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Financial performance of organic farms in England and Wales

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Summary

A survey of farm financial data on 135 organic farms in England and Wales in 2003/04 (as part of an ongoing annual survey) shows that for most farm types, organic farmers achieve similar or higher incomes than similar conventional holdings. Although organic farmers rely on premium prices to compensate for lower yields, overall performance has been maintained despite downward pressure on prices in the period under review. However, all farms, organic and conventional, showed generally poor returns. With organic prices increasing in most areas in 2005, it is likely that significant improvements in performance will result.

Key words: Organic farm incomes, output, gross margins, costs of production

Introduction

Financial data on organic farming in England and Wales has been collected on a regular basis since the early 1990s, as part of a series of Defra-funded projects. The aim of the research is to show the financial performance of organic farms differentiated by farm type and compared with similar conventional farms in order to inform DEFRA policy-making with respect to organic farming, and provide a basis for assessments by farmers, advisers and other interested parties of the farm-level implications of conversion to and continued organic farming.

Since 1995/6, annual reports covering different farm types have been produced, which are now available on the organic statistics section of the Defra website (http://statistics.defra.gov.uk/esg/index/list.asp?i id=130). These ex post survey results complement, but also inform, the ex ante data contained in the Organic Farm Management Handbook (Lampkin *et al*., 2006). The latest of these reports (Jackson & Lampkin, 2005) available at the time of writing covers the two years 2002/03 to 2003/04 (2004/05 data will be available from August 2006).

Materials and Methods

The main dataset represents a combination of two sets of data: a) organic farms occurring ‘by chance’ in the standard Farm Business Survey results and b) organic farms surveyed directly using Farm Business Survey methodology. The results for all farms in both data sets have been completed using the same field book and definitions to ensure comparability. In total, full data from 135 farms were available in 2003/04, 77 of which came from the standard FBS and 58 from the directly surveyed sample. This enabled sample sizes of 15 or more holdings for the cropping, mixed, lowland dairy, lowland cattle/sheep and LFA cattle/sheep samples, but only smaller samples (5–8 holdings) for arable/field vegetables, other horticulture and LFA dairy. Specialist pigs and poultry holdings were not present in sufficient numbers although some gross margin data could be obtained. The nature of the samples is such that they cannot be described as representative, but the larger sample sizes provide some protection against undue influence of outlier holdings, and the ability to compare identical samples from year to year provides an indication of trends.

Conventional holdings for comparison purposes were selected from the standard FBS sample on the basis of a clustering procedure that identified a group of conventional holdings similar to each individual organic holding on the basis of resource endowment criteria (e.g. location, land area, milk quotas). Further information on this procedure is provided in the main reports (Jackson & Lampkin, 2005). The average for each group of organic holdings is compared with the average for the group of associated cluster averages. The intention of this approach is that the focus of the comparisons can then be on differences resulting from differences in management system, rather than the underlying resource endowment which is not (usually) determined by the decision to farm organically or not.

Results

Cropping and horticulture farms

Net farm income for the organic cropping farms increased by 6% whilst increasing nearly three-fold for the conventional farm sample. Cropping inputs increased by 11% for the organic farms, but were similar from 2002/03 to 2003/04 for the conventional farms. Cropping outputs increased by 25% for the conventional farm comparison, but remained similar for the organic farms. Overall, the organic farms achieved higher net farm incomes than the similar conventional farms in 2003/04.

Net farm income for the organic arable/field vegetable farms decreased from 2002/03 to 2003/04 by 43%. Output decreased by one percentage point with inputs rising by 4% overall. The intensive horticulture holdings achieved a 23% higher net farm income per hectare in 2003/04. For this group, outputs increased by 16.5% and inputs by 14%. No conventional farm comparisons were available for the horticulture identical farm samples.

Dairy farms

For the identical LFA dairy farm samples, net farm income increased from 2002/03 to 2003/04 by 91% for the organic farms and by 67% for the conventional farms. Outputs increased by 9.9% for the organic farms and 5.9% for the conventional farms. Milk price increased by 4.3% for both the identical organic and conventional farms. Inputs were similar for the organic farms from 2002/03 and 2003/04, but increased for the conventional farms by 3.5%. Overall, net farm income was higher for the identical organic farm sample than the conventional farms in 2002/03 and 2003/04.

Lowland dairy net farm income increased in 2003/04 for the identical organic farms by 13% and by 32% for the conventional farms. Both the identical and full organic farm samples had higher incomes than the conventional farm sample overall for both years. Outputs were similar for the organic farms, but increased by 9% for the conventional farms. Inputs fell by 1.8% for the organic farms and increased by 6.5% for the conventional farms. Milk price fell by 2.5% for the organic farms and increased by 4% for the conventional farms.

Livestock farms

For the lowland cattle and sheep farms, net farm income increased for both the organic and conventional farm samples. Outputs increased by 10.6% for the organic farms and by 3.4% for the conventional farms. Inputs increased similarly from 2002/03 to 2003/04 by 3.6% and 2.7% on the organic and conventional farms, respectively. Overall, net farm income was much greater for the organic farms than the conventional farms in 2003/04.87

Net farm incomes on the LFA cattle and sheep farms were similar for both organic and conventional farms and from 2002/03 to 2003/04. Outputs rose by 8.6% for the organic farms and by 6.8% for the conventional farms. Inputs increased similarly between samples for both years by 5.7% for the organic farms and 6.4% for the conventional farms.

Table 1 *Net farm incomes on comparable organic and conventional farms (£/farm and £/ha, 2002/03-2003/04)*

Net Farm Income excluding BLSA results for data samples								
	Identical sample					Full sample		
Farm type	Number of farms	2002 / 03		2003 / 04		Number of farms		
Cropping		£/farm	£/ha	£/farm	£/ha		£/farm	£/ha
Organic	8	31053	248	32857	263	18	28526	198
Compararable conventional	87	7813	66	23374	196	245	22930	174
Arable /field vegetable								
Organic	5	46060	115	26372	65	8	18980	56
Comparable conventional	-	-	-	-	-	-	-	-
Horticulture								
Organic	7	19006	1118	22546	1377	8	29386	2001
Comparable conventional	-	-	-	-	-	-	-	-
LFA diary								
Organic	5	8318	100	15914	191	7	13099	152
Comparable conventional	25	3736	49	6143	82	40	12947	164
Lowland diary								
Organic	21	23644	235	28550	266	31	29739	246
Comparable conventional	185	14176	155	18952	205	215	18773	169
Lowland cattle and sheep								
Organic	16	5343	72	8812	119	21	9778	123
Comparable conventional	139	2085	29	2510	35	170	4734	61
LFA cattle and sheep								
Organic	19	11906	91	14297	111	30	16183	130
Comparable conventional	127	12096	103	12794	112	181	15918	132
Mixed								
Organic	7	14963	110	29007	205	15	18181	169
Comparable conventional	61	14596	116	20860	167	118	9945	90

Mixed farms

Net farm income was similar for the identical conventional farms and the organic farms in 2002/03, but changed in 2003/04 by 23% in favour of the organic farms. Outputs increased by approximately 10% on the organic farms and by 15.5% on the conventional farms from 2002/03 to 2003/04. Inputs increased by 2.7% for the organic farms and by 11.7% for conventional farms. Overall, net farm incomes increased in 2002/03 for both farm samples.

Financial benchmarking and costs of production

The results also give insights into the performance of individual farm enterprises (Table 2). Comparable data for conventional holdings are not available, but will be from 2004/05.

Table 2. *Yields, gross margins and cost of production for organic milk, lamb, wheat and potatoes, 2003/04*

	Milk	Lamb	Wheat	Potatoes
Yield	5700 L cow^{-1}	1.37 lambs/ewe	4.9 t ha^{-1}	23.2 t ha^{-1}
Price	21 ppl	£1.23 kg^{-1} LW	£154 t^{-1}	£214 t^{-1}
	Margins (£/head or £/ha, excl. subsidies)			
Enterprise output	1153	40.	748	4965
Feed/seeds	239		56	568
Vet/med/sprays	26		-	181
Forage/ferts	52		-	98
All variable costs	411		92	1975
Gross margin	742		650	2991
	Costs of production (p L^{-1} or p kg^{-1} LW)			
Variable	6.6	40.4	-	-
Forage	0.9	14.0	-	-
Fixed	10.4	146.9	-	-
Total	17.9	201.3	-	-

Conclusions

Organic farms have managed to maintain a reasonable level of performance overall, despite the downward price pressures during this period caused by the very rapid expansion in supplies of organic products since 2001/02. However, good performance relative to similar conventional farms needs to be seen in the context of all farms making poor returns. For some products, particularly milk, the price difference was therefore very low. Encouragingly, the market has shown signs of very rapid growth and improving prices during 2005 (Soil Association, 2006) and it is expected that the effects of this turn round will be seen in the 2005/06 data due in 2007.

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