Financial Performance of Organic Farming

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Introduction

The market for organic food is growing strongly across all international markets, albeit from a low base. Food scares combined with greater health awareness have given rise to greater consumer demand for products that are produced in a natural environment. In Ireland, the growth in demand for organic food continues to outstrip domestic supply resulting in imports of organic food to make up the deficit.

Currently within the EU-25, 3.6% of land farmed or 5.7 million hectares are either organic or in-conversion production. Italy has the largest number of holdings followed by Austria, Spain and Germany. There are 1,230 registered producers in Ireland in 2008 farming 44,600 ha which represents 0.9% of total land farmed. Of the above 31,309 ha is fully organic being farmed by 888 producers and the remainder is in the process of conversion to organic. The growth of organic farming in Ireland over the last decade is shown in Table 1. The data show that organic production grew rapidly in the 1990's, peaked in early 2000 at 30,000 ha and remained static until 2005 when there was further expansion to 1,230 producers 888 organic/342 in conversion farming 44,600 ha (31,709 ha organic/12,891 ha in conversion) by 2008.

Table 1: Irish organic/in conversion farm numbers and area farmed 1995-2008

Year	Farms*	Organic Area (ha)*
1995	300	6,400
2000	852	27,230
2001	918	30,020
2002	923	29,850
2003	889	28,510
2004	897	30,670
2005	978	35,260
2006	1,104	39,940
2007	1,102	39,240
2008	1,230 *(organic 888: in convn 342)*	44,600 *(org 31,709 convn 12,891)*

Source: DAFF *Organic plus in conversion

Organic production in Ireland is located mainly in the west and the southwest with counties Clare and Cork accounting for approximately 30 percent of producers. The proportion of organic producers in the east of the country is significantly lower and as a result the area devoted to organic cereals and tillage is much lower than the national average. In the early years of organic production organic farms were considerably smaller in size than conventional. However, over time this has changed and in 2008 the average organic farm was 36 ha compared to 37 ha for conventional farms. It should be pointed out however that a significant proportion of the larger organic farmers have a part of their land that is of marginal quality.

The majority of Irish organic farms are involved in drystock i.e. cattle or sheep farming and in a number of surveys of the sector, 65 percent of producers were involved with beef and a further 20 percent with sheep production. The majority of producers have more than one enterprise but the above percentages refer to the main or predominant enterprise on the farm. In 2007 there were 93 cereal producers farming 1,283 hectares and a further 274 horticulture producers with 445 hectares. Dairy farming is one of the least represented farming systems involved in organic production due mainly to the lack of an organised organic milk processing and marketing sector. However the number of organic dairy farmers have increased and there are now 19 organic dairy farms farming 1,028 ha.

Financial and Technical Performance on Organic and Conventional Cattle Rearing Farms

Drystock farming is the most prevalent system of production in both the organic and conventional farming sectors in Ireland and in this paper the Cattle Rearing suckler production system is examined. Data on technical and financial performance were collected from a sample of farms involved in the Cattle Rearing System, as defined by the EU Farm Accountancy Data Network (FADN). The method of classifying farms into farming systems, as used in this study is based on the EU farm typology. The methodology assigns a standard gross margin (SGM) to each type of farm animal and each hectare of crop. Farms are then classified into groups called particular types and principal types, according to the proportion of the total SGM of the farm which comes from the main enterprises after which the systems are named. For the purposes of adapting the EU typology to suit Irish conditions more closely, a re-grouping of the

farm types has been carried out. The system titles refer to the dominant enterprise in each group and their results should not be confused with those of individual farm enterprises.

The data on organic farms were collected from farms participating in the joint Department of Agriculture, Fisheries and Food (DAFF) and Teagasc Organic Monitor Farm Project. In 2004, a Steering Committee on organic farming proposed the selection of a number of well developed and managed organic farms to be used as demonstration farms in encouraging and promoting new entrants to organic production. Data were analysed on the selected farms using the Teagasc National Farm Survey (NFS) farm recorders and recording and analysis system. Data on the organic cattle rearing farms selected by the steering committee were collected in 2007. It should be emphasised that the NFS farms were randomly selected by the CSO, whilst the organic farms were specially selected due to their level of performance and experience and therefore would represent the more efficient sector of organic cattle production.

Table 2: Land use – organic v conventional cattle rearing 2007

	Organic	Conventional
	Ha	
Land farmed (UAA)	34.6	27.8
Pasture	20.3	16.5
Winter forage	6.7	7.2
Tillage crops	0.2	0.2
Rough grazing	3.6	2.8

Source: National Farm Survey - 2007

Organic farms were 24% larger than conventional whilst grassland was the predominant crop with virtually no tillage or root crops on either groups of farms. Tillage has declined on both drystock systems since the previous similar analysis in 2004. Winter forage area was similar on both groups despite a higher stocking rate on conventional farms.

Table 3:

Livestock units on organic and conventional cattle rearing farms – 2007

	Organic	Conventional
	Livestock units	
Cattle	16.8	28.2
of which suckler cows	11.1	16.8
Sheep	0.2	1.0
Horses	-	0.2
Total	17.0	29.4

Source: National Farm Survey - 2007

Livestock categories are shown for both systems in Table 3 with the organic farms having less sheep and 42% less livestock than conventional farms despite having 24% more land. The decline in sheep numbers on both organic and conventional farms is another major change compared to the 2004 results. Combining land farmed in Table 2 with livestock units in Table 3 results in a stocking rate of 0.95 livestock units per ha on conventional farms versus 0.50 livestock units per ha on the organic farms. This is a key difference between both systems with organic farms only achieving approximately 50% of the stocking rate pertaining to conventional farms.

Table 4: Selected financial data for organic and conventional cattle rearing farms – 2007

	Organic		Conventional	
	€/farm	**€/ha**	**€/farm**	**€/ha**
Gross Output	23,292	673	25,518	917
of which Direct Payments	17,883	517	12,763	459
Direct costs	3,504	101	7,696	278
Gross margin	19,788	572	17,822	641
Overhead costs	4,813	139	10,120	364
Family Farm Income (FFI)	14,975	433	7,702	277
Cash Income	16,179	467	11,294	406
Net new investments	794	23	5,538	200
Loans (closing balance)	638	18	9,570	344
Total Costs % Gross Output	35%		70%	

Source: National Farm Survey - 2007

Conventional farms had higher output (10%) on a per farm basis and 36% on a per hectare basis. "Market" output i.e. returns from animal sales excluding direct payments was €12,755 per farm on conventional farms compared to €5,409 on the organic farms, which translates to €460/ha and €1 56/ha on conventional and organic respectively. Total Direct Payments on organic farms was €17,883 per farm (€517/ha) compared to €12,763 per farm (€459/ha) on conventional farms. Total production costs (direct and overhead) were €17,816 per farm (€640/ha) on conventional versus €8,317 per farm (€240/ha) for organic producers resulting in a Family Farm Income (FFI) of €14,975 per farm on the organic farms versus €7,702 on the conventional group. On a per hectare basis FFI at €433/ha on organic farms was 56% higher than on conventional farms. The results shown in Table 4 are similar and confirm findings in a previous studies carried out in 2004 and 2001 on the financial performance on organic drystock farms which also found that organic drystock farmers achieved higher incomes than conventional farms due to a combination of lower production costs and higher direct payments (Moran, B. 2007; Connolly, L. 2005; Conway, A., 2002). This is clearly evident in the data in Table 4, where total costs account for 70% of gross output on conventional farms compared to only 35% on the organic farms. Cash income was also higher on organic farms both on a per hectare and a per farm basis. Conventional farms had a higher level of net new investment at €5,538 per farm compared to only €794 per farm on organic farms.

The dependence of the cattle rearing system of farming on subsidies and direct payments in both production systems can be clearly seen in Table 4 where they contribute 119% of farm income on the organic farms and 166% of farm income on conventional farms i.e. direct payments/subsidies account for more than 100% of farm income whenever market based output is not sufficient to cover total production costs. The composition of direct payments is shown in Table 5 showing that the decoupled Single Farm Payment (SFP) is the main contributor followed by the REPS payment on conventional farms but REPS is the main contributor on organic cattle rearing farms.

Table 5: Direct payments on organic and conventional cattle rearing farms – 2007

	Organic		Conventional	
	€/farm	**€/ha**	**€/farm**	**€/ha**
Direct Payments	17,883	516	12,763	460
of which SFP	5,740	166	7,990	287
REPS	9,163	264	2,649	95
DAS	2,980	86	2,115	76

Source: National Farm Survey - 2007

SFP = Single Farm Payment; REPS = Rural Environment Protection Scheme;
DAS = Disadvantaged Area Scheme.

Organic farm households were demographically more viable than conventional farms – farm operators were younger, had a higher percentage of farm holders married and had more off-farm employment. In the National Farm Survey demographically viable is defined as the percentage of farm households which have at least one member under 45 years of age and the survey data show that in 2007 there were 92% and 75% of organic and conventional

Table 6: Socio-economic data on organic and conventional cattle rearing farms – 2007

	Organic	**Conventional**
Age Farmer	50	54
Married (%)	72	65
Off-farm Income (% Holders/spouse)	65	62
Labour Units		

Source: National Farm Survey – 2007

households respectively demographically viable. Finally the amount of farm labour used was higher on the organic farms at 1.14 labour units compared to 0.95 labour units on conventional farms.

Financial Returns to Organic Dairying

There are approximately 20 organic dairy farms in Ireland and expansion has been limited due mainly to limited processing and market outlets. The dairy data shown in Table 7 are based on a relatively small number of organic dairy farms participating in

the National Farm Survey and therefore should be read with caution. As in the cattle sector, farms are classified into the dairying system based on EU typology i.e. dairying is the predominant enterprise on the farms shown in Table 7, but these farms can also have other minor enterprises e.g. cattle, sheep or tillage crops. The data are farm level data – not dairying enterprise data – and therefore represent all other enterprises on the farm and it is important that this is taken into consideration when interpreting the data.

Table 7: Financial farm returns to Organic Dairying farms compared to conventional – 2007

	Organic Dairying	Conventional Dairy Farms
	€/ha	
Gross output	2,646	2,850
- of which Direct Payments	484	434
Direct costs	708	923
Gross Margin	1,938	1,927
Overhead costs	734	800
Family Farm Income	1,204	1,127

Source: National Farm Survey – 2007

The data shows that whilst output is 8% higher on conventional dairy farms, family farm income is 7% higher on organic dairy farms due to total costs being 16% lower. Direct payments were 12% higher on the organic farms. Organic dairy farms were considerably larger than conventional farms 66 ha versus 45 ha. However as expected stocking rate was lower on the organic farms at 1.22 LU per ha compared to 1.82 LU/ha on conventional farms i.e. almost 50% higher on the conventional farms. Despite lower overall livestock units on the larger organic farms, labour units on organic farms was 42% higher.

Conclusions

FFI/ha on organic cattle rearing farms was 56% higher than on conventional farms due entirely to lower costs of production (€240/ha v €640/ha). However the organic

farms were selected as monitor farms and therefore represent the better producers whilst the conventional farms were selected at random. Output and direct payments per ha were higher on conventional farms but not sufficient to cover the additional costs. Organic farms were 24% larger than conventional farms. Organic drystock cattle producers had a more viable socio-economic profile, whilst technical performance was higher on the conventional farms. Organic dairy farms had 7% higher farm income over conventional dairy farmers in 2007. However, these data are based on a small sample and should therefore be interpreted with caution.

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