

# **ORGANIC FARM INCOMES IN ENGLAND AND WALES 2001/02**

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*July 2004*

**Organic Research Group  
Institute of Rural Sciences**



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Report of work for the  
Department of Environment, Food and Rural Affairs  
Contract reference: OF 0189

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*July 2004*

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## Acknowledgements

Our grateful thanks go to the following who contributed to this report:

- Tony O'Regan, Nigel Chapman, Rowland Davies, Nick Reeves, Huw Williams, Ian Williams, Tegid Roberts, Dylan Jones, Wyn Morris, Siwan Jones, Eileen Edwards and Brenda Jones from the Farm Business Survey unit (UWA);
- Chris Firth and colleagues (HDRA) for the collection of horticultural data;
- John Burrows (UWA) for technical assistance with the clustering procedure;
- Soil Association, Organic Farmers and Growers and Organic Grain Link for assistance with recruiting organic farmers for specific farm types;
- Michael Rowlands and John Gorner from the DEFRA statistics division.
- and most especially to all the farmers who gave of their time and information, without which this work would not be possible.

Conventional farm data was supplied by DEFRA with whom copyright rests. Although all efforts are made to ensure the quality of the conventional farm data, the copyright holder, the original data producer, the Department for Environment, Food and Rural Affairs and the Data Archive bear no responsibility for the accuracy or comprehensiveness of these materials, or for their further analysis or interpretation.

We gratefully acknowledge funding from the Department of Environment, Food and Rural Affairs (DEFRA). The views and interpretations expressed here are those of the authors, and do not represent views of the Department.

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## Summary

Financial results from research work carried out for the Department of Environment, Food and Rural Affairs (DEFRA) by the Organic Farming Research Unit at the IRS, UWA on the economic performance of organic farms in 2001/02 are presented in this report. 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 IRS, UWA (Project OF0190, covering 1995/96<sup>1</sup> to 1998/99<sup>2</sup>). Here, data is shown for the 2001/02 financial year, which is the first of a series of three reports covering the financial performance of organic farm types including cropping, horticulture, lowland and LFA dairy, lowland and LFA cattle and sheep and mixed farming systems for 2001/02 up to 2003/04. In comparison with the earlier reports, there has been a significant improvement in the numbers of farms for which data have been obtained.

Summarised and detailed financial input, output, income, liabilities and assets and some physical performance measures are presented based on current Farm Business Survey data collection and collation guidelines. The samples of organic farms per robust farm type are sufficiently large to give a 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 the results can be seen as a reasonable indication of farm income levels for organic farms.

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 the averaged results for a comparable cluster of conventional farms based on the resource endowment of individual organic farms. Broadly speaking, the parameters used to select comparable farm clusters included farm type, FBS region, LFA status, utilisable agricultural area, milk quota holding (where applicable) and farm business size. For each farm type, the results for each cluster were averaged and compared with the average for the individual organic farms.

Overall, organic farms showed a similar or higher level of net farm income for all farm types compared to the conventional farms. The greatest differences were seen in the cropping, horticulture, LFA dairy and mixed farm types. Both organic and conventional lowland dairy types performed similarly. For management and investment income, only the organic lowland and LFA cattle and sheep farms showed a negative value. Conversely, the comparable conventional farm types showed a negative value with the exception of the lowland dairy farms.

Gross margin data is presented for organic dairy herds including the top and bottom 5 performing herds. Cattle and sheep gross margins are shown for lowland and LFA farm types in addition to breeding pig gross margins. Crops shown include winter and spring wheat and barley, spring oats, beans and potatoes and a further five horticultural crops.

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<sup>1</sup> 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](http://www.organic.aber.ac.uk/library/Organic_Farm_Incomes.pdf).

<sup>2</sup> 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](http://www.organic.aber.ac.uk/library/Organic_Farm_Incomes.pdf).





## 1. Introduction

This is the first 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 2001/02, 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 Farming Research Unit, IRS for MAFF (project OF0125, covering 1995/96 to 1997/98, 1998/99<sup>1,2</sup>) 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.

This report is divided into various sections including methodology, which shows the methods used for data sourcing and sampling technique to move towards a representative organic farm sample, followed by an explanation of the clustering procedure, which shows how comparable conventional farms (CCF) are selected as a means of comparing the organic farm types with conventional farms. Hereafter, the financial results are presented with results explanations 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. Overall, the report comprises mostly data tables with limited interpretation at this stage as this work represents the first set of results over a three year period and consequently can be defined as work in progress.

## **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; the majority of farms falling 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 has been derived from four different sources and all data gathered 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 Farming Research Unit / 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 for cropping, dairy, upland, lowland and mixed farm types with the aim of achieving 12 farms per robust type for wholefarm data and gross margin data. Farm recruitment for the survey was carried out by the IRS Organic Farming Research and Farm Business Survey Units 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 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 for the purposes of this research work. In 2001, farm income data from 2845 farms was submitted to DEFRA, of which 109 farms had organic or in-conversion enterprises on farm. From this total, only 51 farms were useable and have been included in this report.

#### 3. HDRA (Henry Doubleday Research Association)

HDRA were responsible for supplying both wholefarm 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.

#### 4. Other Data Sources (IRS, IGER, ADAS)

Data from six commercial dairy farms has been supplied by a DEFRA funded project (project code OF0146) coordinated by the Organic Farming Research Unit, IRS; IGER and ADAS. This data was originally collected to study the conversion of IGER's Ty Gwyn dairy unit to organic milk production using a linked farms approach. Again, the data were collected by IRS using Farm Business Survey guidelines.

**Table 1 Distribution of organic farms by type and source of data, 2001/02**

| <i>Data source</i>   | <i>IRS</i>                     | <i>UK Data Archive</i>     | <i>HDRA</i>                    | <i>Other</i>                    | <i>Total</i>       |
|----------------------|--------------------------------|----------------------------|--------------------------------|---------------------------------|--------------------|
| <i>Farm Type</i>     | <i>Wholefarm &amp; GM data</i> | <i>Wholefarm data only</i> | <i>Wholefarm &amp; GM data</i> | <i>Wholefarm &amp; GM data)</i> |                    |
| Cropping             | 9 + 1 GM                       | 3                          |                                |                                 | <b>12+ 1 GM</b>    |
| Horticulture         | 2*                             |                            | 3 + 8 GM                       |                                 | <b>5 + 8 GM</b>    |
| Pigs and poultry     | 5 GM + 4 GM                    |                            |                                |                                 | <b>5GM+4GM</b>     |
| Dairy (lowland)      | 11                             | 21                         |                                | 2                               | <b>34</b>          |
| Dairy (LFA)          | 2                              | 2                          |                                | 2                               | <b>6</b>           |
| Cattle and sheep LFA | 14                             | 11                         |                                |                                 | <b>25</b>          |
| Lowland              | 11                             | 7                          |                                |                                 | <b>18</b>          |
| Mixed                | 12                             | 6                          |                                | 2                               | <b>20</b>          |
| <b>Total</b>         | <b>59 +10 GM</b>               | <b>51</b>                  | <b>3 + 8 GM</b>                | <b>6</b>                        | <b>120 + 18 GM</b> |

\* Cropping farms with a horticulture enterprise, thus used for both cropping and horticulture farm types

GM – Gross margin data only as no comparable farm data available

## 2.2 Farm samples and farm classification

The total farm sample consists of 132 recruited organic farms; from which, it was possible to derive whole-farm data from 120 farms. 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)<sup>3</sup>. (See Table 2 and 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.

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 to present enough farms in each sample to maintain confidentiality.

At the time of recruiting for this work, it was not possible to recruit the specified number of 12 farms for cropping and lowland robust types due to an apparent lack of these robust types. This may have been due to the introduction of more enterprises for organic farms such as introducing a livestock enterprise on cropping farms or increasing the share of cropping on a lowland farm, leading to a change in type status under the above farm classification methodology. Another main constraint for recruiting cropping farms was that many cropping farms began converting in 1999 and 2000 and therefore not having full organic status by the 2001 financial year end.

Recent DEFRA statistics for December 2003 indicate that this is no longer the case with approximately 150 organic farms per robust type for both cropping and lowland farms matched to census data in England alone (DEFRA Statistics Division, personal communication).

<sup>3</sup> 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.

**Table 2 Distribution of surveyed farms by type and size (European Size Units)**

| <i>Farm type</i> | <i>ESUs</i> | 8 -       | 15 -      | 28 -      | 40 -      | 60 -      | 100 -     | 200      | <b>Total</b> |
|------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|--------------|
|                  | < 8         | <15       | <28       | <40       | <60       | <100      | <200      | +        |              |
| Cropping         |             | 2         | 3         | 1         | 3         | 3         |           | 1        | <b>13</b>    |
| Horticulture     |             |           |           | 3         |           | 2         |           |          | <b>5</b>     |
| Dairy (lowland)  |             |           | 1         | 3         | 7         | 11        | 8         | 4        | <b>34</b>    |
| Dairy (LFA)      |             |           |           | 1         | 2         | 2         | 1         |          | <b>6</b>     |
| Cattle & sheep   |             |           |           |           |           |           |           |          |              |
| - LFA            |             | 7         | 8         | 4         | 5         | 1         |           |          | <b>25</b>    |
| - Lowland        |             | 4         | 7         | 5         | 2         |           |           |          | <b>18</b>    |
| Mixed            | 1           |           |           | 7         | 1         | 5         | 1         | 4        | <b>19</b>    |
| <b>Total</b>     | <b>1</b>    | <b>13</b> | <b>19</b> | <b>21</b> | <b>20</b> | <b>22</b> | <b>10</b> | <b>9</b> | <b>120</b>   |

The combination of organic farm recruitment by IRS and HDRA plus the use of data from existing FBS data represents a four fold increase in the sample size in each group compared with the earlier studies, although recruitment difficulties still raise issues about whether the samples can be considered to be representative or not. Therefore, it should be noted that it has been possible to succeed in the objective of increasing the size of the organic farm sample; but, the recruitment process was not able to identify a statistically representative sample of organic farms, despite aiming to do so. For this to occur, it would be necessary to include organic farming within the sampling stratification frameworks for the Farm Business Survey itself and better harmonisation between administrative data and Farm Structure Survey/June Census data (Offermann in Recke *et al.*, 2004)<sup>4</sup>.

However, a comparison with unpublished census data supplied by DEFRA Statistics Division (personal communication) indicates that the distribution of all farms by size is similar in the sample compared with the organic farms in the DEFRA statistics, although very small units are excluded from the survey (as stated above) and the 100-200 ESU group is somewhat under-represented. A comparison of the distribution of farm type by region using the unpublished census data indicates that there may be a bias towards Welsh and Western region holdings in the sample, particularly with respect to livestock and mixed holdings, but that within regions, individual farm type proportions are well represented by the sample. This Wales and West bias is also indicated by a comparison with all organic farms (Table 3) although it is worth noting that in 2001, the sample of 132 farms accounted for 4.5% of all 2999 organic holdings in England and Wales.

**Table 3 Regional distribution of organic farms within the survey, 2001/02**

| <i>Data source</i> | <i>UK</i>  |                     |             |              | <i>Survey Total</i> | <i>% of survey holdings</i> | <i>No. of organic holdings<sup>5</sup></i> | <i>% of holdings (all E&amp;W)</i> |
|--------------------|------------|---------------------|-------------|--------------|---------------------|-----------------------------|--|------------------------------------|
|                    | <i>IRS</i> | <i>Data Archive</i> | <i>HDRA</i> | <i>Other</i> |                     |                             |  |                                    |
| Northern           | 5          | 9                   | -           | -            | <b>14</b>           | 11                          | 272  | 9                                  |
| Eastern            | 8          | 10                  | 7           | -            | <b>25</b>           | 19                          | 1042                                       | 35                                 |
| South West         | 21         | 20                  | 4           | 3            | <b>48</b>           | 36                          | 1096                                       | 37                                 |
| Wales              | 28         | 14                  | -           | 3            | <b>45</b>           | 34                          | 589  | 20                                 |
| <b>Total</b>       | <b>62</b>  | <b>53</b>           | <b>11</b>   | <b>6</b>     | <b>132</b>          | -                           | <b>2999</b>                                | -                                  |

<sup>4</sup> Recke et al. (2004) Development of a European Information System for Organic Markets. Seminar Proceedings. [www.eisfom.org](http://www.eisfom.org)

<sup>5</sup> Organic Food and Farming Report (2002) Soil Association. Bristol.

## 2.3 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.

### 2.3.1 Background

Issues relating to comparing results from organic and conventional farms have been discussed by Lampkin and Padel (1994)<sup>6</sup> and Offermann and Nieberg (2000).<sup>7</sup>

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 as comparisons has been used in previous studies using a hierarchical cluster analysis technique on the basis of Euclidean squared difference; however, the method of clustering has been changed in this study.

### 2.3.2 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, 2001)<sup>8</sup>. 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 (Table 4)
- Altitude (Table 5)
- Main farm type, which is more descriptive typing than robust type (Table 6).

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<sup>6</sup> Lampkin, NH and S Padel (1994) *Economics of Organic Farming – an international perspective*. CAB International, Wallingford.

<sup>7</sup> Offermann, F. and Nieberg, H. (2000) Profitability of Organic Farming in Europe. Paper presented at the Agricultural Economics Society Annual Conference, Manchester.

<sup>8</sup> Department for Environment, Food and Rural Affairs (Farm Business Division). Farm Business Survey Data, 2001/02 [Computer File]. Colchester, Essex: The Data Archive [Distributor] 9<sup>th</sup> October 2003.

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.

**Table 4 Recoding of LFA codes to simplify the clustering procedure**

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

**Table 5 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    |

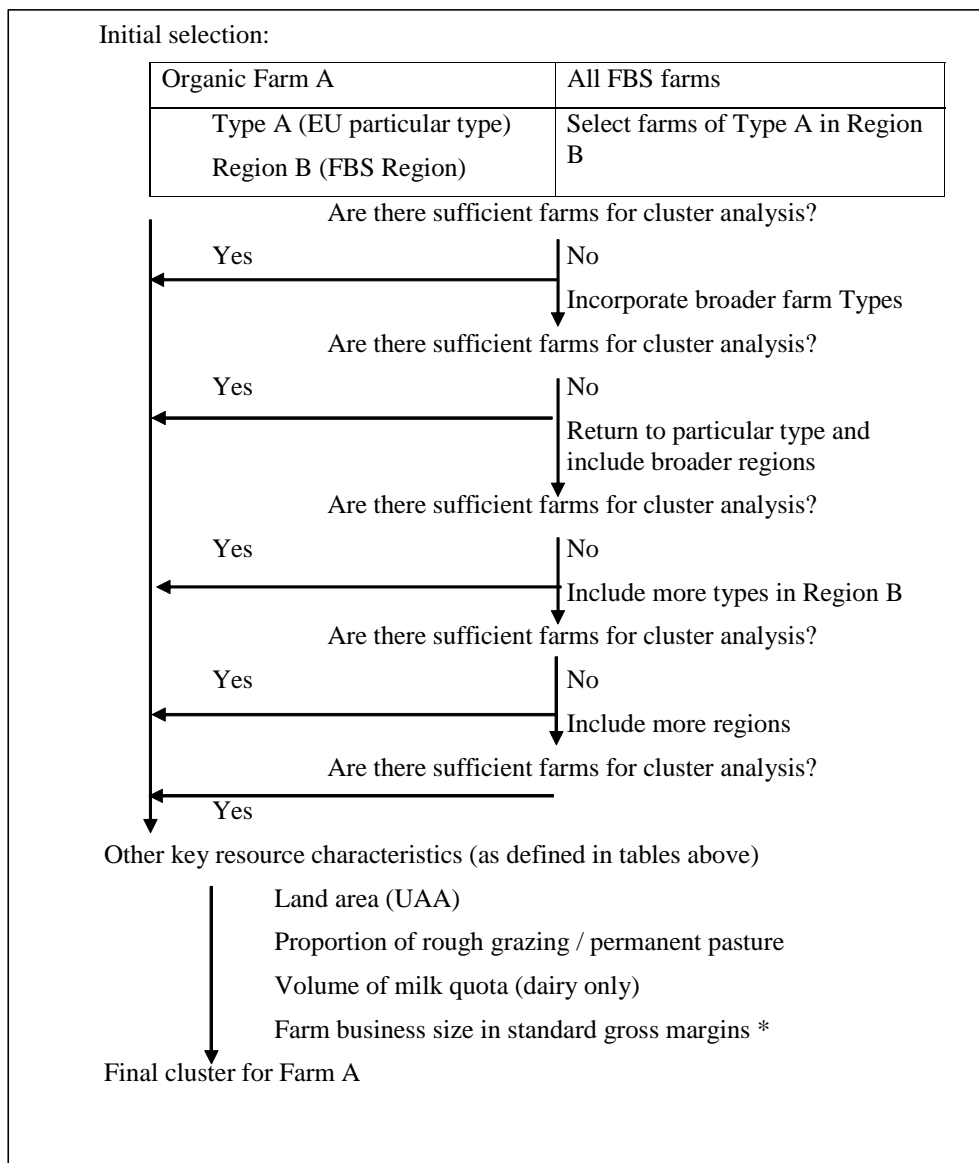
**Table 6 Main type and robust types used in the FBS/FADN system**

| 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        | 6           |
| Cattle & sheep (lowland)   | 15        |             |
| 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 (utilisable agricultural area), 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 rented land, irrigated land, glasshouse and protected cropping area 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 7).

**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.

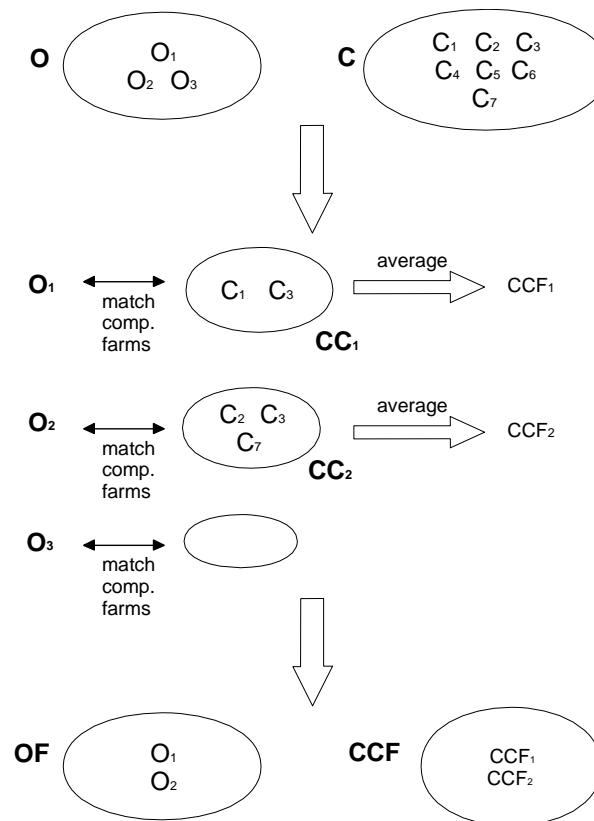
**Table 7 Summary table to show the procedure used per farm type and the CCF results achieved**

|  | Cropping   | Horticulture | Dairy<br>(lowland) | Dairy<br>(LFA) | Cattle and sheep<br>Lowland | LFA        | Mixed      |
|--|------------|--------------|--------------------|----------------|-----------------------------|------------|------------|
| Total organic farms  | <b>12</b>  | <b>5</b>     | <b>34</b>          | <b>6</b>       | <b>18</b>                   | <b>25</b>  | <b>20</b>  |
| <b>Baseline clustering criteria</b>                            |            |              |                    |                |                             |            |            |
| 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 (%)                                   | n/a        | 35 to 50     | n/a                | n/a            | n/a                         | n/a        | n/a        |
| Irrigation/glass area (+/- %)                                  | n/a        | 35           | n/a                | n/a            | n/a                         | n/a        | n/a        |
| No. of farms for which baseline cluster obtained (min 3 farms) | 8          | 4            | 24                 | 4              | 16                          | 19         | 9          |
| (as a percent)   | <b>62%</b> | <b>80%</b>   | <b>70%</b>         | <b>66%</b>     | <b>89%</b>                  | <b>72%</b> | <b>45%</b> |
| Modifications required to achieve clusters for remaining farms |            |              |                    |                |                             |            |            |
| Regional (broader selection)                                   | 3          | -            | 8                  | 2              | -                           | 1          | 9          |
| Regional and/or RG/PP and/or UAA (broader selection)           | 1          | 1            | -                  | -              | 1                           | 3          | 2          |
| LFA/altitude (non-identical criteria)                          | -          | -            | -                  | -              | -                           | 2          | -          |
| Main type (incorporate broader farm type definition)           | -          | -            | -                  | -              | 1                           | -          | -          |
| <b>Resulting final cluster statistics</b>                      |            |              |                    |                |                             |            |            |
| Average number of farms in cluster per organic farm            | 16.2       | 6.6          | 7.4                | 5.1            | 9.6                         | 12.8       | 6          |
| <b>% of organic farms clustered</b>                            | <b>100</b> | <b>100</b>   | <b>100</b>         | <b>100</b>     | <b>100</b>                  | <b>100</b> | <b>100</b> |
| No. of organic farms with more than 5 farms (CCF) per cluster  | 8          | 4            | 26                 | 3              | 15                          | 20         | 10         |
| % of organic farms with more than 5 farms (CCF) per cluster    | <b>62</b>  | <b>80</b>    | <b>65</b>          | <b>50</b>      | <b>83</b>                   | <b>80</b>  | <b>50</b>  |
| Range of CCF per organic farm per farm type: Minimum           | 3          | 4            | 3                  | 4              | 3                           | 3          | 3          |
| Maximum  | 59         | 8            | 21                 | 6              | 22                          | 30         | 23         |



Once the comparable conventional farm data was identified from the main Farm Business Survey database (sample C) for the organic farms (sample O), the comparable conventional farm data was averaged. This effectively creates a single ('artificial') comparable conventional farm CCF<sub>1</sub> for each organic farm<sup>9</sup>. 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**



### 2.3.3 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.

<sup>9</sup> 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](http://www.irs.aber.ac.uk/euceeofp)).

### **3. Presentation of results**

#### **3.1 Whole farm data**

Results for each type of organic farm have been averaged. Within summary sections on each farm type, tables show breakdowns of average outputs, inputs and incomes for whole farms and in £/ha; for cropping, horticulture, lowland and LFA dairy, mixed, LFA and lowland cattle and sheep farms.

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, some performance measures, and asset and liability information for seven farm types. Where physical information was available in addition to the financial data collected, figures for livestock units per forage hectare, and labour units per farm, are presented. Where direct 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.

The effect of breeding livestock revaluations is reflected in the difference shown in full tables in the Appendices as the difference between NFI including and excluding Breeding Livestock Appreciation (BLSA). References in the text to NFI, ONI and Cash Income are excluding BLSA; MII includes BLSA.

#### **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

The results presented cover 2001 when a number of factors were affecting agriculture in general including the Foot and Mouth crisis, which began in March 2001, downward pressures on conventional farm-gate prices and support payments due to the increased value of the pound and Agenda 2000 reforms. In addition, the increasing supply of organic products from the domestic market began to exert downward pressure on organic prices, although this became more apparent in 2002/03.

**Table 8 Farms data summary (£/farm and £/ha), average NFI and MII, 2001/02**

| Farm type                       | Number of farms | Management and Investment Income |        | Net Farm Income excluding BLSA |        |
|---------------------------------|-----------------|----------------------------------|--------|--------------------------------|--------|
|                                 |                 | £ / farm                         | £ / ha | £ / farm                       | £ / ha |
| <b>Cropping</b>                 |                 |                                  |        |                                |        |
| Organic                         | 12              | 6556                             | 57     | 19882                          | 174    |
| Comparable conventional         | 208             | -8423                            | -73    | 3887                           | 34     |
| <b>Horticulture</b>             |                 |                                  |        |                                |        |
| Organic                         | 5               | 18235                            | 397    | 28933                          | 629    |
| Comparable conventional         | 33              | -2890                            | -74    | 12536                          | 320    |
| <b>Dairy lowland</b>            |                 |                                  |        |                                |        |
| Organic                         | 34              | 10377                            | 95     | 25279                          | 231    |
| Comparable conventional         | 298             | 9675                             | 99     | 25062                          | 255    |
| <b>Dairy LFA</b>                |                 |                                  |        |                                |        |
| Organic                         | 6               | 12232                            | 143    | 27414                          | 320    |
| Comparable conventional         | 31              | -7492                            | -99    | 7957                           | 105    |
| <b>Lowland cattle and sheep</b> |                 |                                  |        |                                |        |
| Organic                         | 18              | -9794                            | -126   | 5527                           | 71     |
| Comparable conventional         | 172             | -15933                           | -206   | -3075                          | -40    |
| <b>LFA cattle and sheep</b>     |                 |                                  |        |                                |        |
| Organic                         | 25              | -6258                            | -51    | 6443                           | 52     |
| Comparable conventional         | 320             | -11320                           | -100   | 1711                           | 15     |
| <b>Mixed</b>                    |                 |                                  |        |                                |        |
| Organic                         | 20              | 2977                             | 17     | 15691                          | 92     |
| Comparable conventional         | 120             | -13391                           | -82    | -661                           | -4     |

For the 2001/02 data, all organic farm types showed a positive net farm income (Table 8). The lowest per hectare net farm incomes were for LFA and lowland cattle and sheep systems and mixed farm types. LFA organic dairy farms performed better than the organic lowland dairy farms. On comparing with the conventional farm samples, the organic farms performed better for all farm types with greatest differences between the cropping, horticulture, LFA dairy and mixed farm types. The conventional lowland cattle and sheep and mixed farms showed negative net farm incomes. Organic LFA dairy farms performed significantly better than the conventional LFA dairy farm sample.

Management and investment income is derived from net farm income by subtracting farmer/spouse labour and adding back paid management and livestock appreciation. The data indicates that with the inclusion of these factors, only the organic lowland and LFA cattle and sheep farms show a negative value. For the comparable conventional data, all farm types showed a negative net farm income with the exception of the lowland dairy farms, which showed a minor surplus.

Individual farm type data are summarised below and detailed results shown in appendix 1.

## 4.1 Cropping farms

In total, 12 organic farms have been used for the cropping analysis where one farm was located in the North, two in Wales, four in the West and six in Central and Eastern England.

The total UAA and standard gross margins are similar for both samples. It should be noted that one of the farms in the organic sample has a dairy enterprise. Otherwise key differences between the two samples include more livestock and consequently more grazing land (approx 90%) and 20% less arable cropping in the organic sample. Net farm income (NFI) and management and investment income (MII) are significantly higher in the organic sample than for the conventional farms. Cash income is lower in the organic sample due to greater valuation changes, which is partly from greater investment in livestock enterprises and more produce, goods carried over in store. The organic sample showed a lower net worth and lower percentage of owner equity compared to the CCF. In total, eight of the farms from the organic sample had a higher NFI than their conventional cluster data.

**Table 9 Summary data for cropping farms (£/farm & £/ha), 2001/02**

| Financial Year Data       | 2001/02             |             | 2001/02            |            |
|---------------------------|---------------------|-------------|--------------------|------------|
| Sample number             | <b>Organic = 12</b> |             | <b>Conv. = 208</b> |            |
| Average farm size (UAA)   | 114.2               |             | 115.1              |            |
| Business Size (ESU)       | 70                  |             | 69                 |            |
|                           | £/farm              | £/ha        | £/farm             | £/ha       |
| Livestock outputs         | 41675               | 365         | 13658              | 119        |
| Livestock subsidies       | 1137                | 10          | 1810               | 16         |
| Cropping outputs          | 58301               | 511         | 61327              | 533        |
| AAPS / Set-aside          | 14886               | 130         | 19181              | 167        |
| Miscellaneous             | 6624                | 58          | 11401              | 99         |
| Agri-env. payments        | 11276               | 99          | 518                | 5          |
| <b>TOTAL OUTPUTS</b>      | <b>133899</b>       | <b>1173</b> | <b>107895</b>      | <b>937</b> |
| Livestock inputs          | 23393               | 205         | 7320               | 64         |
| Crop inputs               | 12561               | 110         | 24205              | 210        |
| Labour                    | 17572               | 154         | 16347              | 142        |
| Machinery                 | 24681               | 216         | 26027              | 226        |
| General                   | 9438                | 83          | 9636               | 84         |
| Land & rent               | 26372               | 231         | 20476              | 178        |
| <b>TOTAL INPUTS</b>       | <b>114017</b>       | <b>999</b>  | <b>104012</b>      | <b>904</b> |
| NFI                       | 19882               | 174         | 3887               | 34         |
| Less farmer/spouse labour | 13580               | 119         | 12361              | 107        |
| Add paid management       | 0                   | 0           | 135                | 1          |
| Add BLSA                  | 254                 | 2           | -83                | -1         |
| <b>MII</b>                | <b>6556</b>         | <b>57</b>   | <b>-8423</b>       | <b>-73</b> |
| ONI                       | 19678               | 172         | 7608               | 66         |
| Cash Income               | 5800                | 51          | 24284              | 211        |

**Table 10 Summary cropping data for the cropping farms**

|                      | Enterprise output* (£) |              | Area (ha)   |             | Yield (t / ha) |            | Price (£ / t) |            |
|----------------------|------------------------|--------------|-------------|-------------|----------------|------------|---------------|------------|
|                      | Org                    | Con          | Org         | Con         | Org            | Con        | Org           | Con        |
| Wheat                | 10733                  | 25657        | 22.5        | 35.5        | 4.2            | 6.6        | 130           | 74         |
| Barley               | 7304                   | 8209         | 19.3        | 13.9        | 2.4            | 5.4        | 91            | 67         |
| Other cereals        | 2319                   | 1865         | 6.5         | 3.2         | 2.5            | 5.4        | 88            | 0          |
| <b>Total cereals</b> | <b>20355</b>           | <b>35730</b> | <b>48.3</b> | <b>52.6</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |
| Oil seed rape        | 0                      | 4236         | 0.0         | 7.3         | 0.0            | 2.2        | 0             | 141        |
| Linseed              | 0                      | 182          | 0.0         | 0.5         | 0.0            | 1.2        | 0             | 0          |
| Peas/Beans           | 3936                   | 3190         | 7.1         | 6.2         | 4.8            | 3.1        | n/d           | n/d        |
| Potatoes             | 22731                  | 11117        | 5.0         | 3.2         | 18.0           | 44.2       | 277           | 83         |
| Sugarbeet            | 869                    | 8292         | 0.4         | 5.6         | 54.1           | 47.6       | 43            | 30         |
| Horticulture         | 11089                  | 6284         | 2.5         | 2.2         | n/d            | n/d        | n/d           | n/d        |
| Other                | 62                     | 1565         | 0.1         | 1.6         | n/a            | n/a        | n/d           | n/d        |
| <b>Total (all)</b>   | <b>59042</b>           | <b>70597</b> | <b>63.4</b> | <b>79.3</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |

\* Excluding Transitional agri-money compensation and previous crop disposal

# yield and price data is implied

|                      | Enterprise output (%) |            | Area (%)   |            |
|----------------------|-----------------------|------------|------------|------------|
|                      | Org                   | Con        | Org        | Con        |
| Wheat                | 18                    | 36         | 35         | 45         |
| Barley               | 12                    | 12         | 30         | 18         |
| Other cereals        | 4                     | 3          | 10         | 4          |
| <b>Total cereals</b> | <b>34</b>             | <b>51</b>  | <b>76</b>  | <b>66</b>  |
| Oil seed rape        | 0                     | 6          | 0          | 9          |
| Linseed              | 0                     | 0          | 0          | 1          |
| Peas/Beans           | 7                     | 5          | 11         | 8          |
| Potatoes             | 39                    | 16         | 8          | 4          |
| Sugarbeet            | 1                     | 12         | 1          | 7          |
| Horticulture         | 19                    | 9          | 4          | 3          |
| Other                | 0                     | 2          | 0          | 2          |
| <b>Total (all)</b>   | <b>100</b>            | <b>100</b> | <b>100</b> | <b>100</b> |

## 4.2 Horticultural holdings

In total, five organic farms have been used for the horticultural analysis. Geographically, one farm was located in the North, one in Wales, one in the West and two from Central and Eastern England.

The organic and comparable conventional farms were similar in terms of average farm size and standard gross margins. Overall, net farm income (NFI) was higher in the organic sample although outputs were lower than for the conventional farms. Labour and crop inputs were less in the organic sample, which may be due to greater intensity practiced on the comparable conventional farms. In total, four of the organic farms had a higher NFI than their conventional cluster data.

**Table 11 Summary data for horticulture farms (£/farm & £/ha), 2001/02**

| Financial Year Data       | 2001/02            |             | 2001/02           |             |
|---------------------------|--------------------|-------------|-------------------|-------------|
| Sample number             | <b>Organic = 5</b> |             | <b>Conv. = 33</b> |             |
| Average farm size (UAA)   | 46.0               |             | 39.1              |             |
| Business Size (ESU)       | 49                 |             | 50                |             |
|                           | £/farm             | £/ha        | £/farm            | £/ha        |
| Livestock outputs         | 1657               | 36          | 210               | 5           |
| Livestock subsidies       | 905                | 20          | 16                | 0           |
| Cropping outputs          | 89378              | 1945        | 104469            | 2669        |
| AAPS / Set-aside          | 1556               | 34          | 4127              | 105         |
| Miscellaneous             | 4089               | 89          | 10443             | 267         |
| Agri-env. payments        | 651                | 14          | 188               | 5           |
| <b>TOTAL OUTPUTS</b>      | <b>98235</b>       | <b>2137</b> | <b>119453</b>     | <b>3052</b> |
| Livestock inputs          | 2086               | 45          | 106               | 3           |
| Crop inputs               | 19741              | 430         | 36021             | 920         |
| Labour                    | 13011              | 283         | 30002             | 767         |
| Machinery                 | 16918              | 368         | 18087             | 462         |
| General                   | 5920               | 129         | 10621             | 271         |
| Land & rent               | 11626              | 253         | 12080             | 309         |
| <b>TOTAL INPUTS</b>       | <b>69302</b>       | <b>1508</b> | <b>106917</b>     | <b>2732</b> |
| NFI                       | 28933              | 629         | 12536             | 320         |
| Less farmer/spouse labour | 10698              | 233         | 15426             | 394         |
| Add paid management       | 0                  | 0           | 0                 | 0           |
| Add BLSA                  | 0                  | 0           | 0                 | 0           |
| <b>MII</b>                | <b>18235</b>       | <b>397</b>  | <b>-2890</b>      | <b>-74</b>  |
| ONI                       | 34309              | 746         | 10075             | 257         |
| Cash Income               | 45333              | 986         | 22020             | 563         |

**Table 12 Summary cropping data for horticulture farms**

|                      | Enterprise output* (£) |               | Area (ha)   |             | Yield (t / ha) |            | Price (£ / t) |            |
|----------------------|------------------------|---------------|-------------|-------------|----------------|------------|---------------|------------|
|                      | Org                    | Con           | Org         | Con         | Org            | Con        | Org           | Con        |
| Wheat                | 3340                   | 6866          | 6.4         | 9.4         | 2.7            | 7.1        | 118           | 72         |
| Barley               | 0                      | 2055          | 0.0         | 4.1         | 0.0            | 3.5        | 0             | 61         |
| Other cereals        | 0                      | 71            | 0.0         | 0.1         | 0.0            | 6.0        | 0             | 0          |
| <b>Total cereals</b> | <b>3340</b>            | <b>8992</b>   | <b>6.4</b>  | <b>13.7</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |
| Oil seed rape        | 0                      | 98            | 0.0         | 0.1         | 0.0            | 3.6        | 0             | 156        |
| Linseed              | 0                      | 57            | 0.0         | 0.2         | 0.0            | 0.0        | 0             | 0          |
| Peas/Beans           | 0                      | 416           | 0.0         | 0.9         | 0.0            | 2.6        | n/d           | n/d        |
| Potatoes             | 40127                  | 4650          | 4.7         | 1.3         | 25.1           | 40.0       | 326           | 75         |
| Sugarbeet            | 2085                   | 1996          | 0.9         | 1.2         | 54.1           | 57.7       | 43            | 29         |
| Horticulture         | 42579                  | 85738         | 8.4         | 8.7         | n/d            | n/d        | n/d           | n/d        |
| Other                | 248                    | 0             | 0.0         | 0.0         | n/a            | n/a        | n/d           | n/d        |
| <b>Total (all)</b>   | <b>88380</b>           | <b>101947</b> | <b>20.4</b> | <b>26.1</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |

\* Excluding Transitional agri-money compensation and previous crop disposal

# yield and price data is implied

|                      | Enterprise output (%) |            | Area (%)   |            |
|----------------------|-----------------------|------------|------------|------------|
|                      | Org                   | Con        | Org        | Con        |
| Wheat                | 4                     | 7          | 31         | 36         |
| Barley               | 0                     | 2          | 0          | 16         |
| Other cereals        | 0                     | 0          | 0          | 0          |
| <b>Total cereals</b> | <b>4</b>              | <b>9</b>   | <b>31</b>  | <b>52</b>  |
| Oil seed rape        | 0                     | 0          | 0          | 0          |
| Linseed              | 0                     | 0          | 0          | 1          |
| Peas/Beans           | 0                     | 0          | 0          | 3          |
| Potatoes             | 45                    | 5          | 23         | 5          |
| Sugarbeet            | 2                     | 2          | 4          | 5          |
| Horticulture         | 48                    | 84         | 41         | 33         |
| Other                | 0                     | 0          | 0.1        | 0.0        |
| <b>Total (all)</b>   | <b>100</b>            | <b>100</b> | <b>100</b> | <b>100</b> |



### 4.3 Lowland dairy farms

In total, 34 organic farms have been used for the lowland dairy analysis. Geographically, six farms were in the North, 14 in Wales, 10 in the West and four from Central and Eastern England.

Both the average farm size and dairy cow numbers in the organic sample were approximately 10% higher compared to the conventional farms. Overall, the net farm income (NFI) values for both samples were similar. The implied milk price was 23.7p/litre compared to 19.9p/litre for the conventional farms and milk yield was 10% lower in the organic sample at 5651 litres. Crop output was similar for both samples but the level of inputs varied significantly. In total, 20 of the organic farms had a greater NFI than their conventional cluster data.

**Table 13 Summary data for lowland dairy farms (£/farm & £/ha), 2001/02**

| Financial Year Data       | 2001/02             |             | 2001/02            |             |
|---------------------------|---------------------|-------------|--------------------|-------------|
| Sample number             | <b>Organic = 34</b> |             | <b>Conv. = 298</b> |             |
| Average farm size (UAA)   | 109.2               |             | 98.1               |             |
| Business Size (ESU)       | 102                 |             | 100                |             |
|                           | £/farm              | £/ha        | £/farm             | £/ha        |
| Livestock outputs         | 160455              | 1469        | 139642             | 1423        |
| Livestock subsidies       | 2432                | 22          | 3336               | 34          |
| Cropping outputs          | 7956                | 73          | 9465               | 96          |
| AAPS / Set-aside          | 6209                | 57          | 5021               | 51          |
| Miscellaneous             | 6603                | 60          | 6857               | 70          |
| Agri-env. payments        | 5445                | 50          | 214                | 2           |
| <b>TOTAL OUTPUTS</b>      | <b>189101</b>       | <b>1731</b> | <b>164535</b>      | <b>1677</b> |
| Livestock inputs          | 62449               | 572         | 48578              | 495         |
| Crop inputs               | 4917                | 45          | 12578              | 128         |
| Labour                    | 19963               | 183         | 19736              | 201         |
| Machinery                 | 32871               | 301         | 26229              | 267         |
| General                   | 13752               | 126         | 11402              | 116         |
| Land & rent               | 29871               | 273         | 20948              | 214         |
| <b>TOTAL INPUTS</b>       | <b>163822</b>       | <b>1500</b> | <b>139472</b>      | <b>1422</b> |
| NFI                       | 25279               | 231         | 25062              | 255         |
| Less farmer/spouse labour | 15594               | 143         | 16848              | 172         |
| Add paid management       | 0                   | 0           | 20                 | 0           |
| Add BLSA                  | 692                 | 6           | 1441               | 15          |
| <b>MII</b>                | <b>10377</b>        | <b>95</b>   | <b>9675</b>        | <b>99</b>   |
| ONI                       | 21976               | 201         | 24844              | 253         |
| Cash Income               | 38387               | 351         | 46006              | 469         |

**Table 14 Summary cropping data for lowland dairy farms**

|                      | Enterprise output* (£) |              | Area (ha)   |             | Yield (t / ha) |            | Price (£ / t) |            |
|----------------------|------------------------|--------------|-------------|-------------|----------------|------------|---------------|------------|
|                      | Org                    | Con          | Org         | Con         | Org            | Con        | Org           | Con        |
| Wheat                | 4253                   | 5583         | 4.7         | 8.1         | 3.1            | 5.9        | 152           | 74         |
| Barley               | 1838                   | 3749         | 3.6         | 7.1         | 3.8            | 4.8        | 70            | 65         |
| Other cereals        | 1918                   | 507          | 2.2         | 0.9         | 4.3            | 5.1        | 175           | 0          |
| <b>Total cereals</b> | <b>8009</b>            | <b>9839</b>  | <b>10.5</b> | <b>16.0</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |
| Oil seed rape        | 0                      | 801          | 0.0         | 1.2         | 0.0            | 2.0        | 0             | 150        |
| Linseed              | 0                      | 1            | 0.0         | 0.0         | 0.0            | 0.0        | 0             | 0          |
| Peas/Beans           | 878                    | 255          | 2.2         | 0.5         | 2.3            | 3.0        | n/d           | n/d        |
| Potatoes             | 687                    | 185          | 0.2         | 0.1         | 16.2           | 34.0       | 251           | 98         |
| Sugarbeet            | 688                    | 193          | 0.8         | 0.1         | 19.0           | 46.3       | 43            | 29         |
| Horticulture         | 0                      | 0            | 0.0         | 0.0         | n/d            | n/d        | n/d           | n/d        |
| Other                | 28                     | 78           | 0.1         | 0.1         | n/a            | n/a        | n/d           | n/d        |
| <b>Total (all)</b>   | <b>10289</b>           | <b>11352</b> | <b>13.9</b> | <b>18.0</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |

\* Excluding transitional agri-money compensation and previous crop disposal

# yield and price data is implied

|                      | Enterprise output (%) |            | Area (%)   |            |
|----------------------|-----------------------|------------|------------|------------|
|                      | Org                   | Con        | Org        | Con        |
| Wheat                | 41                    | 49         | 34         | 45         |
| Barley               | 18                    | 33         | 26         | 39         |
| Other cereals        | 19                    | 4          | 16         | 5          |
| <b>Total cereals</b> | <b>78</b>             | <b>87</b>  | <b>76</b>  | <b>89</b>  |
| Oil seed rape        | 0                     | 7          | 0          | 7          |
| Linseed              | 0                     | 0          | 0          | 0          |
| Peas/Beans           | 9                     | 2          | 16         | 3          |
| Potatoes             | 7                     | 2          | 2          | 0          |
| Sugarbeet            | 7                     | 2          | 6          | 1          |
| Horticulture         | 0                     | 0          | 0          | 0          |
| Other                | 0                     | 1          | 1          | 0          |
| <b>Total (all)</b>   | <b>100</b>            | <b>100</b> | <b>100</b> | <b>100</b> |

#### 4.4 LFA dairy farms

In total, six organic farms have been used for the lowland dairy analysis. Geographically, two farms were found in the North and the remaining four were found in Wales.

The average farm size was 12% and dairy cow numbers were 8% higher in the organic sample compared to the comparable conventional farms. Other key differences between the two samples included significantly greater net farm income (NFI) and management and investment income (MII) for the organic farms. The implied organic milk price was 22.4p/litre compared to 19.1p/litre received by the conventional farms and milk yield was 11% lower in the organic sample at 4591 litres. Cropping output was greater in the organic sample as there was some horticultural activity amongst the farms despite a similar area of cropping. In total, five of the organic LFA dairy farms had a greater NFI than their conventional cluster data.

**Table 15 Summary data for LFA dairy farms (£/farm & £/ha), 2001/02**

| Financial Year Data       | 2001/02            |             | 2001/02           |             |
|---------------------------|--------------------|-------------|-------------------|-------------|
| Sample number             | <b>Organic = 6</b> |             | <b>Conv. = 31</b> |             |
| Average farm size (UAA)   | 85.6               |             | 75.9              |             |
| Business Size (ESU)       | 68                 |             | 64                |             |
|                           | £/farm             | £/ha        | £/farm            | £/ha        |
| Livestock outputs         | 84395              | 986         | 75180             | 990         |
| Livestock subsidies       | 1897               | 22          | 1705              | 22          |
| Cropping outputs          | 8245               | 96          | 2377              | 31          |
| AAPS / Set-aside          | 1266               | 15          | 1077              | 14          |
| Miscellaneous             | 4452               | 52          | 4791              | 63          |
| Agri-env. payments        | 6981               | 82          | 1261              | 17          |
| <b>TOTAL OUTPUTS</b>      | <b>107235</b>      | <b>1253</b> | <b>86392</b>      | <b>1138</b> |
| Livestock inputs          | 25273              | 295         | 29249             | 385         |
| Crop inputs               | 5242               | 61          | 5909              | 78          |
| Labour                    | 11488              | 134         | 6564              | 86          |
| Machinery                 | 17960              | 210         | 15367             | 202         |
| General                   | 7867               | 92          | 7522              | 99          |
| Land & rent               | 11992              | 140         | 13823             | 182         |
| <b>TOTAL INPUTS</b>       | <b>79822</b>       | <b>933</b>  | <b>78435</b>      | <b>1033</b> |
| NFI                       | 27414              | 320         | 7957              | 105         |
| Less farmer/spouse labour | 15889              | 186         | 16650             | 219         |
| Add paid management       | 0                  | 0           | 0                 | 0           |
| Add BLSA                  | 708                | 8           | 1201              | 16          |
| <b>MII</b>                | <b>12232</b>       | <b>143</b>  | <b>-7492</b>      | <b>-99</b>  |
| ONI                       | 23706              | 277         | 5494              | 72          |
| Cash Income               | 33798              | 395         | 17417             | 229         |

**Table 16 Summary cropping data for LFA dairy farms**

|                      | Enterprise output* (£) |             | Area (ha)  |            | Yield (t / ha) |            | Price (£ / t) |            |
|----------------------|------------------------|-------------|------------|------------|----------------|------------|---------------|------------|
|                      | Org                    | Con         | Org        | Con        | Org            | Con        | Org           | Con        |
| Wheat                | 638                    | 125         | 0.4        | 0.2        | 3.3            | 7.0        | 167           | 75         |
| Barley               | 0                      | 1887        | 0.0        | 4.2        | 0.0            | 5.2        | 0             | 68         |
| Other cereals        | 1838                   | 37          | 2.4        | 0.1        | 4.3            | 5.5        | 0             | 0          |
| <b>Total cereals</b> | <b>2475</b>            | <b>2049</b> | <b>2.8</b> | <b>4.4</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |
| Oil seed rape        | 0                      | 78          | 0.0        | 0.2        | 0.0            | 2.0        | 0             | 130        |
| Linseed              | 0                      | 0           | 0.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Peas/Beans           | 0                      | 0           | 0.0        | 0.0        | 0.0            | 0.0        | n/d           | n/d        |
| Potatoes             | 2892                   | 0           | 0.6        | 0.0        | 27.9           | 0.0        | 336           | 0          |
| Sugarbeet            | 0                      | 0           | 0.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Horticulture         | 3219                   | 0           | 0.7        | 0.0        | n/d            | n/d        | n/d           | n/d        |
| Other                | 0                      | 0           | 0.0        | 0.0        | n/a            | n/a        | n/d           | n/d        |
| <b>Total (all)</b>   | <b>8586</b>            | <b>2127</b> | <b>4.1</b> | <b>4.6</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |

\* Excluding transitional agri-money compensation and previous crop disposal

# Price and yield data is implied

|                      | Enterprise output (%) |            | Area (%)   |            |
|----------------------|-----------------------|------------|------------|------------|
|                      | Org                   | Con        | Org        | Con        |
| Wheat                | 7                     | 6          | 10         | 4          |
| Barley               | 0                     | 89         | 0          | 92         |
| Other cereals        | 21                    | 2          | 57         | 1          |
| <b>Total cereals</b> | <b>29</b>             | <b>96</b>  | <b>67</b>  | <b>97</b>  |
| Oil seed rape        | 0                     | 4          | 0          | 3          |
| Linseed              | 0                     | 0          | 0          | 0          |
| Peas/Beans           | 0                     | 0          | 0          | 0          |
| Potatoes             | 34                    | 0          | 15         | 0          |
| Sugarbeet            | 0                     | 0          | 0          | 0          |
| Horticulture         | 37                    | 0          | 18         | 0          |
| Other                | 0                     | 0          | 0          | 0          |
| <b>Total (all)</b>   | <b>100</b>            | <b>100</b> | <b>100</b> | <b>100</b> |

## 4.5 Lowland cattle and sheep farms

In total, 18 organic farms have been used for lowland cattle and sheep analysis. Geographically, one farm was in the North, five in Wales, 10 in the West and two from Central and Eastern England.

For this farm type, average farm size was similar, whilst the standard gross margins for the organic sample were slightly lower than the comparable conventional farms. This is reflected in the average livestock figures for the two samples, which were lower for the organic farms by 15% on a livestock unit basis. Overall, the organic farms showed a higher net farm income in comparison to the conventional farms, although both samples had a negative management and investment income (MII) value. In total, 13 of the organic lowland farms had a higher NFI than their conventional clusters.

**Table 17 Summary data for lowland cattle and sheep farms (£/farm & £/ha), 2001/02**

| Financial Year Data       | 2001/02             |             | 2001/02            |             |
|---------------------------|---------------------|-------------|--------------------|-------------|
| Sample number             | <b>Organic = 18</b> |             | <b>Conv. = 172</b> |             |
| Average farm size (UAA)   | 77.8                |             | 77.4               |             |
| Business Size (ESU)       | 26                  |             | 30                 |             |
|                           | £/farm              | £/ha        | £/farm             | £/ha        |
| Livestock outputs         | 23431               | 301         | 25805              | 333         |
| Livestock subsidies       | 9320                | 120         | 11234              | 145         |
| Cropping outputs          | 1911                | 25          | 4893               | 63          |
| AAPS / Set-aside          | 1868                | 24          | 1535               | 20          |
| Miscellaneous             | 5837                | 75          | 5881               | 76          |
| Agri-env. payments        | 7593                | 98          | 845                | 11          |
| <b>TOTAL OUTPUTS</b>      | <b>49959</b>        | <b>642</b>  | <b>50192</b>       | <b>648</b>  |
| Livestock inputs          | 8091                | 104         | 11965              | 155         |
| Crop inputs               | 2160                | 28          | 4265               | 55          |
| Labour                    | 2968                | 38          | 7885               | 102         |
| Machinery                 | 11578               | 149         | 11231              | 145         |
| General                   | 5861                | 75          | 5579               | 72          |
| Land & rent               | 13775               | 177         | 12342              | 159         |
| <b>TOTAL INPUTS</b>       | <b>44432</b>        | <b>571</b>  | <b>53267</b>       | <b>688</b>  |
| NFI                       | 5527                | 71          | -3075              | -40         |
| Less farmer/spouse labour | 15185               | 195         | 13534              | 175         |
| Add paid management       | 0                   | 0           | 5                  | 0           |
| Add BLSA                  | -136                | -2          | 671                | 9           |
| <b>MII</b>                | <b>-9794</b>        | <b>-126</b> | <b>-15933</b>      | <b>-206</b> |
| ONI                       | 5830                | 75          | -1227              | -16         |
| Cash Income               | 7575                | 97          | 10291              | 133         |

**Table 18 Summary cropping data for lowland cattle and sheep farms**

|                      | Enterprise output* (£) |             | Area (ha)  |            | Yield (t / ha) |            | Price (£ / t) |            |
|----------------------|------------------------|-------------|------------|------------|----------------|------------|---------------|------------|
|                      | Org                    | Con         | Org        | Con        | Org            | Con        | Org           | Con        |
| Wheat                | 400                    | 456         | 0.7        | 0.8        | 5.2            | 4.9        | 95            | 85         |
| Barley               | 824                    | 2153        | 1.8        | 4.1        | 3.3            | 5.0        | 102           | 67         |
| Other cereals        | 979                    | 649         | 1.3        | 1.2        | 3.5            | 4.9        | 165           | 0          |
| <b>Total cereals</b> | <b>2203</b>            | <b>3257</b> | <b>3.8</b> | <b>6.1</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |
| Oil seed rape        | 0                      | 0           | 0.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Linseed              | 264                    | 0           | 1.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Peas/Beans           | 0                      | 28          | 0.0        | 0.1        | 0.0            | 1.5        | n/d           | n/d        |
| Potatoes             | 0                      | 23          | 0.0        | 0.0        | 0.0            | 32.6       | 0             | 76         |
| Sugarbeet            | 0                      | 0           | 0.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Horticulture         | 422                    | 0           | 0.2        | 0.0        | n/d            | n/d        | n/d           | n/d        |
| Other                | 0                      | 0           | 0.0        | 0.0        | n/a            | n/a        | n/d           | n/d        |
| <b>Total (all)</b>   | <b>2889</b>            | <b>3308</b> | <b>5.1</b> | <b>6.2</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |

\* Excluding transitional agrimoney compensation and previous crop disposal

# Price and yield data is implied

|                      | Enterprise output (%) |            | Area (%)   |            |
|----------------------|-----------------------|------------|------------|------------|
|                      | Org                   | Con        | Org        | Con        |
| Wheat                | 14                    | 14         | 15         | 12         |
| Barley               | 29                    | 65         | 35         | 66         |
| Other cereals        | 34                    | 20         | 26         | 20         |
| <b>Total cereals</b> | <b>76</b>             | <b>98</b>  | <b>76</b>  | <b>99</b>  |
| Oil seed rape        | 0                     | 0          | 0          | 0          |
| Linseed              | 9                     | 0          | 20         | 0          |
| Peas/Beans           | 0                     | 1          | 0          | 1          |
| Potatoes             | 0                     | 1          | 0          | 0          |
| Sugarbeet            | 0                     | 0          | 0          | 0          |
| Horticulture         | 15                    | 0          | 4          | 0          |
| Other                | 0                     | 0          | 0          | 0          |
| <b>Total (all)</b>   | <b>100</b>            | <b>100</b> | <b>100</b> | <b>100</b> |

## 4.6 LFA cattle and sheep farms

In total, 25 organic farms have been used for the LFA cattle and sheep analysis consisting of three farms in the North, 21 farms in Wales and one farm in the West.

On comparing the two samples, the total area and the standard gross margins were similar. Key system differences included less livestock on the organic farms with 40% less sheep, however cattle numbers were similar. Net farm income (NFI) was greater for the organic sample than for the conventional farms, but management and investment income (MII) for both datasets was negative. A main difference in output for the organic sample was agri-environmental payments, which represented 21.4% of total output compared with 2.1% for the conventional farms. In total, 16 or 64% of the organic farms had a higher NFI than their conventional clusters.

**Table 19 Summary data for LFA cattle and sheep farms (£/farm & £/ha), 2001/02**

| Financial Year Data       | 2001/02             |            | 2001/02            |             |
|---------------------------|---------------------|------------|--------------------|-------------|
| Sample number             | <b>Organic = 25</b> |            | <b>Conv. = 320</b> |             |
| Average farm size (UAA)   | 123.3               |            | 113.2              |             |
| Business Size (ESU)       | 29                  |            | 36                 |             |
|                           | £/farm              | £/ha       | £/farm             | £/ha        |
| Livestock outputs         | 25297               | 205        | 31940              | 282         |
| Livestock subsidies       | 12601               | 102        | 16203              | 143         |
| Cropping outputs          | 195                 | 2          | 827                | 7           |
| AAPS / Set-aside          | 361                 | 3          | 135                | 1           |
| Miscellaneous             | 7352                | 60         | 11492              | 102         |
| Agri-env. payments        | 12501               | 101        | 1533               | 14          |
| <b>TOTAL OUTPUTS</b>      | <b>58308</b>        | <b>473</b> | <b>62130</b>       | <b>549</b>  |
| Livestock inputs          | 14077               | 114        | 18278              | 162         |
| Crop inputs               | 2353                | 19         | 4308               | 38          |
| Labour                    | 5251                | 43         | 7339               | 65          |
| Machinery                 | 13368               | 108        | 13012              | 115         |
| General                   | 4764                | 39         | 5326               | 47          |
| Land & rent               | 12052               | 98         | 12156              | 107         |
| <b>TOTAL INPUTS</b>       | <b>51864</b>        | <b>420</b> | <b>60418</b>       | <b>534</b>  |
| NFI                       | 6443                | 52         | 1711               | 15          |
| Less farmer/spouse labour | 13802               | 112        | 13565              | 120         |
| Add paid management       | 0                   | 0          | 0                  | 0           |
| Add BLSA                  | 1101                | 9          | 534                | 5           |
| <b>MII</b>                | <b>-6258</b>        | <b>-51</b> | <b>-11320</b>      | <b>-100</b> |
| ONI                       | 8529                | 69         | 4120               | 36          |
| Cash Income               | 13486               | 109        | 16990              | 150         |

**Table 20 Summary cropping data for LFA cattle and sheep farms**

|                      | Enterprise output* (£) |            | Area (ha)  |            | Yield (t / ha) |            | Price (£ / t) |            |
|----------------------|------------------------|------------|------------|------------|----------------|------------|---------------|------------|
|                      | Org                    | Con        | Org        | Con        | Org            | Con        | Org           | Con        |
| Wheat                | 0                      | 21         | 0.0        | 0.0        | 0.0            | 4.9        | 0             | 70         |
| Barley               | 399                    | 189        | 0.6        | 0.4        | 5.1            | 4.8        | 90            | 73         |
| Other cereals        | 186                    | 106        | 0.4        | 0.2        | 3.8            | 4.3        | 0             | 0          |
| <b>Total cereals</b> | <b>585</b>             | <b>316</b> | <b>1.0</b> | <b>0.7</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |
| Oil seed rape        | 0                      | 0          | 0.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Linseed              | 0                      | 0          | 0.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Peas/Beans           | 0                      | 0          | 0.0        | 0.0        | 0.0            | 0.0        | n/d           | n/d        |
| Potatoes             | 0                      | 13         | 0.0        | 0.0        | 0.0            | 21.0       | 0             | 106        |
| Sugarbeet            | 0                      | 0          | 0.0        | 0.0        | 0.0            | 0.0        | 0             | 0          |
| Horticulture         | 0                      | 0          | 0.0        | 0.0        | n/d            | n/d        | n/d           | n/d        |
| Other                | 0                      | 0          | 0.0        | 0.0        | n/a            | n/a        | n/d           | n/d        |
| <b>Total (all)</b>   | <b>585</b>             | <b>329</b> | <b>1.0</b> | <b>0.7</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |

\* Excluding transitional agri-money compensation and previous crop disposal

# Price and yield data is implied

|                      | Enterprise output (%) |            | Area (%)   |            |
|----------------------|-----------------------|------------|------------|------------|
|                      | Org                   | Con        | Org        | Con        |
| Wheat                | 0                     | 6          | 0          | 5          |
| Barley               | 68                    | 58         | 64         | 61         |
| Other cereals        | 32                    | 32         | 36         | 33         |
| <b>Total cereals</b> | <b>100</b>            | <b>96</b>  | <b>100</b> | <b>99</b>  |
| Oil seed rape        | 0                     | 0          | 0          | 0          |
| Linseed              | 0                     | 0          | 0          | 0          |
| Peas/Beans           | 0                     | 0          | 0          | 0          |
| Potatoes             | 0                     | 4          | 0          | 1          |
| Sugarbeet            | 0                     | 0          | 0          | 0          |
| Horticulture         | 0                     | 0          | 0          | 0          |
| Other                | 0                     | 0          | 0          | 0          |
| <b>Total (all)</b>   | <b>100</b>            | <b>100</b> | <b>100</b> | <b>100</b> |



## 4.7 Mixed farms

In total, there were 20 organic mixed farms comprising four cropping and dairy farms, 13 cropping and beef/sheep farms, one cropping and pig/poultry unit and two mixed livestock farms. One farm was located in the North, one two in Wales, 13 in the West and four farms were in Central and Eastern England.

Overall, the clustering procedure for this varied group identified comparable conventional farms with similar average farm sizes and standard gross margins. Overall, the organic sample had a higher net farm income (NFI) and management and investment income (MII). A key difference can be found in a lower net worth in the organic sample; this is principally due to 71% of land being tenanted compared to only 40% for the conventional farms. In total, 14 of the organic farms had a higher NFI than their conventional clusters.

**Table 21 Summary data for mixed farms (£/farm & £/ha), 2001/02**

| Financial Year Data       | 2001/02             |             | 2001/02            |            |
|---------------------------|---------------------|-------------|--------------------|------------|
| Sample number             | <b>Organic = 20</b> |             | <b>Conv. = 120</b> |            |
| Average farm size (UAA)   | 171.4               |             | 162.4              |            |
| Business Size (ESU)       | 91                  |             | 91                 |            |
|                           | £/farm              | £/ha        | £/farm             | £/ha       |
| Livestock outputs         | 92943               | 542         | 67692              | 417        |
| Livestock subsidies       | 10200               | 60          | 12243              | 75         |
| Cropping outputs          | 34071               | 199         | 34924              | 215        |
| AAPS / Set-aside          | 18803               | 110         | 18781              | 116        |
| Miscellaneous             | 7866                | 46          | 14495              | 89         |
| Agri-env. payments        | 11183               | 65          | 1307               | 8          |
| <b>TOTAL OUTPUTS</b>      | <b>175066</b>       | <b>1022</b> | <b>149443</b>      | <b>920</b> |
| Livestock inputs          | 38514               | 225         | 32823              | 202        |
| Crop inputs               | 11808               | 69          | 21111              | 130        |
| Labour                    | 31718               | 185         | 22520              | 139        |
| Machinery                 | 34798               | 203         | 31431              | 194        |
| General                   | 12571               | 73          | 12312              | 76         |
| Land & rent               | 29966               | 175         | 29898              | 184        |
| <b>TOTAL INPUTS</b>       | <b>159376</b>       | <b>930</b>  | <b>150095</b>      | <b>924</b> |
| NFI                       | 15691               | 92          | -661               | -4         |
| Less farmer/spouse labour | 12832               | 75          | 14004              | 86         |
| Add paid management       | 425                 | 2           | 245                | 2          |
| Add BLSA                  | -307                | -2          | 1029               | 6          |
| <b>MII</b>                | <b>2977</b>         | <b>17</b>   | <b>-13391</b>      | <b>-82</b> |
| ONI                       | 12459               | 73          | 3371               | 21         |
| Cash Income               | 32805               | 191         | 27697              | 171        |

**Table 22 Summary cropping data for mixed farms**

|                      | Enterprise output* (£) |              | Area (ha)   |             | Yield (t / ha) |            | Price (£ / t) |            |
|----------------------|------------------------|--------------|-------------|-------------|----------------|------------|---------------|------------|
|                      | Org                    | Con          | Org         | Con         | Org            | Con        | Org           | Con        |
| Wheat                | 10794                  | 20396        | 16.4        | 29.4        | 3.3            | 6.6        | 149           | 74         |
| Barley               | 4720                   | 11472        | 9.3         | 21.9        | 2.7            | 5.1        | 124           | 65         |
| Other cereals        | 5572                   | 3417         | 9.4         | 6.4         | 3.3            | 5.1        | 129           | 0          |
| <b>Total cereals</b> | <b>21087</b>           | <b>35284</b> | <b>35.1</b> | <b>57.8</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |
| Oil seed rape        | 476                    | 4276         | 1.8         | 8.2         | 0.3            | 2.3        | 200           | 143        |
| Linseed              | 0                      | 45           | 0.0         | 0.2         | 0.0            | 1.2        | 0             | 0          |
| Peas/Beans           | 5312                   | 2722         | 10.1        | 6.3         | 2.1            | 2.7        | n/d           | n/d        |
| Potatoes             | 5989                   | 272          | 3.3         | 0.1         | 20.7           | 59.1       | 203           | 100        |
| Sugarbeet            | 0                      | 1439         | 0.0         | 0.9         | 0.0            | 47.4       | 0             | 29         |
| Horticulture         | 6209                   | 180          | 2.3         | 0.2         | n/d            | n/d        | n/d           | n/d        |
| Other                | 929                    | 197          | 1.6         | 0.5         | n/a            | n/a        | n/d           | n/d        |
| <b>Total (all)</b>   | <b>40001</b>           | <b>44416</b> | <b>54.1</b> | <b>74.1</b> | <b>N/A</b>     | <b>N/A</b> | <b>N/A</b>    | <b>N/A</b> |

\* Excluding transitional agri-money compensation and previous crop disposal

# Price and yield data is implied

|                      | Enterprise output (%) |            | Area (%)   |            |
|----------------------|-----------------------|------------|------------|------------|
|                      | Org                   | Con        | Org        | Con        |
| Wheat                | 27                    | 46         | 30         | 40         |
| Barley               | 12                    | 26         | 17         | 30         |
| Other cereals        | 14                    | 8          | 17         | 9          |
| <b>Total cereals</b> | <b>53</b>             | <b>79</b>  | <b>65</b>  | <b>78</b>  |
| Oil seed rape        | 1                     | 10         | 3          | 11         |
| Linseed              | 0                     | 0          | 0          | 0          |
| Peas/Beans           | 13                    | 6          | 19         | 9          |
| Potatoes             | 15                    | 1          | 6          | 0          |
| Sugarbeet            | 0                     | 3          | 0          | 1          |
| Horticulture         | 16                    | 0          | 4          | 0          |
| Other                | 2                     | 0          | 3          | 1          |
| <b>Total (all)</b>   | <b>100</b>            | <b>100</b> | <b>100</b> | <b>100</b> |

## 5. Gross margins

Tables 23 to 30 show gross margin results for specific livestock and crop enterprises from the organic study farms for 2001/02. Gross margin figures are for certified organic enterprises, but may include livestock sold at conventional prices. All gross margin data has been calculated by simple averages with the exception of the horticultural data that has been weighted according to the area of crop grown.

Altogether, 88 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 cropping enterprises. Gross margins are presented for seven crops for the 2001/02 harvest year. It should be noted that **not** all farms were eligible for arable area payments.

**Table 23 Dairy gross margins (£/cow), 2001/02**

| <b>Herd Size</b>                          | <b>&lt;40</b> | <b>41-80</b> | <b>&gt;81</b> | <b>Top 5</b> | <b>Low 5</b> |
|---|---------------|--------------|---------------|--------------|--------------|
| Number of herds                           | 1             | 10           | 9             | 5            | 5            |
| Average farm area - actual ha             | n/a           | 116.6        | 263.6         | 107.1        | 202.6        |
| -effective ha                             | n/a           | 108.4        | 249.2         | 103.2        | 192.9        |
| Average size of the farm business (ESU)   | n/a           | 96.9         | 193.1         | 100.7        | 144.9        |
| Average size of herd (dairy cows)         | n/a           | 66           | 157           | 98           | 125          |
| Average milk yield (litres per cow)       | n/a           | 5667         | 5615          | 6665         | 4997         |
| Implied milk price (ppl)                  | n/a           | 23.95        | 24.46         | 24.04        | 22.92        |
| <b>Enterprise output (£ per cow)</b>      |               |              |               |              |              |
| Milk disposals (1)                        | n/a           | 1357         | 1373          | 1602         | 1145         |
| Calves - sales and transfers out          | n/a           | 44           | 54            | 52           | 52           |
| Bulls & cows - sales and transfers out    | n/a           | 112          | 57            | 152          | 67           |
| Net milk quota                            | n/a           | 6            | 13            | 18           | 25           |
| Valuation change                          | n/a           | 97           | 36            | -1           | 1            |
| Less: purchases & transfers in            | n/a           | 258          | 151           | 152          | 141          |
| Total enterprise output                   | n/a           | 1357         | 1382          | 1672         | 1149         |
| <b>Variable Costs (£ per cow)</b>         |               |              |               |              |              |
| Concentrates                              | n/a           | 289          | 252           | 323          | 253          |
| Purchased bulk feed                       | n/a           | 10           | 16            | 9            | 15           |
| Stock keep                                | n/a           | 0            | 0             | 0            | 0            |
| Veterinary & medicines                    | n/a           | 28           | 23            | 26           | 16           |
| Other livestock costs - dairy             | n/a           | 130          | 122           | 88           | 89           |
| Total variable costs                      | n/a           | 458          | 413           | 447          | 374          |
| Margin over concentrates                  | n/a           | 1058         | 1105          | 1270         | 878          |
| Gross margin before forage costs          | n/a           | 899          | 969           | 1225         | 776          |
| Gross margin including forage costs       | n/a           | 814          | 877           | 1135         | 694          |
| <b>Forage variable costs (£ per farm)</b> |               |              |               |              |              |
| Seeds                                     | n/a           | 1062         | 4304          | 2262         | 2462         |
| Fertilisers                               | n/a           | 1081         | 2758          | 297          | 2494         |
| Sprays                                    | n/a           | 12           | 0             | 4            | 0            |
| Other forage costs                        | n/a           | 6550         | 15874         | 10537        | 11756        |
| Total forage variable costs               | n/a           | 8705         | 22936         | 13100        | 16712        |
| % of forage variable costs to dairy       | n/a           | 64           | 63            | 67           | 61           |
| Forage variable costs per cow             | n/a           | 85           | 92            | 90           | 82           |

(1) Including milk to calves and farmhouse

**Table 24 Lowland cattle gross margins (£/cow), 2001/02**

| <b>Herd Size</b>                             | <b>&lt;35</b> | <b>&gt;35</b> | <b>All herds</b> |
|--|---------------|---------------|------------------|
| Number of herds                              | 7             | 7             | 14               |
| Average farm area - actual ha                | 66.3          | 97.4          | 81.8             |
| -effective ha                                | 60.2          | 93.5          | 76.8             |
| Average size of the farm business (ESU)      | 23.1          | 26.4          | 24.8             |
| Average size of herd (breeding cows)         | 28            | 43            | 35               |
| <b>Enterprise output (£ per cow)</b>         |               |               |                  |
| Calf Sales                                   | 3             | 32            | 17               |
| Other store cattle - sales and transfers out | 172           | 41            | 106              |
| Bulls & cows - sales and transfers out       | 50            | 24            | 37               |
| Finished cattle sales                        | 150           | 383           | 267              |
| Net SCP quota leased                         | -18           | -17           | -17              |
| Cattle subsidies - SCP                       | 155           | 184           | 169              |
| Cattle subsidies - BSP                       | 84            | 79            | 82               |
| Cattle subsidies - other                     | 7             | 23            | 15               |
| Valuation change                             | 28            | 36            | 32               |
| Less: purchases & transfers in               | 88            | 49            | 69               |
| Total enterprise output                      | 543           | 736           | 640              |
| <b>Variable Costs (£ per cow)</b>            |               |               |                  |
| Concentrates                                 | 36            | 65            | 51               |
| Purchased bulk feed                          | 0             | 23            | 11               |
| Stock keep                                   | 0             | 0             | 0                |
| Veterinary & medicines                       | 17            | 20            | 19               |
| Other livestock costs - beef                 | 36            | 74            | 55               |
| Total variable costs                         | 89            | 182           | 136              |
| Gross margin before forage costs             | 454           | 554           | 504              |
| Gross margin including forage costs          | 398           | 493           | 445              |
| <b>Forage variable costs (£ per farm)</b>    |               |               |                  |
| Seeds  | 360           | 235           | 298              |
| Fertilisers                                  | 267           | 477           | 372              |
| Sprays                                       | 0             | 0             | 0                |
| Other forage costs                           | 1398          | 2546          | 1972             |
| Total forage variable costs                  | 2026          | 3258          | 2642             |
| % of forage variable costs to beef           | 76            | 82            | 79               |
| Forage variable costs per cow                | 56            | 62            | 59               |

**Table 25 LFA cattle gross margins (£/cow), 2001/02**

| <b>Herd Size</b>                             | <b>&lt;20</b> | <b>20-40</b> | <b>&gt;41</b> | <b>All herds</b> |
|--|---------------|--------------|---------------|------------------|
| Number of herds                              | 5             | 7            | 1             | 13               |
| Average farm area - actual ha                | 169.7         | 154.6        | n/a           | 159.3            |
| -effective ha                                | 133.5         | 121.8        | n/a           | 127.2            |
| Average size of the farm business (ESU)      | 2.2           | 2.4          | n/a           | 2.5              |
| Average size of herd (breeding cows)         | 10            | 23           | n/a           | 24               |
| <b>Enterprise output (£ per cow)</b>         |               |              |               |                  |
| Calf Sales                                   | 6             | 7            | n/a           | 8                |
| Other store cattle - sales and transfers out | 164           | 139          | n/a           | 148              |
| Bulls & cows - sales and transfers out       | 34            | 56           | n/a           | 51               |
| Finished cattle sales                        | 41            | 109          | n/a           | 96               |
| Net SCP quota leased                         | -14           | -17          | n/a           | -15              |
| Cattle subsidies - SCP                       | 152           | 157          | n/a           | 156              |
| Cattle subsidies - BSP                       | 40            | 79           | n/a           | 62               |
| Cattle subsidies - other                     | 1             | 9            | n/a           | 6                |
| Valuation change                             | 65            | 134          | n/a           | 113              |
| Less: purchases & transfers in               | 34            | 75           | n/a           | 63               |
| Total enterprise output                      | 455           | 598          | n/a           | 563              |
| <b>Variable Costs (£ per cow)</b>            |               |              |               |                  |
| Concentrates                                 | 112           | 87           | n/a           | 96               |
| Purchased bulk feed                          | 2             | 15           | n/a           | 9                |
| Stock keep                                   | 24            | 0            | n/a           | 9                |
| Veterinary & medicines                       | 36            | 17           | n/a           | 25               |
| Other livestock costs - beef                 | 49            | 58           | n/a           | 57               |
| Total variable costs                         | 223           | 177          | n/a           | 196              |
| Gross margin before forage costs             | 232           | 422          | n/a           | 368              |
| Gross margin including forage costs          | 140           | 274          | n/a           | 269              |
| <b>Forage variable costs (£ per farm)</b>    |               |              |               |                  |
| Seeds  | 135           | 461          | n/a           | 300              |
| Fertilisers                                  | 1187          | 2792         | n/a           | 2095             |
| Sprays                                       | 0             | 9            | n/a           | 5                |
| Other forage costs                           | 1279          | 2535         | n/a           | 2021             |
| Total forage variable costs                  | 2601          | 5796         | n/a           | 4420             |
| % of forage variable costs to beef           | 37            | 59           | n/a           | 54               |
| Forage variable costs per cow                | 93            | 148          | n/a           | 98               |

**Table 26 Lowland farms, breeding sheep gross margins (£/ewe), 2001/02**

| <b>Flock Size</b>                         | <b>&lt;200</b> | <b>&gt;200</b> | <b>All flocks</b> |
|---|----------------|----------------|-------------------|
| Number of flocks                          | 11             | 5              | 16                |
| Average farm area - actual ha             | 89.5           | 192.8          | 145.9             |
| -effective ha                             | 82.8           | 178.8          | 135.1             |
| Average size of the farm business (ESU)   | 25.3           | 101.2          | 61.6              |
| Average size of flock (breeding ewes)     | 128            | 253            | 199               |
| Lambs reared per ewe                      | 1.11           | 1.40           | 1.27              |
| Finished lambs sold per ewe               | 0.91           | 1.37           | 1.17              |
| <b>Enterprise output (£ per ewe)</b>      |                |                |                   |
| Lamb sales - store                        | 2.5            | 0.0            | 1.7               |
| - finished                                | 43.6           | 44.9           | 49.6              |
| Ewe and ram sales                         | 2.9            | 1.8            | 2.8               |
| Other sheep sales                         | 0.0            | 7.9            | 3.5               |
| Wool sales                                | 1.4            | 0.9            | 1.3               |
| Net SAP quota leased                      | 0.0            | 0.0            | 0.0               |
| Sheep subsidies - SAP                     | 5.5            | 5.5            | 6.2               |
| Sheep subsidies - other                   | 0.0            | 0.0            | 0.0               |
| Valuation change                          | -1.9           | -8.3           | -4.9              |
| Less: sheep purchases                     | 5.6            | 2.4            | 4.9               |
| Total enterprise output                   | 48.4           | 50.3           | 55.3              |
| <b>Variable Costs (£ per ewe)</b>         |                |                |                   |
| Concentrates                              | 9.0            | 4.2            | 8.0               |
| Purchased bulk feed                       | 0.4            | 0.1            | 0.3               |
| Stock keep                                | 0.0            | 0.0            | 0.0               |
| Veterinary & medicines                    | 3.1            | 1.0            | 2.6               |
| Other livestock costs - sheep             | 5.4            | 6.4            | 6.6               |
| Total variable costs                      | 18.0           | 11.8           | 17.5              |
| Gross margin before forage costs          | 30.4           | 38.5           | 37.8              |
| Gross margin including forage costs       | 23.8           | 23.1           | 23.2              |
| <b>Forage variable costs (£ per farm)</b> |                |                |                   |
| Seeds                                     | 413            | 3507           | 1818              |
| Fertilisers                               | 474            | 147            | 390               |
| Sprays                                    | 0              | 0              | 0                 |
| Other forage costs                        | 1137           | 8819           | 4640              |
| Total forage variable costs               | 2023           | 12472          | 6848              |
| % of forage variable costs to lamb        | 42             | 31             | 42                |
| Forage variable costs per ewe             | 6.6            | 15.4           | 14.6              |

**Table 27 LFA farms, breeding sheep gross margins (£/ewe), 2001/02**

| <b>Flock Size</b>                         | <b>&lt;300</b> | <b>&gt;300</b> | <b>All flocks</b> |
|---|----------------|----------------|-------------------|
| Number of flocks                          | 7              | 6              | 13                |
| Average farm area - actual ha             | 79.2           | 242.0          | 154.4             |
| -effective ha                             | 75.9           | 176.6          | 122.4             |
| Average size of the farm business (ESU)   | 15.7           | 30.5           | 22.5              |
| Average size of flock (breeding ewes)     | 173            | 681            | 407               |
| Lambs reared per ewe                      | 1.04           | 0.83           | 0.88              |
| Finished lambs sold per ewe               | 0.51           | 0.37           | 0.40              |
| <b>Enterprise output (£ per ewe)</b>      |                |                |                   |
| Lamb sales - store                        | 0.0            | 1.4            | 0.6               |
| - finished                                | 19.0           | 11.6           | 15.6              |
| Ewe and ram sales                         | 11.0           | 0.4            | 6.1               |
| Other sheep sales                         | 0.0            | 1.0            | 0.5               |
| Wool sales                                | 1.1            | 0.6            | 0.9               |
| Net SAP quota leased                      | -0.1           | 0.2            | 0.0               |
| Sheep subsidies - SAP                     | 14.4           | 11.6           | 13.1              |
| Sheep subsidies - other                   | 0.0            | 0.0            | 0.0               |
| Valuation change                          | 0.4            | 4.5            | 2.3               |
| Less: sheep purchases                     | 1.1            | 1.2            | 1.1               |
| Total enterprise output                   | 44.8           | 30.1           | 38.0              |
| <b>Variable Costs (£ per ewe)</b>         |                |                |                   |
| Concentrates                              | 15.6           | 3.4            | 10.0              |
| Purchased bulk feed                       | 0.0            | 0.8            | 0.4               |
| Stock keep                                | 0.0            | 1.4            | 0.6               |
| Veterinary & medicines                    | 3.5            | 1.2            | 2.4               |
| Other livestock costs - sheep             | 8.6            | 1.8            | 5.5               |
| Total variable costs                      | 27.6           | 8.6            | 18.8              |
| Gross margin before forage costs          | 17.2           | 21.5           | 19.2              |
| Gross margin including forage costs       | 11.7           | 15.1           | 13.7              |
| <b>Forage variable costs (£ per farm)</b> |                |                |                   |
| Seeds                                     | 441            | 151            | 307               |
| Fertilisers                               | 981            | 3102           | 1960              |
| Sprays                                    | 9              | 0              | 5                 |
| Other forage costs                        | 1231           | 2597           | 1861              |
| Total forage variable costs               | 2662           | 5850           | 4133              |
| % of forage variable costs to lamb        | 35             | 76             | 54                |
| Forage variable costs per ewe             | 5.5            | 6.5            | 5.5               |



**Table 28 Pig gross margins (£/sow), 2001/02**


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

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**Table 29 Gross margins for organic arable crops (£/ha), 2001/02**

|  | Winter<br>wheat | Spring<br>wheat | Winter<br>barley | Spring<br>barley | Spring<br>Oats | Beans      | Ware<br>potatoes |
|--|-----------------|-----------------|------------------|------------------|----------------|------------|------------------|
| Number of enterprises                    | 14              | 5               | 7                | 14               | 10             | 10         | 5                |
| Area of crop grown (ha.)                 | 28              | 6               | 25               | 40               | 17             | 17         | 18               |
| Total production (tonnes)                | 99              | 27              | 45               | 137              | 82             | 42         | 68               |
| Yield tonnes per hectare                 | 3.5             | 4.3             | 1.8              | 3.4              | 4.9            | 2.5        | 13.5             |
| Crop Value (£ per tonne)                 | 186             | 181             | 97               | 140              | 85             | 160        | 294              |
| <b>Enterprise output (£ per ha)</b>      |                 |                 |                  |                  |                |            |                  |
| Closing valuation                        | 301             | 253             | 93               | 285              | 153            | 110        | 1                |
| Revenue                                  | 220             | 430             | 31               | 57               | 214            | 185        | 3986             |
| Farm house consumption, benefits in kind | 0               | 0               | 0                | 2                | 10             | 44         | 0                |
| Feed used on farm                        | 135             | 88              | 52               | 137              | 34             | 57         | 0                |
| Area payments and other subsidies        | 135             | 219             | 218              | 125              | 202            | 233        | 0                |
| Total enterprise output                  | 790             | 989             | 394              | 605              | 613            | 630        | 3987             |
| <b>Variable Costs (£ per ha)</b>         |                 |                 |                  |                  |                |            |                  |
| Seeds                                    | 50              | 68              | 36               | 41               | 63             | 42         | 651              |
| Fertilisers                              | 2               | 0               | 0                | 1                | 0              | 0          | 75               |
| Sprays                                   | 12              | 0               | 27               | 0                | 0              | 18         | 197              |
| Other crop costs                         | 37              | 97              | 103              | 61               | 44             | 21         | 392              |
| Casual labour                            | n/a             | n/a             | n/a              | n/a              | n/a            | n/a        | 332              |
| Total variable costs                     | 101             | 165             | 166              | 102              | 107            | 80         | 1647             |
| <b>Gross margin (£ per ha)</b>           | <b>689</b>      | <b>824</b>      | <b>228</b>       | <b>504</b>       | <b>506</b>     | <b>550</b> | <b>2340</b>      |

**Table 30 Agronomic and economic summary for horticultural enterprises for 2001/02 cropping season**

|                                     | Potatoes <sup>1</sup> | Calabrese <sup>1</sup> | S Cauli <sup>1</sup> | O/W Cauli <sup>1</sup> | Leeks <sup>1</sup> | S Cabb <sup>1</sup> |
|-------------------------------------|-----------------------|------------------------|----------------------|------------------------|--------------------|---------------------|
| <b>OUTPUT</b>                       |                       |                        |                      |                        |                    |                     |
| Marketable yield (t/ha)             | 15                    | 4.3                    | 1416 (doz)           | 886 (doz)              | 11.8               | 1450 (doz)          |
| Price per tonne <sup>2</sup> (£)    | 300                   | 760                    | 3.94 (doz)           | 4.46 (doz)             | 899                | 2.44 (doz)          |
| <b>TOTAL (£/ha)</b>                 | <b>4393</b>           | <b>3295</b>            | <b>5573</b>          | <b>3948</b>            | <b>10632</b>       | <b>3530</b>         |
| <b>VARIABLE COSTS (£/ha)</b>        |                       |                        |                      |                        |                    |                     |
| Seeds/transplants                   | 742                   | 475                    | 504                  | 631                    | 1705               | 673                 |
| Fertilisers (FYM)                   | 73                    | 23                     | 6                    | 26                     | 67                 | 19                  |
| Crop protection                     | 407                   | 394                    | 329                  | 253                    | 5                  | 292                 |
| Casual labour                       | 852                   | 430                    | 1202                 | 795                    | 5664               | 719                 |
| Other                               |                       | 10                     | 11                   | 8                      | 6                  | 2                   |
| <b>TOTAL (£/ha)</b>                 | <b>2075</b>           | <b>1922</b>            | <b>2052</b>          | <b>1713</b>            | <b>7446</b>        | <b>1706</b>         |
| <b>GROSS MARGIN (£/ha)</b>          | <b>2318</b>           | <b>1373</b>            | <b>3521</b>          | <b>2236</b>            | <b>3186</b>        | <b>1824</b>         |
|                                     |                       |                        |                      |                        |                    |                     |
| <b>ALLOCATED FIXED COSTS (£/ha)</b> |                       |                        |                      |                        |                    |                     |
| Cultivations                        | 183                   | 113                    | 144                  | 121                    | 171                | 124                 |
| Planting/drilling                   | 99                    | 278                    | 247                  | 239                    | 364                | 354                 |
| Weeding                             | 127                   | 56                     | 62                   | 52                     | 170                | 60                  |
| Spreading FYM                       | 49                    | 13                     | 4                    | 2                      | 1                  | 3                   |
| Spraying                            | 20                    | 39                     | 40                   | 19                     | 18                 | 53                  |
| Irrigation                          | 8                     | 80                     | 151                  | 100                    | 94                 | 60                  |
| Mechanical Harvest                  | 304                   |                        |                      | 14                     |                    |                     |
| Other                               | 20                    |                        |                      |                        |                    |                     |
| <b>TOTAL (£/ha)</b>                 | <b>810</b>            | <b>578</b>             | <b>647</b>           | <b>547</b>             | <b>819</b>         | <b>646</b>          |
| <b>NET MARGIN (£/ha)</b>            | <b>1508</b>           | <b>795</b>             | <b>2874</b>          | <b>1689</b>            | <b>2367</b>        | <b>1178</b>         |

<sup>1</sup>Weighted averages according to area grown at least 3 farms <sup>2</sup>All crops sold net of all market charges (transport, grading, packaging, commission) **Source: HDRA (2001)**

## **6. Appendices**

### **6.1 Appendix 1. Detailed Farm Results**

**Table A1 Results of cropping farms, 2001/02**

|   |                            | Organic       |             | Conventional  |            |
|---|----------------------------|---------------|-------------|---------------|------------|
|   |                            | 12            |             | 208           |            |
| Sample Number   |                            |               |             |               |            |
| Average farm size (UAA)                               |                            | 114.2         |             | 115.1         |            |
| Business size (ESU)                                   |                            | 70            |             | 69            |            |
|   |                            | £/farm        | £/ha        | £/farm        | £/ha       |
| Dairy -   | milk output                | 7637          | 67          | 1714          | 15         |
|   | cattle                     | -8191         | -72         | -57           | 0          |
|   | net quota                  | 325           | 3           | 97            | 1          |
|   | valuation change           | 6699          | 59          | -39           | 0          |
| Other cattle  | output                     | 5144          | 45          | 4086          | 35         |
|   | valuation change           | 2560          | 22          | -488          | -4         |
|   | subsidies                  | 812           | 7           | 1631          | 14         |
| Sheep -   | total output               | 3346          | 29          | 1766          | 15         |
|   | valuation change           | -55           | 0           | -611          | -5         |
|   | subsidies                  | 325           | 3           | 178           | 2          |
| Other livestock                                       |                            | 24209         | 212         | 7190          | 62         |
| Arable crops  | output                     | 48152         | 422         | 56771         | 493        |
|   | subsidies                  | 11199         | 98          | 15574         | 135        |
| By products forage and cults                          | output                     | 10149         | 89          | 4556          | 40         |
|   | subsidies (set-aside)      | 3687          | 32          | 3607          | 31         |
| Miscellaneous (including benefit value of farmhouses) |                            | 6624          | 58          | 11401         | 99         |
|   | - organic grants           | 9640          | 84          | 0             | 0          |
|   | - other agri-env.payments  | 1637          | 14          | 518           | 5          |
| <b>FARM REVENUE</b>                                   |                            | <b>133899</b> | <b>1173</b> | <b>107895</b> | <b>937</b> |
| <b>INPUTS</b>   |                            |               |             |               |            |
| Feeds   | purchased concentrates     | 17228         | 151         | 4788          | 42         |
|   | homegrown concentrates     | 605           | 5           | 642           | 6          |
| Purchased fodder, Tack and stock keep                 |                            | 42            | 0           | 258           | 2          |
| Veterinary and medicines                              |                            | 1020          | 9           | 403           | 4          |
| Other livestock costs                                 |                            | 4499          | 39          | 1229          | 11         |
| Seeds -   | purchased and homegrown    | 7584          | 66          | 5656          | 49         |
| Fertilisers   |                            | 1410          | 12          | 6664          | 58         |
| Crop protection                                       |                            | 1121          | 10          | 8465          | 74         |
| Other crop costs                                      |                            | 2445          | 21          | 3420          | 30         |
| Labour  | paid incl. paid management | 11062         | 97          | 10133         | 88         |
|   | casual                     | 1786          | 16          | 2168          | 19         |
| Machinery   | contract                   | 9459          | 83          | 5846          | 51         |
|   | repairs                    | 4396          | 39          | 5576          | 48         |
|   | fuels                      | 3311          | 29          | 3667          | 32         |
| General farming costs                                 |                            | 9438          | 83          | 9636          | 84         |
| Land expenses   |                            | 4379          | 38          | 1635          | 14         |
| Rent  |                            | 10547         | 92          | 6868          | 60         |
| <b>FARM EXPENSES</b>                                  |                            | <b>90332</b>  | <b>791</b>  | <b>77055</b>  | <b>669</b> |
| <b>Excess of expenses over revenue</b>                |                            | <b>43567</b>  | <b>382</b>  | <b>30840</b>  | <b>268</b> |
| <b>Notional inputs</b>                                |                            |               |             |               |            |
| - rental value/imputed rent                           |                            | 11446         | 100         | 11974         | 104        |
| - unpaid labour                                       |                            | 4724          | 41          | 4046          | 35         |
| - machinery depreciation                              |                            | 7516          | 66          | 10937         | 95         |
|   |                            | <b>23685</b>  | <b>207</b>  | <b>26957</b>  | <b>234</b> |
| <b>NET FARM INCOME (excl. BLSA)</b>                   |                            | <b>19882</b>  | <b>174</b>  | <b>3887</b>   | <b>34</b>  |

**Table A1 Results of cropping farms**

|   | Organic<br>2001/02 |            | Conventional<br>2001/02 |            |
|---|--------------------|------------|-------------------------|------------|
|   | £/farm             | £/ha       | £/farm                  | £/ha       |
| <b>INCOME MEASURES</b>                  |                    |            |                         |            |
| NET FARM INCOME (excl. BLSA)            | 19882              | 174        | 3887                    | 34         |
| Less farmer and spouse labour           | 13580              | 119        | 12361                   | 107        |
| Add managerial input of paid manager    | 0                  | 0          | 135                     | 1          |
| Add BLSA                                | 254                | 2          | -83                     | -1         |
| <b>MANAGEMENT AND INVESTMENT INCOME</b> | <b>6556</b>        | <b>57</b>  | <b>-8423</b>            | <b>-73</b> |
| <br>                                    |                    |            |                         |            |
| NET FARM INCOME (excl. BLSA)            | 19882              | 174        | 3887                    | 34         |
| plus net rental value/imputed rent      | 10055              | 88         | 8998                    | 78         |
| minus occupier's expenses               | 142                | 1          | 735                     | 6          |
| minus interest payments                 | 6702               | 59         | 1769                    | 15         |
| minus build & works depreciation        | 3416               | 30         | 2772                    | 24         |
| <b>OCCUPIER'S NET INCOME</b>            | <b>19678</b>       | <b>172</b> | <b>7608</b>             | <b>66</b>  |
| <br>                                    |                    |            |                         |            |
| plus other imputed items                | 5556               | 49         | 4046                    | 35         |
| plus fixed asset depreciation           | 10978              | 96         | 13860                   | 120        |
| minus valuation changes                 | 30411              | 266        | 1229                    | 11         |
| <b>NOTIONAL CASH INCOME</b>             | <b>5800</b>        | <b>51</b>  | <b>24284</b>            | <b>211</b> |
| <br>                                    |                    |            |                         |            |
| <b>TENANT'S CAPITAL - £ per farm</b>    |                    |            |                         |            |
| Machinery                               | 50180              | 440        | 55370                   | 481        |
| Livestock                               | 21265              | 186        | 9870                    | 86         |
| Crops                                   | 8625               | 76         | 24549                   | 213        |
| Stores                                  | 2050               | 18         | 9639                    | 84         |
| <b>TOTAL</b>                            | <b>82119</b>       | <b>719</b> | <b>99428</b>            | <b>864</b> |
| <br>                                    |                    |            |                         |            |
| <b>PERFORMANCE INDICATORS</b>           |                    |            |                         |            |
| Stocking rate (LU per eff.ha)           | 0.4                |            | 0.2                     |            |
| LU/forage ha                            | 1.5                |            | 1.5                     |            |
| Annual Labour Units per farm            | 2.4                |            | 2.1                     |            |
| of which farmer & spouse                | 1.2                |            | 1.0                     |            |
| Owner Equity (%)                        | 76.9               |            | 89.0                    |            |
| ONI/Net worth (%)                       | 5.0                |            | 1.5                     |            |
| Return on tenant's capital (%)          | 8.0                |            | -8.5                    |            |
| Return on all capital (%)               | 3.3                |            | -0.3                    |            |

**Table A1 Results of cropping farms**

|   | Organic<br>2001/02 |                         | Conventional<br>2001/02 |               |
|---|--------------------|-------------------------|-------------------------|---------------|
| <b>LAND UTILISATION - hectares per farm</b>         |                    |                         |                         |               |
| Tillage - maincrops                                 | 63.3               |                         | 78.7                    |               |
| Tillage - fodder                                    | 2.0                |                         | 0.6                     |               |
| Grassland   |                    | Grazing, hay and silage |                         | 16.5          |
| Fallow, land let & set aside                        | 18.7               |                         | 19.2                    |               |
| Rough grazing                                       |                    | Effective               |                         | 0.1           |
| <b>Utilisable agricultural area (Effective ha.)</b> | 114.2              |                         | 115.1                   |               |
| Woods, roads and buildings                          | 6.5                |                         | 4.6                     |               |
| <b>TOTAL AREA (Actual ha.)</b>                      | 120.7              |                         | 119.7                   |               |
| of which forage area                                | <b>32.2</b>        |                         | <b>17.2</b>             |               |
| Bare land and forage hired in                       | 0.7                |                         | 2.1                     |               |
| <b>LIVESTOCK CARRIED - L.U per farm</b>             | LU                 | No's                    | LU                      | No's          |
| Dairy cows  | 5.5                | 6                       | 0.9                     | 1             |
| Beef cows   | 4.7                | 6                       | 2.7                     | 4             |
| Other cattle  | 13.3               | 21                      | 8.7                     | 16            |
| Breeding sheep                                      | 5.3                | 56                      | 2.9                     | 27            |
| Other sheep   | 0.8                | 21                      | 0.8                     | 20            |
| Pigs  | 3.1                | 182                     | 6.3                     | 27            |
| Poultry   | 15.4               | 111                     | 3.0                     | 19            |
| Other livestock                                     | 0.0                | 0                       | 0.0                     | 44            |
| <b>TOTAL (L.U.)</b>                                 | 48.2               |                         | 25.3                    |               |
| <b>ASSETS - £ per farm</b>                          | Opening Value      | Closing Value           | Opening Value           | Closing Value |
| Land and Property                                   | 381420             | 380633                  | 406907                  | 410959        |
| Buildings, improvements and fixtures                | 16448              | 18592                   | 13190                   | 13488         |
| Machinery   | 51077              | 49283                   | 56215                   | 54525         |
| Livestock   | 12143              | 30386                   | 10602                   | 9138          |
| Produce and goods in store                          | 4645               | 17024                   | 33735                   | 36213         |
| Quotas  | 9307               | 8591                    | 3036                    | 3295          |
| Credit balances                                     | 12795              | 9181                    | 56941                   | 57319         |
| <b>TOTAL</b>  | 487835             | 513689                  | 580628                  | 584936        |
| <b>EXTERNAL LIABILITIES</b>                         |                    |                         |                         |               |
| Long and medium term loans                          | 67220              | 93062                   | 27051                   | 28466         |
| Short term loans                                    | 21291              | 15552                   | 14742                   | 14991         |
| Overdrafts  | 29897              | 9893                    | 18431                   | 20710         |
| <b>TOTAL</b>  | 118407             | 118508                  | 60224                   | 64167         |
| <b>NET WORTH</b>                                    | <b>369429</b>      | <b>395181</b>           | <b>520404</b>           | <b>520769</b> |

**Table A2. Results of horticulture farms**

|   |                             | Organic      |             | Conventional  |             |
|---|-----------------------------|--------------|-------------|---------------|-------------|
| Sample Number   |                             | 5            |             | 33            |             |
| Average farm size (UAA)                               |                             | 46.0         |             | 39.1          |             |
| Business size (ESU)                                   |                             | 49           |             | 50            |             |
|   |                             | £/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                      | 1527         | 33          | 268           | 7           |
|   | valuation change            | 130          | 3           | -58           | -1          |
|   | subsidies                   | 905          | 20          | 16            | 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                      | 87522        | 1904        | 100865        | 2577        |
|   | subsidies                   | 911          | 20          | 3345          | 85          |
| By products forage and cults                          | output                      | 1855         | 40          | 3604          | 92          |
|   | subsidies (set-aside)       | 644          | 14          | 783           | 20          |
| Miscellaneous (including benefit value of farmhouses) |                             | 4089         | 89          | 10443         | 267         |
|   | - organic grants            | 651          | 14          | 0             | 0           |
|   | - other agri-env.payments   | 0            | 0           | 188           | 5           |
|   | <b>FARM REVENUE</b>         | <b>98235</b> | <b>2137</b> | <b>119453</b> | <b>3052</b> |
| <b>INPUTS</b>   |                             |              |             |               |             |
| Feeds   | purchased concentrates      | 0            | 0           | 9             | 0           |
|   | homegrown concentrates      | 0            | 0           | 21            | 1           |
| Purchased fodder, Tack and stock keep                 |                             | 1644         | 36          | 0             | 0           |
| Veterinary and medicines                              |                             | 160          | 3           | 8             | 0           |
| Other livestock costs                                 |                             | 282          | 6           | 68            | 2           |
| Seeds -   | purchased and homegrown     | 11492        | 250         | 9144          | 234         |
| Fertilisers   |                             | 2839         | 62          | 2898          | 74          |
| Crop protection                                       |                             | 736          | 16          | 4897          | 125         |
| Other crop costs                                      |                             | 4675         | 102         | 19082         | 488         |
| Labour  | paid incl. paid management  | 1925         | 42          | 14417         | 368         |
|   | casual                      | 4933         | 107         | 11641         | 297         |
| Machinery   | contract                    | 6944         | 151         | 4644          | 119         |
|   | repairs                     | 3764         | 82          | 5110          | 131         |
|   | fuels                       | 1656         | 36          | 2404          | 61          |
| General farming costs                                 |                             | 5920         | 129         | 10621         | 271         |
| Land expenses   |                             | 1021         | 22          | 1567          | 40          |
| Rent  |                             | 1176         | 26          | 4239          | 108         |
|   | <b>FARM EXPENSES</b>        | <b>49167</b> | <b>1070</b> | <b>90771</b>  | <b>2319</b> |
| <b>Excess of expenses over revenue</b>                |                             | <b>49068</b> | <b>1068</b> | <b>28682</b>  | <b>733</b>  |
| <b>Notional inputs</b>                                |                             |              |             |               |             |
|   | - rental value/imputed rent | 9429         | 205         | 6274          | 160         |
|   | - unpaid labour             | 6152         | 134         | 3945          | 101         |
|   | - machinery depreciation    | 4553         | 99          | 5928          | 151         |
|   |                             | <b>20135</b> | <b>438</b>  | <b>16146</b>  | <b>413</b>  |
| <b>NET FARM INCOME (excl. BLSA)</b>                   |                             | <b>28933</b> | <b>629</b>  | <b>12536</b>  | <b>320</b>  |



**Table A2. Results of horticulture farms**

|   | Organic<br>2001/02 |             | Conventional<br>2001/02 |             |
|---|--------------------|-------------|-------------------------|-------------|
|   | £ / farm           | £ / ha      | £ / farm                | £ / ha      |
| <b>INCOME MEASURES</b>                  |                    |             |                         |             |
| NET FARM INCOME (excl. BLSA)            | 28933              | 629         | 12536                   | 320         |
| Less farmer and spouse labour           | 10698              | 233         | 15426                   | 394         |
| Add managerial input of paid manager    | 0                  | 0           | 0                       | 0           |
| Add BLSA                                | 0                  | 0           | 0                       | 0           |
| <b>MANAGEMENT AND INVESTMENT INCOME</b> | <b>18235</b>       | <b>397</b>  | <b>-2890</b>            | <b>-74</b>  |
| <br>                                    |                    |             |                         |             |
| NET FARM INCOME (excl. BLSA)            | 28933              | 629         | 12536                   | 320         |
| plus net rental value/imputed rent      | 8527               | 186         | 3594                    | 92          |
| minus occupier's expenses               | 359                | 8           | 703                     | 18          |
| minus interest payments                 | 2442               | 53          | 2948                    | 75          |
| minus build & works depreciation        | 350                | 8           | 2404                    | 61          |
| <b>OCCUPIER'S NET INCOME</b>            | <b>34309</b>       | <b>746</b>  | <b>10075</b>            | <b>257</b>  |
| <br>                                    |                    |             |                         |             |
| plus other imputed items                | 7055               | 153         | 3945                    | 101         |
| plus fixed asset depreciation           | 5200               | 113         | 9686                    | 247         |
| minus valuation changes                 | 1230               | 27          | 1685                    | 43          |
| <b>NOTIONAL CASH INCOME</b>             | <b>45333</b>       | <b>986</b>  | <b>22020</b>            | <b>563</b>  |
| <br>                                    |                    |             |                         |             |
| <b>TENANT'S CAPITAL - £ per farm</b>    |                    |             |                         |             |
| Machinery                               | 43230              | 941         | 29706                   | 759         |
| Livestock                               | 3110               | 68          | 210                     | 5           |
| Crops                                   | 1661               | 36          | 9033                    | 231         |
| Stores                                  | 1185               | 26          | 6535                    | 167         |
| <b>TOTAL</b>                            | <b>49187</b>       | <b>1070</b> | <b>45485</b>            | <b>1162</b> |
| <br>                                    |                    |             |                         |             |
| <b>PERFORMANCE INDICATORS</b>           |                    |             |                         |             |
| Stocking rate (LU per eff.ha)           | 0.2                |             | 0.0                     |             |
| LU/forage ha                            | 0.4                |             | 0.2                     |             |
| Annual Labour Units per farm            | 1.9                |             | 3.5                     |             |
| of which farmer & spouse                | 1.1                |             | 1.2                     |             |
| Owner Equity (%)                        | 91.7               |             | 86.4                    |             |
| ONI/Net worth (%)                       | 8.3                |             | 3.3                     |             |
| Return on tenant's capital (%)          | 37.1               |             | -6.4                    |             |
| Return on all capital (%)               | 4.3                |             | 0.4                     |             |

**Table A2. Results of horticulture farms**

|   | Organic<br>2001/02 |                         | Conventional<br>2001/02 |               |
|---|--------------------|-------------------------|-------------------------|---------------|
| <b>LAND UTILISATION - hectares per farm</b>         |                    |                         |                         |               |
| Tillage - maincrops                                 | 20.4               |                         | 25.6                    |               |
| Tillage - fodder                                    | 0.0                |                         | 0.1                     |               |
| Grassland   | 19.5               | Grazing, hay and silage | 3.9                     |               |
| Fallow, land let & set aside                        | 6.1                |                         | 9.6                     |               |
| Rough grazing                                       | 0.0                | Effective               | 0.0                     |               |
| <b>Utilisable agricultural area (Effective ha.)</b> | <b>46.0</b>        |                         | <b>39.1</b>             |               |
| Woods, roads and buildings                          | 2.3                |                         | 2.6                     |               |
| <b>TOTAL AREA (Actual ha.)</b>                      | <b>48.7</b>        |                         | <b>41.7</b>             |               |
| of which forage area                                | <b>19.5</b>        |                         | <b>4.0</b>              |               |
| <br>  |                    |                         |                         |               |
| <b>LIVESTOCK CARRIED - L.U per farm</b>             | LU                 | No's                    | LU                      | No's          |
| Dairy cows  | 0.0                | 0                       | 0.0                     | 0             |
| Beef cows   | 3.2                | 4                       | 0.0                     | 0             |
| Other cattle  | 5.4                | 9                       | 0.7                     | 1             |
| 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             |
| <b>TOTAL (L.U.)</b>                                 | <b>8.5</b>         |                         | <b>0.7</b>              |               |
| <br>  |                    |                         |                         |               |
| <b>ASSETS - £ per farm</b>                          | Opening Value      | Closing Value           | Opening Value           | Closing Value |
| Land and Property                                   | 388785             | 388785                  | 259208                  | 262472        |
| Buildings, improvements and fixtures                | 5536               | 6126                    | 17265                   | 15964         |
| Machinery   | 42780              | 43680                   | 29374                   | 30038         |
| Livestock   | 3045               | 3175                    | 239                     | 181           |
| Produce and goods in store                          | 2296               | 3396                    | 22038                   | 23366         |
| Quotas  | 0                  | 0                       | 0                       | 0             |
| Credit balances                                     | 4894               | 5667                    | 17041                   | 17244         |
| <b>TOTAL</b>  | <b>447336</b>      | <b>450830</b>           | <b>345166</b>           | <b>349266</b> |
| <br>  |                    |                         |                         |               |
| <b>EXTERNAL LIABILITIES</b>                         |                    |                         |                         |               |
| Long and medium term loans                          | 31022              | 29113                   | 18409                   | 23838         |
| Short term loans                                    | 4134               | 4979                    | 12576                   | 9813          |
| Overdrafts  | 5000               | 3304                    | 13172                   | 13844         |
| <b>TOTAL</b>  | <b>40156</b>       | <b>37396</b>            | <b>44157</b>            | <b>47496</b>  |
| <br>  |                    |                         |                         |               |
| <b>NET WORTH</b>                                    | <b>407180</b>      | <b>413434</b>           | <b>301009</b>           | <b>301770</b> |

**Table A3 Results of lowland dairy farms, 2001/02**

|   |                             | Organic       |             | Conventional  |             |
|---|-----------------------------|---------------|-------------|---------------|-------------|
|   |                             |               |             |               |             |
| Sample number   |                             | 34            |             | 298           |             |
| Average farm size UAA)                                |                             | 109           |             | 98            |             |
| Business size (ESU)                                   |                             | 102           |             | 100           |             |
|   |                             | <b>£/farm</b> | <b>£/ha</b> | <b>£/farm</b> | <b>£/ha</b> |
| Dairy -   | milk output                 | 138695        | 1270        | 115556        | 1178        |
|   | cattle                      | -2307         | -21         | -1776         | -18         |
|   | net quota                   | 1513          | 14          | 2147          | 22          |
|   | valuation change            | 1836          | 17          | 514           | 5           |
| Other cattle  | output                      | 15604         | 143         | 21902         | 223         |
|   | valuation change            | 396           | 4           | -869          | -9          |
|   | subsidies                   | 2324          | 21          | 3141          | 32          |
| Sheep -   | total output                | 1346          | 12          | 1238          | 13          |
|   | valuation change            | -301          | -3          | -167          | -2          |
|   | subsidies                   | 109           | 1           | 195           | 2           |
| Other livestock                                       |                             | 3672          | 34          | 1099          | 11          |
| Arable crops  | output                      | 7664          | 70          | 7813          | 80          |
|   | subsidies                   | 2824          | 26          | 3725          | 38          |
| By products forage and cults                          | output                      | 292           | 3           | 1652          | 17          |
|   | subsidies (set-aside)       | 3386          | 31          | 1296          | 13          |
| Miscellaneous (including benefit value of farmhouses) |                             | 6603          | 60          | 6857          | 70          |
|   | - organic grants            | 4203          | 38          | 6             | 0           |
|   | - other agri-env.payments   | 1242          | 11          | 208           | 2           |
|   | <b>FARM REVENUE</b>         | <b>189101</b> | <b>1731</b> | <b>164535</b> | <b>1677</b> |
| <b>INPUTS</b>   |                             |               |             |               |             |
| Feeds   | purchased concentrates      | 35595         | 326         | 26601         | 271         |
|   | homegrown concentrates      | 5824          | 53          | 4129          | 42          |
| Purchased fodder, Tack and stock keep                 |                             | 4263          | 39          | 3044          | 31          |
| Veterinary and medicines                              |                             | 3097          | 28          | 3974          | 41          |
| Other livestock costs                                 |                             | 13670         | 125         | 10831         | 110         |
| Seeds -   | purchased and homegrown     | 2884          | 26          | 2128          | 22          |
| Fertilisers   |                             | 1077          | 10          | 7311          | 75          |
| Crop protection                                       |                             | 26            | 0           | 1951          | 20          |
| Other crop costs                                      |                             | 930           | 9           | 1187          | 12          |
| Labour  | paid incl. paid management  | 15274         | 140         | 11846         | 121         |
|   | casual                      | 1830          | 17          | 1156          | 12          |
| Machinery   | contract                    | 14451         | 132         | 6913          | 70          |
|   | repairs                     | 7245          | 66          | 6386          | 65          |
|   | fuels                       | 3214          | 29          | 3337          | 34          |
| General farming costs                                 |                             | 13752         | 126         | 11402         | 116         |
| Land expenses   |                             | 6004          | 55          | 2488          | 25          |
| Rent  |                             | 12020         | 110         | 6100          | 62          |
|   | <b>FARM EXPENSES</b>        | <b>141156</b> | <b>1292</b> | <b>110784</b> | <b>1129</b> |
| <b>Excess of expenses over revenue</b>                |                             | <b>47945</b>  | <b>439</b>  | <b>53750</b>  | <b>548</b>  |
| <b>Notional inputs</b>                                |                             |               |             |               |             |
|   | - rental value/imputed rent | 11847         | 108         | 12360         | 126         |
|   | - unpaid labour             | 2858          | 26          | 6734          | 69          |
|   | - machinery depreciation    | 7961          | 73          | 9594          | 98          |
|   |                             | <b>22667</b>  | <b>207</b>  | <b>28688</b>  | <b>292</b>  |
| <b>NET FARM INCOME (excl. BLSA)</b>                   |                             | <b>25279</b>  | <b>231</b>  | <b>25062</b>  | <b>255</b>  |

**Table A3 Results of lowland dairy farms**

|   | Organic<br>2001/02 |      | Conventional<br>2001/02 |      |
|---|--------------------|------|-------------------------|------|
|   | £/farm             | £/ha | £/farm                  | £/ha |
| <b>INCOME MEASURES</b>                  |                    |      |                         |      |
| NET FARM INCOME (excl. BLSA)            | 25279              | 231  | 25062                   | 255  |
| Less farmer and spouse labour           | 15594              | 143  | 16848                   | 172  |
| Add managerial input of paid manager    | 0                  | 0    | 20                      | 0    |
| Add BLSA                                | 692                | 6    | 1441                    | 15   |
| <b>MANAGEMENT AND INVESTMENT INCOME</b> | 10377              | 95   | 9675                    | 99   |
| <br>                                    |                    |      |                         |      |
| NET FARM INCOME (excl. BLSA)            | 25279              | 231  | 25062                   | 255  |
| plus net rental value/imputed rent      | 10375              | 95   | 10284                   | 105  |
| minus occupier's expenses               | 245                | 2    | 334                     | 3    |
| minus interest payments                 | 6129               | 56   | 6408                    | 65   |
| minus build & works depreciation        | 7304               | 67   | 3760                    | 38   |
| <b>OCCUPIER'S NET INCOME</b>            | 21976              | 201  | 24844                   | 253  |
| <br>                                    |                    |      |                         |      |
| plus other imputed items                | 3176               | 29   | 6745                    | 69   |
| plus fixed asset depreciation           | 15239              | 139  | 13354                   | 136  |
| minus valuation changes                 | 2003               | 18   | -1064                   | -11  |
| <b>NOTIONAL CASH INCOME</b>             | 38387              | 351  | 46006                   | 469  |
| <br>                                    |                    |      |                         |      |
| <b>TENANT'S CAPITAL - £ per farm</b>    |                    |      |                         |      |
| Machinery                               | 53643              | 491  | 52409                   | 534  |
| Livestock                               | 80178              | 734  | 81334                   | 829  |
| Crops                                   | 7200               | 66   | 8966                    | 91   |
| Stores                                  | 1716               | 16   | 5826                    | 59   |
| <b>TOTAL</b>                            | 142736             | 1307 | 148535                  | 1514 |
| <br>                                    |                    |      |                         |      |
| <b>PERFORMANCE INDICATORS</b>           |                    |      |                         |      |
| Milk price                              | 23.70              |      | 19.91                   |      |
| Milk yield per forage hectare (litres)  | 8125               |      | 10411                   |      |
| Milk yield per cow (litres)             | 5651               |      | 6235                    |      |
| Milk sales per cow (£)                  | 1339               |      | 1241                    |      |
| Stocking rate (LU per eff.ha)           | 1.4                |      | 1.7                     |      |
| LU/forage ha                            | 1.7                |      | 2.0                     |      |
| Annual Labour Units per farm            | 2.5                |      | 2.7                     |      |
| of which farmer & spouse                | 1.3                |      | 1.3                     |      |
| Owner Equity (%)                        | 82.8               |      | 83.1                    |      |
| ONI/Net worth (%)                       | 4.3                |      | 4.7                     |      |
| Return on tenant's capital (%)          | 7.3                |      | 6.5                     |      |
| Return on all capital (%)               | 3.7                |      | 2.5                     |      |

**Table A3 Results of lowland dairy farms**

|   | Organic<br>2001/02 |               | Conventional<br>2001/02 |               |
|---|--------------------|---------------|-------------------------|---------------|
| <b>LAND UTILISATION - hectares per farm</b>         |                    |               |                         |               |
| Tillage - maincrops                                 | 13.9               |               | 17.9                    |               |
| Tillage - fodder                                    | 13.4               |               | 8.9                     |               |
| Grassland   | 77.9               |               | 67.0                    |               |
| Fallow, land let & set aside                        | 3.4                |               | 3.9                     |               |
| Rough grazing                                       | 0.7                |               | 0.4                     |               |
| <b>Utilisable agricultural area (Effective ha.)</b> | <b>109.2</b>       |               | <b>98.1</b>             |               |
| Woods, roads and buildings                          | 5.9                |               | 3.8                     |               |
| <b>TOTAL AREA (Actual ha.)</b>                      | <b>115.5</b>       |               | <b>101.9</b>            |               |
| of which forage area                                | <b>93.2</b>        |               | <b>81.8</b>             |               |
| Bare land and forage hired in                       | 2.2                |               | 5.6                     |               |
| <b>LIVESTOCK CARRIED - L.U per farm</b>             |                    |               |                         |               |
|   | LU                 | No's          | LU                      | No's          |
| Dairy cows  | 103.3              | 103           | 94.5                    | 95            |
| Beef cows   | 0.3                | 0             | 0.9                     | 1             |
| Other cattle  | 50.0               | 91            | 62.4                    | 114           |
| Breeding sheep                                      | 1.7                | 17            | 3.7                     | 36            |
| Other sheep   | 0.4                | 10            | 0.9                     | 22            |
| Pigs  | 0.0                | 0             | 1.3                     | 11            |
| Poultry   | 1.2                | 597           | 0.1                     | 82            |
| Other livestock                                     | 0.1                | 0             | 0.0                     | 0             |
| <b>TOTAL (L.U.)</b>                                 | <b>157.1</b>       |               | <b>163.8</b>            |               |
| <b>ASSETS - £ per farm</b>                          |                    |               |                         |               |
|   | Opening Value      | Closing Value | Opening Value           | Closing Value |
| Land and Property                                   | 334297             | 337890        | 333894                  | 336916        |
| Buildings, improvements and fixtures                | 29440              | 27953         | 19066                   | 18285         |
| Machinery   | 54496              | 52790         | 51676                   | 53142         |
| Livestock   | 78832              | 81525         | 80877                   | 81791         |
| Produce and goods in store                          | 8914               | 8917          | 15060                   | 14524         |
| Quotas  | 89059              | 86986         | 95294                   | 95973         |
| Credit balances                                     | 14146              | 15611         | 26067                   | 32017         |
| <b>TOTAL</b>  | <b>609184</b>      | <b>611672</b> | <b>621934</b>           | <b>632648</b> |
| <b>EXTERNAL LIABILITIES</b>                         |                    |               |                         |               |
| Long and medium term loans                          | 57026              | 55008         | 55825                   | 62275         |
| Short term loans                                    | 10654              | 16747         | 15601                   | 17159         |
| Overdrafts  | 34278              | 33670         | 31601                   | 27455         |
| <b>TOTAL</b>  | <b>101958</b>      | <b>105424</b> | <b>103027</b>           | <b>106890</b> |
| <b>NET WORTH</b>                                    | <b>507226</b>      | <b>506247</b> | <b>518907</b>           | <b>525758</b> |

**Table A4 Results of LFA dairy farms, 2001/02**

|   |  | Organic       |             | Conventional |             |
|---|--|---------------|-------------|--------------|-------------|
|   |  |               |             |              |             |
| Sample number   |  | 6             |             | 31           |             |
| Average farm size (UAA)                               |  | 86            |             | 76           |             |
| Business size (ESU)                                   |  | 68            |             | 64           |             |
|   |  | £/farm        | £/ha        | £/farm       | £/ha        |
| Dairy -   | milk output                            | 69601         | 813         | 60935        | 802         |
|   | cattle                                 | -4029         | -47         | 1422         | 19          |
|   | net quota                              | 1533          | 18          | 1350         | 18          |
|   | valuation change                       | 2212          | 26          | -2017        | -27         |
| Other cattle  | output                                 | 11581         | 135         | 6965         | 92          |
|   | valuation change                       | 3392          | 40          | 2874         | 38          |
|   | subsidies                              | 1835          | 21          | 787          | 10          |
| Sheep -   | total output                           | 111           | 1           | 3745         | 49          |
|   | valuation change                       | 3             | 0           | -352         | -5          |
|   | subsidies                              | 62            | 1           | 918          | 12          |
| Other livestock                                       |  | -8            | 0           | 257          | 3           |
| Arable crops  | output                                 | 7789          | 91          | 1341         | 18          |
|   | subsidies                              | 692           | 8           | 815          | 11          |
| By products forage and cults                          | output                                 | 456           | 5           | 1036         | 14          |
|   | subsidies (set-aside)                  | 574           | 7           | 262          | 3           |
| Miscellaneous (including benefit value of farmhouses) |  | 4452          | 52          | 4791         | 63          |
|   | - organic grants                       | 7273          | 85          | 0            | 0           |
|   | - other agri-env.payments              | -292          | -3          | 1261         | 17          |
|   | <b>FARM REVENUE</b>                    | <b>107235</b> | <b>1253</b> | <b>86392</b> | <b>1138</b> |
| <b>INPUTS</b>   |  |               |             |              |             |
| Feeds   | purchased concentrates                 | 13770         | 161         | 16189        | 213         |
|   | homegrown concentrates                 | 3120          | 36          | 2107         | 28          |
|   | Purchased fodder, Tack and stock keep  | 2904          | 34          | 1391         | 18          |
|   | Veterinary and medicines               | 734           | 9           | 1971         | 26          |
|   | Other livestock costs                  | 4746          | 55          | 7590         | 100         |
| Seeds -   | purchased and homegrown                | 2976          | 35          | 471          | 6           |
|   | Fertilisers                            | 1229          | 14          | 4606         | 61          |
|   | Crop protection                        | 0             | 0           | 303          | 4           |
|   | Other crop costs                       | 1037          | 12          | 528          | 7           |
| Labour  | paid incl. paid management             | 4718          | 55          | 2891         | 38          |
|   | casual                                 | 2953          | 34          | 626          | 8           |
| Machinery   | contract                               | 2837          | 33          | 5096         | 67          |
|   | repairs                                | 4738          | 55          | 3268         | 43          |
|   | fuels                                  | 1757          | 21          | 2028         | 27          |
|   | General farming costs                  | 7867          | 92          | 7522         | 99          |
|   | Land expenses                          | 1450          | 17          | 2024         | 27          |
|   | Rent                                   | 3595          | 42          | 3059         | 40          |
|   | <b>FARM EXPENSES</b>                   | <b>60429</b>  | <b>706</b>  | <b>61672</b> | <b>812</b>  |
|   | <b>Excess of expenses over revenue</b> | <b>46806</b>  | <b>547</b>  | <b>24720</b> | <b>326</b>  |
| <b>Notional inputs</b>                                |  |               |             |              |             |
|   | - rental value/imputed rent            | 6947          | 81          | 8740         | 115         |
|   | - unpaid labour                        | 3817          | 45          | 3047         | 40          |
|   | - machinery depreciation               | 8628          | 101         | 4976         | 66          |
|   |  | <b>19393</b>  | <b>227</b>  | <b>16763</b> | <b>221</b>  |
| <b>NET FARM INCOME (excl. BLSA)</b>                   |  | <b>27414</b>  | <b>320</b>  | <b>7957</b>  | <b>105</b>  |

**Table A4 Results of LFA dairy farms**

| INCOME MEASURES                         | Organic<br>2001/02 |             | Conventional<br>2001/02 |             |
|---|--------------------|-------------|-------------------------|-------------|
|   | £/farm             | £/ha        | £/farm                  | £/ha        |
| NET FARM INCOME (excl. BLSA)            | 27414              | 320         | 7957                    | 105         |
| Less farmer and spouse labour           | 15889              | 186         | 16650                   | 219         |
| Add managerial input of paid manager    | 0                  | 0           | 0                       | 0           |
| Add BLSA                                | 708                | 8           | 1201                    | 16          |
| <b>MANAGEMENT AND INVESTMENT INCOME</b> | <b>12232</b>       | <b>143</b>  | <b>-7492</b>            | <b>-99</b>  |
| NET FARM INCOME (excl. BLSA)            | 27414              | 320         | 7957                    | 105         |
| plus net rental value/imputed rent      | 5516               | 64          | 7253                    | 96          |
| minus occupier's expenses               | 947                | 11          | 181                     | 2           |
| minus interest payments                 | 4537               | 53          | 6365                    | 84          |
| minus build & works depreciation        | 3740               | 44          | 3170                    | 42          |
| <b>OCCUPIER'S NET INCOME</b>            | <b>23706</b>       | <b>277</b>  | <b>5494</b>             | <b>72</b>   |
| plus other imputed items                | 4544               | 53          | 3139                    | 41          |
| plus fixed asset depreciation           | 12245              | 143         | 8146                    | 107         |
| minus valuation changes                 | 6697               | 78          | -639                    | -8          |
| <b>NOTIONAL CASH INCOME</b>             | <b>33798</b>       | <b>395</b>  | <b>17417</b>            | <b>229</b>  |
| <b>TENANT'S CAPITAL - £ per farm</b>    |                    |             |                         |             |
| Machinery                               | 59106              | 691         | 31231                   | 411         |
| Livestock                               | 64584              | 755         | 55679                   | 733         |
| Crops                                   | 7233               | 85          | 5862                    | 77          |
| Stores                                  | 1414               | 17          | 1543                    | 20          |
| <b>TOTAL</b>                            | <b>132336</b>      | <b>1546</b> | <b>94315</b>            | <b>1242</b> |
| <b>PERFORMANCE INDICATORS</b>           |                    |             |                         |             |
| Milk price                              | 22.36              |             | 19.11                   |             |
| Milk yield per forage hectare (litres)  | 6273               |             | 8146                    |             |
| Milk yield per cow (litres)             | 4591               |             | 5105                    |             |
| Milk sales per cow (£)                  | 1027               |             | 975                     |             |
| Stocking rate (LU per eff.ha)           | 1.4                |             | 1.6                     |             |
| LU/forage ha                            | 1.4                |             | 1.7                     |             |
| Annual Labour Units per farm            | 2.5                |             | 1.9                     |             |
| of which farmer & spouse                | 1.4                |             | 1.4                     |             |
| Owner Equity (%)                        | 71.7               |             | 77.7                    |             |
| ONI/Net worth (%)                       | 7.1                |             | 1.7                     |             |
| Return on tenant's capital (%)          | 9.2                |             | -7.9                    |             |
| Return on all capital (%)               | 3.4                |             | -1.1                    |             |

**Table A4 Results of LFA dairy farms**

|   | Organic<br>2001/02 |               | Conventional<br>2001/02 |               |
|---|--------------------|---------------|-------------------------|---------------|
| <b>LAND UTILISATION - hectares per farm</b>         |                    |               |                         |               |
| Tillage - maincrops                                 | 4.1                |               | 4.6                     |               |
| Tillage - fodder                                    | 4.2                |               | 0.9                     |               |
| Grassland   | 73.9               |               | 66.7                    |               |
| Fallow, land let & set aside                        | 0.7                |               | 1.7                     |               |
| Rough grazing                                       | 2.7                |               | 2.1                     |               |
| <b>Utilisable agricultural area (Effective ha.)</b> | <b>85.6</b>        |               | <b>75.9</b>             |               |
| Woods, roads and buildings                          | 5.9                |               | 4.4                     |               |
| <b>TOTAL AREA (Actual ha.)</b>                      | <b>92.4</b>        |               | <b>80.3</b>             |               |
| of which forage area                                | <b>80.8</b>        |               | <b>72.8</b>             |               |
| Bare land and forage hired in                       | 0.0                |               | 3.1                     |               |
| <b>LIVESTOCK CARRIED - L.U per farm</b>             |                    |               |                         |               |
|   | LU                 | No's          | LU                      | No's          |
| Dairy cows  | 67.8               | 68            | 62.9                    | 63            |
| Beef cows   | 0.0                | 0             | 2.1                     | 3             |
| Other cattle  | 48.0               | 84            | 37.6                    | 68            |
| Breeding sheep                                      | 0.1                | 1             | 13.8                    | 170           |
| Other sheep   | 0.0                | 0             | 2.8                     | 70            |
| Pigs  | 0.0                | 0             | 0.0                     | 0             |
| Poultry   | 0.0                | 10            | 1.9                     | 112           |
| Other livestock                                     | 1.1                | 2             | 0.0                     | 0             |
| <b>TOTAL (L.U.)</b>                                 | <b>116.9</b>       |               | <b>121.2</b>            |               |
| <b>ASSETS - £ per farm</b>                          |                    |               |                         |               |
|   | Opening Value      | Closing Value | Opening Value           | Closing Value |
| Land and Property                                   | 259349             | 259349        | 229902                  | 229475        |
| Buildings, improvements and fixtures                | 19402              | 20118         | 9227                    | 14715         |
| Machinery   | 60579              | 57632         | 30977                   | 31485         |
| Livestock   | 61478              | 67689         | 55058                   | 56300         |
| Produce and goods in store                          | 8050               | 9243          | 7745                    | 7065          |
| Quotas  | 50253              | 50610         | 62138                   | 60507         |
| Credit balances                                     | 1897               | 2741          | 9634                    | 8874          |
| <b>TOTAL</b>  | <b>461007</b>      | <b>467382</b> | <b>404680</b>           | <b>408421</b> |
| <b>EXTERNAL LIABILITIES</b>                         |                    |               |                         |               |
| Long and medium term loans                          | 26246              | 90784         | 47584                   | 52741         |
| Short term loans                                    | 10734              | 7455          | 5546                    | 9219          |
| Overdrafts  | 37562              | 34023         | 27981                   | 28993         |
| <b>TOTAL</b>  | <b>74541</b>       | <b>132261</b> | <b>81111</b>            | <b>90953</b>  |
| <b>NET WORTH</b>                                    | <b>386466</b>      | <b>335121</b> | <b>323569</b>           | <b>317469</b> |



**Table A5. Results of lowland cattle and sheep farms, 2001/02**

|   |                             | Organic       |             | Conventional  |             |
|---|-----------------------------|---------------|-------------|---------------|-------------|
|   |                             |               |             |               |             |
| Sample number   |                             | 18            |             | 172           |             |
| Average farm size (UAA)                               |                             | 78            |             | 77            |             |
| Business size (ESU)                                   |                             | 26            |             | 30            |             |
|   |                             | <b>£/farm</b> | <b>£/ha</b> | <b>£/farm</b> | <b>£/ha</b> |
| Dairy -   | milk output                 | 46            | 1           | 313           | 4           |
|   | cattle                      | 1680          | 22          | 155           | 2           |
|   | net quota                   | 506           | 7           | 222           | 3           |
|   | valuation change            | -840          | -11         | -102          | -1          |
| Other cattle  | output                      | 9007          | 116         | 16761         | 217         |
|   | valuation change            | 8208          | 105         | -806          | -10         |
|   | subsidies                   | 8636          | 111         | 9640          | 125         |
| Sheep -   | total output                | 4099          | 53          | 9058          | 117         |
|   | valuation change            | 408           | 5           | -342          | -4          |
|   | subsidies                   | 684           | 9           | 1594          | 21          |
| Other livestock                                       |                             | 316           | 4           | 545           | 7           |
| Arable crops  | output                      | 1913          | 25          | 2160          | 28          |
|   | subsidies                   | 1074          | 14          | 1237          | 16          |
| By products forage and cults                          | output                      | -2            | 0           | 2733          | 35          |
|   | subsidies (set-aside)       | 793           | 10          | 297           | 4           |
| Miscellaneous (including benefit value of farmhouses) |                             | 5837          | 75          | 5881          | 76          |
|   | - organic grants            | 3883          | 50          | 3             | 0           |
|   | - other agri-env.payments   | 3709          | 48          | 842           | 11          |
|   | <b>FARM REVENUE</b>         | <b>49959</b>  | <b>642</b>  | <b>50192</b>  | <b>648</b>  |
| <b>INPUTS</b>   |                             |               |             |               |             |
| Feeds   | purchased concentrates      | 2393          | 31          | 4558          | 59          |
|   | homegrown concentrates      | 883           | 11          | 1271          | 16          |
| Purchased fodder, Tack and stock keep                 |                             | 631           | 8           | 1311          | 17          |
| Veterinary and medicines                              |                             | 938           | 12          | 1495          | 19          |
| Other livestock costs                                 |                             | 3247          | 42          | 3330          | 43          |
| Seeds -   | purchased and homegrown     | 1080          | 14          | 527           | 7           |
| Fertilisers   |                             | 530           | 7           | 2940          | 38          |
| Crop protection                                       |                             | 1             | 0           | 447           | 6           |
| Other crop costs                                      |                             | 549           | 7           | 351           | 5           |
| Labour  | paid incl. paid management  | 22            | 0           | 2260          | 29          |
|   | casual                      | 467           | 6           | 547           | 7           |
| Machinery   | contract                    | 3517          | 45          | 2625          | 34          |
|   | repairs                     | 3172          | 41          | 2487          | 32          |
|   | fuels                       | 1501          | 19          | 1869          | 24          |
| General farming costs                                 |                             | 5861          | 75          | 5579          | 72          |
| Land expenses   |                             | 3093          | 40          | 1190          | 15          |
| Rent  |                             | 4012          | 52          | 3302          | 43          |
|   | <b>FARM EXPENSES</b>        | <b>31896</b>  | <b>410</b>  | <b>36090</b>  | <b>466</b>  |
| <b>Excess of expenses over revenue</b>                |                             | <b>18064</b>  | <b>232</b>  | <b>14102</b>  | <b>182</b>  |
| <b>Notional inputs</b>                                |                             |               |             |               |             |
|   | - rental value/imputed rent | 6669          | 86          | 7850          | 101         |
|   | - unpaid labour             | 2479          | 32          | 5078          | 66          |
|   | - machinery depreciation    | 3389          | 44          | 4249          | 55          |
|   |                             | <b>12536</b>  | <b>161</b>  | <b>17177</b>  | <b>222</b>  |
| <b>NET FARM INCOME (excl. BLSA)</b>                   |                             | <b>5527</b>   | <b>71</b>   | <b>-3075</b>  | <b>-40</b>  |

**Table A5. Results of lowland cattle and sheep farms**

| INCOME MEASURES                         | Organic<br>2001/02 |             | Conventional<br>2001/02 |             |
|---|--------------------|-------------|-------------------------|-------------|
|   | £/farm             | £/ha        | £/farm                  | £/ha        |
| NET FARM INCOME (excl. BLSA)            | 5527               | 71          | -3075                   | -40         |
| Less farmer and spouse labour           | 15185              | 195         | 13534                   | 175         |
| Add managerial input of paid manager    | 0                  | 0           | 5                       | 0           |
| Add BLSA                                | -136               | -2          | 671                     | 9           |
| <b>MANAGEMENT AND INVESTMENT INCOME</b> | <b>-9794</b>       | <b>-126</b> | <b>-15933</b>           | <b>-206</b> |
| NET FARM INCOME (excl. BLSA)            | 5527               | 71          | -3075                   | -40         |
| plus net rental value/imputed rent      | 5058               | 65          | 5709                    | 74          |
| minus occupier's expenses               | 112                | 1           | 196                     | 3           |
| minus interest payments                 | 2593               | 33          | 2289                    | 30          |
| minus build & works depreciation        | 2052               | 26          | 1377                    | 18          |
| <b>OCCUPIER'S NET INCOME</b>            | <b>5830</b>        | <b>75</b>   | <b>-1227</b>            | <b>-16</b>  |
| plus other imputed items                | 3212               | 41          | 5078                    | 66          |
| plus fixed asset depreciation           | 5410               | 69          | 5626                    | 73          |
| minus valuation changes                 | 6875               | 88          | -815                    | -11         |
| <b>NOTIONAL CASH INCOME</b>             | <b>7575</b>        | <b>97</b>   | <b>10291</b>            | <b>133</b>  |
| <b>TENANT'S CAPITAL - £ per farm</b>    |                    |             |                         |             |
| Machinery                               | 22997              | 295         | 26518                   | 343         |
| Livestock                               | 39368              | 506         | 46503                   | 601         |
| Crops                                   | 2710               | 35          | 4482                    | 58          |
| Stores                                  | 467                | 6           | 1482                    | 19          |
| <b>TOTAL</b>                            | <b>65543</b>       | <b>842</b>  | <b>78985</b>            | <b>1020</b> |
| <b>PERFORMANCE INDICATORS</b>           |                    |             |                         |             |
| Stocking rate (LU per eff.ha)           | 1.1                |             | 1.3                     |             |
| LU/forage ha                            | 1.1                |             | 1.3                     |             |
| Annual Labour Units per farm            | 1.6                |             | 1.7                     |             |
| of which farmer & spouse                | 1.3                |             | 1.1                     |             |
| Owner Equity (%)                        | 87.9               |             | 89.2                    |             |
| ONI/Net worth (%)                       | 1.8                |             | -0.4                    |             |
| Return on tenant's capital (%)          | -14.9              |             | -20.2                   |             |
| Return on all capital (%)               | -1.6               |             | -3.3                    |             |

**Table A5. Results of lowland cattle and sheep farms**

|   | Organic<br>2001/02 |               | Conventional<br>2001/02 |               |
|---|--------------------|---------------|-------------------------|---------------|
| <b>LAND UTILISATION - hectares per farm</b>         |                    |               |                         |               |
| Tillage - maincrops                                 | 5.1                |               | 6.2                     |               |
| Tillage - fodder                                    | 2.0                |               | 1.2                     |               |
| Grassland   | 69.4               |               | 66.9                    |               |
| Fallow, land let & set aside                        | 1.1                |               | 2.9                     |               |
| Rough grazing                                       | 0.3                |               | 0.2                     |               |
| <b>Utilisable agricultural area (Effective ha.)</b> | <b>77.8</b>        |               | <b>77.4</b>             |               |
| Woods, roads and buildings                          | 2.7                |               | 2.6                     |               |
| <b>TOTAL AREA (Actual ha.)</b>                      | <b>82.1</b>        |               | <b>80.0</b>             |               |
| of which forage area                                | <b>77.0</b>        |               | <b>73.5</b>             |               |
| Bare land and forage hired in                       | 13.7               |               | 5.1                     |               |
| <b>LIVESTOCK CARRIED - L.U per farm</b>             |                    |               |                         |               |
|   | LU                 | No's          | LU                      | No's          |
| Dairy cows  | 0.1                | 0             | 0.5                     | 1             |
| Beef cows   | 23.1               | 31            | 16.9                    | 23            |
| Other cattle  | 42.8               | 77            | 45.0                    | 80            |
| Breeding sheep                                      | 13.7               | 149           | 29.6                    | 274           |
| Other sheep   | 3.6                | 90            | 6.7                     | 168           |
| Pigs  | 0.5                | 67            | 0.2                     | 281           |
| Poultry   | 0.1                | 25            | 0.1                     | 161           |
| Other livestock                                     | 0.0                | 3             | 0.0                     | 1             |
| <b>TOTAL (L.U.)</b>                                 | <b>83.9</b>        |               | <b>99.0</b>             |               |
| <b>ASSETS - £ per farm</b>                          |                    |               |                         |               |
|   | Opening Value      | Closing Value | Opening Value           | Closing Value |
| Land and Property                                   | 265494             | 266045        | 266867                  | 268402        |
| Buildings, improvements and fixtures                | 11279              | 10780         | 6900                    | 7108          |
| Machinery   | 22843              | 23151         | 26865                   | 26171         |
| Livestock   | 35593              | 43144         | 46772                   | 46234         |
| Produce and goods in store                          | 3583               | 2772          | 5767                    | 6160          |
| Quotas  | 5518               | 5571          | 10302                   | 9254          |
| Credit balances                                     | 23169              | 10323         | 15031                   | 15965         |
| <b>TOTAL</b>  | <b>367479</b>      | <b>361785</b> | <b>378504</b>           | <b>379294</b> |
| <b>EXTERNAL LIABILITIES</b>                         |                    |               |                         |               |
| Long and medium term loans                          | 26746              | 24084         | 14899                   | 15029         |
| Short term loans                                    | 10556              | 10487         | 4474                    | 4920          |
| Overdrafts  | 11932              | 9345          | 19989                   | 20933         |
| <b>TOTAL</b>  | <b>49233</b>       | <b>43917</b>  | <b>39362</b>            | <b>40882</b>  |
| <b>NET WORTH</b>                                    | <b>318246</b>      | <b>317869</b> | <b>339143</b>           | <b>338412</b> |

**Table A6. Results of LFA cattle and sheep farms, 2001/02**

|   |                             | Organic       |             | Conventional  |             |
|---|-----------------------------|---------------|-------------|---------------|-------------|
|   |                             |               |             |               |             |
| Sample number   |                             | 25            |             | 320           |             |
| Average farm size (UAA)                               |                             | 123           |             | 113           |             |
| Business size (ESU)                                   |                             | 29            |             | 36            |             |
|   |                             | <b>£/farm</b> | <b>£/ha</b> | <b>£/farm</b> | <b>£/ha</b> |
| Dairy -   | milk output                 | 809           | 7           | 203           | 2           |
|   | cattle                      | -28           | 0           | 16            | 0           |
|   | net quota                   | 24            | 0           | 61            | 1           |
|   | valuation change            | 27            | 0           | -5            | 0           |
| Other cattle  | output                      | 11687         | 95          | 13429         | 119         |
|   | valuation change            | 1693          | 14          | 54            | 0           |
|   | subsidies                   | 7852          | 64          | 8277          | 73          |
| Sheep -   | total output                | 9453          | 77          | 18411         | 163         |
|   | valuation change            | 1198          | 10          | -368          | -3          |
|   | subsidies                   | 4749          | 38          | 7926          | 70          |
| Other livestock                                       |                             | 434           | 4           | 138           | 1           |
| Arable crops  | output                      | 411           | 3           | 214           | 2           |
|   | subsidies                   | 182           | 1           | 117           | 1           |
| By products forage and cults                          | output                      | -216          | -2          | 613           | 5           |
|   | subsidies (set-aside)       | 179           | 1           | 18            | 0           |
| Miscellaneous (including benefit value of farmhouses) |                             | 7352          | 60          | 11492         | 102         |
|   | - organic grants            | 5572          | 45          | 0             | 0           |
|   | - other agri-env.payments   | 6929          | 56          | 1533          | 14          |
|   | <b>FARM REVENUE</b>         | <b>58308</b>  | <b>473</b>  | <b>62130</b>  | <b>549</b>  |
| <b>INPUTS</b>   |                             |               |             |               |             |
| Feeds   | purchased concentrates      | 6096          | 49          | 8167          | 72          |
|   | homegrown concentrates      | 286           | 2           | 187           | 2           |
| Purchased fodder, Tack and stock keep                 |                             | 2304          | 19          | 4203          | 37          |
| Veterinary and medicines                              |                             | 1799          | 15          | 2222          | 20          |
| Other livestock costs                                 |                             | 3592          | 29          | 3499          | 31          |
| Seeds -   | purchased and homegrown     | 322           | 3           | 191           | 2           |
| Fertilisers   |                             | 1775          | 14          | 3661          | 32          |
| Crop protection                                       |                             | 35            | 0           | 101           | 1           |
| Other crop costs                                      |                             | 221           | 2           | 355           | 3           |
| Labour  | paid incl. paid management  | 2073          | 17          | 1813          | 16          |
|   | casual                      | 931           | 8           | 718           | 6           |
| Machinery   | contract                    | 3608          | 29          | 1972          | 17          |
|   | repairs                     | 3187          | 26          | 2688          | 24          |
|   | fuels                       | 2138          | 17          | 2597          | 23          |
| General farming costs                                 |                             | 4764          | 39          | 5326          | 47          |
| Land expenses   |                             | 2569          | 21          | 1694          | 15          |
| Rent  |                             | 570           | 5           | 1602          | 14          |
|   | <b>FARM EXPENSES</b>        | <b>36271</b>  | <b>294</b>  | <b>40996</b>  | <b>362</b>  |
| <b>Excess of expenses over revenue</b>                |                             | <b>22036</b>  | <b>179</b>  | <b>21134</b>  | <b>187</b>  |
| <b>Notional inputs</b>                                |                             |               |             |               |             |
|   | - rental value/imputed rent | 8912          | 72          | 8860          | 78          |
|   | - unpaid labour             | 2247          | 18          | 4808          | 42          |
|   | - machinery depreciation    | 4434          | 36          | 5755          | 51          |
|   |                             | <b>15593</b>  | <b>126</b>  | <b>19423</b>  | <b>172</b>  |
| <b>NET FARM INCOME (excl. BLSA)</b>                   |                             | <b>6443</b>   | <b>52</b>   | <b>1711</b>   | <b>15</b>   |

**Table A6. Results of LFA cattle and sheep farms**

| INCOME MEASURES                         | Organic<br>2001/02 |            | Conventional<br>2001/02 |             |
|---|--------------------|------------|-------------------------|-------------|
|   | £/farm             | £/ha       | £/farm                  | £/ha        |
| NET FARM INCOME (excl. BLSA)            | 6443               | 52         | 1711                    | 15          |
| Less farmer and spouse labour           | 13802              | 112        | 13565                   | 120         |
| Add managerial input of paid manager    | 0                  | 0          | 0                       | 0           |
| Add BLSA                                | 1101               | 9          | 534                     | 5           |
| <b>MANAGEMENT AND INVESTMENT INCOME</b> | <b>-6258</b>       | <b>-51</b> | <b>-11320</b>           | <b>-100</b> |
| NET FARM INCOME (excl. BLSA)            | 6443               | 52         | 1711                    | 15          |
| plus net rental value/imputed rent      | 7628               | 62         | 7700                    | 68          |
| minus occupier's expenses               | 182                | 1          | 182                     | 2           |
| minus interest payments                 | 4365               | 35         | 2891                    | 26          |
| minus build & works depreciation        | 995                | 8          | 2218                    | 20          |
| <b>OCCUPIER'S NET INCOME</b>            | <b>8529</b>        | <b>69</b>  | <b>4120</b>             | <b>36</b>   |
| plus other imputed items                | 2703               | 22         | 4810                    | 43          |
| plus fixed asset depreciation           | 5381               | 44         | 7973                    | 70          |
| minus valuation changes                 | 3128               | 25         | -88                     | -1          |
| <b>NOTIONAL CASH INCOME</b>             | <b>13486</b>       | <b>109</b> | <b>16990</b>            | <b>150</b>  |
| <b>TENANT'S CAPITAL - £ per farm</b>    |                    |            |                         |             |
| Machinery                               | 30593              | 248        | 38492                   | 340         |
| Livestock                               | 44708              | 362        | 55506                   | 491         |
| Crops                                   | 2064               | 17         | 2785                    | 25          |
| Stores                                  | 528                | 4          | 906                     | 8           |
| <b>TOTAL</b>                            | <b>77893</b>       | <b>632</b> | <b>97688</b>            | <b>863</b>  |
| <b>PERFORMANCE INDICATORS</b>           |                    |            |                         |             |
| Stocking rate (LU per eff.ha)           | 0.7                |            | 1.1                     |             |
| LU/forage ha                            | 0.7                |            | 1.0                     |             |
| Annual Labour Units per farm            | 1.7                |            | 1.8                     |             |
| of which farmer & spouse                | 1.3                |            | 1.2                     |             |
| Owner Equity (%)                        | 87.2               |            | 91.8                    |             |
| ONI/Net worth (%)                       | 2.1                |            | 1.0                     |             |
| Return on tenant's capital (%)          | -8.0               |            | -11.6                   |             |
| Return on all capital (%)               | -1.2               |            | -2.1                    |             |

**Table A6. Results of LFA cattle and sheep farms**

|   | Organic<br>2001/02   |               | Conventional<br>2001/02 |               |
|---|----------------------|---------------|-------------------------|---------------|
| <b>LAND UTILISATION - hectares per farm</b>         |                      |               |                         |               |
| Tillage - maincrops                                 | 1.0                  |               | 0.7                     |               |
| Tillage - fodder                                    | 0.4                  |               | 0.3                     |               |
| Grassland   | 110.2                |               | 99.4                    |               |
| Fallow, land let & set aside                        | 0.9                  |               | 0.0                     |               |
| Rough grazing                                       | 10.9                 |               | 12.8                    |               |
| <b>Utilisable agricultural area (Effective ha.)</b> | <b>123.3</b>         |               | <b>113.2</b>            |               |
| Woods, roads and buildings                          | 5.9                  |               | 6.2                     |               |
| <b>TOTAL AREA (Actual ha.)</b>                      | <b>143.8</b>         |               | <b>119.4</b>            |               |
| of which forage area                                | <b>123.0</b>         |               | <b>121.3</b>            |               |
| Bare land and forage hired in                       | 3.6                  |               | 8.9                     |               |
| <br><b>LIVESTOCK CARRIED - L.U per farm</b>         |                      |               |                         |               |
|   | LU                   | No's          | LU                      | No's          |
| Dairy cows  | 1.0                  | 1             | 0.2                     | 0             |
| Beef cows   | 21.2                 | 28            | 24.2                    | 32            |
| Other cattle  | 24.6                 | 48            | 27.3                    | 54            |
| Breeding sheep                                      | 35.4                 | 487           | 57.8                    | 703           |
| Other sheep   | 7.1                  | 181           | 16.4                    | 424           |
| Pigs  | 0.0                  | 238           | 0.0                     | 722           |
| Poultry   | 0.0                  | 84            | 0.0                     | 405           |
| Other livestock                                     | 0.5                  | 0             | 0.1                     | 0             |
| <b>TOTAL (L.U.)</b>                                 | <b>89.9</b>          |               | <b>126.1</b>            |               |
| <br><b>ASSETS - £ per farm</b>                      |                      |               |                         |               |
|   | Opening Value        | Closing Value | Opening Value           | Closing Value |
| Land and Property                                   | 368667               | 368667        | 318525                  | 318752        |
| Buildings, improvements and fixtures                | 4817                 | 5928          | 10102                   | 10506         |
| Machinery   | 30580                | 30606         | 38301                   | 38683         |
| Livestock   | 42689                | 46728         | 55399                   | 55613         |
| Produce and goods in store                          | 2497                 | 2687          | 3574                    | 3807          |
| Quotas  | 14545                | 11331         | 23366                   | 17365         |
| Credit balances                                     | 11763                | 11052         | 20563                   | 17674         |
| <b>TOTAL</b>  | <b>475558</b>        | <b>476999</b> | <b>469830</b>           | <b>462399</b> |
| <br><b>EXTERNAL LIABILITIES</b>                     |                      |               |                         |               |
| Long and medium term loans                          | 38594                | 36878         | 17506                   | 16712         |
| Short term loans                                    | 3267                 | 4508          | 4156                    | 4155          |
| Overdrafts  | 19042                | 19635         | 16404                   | 17117         |
| <b>TOTAL</b>  | <b>60903</b>         | <b>61021</b>  | <b>38066</b>            | <b>37985</b>  |
| <br><b>NET WORTH</b>                                | <b>414655 415978</b> |               | <b>431764 424415</b>    |               |

**Table A7. Results of mixed farms, 2001/02**

|   |                             | Organic       |             | Conventional  |            |
|---|-----------------------------|---------------|-------------|---------------|------------|
|   |                             | 20            | 120         | 120           | 162        |
| Sample number   |                             |               |             |               |            |
| Average farm size (UAA)                               |                             | 171           | 162         | 162           | 162        |
| Business size (ESU)                                   |                             | 91            | 91          | 91            | 91         |
|   |                             | £/farm        | £/ha        | £/farm        | £/ha       |
| Dairy -   | milk output                 | 28660         | 167         | 28273         | 174        |
|   | cattle                      | 722           | 4           | -1460         | -9         |
|   | net quota                   | 272           | 2           | 619           | 4          |
|   | valuation change            | -998          | -6          | 317           | 2          |
| Other cattle  | output                      | 14881         | 87          | 22839         | 141        |
|   | valuation change            | 3389          | 20          | 964           | 6          |
|   | subsidies                   | 9126          | 53          | 11121         | 68         |
| Sheep -   | total output                | 9830          | 57          | 8067          | 50         |
|   | valuation change            | -607          | -4          | -217          | -1         |
|   | subsidies                   | 1074          | 6           | 1122          | 7          |
| Other livestock                                       |                             | 36793         | 215         | 8290          | 51         |
| Arable crops  | output                      | 30868         | 180         | 30016         | 185        |
|   | subsidies                   | 12582         | 73          | 15092         | 93         |
| By products forage and cults                          | output                      | 3203          | 19          | 4909          | 30         |
|   | subsidies (set-aside)       | 6221          | 36          | 3690          | 23         |
| Miscellaneous (including benefit value of farmhouses) |                             | 7866          | 46          | 14495         | 89         |
|   | - organic grants            | 6630          | 39          | 0             | 0          |
|   | - other agri-env.payments   | 4553          | 27          | 1307          | 8          |
|   | <b>FARM REVENUE</b>         | <b>175066</b> | <b>1022</b> | <b>149443</b> | <b>920</b> |
| <b>INPUTS</b>   |                             |               |             |               |            |
| Feeds   | purchased concentrates      | 23047         | 134         | 15512         | 96         |
|   | homegrown concentrates      | 3331          | 19          | 5352          | 33         |
| Purchased fodder, Tack and stock keep                 |                             | 2124          | 12          | 1617          | 10         |
| Veterinary and medicines                              |                             | 1910          | 11          | 2576          | 16         |
| Other livestock costs                                 |                             | 8103          | 47          | 7765          | 48         |
| Seeds -   | purchased and homegrown     | 7080          | 41          | 3746          | 23         |
| Fertilisers   |                             | 1907          | 11          | 8340          | 51         |
| Crop protection                                       |                             | 694           | 4           | 6841          | 42         |
| Other crop costs                                      |                             | 2127          | 12          | 2184          | 13         |
| Labour  | paid incl. paid management  | 24723         | 144         | 13999         | 86         |
|   | casual                      | 1535          | 9           | 1167          | 7          |
| Machinery   | contract                    | 11088         | 65          | 6016          | 37         |
|   | repairs                     | 8440          | 49          | 8490          | 52         |
|   | fuels                       | 4481          | 26          | 4598          | 28         |
| General farming costs                                 |                             | 12571         | 73          | 12312         | 76         |
| Land expenses   |                             | 4624          | 27          | 2495          | 15         |
| Rent  |                             | 16152         | 94          | 9820          | 60         |
|   | <b>FARM EXPENSES</b>        | <b>133937</b> | <b>782</b>  | <b>112831</b> | <b>695</b> |
| <b>Excess of expenses over revenue</b>                |                             | <b>41130</b>  | <b>240</b>  | <b>36611</b>  | <b>225</b> |
| <b>Notional inputs</b>                                |                             |               |             |               |            |
|   | - rental value/imputed rent | 9189          | 54          | 17584         | 108        |
|   | - unpaid labour             | 5461          | 32          | 7354          | 45         |
|   | - machinery depreciation    | 10789         | 63          | 12327         | 76         |
|   |                             | <b>25439</b>  | <b>148</b>  | <b>37264</b>  | <b>229</b> |
| <b>NET FARM INCOME (excl. BLSA)</b>                   |                             | <b>15691</b>  | <b>92</b>   | <b>-661</b>   | <b>-4</b>  |

**Table A7. Results of mixed farms**

|   | Organic<br>2001/02 |      | Conventional<br>2001/02 |      |
|---|--------------------|------|-------------------------|------|
|   | £/farm             | £/ha | £/farm                  | £/ha |
| <b>INCOME MEASURES</b>                  |                    |      |                         |      |
| NET FARM INCOME (excl. BLSA)            | 15691              | 92   | -661                    | -4   |
| Less farmer and spouse labour           | 12832              | 75   | 14004                   | 86   |
| Add managerial input of paid manager    | 425                | 2    | 245                     | 2    |
| Add BLSA                                | -307               | -2   | 1029                    | 6    |
| <b>MANAGEMENT AND INVESTMENT INCOME</b> | 2977               | 17   | -13391                  | -82  |
| <br>                                    |                    |      |                         |      |
| NET FARM INCOME (excl. BLSA)            | 15691              | 92   | -661                    | -4   |
| plus net rental value/imputed rent      | 8013               | 47   | 14932                   | 92   |
| minus occupier's expenses               | 159                | 1    | 756                     | 5    |
| minus interest payments                 | 7208               | 42   | 5751                    | 35   |
| minus build & works depreciation        | 3877               | 23   | 4394                    | 27   |
| <b>OCCUPIER'S NET INCOME</b>            | 12459              | 73   | 3371                    | 21   |
| <br>                                    |                    |      |                         |      |
| plus other imputed items                | 5869               | 34   | 7354                    | 45   |
| plus fixed asset depreciation           | 14037              | 82   | 16720                   | 103  |
| minus valuation changes                 | -440               | -3   | -252                    | -2   |
| <b>NOTIONAL CASH INCOME</b>             | 32805              | 191  | 27697                   | 171  |
| <br>                                    |                    |      |                         |      |
| <b>TENANT'S CAPITAL - £ per farm</b>    |                    |      |                         |      |
| Machinery                               | 71671              | 418  | 64977                   | 400  |
| Livestock                               | 63776              | 372  | 62655                   | 386  |
| Crops                                   | 14751              | 86   | 20277                   | 125  |
| Stores                                  | 5861               | 34   | 10136                   | 62   |
| <b>TOTAL</b>                            | 156059             | 911  | 158045                  | 973  |
| <br>                                    |                    |      |                         |      |
| <b>PERFORMANCE INDICATORS</b>           |                    |      |                         |      |
| Milk price                              | 25.36              |      | 19.93                   |      |
| Milk yield per forage hectare (litres)  | 4020               |      | 4981                    |      |
| Milk yield per cow (litres)             | 5447               |      | 5980                    |      |
| Milk sales per cow (£)                  | 1381               |      | 1192                    |      |
| Stocking rate (LU per eff.ha)           | 0.7                |      | 0.8                     |      |
| LU/forage ha                            | 1.3                |      | 1.7                     |      |
| Annual Labour Units per farm            | 3.3                |      | 2.6                     |      |
| of which farmer & spouse                | 1.2                |      | 1.1                     |      |
| Owner Equity (%)                        | 84.3               |      | 88.5                    |      |
| ONI/Net worth (%)                       | 2.3                |      | 0.5                     |      |
| Return on tenant's capital (%)          | 1.9                |      | -8.5                    |      |
| Return on all capital (%)               | 3.0                |      | -0.5                    |      |



**Table A7. Results of mixed farms**

|   | Organic<br>2001/02 |               | Conventional<br>2001/02 |               |
|---|--------------------|---------------|-------------------------|---------------|
| <b>LAND UTILISATION - hectares per farm</b>         |                    |               |                         |               |
| Tillage - maincrops                                 | 54.4               |               | 72.5                    |               |
| Tillage - fodder                                    | 5.1                |               | 5.8                     |               |
| Grassland   | 90.5               |               | 66.2                    |               |
| Fallow, land let & set aside                        | 21.1               |               | 17.3                    |               |
| Rough grazing                                       | 0.3                |               | 0.8                     |               |
| <b>Utilisable agricultural area (Effective ha.)</b> | <b>171.4</b>       |               | <b>162.4</b>            |               |
| Woods, roads and buildings                          | 7.4                |               | 5.3                     |               |
| <b>TOTAL AREA (Actual ha.)</b>                      | <b>179.0</b>       |               | <b>167.7</b>            |               |
| of which forage area                                | <b>96.8</b>        |               | <b>78.8</b>             |               |
| Bare land and forage hired in                       | 3.3                |               | 6.5                     |               |
| <b>LIVESTOCK CARRIED - L.U per farm</b>             |                    |               |                         |               |
|   | LU                 | No's          | LU                      | No's          |
| Dairy cows  | 20.7               | 21            | 23.9                    | 24            |
| Beef cows   | 21.6               | 29            | 17.2                    | 23            |
| Other cattle  | 50.0               | 89            | 54.3                    | 100           |
| Breeding sheep                                      | 13.7               | 154           | 19.8                    | 186           |
| Other sheep   | 6.4                | 156           | 5.7                     | 137           |
| Pigs  | 13.8               | 69            | 14.2                    | 89            |
| Poultry   | 0.3                | 876           | 0.1                     | 22            |
| Other livestock                                     | 0.0                | 5             | 0.1                     | 0             |
| <b>TOTAL (L.U.)</b>                                 | <b>126.5</b>       |               | <b>135.3</b>            |               |
| <b>ASSETS - £ per farm</b>                          |                    |               |                         |               |
|   | Opening Value      | Closing Value | Opening Value           | Closing Value |
| Land and Property                                   | 423432             | 400484        | 518941                  | 526156        |
| Buildings, improvements and fixtures                | 18263              | 19581         | 20907                   | 21176         |
| Machinery   | 71506              | 71836         | 66744                   | 63210         |
| Livestock   | 62768              | 64784         | 61405                   | 63904         |
| Produce and goods in store                          | 22074              | 19149         | 31274                   | 29553         |
| Quotas  | 19890              | 19381         | 34717                   | 36546         |
| Credit balances                                     | 33054              | 37225         | 33388                   | 39848         |
| <b>TOTAL</b>  | <b>650988</b>      | <b>632441</b> | <b>767376</b>           | <b>780393</b> |
| <b>EXTERNAL LIABILITIES</b>                         |                    |               |                         |               |
| Long and medium term loans                          | 46814              | 45931         | 42680                   | 41406         |
| Short term loans                                    | 16880              | 13780         | 14025                   | 14986         |
| Overdrafts  | 39640              | 39571         | 28121                   | 33274         |
| <b>TOTAL</b>  | <b>103334</b>      | <b>99283</b>  | <b>84825</b>            | <b>89666</b>  |
| <b>NET WORTH</b>                                    | <b>547654</b>      | <b>533158</b> | <b>682563</b>           | <b>690727</b> |

## 6.2 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:

| <i>Farm type</i>         | <i>Characteristics</i>   |
|--------------------------|--|
| Cropping                 | In this report, two categories are combined:   |
| <i>Cereals</i>           | Farms on which cereals and other crops generally found in cereal rotations account for more than two thirds of their total SGM.  |
| <i>General cropping</i>  | Farms on which arable crops (including field scale vegetables) account for more than two thirds of their total SGM excluding farms classified as <i>cereals</i> .  |
| 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:   |
| <i>Lowland livestock</i> | 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. |
| <i>LFA livestock</i>     | 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.  |

## 6.3 Appendix 3 Definition of Terms

### **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 hectareage 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 farmer's (and spouse's) 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:**

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