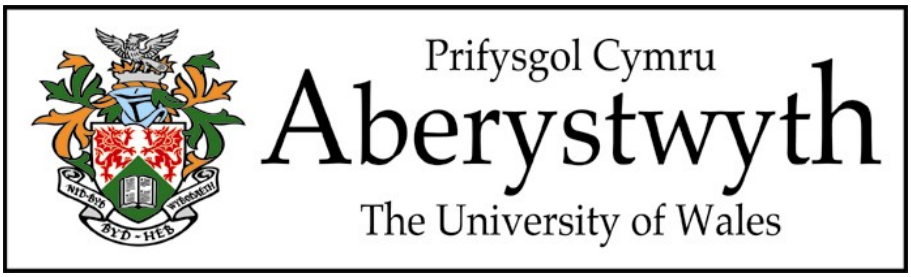

ORGANIC FARM INCOMES IN ENGLAND AND WALES 2002/03

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February 2005

Institute of Rural Sciences

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Report of work for the
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Results from research work carried out for the Department of Environment, Food and Rural Affairs (DEFRA) by the Organic Research Group at the Institute of Rural Sciences, UWA on the economic performance of organic farms in 2002/03 are presented in this report. This report is the second from a series of three economic reports on organic farm incomes from 2001/02[1] through to 2003/04.

A fundamental aim of this work is to assess the financial performance of organic farms differentiated by farm type, in order to inform DEFRA policy-making with respect to economics of organic farming, and to provide a basis for assessments by farmers, advisers and other interested parties of the farm-level implications of conversion to and continued organic farming.

This research area builds on previous economics work on organic farming carried out by Institute of Rural Sciences, UWA (Project OF0190, covering 1995/96[2] to 1998/99[3]). Here, time series data is shown using an identical farm analysis technique for the 2001/02 and 2002/03 financial years covering the economic performance of seven organic farm types including cropping, horticulture, lowland and LFA dairy, lowland and LFA cattle and sheep and mixed farming systems. The identical farm samples comprise farms that are present in both 2001/02 and 2002/03. The total number of organic farms for 2002/03, also referred to as the full farm sample data, is shown alongside the identical datasets for 2002/03.

Summarised and detailed financial input, output, income, returns to labour and capital, liabilities and assets and some physical performance measures are presented based on current Farm Business Survey data collection and collation guidelines. The full samples of organic farms per robust farm type are sufficiently large to give some reasonable level of confidence in the data; however, it should be noted that the organic farm samples are not statistically representative of their type, although they can be seen as a reasonable indication of farm income levels between organic and conventional data. Smaller identical farm samples should be treated more cautiously as there is a possibility for outliers (especially larger farms) to have some influence on the average results.

An additional element of this work is the inclusion of comparable conventional farm data for the farm types shown. Each organic farm within this study was matched with an appropriate cluster of conventional farms based on the resource endowment identifiers/variables of individual organic farms. Broadly speaking, the identifiers/variables included farm type, FBS region, LFA status, utilisable agricultural area, milk quota holding (where applicable) and farm business size. The cluster farm data was averaged for each farm type to derive the comparable conventional farm (CCF) data based on the organic farms from the identical and full farm samples.

Overall, the identical sample of organic farms showed a similar or higher level of net farm income for all farm types in 2002/03 than in 2001/02 with the exception of the identical

[1] Jackson, A.J., Fowler, S.M. and Lampkin, N.H. (2004) Organic Farm Incomes in England and Wales 2001/02. Institute of Rural Sciences, Aberystwyth. Report for DEFRA contract ref. OF0189.

[2] Fowler, S.M., Lampkin. N.H., and P Midmore. (2000) Organic Farm Incomes in England and Wales 1995/96 – 1997/98. Welsh Institute of Rural Studies, Aberystwyth. Report for MAFF contract ref. OF0190 URL www.organic.aber.ac.uk/library/Organic Farm Incomes.pdf.

[3] Fowler, S.M., Wynne-Jones, I. and Lampkin. N.H. (2001) Organic Farm Incomes in England and Wales 1998/99. Welsh Institute of Rural Studies, Aberystwyth. Report for MAFF contract ref. OF0190 URL www.organic.aber.ac.uk/library/Organic Farm Incomes.pdf.

sample of cropping farms, which decreased. On comparing the organic data with the comparable conventional data, the greatest differences in performance were seen in the lowland dairy and lowland cattle and sheep farm types where organic farms performed significantly better in 2002/03. Horticultural and LFA cattle and sheep farm types performed similarly to the comparable conventional farm samples. The organic mixed identical farm sample achieved lower net farm incomes than the conventional farm sample, but the full sample of mixed organic farms in 2002/03 showed a higher net farm income than the conventional farm sample.

Gross margin data is presented for organic dairy herds on a herd size and top five performing herd basis. Cattle and sheep gross margins are shown for lowland and LFA farm types in addition to breeding pig and layer gross margins. Crops shown include winter and spring wheat, spring barley, spring and winter oats, triticale, beans, ware potatoes, sugar beet and leek crops. Where applicable, 2001/02 gross margin data is shown alongside the 2002/03 data.

Benchmarking data is shown for milk, beef and lamb production enterprises.

1. Introduction

This is the second of a series of three annual reports on the financial performance of organic farms covering the years 2001/02 to 2003/04 carried out for the Department for Environment, Food and Rural Affairs (DEFRA).

The aim of this research report is to show the financial performance of organic farms for 2002/03 including comparisons with similar conventional farms and 2001/02 data, differentiated by farm type, 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.

This project builds on existing economics research work carried out by the Organic Research Group, Institute of Rural Sciences for MAFF (project OF0125, covering 1995/96 to 1997/98, 1998/99) with specific objectives, which include:

- the collection of financial data from organic cropping, horticulture, dairy, upland, lowland and mixed farm types (12 farms per robust type) from 2001/02 to 2003/04;
- the collation of organic farm data from the UK Data Archive for existing FBS studies in the study years;
- the selection of appropriate clusters of similar conventional farms of types selected to complement the farms above;
- the production of an annual report incorporating comparisons with data from the conventional farms on a wholefarm basis as well as gross margin data.
- the collation of benchmarking data for dairy and livestock enterprises.

This report is divided into various sections including methodology, which shows the data sourcing and sampling techniques used to obtain a representative organic farm sample, followed by an explanation of the clustering procedure, which shows how comparable conventional farms (CCF) are selected to match the organic farms. Then, the financial results are presented with explanation of the results and brief highlights followed by summary data for each farm type. Detailed gross margins are included for livestock and cropping enterprises. The detailed financial results can be found in appendix 1.

2. Methods

2.1 Organic farm data sources and collection methods

Financial results have been derived from organic farm businesses in England and Wales with account years ending between July and the following April; for the majority of farms this fell between December and April. Where the farm financial year falls outside of the December to April bracket, an artificial year-end is used to avoid year-ends occurring during the growing season.

The data have been derived from three different sources and all data were collected and processed according to standardised Farm Business Survey guidelines set down by the Department for Environment, Food and Rural Affairs, Economics (Farm Business) Division. In a few cases where it was not possible to standardise whole farm figures, only gross margin information for specific enterprises has been included (see Table 1).

1. Organic Research Group / Farm Business Survey Unit, (IRS, Aberystwyth)

For the primary data collection, the Farm Business Survey unit at Aberystwyth is responsible for collecting the main organic farm income data from identical farm samples for cropping, dairy, LFA and lowland cattle and sheep and mixed farm types with the aim of achieving 12 farms per robust type for whole farm and gross margin data. Farm recruitment for the survey was carried out by the Institute of Rural Sciences, Organic Research Group and Farm Business Survey Unit with the aim of identifying a sample of farms to reflect robust types throughout England and Wales. This was carried out via random selection of national producer lists from organic certification bodies to identify holdings with more than 8 European Size Units (ESU) (for definition, see Appendix 2) and having at least 70% organic land status in 2001/02.

2. DEFRA: UK Data Archive

Each year, Farm Business Survey Centres around the UK submit FBS data to DEFRA. Within the remit of this project, it has been possible to derive further organic farms that form part of the farm sample from other FBS centres in the UK with the introduction of organic indicators in 1999. This has proved a valuable method of increasing the number of organic farms. In 2002, farm income data from 2845 farms was submitted to DEFRA, of which 107 farms had organic or in-conversion enterprises on farm. From this total, 65 farms met the farm selection criteria; however only 50 farms have been included in this report as it was not possible to derive comparable conventional farm data for the other 15 farms. The other 42 farms were not included within the report as 22 were still in the conversion phase of their organic status and the remaining 20 had organic areas less than 50% of their total agricultural area.

3. HDRA (Henry Doubleday Research Association)

HDRA were responsible for supplying both whole farm and gross margin data for horticultural holdings. Although eleven farms were recruited, it was not possible to use all of these farms in the horticultural section due to large dissimilarities within the group in terms of the proportion of horticulture output/area and intensity of the enterprises. However, gross margin data is included in the gross margin sections where applicable.

Table 1 Distribution of organic farms by type and source of data, 2002/03

Data source	*IRS*	*UK Data Archive*	*HDRA*	*Other*	***Total***
Farm Type	*Wholefarm & GM data*	*Wholefarm data only*	*Wholefarm & GM data*	*Wholefarm & GM data)*	
Cropping	10 + 3 GM	1	1* + 6GM		**12+ 9 GM**
Horticulture		1	4 + 4GM		**5 + 4 GM**
Pigs and poultry	5 GM + 5 GM				**5GM+ 5GM**
Dairy (lowland)	8	22			**30**
Dairy (LFA)	3	2			**5**
Cattle and sheep					
LFA	12	10			**22**
Lowland	12	7			**19**
Mixed	9	7			**16**
Total	54 +13 GM	50	5 + 10GM		**109 + 23 GM**

* General cropping farm with significant horticulture enterprise thus used for both cropping and horticulture farm types.

GM – Farms used for gross margin data purposes only as no comparable wholefarm data available.

2.2 Farm samples and farm classification

The total farm sample consists of 109 surveyed organic farms for 2002/03. All farms were classified by constituent EC type (1985 EC Typology described in Commission Decision 85/377/EEC) and for the purposes of this report are presented in groups by robust type according to the UK farm classification system (revised 1994)[4]. (See Appendix 2 for more information). The use of constituent EC types relies on the use of standard gross margins (SGMs) from which European Size Units (ESUs) are derived (which in turn allow classification into EC types), a typology system originally devised for conventional agricultural systems.

The number of farms within both this organic farm income survey sample and the Farm Business Survey overall are subject to change. In the Organic Farm Income 2001/02 report, data from 120 organic farms were available. Between the 2001/02 and 2002/03 survey periods, 11 farms dropped out of the organic survey and a further 11 organic farms were no longer available from the UK Data archive. Conversely, there were five new organic farms recruited for the 2002/03 survey by the Farm Business Survey Unit, IRS and a further new set of 24 organic farms were available via the UK Data archive. Overall, 18 organic farms have been excluded from this report as it was either not possible to derive comparable conventional farm data for them for various reasons or there were not enough farms of a particular farm type.

To ensure anonymity of results for farmers participating in these surveys, no data is presented for groups of less than five farms. Robust types 1 (Cereals) and 2 (General Cropping), are merged for this reason.

[4] **See http://statistics.defra.gov.uk/esg/publications/fab/2003/excel.asp for further information on the farm accounting system employed in England and Wales by DEFRA Economics Division.**

2.3 Continuous sampling and interpretation of results

To achieve comparability in the whole farm datasets, the data samples are presented as a continuous (identical) set of farms per farm type. The identical samples show organic farm incomes for both organic and comparable conventional farms between 2001/02 and 2002/03 for comparison. The full sample is shown for 2002/03 data only. It was not possible to form identical farm samples for horticulture and LFA dairy farm types.

In 2002/03, 10 farms changed farm type classification. Where applicable, these farms were included in the identical farm sample that applied to their 2001/02 farm type. For the full sample, these farms were included in the farm sample according to their 2002/03 farm type.

An assessment of the distribution of farm type by region and size between the organic farm survey data and unpublished organic farming census data from DEFRA was undertaken in the previous report. The findings indicated that the organic farm sample was relatively representative on a regional and farm size basis. This exercise has not been repeated for this year with the 2002/03 organic data sample being similar to the 2001/02 data sample (see table 2).

Table 2 Distribution of organic farms by type and size (European Size Units) for the identical and full farm samples, 2002/03

Identical sample		8 -	15 -	28 -	40 -	60 -	100 -		
ESU code	< 8	<15	<28	<40	<60	<100	<200	200 +	**Total**
Farm type									
Cereals and general cropping		1	1	1	2	1			**6**
Horticulture									
Pigs and poultry									
Dairy (lowland)				3	6	8	4	2	**23**
Dairy (LFA)									
Cattle and sheep - LFA		6	7	2	4				**19**
- Lowland		3	5	5	2				**15**
Mixed		1		5		2	1		**9**
Total	0	11	13	16	14	10	5	2	**72**
Full sample									
Farm type									
Cereals and general cropping			3	2	2	4	1		**12**
Horticulture		1	2			1		1	**5**
Pigs and poultry									
Dairy (lowland)			1	3	4	11	9	2	**30**
Dairy (LFA)				1	1	3			**5**
Cattle and sheep - LFA		7	7	3	4	1			**22**
- Lowland		5	7	5	2				**19**
Mixed		2	1	5	2	4	2		**16**
Total	0	15	21	19	15	23	12	3	**109**

2.4 Farm comparisons

A key aspect of this research work was to derive a cluster of comparable conventional farms for each organic farm to provide comparison data. By generating comparison farm data, it is possible to determine and understand further the economic performance of organic farms, their relative competitiveness and the impact of policy on them in relation to conventional farms.

2.4.1 Background

Issues relating to comparing results from organic and conventional farms have been discussed by Lampkin and Padel (1994)[5] and Offermann and Nieberg (2000).[6]

The conventional farms selected need to be 'comparable'. The objective is to isolate the effect of the farming system on profits, so the choice of characteristics for comparison must be restricted to 'non-system determined' factors, i.e. location (climate, topography, soil, and market distance), size and tenure. The use of clusters of similar conventional farms to compare with each organic farm has the advantage over paired farm comparisons in that specific circumstances of individual conventional farms do not distort the comparison. The average for a group of organic farms can then be compared with the average for the group of matched clusters with greater confidence when the farm size, type and location characteristics of the organic and conventional groups are similar.

The idea of using clusters of conventional farms for comparisons has been carried out before, using a hierarchical cluster analysis technique on the basis of Euclidean squared difference; however, the method of clustering has been changed in this study.

2.4.2 Conventional farm selection

For each organic farm recorded, the aim was to generate a cluster of at least three comparable conventional farms (CCF) from the Farm Business Survey database (DEFRA, 2002)[7]. The emphasis for selection of comparable conventional farms for this study was to focus on resource endowment identifiers/variables. The resource endowment of the holding is normally independent of the organic or conventional management, and is a reflection of the resources with which the farm manager can run the farm business.

The main identifiers required to be identical for determining resource endowment include:

- Region (FBS province), assists with selecting farms with similar production conditions (i.e. location, market distance, institutional and policy frameworks);
- Less Favoured Area and Non- Less Favoured Area status (See Table 3);
- Altitude (See Table 4);
- Main farm type, which is more descriptive typing than robust type (see Table 5).

To prevent limiting the number of CCF's unduly, the above variables were reassigned different codes to allow some flexibility in deriving the comparison farm data.

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[5] Lampkin, NH and S Padel (1994) *Economics of Organic Farming – an international perspective.* CAB International, Wallingford.

[6] Offermann, F. and Nieberg, H. (2000) Profitability of Organic Farming in Europe. Paper presented at the Agricultural Economics Society Annual Conference, Manchester.

[7] Department for Environment, Food and Rural Affairs (Farm Business Division). Farm Business Survey Data, 2002/03 [Computer File]. Colchester, Essex: The Data Archive [Distributor] 9th October 2004.

Table 3 Recoding of LFA codes to simplify the clustering procedure

Less favoured Area Codes		LFA types
All land outside LFA	1	**1**
All land inside SDA	2	**2**
All land inside DA	3	
50%+ in LFA of which 50%+ in SDA	4	
50%+ in LFA of which 50%+ in DA	5	
<50%+ in LFA of which 50%+ in SDA	6	**3**
<50%+ in LFA of which 50%+ in DA	7	

Table 4 Altitude codes for farms in the FBS/FADN system

Altitude Description	Code
Most of holding below 300m	1
Most of holding at 300m to 600m	2
Most of holding at 600m or above	3

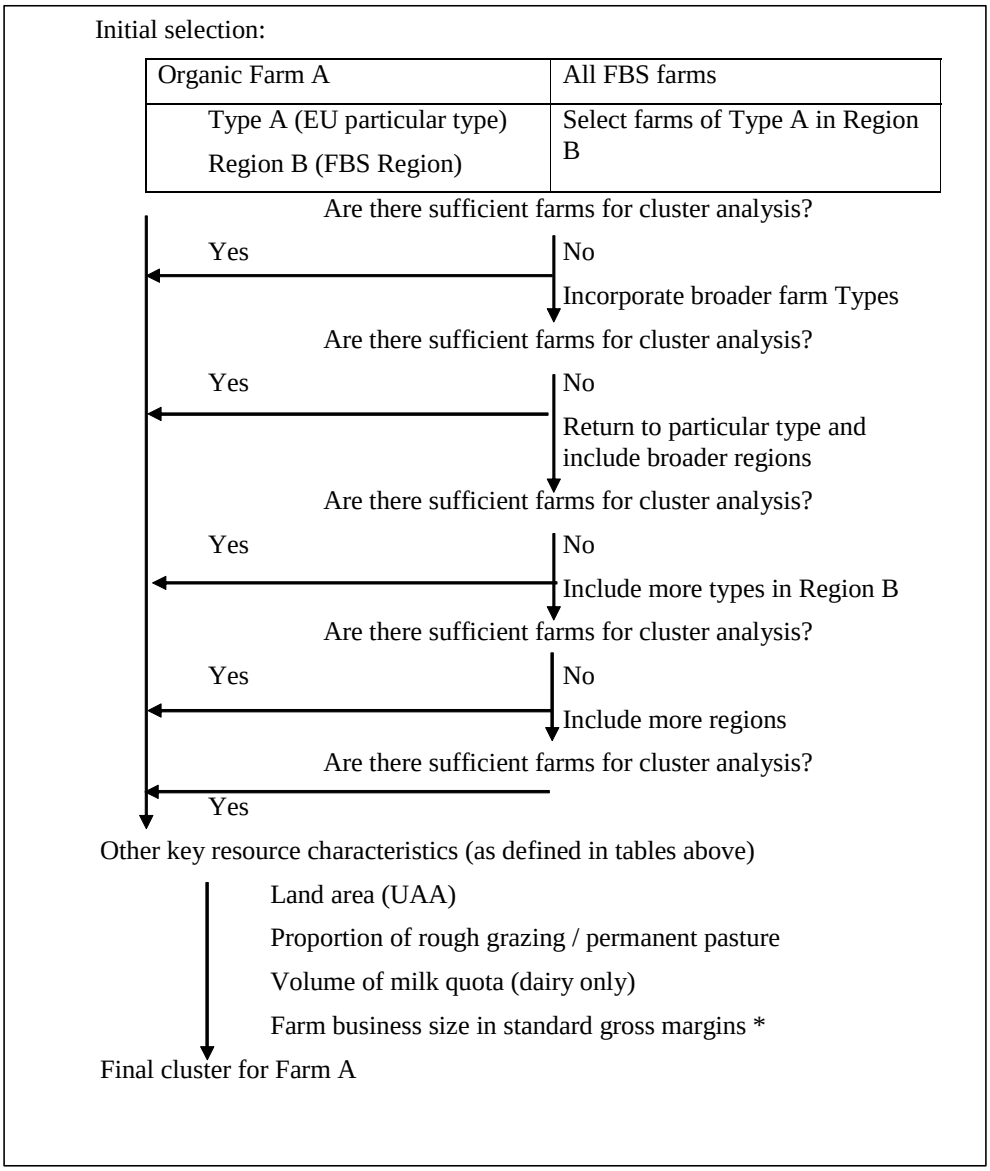
Table 5 Main type and robust types used in the FBS/FADN system

Farming Description	Main type	Robust type
Cereals	1	1
General cropping	2	
Specialist fruit	3	2
Specialist glass	4	
Other horticulture	5	
Specialist pigs	6	3
Specialist poultry	7	
Mixed pigs & poultry	8	
Dairy (LFA)	9	4
Dairy (lowland)	10	
Specialist sheep (SDA)	11	5
Specialist beef (SDA)	12	
Mixed cattle & sheep (SDA)	13	
Cattle & sheep (DA)	14	
Cattle & sheep (lowland)	15	6
Cropping and dairy	16	7
Cropping, cattle & sheep	17	
Cropping, pigs & poultry	18	
Cropping & mixed livestock	19	
Mixed livestock	20	

To identify comparable farm data with similar resource endowment, pre-defined ranges were used for land (UAA), milk quota ownership (dairy farms only), proportion of permanent pasture and rough grazing land and the farm business size in standard gross margins (ESU) per farm. The range was defined by a percentage deviation from the value of the respective organic farm (e.g. +/- 20%) and/or an absolute value to prevent organic farms with small values being lost from the sample. Horticulture farms included the proportion of area utilised for field scale vegetable production and the horticulture enterprise output as a proportion of total farm output. Overall, the combination of variables can be taken as a reasonable guide to identifying comparable resource endowment.

For all farm types, a standard procedure was undertaken to determine the comparable data selection per organic farm. However, it was not possible to achieve a reasonable number of CCF's in 30% of cases. Therefore, a hierarchical clustering approach was used, by adding farms of the same type from adjacent regions and on occasion increasing the pre-defined ranges per farm type (See Box 1 and Table 6).

Box 1 Conventional farm selection procedure



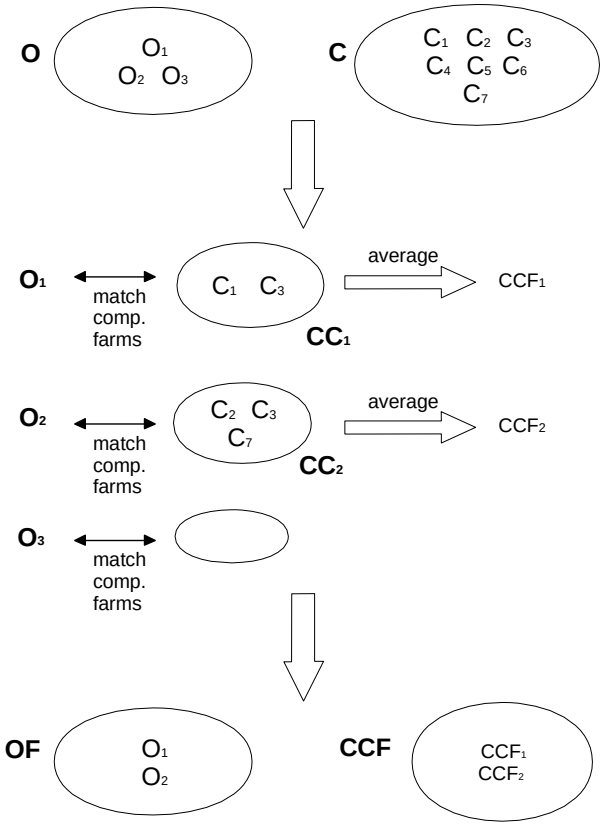
Farm business size, as measured by standard gross margins, is a measure of the potential economic activity of the particular mix and size of enterprises on the farm.

Table 6 Summary table to show the procedure used per farm type and the CCF results achieved (2002/03 farms)

	Cropping	Horticulture	Dairy (lowland)	Dairy (LFA)	Cattle and sheep Lowland	Cattle and sheep LFA	Mixed
Total organic farms	**12**	**5**	**30**	**5**	**19**	**22**	**16**
Baseline clustering criteria							
Utilisable agricultural area [UAA] (+/- %)	20	40	30	30	20	20	30
Quota owned (+/- %)	n/a	n/a	30	30	n/a	n/a	30
Permanent Pasture [PP] (+/- %)	25	30	n/a	n/a	30	30	30
Rough Grazing [RG] (+/- %)	25	30	n/a	n/a	30	30	30
Economic Size Units [ESU] (+/- %)	30	30	30	30	30	30	30
LFA status/altitude	identical	Identical	identical	identical	identical	identical	identical
Main type	identical	Identical	identical	identical	identical	identical	identical
Region	identical	n/a	identical	identical	identical	identical	identical
Horticulture area/output (% difference)	n/a	10	n/a	n/a	n/a	n/a	n/a
No. of farms for which baseline cluster obtained (min 3 farms)	9	0	24	4	17	12	8
(as a percent)	**75%**	**0%**	**83%**	**80%**	**89%**	**55%**	**50%**
Modifications required to achieve clusters for remaining farms							
Regional (broader selection)	2	2	3	1	-	1	7
Regional and/or RG/PP and/or UAA (broader selection)	1	3	2	-	2	2	-
LFA/altitude (non-identical criteria)	-	-	-	-	-	-	-
Main type (incorporate broader farm type definition)	-	-	-	-	-	7	1
Resulting final cluster statistics							
Average number of farms in cluster per organic farm	10.1	4.2	9.2	5.4	9.2	6.7	6.4
% of organic farms clustered	**100**	**100**	**100**	**100**	**100**	**100**	**100**
No. of organic farms with more than 5 farms (CCF) per cluster	10	1	22	4	16	17	10
% of organic farms with more than 5 farms (CCF) per cluster	**83**	**20**	**76**	**80**	**84**	**77**	**63**
Range of CCF per organic farm per farm type: Minimum	4	3	3	3	4	3	3
Maximum	37	5	25	9	17	14	16

Once the comparable conventional farm data was identified from the main Farm Business Survey database (sample C in box 2) for the organic farms (sample O), the comparable conventional farm data were averaged. This effectively creates a single ('artificial') comparable conventional farm CCF_1 for each organic farm[8]. Note that farms from sample C could be used more than once. To arrive at set OF, all organic farms with no comparable data were removed from sample O, leaving set OF an average of sample O and CCF an average of sample C for which the robust type data was based for further comparative analysis in this report.

Box 2. Diagram to show the procedure to determine comparable farm data per farm type



2.4.3 Interpretation of results

It should be noted that the farms have been classified by Standard Gross Margins (SGMs), a typology system originally devised for conventional agricultural systems and therefore not entirely appropriate for these organic farms (see Appendix 2). Further, because of the systematic differences in structure on organic farms, clustering conventional farms is still only an approximate guide to the possible performance of organic farms if they were managed conventionally or vice versa.

The data source for the cluster farm comparisons is sufficiently large for a degree of confidence in the average; however, there is still a possibility for outliers (especially larger farms) to have some influence on the average.

[8] Offermann, F. (2004) Selection of comparable conventional farms: Some considerations for a general guideline. Unpublished project guidelines, Further Development of European Organic Farming Policy Project (www.irs.aber.ac.uk/euceeofp).

3. Presentation of results

3.1 Whole farm data

All whole farm results for each farm type in section 4 and the appendices are simple averages. Within summary sections on each farm type, tables show breakdowns of average outputs, inputs and incomes in £/ha; for cropping, horticulture, lowland and LFA dairy, mixed, LFA and lowland cattle and sheep farms for identical and full samples. It should be noted that the identical samples were derived from individual organic farm data that were available for both 2001/02 and 2002/03 financial years. Comparable conventional farms for the identical samples are based on the 2001/02 cluster data with conventional farms that only appear in both years. To illustrate further, where the conventional farms from a cluster do not appear in 2002/03, these are removed from the 2001/02 cluster set to define a new cluster set per organic farm for 2001/02 and subsequently 2002/03 by default. The full sample represents the full set of organic data available for 2002/03 with newly derived comparable conventional farms based on the 2002/03 Farm Business Survey data.

This format will form the basis of future reporting; therefore the full organic sample for 2002/03 will form the basis of the two year identical sample for 2002/03 and 2003/04.

Throughout the text, the terms *input* and *output* are used to define financial values rather than physical quantities (for further definitions of terms please see Appendix 3).

Within Appendix 1, Tables A1 to A7 give details of outputs, inputs, incomes, returns to labour and capital, asset and liability information, returns to capital, land utilisation and crop performance and stocking and livestock performance for seven farm types. Other physical information available in addition to the financial data collected includes figures for livestock units per forage hectare, and labour units per farm. Where direct labour data were not available, labour units have been derived from wages paid using standard agricultural wages (based on Agricultural Wages Board). All labour-use figures presented are, however, very approximate.

Tables provide whole farm totals averaged for each farm type, and weighted averages per hectare of UAA over the farms or holdings. Values per hectare of total UAA are used (rather than measures per hectare in specific enterprises) because presenting the whole farm situation reflects the interdependence of enterprises. The fact that, for instance, organic horticultural holdings cannot crop their entire land in one year has a considerable influence on the overall farm profitability. However, gross margin data are shown separately to provide an indication of individual enterprise performance.

3.2 Income measures

In the presentation of the management and investment income (MII) and net farm income (NFI) results, all farms are effectively treated as tenanted, and a rental value is imputed as an expense for owner-occupied land. The cost of permanent improvements to farms, together with any capital grants relating to such work, are excluded from these income calculations, although such landlord-type improvements will be reflected in higher rent or rental value charges. Debt servicing charges incurred by farmers on farm borrowing or the leasing of equipment are ignored for the purposes of calculating NFI and MII, but such charges are taken into account in calculating occupier's net income (ONI) and cash income.

MII represents a return to management, whether paid or not, and tenant-type capital invested in the farm, whether borrowed or not. Thus, as well as the usual variable and

fixed costs, it includes a nominal charge for farmer and spouse physical labour, but not management time, and a charge for depreciation of machinery (but not the actual costs of machinery purchased in that period). Interest payments are not included.

NFI represents the return to farmer and spouse for their manual and managerial labour and on the tenant-type capital invested in the farm. NFI can be derived from MII by deducting the cost of paid management, and adding back the notional charge for farmer and spouse labour.

In the presentation of the MII and NFI results, a number of adjustments are made to make farms comparable with each other as far as resource endowment is concerned:

- Land and property: all farms are treated as tenanted – a rental value is imputed as an expense for owner-occupied land. The costs of permanent improvements to farms, together with any capital grants relating to such work, are therefore excluded from these income calculations, although such landlord-type improvements are reflected in higher rent or rental value charges.
- Capital: all farms are treated as if they have no borrowings – debt service charges incurred by farmers on farm borrowing or the leasing of equipment were ignored for the purposes of calculating NFI and MII.
- Labour: all farms are treated as if all labour is paid – including other unpaid labour and, for MII, notional values for farmer and spouse manual labour are included.

ONI and cash income definitions exclude these notional charges and reflect actual land, property and capital costs. The measure closest to the normal definition of profit is that of ONI, as it excludes nominal charges for unpaid labour of farmer and spouse as well as any nominal rents charged, but includes interest charges and depreciation of buildings and works. ONI and cash income more closely represent the actual situations on farms, but comparisons with other farms are less reliable because of differences in land tenure, reliance on unpaid labour, and owner equity.

For further definitions of terms see Appendix 3.

4. Results highlights

During the 2001/02 and 2002/03 financial periods, a number of factors were affecting agriculture in general including the Foot and Mouth crisis, downward pressures on conventional farm-gate prices and support payments and an increasing supply of organic products from the domestic market began to exert downward pressure on organic prices, particularly in 2002/03. This section summarises key changes in net farm incomes (Table 7) between the organic and conventional farm comparisons between 2001/02 and 2002/03.

Cropping and horticulture farms

Net farm income for the organic cropping farms decreased in 2002/03 by 50% whilst increasing more than three fold for the conventional farm sample. Cropping inputs increased by 26% for the organic farms, but were similar from 2001/02 to 2002/03 for the conventional farms. Cropping outputs increased slightly for the conventional farm comparison, but decreased by 16% for the organic farms. Overall, the organic farms achieved higher net farm incomes than the conventional farms in 2002/03.

Net farm income was similar for organic and conventional horticulture farms in 2002/03.

Dairy farms

For the non-identical LFA dairy farm samples, net farm income fell from 2001/02 to 2002/03 by 69% for the organic farms and by 46% for the conventional farms. Overall, net farm income was higher for the non-identical organic farm sample than the conventional farms in 2001/02 and 2002/03.

Lowland dairy net farm income marginally increased in 2002/03 for the identical organic farms. Income fell by 31% 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 fell by 4-6% whilst inputs fell by 1% for the identical conventional farms and 7% for the organic farms. Milk price fell by 10–12% for organic and 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 8% for the organic farms and by 9% for the conventional farms. Inputs remained similar from 2001/02 to 2002/03. Overall, net farm income was much greater for the organic farms than the conventional farms in 2002/03

Net farm incomes on the LFA cattle and sheep farms were higher for the conventional farms than the organic farms by 10%. Net farm income increased for all farm samples substantially from 2001/02 to 2002/03. Outputs rose by 6% for the organic farms and by 18% for the conventional farms. Inputs remained similar between samples for both years.

Mixed farms

Net farm income was higher for the identical conventional farms than the organic farms by 69% in 2002/03. Outputs increased by approximately 10% for both samples from 2001/02 to 2002/03. Inputs increased by 5% for the organic farms and by 1% for conventional farms. Overall, net farm incomes increased in 2002/03 for both farm samples.

Individual farm type data is summarised below with detailed results shown in appendix 1.

Table 7 Farm data summary, average NFI (£/farm and £/ha for 2001/02-2002/03)

		Net Farm Income excluding BLSA results for data samples						
		Identical sample					***Full sample***	
Farm type	Number of farms	2001/02		2002/03		Number of farms	2002/03	
Cropping		**£/farm**	**£/ha**	**£/farm**	**£/ha**		**£/farm**	**£/ha**
Organic	6	19494	254	9786	128	12	21955	204
Comparable conventional	56	1550	21	5804	78	122	7672	74
Horticulture*								
Organic	-	-	-	-	-	5	21891	725
Comparable conventional	-	-	-	-	-	21	23482	698
LFA dairy*								
Organic	6	27414	320	-	-	5	8318	100
Comparable conventional	31	7957	105	-	-	27	4396	57
Lowland dairy								
Organic	23	30198	316	32069	332	30	28121	283
Comparable conventional	171	25015	283	17255	194	273	15342	168
Lowland cattle and sheep								
Organic	15	4984	63	10008	126	19	10517	133
Comparable conventional	140	-1465	-19	2658	34	175	3416	44
LFA cattle and sheep								
Organic	19	8144	73	11051	93	22	10944	88
Comparable conventional	246	944	9	12337	114	148	10761	97
Mixed								
Organic	9	2326	17	7218	56	16	16347	130
Comparable conventional	42	1736	13	12198	91	102	13081	113

* Identical sample data was not available for horticulture and LFA dairy farm types.

4.1 Cropping farms

For detailed results see Appendix 1, Table A1, page 44.

In total, six organic cropping farms have been used for the two year comparison of identical farms where one farm was located in Northern England, one in Wales, two in the West and two in Central and Eastern England. For the identical sample, three out of the six farms were growing some field scale vegetables, amounting to approximately 12% of their land area combined in 2001/02. This increased to 14% for six of the farms in the full sample in 2002/03. Twelve organic cropping farms in total were available for 2002/03 financial year.

In both the identical and full sample of farms, the average UAA and business size were similar. Cropping plus set-aside areas were similar between samples. However, livestock numbers were higher for the organic farm sample compared to the conventional farms mainly due to one of the organic farms operating a mixed pig and poultry enterprise, which expanded in 2002/03. Cattle and sheep numbers were similar on average. Annual labour units were higher for the organic farms than the conventional farms in the identical sample by 47% and 30% in 2001/02 and 2002/03, respectively.

Table 8 Summary data for cropping farms (£/ha), 2001/02 and 2002/03

	Identical sample				*Full sample*	
Financial Year Data	2001/02		2002/03		2002/03	
	Org	**Conv.**	**Org**	**Conv.**	**Org**	**Conv.**
Sample number	6	56	6	56	12	122
Average farm size (UAA)	76.7	74.3	76.3	74.6	107.8	103.8
Business Size (ESU)	41.0	42.2	48.5	42.8	58.0	58.6
	£/ha	**£/ha**	**£/ha**	**£/ha**	**£/ha**	**£/ha**
Livestock outputs	243	64	360	118	235	137
Livestock subsidies	6	22	12	23	43	45
Cropping outputs	742	482	621	492	452	454
AAPS / Set-aside	134	149	128	156	138	155
Miscellaneous	53	114	52	108	65	100
Agri-env. payments	69	4	74	8	58	11
TOTAL OUTPUTS	**1247**	**836**	**1246**	**904**	**990**	**903**
Livestock inputs	116	48	229	55	121	75
Crop inputs	161	205	203	208	128	200
Labour	202	81	199	92	104	96
Machinery	207	221	194	205	186	204
General	96	89	89	96	75	81
Land & rent	211	170	204	170	173	173
TOTAL INPUTS	**993**	**815**	**1118**	**826**	**787**	**829**
NFI	254	21	128	78	204	74
Less farmer/spouse labour	153	177	159	182	107	138
Add paid management	0	0	0	0	0	0
Add BLSA	0	2	0	2	0	2
MII	**101**	**-154**	**-30**	**-103**	**97**	**-62**
ONI	277	44	158	88	206	85
Cash Income	291	173	291	201	270	218

Total outputs remained similar for the identical organic farms from 2001/02 to 2002/03 and increased by 8% for the conventional farms. Overall, the organic farm sample achieved higher total outputs with both greater livestock and cropping outputs as well as environmental payments compared to the conventional farms. The proportion of cropping outputs was approximately 70% of total outputs for both the organic and conventional farms. Although cropping and set-aside areas were similar in size between samples, the organic farms had a lower cropping area with 50% more land managed under set-aside agreements than the conventional farm sample.

Price and yield data indicate that wheat yields remained at similar levels from 2001/02 to 2002/03 although the wheat price increased by 15% for the organic farms to £140/t. Potato cropping areas increased slightly although both yield and price fell, the latter by over 50% to £216/t on the organic farms. Cropping output for the organic farms fell by 16% overall in 2002/03. For the conventional farm sample, cropping output increased slightly from 2001/02 to 2002/03 due to increases in the area of main crops grown such as wheat and barley, coupled with higher yields despite a decrease in crop prices overall.

Livestock outputs represented 10% of total output on the conventional farms compared with 20% for the organic farms.

Environmental payments represented 6% of total output for the organic farms with virtually no environmental payments received by the conventional farms.

The input costs for cropping increased for the organic sample by 26% in 2002/03. This is likely due to a switch to growing higher value crops by some of the organic farms. Fixed cost inputs remained similar from 2001/02 to 2002/03 for the organic sample. The trend for input costs for the conventional farms was similar from 2001/02 to 2002/03. As the physical differences in the organic and conventional farms suggest, livestock costs also increased for the organic farm sample due to the expansion of the pig and poultry enterprise on one of the farms. Cropping inputs were higher for the conventional farms than for the organic farms. Overall, total inputs increased by 12% for the organic farms and increased by 1.3% for the conventional farms in 2002/03.

Net farm income (NFI) decreased from 2001/02 to 2002/03 for the identical organic farms whilst increasing in 2002/03 by nearly four fold for the conventional farms. Overall, NFI was more than 10 times greater for the organic farms than for the conventional farms in 2001/02 and in 2002/03 the organic farms had a greater NFI than the conventional farms by 64%. Management and investment income for the two samples were only positive for the organic sample in 2001/02 and the full sample of organic farms in 2002/03. The returns to total labour units used for the identical samples in 2002/03 were £10,405 for the organic farms and £6,973 for the conventional farms, a difference of 33% between samples.

4.2 Horticultural holdings

For detailed results see Appendix 1, Table A2, page 52.

For this farm type, identical data samples were not available for 2001/02 to 2002/03. Here, the full sample of five farms has been used for the horticultural analysis for 2002/03 only where one farm was located in Northern England, one in the South West region and three from Central and Eastern England.

The average UAA and business size were similar between the organic and conventional farms. The main output was from cropping with little or no output generated from arable aid or set aside. Horticultural cropping was carried out on similar sized areas between samples. Only the organic farms had a small number of livestock. Cropping inputs on the organic farms were more than double that of the conventional farms and machinery costs were 20% higher. Labour costs were similar. Overall, net farm income was higher in the organic sample on a £ per ha basis but lower on a £ per farm basis. Management and investment income were positive for both farm samples.

Table 9 Summary data for horticulture farms (£/farm and £/ha), 2002/03

Financial Year Data	2002/03		2002/03	
	Org		**Conv.**	
Sample number	5		21	
Average farm size (UAA)	30.2		33.6	
Business Size (ESU)	85.2		94.0	
	£/farm	**£/ha**	**£/farm**	**£/ha**
Livestock outputs	1139	38	0	0
Livestock subsidies	1071	35	0	0
Cropping outputs	285863	9468	202107	6007
AAPS / Set-aside	0	0	2189	65
Miscellaneous	10241	339	19830	589
Agri-env. payments	773	26	446	13
TOTAL OUTPUTS	**299088**	**9906**	**224572**	**6675**
Livestock inputs	2200	73	0	0
Crop inputs	116448	3857	55585	1652
Labour	82293	2726	85602	2544
Machinery	40949	1356	32017	952
General	16220	537	15343	456
Land & rent	19086	632	12544	373
TOTAL INPUTS	**277197**	**9181**	**201090**	**5977**
NFI	21891	725	23482	698
Less farmer/spouse labour	10657	353	14288	425
Add paid management	0	0	0	0
Add BLSA	0	0	0	0
MII	**11234**	**372**	**9194**	**273**
ONI	20816	689	24068	715
Cash Income	35556	1178	39412	1171

4.3 LFA dairy farms

For detailed results see Appendix 1, Table A3, page 56.

An identical farm analysis was not possible for the LFA organic dairy farms due to insufficient numbers; however, two years' data are presented from the full sample of organic LFA farms available. In 2001/02, two of these farms were found in Northern England and the remaining four were found in Wales. Likewise in 2002/03, one farm was located in the North with the remaining farms in Wales.

Both UAA and dairy cow numbers were higher in the organic sample compared to the conventional farms. Incomes were significantly greater for the non-identical organic farms than for conventional farms in both 2001/02 and 2002/03. However, net farm income fell by approximately 70% between the two different organic samples from 2001/02 to 2002/03 where milk price fell from 22.3 to 18.6 pence per litre along with a reduction in milk yield by 3% to 4427 litres/cow. Overall, only the organic LFA farms in 2001/02 showed a positive return of 9% on tenant's capital.

Table 10 Summary data for LFA dairy farms (£/ha), 2001/02 and 2002/03

	Non-identical sample			
Financial Year Data	2001/02		2002/03	
	Org	**Conv.**	**Org**	**Conv.**
Sample number	6	31	5	27
Average farm size (UAA)	85.6	75.9	83.2	77.1
Business Size (ESU)	68.3	64.0	63.4	62.1
	£/ha	**£/ha**	**£/ha**	**£/ha**
Livestock outputs	986	990	824	877
Livestock subsidies	22	22	42	53
Cropping outputs	96	31	-25	16
AAPS / Set-aside	15	14	8	5
Miscellaneous	52	63	58	81
Agri-env. payments	82	17	61	12
TOTAL OUTPUTS	**1253**	**1138**	**969**	**1044**
Livestock inputs	295	385	257	337
Crop inputs	61	78	29	83
Labour	134	86	56	103
Machinery	210	202	188	216
General	92	99	89	96
Land & rent	140	182	250	153
TOTAL INPUTS	**933**	**1033**	**869**	**987**
NFI	320	105	100	57
Less farmer/spouse labour	186	219	185	207
Add paid management	0	0	0	0
Add BLSA	8	16	-12	7
MII	**143**	**-99**	**-97**	**-143**
ONI	277	72	113	14
Cash Income	395	229	351	219

4.4 Lowland dairy farms

For detailed results see Appendix 1, Table A4, page 64.

In total, 23 organic farms have been used for the lowland dairy identical farm analysis between 2001/02 and 2002/03. Geographically, four farms were in Northern England, nine in Wales, seven in the South West region and three from Central and Eastern England. The full sample of lowland organic dairy farms amounted to 30 farms in total.

The average UAA and dairy cow numbers in the organic sample were approximately 6% higher than for the conventional farms. However, the greater area of bare land and forage hired in by the conventional farm sample narrows the difference in agricultural area. Business size was similar for both identical and full farm samples. Other system differences included slightly lower annual labour units utilised and a stocking rate equivalent to 88% of the conventional farms at 1.5 LSU per effective ha for the organic sample.

Table 11 Summary data for lowland dairy farms (£/ha), 2001/02 and 2002/03

	Identical sample				*Full sample*	
Financial Year Data	2001/02		2002/03		2002/03	
	Org	**Conv.**	**Org**	**Conv.**	**Org**	**Conv.**
Sample number	23	171	23	171	30	273
Average farm size (UAA)	95.7	88.4	96.5	89.0	99.5	91.1
Business Size (ESU)	92.2	93.0	93.9	92.3	96.0	92.6
	£/ha	**£/ha**	**£/ha**	**£/ha**	**£/ha**	**£/ha**
Livestock outputs	1593	1467	1464	1322	1401	1292
Livestock subsidies	29	36	18	36	15	38
Cropping outputs	40	93	68	110	58	93
AAPS / Set-aside	51	50	56	52	54	40
Miscellaneous	58	73	60	83	62	87
Agri-env. payments	65	2	85	5	75	3
TOTAL OUTPUTS	**1836**	**1721**	**1752**	**1608**	**1665**	**1554**
Livestock inputs	613	514	516	471	507	456
Crop inputs	45	125	42	126	45	118
Labour	184	197	198	198	191	191
Machinery	285	263	272	263	271	271
General	131	118	126	121	121	120
Land & rent	262	223	266	236	255	231
TOTAL INPUTS	**1521**	**1438**	**1419**	**1414**	**1390**	**1387**
NFI	316	283	332	194	283	168
Less farmer/spouse labour	167	193	167	197	167	195
Add paid management	0	0	0	0	0	0
Add BLSA	10	18	14	15	11	9
MII	**159**	**109**	**179**	**12**	**119**	**-17**
ONI	318	285	342	200	288	163
Cash Income	450	501	455	396	406	369

Key differences in the identical organic sample include lower livestock output, mainly from milk production but also from cattle and sheep output in 2002/03. The yield and price data indicates that both organic milk yield and price decreased during this period by 4% to 5232 litres/cow and by 10% to 21.8 pence per litre, respectively. Likewise, livestock output fell for the conventional farms with milk price falling by 12% to 17 pence per litre; however, milk yield rose slightly for the conventional farms to 5949 litre/cow. Total outputs fell by 4% to 6% from 2001/02 to 2002/03 for both samples.

Between identical samples, the conventional cropping output was greater than the organic farm sample, which is mostly due to a proportionately greater area of crops grown. Set-aside and arable area aid payments for the organic and conventional samples in both years were similar whilst the organic farm sample received higher agri-environmental payments on a hectare basis than the conventional farms.

Inputs were similar for most categories with the exception of livestock inputs which decreased from 2001/02 to 2002/03. In particular, the reduction in livestock inputs was associated with feed costs. The conventional farm sample reduced feed costs by 10% while the organic farm sample reduced feed costs by 23% in 2002/03.

Net farm income (NFI) for the identical organic farm sample increased from 2001/02 to 2002/03, but decreased for the conventional farms. The organic farms achieved higher NFI values overall. In 2001/02, 14 of the organic farms had higher NFI values than their conventional cluster data and in 2002/03, this applied to 13 of the organic farms. In 2001/02, NFI values were relatively similar between the identical samples yet in 2002/03 the organic farms had 68% higher NFI compared to the conventional comparison. Management and investment income showed similar trends for this farm type.

Overall, the organic farm sample as a whole maintained similar returns on tenant's capital which was 12.5% for 2001/02, increasing to 13.1% for 2002/03. For the conventional farms, this was 6.8% moving to 0.7% for the same period. The full sample of farms for 2002/03 indicated a similar relationship as the identical farms. In total, 18 of the 30 organic farms from the full sample had a greater NFI than the conventional farm comparisons. The return on tenant's capital was 8.7% for the organic sample whilst the conventional farms showed a negative return for this financial period. Returns to total labour units used for the identical samples were £20,370 for the organic farms and £11,305 for the conventional farms based on net farm income and labour calculations.

4.5 Lowland cattle and sheep farms

For detailed results see Appendix 1, Table A5, page 72.

In total, 15 organic farms have been used for lowland cattle and sheep identical farm analysis. Geographically, six farms were in Wales, eight in the South West region and one from Central and Eastern England. From the 2002/03 dataset, there were 19 organic lowland cattle and sheep farms in the full sample.

Both average UAA and business size were similar for the farm samples. The main system differences included 18% more livestock on the conventional farms than the organic farm sample stocking at 1.3 LSU/ha compared to 1.1 LSU/ha on the organic farms. Cattle represented 79% of the stock carried on the organic farms, whilst cattle represented 66% of stock carried by the conventional farms on a livestock unit basis. Sheep mostly made up the remainder of stock carried for both farm samples although the conventional farms on average carried approximately twice as many breeding ewes as the organic farms. Annual labour units were similar for both organic and conventional farms.

Table 12 Summary data for lowland cattle and sheep farms (£/ha), 2001/02 and 2002/03

	Identical sample				*Full sample*	
Financial Year Data	2001/02		2002/03		2002/03	
	Org	**Conv.**	**Org**	**Conv.**	**Org**	**Conv.**
Sample number	15	140	15	140	19	175
Average farm size (UAA)	78.9	77.9	79.7	78.0	79.1	77.3
Business Size (ESU)	27.0	30.3	24.7	29.5	25.3	29.6
	£/ha	**£/ha**	**£/ha**	**£/ha**	**£/ha**	**£/ha**
Livestock outputs	284	355	318	393	335	403
Livestock subsidies	129	157	167	170	161	176
Cropping outputs	17	63	36	59	39	61
AAPS / Set-aside	24	19	20	19	24	18
Miscellaneous	67	75	51	90	60	98
Agri-env. payments	91	13	71	12	76	12
TOTAL OUTPUTS	**612**	**683**	**663**	**743**	**697**	**767**
Livestock inputs	99	161	94	156	97	158
Crop inputs	25	59	21	56	26	59
Labour	43	96	44	97	49	94
Machinery	134	151	147	154	157	163
General	74	72	81	77	82	81
Land & rent	174	164	151	169	153	167
TOTAL INPUTS	**549**	**702**	**537**	**709**	**564**	**723**
NFI	63	-19	126	34	133	44
Less farmer/spouse labour	197	179	203	184	206	181
Add paid management	0	0	0	0	0	1
Add BLSA	2	7	6	15	4	12
MII	**-132**	**-191**	**-71**	**-134**	**-68**	**-124**
ONI	107	15	162	73	159	87
Cash Income	121	160	278	193	281	227

In 2002/03, total output was higher for the identical conventional farms than for the organic farm sample because of higher livestock output and subsidies received. From 2001/02 to 2002/03, both the organic and conventional farms show increased total outputs by 8% and 9%, respectively. Again, livestock outputs and also livestock subsidies increased from 2001/02 to 2002/03 for both samples. The livestock price data indicates that greater values were received for cattle and sheep from 2001/02 and 2002/03. The organic finished stock received higher values than the conventional finished stock, whilst higher values were received for the conventional younger stock/stores than the organic stores.

Other output differences included higher cropping outputs from the conventional farms, although cropping contributed only a small part to total output with only 4-6 ha utilised for this purpose. The organic price data for wheat and barley crops has a low valuation indicating on-farm useage as opposed to selling at a premium off farm. Agri-environmental payments represented some 15% of total output in 2001/02 and 11% in 2002/03 for the organic farms, compared with an average output of 2% from this category for the conventional farms.

In general, inputs remained at similar levels between the organic and conventional farm samples for both years. Livestock inputs however were approximately 40% lower on the organic farms than the conventional farms because of lower feed, vet and medicine and other livestock costs in general. Fixed costs were similar between samples for all general categories.

Overall, the identical organic farm sample indicated a higher net farm income (NFI) in comparison to the conventional farms, and a 100% increase in NFI from 2001/02 to 2002/03. This trend was similar for the conventional farms from 2001/02 to 2002/03; however, the management and investment income indicator for all the data samples is negative. In 2001/02, 11 of the organic farms had higher NFI values than their comparable datasets and in 2002/03, this applied to nine of the organic farms. In terms of returns on tenant's capital, the outcome for this farm type for both samples in both years indicates negative or no returns. In 2002/03, the returns to total labour units were £6,272 on the organic farms and £3,117 for the conventional farms based on net farm income and labour calculations.

4.6 LFA cattle and sheep farms

For detailed results see Appendix 1, Table A6, page 80.

In total, 19 organic farms have been used for the LFA cattle and sheep identical farm analysis. Seventeen of these farms were located in Wales with the remaining two farms located in Northern England.

On comparing the two identical samples, average UAA and business size were similar, although total area for the conventional farms was slightly less than the organic farms as a result of the clustering output. Key system differences include lower stocking levels for the organic farm sample at 0.7 LSU's per ha compared to 1.0-1.1 LSU's per ha for the conventional farms. The lower stocking rate for the organic farm sample translates into lower stock numbers carried per farm. For the organic sample, 30% less stock are carried with the proportion of cattle and sheep managed at 50:50 compared to the conventional farms where the proportion of cattle and sheep is 40:60. The estimated labour useage was 1.6 labour units per year for the organic farms and 1.7 labour units for the conventional farms.

Table 13 Summary data for LFA cattle and sheep farms (£/ha), 2001/02 and 2002/03

	Identical sample				*Full sample*	
Financial Year Data	2001/02		2002/03		2002/03	
	Org	**Conv.**	**Org**	**Conv.**	**Org**	**Conv.**
Sample number	19	246	19	246	22	148
Average farm size (UAA)	111.8	105.8	118.2	107.9	123.7	110.4
Business Size (ESU)	26.3	33.8	26.1	33.7	26.9	31.9
	£/ha	**£/ha**	**£/ha**	**£/ha**	**£/ha**	**£/ha**
Livestock outputs	195	282	217	332	221	294
Livestock subsidies	103	142	130	188	132	173
Cropping outputs	4	9	11	8	10	7
AAPS / Set-aside	4	2	5	2	4	1
Miscellaneous	62	90	54	85	53	81
Agri-env. payments	102	13	83	22	84	23
TOTAL OUTPUTS	**471**	**537**	**500**	**635**	**504**	**579**
Livestock inputs	105	163	106	155	106	134
Crop inputs	22	39	16	36	16	33
Labour	34	59	38	56	41	51
Machinery	101	113	101	114	104	108
General	38	48	45	50	45	49
Land & rent	98	107	100	110	104	108
TOTAL INPUTS	**398**	**528**	**406**	**521**	**416**	**482**
NFI	73	9	93	114	88	97
Less farmer/spouse labour	127	126	120	127	111	123
Add paid management	0	0	0	0	0	0
Add BLSA	5	4	2	4	2	2
MII	**-49**	**-113**	**-25**	**-9**	**-20**	**-23**
ONI	88	33	111	141	114	124
Cash Income	123	143	181	236	179	220

From 2001/02 to 2002/03, total output for the identical farm samples increased by 6% for the organic farms and by 18% for the conventional farms. Increases in livestock outputs and subsidies from 2001/02 to 2002/03 were the main factor with similar output trends for other output categories. The livestock price data indicates that prices rose for most ruminant stock categories in 2002/03 with the exception of a falling finished beef livestock value in 2002/03 from £691/head to £636/head for the organic farms. Overall, organic stock made higher values than the conventional livestock for both years in general, however store cattle prices were higher for the conventional stock in 2002/03 than the organic stores for these farms. This trend is similarly shown for sheep where finished lambs sold at higher prices on average compared to the conventional lambs, but again store lambs from the conventional farms fetched higher prices.

Livestock subsidies increased for all samples. This is expected with increases in all livestock subsidy rates for cattle and sheep from 2001/02 to 2002/03.

The organic farms received higher agri-environmental payments than the conventional farms. Agri-environmental payments represented 22% and 17% of total output for the organic farms from 2001/02 to 2002/03, respectively. The reduction in percentage terms is due to lower payments received from the Organic Farming Scheme; however greater output was generated from other environmental scheme revenues in 2002/03. Conversely, agri-environmental payments represented only 2-3% of total output from the conventional farms.

Cropping represented a small part of land utilisation by the LFA cattle and sheep farm type. Where crops were grown, yields were generally lower in 2002/03, although fairly similar between the organic and conventional farm samples. Overall organic crops were valued higher than conventional crops.

Input categories were also similar with no substantial changes in 2002/03 for the organic and conventional farms. Livestock inputs were lower for the organic farms compared to the conventional farms by approximately 40%. Fixed cost type inputs were similar for the organic and conventional samples in 2001/02 and 2002/03 although labour costs were between 47% and 74% higher for the conventional farms than the organic farm sample.

Overall, net farm income (NFI) rose substantially for the conventional farm sample in 2002/03 and by 23% for the organic farm sample. The identical organic sample shows a higher NFI on a hectare basis in 2001/02 whilst the conventional farms have a higher NFI for 2002/03. The slightly higher NFI value for the conventional farms is also shown for the full sample of conventional farms in 2002/03. However on a £ per farm basis, NFI is similar for 2002/03 for both organic and conventional farms. Management and investment incomes are negative for all farm samples in both years. In 2001/02, 12 of the organic farms had higher NFI values than their conventional datasets and in 2002/03, this applied to nine of the organic farms. In terms of returns on tenant's capital, neither the organic nor the conventional farm samples were able to make a positive return. Returns to total labour units used for the identical samples were £7,796 for the organic farms and £8,732 for the conventional farms based on net farm income and labour calculations.

4.7 Mixed farms

For detailed results see Appendix 1, Table A7, page 88.

In total, there were nine organic farms in the identical mixed farm analysis. All farms were classified as cropping, cattle and sheep types. One farm was located in Wales, three in Central and Eastern England and the remaining farms were in South West England. The full sample comprises 15 cropping, cattle and sheep and one mixed livestock farm.

Average UAA and business size were similar between the identical datasets. Main differences included a higher cropping area on the conventional farms by 50%, mostly allocated to cereal production. The organic farms had a greater area allocated to grassland, although on average, effective forage area was only 10% higher as the conventional farms hired in additional land for forage purposes. Stocking rates were similar for both farm samples, although the proportion of cattle and sheep differed. Cattle represented 76% of the organic livestock compared to 60% for the conventional farms. Sheep in general made up the remaining livestock carried although some farms did have pig and poultry enterprises. Labour useage was higher on the organic farms by 0.8 labour units.

Table 14 Summary data for mixed farms (£/ha), 2001/02 and 2002/03

	Identical sample				*Full sample*	
Financial Year Data	2001/02		2002/03		2002/03	
	Org	**Conv.**	**Org**	**Conv.**	**Org**	**Conv.**
Sample number	9	42	9	42	16	102
Average farm size (UAA)	135.1	129.8	130.0	133.5	125.6	115.4
Business Size (ESU)	59.4	62.7	50.6	64.8	53.8	56.0
	£/ha	**£/ha**	**£/ha**	**£/ha**	**£/ha**	**£/ha**
Livestock outputs	286	280	294	340	427	349
Livestock subsidies	116	114	144	136	128	128
Cropping outputs	165	223	173	232	196	262
AAPS / Set-aside	82	99	80	98	93	105
Miscellaneous	47	72	43	67	48	102
Agri-env. payments	70	11	105	13	104	8
TOTAL OUTPUTS	**765**	**799**	**838**	**887**	**996**	**955**
Livestock inputs	125	164	116	175	211	183
Crop inputs	52	113	57	123	66	122
Labour	145	92	155	90	127	102
Machinery	178	172	190	167	201	192
General	85	65	89	68	85	78
Land & rent	164	180	175	172	176	165
TOTAL INPUTS	**748**	**785**	**783**	**796**	**866**	**842**
NFI	17	13	56	91	130	113
Less farmer/spouse labour	97	111	104	112	127	136
Add paid management	0	0	0	0	0	0
Add BLSA	0	4	6	18	4	11
MII	**-80**	**-94**	**-42**	**-2**	**8**	**-12**
ONI	-9	29	52	99	104	108
Cash Income	123	169	254	190	255	237

From the results, livestock and livestock subsidy output represented approximately 50% of total output with cropping-associated outputs representing between 30% and 40%. Output generated from agri-environmental payments differed more markedly between samples with the organic farms deriving 9% and 12.5% of output from this revenue source in 2001/02 and 2002/03, respectively. On the conventional farms, agri-environmental payments represented only 1% to 1.5% of total output.

Livestock outputs increased marginally on the organic farms in 2002/03 whilst increasing by 21% on the conventional farms. For cattle, the price data indicates that the organic finished cattle values were slightly higher than conventional stock whilst conventional store cattle of all age groups and beef heifers in calf had greater values on average than the equivalent organic stock in 2001/02. In 2002/03, the organic finished cattle value was 30% higher than the previous year at £737/head and nearly 50% higher than conventional finished cattle. For sheep, organic ewe and finished lamb values were higher than conventional stock at £32/ewe and £59/head with prices remaining mostly unchanged from 2001/02 to 2002/03. Output derived from organic sheep was 75% of the conventional output generated from the conventional sheep flocks although the latter were double the size of the organic flocks on average. Livestock subsidy outputs increased slightly for cattle enterprises whilst sheep subsidies received doubled in 2002/03 for both the organic and conventional mixed farms.

Cropping output decreased on the organic farms from 2001/02 to 2002/03 by 13% whilst increasing by 9% for the conventional farms. Cropping output from the organic farm sample was 20% lower than the conventional farms and land utilised for arable cropping on the organic farms was the equivalent of 69% of the conventional cropping area. In 2002/03, the price and yield data for wheat showed that organic crops yielded 38% less than conventional crops and achieved a similar 38% premium for the crop above conventional prices at £124/tonne. Again, the organic price data indicate a reduction in crop values for wheat and barley by 10% in 2002/03 whilst conventional values remained constant for this farm type category in 2002/03.

Inputs associated with crop and livestock production show similar trends from 2001/02 to 2002/03 for the organic and conventional farms. The main differences in input costs between farm samples include lower livestock costs for the organic farms than for the conventional farms by 26% in 2001/02 and by 55% in 2002/03 and higher cropping costs for the conventional farms by 108% in 2001/02 and 122% in 2002/03 than for the organic farms. Fixed costs including labour, machinery, general farming and land expenses and rent were similar in both years for both farm samples, but the organic farms had 20% higher fixed costs compared to the conventional farms.

Overall, net farm income was marginally higher for the organic farms in 2001/02 than for the conventional farms. In 2002/03, the conventional farms had a higher net farm income than the organic farm sample. The management and investment incomes for both identical and full farm samples were negative in both years with the exception of the full sample for the organic farms. Likewise, return on tenant's capital was zero or negative for both years. Returns to total labour used were £6,496 for the organic farms and £9,161 for the conventional farms in 2002/03 based on net farm income and labour calculations.

5. Gross margins

Tables 15 to 22 show gross margin results for specific livestock and crop enterprises from the organic study farms for 2002/03 alongside the 2001/02 data. Gross margin figures are for certified organic enterprises, but may include some livestock/crops sold at conventional prices. All gross margin data has been calculated by simple averages.

Altogether, 134 different crop enterprise gross margins were collected excluding data from the horticultural farms, but few crops had sufficient samples to validate results i.e. a minimum of five enterprises. Gross margins are presented for ten crops for the 2002/03 harvest year. Crop outputs include revenue and imputed values for farmhouse consumption, feed used on farm and a closing valuation for any unsold crop. Where available, data from 2001/02 have been included for comparison purposes. It should be noted that the data are **not** from identical farms and that **not** all farms were eligible for arable area payments.

Table 15 Organic dairy gross margins (£/cow), 2002/03

Herd Size	41-80	>81	Top 5	All herds	All herds 2001/02
Number of herds	5	7	5	12	18
Average farm area - actual ha	66.2	190.3	111.1	138.6	187.0
-effective ha	61.6	179.9	106.9	130.6	176.1
Average size of the farm business (ESU)	48.1	179.9	107.9	125.0	143.0
Average size of herd (dairy cows)	53	137	109	102	110
Average milk yield (litres per cow)	5596	5699	6006	5656	5868
Implied milk price (ppl)	22.34	20.99	24.21	21.55	23.69
Enterprise output (£ per cow)					
Milk disposals (1)	1250	1196	1454	1219	1390
Calves - sales and transfers out	66	59	84	62	50
Bulls & cows - sales and transfers out	1	1	1	1	82
Net milk quota	7	-14	4	-5	5
Valuation change	33	25	11	28	79
Less: purchases & transfers in	115	152	101	137	212
Total enterprise output	1242	1116	1453	1169	1395
Variable Costs (£ per cow)					
Concentrates	274	222	267	244	277
Purchased bulk feed	5	7	6	6	12
Stock keep	0	0	0	0	0
Veterinary & medicines	16	33	28	26	27
Other livestock costs - dairy	88	117	121	105	123
Total variable costs	383	379	422	380	439
Margin over concentrates	971	968	1181	969	1101
Gross margin before forage costs	860	737	1031	788	955
Gross margin including forage costs	768	664	932	711	861
Forage variable costs (£ per farm)					
Seeds	551	1857	1513	1313	2626
Fertilisers	1093	3673	2527	2598	1845
Sprays	4	0	0	2	8
Other forage costs	5543	9220	12624	7688	11401
Total forage variable costs	7191	14749	16664	11600	15879
% of forage variable costs to dairy	68	68	65	68	65
Forage varable costs per cow	92	73	99	77	95

(1) Including milk to calves and farmhouse

* Top five farms are based on the highest gross margin including forage cost data.

Table 16 Lowland farms, organic cattle gross margins (£/cow), 2002/03

Herd Size	<35	>35	All herds	All herds 2001/02
Number of herds	11	7	18	14
Average farm area - actual ha	79.1	97.4	86.2	81.8
-effective ha	73.8	93.5	81.4	76.8
Average size of the farm business (ESU)	22.4	27.0	24.2	24.8
Average size of herd (breeding cows)	22	45	31	35
Enterprise output (£ per cow)				
Calf Sales	14	26	18	17
Other store cattle - sales & transfers out	170	122	151	106
Bulls & cows - sales & transfers out	21	41	29	37
Finished cattle sales	390	339	370	267
Net SCP quota leased	-18	-23	-20	-17
Cattle subsidies - SCP	201	177	191	169
Cattle subsidies - BSP	96	82	90	82
Cattle subsidies - other	27	20	24	15
Valuation change	-27	0	-17	32
Less: purchases & transfers in	98	85	93	69
Total enterprise output	775	699	746	640
Variable Costs (£ per cow)				
Concentrates	87	60	76	51
Purchased bulk feed	9	21	13	11
Stock keep	0	0	0	0
Veterinary & medicines	23	23	23	19
Other livestock costs - beef	81	59	72	55
Total variable costs	199	163	185	136
Gross margin before forage costs	576	537	561	504
Gross margin including forage costs	425	459	451	445
Forage variable costs (£ per farm)				
Seeds	749	179	527	298
Fertilisers	1282	101	823	372
Sprays	30	0	18	0
Other forage costs	1890	3726	2604	1972
Total forage variable costs	3951	4006	3972	2642
% of forage variable costs to beef	84	87	85	79
Forage varable costs per cow	151	78	110	59

Table 17 LFA farms, organic cattle gross margins (£/cow), 2002/03

Herd Size	<20	>20	All herds	All herds 2001/02
Number of herds	6	5	11	13
Average farm area - actual ha	137.2	164.4	149.6	159.3
-effective ha	132.7	119.4	126.7	127.2
Average size of the farm business (ESU)	20.3	32.4	25.8	2.5
Average size of herd (breeding cows)	15	41	27	24
Enterprise output (£ per cow)				
Calf Sales	55	0	30	8
Other store cattle - sales & transfers out	83	226	148	148
Bulls & cows - sales & transfers out	48	38	43	51
Finished cattle sales	200	304	247	96
Net SCP quota leased	-36	-19	-28	-15
Cattle subsidies - SCP	147	149	148	156
Cattle subsidies - BSP	64	94	78	62
Cattle subsidies - other	14	20	17	6
Valuation change	101	44	75	113
Less: purchases & transfers in	164	156	161	63
Total enterprise output	512	700	597	563
Variable Costs (£ per cow)				
Concentrates	133	136	134	96
Purchased bulk feed	10	4	8	9
Stock keep	0	4	2	9
Veterinary & medicines	61	19	42	25
Other livestock costs - beef	79	75	77	57
Total variable costs	283	238	263	196
Gross margin before forage costs	229	462	335	368
Gross margin including forage costs	109	414	262	269
Forage variable costs (£ per farm)				
Seeds	114	257	179	300
Fertilisers	1128	1551	1320	2095
Sprays	0	0	0	5
Other forage costs	3434	1471	2542	2021
Total forage variable costs	4676	3279	4041	4420
% of forage variable costs to beef	38	59	48	54
Forage varable costs per cow	120	48	73	98

Table 18 Lowland farms, organic breeding sheep gross margins (£/ewe), 2002/03

Flock Size	<200	>200	Lowland (All)	Lowland (All) 2001/02
Number of flocks	10	5	15	16
Average farm area - actual ha	83.6	164.5	110.6	145.9
-effective ha	77.5	156.9	104.0	135.1
Average size of the farm business (ESU)	23.2	71.1	39.1	61.6
Average size of flock (breeding ewes)	116	318	183	199
Lambs reared per ewe	1.09	1.56	1.36	1.27
Finished lambs sold per ewe	1.00	1.38	1.22	1.17
Enterprise output (£ per ewe)				
Lamb sales - store	1.9	7.4	3.7	1.7
- finished	52.9	66.2	57.4	49.6
Ewe and ram sales	7.9	8.3	8.1	2.8
Other sheep sales	1.3	0.6	1.1	3.5
Wool sales	1.3	1.3	1.3	1.3
Net SAP quota leased	0.0	-0.1	0.0	0.0
Sheep subsidies - SAP	12.3	15.4	13.3	6.2
Sheep subsidies - other	0.0	0.0	0.0	0.0
Valuation change	-3.5	-6.1	-4.4	-4.9
Less: sheep purchases	5.8	6.7	6.1	4.9
Total enterprise output	68.3	86.2	74.3	55.3
Variable Costs (£ per ewe)				
Concentrates	9.5	8.1	9.0	8.0
Purchased bulk feed	0.2	0.0	0.2	0.3
Stock keep	0.0	0.0	0.0	0.0
Veterinary & medicines	3.1	4.1	3.4	2.6
Other livestock costs - sheep	5.5	9.4	6.8	6.6
Total variable costs	18.2	21.7	19.4	17.5
Gross margin before forage costs	50.1	64.5	54.9	37.8
Gross margin including forage costs	43.7	51.1	46.0	23.2
Forage variable costs (£ per farm)				
Seeds	249	2206	901	1818
Fertilisers	526	1261	771	390
Sprays	0	100	33	0
Other forage costs	1721	4177	2540	4640
Total forage variable costs	2496	7745	4246	6848
% of forage variable costs to lamb	30	55	38	42
Forage varable costs per ewe	6.4	13.4	8.9	14.6

Table 19 LFA farms, organic breeding sheep gross margins (£/ewe), 2002/03

Flock Size	<300	>300	All flocks	All flocks 2001/02
Number of flocks	6	5	11	13
Average farm area - actual ha	71.4	230.5	143.7	154.4
-effective ha	68.5	183.8	120.9	122.4
Average size of the farm business (ESU)	15.4	30.0	22.1	22.5
Average size of flock (breeding ewes)	190	654	401	407
Lambs reared per ewe	1.05	0.91	0.95	0.88
Finished lambs sold per ewe	0.89	0.68	0.73	0.40
Enterprise output (£ per ewe)				
Lamb sales - store	0.4	1.8	1.0	0.6
- finished	41.7	26.4	34.7	15.6
Ewe and ram sales	3.0	3.4	3.2	6.1
Other sheep sales	0.0	0.9	0.4	0.5
Wool sales	0.8	0.9	0.9	0.9
Net SAP quota leased	-0.1	-0.1	-0.1	0.0
Sheep subsidies - SAP	19.2	19.6	19.4	13.1
Sheep subsidies - other	0.4	0.0	0.2	0.0
Valuation change	-3.3	-1.0	-2.3	2.3
Less: sheep purchases	3.5	2.1	2.9	1.1
Total enterprise output	58.6	49.9	54.6	38.0
Variable Costs (£ per ewe)				
Concentrates	8.8	3.6	6.4	10.0
Purchased bulk feed	0.3	0.4	0.4	0.4
Stock keep	0.8	0.5	0.7	0.6
Veterinary & medicines	3.5	1.2	2.5	2.4
Other livestock costs - sheep	6.0	3.0	4.7	5.5
Total variable costs	19.5	8.7	14.6	18.8
Gross margin before forage costs	39.1	41.2	40.0	19.2
Gross margin including forage costs	34.8	34.4	34.6	13.7
Forage variable costs (£ per farm)				
Seeds	116	354	224	307
Fertilisers	640	1607	1079	1960
Sprays	0	0	0	5
Other forage costs	895	4002	2307	1861
Total forage variable costs	1651	5964	3611	4133
% of forage variable costs to lamb	49	75	61	54
Forage varable costs per ewe	4.3	6.8	5.5	5.5

Table 20 Organic pig gross margins (£/sow), 2002/03

Herd Size	All herds	All herds 2001/02
Number of herds	5	5
Average farm area - actual ha	538.5	538.5
-effective ha	416.5	416.5
Average size of the farm business (ESU)	210.6	180.6
Size of pig herd - average number	140	109
Piglets reared per sow	14.0	17.0
Enterprise output (£ per sow)		
Sales - fat pigs	1859	1492
- store pigs	0	0
- weaners	0	0
- gilts	0	0
- boars and sows	13	0
Less : purchases / replacements	77	84
Total enterprise output	1795	1408
Variable Costs (£ per sow)		
Concentrates	1282	1001
Purchased bulk feed	4	4
Stock keep	0	0
Veterinary and medicines	17	21
Other livestock costs - pigs	108	238
Total variable costs	1411	1264
Gross margin (£ per sow)	384	145

Table 21 Organic layer gross margins (£/hen), 2002/03

Flock Size	**All flocks**
Number of flocks	5
Average farm area - actual ha	45.4
-effective ha	41.3
Average size of the farm business (ESU)	23.8
Size of total flock - average number	3920
Egg production (dozens)	68694
Enterprise output (£ per hen)	
Hen sales	0.01
Egg sales	29.05
Valuation change	0.34
Less : purchases of hens	4.05
Total enterprise output	25.36
Variable Costs (£ per hen)	
Concentrates	18.59
Veterinary and medicines	0.33
Other livestock costs - poultry	0.27
Total variable costs	19.19
Gross margin (£ per hen)	**6.17**

Table 22 Gross margins for organic arable and horticultural crops (£/ha), 2001/02 and 2002/03

	Winter Wheat		Spring wheat		Triticale		Spring barley		Winter oats	
	2001/02	2002/03	2001/02	2002/03	2001/02	2002/03	2001/02	2002/03	2001/02	2002/03
Number of enterprises	14	14	5	8	-	8	14	13	-	8
Area of crop grown (ha.)	28	52	6	16	-	12	40	13	-	9
Total production (tonnes)	99	249	27	55	-	39	137	25	-	58
Yield tonnes per hectare	3.5	4.8	4.3	3.4	-	3.2	3.4	1.9	-	6.6
Crop Value (£ per tonne)	186	128	181	130	-	133	140	125	-	93
Enterprise output (£ per ha)										
Closing valuation	301	82	253	105	-	71	285	125	-	52
Revenue	220	457	430	216	-	159	57	37	-	373
Farm house consumption, benefits in kind	0	12	0	30	-	24	2	7	-	113
Feed used on farm	135	65	88	94	-	171	137	67	-	72
Area payments and other subsidies	135	226	219	212	-	218	125	198	-	511
Total enterprise output	790	841	989	658	-	642	605	433	-	1122
Variable Costs (£ per ha)										
Seeds	50	45	68	91	-	43	41	43	-	36
Fertilisers	2	6	0	0	-	1	1	3	-	56
Crop protection	12	0	0	0	-	0	0	3	-	0
Other crop costs	37	38	97	35	-	10	61	27	-	94
Casual labour	n/a	n/a	n/a	n/a	-	n/a	n/a	n/a	-	n/a
Total variable costs	101	89	165	125	-	54	102	78	-	186
Gross margin (£ per ha)	689	752	824	532	-	588	504	356	-	935

	Spring oats		Beans - stock feed		Ware potatoes		Sugar beet		Leeks	
	2001/02	2002/03	2001/02	2002/03	2001/02	2002/03	2001/02	2002/03	2001/02*	2002/03
Number of enterprises	10	13	10	12	5	5	-	5	-	5
Area of crop grown (ha.)	17	14	17	23	18	13	-	12	-	3
Total production (tonnes)	82	55	42	52	68	129	-	168	-	57
Yield tonnes per hectare	4.9	3.9	2.5	2.2	13.5	25.8	-	33.5	11.8	11.4
Crop Value (£ per tonne)	85	125	160	151	294	199	-	52	899	765
Enterprise output (£ per ha)										
Closing valuation	153	253	110	19	1	121	-	0	0	0
Revenue	214	152	185	254	3986	5003	-	1736	10632	8734
Farm house consumption, benefits in kind	10	8	44	0	0	0	-	0	0	0
Feed used on farm	34	80	57	66	0	0	-	0	0	0
Area payments and other subsidies	202	184	233	264	0	0	-	0	0	0
Total enterprise output	613	677	630	603	3987	5124	-	1736	10632	8734
Variable Costs (£ per ha)										
Seeds	63	57	42	33	651	996	-	246	1705	2906
Fertilisers	0	5	0	3	75	103	-	4	67	97
Crop protection	0	5	18	0	197	167	-	27	6	84
Other crop costs	44	15	21	25	392	610	-	569	6	1587
Casual labour	n/a	n/a	n/a	n/a	332	806	-	34	5664	3334
Total variable costs	107	81	80	60	1647	2682	-	880	7448	8008
Gross margin (£ per ha)	506	595	550	543	2340	2442	-	856	3184	726

* Source: HDRA

6. Benchmarking

Tables 23 to 25 show costs of production data for organic milk, beef and lamb production. The 2002/03 average and top 5 (low cost) results are shown alongside data for 2001/02. Results shown are average cost of production data and the top 5 represents farms with the lowest costs of production within the sample. It should be noted that the data is not from identical samples, but is derived from the organic farm data collected by the Aberystwyth based Farm Business Survey Unit for this research work to acquire the correct level of detail for the represented years.

The cost of production data is calculated according to standard procedures whereby the variable costs relate to actual enterprise costs whilst the forage costs are proportioned according to the weighting of the livestock enterprise on the basis of livestock units associated with each livestock enterprise. This methodology is also carried out for allocating the fixed/overhead costs and other outputs except that there is a further adjustment to account for the weighting of any arable enterprises within the whole farm system. Here, values are allocated on the basis of livestock units and the percentage area that is utilised by the livestock enterprises as a whole. This methodology assists to prevent allocating arable costs to the livestock enterprises. All outputs and costs are then divided by the unit of production, this being litres for milk and kilograms for beef and lamb production.

6.1 Dairy enterprise data

For the dairy enterprise, the costs of production results are taken from 10 dairy farms comprising eight lowland and two LFA farm types in 2002/03. The 2001/02 group comprises 11 lowland dairy farms and four LFA dairy farms. To highlight a few key features, there was an increase in total costs from 2001/02 to 2002/03 of 0.42 pence per litre in addition to a more significant reduction in the price received for milk of 2.34 pence per litre. Consequently, this had a negative impact on the margin of production, which reduced by 2.7 pence per litre between years for the two groups of farms.

The main physical differences between the top 5 (low cost) and average groups for 2002/03 included smaller farm size and herd size for the top 5 group as well as lower average milk yields per cow. The margin of production difference was 3.08 pence per litre higher for the top 5 (low cost) group compared to the average, with the top 5 (low cost) group receiving just over a penny a litre more in outputs and producing at just over two pence per litre less in total production costs mainly associated with lower fixed costs.

The margin of production figures exclude the unpaid labour costs required to operate the enterprise associated with the farmer/spouse and other unpaid farm members. When including these costs for the 2002/03 data, the average group maintained a positive margin of production of 4.56 pence per litre as did the top 5 (low cost) group at 7.89 pence per litre.

Table 23 Milk: benchmarking data

	2002/03		2001/02
Sample size	10	Top 5	15
Herd size - numbers	98.6	82.1	95.8
Herd size - LU	98.6	82.1	95.8
Total Grazing LU	150.5	129.9	150.8
Litres of milk produced per cow	5472	5173	5859
Percentage Dairy LU to Total GLU	65.5	63.2	63.5
Farm size - effective hectares	100.7	88.4	99.5
Farm size - ESU	91.2	71.9	95.2
% of area used for forage/grazing	94.4	97.5	90.9
OUTPUTS	ppl	ppl	ppl
Dairy - milk	22.11	22.95	24.45
- livestock purchases, sales and transfers	-0.19	-0.80	0.05
- net milk quota	-0.05	0.08	0.22
- slaughter premium	0.13	0.13	0.00
- valuation change	0.44	0.96	0.12
Dairy output	**22.44**	**23.31**	**24.84**
OTHER RELATED OUTPUTS			
LFA and agri-environmental payments	0.67	0.88	0.64
Miscellaneous revenue	0.35	0.24	0.36
By-products and forage	0.31	0.39	0.21
Other output	**1.33**	**1.52**	**1.21**
TOTAL OUTPUTS	**23.77**	**24.83**	**26.05**
Margin of production - pence per litre	**7.22**	**10.30**	**9.92**
(excluding unpaid labour costs)			

	2002/03		2001/02
	10	Top 5	15
COSTS	ppl	ppl	ppl
Concentrates	3.67	3.99	3.92
Purchased bulk feed (hay & straw)	0.10	0.05	0.20
Stock keep	0.00	0.00	0.00
Veterinary and medicines	0.48	0.32	0.31
Other livestock costs - dairy	1.83	1.58	1.39
Herd replacement	1.05	0.86	0.74
Total variable costs	**7.14**	**6.80**	**6.56**
Seeds	0.16	0.14	0.20
Fertilisers	0.28	0.24	0.20
Sprays	0.00	0.00	0.00
Other forage costs	0.80	0.85	1.01
Total forage costs	**1.25**	**1.22**	**1.41**
Paid labour	1.19	0.87	1.41
Casual labour	0.17	0.31	0.39
Machinery - contract work	0.11	0.10	0.10
- repairs	0.77	0.51	0.81
- fuels	0.39	0.26	0.32
-depreciation	1.11	0.78	1.05
Buildings depreciation	0.35	0.22	0.45
General farm costs	0.74	0.66	0.82
Water	0.15	0.13	0.18
Electricity	0.24	0.21	0.24
Land expenses	1.02	0.71	0.41
Insurance	0.39	0.23	0.28
Rent	0.78	1.03	0.81
Interest payments	0.74	0.49	0.88
Total fixed costs	**8.16**	**6.50**	**8.15**
TOTAL COSTS	**16.55**	**14.53**	**16.13**
Unpaid labour	0.06	0.10	0.32
Unpaid farmer and spouse labour	2.60	2.41	1.95

6.2 Beef enterprise data

The beef production data are taken from 20 farms in 2002/03 and seven farms in 2001/02. Average cost of production data is shown for **both** suckler store and finishing beef herd enterprises. The suckler store beef enterprises contains three LFA and four farms from lowland areas whilst the finishing beef enterprise data are derived from five LFA farms and eight lowland farms. The 2001/02 average cost of production data are derived from three LFA and four lowland farm types. Again, it should be noted that the top 5 group represents the lowest cost of production enterprises from the 2002/03 data.

The physical data between the top 5 (low cost) and average group for the suckler store beef enterprise are mostly similar although farm size is greater for the average dataset than the top 5 (low cost). Financial outputs from the beef enterprise alone were similar between datasets with the average group achieving higher other related output than the top 5 (low cost) group. Nevertheless, margins are greater for the top 5 (low cost) group due to lower variable and fixed costs, particularly feed, labour, machinery repair and rental costs.

The margin of production figures excludes the labour costs required to operate the enterprise at farm level. When included, the calculated costs of production figures for unpaid labour indicate that both the top 5 (low cost) and average group would have a negative margin of 53.8 and 72.1 p/kg liveweight, respectively.

For the finishing beef enterprises recorded, there is greater variation between physical characteristics of the top 5 (low cost) and average. The top 5 group has 20 beef cows more than the average producing significantly more beef overall and on a beef produced per cow basis. Farm size and business size were similar. Financial outputs were similar between the top 5 (low cost) and average dataset although the average group achieved higher p/kg liveweight overall than the top 5 (low cost) group. Other related outputs were higher for the average group on a p/kg liveweight basis by nearly four fold. The lower costs associated with the top 5 (low cost) group in were mainly applicable to feed, vet and forage costs by some margin as well as overhead costs by some 45%. This equated to a better margin overall for the top 5 (low cost) group overall.

The margin of production figures exclude the labour costs required to operate the enterprise at farm level. When included, the calculated costs of production figures for unpaid labour indicate that the average group would have a negative margin of production of 55.9 pence per kilogram, although positive for the top 5 (low cost) group at 13.8 pence per kilogram liveweight for beef finishing herds.

On comparing the suckler store and beef finishing herds, the farm size is similar although the suckler store herds carry approximately half the number of beef cows. The output and cost figures are similar in their proportion to each other as are the margins of production. However, a main difference is the number of kilograms of beef produced with the beef finishing herds producing significantly greater quantities of beef over the production cycle than the store producers. This difference does have an impact on unpaid labour costs which are higher for the suckler store enterprises than the beef finishing enterprises.

Table 24 Beef: Benchmarking data for suckler store herds

	2002/03		2001/02
Sample size	7	Top 5	7
Herd size - numbers	23.4	24.0	29.6
Herd size - LU	35.7	37.2	46.8
Total Grazing LU	67.0	55.9	78.5
Percentage Beef LU to Total GLU	53.3	66.4	59.6
Kilograms beef produced	7273	7122	11441
Average beef produced per cow	310.4	296.8	386.9
Farm size - effective hectares	117.2	90.0	112.8
Farm size - ESU	27.1	22.9	30.5
Forage area % from total UAA	85.2	85.2	90.7
OUTPUTS	p/kg LW	p/kg LW	pence/kg
Beef - output	101.84	94.15	95.29
- subsidies	92.02	88.69	76.14
- valuation change	14.37	21.83	10.04
Beef output	**208.23**	**204.67**	**181.48**
OTHER RELATED OUTPUTS			
LFA and agri-environmental payments	75.53	60.14	45.01
Miscellaneous revenue	10.39	12.03	11.63
By-products and forage	15.12	7.72	7.48
Other output	**101.03**	**79.89**	**64.11**
TOTAL OUTPUTS	**309.27**	**284.56**	**245.59**
Margin of production - pence per kilogram (excluding unpaid labour costs)	**36.75**	**55.87**	**54.95**

	2002/03		2001/02
	7	Top 5	7
COSTS	p/kg LW	p/kg LW	p/kg LW
Concentrates	26.95	12.45	14.34
Purchased bulk feed (hay & straw)	3.25	4.55	1.21
Stock keep	0.00	0.00	0.00
Veterinary and medicines	3.82	3.83	4.45
Other livestock costs - beef	24.00	21.28	15.48
Net SCP quota leased	3.58	3.74	5.62
Herd replacement	9.17	6.29	-1.49
Total variable costs	**70.77**	**52.15**	**39.60**
Seeds	5.39	2.34	1.22
Fertilisers	19.83	25.01	10.13
Sprays	0.28	0.00	0.04
Other forage costs	13.98	10.88	8.60
Total forage costs	**39.48**	**38.23**	**19.99**
Paid labour	9.57	0.00	0.00
Casual labour	1.24	0.90	4.98
Machinery - contract work	2.72	1.92	3.68
- repairs	19.20	14.39	13.30
- fuels	12.06	10.32	9.89
-depreciation	21.80	21.80	24.35
Buildings depreciation	6.72	7.60	5.77
General farm costs	23.66	21.08	15.52
Water	2.03	1.28	1.18
Electricity	1.73	1.54	0.95
Land expenses	10.84	10.42	12.31
Insurance	11.70	11.10	7.20
Rent	17.50	13.53	20.62
Interest payments	21.50	22.43	11.31
Total fixed costs	**162.27**	**138.31**	**131.06**
TOTAL COSTS	**272.51**	**228.69**	**190.64**
Unpaid labour	2.72	1.67	20.93
Unpaid farmer and spouse labour	87.87	126.25	69.69

Table 25 Beef: Benchmarking data for finishing beef herds

	2002/03		2001/02
Sample size	13	Top 5	7
Herd size - numbers	41.2	61.7	29.6
Herd size - LU	68.3	103.3	46.8
Total Grazing LU	85.0	112.9	78.5
Percentage Beef LU to Total GLU	80.4	91.4	59.6
Kilograms beef produced	16240	28687	11441
Average kilograms of beef produced per cow	393.9	465.2	386.9
Farm size - effective hectares	110.8	99.3	112.8
Farm size - ESU	33.1	31.8	30.5
Forage area % from total UAA	84.0	95.5	90.7
OUTPUTS	p/kg LW	p/kg LW	p/kg LW
Beef - output	131.69	123.40	95.29
- subsidies	74.91	68.98	76.14
- valuation change	5.62	6.23	10.04
Beef output	**212.22**	**198.61**	**181.48**
OTHER RELATED OUTPUTS			
LFA and agri-environmental payments	41.89	11.93	45.01
Miscellaneous revenue	7.53	4.28	11.63
By-products and forage	16.81	1.31	7.48
Other output	**66.23**	**17.52**	**64.11**
TOTAL OUTPUTS	**278.45**	**216.14**	**245.59**
Margin of production - pence per kilogram (excluding unpaid labour costs)	**29.10**	**66.95**	**54.95**

	2002/03		2001/02
	13	Top 5	7
COSTS	p/kg LW	p/kg LW	p/kg LW
Concentrates	27.81	12.88	14.34
Purchased bulk feed (hay & straw)	3.05	0.00	1.21
Stock keep	0.37	0.00	0.00
Veterinary and medicines	7.47	3.28	4.45
Other livestock costs - beef	20.60	18.69	15.48
Net SCP quota leased	5.29	10.71	5.62
Herd replacement	6.55	5.50	-1.49
Total variable costs	**71.13**	**51.06**	**39.60**
Seeds	3.47	0.63	1.22
Fertilisers	5.73	2.24	10.13
Sprays	0.03	0.00	0.04
Other forage costs	20.14	14.66	8.60
Total forage costs	**29.37**	**17.54**	**19.99**
Paid labour	1.75	0.00	0.00
Casual labour	2.10	0.00	4.98
Machinery - contract work	12.24	1.40	3.68
- repairs	13.07	8.83	13.30
- fuels	9.96	6.17	9.89
-depreciation	25.05	15.90	24.35
Buildings depreciation	2.22	4.30	5.77
General farm costs	23.67	10.25	15.52
Water	1.11	1.33	1.18
Electricity	2.48	0.55	0.95
Land expenses	9.24	10.10	12.31
Insurance	11.27	7.48	7.20
Rent	22.20	13.63	20.62
Interest payments	12.49	0.66	11.31
Total fixed costs	**148.85**	**80.59**	**131.06**
TOTAL COSTS	**249.35**	**149.19**	**190.64**
Unpaid labour	27.64	11.18	20.93
Unpaid farmer and spouse labour	57.44	41.90	69.69

6.3 Lamb enterprise data

The cost of production data for lamb production is taken from 16 farms in 2002/03 and eight farms in 2001/02. Data is shown for breeding ewe enterprises that sell store/finished stock and is derived from six LFA farms and 10 lowland farm types in 2002/03, whilst the 2001/02 group contains four lowland and four LFA farms. Again, it should be noted that the data are not based on identical samples for the two financial years and the top 5 group represents the lowest cost of production enterprises from the 2002/03 data.

The top 5 (low cost) dataset includes four lowland and one LFA farms. Average flock size is half that of the average group and farm size is smaller for the top 5 (low cost) group although business size is similar overall. The greater proportion of lowland farms within the top 5 (low cost) group highlights some of the differences in the financial results such as lower concentrate costs and less output from LFA and agri-environmental payments. The main financial difference are the lower fixed costs of production giving rise to a greater margin of production overall for the top 5 (low cost) group. The lower costs of production for this top 5 (low cost) group can be partly expected due to more kilograms of lamb produced per ewe and less livestock units associated with the lamb enterprise, which assists to dilute the costs on a p/kg liveweight basis.

The margin of production data does not include the unpaid labour costs. In 2001/02, the outputs associated with the lamb enterprise barely covered the unpaid labour costs and only covered a fraction of the farmer/spouse labour costs. For the 2002/03 dataset, the margin of production for the lamb enterprise was just under a penny at 0.8 pence per kilogram when including all unpaid labour costs for the average group, whilst the margin of production for the top 5 (low cost) group was 27.9 pence per kilogram.

Table 26 Lamb: benchmarking data

	2002/03		2001/02
Sample size	16	Top 5	8
Flock size - numbers	299.7	145.0	393.1
Flock size - LU	32.1	16.1	35.4
Total Grazing LU	79.7	96.0	77.6
Percentage Sheep LU to Total GLU	40.2	16.8	45.7
Kilograms sheep produced	13046	9701	8588
Kilograms of lamb produced per ewe	43.5	66.9	21.8
Farm size - effective hectares	132.5	98.7	121.8
Farm size ESU	37.4	36.0	30.4
Forage area % from total UAA	82.0	89.0	91.8
OUTPUTS	p/kg LW	p/kg LW	p/kg LW
Sheep - output	124.65	116.58	110.17
- subsidies	38.05	24.96	43.63
- wool	2.68	2.28	3.89
- valuation change	-5.28	-4.34	6.58
Sheep output	**160.10**	**139.48**	164.26
OTHER RELATED OUTPUTS			
LFA and agri-environmental payments	38.07	12.76	84.25
Miscellaneous revenue	3.37	2.95	5.39
By-products and forage	7.51	0.52	4.46
Other output	**48.96**	**16.24**	**94.09**
TOTAL OUTPUTS	**209.05**	**155.72**	**258.36**
Margin of production - pence per kilogram (excluding unpaid labour costs)	**43.79**	**58.49**	**14.97**

	2002/03		2001/02
	16	Top 5	8
COSTS	p/kg LW	p/kg LW	p/kg LW
Concentrates	18.12	14.42	18.06
Purchased bulk feed (hay & straw)	0.16	0.00	0.00
Stock keep	0.00	0.00	7.26
Veterinary and medicines	7.08	5.50	8.63
Other livestock costs - sheep	13.32	14.75	12.34
Net SAP quota leased	0.09	0.00	0.00
Flock replacement	14.72	7.96	28.14
Total variable costs	**53.50**	**42.63**	**74.44**
Seeds	2.12	0.71	0.87
Fertilisers	4.75	1.05	15.08
Sprays	0.07	0.02	0.02
Other forage costs	10.66	6.71	8.34
Total forage costs	**17.60**	**8.49**	**24.32**
Paid labour	7.89	0.59	9.44
Casual labour	2.85	0.10	6.20
Machinery - contract work	2.89	2.05	4.15
- repairs	10.03	4.62	15.58
- fuels	7.45	3.46	10.53
-depreciation	13.95	7.58	27.12
Buildings depreciation	3.37	1.60	10.69
General farm costs	12.31	7.18	14.10
Water	1.08	0.85	0.61
Electricity	1.22	0.40	1.17
Land expenses	8.80	4.46	10.52
Insurance	5.72	3.59	7.56
Rent	10.99	7.12	11.21
Interest payments	5.62	2.51	15.77
Total fixed costs	**94.16**	**46.11**	**144.64**
TOTAL COSTS	**165.27**	**97.23**	**243.39**
Unpaid labour	7.41	7.92	12.05
Unpaid farmer and spouse labour	35.54	22.64	69.62

7. Appendices

7.1 Appendix 1. Detailed Farm Results

Table A1.1 CROPPING FARM RESULTS **ORGANIC**

OUTPUTS AND INPUTS		*Identical sample*				*Full sample*	
		2001/02		2002/03		2002/03	
Sample number		6		6		12	
Average farm size (UAA)		77		76		108	
Business size (ESU)		41		49		58	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	0	0	0	0	0	0
	cattle	0	0	0	0	0	0
	net quota	1296	17	3244	43	1622	15
	valuation change	0	0	0	0	0	0
Other cattle	output	-783	-10	2288	30	11929	111
	valuation change	2008	26	-598	-8	-3792	-35
	subsidies	97	1	119	2	3274	30
Sheep -	total output	2924	38	4046	53	5623	52
	valuation change	-117	-2	494	6	302	3
	subsidies	349	5	786	10	1333	12
Other livestock		13310	174	17974	236	9597	89
Arable crops	output	48183	628	40499	531	41961	389
	subsidies (AAPS)	6340	83	6127	80	10059	93
By products forage and cults		8723	114	6867	90	6722	62
	subsidies (set-aside /other)	3907	51	3606	47	4818	45
Miscellaneous (incl. farmhouse benefit value)		4085	53	3946	52	7059	65
	- organic grants	5294	69	4249	56	4478	42
	- other agri-env.payments	0	0	1371	18	1752	16
	FARM REVENUE	95615	1247	95018	1246	106737	990
INPUTS							
Feeds	purchased concentrates	7055	92	10798	142	5831	54
	homegrown concentrates	0	0	3478	46	2731	25
Purchased fodder, Tack and stock keep		83	1	833	11	719	7
Veterinary and medicines		387	5	1017	13	711	7
Other livestock costs		1384	18	1341	18	3011	28
Seeds -	purchased and homegrown	7373	96	8999	118	7203	67
Fertilisers		2255	29	2866	38	2701	25
Crop protection		1949	25	553	7	952	9
Other crop costs		742	10	3040	40	2910	27
Labour	paid incl. paid management	9406	123	9284	122	7148	66
	casual	3059	40	2800	37	2355	22
Machinery	contract	5772	75	4481	59	7558	70
	repairs	3953	52	4351	57	5295	49
	fuels	1882	25	1872	25	2148	20
General farming costs		7370	96	6793	89	8071	75
Land expenses		1291	17	914	12	2136	20
Rent		7156	93	6892	90	11068	103
	FARM EXPENSES	61117	797	70312	922	72545	673
Excess of expenses over revenue		34497	450	24706	324	34192	317
Notional inputs							
- rental value/imputed rent		7706	101	7754	102	5459	51
- unpaid labour		3021	39	3110	41	1725	16
- machinery depreciation		4276	56	4056	53	5052	47
		15003	196	14920	196	12237	114
NET FARM INCOME (excl. BLSA)		19494	254	9786	128	21955	204

Table A1.1 CROPPING FARM RESULTS — CONVENTIONAL

OUTPUTS AND INPUTS		*Identical sample* 2001/02		*Identical sample* 2002/03		*Full sample* 2002/03	
Sample number		56		56		122	
Average farm size (UAA)		74		75		104	
Business size (ESU)		42		43		59	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	0	0	0	0	0	0
	cattle	0	0	0	0	0	0
	net quota	4	0	93	1	39	0
	valuation change	0	0	0	0	0	0
Other cattle	output	3417	46	3315	44	6517	63
	valuation change	-836	-11	411	6	-14	0
	subsidies	1464	20	1334	18	4139	40
Sheep -	total output	1798	24	1770	24	2681	26
	valuation change	-401	-5	135	2	37	0
	subsidies	195	3	366	5	580	6
Other livestock		762	10	3044	41	4978	48
Arable crops	output	31508	424	33257	446	42046	405
	subsidies (AAPS)	9120	123	9925	133	13798	133
By products forage and cults		4324	58	3438	46	5012	48
	subsidies (set-aside /other)	1975	27	1693	23	2286	22
Miscellaneous (incl. farmhouse benefit value)		8485	114	8062	108	10418	100
	- organic grants	0	0	82	1	33	0
	- other agri-env.payments	289	4	515	7	1108	11
	FARM REVENUE	62106	836	67440	904	93658	903
INPUTS							
Feeds	purchased concentrates	1478	20	2315	31	3454	33
	homegrown concentrates	737	10	513	7	1536	15
Purchased fodder, Tack and stock keep		113	2	51	1	197	2
Veterinary and medicines		292	4	406	5	616	6
Other livestock costs		919	12	786	11	1998	19
Seeds -	purchased and homegrown	3441	46	3356	45	3858	37
Fertilisers		4181	56	4147	56	6255	60
Crop protection		4807	65	4991	67	6968	67
Other crop costs		2839	38	3023	41	3661	35
Labour	paid incl. paid management	2345	32	2826	38	5355	52
	casual	1936	26	2360	32	2048	20
Machinery	contract	4522	61	4420	59	6103	59
	repairs	3551	48	3201	43	4068	39
	fuels	2350	32	2243	30	2807	27
General farming costs		6636	89	7164	96	8371	81
Land expenses		1134	15	909	12	1504	14
Rent		3980	54	4035	54	5995	58
	FARM EXPENSES	45260	609	46746	627	64795	624
Excess of expenses over revenue		16846	227	20694	277	28862	278
Notional inputs							
- rental value/imputed rent		7539	101	7767	104	10485	101
- unpaid labour		1752	24	1656	22	2542	25
- machinery depreciation		6004	81	5466	73	8164	79
		15295	206	14890	200	21191	204
NET FARM INCOME (excl. BLSA)		1550	21	5804	78	7672	74

Table A1.2 CROPPING FARM RESULTS ORGANIC

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	19494	254	9786	128	21955	204
Less farmer and spouse labour	11756	153	12101	159	11505	107
Add managerial input of paid manager	0	0	0	0	0	0
Add BLSA	0	0	0	0	0	0
MANAGEMENT & INVESTMENT INCOME	7738	101	-2315	-30	10450	97
NET FARM INCOME (excl. BLSA)	19494	254	9786	128	21955	204
plus net rental value/imputed rent	6325	82	6373	84	4519	42
minus occupier's expenses	130	2	135	2	146	1
minus interest payments	3923	51	3355	44	3479	32
minus build & works depreciation	555	7	634	8	654	6
OCCUPIER'S NET INCOME	21211	277	12036	158	22195	206
plus other imputed items	4403	57	4491	59	2558	24
plus fixed asset depreciation	4831	63	4656	61	5689	53
minus valuation changes	8133	106	-1021	-13	1316	12
NOTIONAL CASH INCOME	22312	291	22204	291	29126	270
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	2.2		2.1		1.8	
of which farmer & spouse	1.0		0.9		0.9	
NFI and paid labour/Annual Labour Units	14587		10405		17577	
NFI/Farmer & Spouse Labour Units	18854		10377		24032	
TENANT'S CAPITAL - £ per farm						
Machinery	32619	425	29817	391	36464	338
Livestock	9368	122	11969	157	21048	195
Crops	2208	29	2634	35	15786	146
Stores	619	8	888	12	2239	21
TOTAL	44814	584	45308	594	75537	701
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	312229	312229	312229	312229	217752	217752
Buildings, improvements and fixtures	4927	4372	4372	4519	3323	4552
Machinery	34733	30504	30504	29131	35455	37474
Livestock	6861	11876	11876	12062	22544	19552
Produce and goods in store	1268	4386	4126	2919	15871	20179
Quotas	17951	16518	16518	16518	9688	10050
Credit balances	17553	12206	12206	19926	15118	14732
TOTAL	395522	392089	391829	397302	319750	324291
EXTERNAL LIABILITIES						
Long and medium term loans	43939	38958	42865	33155	36733	31674
Short term loans	1717	2010	2010	2952	5301	5573
Overdrafts	5904	4663	4663	7257	16030	16492
TOTAL	51560	45631	49538	43364	58063	53739
NET WORTH	**343962**	**346457**	**342291**	**353938**	**261687**	**271388**
RETURNS TO CAPITAL						
Owner Equity (%)	88.4		89.1		83.7	
ONI/Net worth (%)	6.1		3.4		8.2	
Return on tenant's capital (%)	17.3		-5.1		13.8	
Return on all capital (%)	3.8		1.2		6.6	

Table A1.2 CROPPING FARM RESULTS — CONVENTIONAL

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	1550	21	5804	78	7672	74
Less farmer and spouse labour	13117	177	13604	182	14328	138
Add managerial input of paid manager	0	0	0	0	35	0
Add BLSA	160	2	120	2	233	2
MANAGEMENT & INVESTMENT INCOME	-11407	-154	-7680	-103	-6388	-62
NET FARM INCOME (excl. BLSA)	1550	21	5804	78	7672	74
plus net rental value/imputed rent	4885	66	4549	61	7157	69
minus occupier's expenses	343	5	316	4	426	4
minus interest payments	1488	20	1985	27	3572	34
minus build & works depreciation	1351	18	1499	20	2005	19
OCCUPIER'S NET INCOME	3253	44	6553	88	8825	85
plus other imputed items	1752	24	1656	22	2542	25
plus fixed asset depreciation	7653	103	7343	98	10662	103
minus valuation changes	-184	-2	542	7	-593	-6
NOTIONAL CASH INCOME	12843	173	15010	201	22623	218
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	1.5		1.6		1.8	
of which farmer & spouse	1.0		1.0		1.0	
NFI and paid labour/Annual Labour Units	3886		6973		8360	
NFI/Farmer & Spouse Labour Units	1565		5823		7308	
TENANT'S CAPITAL - £ per farm						
Machinery	32873	442	31918	428	44574	430
Livestock	7273	98	7324	98	15547	150
Crops	10112	136	10742	144	18864	182
Stores	5876	79	6480	87	9631	93
TOTAL	56133	755	56464	757	88616	854
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	290400	291449	291449	291977	366341	366529
Buildings, improvements and fixtures	4080	7339	7339	8461	11974	11498
Machinery	33930	31815	31815	32021	45323	43825
Livestock	7575	6971	6987	7660	15364	15731
Produce and goods in store	17406	17721	18671	18394	30872	30063
Quotas	877	917	926	911	2280	2077
Credit balances	17880	18169	18596	20097	23635	25079
TOTAL	372147	374382	375784	379521	495789	494801
EXTERNAL LIABILITIES						
Long and medium term loans	13170	12401	12758	12403	30327	32792
Short term loans	8272	8367	10772	12116	12387	12892
Overdrafts	10576	14240	13928	19654	26221	28670
TOTAL	32018	35009	37459	44173	68934	74353
NET WORTH	**340128**	**339373**	**338325**	**335349**	**426855**	**420448**
RETURNS TO CAPITAL						
Owner Equity (%)	90.6		88.4		85.0	
ONI/Net worth (%)	1.0		2.0		2.1	
Return on tenant's capital (%)	-20.3		-13.6		-7.2	
Return on all capital (%)	-2.0		-1.0		-0.1	

Table A1.3 CROPPING FARM RESULTS **ORGANIC**

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	14.2	14.6	26.9
	Barley	8.6	2.0	3.6
	Other cereals	1.7	4.6	8.4
	Oil seed rape	0.0	0.0	1.8
	Linseed	0.0	0.0	0.0
	Peas/Beans	2.1	6.2	4.5
	Potatoes	3.2	3.5	2.4
	Sugarbeet	0.0	0.8	0.4
	Horticulture	2.4	3.9	3.0
	Other crops	0.2	0.4	0.2
	Total cropping	**32.5**	**36.0**	**51.2**
	Set-aside	17.9	16.8	20.1
Tillage - fodder		0.0	0.0	0.6
Grassland	Grazing, hay and silage	21.9	19.6	33.8
Fallow and land let		4.4	3.9	1.9
Rough grazing	Effective	0.0	0.0	0.1
Utilisable agricultural area (Effective ha.)		76.7	76.3	107.8
Woods, roads and buildings		3.9	3.9	5.0
TOTAL AREA (Actual ha.)		80.6	80.2	113.1
effective forage area		**21.9**	**19.6**	**34.5**
Bare land and forage hired in		0.0	0.0	0.0
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		5.1	4.8	5.5
Barley		4.1	1.6	3.2
Oilseed Rape		0.0	0.0	0.4
Potatoes		17.3	13.6	14.7
Sugar Beet		0.0	45.0	45.0
- Prices (£ per tonne)*				
Wheat		122	140	119
Barley		72	125	93
Oilseed Rape		0	0	152
Potatoes		456	216	211
Sugar Beet		0	46	46

* Yield and price data is implied

Table A1.3 CROPPING FARM RESULTS **CONVENTIONAL**

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	16.3	22.9	34.8
	Barley	11.9	10.6	14.5
	Other cereals	4.5	2.7	3.4
	Oil seed rape	2.9	3.0	6.1
	Linseed	0.8	0.3	0.0
	Peas/Beans	2.6	3.1	4.2
	Potatoes	2.2	2.1	1.2
	Sugarbeet	2.5	2.1	2.7
	Horticulture	2.1	2.0	2.1
	Other crops	0.9	0.7	0.7
	Total cropping	**46.7**	**49.6**	**69.8**
	Set-aside	9.0	7.3	10.1
Tillage - fodder		0.6	0.5	0.5
Grassland	Grazing, hay and silage	14.0	13.4	22.2
Fallow and land let		4.5	4.7	2.2
Rough grazing	Effective	0.0	0.0	0.2
Utilisable agricultural area (Effective ha.)		74.3	74.6	103.8
Woods, roads and buildings		3.4	3.4	4.9
TOTAL AREA (Actual ha.)		77.7	78.0	108.6
effective forage area		**14.9**	**14.2**	**24.2**
Bare land and forage hired in		1.0	1.1	1.4
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		6.3	7.9	8.1
Barley		5.1	5.7	5.6
Oilseed Rape		2.3	3.2	3.2
Potatoes		37.6	29.0	33.9
Sugar Beet		44.6	52.7	50.7
- Prices (£ per tonne)*				
Wheat		74	61	60
Barley		66	62	63
Oilseed Rape		137	148	145
Potatoes		76	61	65
Sugar Beet		30	31	32

* Yield and price data is implied

Table A1.4 CROPPING FARM RESULTS **ORGANIC**

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0
Beef cows	1.6	2	1.9	3	7.9	11
Other cattle	6.6	10	8.1	13	16.3	28
Breeding sheep	4.7	58	4.9	61	7.4	99
Other sheep	0.6	15	1.4	36	2.2	54
Pigs	6.3	33	8.3	40	4.2	20
Poultry	3.3	195	4.6	271	2.3	135
Other livestock	0.0	0	0.0	0	0.0	5
TOTAL (L.U.)	23.0		29.3		40.3	
STOCKING RATES						
Stocking rate (LU per eff.ha)	0.3		0.4		0.4	
GLU/forage effective hectare*	1.0		1.5		1.2	

* for organic farms, pigs, poultry and other livestock are deemed to be grazing livestock

LIVESTOCK PERFORMANCE - Prices (£ per head)*			
Dairy cows	0	0	0
Dairy calves	0	0	0
Dairy heifers in calf	0	0	224
Beef heifers in calf	450	0	760
Fat cattle	501	528	573
Beef store cattle 1-2 yrs	461	596	518
Beef stores <1 yr	400	400	300
Ewes	21	50	36
Ewe hoggs	0	0	0
Fat lambs	36	49	48
Store lambs	0	42	42
Fat Pigs	145	150	150
Milk (pence per litre)	0.0	0.0	0.0
Wool (pence per kg)	39.5	43.7	46.0

* Price data is implied

Table A1.4 CROPPING FARM RESULTS **CONVENTIONAL**

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0
Beef cows	1.3	2	1.4	2	4.4	6
Other cattle	8.5	16	7.6	14	15.5	29
Breeding sheep	3.8	36	3.4	32	5.1	49
Other sheep	1.1	26	0.9	23	1.3	32
Pigs	0.1	0	0.1	0	1.7	14
Poultry	1.2	73	3.8	222	5.3	320
Other livestock	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	16.0		17.1		33.3	
STOCKING RATES						
Stocking rate (LU per eff.ha)	0.2		0.2		0.3	
GLU/forage effective hectare*	1.1		1.2		1.4	

* for conventional farms, pigs, poultry and other livestock are deemed to be non-grazing livestock

LIVESTOCK PERFORMANCE - Prices (£ per head)*			
Dairy cows	0	0	0
Dairy calves	0	0	0
Dairy heifers in calf	0	0	819
Beef heifers in calf	0	0	438
Fat cattle	517	466	507
Beef store cattle 1-2 yrs	301	442	450
Beef stores <1 yr	180	312	249
Ewes	39	99	37
Ewe hoggs	152	42	34
Fat lambs	36	47	45
Store lambs	22	36	35
Fat Pigs	64	68	60
Milk (pence per litre)	0.0	0.0	0.0
Wool (pence per kg)	43.4	43.8	51.5

* Price data is implied

Table A2.1 INTENSIVE HORTICULTURAL FARM RESULTS

OUTPUTS AND INPUTS		*Organic* 2002/03		*Conventional* 2002/03	
Sample number		5		21	
Average farm size (UAA)		30		34	
Business size (ESU)		85		94	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	0	0	0	0
	cattle	0	0	0	0
	net quota	0	0	0	0
	valuation change	0	0	0	0
Other cattle	output	1679	56	0	0
	valuation change	-540	-18	0	0
	subsidies	1071	35	0	0
Sheep -	total output	0	0	0	0
	valuation change	0	0	0	0
	subsidies	0	0	0	0
Other livestock		0	0	0	0
Arable crops	output	284046	9408	201780	5998
	subsidies (AAPS)	0	0	1689	50
By products forage and cults		1816	60	327	10
	subsidies (set-aside /other)	0	0	500	15
Miscellaneous (incl. farmhouse benefit value)		10241	339	19830	589
	- organic grants	587	19	0	0
	- other agri-env.payments	186	6	446	13
	FARM REVENUE	299088	9906	224572	6675
INPUTS					
Feeds	purchased concentrates	139	5	0	0
	homegrown concentrates	0	0	0	0
Purchased fodder, Tack and stock keep		1431	47	0	0
Veterinary and medicines		165	5	0	0
Other livestock costs		465	15	0	0
Seeds -	purchased and homegrown	40255	1333	18597	553
Fertilisers		4842	160	3987	119
Crop protection		4103	136	6185	184
Other crop costs		67248	2227	26816	797
Labour	paid incl. paid management	28832	955	45627	1356
	casual	52754	1747	35769	1063
Machinery	contract	14468	479	4879	145
	repairs	8923	296	10022	298
	fuels	3234	107	4735	141
General farming costs		16220	537	15343	456
Land expenses		1698	56	1626	48
Rent		14533	481	3090	92
	FARM EXPENSES	259310	8589	176674	5251
Excess of expenses over revenue		39778	1318	47897	1424
Notional inputs					
- rental value/imputed rent		2856	95	7828	233
- unpaid labour		707	23	4206	125
- machinery depreciation		14324	474	12382	368
		17887	592	24416	726
NET FARM INCOME (excl. BLSA)		21891	725	23482	698

Table A2.2 INTENSIVE HORTICULTURAL FARM RESULTS

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Organic 2002/03		*Conventional* 2002/03	
INCOME MEASURES	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	21891	725	23482	698
Less farmer and spouse labour	10657	353	14288	425
Add managerial input of paid manager	0	0	0	0
Add BLSA	0	0	0	0
MANAGEMENT & INVESTMENT INCOME	11234	372	9194	273
NET FARM INCOME (excl. BLSA)	21891	725	23482	698
plus net rental value/imputed rent	2058	68	6128	182
minus occupier's expenses	464	15	287	9
minus interest payments	2159	72	2792	83
minus build & works depreciation	510	17	2464	73
OCCUPIER'S NET INCOME	20816	689	24068	715
plus other imputed items	1505	50	4206	125
plus fixed asset depreciation	14901	494	14966	445
minus valuation changes	1665	55	3828	114
NOTIONAL CASH INCOME	35556	1178	39412	1171
LABOUR USE AND LABOUR INCOMES				
Annual Labour Units per farm	7.8		8.5	
of which farmer & spouse	0.9		1.1	
NFI and paid labour/Annual Labour Units	13278		12361	
NFI/Farmer & Spouse Labour Units	23392		21353	
TENANT'S CAPITAL - £ per farm				
Machinery	70193	2325	62201	1849
Livestock	3205	106	0	0
Crops	2671	88	4643	138
Stores	6032	200	8347	248
TOTAL	82101	2719	75192	2235
ASSETS - £ per farm	Opening Value	Closing Value	Opening Value	Closing Value
Land and Property	54335	54335	188624	181224
Buildings, improvements and fixtures	7289	6458	12741	13095
Machinery	62841	77545	60479	63923
Livestock	3475	2935	0	0
Produce and goods in store	7601	9806	12222	15980
Quotas	0	0	0	0
Credit balances	11849	24213	20806	14117
TOTAL	147390	175292	294872	288340
EXTERNAL LIABILITIES				
Long and medium term loans	9130	8477	20788	21819
Short term loans	19321	34432	12686	15391
Overdrafts	481	7437	30901	24028
TOTAL	28932	50346	64375	61239
NET WORTH	**118458**	**125097**	**230497**	**227101**
RETURNS TO CAPITAL				
Owner Equity (%)	71.4		78.8	
ONI/Net worth (%)	16.6		10.6	
Return on tenant's capital (%)	13.7		12.2	
Return on all capital (%)	14.7		4.3	

Table A2.3 INTENSIVE HORTICULTURAL FARM RESULTS

LAND UTILISATION AND CROP PERFORMANCE

		Organic	*Conventional*
LAND UTILISATION - hectares per farm		2002/03	2002/03
Tillage - maincrops	Wheat	0.0	2.5
	Barley	0.0	3.7
	Other cereals	0.0	0.0
	Oil seed rape	0.0	0.0
	Linseed	0.0	0.0
	Peas/Beans	0.0	1.0
	Potatoes	1.8	0.3
	Sugarbeet	0.0	0.0
	Horticulture	21.7	23.9
	Other crops	0.0	0.0
	Total cropping	**23.5**	**31.4**
	Set-aside	0.0	2.2
Tillage - fodder		0.0	0.0
Grassland	Grazing, hay and silage	5.8	2.2
Fallow and land let		3.8	1.4
Rough grazing	Effective	0.0	0.0
Utilisable agricultural area (Effective ha.)		30.2	33.6
Woods, roads and buildings		0.9	1.4
TOTAL AREA (Actual ha.)		31.1	35.1
effective forage area		**5.8**	**2.2**
Bare land and forage hired in		0.0	0.0

CROP PERFORMANCE -Yields (tonnes per hectare)*		
Wheat	0.0	7.4
Barley	0.0	4.2
Oilseed Rape	0.0	0.0
Potatoes	19.3	41.7
Sugar Beet	0.0	0.0
- Prices (£ per tonne)*		
Wheat	0	51
Barley	0	68
Oilseed Rape	0	0
Potatoes	349	61
Sugar Beet	0	0

* Yield and price data is implied

Table A2.4 INTENSIVE HORTICULTURAL FARM RESULTS

STOCKING AND LIVESTOCK PERFORMANCE

	Organic 2002/03		*Conventional* 2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0
Beef cows	3.2	4	0.0	0
Other cattle	2.5	5	0.0	0
Breeding sheep	0.0	0	0.0	0
Other sheep	0.0	0	0.0	0
Pigs	0.0	0	0.0	0
Poultry	0.0	0	0.0	0
Other livestock	0.0	0	0.0	0
TOTAL (L.U.)	5.7		0.0	

STOCKING RATES

Stocking rate (LU per eff.ha)	0.2	0.0
GLU/forage effective hectare*	1.0	0.0

* for organic farms, pigs, poultry and other livestock are deemed to be grazing livestock

LIVESTOCK PERFORMANCE - Prices (£ per head)*

Dairy cows	0	0
Dairy calves	0	0
Dairy heifers in calf	0	0
Beef heifers in calf	0	0
Fat cattle	0	0
Beef store cattle 1-2 yrs	400	0
Beef stores <1 yr	294	0
Ewes	0	0
Ewe hoggs	0	0
Fat lambs	0	0
Store lambs	0	0
Fat Pigs	0	0
Milk (pence per litre)	0.0	0.0
Wool (pence per kg)	0.0	0.0

* Price data is implied

Table A3.1 LFA DAIRY FARM RESULTS ORGANIC

OUTPUTS AND INPUTS *Non-Identical sample*

		2001/02		2002/03	
Sample number		6		5	
Average farm size (UAA)		86		83	
Business size (ESU)		68		63	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	69601	813	57920	696
	cattle	-4029	-47	-1797	-22
	net quota	1533	18	-120	-1
	valuation change	2212	26	587	7
Other cattle	output	11581	135	14576	175
	valuation change	3392	40	-2630	-32
	subsidies	1835	21	3494	42
Sheep -	total output	111	1	0	0
	valuation change	3	0	0	0
	subsidies	62	1	0	0
Other livestock		-8	0	0	0
Arable crops	output	7789	91	0	0
	subsidies (AAPS)	692	8	0	0
By products forage and cults		456	5	-2040	-25
	subsidies (set-aside /other)	574	7	659	8
Miscellaneous (incl. farmhouse benefit value)		4452	52	4854	58
	- organic grants	7273	85	4208	51
	- other agri-env.payments	-292	-3	885	11
	FARM REVENUE	107235	1253	80596	969
INPUTS					
Feeds	purchased concentrates	13770	161	12807	154
	homegrown concentrates	3120	36	1253	15
Purchased fodder, Tack and stock keep		2904	34	1951	23
Veterinary and medicines		734	9	1758	21
Other livestock costs		4746	55	3576	43
Seeds -	purchased and homegrown	2976	35	285	3
Fertilisers		1229	14	1307	16
Crop protection		0	0	22	0
Other crop costs		1037	12	759	9
Labour	paid incl. paid management	4718	55	0	0
	casual	2953	34	448	5
Machinery	contract	2837	33	2420	29
	repairs	4738	55	4047	49
	fuels	1757	21	2188	26
General farming costs		7867	92	7406	89
Land expenses		1450	17	7878	95
Rent		3595	42	3054	37
	FARM EXPENSES	60429	706	51158	615
Excess of expenses over revenue		46806	547	29438	354
Notional inputs					
- rental value/imputed rent		6947	81	9878	119
- unpaid labour		3817	45	4227	51
- machinery depreciation		8628	101	7015	84
		19393	227	21120	254
NET FARM INCOME (excl. BLSA)		27414	320	8318	100

Table A3.1 LFA DAIRY FARM RESULTS CONVENTIONAL

OUTPUTS AND INPUTS *Non-Identical sample*

		2001/02		2002/03	
Sample number		31		27	
Average farm size (UAA)		76		77	
Business size (ESU)		64		62	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	60935	802	51889	673
	cattle	1422	19	1480	19
	net quota	1350	18	-321	-4
	valuation change	-2017	-27	-2521	-33
Other cattle	output	6965	92	12031	156
	valuation change	2874	38	-389	-5
	subsidies	787	10	1129	15
Sheep -	total output	3745	49	5406	70
	valuation change	-352	-5	37	0
	subsidies	918	12	2943	38
Other livestock		257	3	0	0
Arable crops	output	1341	18	686	9
	subsidies (AAPS)	815	11	380	5
By products forage and cults		1036	14	582	8
	subsidies (set-aside /other)	262	3	0	0
Miscellaneous (incl. farmhouse benefit value)		4791	63	6262	81
	- organic grants	0	0	0	0
	- other agri-env.payments	1261	17	900	12
	FARM REVENUE	86392	1138	80494	1044
INPUTS					
Feeds	purchased concentrates	16189	213	14433	187
	homegrown concentrates	2107	28	1634	21
Purchased fodder, Tack and stock keep		1391	18	1943	25
Veterinary and medicines		1971	26	2254	29
Other livestock costs		7590	100	5685	74
Seeds -	purchased and homegrown	471	6	305	4
Fertilisers		4606	61	4987	65
Crop protection		303	4	191	2
Other crop costs		528	7	885	11
Labour	paid incl. paid management	2891	38	1910	25
	casual	626	8	833	11
Machinery	contract	5096	67	4044	52
	repairs	3268	43	4675	61
	fuels	2028	27	2257	29
General farming costs		7522	99	7381	96
Land expenses		2024	27	1957	25
Rent		3059	40	2895	38
	FARM EXPENSES	61672	812	58270	756
Excess of expenses over revenue		24720	326	22225	288
Notional inputs					
- rental value/imputed rent		8740	115	6968	90
- unpaid labour		3047	40	5214	68
- machinery depreciation		4976	66	5647	73
		16763	221	17829	231
NET FARM INCOME (excl. BLSA)		7957	105	4396	57

Table A3.2 LFA DAIRY FARM RESULTS ORGANIC

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

Non-Identical sample

INCOME MEASURES	2001/02		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	27414	320	8318	100
Less farmer and spouse labour	15889	186	15347	185
Add managerial input of paid manager	0	0	0	0
Add BLSA	708	8	-1023	-12
MANAGEMENT & INVESTMENT INCOME	12232	143	-8052	-97
NET FARM INCOME (excl. BLSA)	27414	320	8318	100
plus net rental value/imputed rent	5516	64	8319	100
minus occupier's expenses	947	11	266	3
minus interest payments	4537	53	3058	37
minus build & works depreciation	3740	44	3945	47
OCCUPIER'S NET INCOME	23706	277	9368	113
plus other imputed items	4544	53	4567	55
plus fixed asset depreciation	12245	143	10959	132
minus valuation changes	6697	78	-4286	-52
NOTIONAL CASH INCOME	33798	395	29181	351
LABOUR USE AND LABOUR INCOMES				
Annual Labour Units per farm	2.5		1.8	
of which farmer & spouse	1.4		1.0	
NFI and paid labour/Annual Labour Units	14245		5004	
NFI/Farmer & Spouse Labour Units	20295		8126	
TENANT'S CAPITAL - £ per farm				
Machinery	59106	691	50278	604
Livestock	64584	755	68174	820
Crops	7233	85	7900	95
Stores	1414	17	998	12
TOTAL	132336	1546	127349	1531
	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value
Land and Property	259349	259349	279846	279846
Buildings, improvements and fixtures	19402	20118	17249	19305
Machinery	60579	57632	49193	51362
Livestock	61478	67689	69707	66641
Produce and goods in store	8050	9243	10019	7776
Quotas	50253	50610	56175	54342
Credit balances	1897	2741	4722	7527
TOTAL	461007	467382	486911	486799
EXTERNAL LIABILITIES				
Long and medium term loans	26246	90784	94736	92459
Short term loans	10734	7455	7268	6736
Overdrafts	37562	34023	32980	36793
TOTAL	74541	132261	134983	135989
NET WORTH	**386466**	**335121**	**351928**	**350810**
RETURNS TO CAPITAL				
Owner Equity (%)	71.7		72.1	
ONI/Net worth (%)	7.1		2.7	
Return on tenant's capital (%)	9.2		-6.3	
Return on all capital (%)	3.4		-1.0	

Table A3.2 LFA DAIRY FARM RESULTS CONVENTIONAL

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

Non-Identical sample

INCOME MEASURES	2001/02		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	7957	105	4396	57
Less farmer and spouse labour	16650	219	15959	207
Add managerial input of paid manager	0	0	0	0
Add BLSA	1201	16	532	7
MANAGEMENT & INVESTMENT INCOME	-7492	-99	-11031	-143
NET FARM INCOME (excl. BLSA)	7957	105	4396	57
plus net rental value/imputed rent	7253	96	5291	69
minus occupier's expenses	181	2	142	2
minus interest payments	6365	84	6444	84
minus build & works depreciation	3170	42	2059	27
OCCUPIER'S NET INCOME	5494	72	1041	14
plus other imputed items	3139	41	5214	68
plus fixed asset depreciation	8146	107	7706	100
minus valuation changes	-639	-8	-2944	-38
NOTIONAL CASH INCOME	17417	229	16905	219
LABOUR USE AND LABOUR INCOMES				
Annual Labour Units per farm	1.9		2.0	
of which farmer & spouse	1.4		1.3	
NFI and paid labour/Annual Labour Units	5940		3639	
NFI/Farmer & Spouse Labour Units	5767		3331	
TENANT'S CAPITAL - £ per farm				
Machinery	31231	411	38868	504
Livestock	55679	733	55112	715
Crops	5862	77	4711	61
Stores	1543	20	630	8
TOTAL	94315	1242	99321	1289
ASSETS - £ per farm	Opening Value	Closing Value	Opening Value	Closing Value
Land and Property	229902	229475	216621	219648
Buildings, improvements and fixtures	9227	14715	9684	8232
Machinery	30977	31485	39525	38210
Livestock	55058	56300	56283	53942
Produce and goods in store	7745	7065	5376	5306
Quotas	62138	60507	51091	38904
Credit balances	9634	8874	8052	12390
TOTAL	404680	408421	386631	376631
EXTERNAL LIABILITIES				
Long and medium term loans	47584	52741	36357	38553
Short term loans	5546	9219	4807	7326
Overdrafts	27981	28993	24420	20821
TOTAL	81111	90953	65584	66700
NET WORTH	**323569**	**317469**	**321047**	**309931**
RETURNS TO CAPITAL				
Owner Equity (%)	77.7		82.3	
ONI/Net worth (%)	1.7		0.3	
Return on tenant's capital (%)	-7.9		-11.1	
Return on all capital (%)	-1.1		-2.2	

Table A3.3 LFA DAIRY FARM RESULTS ORGANIC

LAND UTILISATION AND CROP PERFORMANCE

		Non-Identical sample	
LAND UTILISATION - hectares per farm		2001/02	2002/03
Tillage - maincrops	Wheat	0.4	0.0
	Barley	0.0	0.0
	Other cereals	2.4	0.0
	Oil seed rape	0.0	0.0
	Linseed	0.0	0.0
	Peas/Beans	0.0	0.0
	Potatoes	0.6	0.0
	Sugarbeet	0.0	0.0
	Horticulture	0.7	0.0
	Other crops	0.0	0.0
	Total cropping	**4.1**	**0.0**
	Set-aside	0.0	0.0
Tillage - fodder		4.2	3.2
Grassland	Grazing, hay and silage	73.9	77.7
Fallow and land let		0.7	0.0
Rough grazing	Effective	2.7	2.2
Utilisable agricultural area (Effective ha.)		85.6	83.2
Woods, roads and buildings		5.9	2.9
TOTAL AREA (Actual ha.)		91.5	86.1
effective forage area		**80.8**	**83.2**
Bare land and forage hired in		0.0	0.0
CROP PERFORMANCE -Yields (tonnes per hectare)*			
Wheat		3.3	0.0
Barley		0.0	0.0
Oilseed Rape		0.0	0.0
Potatoes		27.9	0.0
Sugar Beet		0.0	0.0
- Prices (£ per tonne)*			
Wheat		167	0
Barley		0	0
Oilseed Rape		0	0
Potatoes		336	0
Sugar Beet		0	0

* Yield and price data is implied

Table A3.3 LFA DAIRY FARM RESULTS CONVENTIONAL

LAND UTILISATION AND CROP PERFORMANCE

		Non-Identical sample	
LAND UTILISATION - hectares per farm		2001/02	2002/03
Tillage - maincrops	Wheat	0.2	0.3
	Barley	4.2	1.6
	Other cereals	0.1	0.2
	Oil seed rape	0.2	0.0
	Linseed	0.0	0.0
	Peas/Beans	0.0	0.0
	Potatoes	0.0	0.0
	Sugarbeet	0.0	0.0
	Horticulture	0.0	0.0
	Other crops	0.0	0.0
	Total cropping	**4.6**	**2.1**
	Set-aside	0.0	0.0
Tillage - fodder		0.9	1.0
Grassland	Grazing, hay and silage	66.7	71.0
Fallow and land let		1.7	0.0
Rough grazing	Effective	2.1	3.0
Utilisable agricultural area (Effective ha.)		75.9	77.1
Woods, roads and buildings		4.4	2.3
TOTAL AREA (Actual ha.)		80.3	79.4
effective forage area		**72.8**	**79.5**
Bare land and forage hired in		3.1	4.6
CROP PERFORMANCE -Yields (tonnes per hectare)*			
Wheat		7.0	7.6
Barley		5.2	6.6
Oilseed Rape		2.0	0.0
Potatoes		0.0	0.0
Sugar Beet		0.0	0.0
- Prices (£ per tonne)*			
Wheat		75	65
Barley		68	59
Oilseed Rape		130	0
Potatoes		0	0
Sugar Beet		0	0

* Yield and price data is implied

Table A3.4 LFA DAIRY FARM RESULTS ORGANIC

STOCKING AND LIVESTOCK PERFORMANCE

Non-Identical sample

	2001/02		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's
Dairy cows	67.8	68	70.2	70
Beef cows	0.0	0	5.6	7
Other cattle	48.0	84	42.4	70
Breeding sheep	0.1	1	0.0	0
Other sheep	0.0	0	0.0	0
Pigs	0.0	0	0.0	0
Poultry	0.0	10	0.0	0
Other livestock	1.1	2	0.0	0
TOTAL (L.U.)	116.9		118.1	

STOCKING RATES

Stocking rate (LU per eff.ha)	1.4	1.4
GLU/forage effective hectare*	1.4	1.4

* for organic farms, pigs, poultry and other livestock are deemed to be grazing livestock

LIVESTOCK PERFORMANCE - Yield and prices (£ per head)*

Dairy cows (litres)	4550	4427
Dairy cows	273	275
Dairy calves	27	41
Dairy heifers in calf	534	575
Beef heifers in calf	0	0
Fat cattle	358	315
Beef store cattle 1-2 yrs	343	440
Beef stores <1 yr	116	219
Ewes	32	0
Ewe hoggs	0	0
Fat lambs	0	0
Store lambs	0	0
Fat Pigs	0	0
Milk (pence per litre)	22.3	18.6
Wool (pence per kg)	0.0	0.0

* Price data is implied

Table A3.4 LFA DAIRY FARM RESULTS CONVENTIONAL

STOCKING AND LIVESTOCK PERFORMANCE

Non-Identical sample

	2001/02		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's
Dairy cows	62.9	63	61.4	61
Beef cows	2.1	3	1.9	3
Other cattle	37.6	68	39.0	69
Breeding sheep	13.8	170	14.6	182
Other sheep	2.8	70	3.6	90
Pigs	0.0	0	0.0	0
Poultry	1.9	112	0.0	0
Other livestock	0.0	0	0.0	0
TOTAL (L.U.)	121.2		120.6	

STOCKING RATES

Stocking rate (LU per eff.ha)	1.6	1.6
GLU/forage effective hectare*	1.7	1.5

* for conventional farms, pigs, poultry and other livestock are deemed to be non-grazing livestock

LIVESTOCK PERFORMANCE - Yield and prices (£ per head)*

Dairy cows (litres)	5026	5069
Dairy cows	339	368
Dairy calves	64	47
Dairy heifers in calf	671	555
Beef heifers in calf	0	0
Fat cattle	429	458
Beef store cattle 1-2 yrs	303	343
Beef stores <1 yr	118	127
Ewes	20	14
Ewe hoggs	0	51
Fat lambs	34	44
Store lambs	22	35
Fat Pigs	0	0
Milk (pence per litre)	19.2	16.0
Wool (pence per kg)	42.1	40.0

* Price data is implied

Table A4.1 LOWLAND DAIRY FARM RESULTS ORGANIC

OUTPUTS AND INPUTS		*Identical sample*				*Full sample*	
		2001/02		2002/03		2002/03	
Sample number		23		23		30	
Average farm size (UAA)		96		97		99	
Business size (ESU)		92		94		96	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	129047	1349	119147	1234	119435	1200
	cattle	-2056	-21	2991	31	2759	28
	net quota	1408	15	-777	-8	-1258	-13
	valuation change	2315	24	-750	-8	-418	-4
Other cattle	output	16444	172	12774	132	12547	126
	valuation change	-372	-4	2509	26	2116	21
	subsidies	2656	28	1680	17	1420	14
Sheep -	total output	1495	16	206	2	78	1
	valuation change	-478	-5	202	2	254	3
	subsidies	87	1	60	1	66	1
Other livestock		4624	48	5025	52	3921	39
Arable crops	output	3637	38	4137	43	3549	36
	subsidies (AAPS)	2500	26	1874	19	1659	17
By products forage and cults		213	2	2395	25	2241	23
	subsidies (set-aside /other)	2390	25	3572	37	3673	37
Miscellaneous (incl. farmhouse benefit value)		5548	58	5822	60	6181	62
	- organic grants	4726	49	5708	59	5334	54
	- other agri-env.payments	1535	16	2520	26	2088	21
	FARM REVENUE	175717	1836	169094	1752	165645	1665
INPUTS							
Feeds	purchased concentrates	36020	376	23850	247	24628	248
	homegrown concentrates	5525	58	6660	69	5994	60
Purchased fodder, Tack and stock keep		2843	30	3291	34	3166	32
Veterinary and medicines		2587	27	2950	31	3055	31
Other livestock costs		11655	122	13038	135	13582	137
Seeds -	purchased and homegrown	2436	25	2197	23	2509	25
Fertilisers		1226	13	1163	12	1249	13
Crop protection		22	0	1	0	7	0
Other crop costs		632	7	646	7	751	8
Labour	paid incl. paid management	13050	136	15562	161	14807	149
	casual	1395	15	993	10	1067	11
Machinery	contract	9705	101	9087	94	9823	99
	repairs	7246	76	6912	72	6609	66
	fuels	3054	32	3260	34	3174	32
General farming costs		12564	131	12177	126	12009	121
Land expenses		5249	55	5573	58	5168	52
Rent		9092	95	9013	93	9415	95
	FARM EXPENSES	124303	1299	116374	1205	117013	1176
Excess of expenses over revenue		51414	537	52721	546	48632	489
Notional inputs							
- rental value/imputed rent		10709	112	11083	115	10745	108
- unpaid labour		3206	34	2557	26	3094	31
- machinery depreciation		7301	76	7012	73	7406	74
		21216	222	20652	214	21245	214
NET FARM INCOME (excl. BLSA)		30198	316	32069	332	28121	283

Table A4.1 LOWLAND DAIRY FARM RESULTS CONVENTIONAL

OUTPUTS AND INPUTS		*Identical sample* 2001/02		*Identical sample* 2002/03		*Full sample* 2002/03	
Sample number		171		171		273	
Average farm size (UAA)		88		89		91	
Business size (ESU)		93		92		93	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	107298	1214	96143	1080	96158	1056
	cattle	-2259	-26	-603	-7	-1015	-11
	net quota	1835	21	-1045	-12	-1201	-13
	valuation change	963	11	-606	-7	354	4
Other cattle	output	20349	230	19830	223	21224	233
	valuation change	-798	-9	1301	15	35	0
	subsidies	2947	33	2860	32	3053	34
Sheep -	total output	1402	16	1441	16	1634	18
	valuation change	-152	-2	-56	-1	3	0
	subsidies	199	2	361	4	449	5
Other livestock		1039	12	1208	14	550	6
Arable crops	output	6543	74	7332	82	5545	61
	subsidies (AAPS)	3150	36	3525	40	2676	29
By products forage and cults		1710	19	2453	28	2936	32
	subsidies (set-aside /other)	1236	14	1095	12	1002	11
Miscellaneous (incl. farmhouse benefit value)		6429	73	7344	83	7896	87
	- organic grants	0	0	0	0	0	0
	- other agri-env.payments	219	2	476	5	316	3
	FARM REVENUE	152110	1721	143057	1608	141615	1554
INPUTS							
Feeds	purchased concentrates	24910	282	22448	252	22605	248
	homegrown concentrates	3698	42	3534	40	3468	38
Purchased fodder, Tack and stock keep		3085	35	2522	28	2279	25
Veterinary and medicines		3670	42	3779	42	3875	43
Other livestock costs		10068	114	9610	108	9319	102
Seeds -	purchased and homegrown	1810	20	1588	18	1492	16
Fertilisers		6533	74	6568	74	6584	72
Crop protection		1654	19	1753	20	1442	16
Other crop costs		1010	11	1298	15	1275	14
Labour	paid incl. paid management	9931	112	10139	114	8935	98
	casual	994	11	1074	12	1335	15
Machinery	contract	6014	68	6604	74	7122	78
	repairs	5605	63	5347	60	5596	61
	fuels	2957	33	2661	30	2927	32
General farming costs		10384	118	10741	121	10926	120
Land expenses		2232	25	3002	34	3133	34
Rent		5070	57	4988	56	5466	60
	FARM EXPENSES	99625	1127	97654	1097	97780	1073
Excess of expenses over revenue		52484	594	45403	510	43835	481
Notional inputs							
- rental value/imputed rent		12367	140	13011	146	12407	136
- unpaid labour		6467	73	6390	72	7095	78
- machinery depreciation		8634	98	8752	98	9031	99
		27469	311	28153	316	28533	313
NET FARM INCOME (excl. BLSA)		25015	283	17255	194	15342	168

Table A4.2 LOWLAND DAIRY FARM RESULTS ORGANIC

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	30198	316	32069	332	28121	283
Less farmer and spouse labour	15960	167	16127	167	16624	167
Add managerial input of paid manager	0	0	0	0	0	0
Add BLSA	971	10	1365	14	1053	11
MANAGEMENT & INVESTMENT INCOME	15209	159	17306	179	11816	119
NET FARM INCOME (excl. BLSA)	30198	316	32069	332	28121	283
plus net rental value/imputed rent	9504	99	9202	95	8688	87
minus occupier's expenses	269	3	253	3	318	3
minus interest payments	5298	55	4030	42	4025	40
minus build & works depreciation	3704	39	4012	42	3806	38
OCCUPIER'S NET INCOME	30430	318	32976	342	28659	288
plus other imputed items	3494	37	2845	29	3398	34
plus fixed asset depreciation	11005	115	11010	114	11202	113
minus valuation changes	1857	19	2878	30	2860	29
NOTIONAL CASH INCOME	43072	450	43953	455	40399	406
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	2.4		2.4		2.5	
of which farmer & spouse	1.3		1.2		1.3	
NFI and paid labour/Annual Labour Units	18510		20370		17507	
NFI/Farmer & Spouse Labour Units	23782		26775		21604	
TENANT'S CAPITAL - £ per farm						
Machinery	47416	496	47308	490	47624	479
Livestock	74434	778	77372	801	78514	789
Crops	5678	59	6314	65	6329	64
Stores	1499	16	1453	15	1804	18
TOTAL	129027	1349	132447	1372	134271	1349
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	258993	264304	264304	264521	246775	250275
Buildings, improvements and fixtures	18105	17962	17962	16803	17006	16667
Machinery	48264	46567	46883	47733	46280	48967
Livestock	73216	75652	75600	79144	76931	80096
Produce and goods in store	6981	7373	7417	8116	7759	8507
Quotas	87229	86407	90965	71673	90330	67290
Credit balances	13216	15879	15223	16214	16060	15277
TOTAL	506005	514145	518354	504204	501141	487079
EXTERNAL LIABILITIES						
Long and medium term loans	43461	44313	44313	37935	42532	37531
Short term loans	8444	11456	11165	11650	15403	14501
Overdrafts	24195	19232	19232	20640	18470	21312
TOTAL	76100	75001	74710	70225	76405	73344
NET WORTH	**429905**	**439143**	**443645**	**433979**	**424736**	**413735**
RETURNS TO CAPITAL						
Owner Equity (%)	85.4		86.1		84.9	
ONI/Net worth (%)	6.9		7.6		6.9	
Return on tenant's capital (%)	11.8		13.1		8.8	
Return on all capital (%)	4.7		5.2		4.4	

Table A4.2 LOWLAND DAIRY FARM RESULTS CONVENTIONAL

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	25015	283	17255	194	15342	168
Less farmer and spouse labour	17020	193	17529	197	17727	195
Add managerial input of paid manager	34	0	35	0	19	0
Add BLSA	1600	18	1325	15	820	9
MANAGEMENT & INVESTMENT INCOME	9629	109	1086	12	-1546	-17
NET FARM INCOME (excl. BLSA)	25015	283	17255	194	15342	168
plus net rental value/imputed rent	10275	116	10604	119	9816	108
minus occupier's expenses	392	4	343	4	311	3
minus interest payments	6192	70	5269	59	5597	61
minus build & works depreciation	3490	39	4470	50	4359	48
OCCUPIER'S NET INCOME	25215	285	17777	200	14891	163
plus other imputed items	6473	73	6426	72	7122	78
plus fixed asset depreciation	12125	137	13227	149	13394	147
minus valuation changes	-493	-6	2167	24	1821	20
NOTIONAL CASH INCOME	44306	501	35262	396	33585	369
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	2.6		2.5		2.6	
of which farmer & spouse	1.3		1.3		1.4	
NFI and paid labour/Annual Labour Units	14014		11305		9755	
NFI/Farmer & Spouse Labour Units	18727		13069		10997	
TENANT'S CAPITAL - £ per farm						
Machinery	50242	569	51550	579	52865	580
Livestock	76403	865	78135	878	81720	897
Crops	8765	99	9063	102	9157	101
Stores	5257	59	5457	61	4565	50
TOTAL	140667	1592	144204	1620	148307	1628
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	332938	334630	334629	351375	338398	352409
Buildings, improvements and fixtures	17132	16670	17346	18516	17992	18210
Machinery	49585	50898	50869	52230	52230	53501
Livestock	75599	77207	77070	79199	81107	82332
Produce and goods in store	14273	13772	13874	15269	13043	14483
Quotas	85572	87821	87925	64732	84807	63718
Credit balances	20586	26837	26743	26341	24007	24679
TOTAL	595685	607834	608457	607662	611584	609333
EXTERNAL LIABILITIES						
Long and medium term loans	52380	58686	58573	60584	58320	59069
Short term loans	12712	13560	13654	15706	12726	14473
Overdrafts	26459	24584	24687	27320	28814	32275
TOTAL	91551	96830	96913	103610	99860	105817
NET WORTH	**504134**	**511004**	**511544**	**504052**	**511724**	**503516**
RETURNS TO CAPITAL						
Owner Equity (%)	84.1		82.9		82.6	
ONI/Net worth (%)	4.9		3.5		3.0	
Return on tenant's capital (%)	6.8		0.8		-1.0	
Return on all capital (%)	2.4		1.0		0.6	

Table A4.3 LOWLAND DAIRY FARM RESULTS ORGANIC

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	2.5	3.6	3.4
	Barley	4.2	1.2	1.0
	Other cereals	1.5	2.2	1.9
	Oil seed rape	0.0	0.0	0.0
	Linseed	0.0	0.0	0.0
	Peas/Beans	2.9	1.8	1.5
	Potatoes	0.1	0.0	0.0
	Sugarbeet	0.0	0.3	0.3
	Horticulture	0.0	0.0	0.0
	Other crops	0.2	0.0	0.0
	Total cropping	**11.4**	**9.2**	**8.0**
	Set-aside	2.2	4.0	4.5
Tillage - fodder		11.8	10.1	11.0
Grassland	Grazing, hay and silage	69.0	72.3	75.4
Fallow and land let		0.4	0.1	0.1
Rough grazing	Effective	0.9	0.9	0.7
Utilisable agricultural area (Effective ha.)		95.7	96.5	99.5
Woods, roads and buildings		5.0	5.1	4.3
TOTAL AREA (Actual ha.)		100.6	101.6	104.2
effective forage area		**81.9**	**83.3**	**88.2**
Bare land and forage hired in		0.2	0.0	1.2
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		2.8	4.6	4.2
Barley		3.8	4.4	4.6
Oilseed Rape		0.0	0.0	0.0
Potatoes		17.3	0.0	0.0
Sugar Beet		0.0	34.6	34.6
- Prices (£ per tonne)*				
Wheat		135	55	68
Barley		71	56	88
Oilseed Rape		0	0	0
Potatoes		0	0	0
Sugar Beet		0	44	44

* Yield and price data is implied

Table A4.3 LOWLAND DAIRY FARM RESULTS CONVENTIONAL

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	7.0	9.5	6.9
	Barley	5.8	5.7	4.4
	Other cereals	0.7	0.5	0.6
	Oil seed rape	0.5	0.2	0.2
	Linseed	0.0	0.0	0.0
	Peas/Beans	0.6	0.5	0.3
	Potatoes	0.1	0.1	0.0
	Sugarbeet	0.2	0.2	0.2
	Horticulture	0.0	0.0	0.0
	Other crops	0.1	0.0	0.0
	Total cropping	**15.0**	**16.6**	**12.7**
	Set-aside	3.2	2.6	2.1
Tillage - fodder		7.8	6.7	7.4
Grassland	Grazing, hay and silage	61.3	62.1	68.0
Fallow and land let		0.7	0.7	0.2
Rough grazing	Effective	0.5	0.5	0.8
Utilisable agricultural area (Effective ha.)		88.4	89.0	91.1
Woods, roads and buildings		3.3	3.4	2.9
TOTAL AREA (Actual ha.)		91.8	92.4	94.0
effective forage area		**74.5**	**74.9**	**81.4**
Bare land and forage hired in		5.0	5.8	5.3
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		6.3	7.2	7.3
Barley		4.9	5.8	5.5
Oilseed Rape		1.8	3.1	3.1
Potatoes		35.1	33.6	27.0
Sugar Beet		42.1	54.6	66.2
- Prices (£ per tonne)*				
Wheat		72	62	61
Barley		66	59	60
Oilseed Rape		151	155	130
Potatoes		98	70	57
Sugar Beet		30	26	26

* Yield and price data is implied

Table A4.4 LOWLAND DAIRY FARM RESULTS ORGANIC

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	95.2	95	97.9	98	101.2	101
Beef cows	0.5	1	1.0	1	0.7	1
Other cattle	47.8	88	47.6	86	44.8	82
Breeding sheep	1.0	11	0.7	7	0.9	9
Other sheep	0.4	10	0.2	6	0.4	7
Pigs	0.0	0	0.0	0	0.0	0
Poultry	1.4	848	1.5	870	1.3	680
Other livestock	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	146.4		148.9		149.3	
STOCKING RATES						
Stocking rate (LU per eff.ha)	1.5		1.5		1.5	
GLU/forage effective hectare*	1.8		1.8		1.7	

* for organic farms, pigs, poultry and other livestock are deemed to be grazing livestock

LIVESTOCK PERFORMANCE - Yield and prices (£ per head)*

Dairy cows (litres)	5437	5232	5318
Dairy cows	370	420	452
Dairy calves	48	56	54
Dairy heifers in calf	557	630	630
Beef heifers in calf	350	0	0
Fat cattle	577	515	508
Beef store cattle 1-2 yrs	292	319	317
Beef stores <1 yr	111	119	134
Ewes	35	62	53
Ewe hoggs	48	0	0
Fat lambs	47	51	51
Store lambs	46	0	31
Fat Pigs	0	0	61
Milk (pence per litre)	24.1	21.8	21.1
Wool (pence per kg)	48.8	40.2	49.6

* Yield and price data is implied

Table A4.4 LOWLAND DAIRY FARM RESULTS CONVENTIONAL

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	88.8	89	87.7	88	90.2	90
Beef cows	1.4	2	1.4	2	0.9	1
Other cattle	56.7	105	53.5	99	57.3	106
Breeding sheep	3.7	37	3.6	36	4.6	47
Other sheep	1.0	25	0.8	19	1.0	24
Pigs	1.6	15	1.6	10	0.4	3
Poultry	0.0	2	0.0	2	0.3	95
Other livestock	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	153.1		148.5		154.8	
STOCKING RATES						
Stocking rate (LU per eff.ha)	1.7		1.7		1.7	
GLU/forage effective hectare*	2.1		2.0		1.9	

* for conventional farms, pigs, poultry and other livestock are deemed to be non-grazing livestock

LIVESTOCK PERFORMANCE - Yield and prices (£ per head)*

Dairy cows (litres)	5777	5949	5843
Dairy cows	366	343	332
Dairy calves	57	68	76
Dairy heifers in calf	768	569	495
Beef heifers in calf	681	479	464
Fat cattle	421	447	460
Beef store cattle 1-2 yrs	315	349	359
Beef stores <1 yr	103	144	138
Ewes	26	28	31
Ewe hoggs	46	40	41
Fat lambs	34	45	47
Store lambs	27	32	27
Fat Pigs	47	51	35
Milk (pence per litre)	19.3	17.0	16.8
Wool (pence per kg)	46.7	50.8	45.5

* Yield and price data is implied

Table A5.1 LOWLAND CATTLE & SHEEP RESULTS ORGANIC

OUTPUTS AND INPUTS		*Identical sample*				*Full sample*	
		2001/02		2002/03		2002/03	
Sample number		15		15		19	
Average farm size (UAA)		79		80		79	
Business size (ESU)		27		25		25	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	0	0	0	0	0	0
	cattle	0	0	0	0	0	0
	net quota	267	3	187	2	148	2
	valuation change	0	0	0	0	0	0
Other cattle	output	8762	111	20321	255	19125	242
	valuation change	8167	103	101	1	505	6
	subsidies	9519	121	11844	149	11207	142
Sheep -	total output	4792	61	5063	64	6951	88
	valuation change	42	1	-708	-9	-991	-13
	subsidies	670	8	1438	18	1564	20
Other livestock		380	5	369	5	786	10
Arable crops	output	1540	20	1717	22	2195	28
	subsidies (AAPS)	1283	16	1115	14	1501	19
By products forage and cults		-173	-2	1167	15	927	12
	subsidies (set-aside /other)	625	8	478	6	424	5
Miscellaneous (incl. farmhouse benefit value)		5279	67	4057	51	4748	60
	- organic grants	3446	44	1837	23	2368	30
	- other agri-env.payments	3737	47	3834	48	3661	46
	FARM REVENUE	48334	612	52820	663	55118	697
INPUTS							
Feeds	purchased concentrates	2367	30	1500	19	1682	21
	homegrown concentrates	1059	13	1261	16	1144	14
Purchased fodder, Tack and stock keep		641	8	1112	14	1094	14
Veterinary and medicines		791	10	786	10	784	10
Other livestock costs		2944	37	2836	36	2934	37
Seeds -	purchased and homegrown	1121	14	519	7	917	12
Fertilisers		507	6	893	11	774	10
Crop protection		1	0	0	0	0	0
Other crop costs		350	4	233	3	378	5
Labour	paid incl. paid management	27	0	0	0	0	0
	casual	427	5	414	5	568	7
Machinery	contract	2587	33	3552	45	3527	45
	repairs	2974	38	2886	36	3078	39
	fuels	1490	19	1729	22	1784	23
General farming costs		5806	74	6478	81	6507	82
Land expenses		3379	43	1772	22	1907	24
Rent		2880	36	2686	34	2673	34
	FARM EXPENSES	29350	372	28657	360	29751	376
Excess of expenses over revenue		18984	240	24164	303	25367	321
Notional inputs							
- rental value/imputed rent		7510	95	7562	95	7554	96
- unpaid labour		2974	38	3061	38	3290	42
- machinery depreciation		3515	45	3527	44	4001	51
		14000	177	14151	178	14845	188
NET FARM INCOME (excl. BLSA)		4984	63	10008	126	10517	133

Table A5.1 LOWLAND CATTLE & SHEEP RESULTS CONVENTIONAL

OUTPUTS AND INPUTS		*Identical sample* 2001/02		2002/03		*Full sample* 2002/03	
Sample number		140		140		175	
Average farm size (UAA)		78		78		77	
Business size (ESU)		30		29		30	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	163	2	102	1	890	12
	cattle	129	2	4	0	232	3
	net quota	295	4	792	10	843	11
	valuation change	-79	-1	0	0	-234	-3
Other cattle	output	18912	243	17337	222	17892	232
	valuation change	-594	-8	1936	25	1152	15
	subsidies	10721	138	10353	133	10996	142
Sheep -	total output	8220	106	10263	131	9814	127
	valuation change	-42	-1	-354	-5	-540	-7
	subsidies	1501	19	2934	38	2585	33
Other livestock		686	9	591	8	1115	14
Arable crops	output	2202	28	2240	29	2046	26
	subsidies (AAPS)	1211	16	1243	16	1104	14
By products forage and cults		2709	35	2362	30	2655	34
	subsidies (set-aside /other)	307	4	228	3	250	3
Miscellaneous (incl. farmhouse benefit value)		5856	75	7019	90	7562	98
	- organic grants	0	0	0	0	0	0
	- other agri-env.payments	1028	13	916	12	930	12
	FARM REVENUE	53224	683	57965	743	59290	767
INPUTS							
Feeds	purchased concentrates	4855	62	4256	55	4281	55
	homegrown concentrates	1407	18	1483	19	1689	22
Purchased fodder, Tack and stock keep		1264	16	1192	15	1251	16
Veterinary and medicines		1511	19	1529	20	1541	20
Other livestock costs		3495	45	3709	48	3432	44
Seeds -	purchased and homegrown	531	7	494	6	535	7
Fertilisers		3289	42	2999	38	3155	41
Crop protection		447	6	442	6	402	5
Other crop costs		330	4	438	6	485	6
Labour	paid incl. paid management	2119	27	2187	28	2193	28
	casual	486	6	519	7	400	5
Machinery	contract	2685	34	2825	36	2610	34
	repairs	2584	33	2658	34	2871	37
	fuels	1951	25	1959	25	2124	27
General farming costs		5624	72	5988	77	6281	81
Land expenses		1326	17	1518	19	1781	23
Rent		2748	35	2781	36	2286	30
	FARM EXPENSES	36654	471	36979	474	37317	483
Excess of expenses over revenue		16570	213	20986	269	21973	284
Notional inputs							
- rental value/imputed rent		8689	112	8900	114	8860	115
- unpaid labour		4842	62	4858	62	4706	61
- machinery depreciation		4505	58	4578	59	4994	65
		18035	232	18335	235	18561	240
NET FARM INCOME (excl. BLSA)		-1465	-19	2658	34	3416	44

Table A5.2 LOWLAND CATTLE & SHEEP RESULTS ORGANIC

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	4984	63	10008	126	10517	133
Less farmer and spouse labour	15546	197	16151	203	16261	206
Add managerial input of paid manager	0	0	0	0	0	0
Add BLSA	128	2	464	6	353	4
MANAGEMENT & INVESTMENT INCOME	-10433	-132	-5674	-71	-5387	-68
NET FARM INCOME (excl. BLSA)	4984	63	10008	126	10517	133
plus net rental value/imputed rent	5875	74	5871	74	5465	69
minus occupier's expenses	134	2	206	3	264	3
minus interest payments	1341	17	1545	19	1964	25
minus build & works depreciation	937	12	1203	15	1207	15
OCCUPIER'S NET INCOME	8448	107	12925	162	12547	159
plus other imputed items	3854	49	3941	49	4065	51
plus fixed asset depreciation	4415	56	4652	58	5146	65
minus valuation changes	7192	91	-602	-8	-490	-6
NOTIONAL CASH INCOME	9525	121	22120	278	22247	281
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	1.7		1.7		1.7	
of which farmer & spouse	1.3		1.2		1.2	
NFI and paid labour/Annual Labour Units	3172		6272		6422	
NFI/Farmer & Spouse Labour Units	3743		8558		8829	
TENANT'S CAPITAL - £ per farm						
Machinery	24459	310	28291	355	31387	397
Livestock	40761	516	44669	561	45058	570
Crops	2667	34	2013	25	2522	32
Stores	451	6	393	5	338	4
TOTAL	68338	866	75366	946	79306	1003
ASSETS - £ per farm	Opening Value	Closing Value	Opening Value	Closing Value	Opening Value	Closing Value
Land and Property	305107	305769	305769	306306	292489	292994
Buildings, improvements and fixtures	5221	6426	6426	7849	5989	7474
Machinery	24298	24620	24620	31962	28843	33932
Livestock	36646	44876	44901	44437	45242	44874
Produce and goods in store	3572	2663	2243	2569	2745	2976
Quotas	6496	6485	6372	7051	6440	7113
Credit balances	26791	10587	11881	13728	11130	13686
TOTAL	408132	401425	402211	413902	392877	403049
EXTERNAL LIABILITIES						
Long and medium term loans	16642	13197	13197	11226	13994	12358
Short term loans	7036	6261	6340	6114	7406	6897
Overdrafts	8561	5199	5199	2833	9878	8018
TOTAL	32239	24657	24736	20172	31279	27273
NET WORTH	**375893**	**376768**	**377475**	**393730**	**361598**	**375776**
RETURNS TO CAPITAL						
Owner Equity (%)	93.9		95.1		93.2	
ONI/Net worth (%)	2.2		3.3		3.3	
Return on tenant's capital (%)	-15.3		-7.5		-6.8	
Return on all capital (%)	-1.9		-0.7		-0.7	

Table A5.2 LOWLAND CATTLE & SHEEP RESULTS CONVENTIONAL

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	-1465	-19	2658	34	3416	44
Less farmer and spouse labour	13966	179	14368	184	13961	181
Add managerial input of paid manager	6	0	33	0	41	1
Add BLSA	514	7	1197	15	939	12
MANAGEMENT & INVESTMENT INCOME	-14912	-191	-10480	-134	-9564	-124
NET FARM INCOME (excl. BLSA)	-1465	-19	2658	34	3416	44
plus net rental value/imputed rent	6489	83	6483	83	6696	87
minus occupier's expenses	191	2	225	3	224	3
minus interest payments	2072	27	1764	23	1625	21
minus build & works depreciation	1596	20	1436	18	1505	19
OCCUPIER'S NET INCOME	1165	15	5717	73	6758	87
plus other imputed items	4842	62	4858	62	4708	61
plus fixed asset depreciation	6100	78	6013	77	6500	84
minus valuation changes	-359	-5	1505	19	452	6
NOTIONAL CASH INCOME	12466	160	15083	193	17513	227
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	1.7		1.7		1.7	
of which farmer & spouse	1.1		1.1		1.1	
NFI and paid labour/Annual Labour Units	658		3117		3489	
NFI/Farmer & Spouse Labour Units	-1291		2335		3013	
TENANT'S CAPITAL - £ per farm						
Machinery	28907	371	29205	374	32964	427
Livestock	48455	622	49635	636	50644	655
Crops	5163	66	5270	68	4838	63
Stores	1494	19	1439	18	1562	20
TOTAL	84020	1079	85549	1096	90008	1165
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	281871	283506	283668	283821	299545	298755
Buildings, improvements and fixtures	8194	8584	6986	6962	7886	7361
Machinery	29150	28665	28673	29737	31966	33961
Livestock	48530	48380	48263	51006	50029	51260
Produce and goods in store	6504	6810	6730	6688	6320	6480
Quotas	11780	10659	10646	11146	11033	11618
Credit balances	15132	15905	15812	18582	15612	17412
TOTAL	401162	402509	400778	407943	422391	426848
EXTERNAL LIABILITIES						
Long and medium term loans	16246	16152	15525	14056	14547	13481
Short term loans	4366	4721	4805	4576	4617	4728
Overdrafts	17924	18372	18346	18630	14721	15054
TOTAL	38536	39245	38676	37263	33885	33263
NET WORTH	**362626**	**363264**	**362101**	**370680**	**388506**	**393585**
RETURNS TO CAPITAL						
Owner Equity (%)	90.2		90.9		92.2	
ONI/Net worth (%)	0.3		1.5		1.7	
Return on tenant's capital (%)	-17.7		-12.3		-10.6	
Return on all capital (%)	-3.0		-1.9		-1.7	

Table A5.3 LOWLAND CATTLE & SHEEP RESULTS ORGANIC

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	0.3	0.0	0.5
	Barley	2.1	2.5	3.1
	Other cereals	1.6	1.9	2.2
	Oil seed rape	0.0	0.0	0.0
	Linseed	1.2	0.7	0.6
	Peas/Beans	0.0	0.0	0.0
	Potatoes	0.0	0.0	0.0
	Sugarbeet	0.0	0.0	0.0
	Horticulture	0.1	0.1	0.1
	Other crops	0.0	0.0	0.4
	Total cropping	**5.4**	**5.3**	**6.9**
	Set-aside	0.3	0.5	0.6
Tillage - fodder		1.4	1.3	1.6
Grassland	Grazing, hay and silage	71.1	71.9	68.9
Fallow and land let		0.4	0.3	0.9
Rough grazing	Effective	0.4	0.4	0.3
Utilisable agricultural area (Effective ha.)		78.9	79.7	79.1
Woods, roads and buildings		3.1	3.1	2.6
TOTAL AREA (Actual ha.)		82.0	82.8	83.2
effective forage area		**79.1**	**80.0**	**78.2**
Bare land and forage hired in		6.3	6.4	7.5
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		3.4	0.0	0.0
Barley		3.3	3.6	3.7
Oilseed Rape		0.0	0.0	0.0
Potatoes		0.0	0.0	0.0
Sugar Beet		0.0	0.0	0.0
- Prices (£ per tonne)*				
Wheat		120	0	0
Barley		102	85	83
Oilseed Rape		0	0	0
Potatoes		0	0	0
Sugar Beet		0	0	0

* Yield and price data is implied

Table A5.3 LOWLAND CATTLE & SHEEP RESULTS CONVENTIONAL

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	0.6	1.0	1.0
	Barley	4.2	4.3	3.9
	Other cereals	1.4	1.3	1.0
	Oil seed rape	0.0	0.0	0.0
	Linseed	0.0	0.0	0.0
	Peas/Beans	0.0	0.0	0.1
	Potatoes	0.0	0.0	0.0
	Sugarbeet	0.0	0.0	0.0
	Horticulture	0.0	0.0	0.0
	Other crops	0.0	0.0	0.0
	Total cropping	**6.2**	**6.6**	**6.1**
	Set-aside	0.8	0.5	0.6
Tillage - fodder		1.2	1.1	1.5
Grassland	Grazing, hay and silage	67.2	67.6	66.6
Fallow and land let		2.3	2.2	2.4
Rough grazing	Effective	0.3	0.3	0.3
Utilisable agricultural area (Effective ha.)		77.9	78.0	77.3
Woods, roads and buildings		2.9	2.9	2.8
TOTAL AREA (Actual ha.)		80.8	80.9	80.1
effective forage area		**73.4**	**74.4**	**73.3**
Bare land and forage hired in		4.6	5.4	5.0
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		4.7	5.5	5.7
Barley		5.1	5.1	5.1
Oilseed Rape		0.0	0.0	0.0
Potatoes		32.6	0.0	0.0
Sugar Beet		0.0	0.0	0.0
- Prices (£ per tonne)*				
Wheat		88	63	63
Barley		67	61	61
Oilseed Rape		0	0	0
Potatoes		76	0	0
Sugar Beet		0	0	0

* Yield and price data is implied

Table A5.4 LOWLAND CATTLE & SHEEP RESULTS ORGANIC

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0
Beef cows	24.5	33	24.8	33	23.9	32
Other cattle	43.9	78	42.0	75	41.4	72
Breeding sheep	13.9	155	12.7	142	12.7	136
Other sheep	3.9	98	3.1	78	3.4	85
Pigs	0.6	3	0.5	4	0.4	3
Poultry	0.1	15	0.7	46	0.8	51
Other livestock	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	86.9		83.9		82.7	

STOCKING RATES			
Stocking rate (LU per eff.ha)	1.1	1.1	1.0
GLU/forage effective hectare*	1.1	1.0	1.1

* for organic farms, pigs, poultry and other livestock are deemed to be grazing livestock

LIVESTOCK PERFORMANCE - Prices (£ per head)*			
Dairy cows	0	0	0
Dairy calves	0	0	0
Dairy heifers in calf	0	0	0
Beef heifers in calf	460	476	476
Fat cattle	571	584	596
Beef store cattle 1-2 yrs	326	359	347
Beef stores <1 yr	187	200	200
Ewes	17	36	36
Ewe hoggs	61	25	32
Fat lambs	44	50	51
Store lambs	0	19	19
Fat Pigs	80	80	80
Milk (pence per litre)	0.0	0.0	0.0
Wool (pence per kg)	43.5	43.0	43.6

* Price data is implied

Table A5.4 LOWLAND CATTLE & SHEEP RESULTS CONVENTIONAL

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.4	0	0.3	0	1.0	1
Beef cows	16.9	23	16.3	22	17.1	23
Other cattle	50.6	90	49.0	88	51.3	90
Breeding sheep	28.0	267	27.8	265	24.5	232
Other sheep	6.3	154	6.0	147	5.4	133
Pigs	0.2	1	0.2	1	0.8	7
Poultry	0.1	70	0.1	51	0.2	73
Other livestock	0.0	1	0.0	1	0.9	2
TOTAL (L.U.)	102.5		99.8		101.2	
STOCKING RATES						
Stocking rate (LU per eff.ha)	1.3		1.3		1.3	
GLU/forage effective hectare*	1.4		1.3		1.4	

* for conventional farms, pigs, poultry and other livestock are deemed to be non-grazing livestock

LIVESTOCK PERFORMANCE - Prices (£ per head)*			
Dairy cows	445	272	335
Dairy calves	0	0	0
Dairy heifers in calf	974	568	568
Beef heifers in calf	511	534	534
Fat cattle	493	509	502
Beef store cattle 1-2 yrs	351	391	400
Beef stores <1 yr	159	173	184
Ewes	24	34	33
Ewe hoggs	41	43	43
Fat lambs	35	45	44
Store lambs	26	30	29
Fat Pigs	76	89	86
Milk (pence per litre)	18.0	17.1	17.3
Wool (pence per kg)	47.1	52.4	50.8

* Price data is implied

Table A6.1 LFA CATTLE & SHEEP RESULTS ORGANIC

OUTPUTS AND INPUTS		*Identical sample* 2001/02		*Identical sample* 2002/03		*Full sample* 2002/03	
Sample number		19		19		22	
Average farm size (UAA)		112		118		124	
Business size (ESU)		26		26		27	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	0	0	0	0	0	0
	cattle	0	0	0	0	0	0
	net quota	0	0	0	0	0	0
	valuation change	0	0	0	0	0	0
Other cattle	output	9518	85	12664	107	12389	100
	valuation change	2274	20	-465	-4	550	4
	subsidies	6750	60	7366	62	7952	64
Sheep -	total output	8445	76	12469	105	13465	109
	valuation change	940	8	75	1	223	2
	subsidies	4783	43	8054	68	8384	68
Other livestock		621	6	881	7	761	6
Arable crops	output	541	5	708	6	611	5
	subsidies (AAPS)	240	2	319	3	276	2
By products forage and cults		-131	-1	598	5	637	5
	subsidies (set-aside /other)	235	2	233	2	201	2
Miscellaneous (incl. farmhouse benefit value)		6954	62	6328	54	6538	53
	- organic grants	5543	50	3468	29	3069	25
	- other agri-env.payments	5911	53	6370	54	7297	59
	FARM REVENUE	52624	471	59068	500	62353	504
INPUTS							
Feeds	purchased concentrates	4355	39	4810	41	5264	43
	homegrown concentrates	362	3	465	4	402	3
Purchased fodder, Tack and stock keep		2036	18	1831	15	1999	16
Veterinary and medicines		1435	13	1586	13	1748	14
Other livestock costs		3511	31	3875	33	3721	30
Seeds -	purchased and homegrown	331	3	362	3	377	3
Fertilisers		1905	17	1220	10	1205	10
Crop protection		12	0	0	0	0	0
Other crop costs		245	2	338	3	358	3
Labour	paid incl. paid management	1151	10	1026	9	1241	10
	casual	485	4	666	6	777	6
Machinery	contract	2806	25	2895	24	2842	23
	repairs	3133	28	2806	24	2878	23
	fuels	1766	16	2195	19	2383	19
General farming costs		4272	38	5313	45	5589	45
Land expenses		2355	21	2201	19	2267	18
Rent		751	7	1486	13	1645	13
	FARM EXPENSES	30912	277	33074	280	34697	281
Excess of expenses over revenue		21712	194	25993	220	27656	224
Notional inputs							
- rental value/imputed rent		7866	70	8089	68	8914	72
- unpaid labour		2116	19	2850	24	3087	25
- machinery depreciation		3586	32	4003	34	4711	38
		13568	121	14943	126	16712	135
NET FARM INCOME (excl. BLSA)		8144	73	11051	93	10944	88

Table A6.1 LFA CATTLE & SHEEP RESULTS — CONVENTIONAL

OUTPUTS AND INPUTS		*Identical sample* 2001/02		*Identical sample* 2002/03		*Full sample* 2002/03	
Sample number		246		246		148	
Average farm size (UAA)		106		108		110	
Business size (ESU)		34		34		32	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	374	4	321	3	96	1
	cattle	29	0	-51	0	75	1
	net quota	89	1	185	2	55	0
	valuation change	-8	0	3	0	-106	-1
Other cattle	output	12031	114	11987	111	11665	106
	valuation change	-165	-2	-55	-1	-867	-8
	subsidies	7625	72	8214	76	7034	64
Sheep -	total output	17690	167	22641	210	20639	187
	valuation change	-286	-3	736	7	909	8
	subsidies	7371	70	12080	112	12028	109
Other livestock		61	1	43	0	5	0
Arable crops	output	277	3	272	3	208	2
	subsidies (AAPS)	154	1	165	2	150	1
By products forage and cults		647	6	552	5	600	5
	subsidies (set-aside /other)	15	0	7	0	0	0
Miscellaneous (incl. farmhouse benefit value)		9557	90	9166	85	8956	81
	- organic grants	0	0	0	0	0	0
	- other agri-env.payments	1371	13	2323	22	2507	23
	FARM REVENUE	56831	537	68589	635	63953	579
INPUTS							
Feeds	purchased concentrates	7569	72	7132	66	6787	61
	homegrown concentrates	233	2	266	2	248	2
Purchased fodder, Tack and stock keep		4298	41	4057	38	2835	26
Veterinary and medicines		1988	19	2308	21	1991	18
Other livestock costs		3111	29	3000	28	2907	26
Seeds -	purchased and homegrown	204	2	183	2	181	2
Fertilisers		3479	33	3246	30	3029	27
Crop protection		96	1	120	1	125	1
Other crop costs		307	3	350	3	295	3
Labour	paid incl. paid management	1809	17	1754	16	1421	13
	casual	518	5	451	4	441	4
Machinery	contract	1834	17	1986	18	1752	16
	repairs	2388	23	2710	25	2610	24
	fuels	2375	22	2387	22	2343	21
General farming costs		5115	48	5445	50	5372	49
Land expenses		1660	16	1741	16	1707	15
Rent		1532	14	1635	15	1827	17
	FARM EXPENSES	38513	364	38771	359	35872	325
Excess of expenses over revenue		18319	173	29818	276	28081	254
Notional inputs							
- rental value/imputed rent		8091	76	8449	78	8362	76
- unpaid labour		3897	37	3854	36	3786	34
- machinery depreciation		5387	51	5179	48	5173	47
		17374	164	17481	162	17320	157
NET FARM INCOME (excl. BLSA)		944	9	12337	114	10761	97

Table A6.2 LFA CATTLE & SHEEP RESULTS ORGANIC

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	8144	73	11051	93	10944	88
Less farmer and spouse labour	14160	127	14224	120	13677	111
Add managerial input of paid manager	0	0	0	0	0	0
Add BLSA	553	5	249	2	215	2
MANAGEMENT & INVESTMENT INCOME	-5464	-49	-2924	-25	-2518	-20
NET FARM INCOME (excl. BLSA)	8144	73	11051	93	10944	88
plus net rental value/imputed rent	6914	62	7066	60	7858	64
minus occupier's expenses	168	2	219	2	215	2
minus interest payments	3903	35	3614	31	3249	26
minus build & works depreciation	1117	10	1147	10	1256	10
OCCUPIER'S NET INCOME	9870	88	13136	111	14082	114
plus other imputed items	2628	24	3362	28	3529	29
plus fixed asset depreciation	4639	42	5075	43	5901	48
minus valuation changes	3345	30	234	2	1318	11
NOTIONAL CASH INCOME	13792	123	21340	181	22194	179
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	1.6		1.6		1.6	
of which farmer & spouse	1.3		1.1		1.0	
NFI and paid labour/Annual Labour Units	6120		7796		7904	
NFI/Farmer & Spouse Labour Units	6314		10342		10483	
TENANT'S CAPITAL - £ per farm						
Machinery	26694	239	27976	237	32875	266
Livestock	41999	376	43751	370	44404	359
Crops	1883	17	2256	19	2344	19
Stores	97	1	89	1	219	2
TOTAL	70672	632	74072	627	79842	645
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	324376	324376	324376	329012	335044	339048
Buildings, improvements and fixtures	5462	6779	6779	6062	7038	6258
Machinery	26452	26936	27225	28727	32406	33344
Livestock	40115	43882	43809	43694	43899	44909
Produce and goods in store	1914	2046	2046	2643	2302	2824
Quotas	12261	9735	9771	11239	10375	11938
Credit balances	10801	8559	8556	15830	9366	17010
TOTAL	421381	422312	422561	437207	440429	455332
EXTERNAL LIABILITIES						
Long and medium term loans	31042	30215	30215	34365	26094	29893
Short term loans	946	1724	1724	2530	2316	3047
Overdrafts	16856	17675	17675	19345	15710	18028
TOTAL	48844	49614	49614	56239	44120	50969
NET WORTH	**372537**	**372698**	**372948**	**381077**	**396309**	**404458**
RETURNS TO CAPITAL						
Owner Equity (%)	88.3		87.2		88.8	
ONI/Net worth (%)	2.6		3.4		3.5	
Return on tenant's capital (%)	-7.7		-3.9		-3.2	
Return on all capital (%)	-1.1		-0.3		-0.2	

Table A6.2 LFA CATTLE & SHEEP RESULTS — CONVENTIONAL

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	944	9	12337	114	10761	97
Less farmer and spouse labour	13282	126	13668	127	13605	123
Add managerial input of paid manager	0	0	0	0	0	0
Add BLSA	385	4	378	4	259	2
MANAGEMENT & INVESTMENT INCOME	-11953	-113	-953	-9	-2585	-23
NET FARM INCOME (excl. BLSA)	944	9	12337	114	10761	97
plus net rental value/imputed rent	7037	67	7319	68	7284	66
minus occupier's expenses	182	2	176	2	172	2
minus interest payments	2294	22	2212	20	2413	22
minus build & works depreciation	2016	19	2020	19	1816	16
OCCUPIER'S NET INCOME	3489	33	15249	141	13645	124
plus other imputed items	3900	37	3854	36	3786	34
plus fixed asset depreciation	7403	70	7198	67	6988	63
minus valuation changes	-339	-3	841	8	81	1
NOTIONAL CASH INCOME	15130	143	25460	236	24338	220
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	1.7		1.7		1.7	
of which farmer & spouse	1.2		1.2		1.2	
NFI and paid labour/Annual Labour Units	1923		8732		7641	
NFI/Farmer & Spouse Labour Units	808		10585		9141	
TENANT'S CAPITAL - £ per farm						
Machinery	35364	334	36283	336	36993	335
Livestock	51526	487	51882	481	49207	446
Crops	2608	25	2725	25	3355	30
Stores	619	6	642	6	484	4
TOTAL	90117	852	91532	848	90039	816
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	278974	279294	288374	294153	304574	307494
Buildings, improvements and fixtures	8882	9153	9157	9756	7736	7838
Machinery	35568	35161	35347	37218	36253	37733
Livestock	51567	51485	51348	52417	49109	49306
Produce and goods in store	3163	3291	3292	3442	3768	3910
Quotas	23629	17920	17883	16376	12367	13335
Credit balances	17911	15099	15414	21838	16655	22537
TOTAL	419694	411403	420815	435200	430461	442153
EXTERNAL LIABILITIES						
Long and medium term loans	13153	12397	12954	14385	11751	12030
Short term loans	3421	2886	3091	4539	3401	4259
Overdrafts	14522	15148	15392	14765	17881	17799
TOTAL	31097	30432	31438	33689	33033	34088
NET WORTH	**388597**	**380971**	**389378**	**401510**	**397428**	**408065**
RETURNS TO CAPITAL						
Owner Equity (%)	92.6		92.3		92.3	
ONI/Net worth (%)	0.9		3.8		3.3	
Return on tenant's capital (%)	-13.3		-1.0		-2.9	
Return on all capital (%)	-2.5		0.2		-0.2	

Table A6.3 LFA CATTLE & SHEEP RESULTS ORGANIC

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	0.0	0.0	0.0
	Barley	0.8	0.6	0.5
	Other cereals	0.5	1.0	0.8
	Oil seed rape	0.0	0.0	0.0
	Linseed	0.0	0.0	0.0
	Peas/Beans	0.0	0.0	0.0
	Potatoes	0.0	0.0	0.0
	Sugarbeet	0.0	0.0	0.0
	Horticulture	0.0	0.0	0.0
	Other crops	0.0	0.0	0.0
	Total cropping	**1.3**	**1.6**	**1.4**
	Set-aside	0.0	0.0	0.0
Tillage - fodder		0.5	1.4	1.2
Grassland	Grazing, hay and silage	98.7	104.9	112.2
Fallow and land let		1.0	0.0	0.0
Rough grazing	Effective	10.3	10.3	8.9
Utilisable agricultural area (Effective ha.)		111.8	118.2	123.7
Woods, roads and buildings		5.1	5.4	8.2
TOTAL AREA (Actual ha.)		116.9	123.6	143.5
effective forage area		**111.6**	**118.6**	**124.9**
Bare land and forage hired in		2.1	2.0	2.6
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		0.0	0.0	0.0
Barley		5.1	4.1	4.1
Oilseed Rape		0.0	0.0	0.0
Potatoes		0.0	0.0	0.0
Sugar Beet		0.0	0.0	0.0
- Prices (£ per tonne)*				
Wheat		0	0	0
Barley		90	110	110
Oilseed Rape		0	0	0
Potatoes		0	0	0
Sugar Beet		0	0	0

* Yield and price data is implied

Table A6.3 LFA CATTLE & SHEEP RESULTS CONVENTIONAL

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	0.1	0.1	0.1
	Barley	0.5	0.5	0.4
	Other cereals	0.3	0.4	0.4
	Oil seed rape	0.0	0.0	0.0
	Linseed	0.0	0.0	0.0
	Peas/Beans	0.0	0.0	0.0
	Potatoes	0.0	0.0	0.0
	Sugarbeet	0.0	0.0	0.0
	Horticulture	0.0	0.0	0.0
	Other crops	0.0	0.0	0.0
	Total cropping	**0.9**	**0.9**	**0.8**
	Set-aside	0.0	0.0	0.0
Tillage - fodder		0.1	0.2	0.4
Grassland	Grazing, hay and silage	93.4	95.2	99.2
Fallow and land let		0.0	0.1	0.0
Rough grazing	Effective	11.4	11.6	10.0
Utilisable agricultural area (Effective ha.)		105.8	107.9	110.4
Woods, roads and buildings		5.8	6.3	5.9
TOTAL AREA (Actual ha.)		120.6	114.3	116.3
effective forage area		**113.0**	**115.3**	**114.5**
Bare land and forage hired in		8.1	8.3	5.0
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		4.9	6.2	6.2
Barley		4.8	5.8	4.6
Oilseed Rape		0.0	0.0	0.0
Potatoes		21.0	16.0	0.0
Sugar Beet		0.0	0.0	0.0
- Prices (£ per tonne)*				
Wheat		70	60	60
Barley		73	67	57
Oilseed Rape		0	0	0
Potatoes		106	117	0
Sugar Beet		0	0	0

* Yield and price data is implied

Table A6.4 LFA CATTLE & SHEEP RESULTS ORGANIC

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0
Beef cows	19.0	25	18.9	25	19.5	26
Other cattle	22.1	43	22.8	45	22.7	45
Breeding sheep	34.1	481	33.9	480	36.7	508
Other sheep	7.1	177	9.3	228	9.4	230
Pigs	0.1	0	0.5	2	0.4	2
Poultry	0.0	0	0.0	0	0.0	0
Other livestock	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	82.5		85.3		88.7	
STOCKING RATES						
Stocking rate (LU per eff.ha)	0.7		0.7		0.7	
GLU/forage effective hectare*	0.7		0.7		0.7	
LIVESTOCK PERFORMANCE - Prices (£ per head)*						
Dairy cows	0		0		0	
Dairy calves	0		0		0	
Dairy heifers in calf	0		0		0	
Beef heifers in calf	590		539		539	
Fat cattle	691		636		670	
Beef store cattle 1-2 yrs	375		406		415	
Beef stores <1 yr	206		192		211	
Ewes	22		23		23	
Ewe hoggs	41		100		100	
Fat lambs	36		39		40	
Store lambs	20		24		25	
Fat Pigs	104		0		0	
Milk (pence per litre)	0.0		0.0		0.0	
Wool (pence per kg)	45.2		45.7		46.3	

* for organic farms, pigs, poultry and other livestock are deemed to be grazing livestock

* Price data is implied

Table A6.4 LFA CATTLE & SHEEP RESULTS CONVENTIONAL

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.4	0	0.4	0	0.1	0
Beef cows	21.7	29	21.7	29	18.8	25
Other cattle	25.8	51	24.6	49	27.4	51
Breeding sheep	54.9	686	55.6	695	53.6	670
Other sheep	15.4	380	16.3	401	14.8	365
Pigs	0.0	0	0.1	0	0.0	0
Poultry	0.0	2	0.0	0	0.0	0
Other livestock	0.1	0	0.1	0	0.1	0
TOTAL (L.U.)	118.3		118.7		114.9	
STOCKING RATES						
Stocking rate (LU per eff.ha)	1.1		1.1		1.0	
GLU/forage effective hectare*	1.0		1.0		1.0	

* for conventional farms, pigs, poultry and other livestock are deemed to be non-grazing livestock

LIVESTOCK PERFORMANCE - Prices (£ per head)*			
Dairy cows	661	425	244
Dairy calves	9	24	0
Dairy heifers in calf	518	505	473
Beef heifers in calf	562	470	487
Fat cattle	474	511	508
Beef store cattle 1-2 yrs	357	431	432
Beef stores <1 yr	275	316	228
Ewes	32	27	28
Ewe hoggs	34	42	39
Fat lambs	29	37	36
Store lambs	18	30	30
Fat Pigs	55	57	0
Milk (pence per litre)	19.3	17.3	15.4
Wool (pence per kg)	42.9	44.6	45.4

* Price data is implied

Table A7.1 MIXED FARM RESULTS — ORGANIC

OUTPUTS AND INPUTS		*Identical sample* 2001/02 £/farm	£/ha	2002/03 £/farm	£/ha	*Full sample* 2002/03 £/farm	£/ha
Sample number		9		9		16	
Average farm size (UAA)		135		130		126	
Business size (ESU)		59		51		54	
OUTPUTS							
Dairy -	milk output	0	0	0	0	0	0
	cattle	0	0	0	0	0	0
	net quota	0	0	0	0	0	0
	valuation change	0	0	0	0	0	0
Other cattle	output	18374	136	27107	209	19802	158
	valuation change	4824	36	-5597	-43	-1510	-12
	subsidies	14666	109	16553	127	13706	109
Sheep -	total output	11098	82	12274	94	12225	97
	valuation change	-866	-6	315	2	-158	-1
	subsidies	1031	8	2108	16	2407	19
Other livestock		5144	38	4104	32	23287	185
Arable crops	output	19607	145	16993	131	19606	156
	subsidies (AAPS)	7638	57	7851	60	8841	70
By products forage and cults		2615	19	5485	42	5045	40
	subsidies (set-aside /other)	3441	25	2514	19	2798	22
Miscellaneous (incl. farmhouse benefit value)		6291	47	5627	43	5967	48
	- organic grants	5332	39	6165	47	6213	49
	- other agri-env.payments	4177	31	7444	57	6827	54
	FARM REVENUE	103373	765	108944	838	125056	996
INPUTS							
Feeds	purchased concentrates	3089	23	2941	23	15708	125
	homegrown concentrates	2298	17	4312	33	2741	22
Purchased fodder, Tack and stock keep		2524	19	1383	11	1493	12
Veterinary and medicines		1892	14	1713	13	1564	12
Other livestock costs		7060	52	4790	37	4935	39
Seeds -	purchased and homegrown	4044	30	4741	36	5093	41
Fertilisers		1335	10	1128	9	1524	12
Crop protection		722	5	449	3	799	6
Other crop costs		969	7	1061	8	907	7
Labour	paid incl. paid management	8920	66	9271	71	7907	63
	casual	1856	14	1906	15	1261	10
Machinery	contract	4163	31	3898	30	6640	53
	repairs	6461	48	6803	52	6190	49
	fuels	4259	32	4113	32	3416	27
General farming costs		11489	85	11626	89	10658	85
Land expenses		1910	14	3268	25	3102	25
Rent		10877	81	10067	77	11386	91
	FARM EXPENSES	73868	547	73468	565	85323	679
Excess of expenses over revenue		29505	218	35476	273	39733	316
Notional inputs							
- rental value/imputed rent		9305	69	9353	72	7668	61
- unpaid labour		8744	65	9015	69	6741	54
- machinery depreciation		9129	68	9890	76	8978	71
		27179	201	28258	217	23386	186
NET FARM INCOME (excl. BLSA)		2326	17	7218	56	16347	130

Table A7.1 MIXED FARM RESULTS — CONVENTIONAL

OUTPUTS AND INPUTS		*Identical sample* 2001/02		*Identical sample* 2002/03		*Full sample* 2002/03	
Sample number		42		42		102	
Average farm size (UAA)		130		133		115	
Business size (ESU)		63		65		56	
OUTPUTS		**£/farm**	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
Dairy -	milk output	0	0	0	0	0	0
	cattle	0	0	0	0	0	0
	net quota	189	1	615	5	152	1
	valuation change	0	0	0	0	0	0
Other cattle	output	19278	148	21051	158	19594	170
	valuation change	-92	-1	3406	26	2735	24
	subsidies	12777	98	14108	106	12543	109
Sheep -	total output	14848	114	17427	131	8787	76
	valuation change	-129	-1	1232	9	445	4
	subsidies	1966	15	4079	31	2242	19
Other livestock		2296	18	1701	13	8610	75
Arable crops	output	23368	180	25385	190	24531	213
	subsidies (AAPS)	10692	82	11267	84	10326	89
By products forage and cults		5530	43	5621	42	5717	50
	subsidies (set-aside /other)	2223	17	1795	13	1828	16
Miscellaneous (incl. farmhouse benefit value)		9316	72	8942	67	11757	102
	- organic grants	0	0	0	0	0	0
	- other agri-env.payments	1442	11	1781	13	971	8
	FARM REVENUE	103705	799	118408	887	110239	955
INPUTS							
Feeds	purchased concentrates	7456	57	7981	60	9262	80
	homegrown concentrates	4570	35	4986	37	3445	30
Purchased fodder, Tack and stock keep		1374	11	1501	11	1540	13
Veterinary and medicines		2195	17	2391	18	1706	15
Other livestock costs		5658	44	6535	49	5119	44
Seeds -	purchased and homegrown	2622	20	2589	19	2277	20
Fertilisers		6326	49	6648	50	6086	53
Crop protection		4386	34	5482	41	4066	35
Other crop costs		1377	11	1694	13	1694	15
Labour	paid incl. paid management	4215	32	4455	33	5271	46
	casual	1509	12	1503	11	1484	13
Machinery	contract	3876	30	3989	30	5171	45
	repairs	6358	49	6199	46	4978	43
	fuels	3707	29	3474	26	3241	28
General farming costs		8477	65	9084	68	8996	78
Land expenses		2060	16	1933	14	2692	23
Rent		9608	74	9342	70	5421	47
	FARM EXPENSES	75775	584	79785	598	72449	628
Excess of expenses over revenue		27930	215	38623	289	37790	327
Notional inputs							
- rental value/imputed rent		11660	90	11691	88	10916	95
- unpaid labour		6186	48	6042	45	4986	43
- machinery depreciation		8353	64	8682	65	8802	76
		26198	202	26415	198	24704	214
NET FARM INCOME (excl. BLSA)		1736	13	12198	91	13081	113

Table A7.2 MIXED FARM RESULTS — ORGANIC

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	2326	17	7218	56	16347	130
Less farmer and spouse labour	13100	97	13475	104	15929	127
Add managerial input of paid manager	0	0	0	0	0	0
Add BLSA	0	0	789	6	540	4
MANAGEMENT & INVESTMENT INCOME	-10774	-80	-5468	-42	958	8
NET FARM INCOME (excl. BLSA)	2326	17	7218	56	16347	130
plus net rental value/imputed rent	8262	61	8355	64	6380	51
minus occupier's expenses	162	1	217	2	211	2
minus interest payments	9022	67	5945	46	5006	40
minus build & works depreciation	2659	20	2698	21	4395	35
OCCUPIER'S NET INCOME	-1256	-9	6714	52	13114	104
plus other imputed items	9078	67	9349	72	6982	56
plus fixed asset depreciation	11789	87	12588	97	13381	107
minus valuation changes	3051	23	-4344	-33	1401	11
NOTIONAL CASH INCOME	16561	123	32995	254	32076	255
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	2.8		2.8		2.6	
of which farmer & spouse	1.2		1.0		1.2	
NFI and paid labour/Annual Labour Units	4604		6496		9729	
NFI/Farmer & Spouse Labour Units	1959		7150		14065	
TENANT'S CAPITAL - £ per farm						
Machinery	57918	429	61633	474	59232	472
Livestock	62532	463	61084	470	56472	450
Crops	14847	110	15542	120	12186	97
Stores	3191	24	2745	21	2717	22
TOTAL	138488	1025	141003	1085	130607	1040
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	365862	347949	347949	345505	233703	231696
Buildings, improvements and fixtures	12650	15057	15057	12536	21555	17575
Machinery	55275	60561	61252	62013	59977	58487
Livestock	60505	64558	63592	58576	56390	56555
Produce and goods in store	18539	17537	17557	19017	14014	15791
Quotas	10923	10701	10391	12492	8407	10420
Credit balances	19437	22882	25909	35516	19977	29695
TOTAL	543191	539246	541707	545655	414024	420219
EXTERNAL LIABILITIES						
Long and medium term loans	65298	69427	69427	61464	55868	50790
Short term loans	13472	11763	11441	18928	12225	15036
Overdrafts	35690	39650	32733	36353	26732	29472
TOTAL	114461	120840	113601	116744	94825	95298
NET WORTH	**428731**	**418406**	**428106**	**428910**	**319199**	**324921**
RETURNS TO CAPITAL						
Owner Equity (%)	77.6		78.6		77.3	
ONI/Net worth (%)	-0.3		1.6		4.0	
Return on tenant's capital (%)	-7.8		-3.9		0.7	
Return on all capital (%)	0.0		0.8		2.9	

Table A7.2 MIXED FARM RESULTS — CONVENTIONAL

INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

	Identical sample				*Full sample*	
INCOME MEASURES	2001/02		2002/03		2002/03	
	£/farm	**£/ha**	**£/farm**	**£/ha**	**£/farm**	**£/ha**
NET FARM INCOME (excl. BLSA)	1736	13	12198	91	13081	113
Less farmer and spouse labour	14424	111	14904	112	15711	136
Add managerial input of paid manager	0	0	0	0	0	0
Add BLSA	511	4	2397	18	1286	11
MANAGEMENT & INVESTMENT INCOME	-12177	-94	-308	-2	-1344	-12
NET FARM INCOME (excl. BLSA)	1736	13	12198	91	13081	113
plus net rental value/imputed rent	9560	74	9213	69	7490	65
minus occupier's expenses	346	3	314	2	376	3
minus interest payments	4061	31	4613	35	4005	35
minus build & works depreciation	3123	24	3237	24	3676	32
OCCUPIER'S NET INCOME	3765	29	13247	99	12515	108
plus other imputed items	6186	48	6054	45	4993	43
plus fixed asset depreciation	11476	88	11919	89	12477	108
minus valuation changes	-574	-4	5888	44	2660	23
NOTIONAL CASH INCOME	22001	169	25332	190	27325	237
LABOUR USE AND LABOUR INCOMES						
Annual Labour Units per farm	2.0		2.0		2.0	
of which farmer & spouse	1.1		1.1		1.2	
NFI and paid labour/Annual Labour Units	3822		9161		9937	
NFI/Farmer & Spouse Labour Units	1602		10942		11267	
TENANT'S CAPITAL - £ per farm						
Machinery	48432	373	49405	370	46038	399
Livestock	55714	429	60213	451	48894	424
Crops	16516	127	16368	123	14292	124
Stores	8724	67	9300	70	6932	60
TOTAL	129387	997	135286	1014	116157	1006
	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS - £ per farm	Value	Value	Value	Value	Value	Value
Land and Property	397209	400590	400590	406913	429674	442595
Buildings, improvements and fixtures	14935	14892	14892	13812	18694	17076
Machinery	49048	47817	47841	50970	45519	46557
Livestock	55589	55840	56717	63709	46654	51134
Produce and goods in store	25397	25083	25021	26314	21491	20958
Quotas	9946	11020	10876	9759	5948	6328
Credit balances	21176	23027	23843	27921	26477	34829
TOTAL	573300	578268	579780	599399	594458	619477
EXTERNAL LIABILITIES						
Long and medium term loans	24989	23582	23833	31889	37826	41679
Short term loans	9358	9317	9255	12912	15464	19680
Overdrafts	30352	40067	40125	48641	20879	21645
TOTAL	64699	72967	73213	93442	74169	83004
NET WORTH	**508600**	**505302**	**506567**	**505957**	**520288**	**536473**
RETURNS TO CAPITAL						
Owner Equity (%)	87.4		84.4		86.6	
ONI/Net worth (%)	0.7		2.6		2.3	
Return on tenant's capital (%)	-9.4		-0.2		-1.2	
Return on all capital (%)	-0.4		1.5		0.7	

Table A7.3 MIXED FARM RESULTS ORGANIC

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	16.5	10.8	14.1
	Barley	0.3	2.1	4.7
	Other cereals	10.7	13.4	10.7
	Oil seed rape	0.6	0.0	0.0
	Linseed	0.0	0.0	0.0
	Peas/Beans	5.8	8.1	9.4
	Potatoes	1.6	0.8	1.1
	Sugarbeet	0.0	0.0	1.5
	Horticulture	0.9	0.2	0.1
	Other crops	0.0	1.4	0.8
	Total cropping	**36.5**	**36.8**	**42.4**
	Set-aside	12.0	7.7	8.7
Tillage - fodder		3.4	2.8	2.3
Grassland	Grazing, hay and silage	81.6	80.1	70.5
Fallow and land let		1.1	2.2	1.4
Rough grazing	Effective	0.4	0.4	0.3
Utilisable agricultural area (Effective ha.)		135.1	130.0	125.6
Woods, roads and buildings		3.1	3.1	3.0
TOTAL AREA (Actual ha.)		138.2	133.0	128.6
effective forage area		**86.6**	**83.9**	**73.7**
Bare land and forage hired in		3.4	0.6	0.7
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		3.4	4.1	4.0
Barley		2.3	3.6	4.1
Oilseed Rape		0.3	0.0	0.0
Potatoes		13.4	10.0	16.2
Sugar Beet		0.0	0.0	38.6
- Prices (£ per tonne)*				
Wheat		136	124	118
Barley		138	125	113
Oilseed Rape		200	0	0
Potatoes		333	290	186
Sugar Beet		0	0	36

* Yield and price data is implied

Table A7.3 MIXED FARM RESULTS — CONVENTIONAL

LAND UTILISATION AND CROP PERFORMANCE

		Identical sample		*Full sample*
LAND UTILISATION - hectares per farm		2001/02	2002/03	2002/03
Tillage - maincrops	Wheat	22.2	27.6	24.6
	Barley	14.8	11.8	11.5
	Other cereals	5.7	7.1	4.1
	Oil seed rape	2.6	2.2	2.9
	Linseed	0.2	0.0	0.1
	Peas/Beans	6.7	5.1	3.5
	Potatoes	0.2	0.2	0.3
	Sugarbeet	0.2	0.3	0.5
	Horticulture	0.3	0.5	0.2
	Other crops	0.2	0.5	1.0
	Total cropping	**53.2**	**55.3**	**48.8**
	Set-aside	10.1	7.9	7.5
Tillage - fodder		1.3	1.2	1.5
Grassland	Grazing, hay and silage	64.4	67.7	55.4
Fallow and land let		2.1	2.9	3.1
Rough grazing	Effective	0.2	0.2	0.1
Utilisable agricultural area (Effective ha.)		129.8	133.5	115.4
Woods, roads and buildings		3.4	3.3	2.5
TOTAL AREA (Actual ha.)		133.2	136.8	118.0
effective forage area		**74.7**	**78.3**	**66.0**
Bare land and forage hired in		9.1	9.4	9.2
CROP PERFORMANCE -Yields (tonnes per hectare)*				
Wheat		6.5	6.7	8.0
Barley		5.3	5.3	6.1
Oilseed Rape		2.8	2.7	3.0
Potatoes		48.7	48.7	23.8
Sugar Beet		45.8	45.8	50.6
- Prices (£ per tonne)*				
Wheat		75	75	63
Barley		65	65	60
Oilseed Rape		141	144	152
Potatoes		103	103	96
Sugar Beet		28	28	28

* Yield and price data is implied

Table A7.4 MIXED FARM RESULTS ORGANIC

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0
Beef cows	39.3	52	36.6	49	30.4	41
Other cattle	55.9	100	51.3	97	43.8	82
Breeding sheep	14.6	150	15.0	156	15.2	165
Other sheep	7.2	174	6.0	145	7.5	186
Pigs	7.5	38	6.4	32	19.2	96
Poultry	0.0	0	0.0	0	6.2	370
Other livestock	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	124.4		115.3		122.4	
STOCKING RATES						
Stocking rate (LU per eff.ha)	0.9		0.9		1.0	
GLU/forage effective hectare*	1.4		1.4		1.7	
LIVESTOCK PERFORMANCE - Prices (£ per head)*						
Dairy cows	0		0		0	
Dairy calves	0		0		0	
Dairy heifers in calf	0		0		0	
Beef heifers in calf	450		463		440	
Fat cattle	560		737		735	
Beef store cattle 1-2 yrs	341		322		353	
Beef stores <1 yr	156		156		147	
Ewes	30		32		29	
Ewe hoggs	0		60		60	
Fat lambs	60		59		56	
Store lambs	25		0		41	
Fat Pigs	109		118		121	
Milk (pence per litre)	0.0		0.0		0.0	
Wool (pence per kg)	70.6		50.5		49.4	

* for organic farms, pigs, poultry and other livestock are deemed to be grazing livestock

* Price data is implied

Table A7.4 MIXED FARM RESULTS — CONVENTIONAL

STOCKING AND LIVESTOCK PERFORMANCE

	Identical sample				*Full sample*	
	2001/02		2002/03		2002/03	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0
Beef cows	22.2	30	23.6	31	18.8	25
Other cattle	44.0	85	46.6	90	46.0	88
Breeding sheep	35.4	331	36.5	340	20.1	189
Other sheep	9.7	237	9.3	228	5.2	126
Pigs	2.6	14	1.6	10	17.0	98
Poultry	0.1	26	0.1	20	0.1	15
Other livestock	0.0	0	0.0	0	0.0	3
TOTAL (L.U.)	114.1		117.7		107.2	
STOCKING RATES						
Stocking rate (LU per eff.ha)	0.9		0.9		0.9	
GLU/forage effective hectare*	1.5		1.5		1.6	

* for conventional farms, pigs, poultry and other livestock are deemed to be non-grazing livestock

LIVESTOCK PERFORMANCE - Prices (£ per head)*			
Dairy cows	0	0	0
Dairy calves	0	0	0
Dairy heifers in calf	825	825	668
Beef heifers in calf	561	561	508
Fat cattle	499	502	543
Beef store cattle 1-2 yrs	442	462	690
Beef stores <1 yr	150	174	214
Ewes	24	24	34
Ewe hoggs	39	39	42
Fat lambs	33	33	44
Store lambs	27	27	35
Fat Pigs	72	72	66
Milk (pence per litre)	0.0	0.0	0.0
Wool (pence per kg)	47.0	48.0	48.3

* Price data is implied

7.2 Appendix 2 The Farm Classification System

For each farm in the survey, each hectare of crop area and each head of livestock are assessed in terms of Standard Gross Margins (SGMs). These SGMs are expressed in European Currency Units, with 1200 such units equivalent to 1 European Size Unit (ESU).

Farm size is measured for a particular farm by the number of ESUs registered in total, and this is thus a measure of the size of the farm business. It is a measure of the economic size of holdings in terms of the value they add to variable inputs and thus differs from physical measures, such as area, which take no account of the intensity of production. The survey is designed to cover farms of at least 8 ESU in size.

Farm type is determined for a particular farm by the proportion of the SGM total accounted for by each enterprise. Precise details of the typology are complex, but may be summarised as follows:

Farm type	*Characteristics*
Cropping	In this report, two categories are combined:
Cereals	Farms on which cereals and other crops generally found in cereal rotations account for more than two thirds of their total SGM.
General cropping	Farms on which arable crops (including field scale vegetables) account for more than two thirds of their total SGM excluding farms classified as *cereals*.
Horticulture	Farms where horticultural crops or permanent crops including fruit, either alone or in combination, account for over one-third of total SGM and form the largest enterprise group.
Dairy	Farms where the dairy enterprise, including followers, accounts for over one third, and commonly over two-thirds of total SGM and is the largest enterprise group.
Cattle and Sheep	In this report, two categories are presented separately:
Lowland livestock	Farms outside the Less Favoured Areas on which grazing livestock, other than dairy cattle, account for over one-third, commonly over two-thirds, of total SGM, and form the largest enterprise group, or farms on which grazing livestock (except dairy cattle) and field crops each account for over one-third but less than two-thirds of total SGM.
LFA livestock	Farms in the Less Favoured Areas on which sheep, cattle or cattle and sheep together, other than dairy cattle, account for over one-third of total SGM, commonly over two-thirds and are the largest enterprise group.
Mixed	Farms with a range of enterprise where none clearly predominates.

7.3 Appendix 3 Definition of Terms and abbreviations

Breeding Livestock Appreciation (BLSA)
BLSA is that element of Net Farm Income resulting from changes in breeding livestock prices between the opening and closing valuations. It is calculated by multiplying for each category of breeding livestock the change in the opening and closing valuations by the average number of livestock in that category during the year.

Cash Income
Cash income is based on actual receipts and actual expenditure. It represents the difference between receipts and expenditure on current account, before depreciation charges and investment spending.

Effective Hectares (Eff.Ha)
The effective hectarage constitutes the total farm area minus the area occupied by roads, woodland, wasteland and buildings, and with rough grazings expressed in terms of their pasture equivalent. E.g. on a particular farm, 20 hectares of rough grazing in terms of its capacity to carry stock may be worth 4 hectares of permanent pasture - it is therefore regarded as being 4 effective hectares. A notional area is also estimated for the use made of any common grazings.

Enterprise Output
Enterprise output is all returns from an enterprise, plus the market value of any of its products transferred out to another enterprise, plus the market value of any production from the enterprise given to workers or consumed on the farm. In the case of livestock enterprises, the value of purchased livestock and the market value of livestock transferred in from another enterprise are deducted. All totals are adjusted for changes in valuation. Milk output includes quota transactions and any super-levies paid, have been deducted.

General Farming Costs
General farming costs include electricity, water and telephone charges, licences, insurances, subscriptions, professional charges, etc.

Livestock Units (LU) and Grazing Livestock Units (GLU)
Livestock numbers are converted to livestock units, which are based on estimated energy requirements, in order to calculate the total stocking of grazing livestock on the farm. The following conversion factors are used:

Dairy cow	1.00	Hill ewe	0.06
Beef/hill cow	0.75	Upland ewe	0.08
Beef/dairy bull	0.65	Lowland ewe	0.11
Beef/dairy heifer	0.80	Ram	0.08
Other cattle – 2 years old and over	0.80	Ewe lamb	0.08
- 1 to 2 years old	0.65	Other sheep 1 year old and over	0.08
- under 1 year old	0.34	Store lamb under 1 yr.	0.04

Management and Investment Income (MII)
MII is total farm enterprise output less total inputs (including the value of the labour input of the farmer and spouse). It represents the reward for the farmers (and spouses) management and interest on the tenant's capital employed on the farm.

Margin over concentrates

Margin over concentrates is the difference between milk sales and the value of purchased and home grown concentrates used for the dairy herd.

Miscellaneous Output
Miscellaneous output includes contract work, farm cottage rents, benefit value of farmhouses, and profit on resale of purchased agricultural produce.

Net Farm Income (NFI)
NFI is total farm enterprise output less total inputs (excluding the value of the labour of the farmer and spouse). It is calculated as if all farms are tenanted, and represents the return to the farmer and spouse for their labour and management, and on the tenant-type capital of the business.

Net Worth
Net worth is the difference between total assets and total liabilities and represents the value of assets available to the business, all other claims against these assets having been met.

Occupier's Net Income
Occupier's net income is based on actual tenure and indebtedness. It represents the return to the farmer and spouse for their labour, management and investment in the farm business.

Other Crop Costs
Other crop costs include crop protection chemicals and other costs incurred specifically for crop enterprises and forage.

Other Livestock Costs
Other livestock costs include purchased bedding materials, and other costs incurred specifically for livestock enterprises.

Owner Equity
Owner equity is net worth expressed as a percentage of total assets.

Rental Value
For owner-occupied farms, a rental value is imputed to make it possible to compare results with farms on which rents have to be paid.

Return on All Capital
Return on all capital is management and investment income plus rental value expressed as a percentage of total capital.

Return on Tenant's Capital
Return on tenant's capital is management and investment income expressed as a percentage of total tenant's capital.

Tenant's Capital
Tenant's capital is the value of livestock, machinery, crops (including cultivations) and stores. In the tables, it is expressed as the average of the opening and closing valuations for these items.

Utilisable Agricultural Area
UAA is the land area that is actually farmed by the farmer excluding areas such as roads, farm yards, buildings woodlands, water or unused rough grazing.

Abbreviations used throughout text include:

AAPS – Arable Area Payment Scheme

CCF – Comparable Conventional Farms

ESU – Economic Size Unit

FBS – Farm Business Survey

LFA – Less Favoured Area

LSU – Livestock Unit

MII – Management and Investment Income

NFI – Net Farm Income

SGM – Standard Gross Margins

UAA – Utilisable Agricultural Area