Organic Farming in Wales: Economic and Policy Opportunities and Constraints

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Introduction

Organic farming is much debated in policy circles and the media, but is also a complex and poorly understood concept. There is a need for an improved understanding of the contribution that organic farming can make to Welsh agriculture, the environment and rural development, and for better policy making to achieve these goals. The aim here is to examine the development of organic farming in Wales, its economic and policy potential, and the constraints facing the sector.

What is organic farming?

Organic farming is an approach to agriculture which aims for environmental, economic and social sustainability by relying on biological processes and agroecosystem management in preference to external, often non-renewable or environmentally suspect, inputs (Lampkin, 2005). It is popularly, but not particularly accurately, characterised by the prohibition of specific technologies, in particular pesticides, synthetic fertilisers, genetically modified organisms (GMOs) and prophylactic animal medication, relying on consumers' willingness to pay higher prices to survive financially.

Organic farming as a distinct concept emerged in the 1920s and 1930s, but organic farming as a policy and marketing option is a relatively recent development. Specialist markets for organic food have developed since the 1970s, with the main growth period since the late 1980s, and served to support farmers in the pursuit of the quality, broader health and sustainability goals of organic farming. These markets were not, however, a primary objective of organic farming, although they are often now regarded as such.

The development of specialist markets for organic products presents a number of challenges, not least that organic products as purchased by the consumer are distinguished more by the production system than the end product. This means that it is very difficult for organic and non-organic products to be differentiated by testing the product on the shelf, even for the presence or absence of pesticide residues. Differentiation on the basis of the production system requires formalised production standards (codes of practice, see Soil Association, SA 2005) and inspection and certification systems, which have been developed in UK and internationally since the 1970s (Lampkin, 2005).

Growth in the value of the organic market in the UK and globally has significantly increased the potential for fraud and the need for protection of consumers and *bona fide* producers, justifying legal protection. Within the EU, all member states need to comply with Regulation 2092/91 and subsequent amendments, and it is illegal to market any food products as organic or as containing organic ingredients if they do not meet the terms of the regulation.

It should be noted the regulations do not preclude uncertified organic production as long as it is not marketed as organic – indeed this is of particular interest in some countries as an agrienvironmental policy (e.g. Sweden) and in many developing countries where the resource use benefits are seen as a potential advantage in subsistence farming systems (Scialabba and Hattam, 2002).

The development of organic farming in Wales

The first Welsh organic dairy farm was established in 1948, shortly after the foundation of the Soil Association and long before the development of a significant organic market. Although this holding was later to give rise to Rachel's Dairy, it survived for thirty-five years as an organic farm before it developed a specialist organic market for its products.

The three decades following saw only very limited development of organic farming in Wales. During the 1970s, a new generation of organic producers emerged, many of them new entrants to agriculture, inspired by a mix of late 1960s radicalism, 1970s self-sufficiency idealism, the Welsh environment, and the availability of land at relatively low cost. This group of incomers developed a strong social network which, although not integrated with the indigenous Welsh agricultural community, provided the basis for some important future developments for the organic sector, not just in Wales but on a wider UK and international level.

Wales – a catalyst for change in the organic sector

During the early decades, the organic farming movement was dominated by pioneer individuals, many coming from a conservative, aristocratic tradition (Conford, 2001). There was virtually no public investment in the sector – organic farming was anathema to many and still remains controversial. However, in the early 1980s, a core group of west Wales organic producers, including Peter Segger, Patrick Holden and Charles Wacher, initiated a period of change in the structure of the UK organic movement, with the establishment of the Organic Growers Association, British Organic Farmers and the restructuring of the Soil Association.

The same group pioneered the marketing of organic vegetables to the supermarkets in the mid-1980s, leading to the establishment of Organic Farm Foods in Lampeter and the subsequent substantial growth of supermarket retailing of organic foods, although a significant market for organic food only developed in the 1990s. By the end of the decade, premium prices, sometimes substantial, were available for most farm products and proved attractive to producers with a considerable number of farmers converting in 1999 and 2000 (OCW, 2003). Specialist Welsh-based processing and marketing businesses were established in most sectors, including the formation of producer cooperatives for vegetable and livestock marketing, not all of which survived. This period also saw the first significant investments by the Development Board for Rural Wales, later the Welsh Development Agency, in processing and marketing activities (OCW, 2003).

The current situation

Today, organic farming in Wales accounts for more than 650 holdings and 55,000 ha, or about 4% of Welsh agricultural area, similar to the UK and EU averages (OCW, 2005). This represents substantial growth from 0.3% of agricultural land area in 1998, but well short of the 10% by 2005 target set by the first Welsh Organic Food Sector Action Plan. Separate data for the size of the Welsh organic market are not yet available, but in the last decade the UK market for organic food has grown from £100 million to over £1 billion retail sales value (SA, 2004), accounting for 10% of the EU and 4% of the global organic market.

The potential contribution of organic farming to Wales

Organic farming is seen by its advocates to have a potential contribution to make in several areas of public policy and Welsh life, including the economic, environmental and food and health arenas.

Market potential

In terms of economic potential, organic farming has been shown to improve resource use efficiency (consuming fewer non renewable resources and reducing pollution and greenhouse gas emissions) (Stolze et al., 2000; Shepherd et al., 2003). The focus on supplying premium markets has enabled many producers to maintain or increase farm incomes (Jackson and Lampkin, 2005), providing scope to sustain small/family farms. Specialist organic markets also provide opportunities for capturing added-value potential locally, maintaining/increasing rural employment, and supporting the shift from commodity to quality food production - a key Welsh policy goal (WAG, 2001).

Consumer willingness to pay a premium for the perceived benefits of organic food originally provided a mechanism to compensate producers for internalising external costs, achieved by limiting the range of yield increasing technologies and practices that could be used. In the absence of direct policy support, which still is relatively insignificant, specialist markets were the only way that financial viability of organic holdings could be assured because lower input costs are typically insufficient to compensate for reduced yields and higher labour costs (Tables 1 and 2).

However, it is arguable that the mismatch between consumer personal goals (focused on food safety, taste and health) and potential public good delivery (focused on environment, animal welfare and social goals) reduces the effectiveness of this means of using the market to reward delivery of public goods. If exploiting the market for organic food becomes an end in itself, rather than the means of supporting the wider quality, health and sustainability goals through strong consumerproducer links, then the integrity of the organic concept itself might be threatened. Because of the limited recognition of the value of quality and externality issues, consumers are in any case showing resistance to higher prices. Many of the premium markets are outside Wales, so it is questionable that price is an effective mechanism to encourage local responsibility for local externalities.

In this context, it becomes more relevant to consider premium prices as primarily a reward for marketing initiatives specifically addressing consumer demand, rather than the delivery of public goods. This is particularly so in periods of oversupply, when not all farmers have access to specialist markets and not all product may be sold as organic. Particularly small-scale, undeveloped markets are susceptible to supply/demand imbalances, leading to insecurity in the sector, and a sometimes significantly reduced willingness to convert, as can be seen by the relatively low Organic Farming Scheme uptake rates since 2001 (NAW, 2002; OCW, 2005).

Employment potential

Organic farming is perceived to offer advantages in terms of rural employment, but the evidence on this is mixed. Comparisons of organic and conventional farms in England and Wales (e.g. Jackson and Lampkin, 2005) show similar levels of labour full-time equivalents (FTEs) on organic farms, but other studies, e.g. Offermann and Nieberg (2000) and Morison *et al.* (2005), show higher levels of employment, typically 10-20%. The

Table 1: Comparison of organic and conventional lowland dairy farm performance (2002/03).

	Organic	Conventional
Yield (litres/cow)	5318	5843
Price (pence per litre)	21.1	16.8
Grazing livestock units per forage hectare	1.7	1.9
CAP subsidy (£/ha)	69	79
Organic support (£/ha)	54	-
Net farm income (£/ha)	283	168
Labour units (FTE/farm unit)	2.5	2.6
Labour income (£/FTE)	17507	9755
Source: Jackson and Lampkin (2005)		

Table 2: Comparison of organic and conventional less favoured area cattle and sheep performance (2002/03).

	Organic	Conventional
Price (£/beef head)	670	508
Grazing livestock units per forage hectare	0.7	1.0
CAP subsidy (£/ha)	138	174
Organic support (£/ha)	25	-
Net farm income (£/ha)	88	97
Labour units (FTE/farm unit)	1.6	1.7
Labour income (£/FTE)	7904	7641

Source: Jackson and Lampkin (2005)

evidence is that this is mainly due to high value enterprises, e.g. horticulture, and marketing activities, as lower stocking rates for livestock for example might be expected to be associated with lower requirements for labour, though not necessarily pro rata. There is evidence that the same pressures for labour rationalisation exist on organic as on conventional holdings. However, results such as those of Jackson and Lampkin (2005) and Offermann and Nieberg (2000) indicate that labour incomes may be higher (see also Tables 1 and 2). In this context, sustaining existing holdings and on-farm employment may be more relevant outcomes from organic management.

Capturing added-value potential

One of the major contributions which organic farming is believed to offer rural development is the ability to capture and retain the benefits of added-value activities in the local economy. In Wales, this perception has been supported by the significant number of specialist organic food companies that have been established (Meridian, Graig Farm, Cambrian Organics, Rachel's Dairy, Calon Wen, Trioni to name but a few). Much of the rural employment potential of organic food can be attributed to companies like these, but peripherality and transport costs are still an issue, as has been seen with the closure of the Organic Farm Foods packhouse in Lampeter in 2005.

However, the organic sector is not immune from the pressures affecting all food producers and processors. Specialist organic companies have increasingly been the subject of takeovers by multi-national food businesses. This raises the question about whether the future direction of the organic sector is to be controlled by, and no different from, the mainstream food industry (Guthman, 2004).

Is it realistic to expect that organic can be any different? If it is, where is the new generation of pioneer/specialist companies to come from? How will they compete against diversification into organic food by existing food firms, now that this is an attractive option? And if they do develop, is there a different way to overcome the expansion barriers typically encountered once companies have grown to the £10-20 million turnover level? How can their capital investment needs for further growth be met without losing control of the original businesses? Do the multiple retailers have a contribution to make to this process? These questions deserve to be addressed, as there are currently few convincing answers.

The policy context

Despite its long history, organic farming has only been the subject of interest from policy makers since the late 1980s (Lampkin et al., 1999). In 1989, the UK government introduced the United Kingdom Register of Organic Food Standards (UKROFS) to bring some sense of order to a range of competing private sector organic certifiers with sometimes widely varying standards. This paved the way for the implementation in 1993 of the EU Reg. 2092/91 providing a legal definition of organic food and the introduction in 1994 of the poorly resourced and spartan Organic Aid Scheme.

In 1998, following the change of government, the Welsh Organic Sector Working Group was established by Ron Davies, the then Secretary of State for Wales, as part of the Welsh Agri-Food Partnership, leading to the publication in 1999 of the first Welsh Action Plan for Organic Farming (WAFP, 1999). In late 1999, the Organic Farming Scheme replaced the Organic Aid Scheme and introduced much higher levels of support for producers during the conversion period, although farmers who had already converted received no support, unlike most other EU countries, a situation which was not remedied until 2004.

In 2000, Organic Centre Wales (www.organic.aber.ac.uk) was established as part of the first action plan, with the main aim of disseminating information on organic farming to producers in order to encourage farmers to convert. As a result of the rapid initial conversion rates and the oversupply problems which resulted, the National Assembly for Wales undertook a review of organic farming policy in 2002 (NAW, 2002). This urged an increased market focus on the development of the organic sector, which was reflected in the changed remit for Organic Centre Wales from 2003, and the second Welsh Organic Action Plan for Wales (WAFP, 2004).

Given the range of initiatives that have been implemented, it is pertinent to ask why policy makers should be interested in supporting a sector which is still only a small part of Welsh agriculture. The potential contribution of organic farming to Welsh rural development has already been discussed, but beyond this, the environmental, animal welfare and food quality/public health benefits are important. In addition, the positive consumer perception of organic farming can be used to enhance the overall perception of Welsh agriculture, if organic farming is seen to be a priority.

In practice, the policies implemented address two different market failure

issues: firstly, the delivery of public goods, such as the environment, for which no financial market exists, and secondly the nurturing of nascent industries, until they have matured to a point at which they can compete independently. Most of the policies implemented have been within the context of the EU Rural Development and Structural funds, including the Organic Farming Scheme direct payments, the WDA marketing and processing initiatives, and the Organic Centre Wales (OCW) information dissemination activities. More recently, public procurement has also become a significant focus for attention.

However, given the multi-objective nature of organic farming, policy makers face a problem of balancing supply-push and demand-pull policies and of reconciling economic and environmental policy objectives. Action plans, such as those developed in Wales and elsewhere in Europe, provide an opportunity for policy integration. But they also illustrate that complexity is an issue that needs to be addressed. Organic farming, and the related policy support, involves multiple objectives and multiple policy instruments. Policy makers are often unclear about the basis for action - a clearer distinction is needed between direct payments to support the delivery of public goods, such as the environmental benefits of organic land management, and support for the market to deliver consumer expectations and reward producers for their marketing initiatives. This challenge has yet to be faced as part of the deliberations on the 2007-2013 Welsh Rural Development Plan.

Conclusion

Organic farming has demonstrated both environmental and economic potential, and continues to be an expanding sector of the Welsh rural economy, but there are challenges. Getting the policy mix right remains a significant challenge the second Welsh Organic Action Plan represents an attempt to do this. The action plan now needs to be properly embedded in the implementation of the next rural development and structural funding programmes.

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