great. Conventional prices need to rise.

3.6.3 Strategy for developing the organic market

The main strategies to develop the organic dairy market identified by stakeholders were:

- *Co-operation*. This is needed between processors and producers in order to sustain milk volumes.
- *Conversion*. It was felt important to try to encourage more farmers to convert to organic production and thus to alleviate the supply problem.
- *Consumer education*. There is too great a distance between the consumer and agriculture. There is a need to educate consumers more about organic dairying, explaining organic farming benefits, such as being less energy-dependant and more positive in terms of energy saving and global warming issues.
- *Higher organic profile*. It was felt that continuing the involvement of people such as Jamie Oliver could raise the profile of the organic sector.
- *Long term agreements*. There was felt to be a need for long-term agreements involving the whole supply chain, from processors through to retailers.

Stakeholders also felt that the development of the organic market could have a significant effect on *employment opportunities*, as it is very labour intensive, with more staff required for animal husbandry, etc. They felt it important to ensure that the *taste of organic milk* is recognised as better than conventional milk and that there needs to be a continuing focus on *organic standards*. Some stakeholders also felt that there needs to be a realisation that organic is an *added value product*, not a commodity.

3.6.4 Priorities for the future

Some of the key areas identified by stakeholders were:

- The need to focus on supply. (To which ADAS adds that it is also important to give high priority to market development, stimulation and promotion in order to avoid the previous experience of over supply);
- Planning ahead – information on the demand side is required 2 years in advance due to conversion times;
- Innovation – need for new products and innovation in packaging;
- There is a need for positive PR for organic farming, with more research to back up health benefit claims.

4 Review of the second organic action plan for Wales

The first Welsh Organic Action Plan was published in 1999. One of its principle objectives was to develop the organic sector in Wales with a target of 10% of Welsh agriculture to be organic by 2005. Although the 10% target was not achieved, the area of agricultural land managed organically increased from 0.3% in 1998 to nearly 4.0% by the end of 2003 – the point at which the second Welsh Organic Action Plan was being prepared.

The second Organic Action Plan noted that with the increase in production, the rapid increase in supply had led to marketing problems, especially in the dairy sector. The Plan therefore recommended a shift of emphasis from encouraging increased supply to improving the marketing of organic products, developing consumer understanding and increasing demand.

For the review of the Organic Dairy Sector in Wales, ADAS identified the relevant recommendations in the Second Organic Action Plan and attempted to evaluate the extent to which the targets associated with each recommendation have / are being implemented. Here we highlight some of the key areas of progress and problems.

4.1 *Targets for 2005 and 2010*

The Plan recommends a target of 10%-15% of agricultural land to be organic or in-conversion by end 2010 to be reviewed against indicators of sustainable development of the organic market.

The situation in 2007 for the organic dairy market is that increased public understanding and awareness has been boosted by the Omega 3 research findings and other positive news stories. Other target areas are more problematic; notably the balance between sectors, due to insufficient arable farmers converting to meet need for livestock feed.

The target of developing and implementing monitoring systems has been addressed and data is increasingly available, but some of the data collected is unavailable to OCW for commercial reasons or due to high costs.

4.2 *The market, public education and public procurement*

The recommendations in the Plan under these headings are general in nature and are not assessed in this review of the organic dairy market.

4.3 *Retailing*

The Plan noted that there was scope to increase sales of Welsh Organic Produce via multiple retailers and that they should be encouraged to source more Welsh organic food. In 2007, it is noticeable that multiple retailers have adopted 'local marketing' and 'regional specialities' as a key strategy, going some way towards the Action Plan targets of a 'Strategy for increasing the amount of Welsh produce in supermarkets' and 'Encouraging UK retailers to stock UK produce'. Most of the multiples now have departments looking into local sourcing. These departments can be contacted directly or through roadshows, a number of which have been held in Wales in 2006/07.

4.4 *Developing new marketing and processing opportunities*

A wide range of opportunities for market development were noted in the Action Plan. One recommendation was for more use of organic food in food service and the hospitality sector. This has been partly addressed through the launch of the *Where to Stay and Where to Eat* guide in March 2007. The guide contains a number of organic dairy entries. Support for Farmers' Markets has continued, but it should be noted that in the organic dairy sector this market outlet is particularly valuable for cheese sales but less so for liquid milk and yogurts.

4.5 *Producer-focused, supply-side initiatives*

In the Plan, these are divided into two sections, *Payments* and *Supply Chain Development*. Many of the recommendations for supply chain development are being developed. For example the recommendation to develop strategic objectives for the main sectors has been addressed in the dairy sector by holding a marketing workshop, though, as argued below in section 4.8, a more permanent or standing group to deal with organic dairy strategy in Wales is desirable.

4.6 *Research, market intelligence and information dissemination*

The Plan sought to establish methods of obtaining more specifically Welsh organic information. In 2006, OCW published an Organic Farming Technical Guide, *Organic Dairy Farming* (Weller and Jackson, 2006) which included findings on the financial performance of organic dairy farms and case studies of organic dairy farms in Wales. OCW is now also compiling regular policy and market update reports for each quarterly meeting of the Organic Strategy Group.

4.7 *Organic standards development and integrity of Welsh organic produce/GMO co-existence.*

The recommendations in the Plan under these headings are outside the remit of this review of the organic dairy market.

4.8 *Conclusions on the second Welsh Action Organic Plan as relating to the organic dairy sector in March 2007*

This is a major exercise – one that requires the collaboration of all stakeholders and is beyond the scope of this current review. We recommend that the task should be undertaken by a sub group of the Organic Strategy Group. It is an anomaly of the existing situation that organic horticulture, one of the smallest organic sectors in Wales, has a sub-group, whereas the organic dairy and organic red meat sectors do not.

As part of the implementation of the Second Organic Action Plan, Organic Centre Wales has been working with each sector to develop marketing and research strategies. A Marketing Strategy Workshop for the Welsh Organic Dairy Sector was held at the International Pavilion, Royal Welsh Showground, Builth Wells in December, 2005¹⁴.

¹⁴ Participants: Bruce Carlisle, OMSco; Neil Burchell, Rachel's Organic; Geraint George, Calon Wen; Roger Kerr, Calon Wen; Sian Roberts Davies, WDA; Cate Barrow, ADAS; Richard Weller, IGER; John Marby, IGER; Pip Nicholas, IRS; Phil Stocker, Soil Association; Sue Fowler, OCW; David Frost, OCW / ADAS.

Key points that emerged from the workshop were,

- (a) An effective supply chain is needed to provide a stable future for the organic dairy sector;
- (b) The profile of the Welsh Organic Dairy Sector should be raised
- (c) Increases in the supply of organic milk should be based on efficiencies of production and sustainable price levels
- (d) Production of organic milk needs to be based on high standards of animal welfare and high quality feed.

The following key issues for the stable development of the organic dairy sector in Wales were identified:

- *Demand and supply* – need to increase production in balance with demand;
- *Distribution* – need for cost-effective distribution systems;
- *Price* – need for a sustainable price over marginal costs;
- *Feed* – impact of feed on milk quality. Use of forage and the value of home-produced feed. Need to research novel crops;
- *Quality* - unique quality of organic milk highlighted as a key issue for marketing;
- *Marketing intelligence* – need for information on consumer trends.

Overall conclusions from the workshop on marketing priorities:

1. There is a need to develop a supply chain based on co-operation between producers and milk groups that will provide a stable future for the organic dairy sector;
2. The profile of the Welsh Organic Dairy Sector needs to be raised. Branding, and the use of marques such as PGO, PGI¹⁵ should be investigated. Development of the sector should be market-led, with products that the market wants;
3. Increases in the supply of organic milk should be based on efficiencies of production and sustainable price levels. Milk quality should meet processors requirements;
4. Production of organic milk needs to be based on high standards of animal welfare. The organic dairy cow's diet should be based on the best use of quality forage - resulting in longevity, efficient nutrient utilisation and high milk quality

¹⁵ EC Directive 2081/92 allows food producers to register products with geographical names if they can show that region of origin give special characteristics. PDO – Protected Denomination of Origin; PGI – Protected Geographical Indications of supply. A third category was introduced in 1994, CSC – Certificate of Special Character. Wales currently has only 2 PGIs – Welsh Lamb, Welsh Beef.

5 Market and product development

An issue highlighted in the interviews with organic dairy sector stakeholders was that price is a major challenge to increased sales of organic food and drink. One way of addressing this issue is through increasing consumers' understanding of the reasons for higher prices. In the case of milk however, the very low price of conventional milk may have exaggerated the organic premium, with an associated deterrent effect on consumer sales

OMSCo (2007) forecast growth in the liquid and yoghurt milk volumes of just over 20% per sector for 2006/7. Cheese is forecast to grow by 10%. Keynote's 2006 forecasts for the organic dairy market are summarised in Table 5.1.

Table 5.1 UK market forecast for organic dairy sectors (£ million retail sales value at current prices and %), 2006-2009

<i>Dairy products</i>	2006	2007	2008	2009	% of total 2009
Milk, cheese and butter	222	237	266	280	16.1
Yoghurts	75	83	90	95	5.5
Eggs	19	20	21	21	1.2
Ice cream	19	20	21	22	1.3
Total	335	360	398	418	24.0

Source: Keynote (2006)

5.1 Innovative products

A number of new products have been launched since 2003 in Wales:

1. **Trioni** was established in April 2002 by three organic farmers with the purpose of increasing the value of milk on their farms. In July 2003 they launched Daioni, a flavoured milk sold in 250 ml packs. Daioni was developed with the help of the WDA and Food Centre Wales at Horeb.
2. In 2006, **Sancler** developed a yoghurt cheese which was launched at 2006 winter fair. The yoghurt cheese should be sold in Tesco in the near future (see *Organic Market Wales* April 2007¹⁶).
3. **Classic Organic Ltd** is based in North Wales with the company headquarters in Denbigh. The company's first product, **COR!** organic flavoured milk, was launched in 2003. Major retailers such as Selfridges and Harvey Nichols stock COR!, which is also available at Planet Organic, Fresh & Wild and many health food stores throughout the UK. COR! was developed in Wales, with the help of experts at the Food Technology Centre, Coleg Menai, Llangefni, on the Isle and Anglesey.
4. In October 2006 **Rachel's Organic** launched a probiotic drinking yoghurt, developed with help of Food Centre Wales. Rachel's Organic also unveiled a 'new look' and new package designs for 2007.¹⁷
5. **Rachel's Organic** and the Welsh farmers cooperative **Calon Wen** formed a new partnership in 2006. The partnership agreement secured a 25% increase in organic milk supplies year on year to meet the Rachel's Organic sales increase.
6. **Calon Wen** is the first dairy in the UK to achieve the Soil Association Ethical Trade Symbol for milk. Calon Wen also rebranded their product range in October 2006.

¹⁶ www.organic.aber.ac.uk/markets/mibulletin.

¹⁷ <http://www.rachelsorganic.co.uk/news/pressreleases/press.php?release=38>

7. In West Wales, **Patrick Holden**, Director of the Soil Association and his wife have recently gone into partnership with his son and his wife to produce, organic unpasteurised cheese¹⁸.
8. In 2007, interest in finishing organic dairy steer calves has increased as a result of the under supply of the UK organic beef market with initiatives from **OSMScO** and **Graig Farm Producers** planned.

¹⁸ http://www.timesonline.co.uk/tol/life_and_style/food_and_drink/real_food/article1508885.ece

6 Discussion

Compared to the situation reported on by Hancock and Haward for OCW in 2003 (Hancock and Haward, 2003), there have been significant changes in the market for organic milk.

Until 2001, the organic dairy market was under-supplied, but by 2002, with an increased number of dairy farms achieving full organic conversion, the market had moved into over-supply. Between 2002 and 2005 over a third of organic milk was sold as conventional.

In 2004, the Organic Milk Suppliers Cooperative (OMSCo) reported that sales were increasing by 25%. This was largely due the increased availability of many dairy lines including fresh and flavoured milk, soft cheeses and yogurts, in both the independent and multiple sectors. Research showing the higher levels of omega acids and conjugated linoleic acid in organic milk compared to conventional also strengthened consumer demand. In Wales, Rachel's Organic built a new extension at its main processing plant in Aberystwyth, enabling processing capacity to treble from the previous level of 5 million litres.

In 2005, market growth resulting from a number of drivers led to under-supply and organic milk was imported from Denmark to meet the UK shortfall.

By 2007, although organic milk production has increased to 330 million litres, milk is currently imported to meet demand.

The milk price paid to producers has increased from 23.4ppl in 2005 to over 27ppl in 2006. This has encouraged conventional farmers, disillusioned with poor conventional prices, to look at converting to organic. As a result the number of OCIS requests from dairy farmers in Wales has increased from 4 in 2004 to 71 in 2006.

The OCIS visits look at the possible stocking rate of the farm once converted, as well as other potential constraints. Currently, it does not look at the full financial implications of conversion. It is possible that not every farmer who starts conversion becomes organic. This may be for a variety of reasons. Will they still convert if the conventional price increases or the organic price falls? Market price will have a major effect on the profitability of the organic system. The IRS figures (Section 2.4) show the effect of milk price on margins.

Despite the recommendations from OCIS advisers to prepare before converting, there is no information on how many farmers actually introduce clover into the swards before converting. Conforming to organic standards places challenges on organic farmers when competing with non-organic agriculture; resulting in lower productivity and higher unit costs. With so many newcomers to the organic system it is essential that standards are maintained and that they are able to obtain advice on the technical aspects of organic farming. Participants in the stakeholder interviews considered this as a role for Organic Centre Wales.

There are more dairy farmers converting to organic than arable farmers. With the derogation allowing the feeding of 5% non organic feed expiring on 31 December 2007 and increasing demand for organic feed due to more farmers converting, pressure will continue to increase on organic feed supplies. Wheat and barley prices reached £195 per tonne in the winter of 2006/07.

In recent years we have seen fewer mixed farms in conventional agriculture and more livestock and arable farms. Consequently the arable farms have not the livestock nor the facilities to house livestock. The lack of availability of organic

manure for an organic arable enterprise is a major barrier to these farms converting. Also the high rainfall and the topography of some areas of Wales makes it more difficult to grow arable crops. The availability of land to rent or the cost of purchase makes it difficult for livestock farms to obtain sufficient land on which to grow their own cereals. In some cases there is insufficient knowledge of growing arable crops.

In Wales, the Organic Farming Scheme provides support for farmers for the first 5 years of conversion. The Organic Maintenance Scheme opened in March 2004, providing a further 5 year support for farmers who converted to organic production under the OFS, and support for longer-established organic farmers. The OFS provides £35 per hectare for years four and five of conversion of enclosed land, and for the next 5 years of the Maintenance Scheme. A payment of £10 per hectare is now given for years three to five for unenclosed land, and for years six to ten of the Maintenance scheme.

The temporary closure of the scheme has led to some farmers delaying starting conversion, which will have a knock-on effect on the amount of organic milk available in April 2009.

At present, it is difficult precisely to ascertain the numbers of farmers in conversion and who have converted without direct records from the certification bodies. Keeping a record of those in conversion and those who have converted would provide an idea of trends within the organic sector including drop-out rates.

Encouragingly, there seems to be some liaison between the milk buyers and producers in that farmers are encouraged to obtain a contract before they start conversion. It is essential that the certification bodies ensure that their members do so. This should help to avoid the over supply problems which occurred in 2002-3.

The milk buyers and processors interviewed indicated differing growth projections. Any discrepancies in the projections could result in a supply and demand imbalance resulting in price fluctuations. This indicates the need for more research in this area.

The demand for organic products is dependent upon the consumer continuing to buy increasing amounts of organic dairy produce. They buy organic products for a variety of reasons including perceived health benefits and animal welfare reasons. It is essential that organic farming standards are maintained.

At the same time it is necessary to keep increasing the public awareness of organic dairy farming, and also agriculture. It was mentioned in the stakeholder interviews that there is a great distance between the consumer and agriculture.

Concern was also expressed that a much higher percentage of organic milk is sold through supermarkets than conventional milk. This could leave the product vulnerable to downward price pressures by supermarkets. There is a role for locally produced Welsh organic products to be used locally. For instance they could be used to promote the image of Wales in restaurants, and catered accommodation. Organic Centre Wales has recently launched a *Where to Stay and Where to Eat* guide^{19 20}, which lists organic farms, restaurants with authentic foods and quality accommodation in Mid Wales – but at present there is no mention of organics on the Welsh Tourist Board website. With increasing publicity and concern about food miles,

19 See, Sion Morgan (2007) "Connecting up green tourists with good food" Cambrian News Thursday 5 April. P 24

20 *Where to Stay and Where to Eat* is available free of charge from Organic Centre Wales - call Carolyn Wacher on 01970 622248 or email to organic@aber.ac.uk. The outlets are listed on the OCW website www.organic.aber.ac.uk/organics.

there is clearly more scope for promoting locally produced and regionally branded organic dairy products.

Cheese seems to be one area where the stakeholders believe that the market is under-developed. Steps need to be taken to ensure that organic cheese stands out amongst the conventional cheese market where cheeses such as cheddar are traded as a commodity.

In the past the dairy industry has suffered from a lack of innovation. This has resulted in milk being made into skimmed milk and butter encouraged by EU policy. It is essential that innovation occurs at farm processor level as well as at the major processor level. Several of the stakeholders commented that it was difficult to find milk at present for developing new products due the shortage of supply.

The National Assembly for Wales and the Rural Development Plan for Wales could help in providing financial assistance to help entrepreneurs process and market their product. Until recently the Processing and Marketing Grant was available for this purpose.

7 Conclusions and recommendations

The market for raw organic milk has increased by 45% in 2005. Liquid milk has grown from 57.3 million litres to 150.3 million in the 3 years to January 2007 (MDC Datum). Due to the necessary two year conversion period there will always be a lag time before farmers can convert. Accurate market research and monitoring of the amount of milk in conversion is necessary to ensure continuity of supply and a market for the product.

On the farming side there are worries about the supply of organic feed, and to a lesser extent the closure of the Organic Farming Scheme for Wales may prevent some farmers from converting in the short term.

The industry is heavily reliant on selling liquid milk through the multiple retail sector.

The marketing of the product and public perception is very important to the continuing development of the market.

To address the issues identified, the following actions are needed:

1. A joint effort by the whole organic dairy industry, principally in the form of the Organic Federation of Milk Groups, aided by DEFRA and others is required. It is necessary for them to plan ahead to ensure that the number of dairy farm conversions is restricted to a number that will not lead to a repetition of the oversupply problem experienced in the past.
2. Consideration should be given to setting up an Organic Dairy Sub-Group jointly to the Agri-Food Partnership Organic Strategy and Dairy Strategy Groups.
3. The numbers of farms converted and in-conversion needs to be accurately monitored. This is a role for Organic Centre Wales. Reasons for farmers failing to convert need to be identified and addressed.
4. Advice needs to be available through Organic Centre Wales, to ensure that technical knowledge on organic dairy farming can be increased for these newly converting farmers.
5. The industry needs to look into ways of encouraging more organic cereal and protein crops to be grown in order to prevent the shortage of organic feed.
6. Continued research into the economics of winter milk production and the use of conserved grass legumes and other alternative protein sources is needed to address the issues of feed costs and seasonality of supply identified in this report.
7. It is important that the research and technology transfer resource for organic dairy farming should be maintained at Ty Gwyn, Trawscoed.
8. There is a need to continue to increase the public awareness of organic farming and agriculture as a whole.
9. Welsh branding of organic products should be developed.
10. The Welsh organic dairy industry industry should examine ways of increasing sales through outlets other than the multiple retailers e.g. through schools, hospitals, restaurants, so that less reliance is placed on this market.

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- <http://www.organic.aber.ac.uk/tradedirectory/dairy.pdf>
- <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2007/02/26/neco126.xml>
- <http://www.calonwen-cymru.com/>
- <http://www.rachelsorganic.co.uk/>

Annex: Organic dairy trade directory

Calon Wen Organic Milk Co-operative

3 Arch Offices
Stable Yard, Lawrenny
Pembrokeshire, SA68 0PW
Tel: 01994 241481
roger@calonwen-cymru.com
www.calonwen-cymru.com

Co-operative supplying raw milk, bottled milk, butter, cheese and locally sourced organic produce.
Main supply market: Wholesalers, Box scheme

Castle Dairies Ltd.

Pontygwindy Industrial Estate
Caerphilly, CF83 3HU
Tel: 0151 526 4839
Fax: 0151 526 5088
norman@castledairies.co.uk
www.castledairies.co.uk

Butter Producer

Main supply market: Retailers

Family-run business manufacturing a wide range of organic cheeses on farm including Welsh Farmhouse Caerffili.

Caws Cenarth

Fferm Glynethinog
Lancyh, Boncath
Pembrokeshire, SA37 0LH
Tel: 01239 710432
Cenarth.cheese@virgin.net
www.cawscenarth.co.uk

Main supply market: Mail order, Retailers, Wholesalers, Caterers, Farm Shop

Organic grower distributing eggs and dairy products.

Ceri Organic

Llwyn-yr-Eos
Rhydlewis, Llandysul
Ceredigion, SA44 5QU
Tel: 01239 851850
www.ceri-organic.co.uk

Main supply market: Direct sales, Wholesalers, Farmers' markets, Box Scheme

Classic Organic Ltd

Pentre Wern Farm, Gobowen,
Oswestry, SY10 7JZ
Tel: 01691 650450
Fax: 01691 650212
Enquiries@classicorganic.co.uk
www.classic-organic.co.uk

Flavoured organic milk

D.W & C.M Evans (Caerfai organic)

Caerfai Farm
St David's, Haverfordwest
Pembrokeshire, SA62 6QT
Tel: 01437 720548
www.cawscarfai.co.uk

Traditional farm cheese (cheddar and caerphilly) manufacturer. On-farm using un-pasteurised milk from own cows. Supplier of bottled and pasteurised milk.

Main Supply Market: Box schemes, Caterers, Retailers, Farm shop, Wholesalers

Evan Rees (Butter) Ltd

2 Viking Way
Winchwen, Swansea
Glamorgan, SA1 7DA
Tel: 01792 310567
dc@evanrees.com
www.evanrees.com

Organic butter producers

Main supply market: Supermarkets and export

Farmhouse Freedom Eggs Ltd

Great House Farm
Gwehelog, Usk
Monmouthshire, NP15 1RJ
Tel: 01291 673129
sales@freedomeggs.co.uk
www.freedomeggs.co.uk

Freshfayre Products Ltd

Llandough Trading Estate
Penarth Road, Cardiff
Glamorgan, CF11 8RR
Tel: 0292 0705701
Fax: 02920 705366
john.mcardle@freshfayre.com
www.freshfayre.com (under construction)

Graig Farm

Dolau, Llandrindod Wells
Powys, LD1 5TL
Tel : 01597 851655

bob@grraigfarm.co.uk
www.grraigfarm.co.uk

Kite Wholefoods

Y Cadw, 38 Ffordd Aneurin
Pontyberem
Carmarthenshire, SA15 5DF
Tel: 01269 871035

enquiries@kitewholefoods.co.uk
www.kitewholefoods.co.uk

Llanboidy Cheesemakers

Cilowen Uchaf
Login, Whitland
Carmarthenshire, SA34 0TJ
Tel: 01994 448303

sue@llanboidycheese.co.uk
www.llanboidycheese.co.uk

Nantclyd Organics

Rhos Y Garth
Llanilar, Aberystwyth
Ceredigion, SY23 4SL
Tel: 01974 241543

liz@nantclydorganics.co.uk
www.nantclydorganicws.co.uk

Rachel's Organic Ltd

Unit 63 Glan-Yr-Afon Industrial Est
Aberystwyth
Ceredigion, SY23 3JQ
Tel: 01970-625805

enq@rachelsdairy.co.uk
www.rachelsdairy.co.uk

Specialist producer and packer of free range and organic eggs. Also supply Organic mayonnaise, pickled eggs, pasteurised liquid egg and lemon curd.

Main supply market: Wholesalers, Retailers, Caterers

Bakery ingredients supplier of organic, pasteurised, liquid whole egg.

Main supply market: Direct sales

Producer group and retailer of organic produce including dairy products and eggs.

Main supply market: Mail order, Farm shop, Retailers, Caterers, Processors, Wholesalers, Supermarkets
Specialist manufacturer of organic mayonnaise.

Main supply market: Direct sales, Retailers, Mail order, Supermarkets, Wholesalers and Caterers

Manufacturer of Cilowen Organic cheese from local organic milk, as well as a range of traditional Welsh cheeses from rare breed dairy herd. Winners of a gold award at the World Cheese Awards 2005 and winners at the Royal Welsh Dairy Show 2004.

Main supply market: Box scheme, Retailers, Farmers markets, Farm shop, Local market, Mail order, Wholesalers

Small farm specialising in local sales of eggs.

Main supply market: Farm gate sales, Wholesalers, Retailers

Manufacturers of organic yoghurt, milk, butter, double cream, crème fraiche and rice desserts.

Main supply market: Supermarkets, Independent retailers, Wholesalers

Sancler

Glancynin, St. Clears
Carmarthenshire, SA33 4JR
Tel: 01994 232999
Fax: 01994 232999

sanclerorganic@aol.com

<http://www.sanclerorganic.co.uk/aboutwelsh.html>

Organic yoghurt, cheese

Main supply market: Caterers and Retailers

South Caernarfon Creameries Ltd /Hufenfa De Arfon

Rhydygwystyl
Chwilog, Pwllheli
Gwynedd, LL53 6SB Tel: 01766 810 251

cjardine@sccwales.co.uk

www.sccwales.co.uk

Trioni

Ffosyficer
Abercych, Boncath
Pembrokeshire, SA37 0EU
Tel: 01239 682572

laurence@trioni.com

www.trioni.com

Tomlinson Dairy

Pen Y Palmant Farm
Minera, Wrexham, LL11 3YR
Tel: 01978 758833
01978 754367

jane@tomlinsondairies.co.uk

Farmer-owned dairy co-operative based in Northwest Wales with 190 members supplying milk and cheese

Main supply market: Retailers, Supermarkets
Family business selling Welsh branded organic milk and milk products including 'Daioni' flavoured organic milk (banana, chocolate and strawberry) long life, low sugar and low fat.

Main supply market: Retailers, Wholesalers, Caterers, Schools, Export
Producers of organic skimmed, semi-skimmed and whole milk and whipping and double cream.

Main supply market: Independent retailers, garages, shops, hotels and restaurants. Area of operation: North Wales, Wirral and North Shropshire