# ORGANIC FARM INCOMES IN ENGLAND AND WALES 2012/13

# Simon Moakes, Nicolas Lampkin and Catherine Gerrard

April 2014

**Institute of Biological, Environmental and Rural Sciences (IBERS)** 





# ORGANIC FARM INCOMES IN ENGLAND AND WALES 2012/13

Simon Moakes<sup>1</sup>
Nicolas Lampkin<sup>2</sup>
Catherine Gerrard<sup>2</sup>

March 2014

<sup>1</sup>Institute of Biological, Environmental & Rural Sciences Aberystwyth University, Gogerddan Campus Aberystwyth SY23 3EB <a href="mailto:svm@aber.ac.uk">svm@aber.ac.uk</a> / 01970 621603

<sup>2</sup>Organic Research Centre, Elm Farm Hamstead Marshall, Newbury, RG20 0HR nic.l@organicresearchcentre.com / 01488 658298

# Acknowledgements

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

- Rural Business Research (www.ruralbusinessresearch.co.uk) and its constituent RBR Units throughout England who were responsible for data collection in England;
- The Welsh Farm Business Survey unit at Aberystwyth University who were responsible for data collection in Wales;
- John Burrows for previous technical assistance with the clustering and data extraction procedure;
- Department for Environment, Food and Rural Affairs (Defra) Statistics and Farm Business Survey Divisions for supplying data for analysis;
- And most especially to all the farmers who gave of their time and information, without which this work would not be possible.

Data were supplied by Defra with whom copyright rests. Although all efforts are made to ensure the quality of the farm data supplied, the copyright holder, the original data producer, Defra 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 previous funding for this project from Defra, though this report has been produced with some financial support from the Welsh Government. The views and interpretations expressed here are those of the authors, and do not represent views of the Department.

# **Executive Summary**

This report presents results of research on the financial performance of organic farms in the **2012/13** financial year (with **2011/12** data for reference). This research, now no longer Defra-funded but with some financial support from the Welsh Government, continues on from Defra funded project; OF0373 and previous work on the economics of organic farming carried out at Aberystwyth University (Projects OF0190, covering 1995/96 to 1998/99 and OF0189, covering 1999/00 to 2004/05)<sup>1</sup>.

This report utilises data collected through the Farm Business Survey in England and Wales. An analysis of the FBS/Defra Data Archive for 2012/13 found a total of 229 businesses with some organic land. To ensure the analysis undertakes a reasonable comparison of organic and conventional farms, the organic sample comprises holdings with at least 70% fully organic land (>=70% of UAA ha), therefore farms identified as "in-conversion" and those with less than 70% fully organic certified land were excluded from the analysis, providing a sample of 198 organic holdings.

To allow for comparison with conventional farm data the organic holdings were matched with clusters of comparable conventional holdings, utilising data from a total of 786 conventional farms. Based on a similar resource base e.g. similar land area, farm type, region and other factors, a minimum of 3 **comparable conventional farms** (CCF) were clustered to each organic farm. In total, data from 191 organic farms were suitable for inclusion in the analysis, as it was not possible to identify comparable conventional businesses for some organic farms, and the sample of organic specialist pig and poultry farms was not assessed (due to minimum sample size restrictions).

The data was analysed as two samples; a **full sample** and an **identical sample**. The full sample analysis utilised data from all 191 organic farms and provides the best comparison of organic and comparable conventional farm income data in 2012/13. The identical sample identifies year to year changes within systems of 151 farms, though the sample sizes are smaller.

The results are presented by farm type<sup>2</sup> as un-weighted means of organic and CCF groups. Differences in profitability were also assessed with t-test analysis of Farm Business Income (FBI) results; however some of the samples were small and had large variation which will have reduced the likelihood of statistical differences being identified.

The **full sample** results are presented in Figure A, and indicate that in 2012/13 the profitability (Farm Business Income) of most organic farm types was slightly greater or similar to that of comparable conventional farms (except for horticulture), though organic LFA farms were significantly more profitable than the CCF group. Despite some differences in performance between organic and conventional systems, differences in FBI for other farm types were not statistically significant (see Table B).

Figure A indicates the total income and various income sources for organic (O) and conventional (C) farm types (horticultural farm types are excluded from Figures B and C for clarity). It can be seen that although organic farms receive greater agri-environment payments per hectare than conventional holdings, the majority of their income originates from livestock and cropping outputs. The figure also indicates a high level of support payments compared to total income for both organic and conventional cattle and sheep holdings, suggesting that they may be more reliant on support payments than other farm types.

\_

<sup>&</sup>lt;sup>1</sup> Previous reports, including a time-series compilation of 2005/06-2011/12 data, can be found at: <a href="http://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">http://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">http://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">http://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">http://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">http://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">http://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">https://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">https://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">https://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%20policy&i=projects.php&p\_id=7">https://www.organicresearchcentre.com/?go=Research%20and%20development&page=Socio-economics%20and%

<sup>&</sup>lt;sup>2</sup> From this report, farm type is defined by the SO method, rather than the SGM method previously used (see Annex 4), so there will be some discontinuity of samples between this and previous reports. The 2011/12 samples used in this report have been updated to ensure consistency with the new data. However, 2004 SO coefficients have been used, which has led to some differences in sample classification with the Newcastle FBS organic farm incomes in England report, where 2007 SO coefficients were used. 2007 or 2010 SO coefficients will be used in future reports.

Figure A Organic and conventional Farm Business Income (£/ha, full samples, 2012/13)

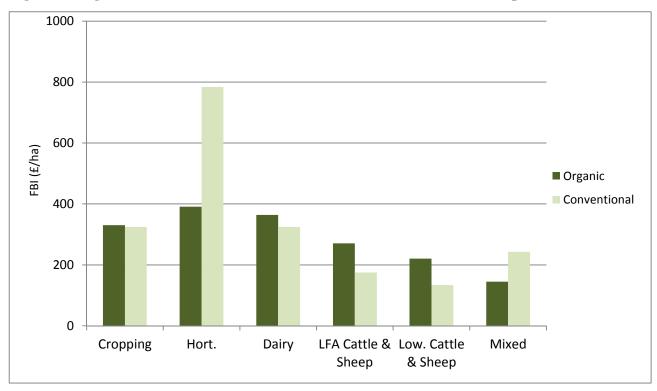


Figure A Organic and conventional farm income sources (£/ha, full samples, 2012/13)

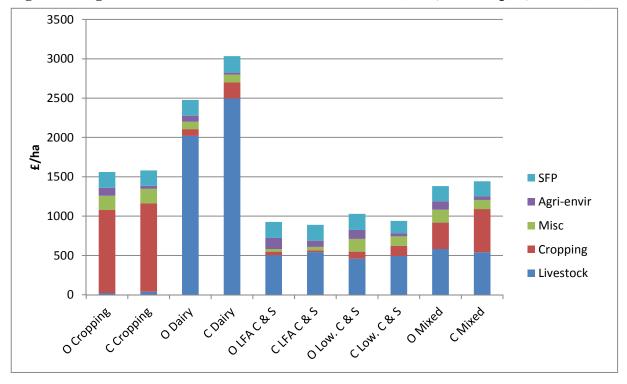


Figure C shows the total costs and allocation per ha for organic (O) and conventional (C) farm types. Total costs were lower or similar for most organic farm types. Crop input costs such as fertiliser and crop protection were lower, as were livestock costs for all types except mixed farms; other costs varied by farm type.

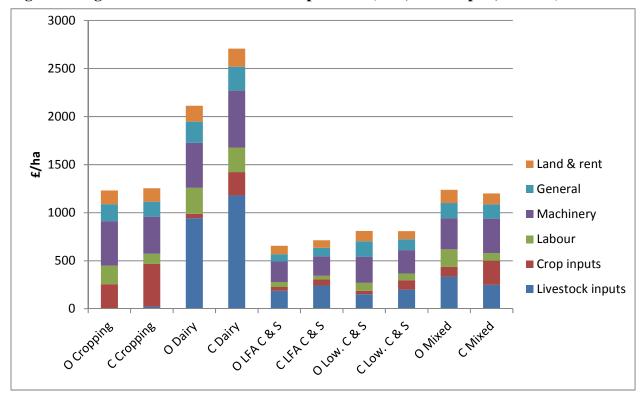


Figure B Organic and conventional farm input costs (£/ha, full samples, 2012/13)

The **identical sample** indicates year to year changes, with the percentage change in FBI (£/ha) between years shown in Figure C. The chart highlights a trend of decreased profitability in all farm types, though reductions were greater for conventional holdings. The statistical analysis found that profitability was only significantly lower between years for organic LFA farms, but for conventional farms FBI/ha decreased significantly for cropping, cattle/sheep and mixed farm types.

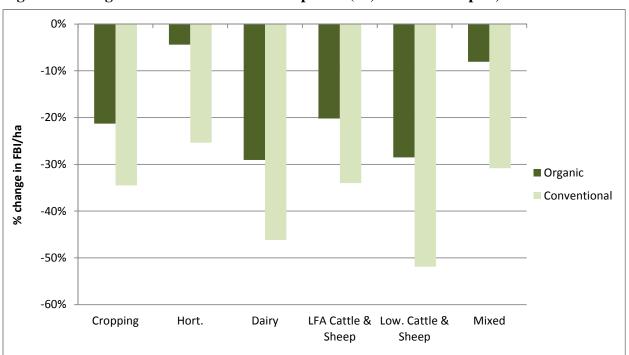


Figure C Change in Farm Business Income per ha (%, identical samples, 2011/12 & 2012/13)

A summary of Farm Business Income per farm and per hectare is shown in Table A, below.

Table A Farm Business Income by farm type (£/farm and £/ha, 2012/13 and 2011/12)

	Full sample							Identical sample					
		2012/13			2011/12			2012/	13	2011/	12		
Farm type	Farms	£/farm	£/ha	Farms	£/farm	£/ha	Farms	£/farm	£/ha	£/farm	£/ha		
Cropping													
Organic	20	83734	330	21	110520	448	17	97419	347	124029	441		
Comparable conventional	178	68559	325	180	106233	480	144	73420	312	112323	477		
Horticulture													
Organic	14	20979	391	15	11401	454	10	21764	356	22622	373		
Comparable conventional	75	27352	784	66	45884	2106	52	37244	1065	50244	1428		
Dairy													
Organic	42	55397	364	49	76847	482	36	56990	351	78191	495		
Comparable conventional	238	42158	325	291	82226	567	212	42402	311	77343	578		
LFA cattle and sheep													
Organic	47	51958	271	54	63202	357	41	52463	286	63089	358		
Comparable conventional	312	28483	175	524	43626	288	273	28460	180	43182	273		
Lowland cattle and sheep													
Organic	41	31914	220	46	40703	274	34	29681	210	40479	294		
Comparable conventional	287	17781	133	269	40790	308	215	18242	141	36837	294		
Mixed													
Organic	27	33106	145	17	25742	126	13	26954	127	28869	138		
Comparable conventional	380	45322	243	87	72321	422	170	51116	280	72076	404		

The differences between organic and conventional systems (2012/13), and year to year changes (2011/12 vs. 2012/13) were also assessed for statistical significance with the student's t-test. Differences and their statistical significance are presented in Table B below and have already been discussed in the text above:

Table B Statistical differences in Farm Business Income (£/farm and £/ha) by farm type, 2012/13 and 2011/12

	Full sa	ample		Identica	l sample		
			Orga	anic	Conve	ntional	
Farm type	FBI/farm	FBI/ha	FBI/farm	FBI/ha	FBI/farm	FBI/ha	
Cropping							
Organic vs. Conventional (2012/13)	15175 NS	5 NS					
Yr to yr change (2011/12 vs. 2012/13)			-26610 NS	-94 NS	-38903 **	-164 ***	
Horticulture						_	
Organic vs. Conventional (2012/13)	-6374 NS	-393 NS					
Yr to yr change (2011/12 vs. 2012/13)			-858 NS	-16 NS	-13000 NS	-362 NS	
Lowland dairy						_	
Organic vs. Conventional (2012/13)	13239 NS	39 NS					
Yr to yr change (2011/12 vs. 2012/13)			-21201 NS	-144 NS	-34941 NS	-267 NS	
LFA cattle and sheep						_	
Organic vs. Conventional (2012/13)	23475 **	96 **					
Yr to yr change (2011/12 vs. 2012/13)			-10626 *	-72 ***	-14722 ***	-93 ***	
Lowland cattle and sheep						_	
Organic vs. Conventional (2012/13)	14133 NS	87 NS					
Yr to yr change (2011/12 vs. 2012/13)			-10798 *	-84 NS	-18595 ***	-153 ***	
Mixed							
Organic vs. Conventional (2012/13)	-12216 NS	-98 NS					
Yr to yr change (2011/12 vs. 2012/13)	. 50/ 11 1:11		-1915 NS	-11 NS	-20960 **	-125 ***	

Notes: NS-No significant difference, \*-difference at 5%, \*\*-difference at 1%, \*\*\*-difference at 0.1%

Gross (GM) and Net Margin (NM) data were also calculated for organic and conventional systems, and summary data are shown in Table C and Table D below. The organic livestock net margins are characterised by similar financial output (less output volume but sold at a higher price), lower variable costs (due to feed and fertiliser savings) but higher fixed costs per head due to lower stocking rates. Both organic and conventional net margins tended to be negative for beef and sheep sectors but the conventional dairy net margin before imputed costs was superior to organic. However, the addition of support payments to NM results in a superior organic financial performance.

Table C Organic and conventional livestock enterprise net margins (£/head, 2012/13)

			She	еер	Beef				
All values £ per cow or ewe	Dai	iry	LF	`A	Suckler	stores	Suckler finishing		
_			Higher	output	LF	<b>A</b>	Lowland		
	Org.	Conv.	Org.	Conv.	Org.	Conv.	Org.	Conv.	
Output	1952	1990	100	85	776	779	1149	1366	
Variable costs	955	1065	41	48	371	438	446	748	
Gross Margin	998	926	59	37	405	341	703	618	
Fixed Costs	816	707	59	46	548	535	1284	982	
Total actual costs	1770	1772	100	94	919	974	1730	1730	
Net Margin after actual costs	182	219	0	-9	-143	-195	-580	-364	
Imputed costs (IC)	324	343	36	37	390	407	588	630	
Net Margin after all costs	-142	-124	-36	-46	-533	-602	-1168	-994	
Support payments*	248	155	47	34	617	476	895	675	
NM (incl. support payments)	106	31	11	-12	84	-126	-272	-319	

<sup>\*=</sup> also includes miscellaneous output e.g. forage sales

Crop net margin results indicate varying results for organic enterprises. In general organic crops had lower output, but also lower variable costs and higher support payments resulting in similar or higher organic net margins (except for potatoes that incurred greater costs for organic producers in 2012/13). Detailed results and data for a greater range of enterprises are presented in Chapter 3.

Table D Organic and conventional crop enterprise net margins (£/ha, 2012/13)

All values £/ha	Winter	Wheat	Spring	Barley	Feed I	Beans	Potatoes	
	Org.	Conv.	Org.	Conv.	Org.	Conv.	Org.	Conv.
Output	907	1323	781	1022	517	1156	6029	6911
Variable costs	159	542	180	353	125	317	2445	1996
Gross Margin	747	780	601	669	392	839	3585	4914
Fixed Costs	736	714	808	731	577	650	2318	1841
Total actual costs	896	1256	988	1084	703	967	4763	3837
Net Margin after actual costs	11	67	-207	-62	-186	188	1266	3073
Imputed costs (IC)	158	210	113	194	131	232	384	651
Net Margin after all costs	-147	-143	-320	-256	-316	-43	882	2422
Support payments*	290	271	319	256	293	260	285	277
NM (incl. support payments)	143	128	-1	0	-24	217	1167	2699

<sup>\*=</sup> also includes miscellaneous output e.g. forage sales

**In summary,** the 2012/13 results indicate that during a difficult year for farming due to adverse weather, both organic and conventional sectors suffered reduced profitability. However, due to less reliance upon external inputs organic farm profitability reduced by a smaller margin than for comparable conventional farms. Overall, in 2012/13 organic holding profitability was similar to conventional holdings, with organic LFA cattle and sheep farm profitability significantly higher.

# **Contents**

			Page
Exe	cutive Summa	nry	i
List	of Tables		vi
List	of Figures		viii
	oduction		1
1.	Methods		2
2.	Whole-farm	results	6
	2.1	Presentation of results	6
	2.2	Summary of whole-farm Farm Business Income results	7
	2.3	Cropping farms	9
	2.4	Horticulture farms	10
	2.5	Dairy farms	11
	2.6	LFA Cattle and Sheep	12
	2.7	Lowland cattle and sheep farms	13
	2.8	Mixed farms	14
3.	Enterprise g	cross and net margins	15
4.	Benchmark	costs of production	21
	4.1	Dairy enterprise production costs	22
	4.2	Cropping enterprise production costs	24
5.	Appendices		26
	Appendix 1	Detailed Whole Farm Results	27
	Appendix 2 I	Detailed Gross Margin and Net Margin Data	75
	Appendix 3	Detailed Costs of Production Data	87
	Appendix 4	The farm classification system	89
	Appendix 5	Definition of terms and abbreviations	90
	Appendix 6	Numbers of farms to be sampled/recruited by type and region	93
	Appendix 7	Organic and conventional farm comparisons	95

# **List of Tables**

Pag	ze
~	iv
Table B Statistical differences in Farm Business Income (£/farm and £/ha) by farm type,	
	iv
Table C Organic and conventional livestock enterprise net margins (£/head, 2012/13)	v
Table D Organic and conventional crop enterprise net margins (£/ha, 2012/13)	V
Table 1 Distribution of useable surveyed organic farms by type and region (2012/13)	2
Table 2 Distribution of useable surveyed organic farms by type and size (European Size Units)	
(identical and full farm samples, 2012/13)	3
Table 3 Summary of Farm Business Incomes by farm type (£/ha, 2012/13 and 2011/12)	7
Table 4 Statistical differences in Farm Business Income by farm type (organic vs. conventional,	
2012/13) and between years (2012/13 and 2011/12)	8
Table 5 Summary data for cropping farms (£/ha, 2012/13 and 2011/12)	9
Table 6 Summary data for horticultural farms (£/ha, 2012/13 and 2011/12)	10
Table 7 Summary data for dairy farms (£/ha, 2012/13 and 2011/12)	11
Table 8 Summary data for LFA Cattle & Sheep farms (£/ha, 2012/13 and 2011/12)	12
Table 9 Summary data for Lowland Cattle & Sheep farms (£/ha, 2012/13 and 2011/12)	13
Table 10 Summary data for Mixed farms (£/ha, 2012/13 and 2011/12)	14
Table 11 Summary of organic and conventional dairy gross and net margins (£ per cow,	
2011/12 and 2012/13)	16
Table 12 Summary of organic and conventional beef gross and net margins (£/cow, 2012/13,	
full samples)	17
Table 13 Summary of organic and conventional sheep gross and net margins (£/ewe, 2012/13,	
1 /	18
Table 14 Summary of organic and conventional crop gross, net margins (£/ha, 2012/13,	
1 /	19
Table 15 Summary of costs of production data for milk (ppl, 2011/12 and 2012/13, identical and	
1 /	23
Table 16 Summary of organic and conventional crop costs of production (£/t, 2012/13,	
full samples)	24

# **List of Figures**

Page	
Figure A Organic and conventional Farm Business Income (£/ha, full samples, 2012/13)	ii
Figure B Organic and conventional farm income sources (£/ha, full samples, 2012/13)	ii
Figure C Organic and conventional farm input costs (£/ha, full samples, 2012/13)	iii
Figure D Change in Farm Business Income (£/ha, identical samples, 2011/12 and 2012/13)	iii

#### Introduction

This report continues the series previously funded by Defra under Project OF0373, and other reports on organic farm incomes that started with the 1995/96-1998/99 period under MAFF project OF0190 and continued from 1999/00-2004/05 under Defra Project OF0189<sup>3</sup>. We gratefully acknowledge some financial assistance from the Welsh Government for the analysis and reporting of the 2012/13 data.

The aim of this report is to show the financial performance of organic farms, differentiated by farm type for 2012/13 including comparisons with similar conventional farms and with 2011/12 data, in order to inform Defra and Welsh Government 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 report includes a section on methodology, which shows the data sourcing and sampling techniques used to obtain a representative organic farm sample, as well as an explanation of the clustering procedure used to select comparable conventional farms (CCF) to match the organic farms. The financial results are presented with an explanation of the results and brief highlights, followed by summary data for each farm type. As in previous years, the 2012/13 report uses Farm Business Income (FBI) indicator as the headline profitability figure, in line with publishing by Defra and the devolved administrations. Detailed gross and net margins are included for livestock and cropping enterprises, as are benchmark costs of production per tonne and per litre for arable and milk respectively.

The detailed whole-farm results can be found in Appendix 1 and detailed enterprise-specific gross and net margin results in Appendix 2 and costs of production data in Appendix 3, with methodological details in Appendices 4-7.

Please note that in data tables sub totals and totals may not exactly equal the sum of the column due to the rounding of numbers, but the difference should be minimal.

\_

<sup>&</sup>lt;sup>3</sup> Previous reports can be found at

#### 1. Methods

In this report, financial and physical farm data are shown for the 2011/12 and 2012/13 financial years. The report includes an analysis of organic farms including comparisons with similar conventional farms and between year comparisons, presented as full and identical samples.

#### **Data Sample**

As in previous OFI reports, the data analysed within this report was collected as part of the English and Welsh Farm Business Surveys by the constituent Rural Business Research Units in England and by the Welsh Farm Business Survey Unit at Aberystwyth University. The standard Farm Business Survey methodology<sup>4</sup> was used for all farms.

Financial results were obtained from businesses in England and Wales with account years ending between December 2012 and April 2013. The data for all the organic and non-organic farms surveyed was collated by Defra, stored in the Defra Data Archive and made available to Aberystwyth University for analysis.

The analysis within this report is focused on farm businesses having at least 70% organic land status in 2012/13. Of the total of 229 businesses with some organic land identified in the Defra Data Archive, 198 met the greater than 70% fully organic land criterion (see Table 1). Of these, it was not possible to identify comparable conventional businesses for four holdings, whilst three organic specialist pig/poultry farms were also excluded due to sample size limits for disclosure.

Table 1 Distribution of useable surveyed organic farms by type and region, 2012/13

	Whole	North	East	No	orth	You	k &	Е	ast	W	'est	Е	ast	So	uth	So	uth	W	ales
Farm Type	farm	North	East	W	est '	Ηυ	mb	N	Iid	N	Iid	Е	ng	Е	ng	W	est	VV a	nes
Cropping	20	2	(0)	0	(0)	1	(0)	0	(0)	1	(0)	8	(0)	2	(0)	6	(0)	0	(0)
Horticulture	14	0	(0)	1	(0)	2	(0)	0	(0)	2	(0)	6	(1)	3	(0)	0	(0)	0	(0)
Dairy	42	1	(0)	8	(0)	2	(0)	3	(0)	7	(0)	0	(0)	5	(0)	13	(0)	3	(0)
Cattle/sheep (LFA)	47	9	(0)	4	(1)	0	(0)	1	(0)	1	(0)	0	(0)	0	(0)	6	(0)	26	(0)
Cattle/sheep (Low)	41	3	(0)	0	(0)	1	(0)	4	(0)	4	(0)	1	(1)	4	(0)	20	(0)	4	(0)
Mixed	27	0	(0)	1	(0)	2	(0)	2	(0)	3	(0)	3	(0)	6	(0)	8	(0)	2	(0)
Total	191	1:	5 (0)	14	(1)	8	(0)	10	(0)	18	(0)	18	(2)	20	(0)	53	(0)	35	(0)

<sup>\*</sup> GM - Farms used for gross margin data purposes only as no comparable whole-farm data available. Figures in parentheses indicate businesses for which clustering was not possible and additional farms excluded for technical reasons.

#### **Farm Types**

For the first time in this series of reports, for both 2011/12 and 2012/13 data, farm types are defined using the Standard Output (SO) typology, rather than the Standard Gross Margin (SGM) typology previously used (see Annex 4). This has led to some subtle changes in the sample sizes of some of the crop and mixed farm types. To ensure consistency between years for the identical sample the Standard Output based upon 2004 values was utilised, which varies slightly with FBS published data that utilises 2007 SO values as the typology variable. Future reports will be based on the most recent SO coefficients. To provide an indication of farm economic size within each typology, the distribution of the businesses by economic size (ESU) and type is shown in Table 2.

<sup>&</sup>lt;sup>4</sup> See <a href="http://www.defra.gov.uk/statistics/foodfarm/farmmanage/fbs/aboutfbs/datacollection/">http://www.defra.gov.uk/statistics/foodfarm/farmmanage/fbs/aboutfbs/datacollection/</a> for further information on the farm accounting system employed in England and Wales by Defra Economics Division.

Table 2 Distribution of useable surveyed organic farms by type and size (European Size Units) for the identical and full farm samples, 2012/13

<b>Identical sample</b>		16 -	28 -	40 -	60 -	100 -		
ESU code	< 16	< 28	< 40	< 60	< 100	< 200	200 +	Total
Farm type								
Cropping		2		4	2	5	4	17
Horticulture			1	3	3	1	2	10
Dairy					11	15	10	36
Cattle and sheep - LFA	4	12	11	6	3	4	1	41
Cattle and sheep - lowland	10	9	9	1	2	3		34
Mixed		1	2	3	3	1	3	13
Total	14	24	23	17	24	29	20	151
Full sample		16 -	28 -	40 -	60 -	100 -		
Full sample  ESU code	< 16	16 -< 28	28 - < 40	40 - < 60	60 - < 100	100 -< 200	200 +	Total
Full sample  ESU code Farm type	< 16		28 - < 40	40 - < 60		100 -< 200	200 +	Total
ESU code	< 16						200 +	Total
ESU code Farm type	< 16	< 28		< 60	< 100	< 200		
ESU code Farm type Cereals and general cropping		< 28	< 40	< 60 5	< 100	< 200	4	20
ESU code Farm type Cereals and general cropping Horticulture		< 28	< 40	< 60 5 4	< 100 2 3	< 200 6 3	4 2	20 14
ESU code Farm type Cereals and general cropping Horticulture Dairy	1	< 28	< 40 1 1	< 60 5 4 1	< 100 2 3 13	< 200 6 3 16	4 2 11	20 14 42
ESU code Farm type Cereals and general cropping Horticulture Dairy Cattle and sheep - LFA	1 7	< 28 3 12	< 40 1 1 12	< 60 5 4 1 6	< 100 2 3 13 5	< 200 6 3 16 4	4 2 11	20 14 42 47

#### **Comparable Conventional Farms (CCF)**

An additional element of this work is the inclusion of comparable conventional farm data (obtained from the main FBS sample) for the farm types shown. Each organic farm within this study was matched with a cluster of conventional farms based on the resource endowment indicators for individual organic farms. Indicators included farm type, FBS region, Less Favoured Area (LFA) status, utilisable agricultural area (UAA); farm business size and milk quota held (where applicable). The milk quota indicator was relaxed in 2011/12 due to the reduced constraining effect of milk quota size. The clustered conventional farm data were averaged for each farm type to derive the comparable conventional farm (CCF) data based on the organic farms from the identical and full farm samples.

The full clustering procedure is outlined in Appendix 7, but in brief, the average for the group of individual organic businesses is then compared with the average for the group of conventional farm clusters. The intention is to ensure, as far as possible, that differences between organic and conventional farms can be attributed to their management system and not to differences in business resource endowment that are not related to the production system employed.

# **Data Analysis Method**

The 2012/13 report continues to utilise the new software process that was employed to carry out the data analysis over the last few years, ensuring full comparability. Custom built Java programs are used to sort the Defra dataset, to cluster conventional farms and to extract the correct data from the database. MS Excel was utilised to undertake the two-tailed student's t-test statistical comparison of the mean profitability (FBI) of the different farm systems and years.

#### **Samples**

The full samples for each farm type include all data available for organic holdings that comprise over 70% fully organic land within the Defra dataset. This sample is primarily used to compare the performance of organic farms with clustered comparable conventional farms. Both organic and conventional farm data is collected from the same time period and should reflect direct differences between the two systems.

The identical samples include data from samples of organic and comparable conventional farms that available in the data set for both years. This sample highlights between year changes, such as output or input cost changes within each sector.

Occasionally the two samples may show conflicting results, but the full sample is the best indicator of organic *vs.* conventional comparisons, the identical sample the best indicator of between year changes within each sector.

To ensure anonymity of results for farmers participating in these surveys, no data are presented for groups of less than five farms. However, it should be noted that individual farm results can still have a significant effect on average results for these small samples, so that where possible, results are presented for groups of more than 15 businesses. Where results are presented for groups of less than 15, the results should be treated with some caution.

The full samples of organic farms per robust farm type are sufficiently large to give some reasonable level of confidence in the data although it should be noted that the organic farm samples are not necessarily statistically representative of their type, as most have been selected to meet the statistical needs of the Farm Business Survey as a whole, not this study. However, the results can be seen as a reasonable indication of farm incomes for comparable organic and conventional farms.

#### **Results Presentation**

Summarised and detailed financial input, output, income, returns to labour and capital, liabilities and assets and some physical performance measures are presented based on current FBS data collection and collation guidelines.

Whole farm data is presented in Appendix 1 and is summarised in tables in Section 2. Data is calculated for most robust types (e.g. cereals) and some individual farm types (e.g. LFA Cattle & Sheep), depending on sample sizes.

The results include a large number of variables for both financial and physical outputs and inputs in addition to factors such as labour and investment returns. This report focuses on the Farm Business Income (FBI) measure adopted by Defra and the Welsh Assembly Government, but the previously used Net Farm Income (NFI) figures are also shown in the detailed appendix data. The newer income measure is intended to reflect more closely actual profitability of farm businesses and does not include the adjustments designed to make farms comparable in terms of land tenure, reliance on borrowed capital and reliance on unpaid staff which Net Farm Income and Management and Investment Income were intended to do. As a result of the exclusion of notional costs for unpaid resources, Farm Business Income values are typically higher than Net Farm Incomes, but the relative performance of organic and conventional farms is similar in most cases.

Please note there were methodology changes to land and building valuation so opening and closing values may vary between sample years.

Gross and net margin data are included for selected organic livestock and crop enterprises. Margins for organic dairy herds are presented on a herd size and top performing herds basis as well as a regional basis, in addition to a two year identical sample. Cattle and sheep gross margins are shown for lowland and LFA farm types. For arable crops, gross and net margins are also shown, and include winter and spring wheat, spring barley, spring oats, and beans for stock feed. Where available, 2011/12 organic and conventional gross margin data are shown alongside the 2012/13 data. The conventional farm data are included from holdings that have been clustered within the whole farm section of this report.

**Benchmark costs of production** data are shown for organic milk and arable crop production enterprises using the full FBS sample.

#### 2. Whole-farm results

#### 2.1 Presentation of results

The summary section shows tables for each farm type giving breakdowns of average outputs, inputs and incomes in £/ha; for cropping, horticulture (intensive horticulture), dairy, LFA and lowland cattle and sheep and mixed farms for identical and full samples. The terms *input* and *output* are used to define financial values rather than physical quantities (for further definitions of terms see Appendix 5). All whole-farm results for each farm type in this section and the appendices are simple averages.

Tables A1 to A7 in Appendix 1 (page 26 onwards), provide detailed figures for whole-farm outputs, inputs, incomes, returns to labour and capital, asset and liability information, land utilisation and crop performance, and stocking and livestock performance for the eight farm types. Other physical information available, in addition to the financial data collected, includes figures for livestock units per forage hectare, and labour units per farm. Where direct labour data were not available, labour units have been derived from wages paid using standard agricultural wages (based on Agricultural Wages Board). All labour-use figures presented are, however, based on estimated hours and should be treated with caution.

Values per hectare shown are weighted averages per hectare of farm utilised agricultural area (UAA) rather than per hectare of a specific enterprise because presenting the whole-farm situation reflects the interdependence of enterprises. For example, organic horticultural businesses cannot crop their entire land each year and this has a considerable influence on the overall farm profitability. However, gross/net margin data are shown separately to provide an indication of individual enterprise performance within farm businesses.

In line with changes to Farm Business Survey practice, two main income measures are shown: Farm Business Income and Net Farm Income. Other previously used income measures (management and investment income, occupiers' net income and cash income) are not shown but can be derived from the results presented if required.

Farm Business Income (FBI) is the headline profitability figure and represents the return to all unpaid labour (farmers, spouses and others with an entrepreneurial interest in the farm business) and to all their capital invested in the farm business including land and farm buildings. FBI excludes notional rental values for owner-occupied land and unpaid labour included in NFI, but includes interest and other capital charges. It is designed to better reflect overall business performance including the increasing levels of business diversification currently found on farms. 2012/13 data also includes directors' remuneration as a capital withdrawal from the business, in line with FBS practise from 2008/09 onwards.

Net Farm Income (NFI) is shown below the FBI figure for information and represents the return to farmer and spouse for their manual and managerial labour and on the tenant-type capital invested in the farm. For this measure, 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, 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 also excluded. Unpaid labour (other than that of farmer and spouse) is treated as if paid at standard rates.

## 2.2 Summary of whole-farm Farm Business Income results

Table 3 summarises the Farm Business Income (FBI) results for full samples and identical samples of organic and similar conventional farms on a whole farm and per ha basis for 2012/13 and 2011/12.

Table 3 Summary of Farm Business Incomes by farm type, 2012/13 and 2011/12

Full samples			2012/13			2011/12	
Farm type	Type*	Farms	£/farm	£/ha	Farms	£/farm	£/ha
Cropping	Organic	20	83734	330	21	110520	448
	CCF	178	68559	325	180	106233	480
Horticulture	Organic	14	20979	391	15	11401	454
	CCF	75	27352	784	66	45884	2106
Dairy	Organic	42	55397	364	49	76847	482
	CCF	238	42158	325	291	82226	567
LFA cattle and sheep	Organic	47	51958	271	54	63202	357
	CCF	312	28483	175	524	43626	288
Lowland cattle and sheep	Organic	41	31914	220	46	40703	274
	CCF	287	17781	133	269	40790	308
Mixed	Organic	27	33106	145	17	25742	126
	CCF	380	45322	243	87	72321	422
<b>Identical samples</b>			2012/13			2011/12	
Farm type	Type*	Farms	£/farm	£/ha	Farms	£/farm	£/ha
Cropping	Organic	17	97419	347	17	124029	441
	CCF	144	73420	312	144	112323	477
Horticulture	Organic	10	21764	356	10	22622	373
	CCF	52	37244	1065	52	50244	1428
Dairy	Organic	36	56990	351	36	78191	495
	CCF	212	42402	311	212	77343	578
LFA cattle and sheep	Organic	41	52463	286	41	63089	358
	CCF	273	28460	180	273	43182	273
Lowland cattle and sheep	Organic	34	29681	210	34	40479	294
				4 4 4	215		20.4
	CCF	215	18242	141	215	36837	294
Mixed	CCF Organic	215 13	18242 26954	141 127	13	36837 28869	138

<sup>\*</sup>Type: Organic=Organically managed farms, CCF=Comparable Conventional Farms

Table 4 indicates differences in farm profitability between organic and conventional systems, and year to year results. The differences in mean figures were assessed using a two-tailed student's t-test. Due to variability in profit (within sample) and the small size of some of the samples few differences in FBI were significantly different either at farm or per hectare level, though organic LFA Cattle and Sheep farm profitability was significantly higher than the CCF farms. Changes between years were more marked, with a significant profitability reduction for LFA Cattle and Sheep farms across both sectors. The conventional sector identical sample also saw significantly lower profitability (year to year) for Cropping, Lowland Cattle and Sheep and Mixed farm types.

Table 4 Statistical differences in Farm Business Income by farm type (organic vs. conventional, 2012/13) and between years (2012/13 and 2011/12)

	Full sa	ample		Identica	l sample	
		_	Orga	nnic	Conve	ntional
Farm type	FBI/farm	FBI/ha	FBI/farm	FBI/ha	FBI/farm	FBI/ha
Cropping						<u> </u>
Organic vs. Conventional (2012/13)	15175 NS	5 NS				
Yr to yr change (2011/12 vs. 2012/13)			-26610 NS	-94 NS	-38903 **	-164 ***
Horticulture						_
Organic vs. Conventional (2012/13)	-6374 NS	-393 NS				
Yr to yr change (2011/12 vs. 2012/13)			-858 NS	-16 <sup>NS</sup>	-13000 NS	-362 NS
Lowland dairy						
Organic vs. Conventional (2012/13)	13239 NS	39 NS				
Yr to yr change (2011/12 vs. 2012/13)			-21201 NS	-144 NS	-34941 <sup>NS</sup>	-267 NS
LFA cattle and sheep						
Organic vs. Conventional (2012/13)	23475 **	96 **				
Yr to yr change (2011/12 vs. 2012/13)			-10626 *	-72 ***	-14722 ***	-93 ***
Lowland cattle and sheep						_
Organic vs. Conventional (2012/13)	14133 NS	87 NS				
Yr to yr change (2011/12 vs. 2012/13)			-10798 *	-84 NS	-18595 ***	-153 ***
Mixed						_
Organic vs. Conventional (2012/13)	-12216 NS	-98 NS				
Yr to yr change (2011/12 vs. 2012/13)			-1915 NS	-11 NS	-20960 **	-125 ***

Notes: NS-No significant difference, \*-difference at 5%, \*\*-difference at 1%, \*\*\*-difference at 0.1%

#### 2.3 Cropping farms

For detailed results see Appendix 1, Table A1, pages 28-35.

Table 5 Summary data for cropping farms (£/ha, 2012/13 and 2011/12)

		Full sa	mple			Identic	al sample	
	201	2/13	201	1/12	Orga	anic	Conve	ntional
	Org	Conv.	Org	Conv.	12/13	11/12	12/13	11/12
Sample number	20	178	21	180	17	17	144	144
Average farm size (UAA)	253.6	211.1	246.9	221.2	280.5	281.0	235.2	235.7
Business Size (ESU)	175.1	157.6	174.8	173.5	190.1	194.4	171.7	173.8
	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha
Livestock outputs	22	39	45	49	19	14	39	39
Cropping outputs	1055	1122	1156	1208	1078	1147	1074	1165
Miscellaneous	181	186	207	159	180	192	179	169
Agri-env. payments	102	38	87	38	101	88	39	45
Subsidies/Single Payment	201	194	221	202	201	221	193	208
TOTAL OUTPUTS	1561	1580	1715	1656	1579	1661	1524	1625
Livestock inputs	7	25	14	26	7	5	25	21
Crop inputs	248	442	252	385	254	260	423	368
Labour	192	106	197	110	195	165	90	87
Machinery	464	386	450	385	465	457	384	377
General	177	156	166	143	167	163	153	154
Land & rent	142	140	188	128	145	171	137	142
TOTAL INPUTS	1231	1255	1268	1176	1232	1220	1212	1149
Farm Business Income	330	325	448	480	347	441	312	477
Net Farm Income	235	242	377	370	249	350	225	404

The 2012/13 *full sample* indicates that FBI per ha was very similar for organic and conventional holdings. Organic output was slightly lower than conventional, but costs were also slightly less. Organic cropping output was slightly lower, but agri-environment payments were higher. Total costs were similar but organic farm crop input costs were much lower, whilst machinery and labour costs were higher.

The *identical samples* showed a slight increase in organic holding profitability, whilst conventional holding FBI/ha decreased through lower output and increased costs.

Organic crop yields remained substantially lower than conventional e.g. conventional wheat yield of 6.8t/ha *vs* organic wheat yield of 2.9t/ha, but both sectors incurred yield losses in 2012/13. The average organic wheat price was higher at £308/t compared to the average conventional price of £182/t.

Overall, organic cropping holding profitability decreased in 2012/13, but remained at a similar level to the conventional sector.

#### 2.4 Horticulture farms

For detailed results see Appendix 1, Table A2, pages 36-43.

Table 6 Summary data for horticultural farms (£/ha, 2012/13 and 2011/12)

		Full sar	mple			Identic	al sample	
	201	2/13	201	1/12	Orga	anic	Conver	ntional
	Org	Conv.	Org	Conv.	12/13	11/12	12/13	11/12
Sample number	14	75	15	66	10	10	52	52
Average farm size (UAA)	53.7	34.9	25.1	21.8	61.1	60.7	35.0	35.2
Business Size (ESU)	102.0	93.0	145.8	140.8	108.2	107.9	99.2	108.7
	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha
Livestock outputs	444	88	342	184	397	335	96	96
Cropping outputs	2191	6293	7552	18218	2180	2447	8311	9281
Miscellaneous	437	1066	734	2112	512	472	1541	1611
Agri-env. payments	102	65	157	36	118	154	95	79
Subsidies/Single Payment	182	183	161	183	187	203	185	195
TOTAL OUTPUTS	3356	7695	8946	20733	3395	3611	10228	11262
Livestock inputs	148	68	147	68	119	104	74	86
Crop inputs	797	2753	2772	7197	858	972	3867	4477
Labour	695	2160	2518	6803	689	678	2966	3048
Machinery	811	893	1458	1627	840	921	1087	1046
General	429	828	1271	2420	447	421	948	942
Land & rent	86	210	326	511	86	143	221	236
TOTAL INPUTS	2965	6911	8492	18627	3038	3238	9163	9835
Farm Business Income	391	784	454	2106	356	373	1065	1428
Net Farm Income	165	698	360	2243	129	122	966	1359

The horticulture holding data has historically been difficult to assess due to the small sample sizes and large variation in intensity of production between holdings. The sample size in 2012/13 was higher than previously, with 14 holdings, though these still represent a broad range of systems and vary significantly in their intensity compared to the conventional sample.

The 2012/13 *full sample* indicates the average organic holding FBI per ha to be lower than comparable conventional holdings, as in previous years. Organic holding output was less than 50% of conventional reflecting their lower intensity, however, organic costs were also much lower than conventional; with labour and cropping input costs at around a third of the conventional level. Overall though, conventional holding FBI per ha remained higher for both 2011/12 and 2012/13 financial years.

The *identical sample* showed a slight decrease in organic profitability, but conventional holdings also showed a decrease in profitability, outweighing lower and costs.

Overall, conventional horticultural holdings remained financially superior to organic holdings mainly due to higher output from a smaller area through increased intensity of farming. Organic systems appear less profitable per farm hectare, in part due to the need for a fertility-building phase in the rotation, but are less reliant on external inputs to maintain income.

## 2.5 Dairy farms

For detailed results see Appendix 1, Table A3, pages 44-51.

Table 7 Summary data for dairy farms (£/ha, 2012/13 and 2011/12)

		Full sa	mple			Identic	al sample	
	201	2/13	201	1/12	Orga	anic	Conve	ntional
	Org	Conv.	Org	Conv.	12/13	11/12	12/13	11/12
Sample number	42	238	49	291	36	36	212	212
Average farm size (UAA)	152.1	129.8	159.4	145.0	162.4	158.1	136.3	133.9
Business Size (ESU)	153.1	160.4	164.8	164.9	162.4	162.5	165.4	160.8
	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha
Livestock outputs	2018	2496	2135	2241	2021	2084	2461	2453
Cropping outputs	88	204	106	301	92	89	201	228
Miscellaneous	92	98	86	96	86	88	100	82
Agri-env. payments	78	27	68	27	76	69	27	25
Subsidies/Single Payment	201	209	219	212	203	220	208	231
TOTAL OUTPUTS	2478	3033	2615	2877	2478	2550	2998	3020
Livestock inputs	942	1179	939	920	950	911	1164	1008
Crop inputs	46	244	51	219	45	41	242	223
Labour	269	255	273	216	281	277	258	222
Machinery	471	593	469	545	460	445	592	584
General	218	249	223	243	218	218	244	236
Land & rent	167	189	178	168	172	163	188	170
TOTAL INPUTS	2114	2708	2132	2310	2127	2055	2687	2443
Farm Business Income	364	325	482	567	351	495	311	578
Net Farm Income	293	213	436	440	293	450	197	459

The LFA and lowland dairy samples are combined to due to a small number of LFA dairy holdings within the sample.

The *full sample* results indicate that organic dairy farm profitability was above conventional levels in 2012/13. Organic farm output was lower, with less livestock and cropping output but livestock and crop inputs were also much lower, especially crop costs due to less reliance on fertiliser.

The *identical samples* showed a decreased FBI/ha for both organic and conventional farms. Organic farms experienced a slight fall in output and an increase in costs, whilst the conventional sector had similar output but much increased costs.

In terms of milk production, the average organic milk yield was 6034 litres/cow, lower than the average conventional holding yield of 7120 litres/cow. The organic milk price was 32.6ppl; higher than the average conventional price of 27.5ppl.

Overall, the data indicates that organic dairying remains competitive with the conventional sector and is less exposed to external input price volatility.

## 2.6 LFA Cattle and Sheep

For detailed results see Appendix 1, Table A4, pages 52-59.

Table 8 Summary data for LFA Cattle & Sheep farms (£/ha, 2012/13 and 2011/12)

		Full san	nple			Identica	al sample	-
	201	2/13	201	1/12	Orga	anic	Conver	tional
	Org	Conv.	Org	Conv.	12/13	11/12	12/13	11/12
Sample number	47	312	54	524	41	41	273	273
Average farm size (UAA)	191.8	163.0	176.9	151.4	183.6	176.2	158.2	158.4
Business Size (ESU)	46.0	42.1	42.4	40.8	46.6	44.6	41.9	42.2
	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha
Livestock outputs	503	541	543	595	533	543	564	572
Cropping outputs	45	26	42	29	54	47	29	38
Miscellaneous	35	42	42	37	38	49	45	37
Agri-env. payments	140	79	152	89	143	165	79	90
Subsidies/Single Payment	203	202	232	225	210	235	201	216
TOTAL OUTPUTS	926	889	1010	975	978	1038	917	953
Livestock inputs	188	242	171	223	199	174	248	217
Crop inputs	39	64	37	68	41	41	69	67
Labour	51	38	51	33	56	54	41	36
Machinery	215	201	225	197	227	232	208	195
General	76	90	81	87	77	80	95	88
Land & rent	86	79	90	80	93	100	77	77
TOTAL INPUTS	655	714	653	686	692	680	737	681
Farm Business Income	271	175	357	288	286	358	180	273
Net Farm Income	207	100	296	210	221	297	108	201

Through combining the four main LFA cattle and sheep farm types, the robust farm type sample comprised 47 farms in 2012/13.

The 2012/13 *full sample* highlighted that organic LFA cattle and sheep farms were significantly more profitable than comparable conventional farms. Organic FBI/ha was higher despite slightly lower livestock output, this being offset by considerably greater agri-environment payments, resulting in a higher overall output. Organic livestock and crop inputs were lower than conventional, though labour and machinery costs remained higher, but overall organic farm costs were slightly lower.

The *identical samples* showed a decrease in profitability for both organic and conventional farms with lower output and marginally higher costs for the organic sector but much greater costs for conventional holdings.

LFA organic finished cattle prices averaged £1281/head, much higher than 2011/12, whilst the conventional average of £1139 was also considerably improved from 2011/12. The LFA holding organic finished lamb price was similar to the conventional price, at £66/head and £64/head respectively, both lower than in 2011/12.

Overall, despite reduced profitability organic LFA cattle and sheep holdings continued to be more profitable than their conventional counterparts in 2012/13.

#### 2.7 Lowland cattle and sheep farms

For detailed results see Appendix 1, Table A5, pages 60-67.

Table 9 Summary data for Lowland Cattle & Sheep farms (£/ha, 2012/13 and 2011/12)

		Full sa	mple			Identic	al sample	
	201	2/13	201	1/12	Orga	anic	Conver	ntional
	Org	Conv.	Org	Conv.	12/13	11/12	12/13	11/12
Sample number	41	287	46	269	34	34	215	215
Average farm size (UAA)	144.9	133.3	148.3	132.4	141.5	137.9	128.9	125.3
Business Size (ESU)	35.3	35.1	35.6	34.5	34.6	34.4	34.2	34.5
	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha
Livestock outputs	458	492	461	548	479	525	516	592
Cropping outputs	90	128	89	134	85	83	131	148
Miscellaneous	162	123	104	143	156	129	132	136
Agri-env. payments	115	39	121	53	108	126	45	48
Subsidies/Single Payment	205	158	202	180	194	210	159	180
TOTAL OUTPUTS	1029	940	977	1058	1023	1072	983	1105
Livestock inputs	152	200	134	179	144	162	209	201
Crop inputs	35	97	29	82	37	26	97	91
Labour	83	69	70	72	78	80	73	76
Machinery	273	244	237	227	283	253	258	243
General	160	112	140	107	176	159	116	111
Land & rent	106	84	93	82	96	98	88	89
TOTAL INPUTS	809	807	703	749	813	779	841	811
Farm Business Income	220	133	274	308	210	294	141	294
Net Farm Income	146	55	198	220	122	207	60	214

The 2012/13 *full sample* indicated that organic lowland cattle and sheep holding profitability (FBI) was higher than comparable conventional holdings. Total output on organic holdings was greater with higher miscellaneous income and support payments but lower livestock and cropping outputs. Overall costs were almost identical, with lower direct input costs for the organic sector but higher labour, machinery and general costs.

The identical sample showed a decrease in FBI for both sectors through reduced output and greater costs such as for machinery.

Lowland organic finished cattle prices averaged £1143/head, slightly higher than the conventional average of £1095/head, whilst the lowland holding organic finished lamb price was similar to the conventional price, at £75/head and £74/head respectively, both lower than in 2011/12.

Overall, whilst profitability of organic lowland cattle and sheep holdings decreased in 2012/13, comparable conventional holding profitability fell behind that of the organic holdings.

#### 2.8 Mixed farms

For detailed results see Appendix 1, Table A6, pages 68-75.

Table 10 Summary data for Mixed farms (£/ha, 2012/13 and 2011/12)

		Full sar	mple		13 13 170 212.3 209.0 182.7 1 122.1 121.8 84.1 <b>£/ha £/ha</b> 874 733 472 309 374 554 166 149 123 108 106 43 195 220 188 1653 1580 1379  533 465 207 109 109 247 196 197 76 374 395 316 178 151 155			
	201	2/13	201	1/12	Orga	anic	Conver	ntional
	Org	Conv.	Org	Conv.	12/13	11/12	12/13	11/12
Sample number	27	380	17	87	13	13	170	170
Average farm size (UAA)	228.4	186.9	203.6	171.6	212.3	209.0	182.7	178.2
Business Size (ESU)	110.8	90.2	83.1	85.0	122.1	121.8	84.1	83.8
	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha	£/ha
Livestock outputs	582	541	244	589	874	733	472	506
Cropping outputs	335	548	305	613	309	374	554	594
Miscellaneous	164	116	140	190	166	149	123	138
Agri-env. payments	107	46	118	54	108	106	43	45
Subsidies/Single Payment	195	193	220	220	195	220	188	216
TOTAL OUTPUTS	1383	1443	1026	1665	1653	1580	1379	1499
Livestock inputs	335	249	120	295	533	465	207	235
Crop inputs	101	252	78	235				228
Labour	183	79	172	87				71
Machinery	324	358	295	342			316	308
General	158	150	123	176	178	151	155	152
Land & rent	137	113	112	109	136	124	99	101
TOTAL INPUTS	1238	1200	900	1244	1526	1442	1099	1095
Farm Business Income	145	243	126	422	127	138	280	404
Net Farm Income	72	150	37	379	56	60	205	343

The 2012/13 *full sample* indicated that mixed organic farm profitability was below that of comparable conventional farms, though there was less difference than 2011/12. Total output was slightly lower for organic holdings, with similar total costs, but with greater livestock and labour costs but lower crop input costs.

The *identical sample* indicated similar profitability for organic holdings, but much decreased profits for conventional farms. Total output improved for the organic sector but fell sharply for conventional farms, but organic costs increased, especially livestock input costs, whilst conventional costs were very similar.

Organic mixed farms saw a decreased average wheat yield of 2.4t/ha compared to 4.1t/ha in 2011/12. The organic wheat price was greater at £296/t compared to £234/t in 2011/12. However this compares to 6.2t/ha, down from 7.6t/ha in 2011/12 and £180/t vs. £154/t in 2011/12 for conventional production. Organic and conventional finished cattle prices were higher at £1163 and £1155 per head and lamb was slightly lower at £78 and £76 per head for organic and conventional respectively.

Overall, both organic and conventional mixed farm profitability was low, though conventional profitability was slightly higher despite a large drop in FBI.

# 3. Enterprise gross and net margins

Tables 12 to 15 show gross and net margin results for selected organic livestock and crop enterprises for 2012/13 and 2011/12, with comparative conventional data shown where available. More detailed data is shown in Appendix 2. (Caution is required when making comparisons between years as only Table 11 has an identical sample for both years).

Gross and net margin figures are for certified organic enterprises, but may include some livestock/crops sold at conventional prices. Arable benchmark costs of production are included in this section as the results are derived from the gross/net margin data based on achieved yields. Not all crop results are shown due to small samples.

All gross/net margin data has been calculated as un-weighted averages. Crop outputs include revenue and imputed values for farmhouse consumption, feed used on farm and a closing valuation for any unsold crop. It should be noted that feed values and closing valuations may be undervalued (i.e. not valued at achievable organic premium prices) in the recording process – however, this will also be reflected in lower costs for the livestock enterprises where home-grown feed is used.

Estimated net margins including allocated fixed and imputed costs are also shown. These costs are allocated pro rata based on the number of livestock units (LU) and the land area allocated to individual enterprises. The imputed costs cover unpaid labour (based on standard rates for hours input) as well as rental value for owner occupied land and interest on tenant-type capital adjusted for actual interest payments. This ensures that the costs of the farm-family's own labour, land and capital resources used in the business are accounted for.

Table 11 presents dairy data for the identical and full samples. The **identical** sample comprised of 39 organic and 65 comparable conventional dairy holdings over two years. Both organic and conventional holding output was similar in 2012/13 to those in 2011/12, but variable costs were considerably greater. The organic gross margin (GM) was therefore £26 lower, the conventional was £80 lower. Further increases in fixed and imputed costs resulted in the organic net margin (NM) (excluding support payments) falling by £152 to £-127/cow, the conventional NM decreased to £-149/cow.

Table 11 also contains results for the **full** sample of 45 organic dairy enterprises and 143 comparable conventional enterprises. Comparing organic and conventional groups, output was slightly higher but variable costs increased considerably, especially for the conventional sector. Organic fixed costs remained higher due to greater labour and machinery costs, resulting in a net margin (excluding support payments) of £-142/cow, compared to £-124/cow margin for the conventional holdings.

Table 12 shows organic LFA and lowland cattle gross margins to be above or similar to conventional levels. However, due to lower output from the organic farms, fixed costs were higher per head, resulting in large negative margins, though these were often offset by support payments in the LFA, whereas all conventional margins remained negative.

Table 13 indicates that organic sheep gross margins were better than conventional levels, due to similar or higher outputs and lower variable costs, but higher fixed costs resulted in negative net margins. Lowland organic and all but one conventional sheep margin remained negative even with the addition of support payments.

Table 14 presents crop gross and net margin data for 2012/13. Whilst organic gross margins were generally higher, net margins excluding support payments were negative for virtually all crops (both organic and conventional). Organic net margins were lower in 2012/13 as a result of very low yields due to weather conditions.

Table 11 Summary of organic and conventional dairy gross and net margins (£ per cow, 2011/12 and 2012/13)

Sample Type		Identica	l Sample		Full Sample			
Herd characteristics	Orga	nic	Convent	tional**	Orga	nic	Conventi	ional**
Year	2011/12	2012/13	2011/12	2012/13	2011/12	2012/13	2011/12	2012/13
Number of herds	39	39	65	65	45	42	145	143
Average farm area - actual ha	165	168	151	150	160	177	140	137
Average size of the farm business (ESU)	163	154	167	168	156	153	166	151
Average size of herd (dairy cows)	139	129	131	133	134	124	137	120
Average milk yield (litres per cow)	6314	6078	7800	7508	6315	6049	7397	7397
Implied milk price (ppl)	32	33	27	28	32	33	27	28
Enterprise output (£ per cow)								
Milk disposals (1)	2015	2051	2178	2143	2011	2044	2060	2087
Other output less transfers in	-84	-85	-151	-138	-91	-91	-122	-96
Total enterprise output	1931	1966	2027	2005	1919	1952	1938	1990
Variable Costs (£ per cow)								
Concentrates	572	603	612	694	574	604	561	671
Other feed and keep	51	49	27	31	49	49	33	33
Other livestock costs - dairy	235	275	244	246	239	277	232	251
Total variable costs	858	927	883	972	862	930	826	955
Margin over concentrates	1359	1363	1414	1311	1345	1348	1378	1319
Forage variable costs (£ per cow)	30	24	101	111	29	24	94	110
Gross margin including forage costs	1042	1016	1043	923	1028	998	1018	926
Fixed Costs (£ per cow)\$								
Labour	193	225	157	192	184	231	145	162
Power and machinery	271	311	269	282	275	308	268	293
Land and buildings	95	107	95	96	95	106	92	96
General farm costs	81	95	85	89	82	94	81	89
Rent and finance	86	77	76	79	88	77	71	67
Total fixed costs	725	815	682	738	724	816	657	707
Total actual costs	1613	1766	1666	1820	1615	1770	1577	1772
Net margin over actual costs (£/cow)	317	200	361	185	304	182	361	219
Total imputed costs	293	327	327	334	299	324	330	343
Total costs including imputed	1906	2092	1993	2155	1914	2094	1907	2114
Net margin over all costs (£/cow)	25	-127	34	-149	5	-142	31	-124
Other related outputs (ORO)								
Agri-environment payments (exc OFS)	54	62	16	14	54	68	17	16
Organic Farming Scheme Payment	4	2	0	0	4	2	0	0
Single Payment Scheme	157	153	123	109	157	163	115	120
Byproducts & forage	12	14	29	19	11	17	22	19
Total other related outputs	227	231	167	142	226	250	154	155
NM over all costs (inc. ORO) (£/cow)	252	105	201	-8	231	108	185	31
1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			<b>.</b>					

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the ratio of livestock units

per enterprise and the proportion of the farm area in forage production  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

<sup>#</sup> Includes unpaid labour, imputed rent and interest on tenants capital

<sup>\*\*</sup> Conventional data are from whole farm analysis clustered conventional farms

Table 12 Summary of organic and conventional beef gross and net margins (£/cow, 2012/13, full samples)

LFA status		Less Favou	red Area			<b>Lowland Area</b>			
Production system	Finishe	d cattle	Store		Finished		Store	cattle	
Organic or conventional system	Org.	Conv.**	Org.	Conv.**	Org.	Conv.**	Org.	Conv.**	
Number of herds	8	28	22	122	34	52	21	58	
Average farm area - actual ha	170	202	344	229	274	174	143	125	
Average size of the farm business (ESU)	53	53	43	38	93	79	68	38	
Average size of herd	65	56	45	39	56	43	33	33	
Enterprise output (£ per cow)									
Finished beef sales	909	1207	68	43	984	1500	55	290	
Store beef sales & transfers	387	247	703	660	262	213	402	617	
Other output less transfers in	-89	-221	5	76	-97	-347	131	-20	
Total enterprise output	1207	1233	776	779	1149	1366	588	887	
Variable Costs (£ per cow)									
Concentrates	107	333	97	160	100	345	27	135	
Other feed and keep	71	42	77	35	39	56	28	24	
Other livestock costs - dairy	195	182	161	146	194	201	126	177	
Total variable costs	373	556	335	341	333	602	181	335	
Gross margin before forage costs	834	677	441	438	816	764	407	551	
Forage variable costs (£ per cow)	27	147	36	98	113	145	33	108	
Gross margin including forage costs	808	529	405	341	703	618	374	443	
Fixed Costs (£ per cow)\$									
Labour	80	65	38	38	365	177	125	78	
Power and machinery	359	338	287	279	452	398	344	357	
Land and buildings	79	123	67	64	119	138	209	105	
General farm costs	102	95	99	85	147	119	159	119	
Rent and finance	38	59	58	69	201	151	141	110	
Total fixed costs	659	679	548	535	1284	982	978	770	
Total actual costs	1058	1383	919	974	1730	1730	1192	1213	
Net margin over actual costs	149	-150	-143	-195	-580	-364	-604	-327	
Total imputed costs#	456	480	390	407	588	630	636	634	
Total costs including imputed	1515	1863	1309	1381	2317	2360	1828	1847	
Net margin over all costs	-308	-630	-533	-602	-1168	-994	-1241	-961	
Other related outputs (ORO)									
LFA and agri-environmental payments	146	133	198	145	339	259	394	195	
Organic Farming Scheme Payment	9	0	45	0	5	0	0	0	
Single Payment Scheme	303	326	375	331	551	415	470	312	
Total other related outputs	457	459	617	476	895	675	864	507	
NM over all costs (inc. ORO)	150	-171	84	-126	-272	-319	-377	-454	
\$ Fived costs are proportioned to enterprise ac	cording to	the ratio o	flivostock	unite					

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the ratio of livestock units

per enterprise and the proportion of the farm area in forage production

<sup>#</sup> Includes unpaid labour, imputed rent and interest on tenants capital

<sup>\*\*</sup> Conventional data are from whole farm analysis clustered conventional farms

Table 13 Summary of organic and conventional sheep gross and net margins (£/ewe, 2012/13, full samples)

Average farm area - actual ha Average size of the farm business (ESU) Average size of the farm business (ESU) Average size of her farm business (ESU) Finished lambs sold per ewe  Enterprise output (£ per ewe) Finished lamb sales  36 28 72 64 78 75 Store lamb sales 76 65 55 10 8 Other output less transfers in Total enterprise output Average size of her d 537 700 726 65 72 64 78 75 75 Store lamb sales 76 65 55 10 88 77 66 55 51 00 88 77 76 76 76 77 71 71 71 72 71 71 72 71 71 72 71 71 72 71 71 72 71 72 71 71 72 71 72 72 73 74 74 75 75 75 75 75 76 76 76 76 76 76 76 76 76 76 76 76 76	LFA status		Less Favour	<b>Lowland Area</b>				
Number of flocks	Productivity	Low	er			All flocks		
Average farm area - actual ha Average size of the farm business (ESU) Average size of the farm business (ESU) Finished lambs sold per ewe O.59 O.51 O.00 O.94 O.99  Enterprise output (£ per ewe) Finished lamb sales Sold per ewe Fini	Organic or conventional system	Org.	Conv.**	Org. (	Conv.**	Org. (	Conv.**	
Average size of the farm business (ESU) 37 44 55 43 73 68 Average size of herd 537 700 726 659 244 317 Finished lambs sold per ewe 0.59 0.51 1.00 0.94 1.03 0.99    Enterprise output (£ per ewe) Finished lamb sales 36 28 72 64 78 75 5tore lamb sales 7 6 5 5 10 8 Other output less transfers in 7 11 22 16 16 11 Total enterprise output 49 45 100 85 104 94    Variable Costs (£ per ewe) Concentrates 8 11 17 21 14 19 Other feed and keep 4 4 4 3 5 5 2 2 0 0 0 10 10 10 10 10 10 10 10 10 10 10	Number of flocks	14	70	26	140	41	116	
Average size of herd   537   700   726   659   244   317   Finished lambs sold per ewe   0.59   0.51   1.00   0.94   1.03   0.99   1.03   0.	Average farm area - actual ha	346	277	289	184	195	159	
Finished lambs sold per ewe         0.59         0.51         1.00         0.94         1.03         0.99           Enterprise output (£ per ewe)         Finished lamb sales         36         28         72         64         78         75           Store lamb sales         7         6         5         5         10         88           Other output less transfers in Total enterprise output         49         45         100         85         104         94           Variable Costs (£ per ewe)         Concentrates         8         11         17         21         14         19           Other flivestock costs - dairy         9         9         17         14         20         17           Total variable costs         20         25         38         40         36         38           Gross margin before forage costs         29         20         62         45         68         56           Forage variable costs (£ per ewe)         2         6         3         9         4         48           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         2         6         3<	Average size of the farm business (ESU)	37	44	55	43	73	68	
Enterprise output (£ per ewe)   Finished lamb sales   36   28   72   64   78   75   Store lamb sales   7   6   5   5   10   8   Other output less transfers in   7   11   22   16   16   11   Total enterprise output   49   45   100   85   104   94   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   100   85   104   94   945   104   945   104   10	Average size of herd	537	700	726	659	244	317	
Finished lamb sales 36 28 72 64 78 75 Store lamb sales 7 6 5 5 10 8 Other output less transfers in 7 11 22 16 16 16 11 Total enterprise output 49 45 100 85 104 94	Finished lambs sold per ewe	0.59	0.51	1.00	0.94	1.03	0.99	
Finished lamb sales 36 28 72 64 78 75 Store lamb sales 7 6 5 5 10 8   Other output less transfers in 7 11 22 16 16 16 11   Total enterprise output 49 45 100 85 104 94   Variable Costs (£ per ewe)   Concentrates 8 11 17 21 14 19   Other feed and keep 4 4 4 3 5 5 2 2   Other livestock costs - dairy 9 9 17 14 20 17   Total variable costs 20 25 38 40 36 38   Gross margin before forage costs 29 20 62 45 68 56   Forage variable costs (£ per ewe) 2 6 3 9 4 8   Gross margin including forage costs 27 15 59 37 64 48   Fixed Costs (£ per ewe)\$   Labour 9 3 7 5 29 10   Power and machinery 22 19 33 24 44 29   Land and buildings 5 4 6 5 11 8   General farm costs 6 6 6 8 6 11 10   Rent and finance 3 6 5 4 115 11   Rent and finance 3 6 5 4 115 11   Total fixed costs 4 4 38 59 46 111 6   Total fixed costs 4 4 38 59 46 111 6   Total actual costs 5 17 2-3 0 -9 -47 20    Total imputed costs 30 30 36 37 55 54    Total costs including imputed 96 98 136 131 206 168   Net margin over actual costs -47 -53 -36 -46 -102 -74    Other related outputs (ORO)  LFA and agri-environmental payments 20 11 16 9 28 12   Organic Farming Scheme Payment 4 0 2 0 0 0 0   Single Payment Scheme 30 22 29 25 36 29   Total other related outputs 53 33 47 34 65 41    Total other related outputs 53 33 47 34 65 41    Total other related outputs 53 33 47 34 65 41    Total other related outputs 53 33 34 47 34 65 41    Total other related outputs 53 33 34 47 34 65 41    Total other related outputs 53 33 34 47 34 65 41    Total other related outputs 53 33 34 47 34 65 41    Total other related outputs 53 33 34 47 34 65 54    Total other related outputs 53 33 34 47 34 65 41    Total other related outputs 53 33 34 47 34 65 54    Total other related outputs 53 33 34 47 34 65 54    Total other related outputs 54 25 25 25 36 29    Total other related outputs 53 33 34 47 34 65 54    Total other related outputs 54 25 25 25 36 29    Total other related outputs 54 25 25 25 36 29    Total other related outputs 54 25 25 25 25 25 25 25 25 25 25 25 25 25	Enterprise output (£ per ewe)							
Other output less transfers in Total enterprise output         7         11         22         16         16         11           Total enterprise output         49         45         100         85         104         94           Variable Costs (£ per ewe)         Concentrates         8         11         17         21         14         19           Other livestock costs - dairy         9         9         17         14         20         17           Total variable costs         20         25         38         40         36         38           Gross margin before forage costs         29         20         62         45         68         56           Forage variable costs (£ per ewe)         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         2         19         3         7<	Finished lamb sales	36	28	72	64	78	75	
Total enterprise output         49         45         100         85         104         94           Variable Costs (£ per ewe)         Concentrates         8         11         17         21         14         19         Other feed and keep         4         4         3         5         2         2         2         Other livestock costs - dairy         9         9         17         14         20         17         Total variable costs         20         25         38         40         36         38         38         38         40         36         38         38         38         40         36         38         38         40         36         38         38         40         36         38         38         40         36         38         38         40         36         38         38         40         36         38         38         40         36         38         38         40         36         38         38         40         36         38         36         36         36         38         40         36         38         36         36         37         36         48         48         38         39         44<	Store lamb sales	7	6	5	5	10	8	
Variable Costs (£ per ewe)           Concentrates         8         11         17         21         14         19           Other feed and keep         4         4         3         5         2         2           Other livestock costs - dairy         9         9         17         14         20         17           Total variable costs         20         25         38         40         36         38           Gross margin before forage costs         29         20         62         45         68         56           Forage variable costs (£ per ewe)         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         2         6         3         9         4         48           Fixed Costs (£ per ewe)\$         2         19         33         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         8<	Other output less transfers in	7	11	22	16	16	11	
Concentrates         8         11         17         21         14         19           Other feed and keep         4         4         4         3         5         2         2           Other livestock costs - dairy         9         9         17         14         20         17           Total variable costs         20         25         38         40         36         38           Gross margin before forage costs         29         20         62         45         68         56           Forage variable costs (£ per ewe)         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         2         6         3         9         4         48           Fixed Costs (£ per ewe)\$         2         19         33         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         8           General farm costs </td <td>Total enterprise output</td> <td>49</td> <td>45</td> <td>100</td> <td>85</td> <td>104</td> <td>94</td>	Total enterprise output	49	45	100	85	104	94	
Concentrates         8         11         17         21         14         19           Other feed and keep         4         4         4         3         5         2         2           Other livestock costs - dairy         9         9         17         14         20         17           Total variable costs         20         25         38         40         36         38           Gross margin before forage costs         29         20         62         45         68         56           Forage variable costs (£ per ewe)         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         2         6         3         9         4         48           Fixed Costs (£ per ewe)\$         2         19         33         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         8           General farm costs </td <td>Variable Costs (£ per ewe)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Variable Costs (£ per ewe)							
Other livestock costs - dairy         9         9         17         14         20         17           Total variable costs         20         25         38         40         36         38           Gross margin before forage costs         29         20         62         45         68         56           Forage variable costs (£ per ewe)         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         Fixed Costs (£ per ewe)\$           Labour         9         3         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         10           General farm costs         6         6         8         6         11         10           Rent and finance         3         6         5         4         15         11           Total fixed costs         67         68         100         94         151 <td< td=""><td></td><td>8</td><td>11</td><td>17</td><td>21</td><td>14</td><td>19</td></td<>		8	11	17	21	14	19	
Total variable costs         20         25         38         40         36         38           Gross margin before forage costs         29         20         62         45         68         56           Forage variable costs (£ per ewe)         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         Fixed Costs (£ per ewe)\$           Labour         9         3         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         8           General farm costs         6         6         8         6         11         10           Rent and finance         3         6         5         4         15         11           Total fixed costs         44         38         59         46         111         68           Total actual costs         67         68         100         94         151         114	Other feed and keep	4	4	3	5	2	2	
Gross margin before forage costs       29       20       62       45       68       56         Forage variable costs (£ per ewe)       2       6       3       9       4       8         Gross margin including forage costs       27       15       59       37       64       48         Fixed Costs (£ per ewe)\$          Labour       9       3       7       5       29       10       Power and machinery       22       19       33       24       44       29       24       46       5       11       8       6       6       6       8       6       10       5       4       6       5       11       8       6       6       8       6       6       8       6       11       10       10       10       10       10       10       10       10       10       10       10       10       10       10       11       16       11       16       16       16       16       16       16       16       16       16       17       17       18       19       19       19       10       10       10       10       11       16       10       10       10       10       10       10       10       10       10       10       10       10       10	Other livestock costs - dairy	9	9	17	14	20	17	
Forage variable costs (£ per ewe)         2         6         3         9         4         8           Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         Experimental payments           Labour         9         3         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         8           General farm costs         6         6         8         6         11         10           Rent and finance         3         6         5         4         15         11           Total fixed costs         44         38         59         46         111         68           Total actual costs         67         68         100         94         151         114           Net margin over actual costs         -17         -23         0         -9         -47         -20           Total costs including imputed         96         98         136         131         206 <td< td=""><td>Total variable costs</td><td>20</td><td>25</td><td>38</td><td>40</td><td>36</td><td>38</td></td<>	Total variable costs	20	25	38	40	36	38	
Gross margin including forage costs         27         15         59         37         64         48           Fixed Costs (£ per ewe)\$         Labour         9         3         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         8           General farm costs         6         6         8         6         11         10           Rent and finance         3         6         5         4         15         11           Total fixed costs         44         38         59         46         111         68           Total actual costs         67         68         100         94         151         114           Net margin over actual costs         -17         -23         0         -9         -47         -20           Total imputed costs         30         30         36         37         55         54           Total costs including imputed         96         98         136         131         206         168           Net margin over all costs	Gross margin before forage costs	29	20	62	45	68	56	
Fixed Costs (£ per ewe)\$         9         3         7         5         29         10           Power and machinery         22         19         33         24         44         29           Land and buildings         5         4         6         5         11         8           General farm costs         6         6         8         6         11         10           Rent and finance         3         6         5         4         15         11           Total fixed costs         44         38         59         46         111         68           Total actual costs         67         68         100         94         151         114           Net margin over actual costs         -17         -23         0         -9         -47         -20           Total imputed costs         30         30         36         37         55         54           Total costs including imputed         96         98         136         131         206         168           Net margin over all costs         -47         -53         -36         -46         -102         -74           Other related outputs (ORO)	Forage variable costs (£ per ewe)	2	6	3	9	4	8	
Labour	Gross margin including forage costs	27	15	59	37	64	48	
Labour	Fixed Costs (£ per ewe)\$							
Land and buildings       5       4       6       5       11       8         General farm costs       6       6       8       6       11       10         Rent and finance       3       6       5       4       15       11         Total fixed costs       44       38       59       46       111       68         Total actual costs       67       68       100       94       151       114         Net margin over actual costs       -17       -23       0       -9       -47       -20         Total imputed costs       30       30       36       37       55       54         Total costs including imputed       96       98       136       131       206       168         Net margin over all costs       -47       -53       -36       -46       -102       -74         Other related outputs (ORO)       Corganic Farming Scheme Payment       20       11       16       9       28       12         Organic Farming Scheme Payment       4       0       2       0       0       0         Single Payment Scheme       30       22       29       25       36       29 <tr< td=""><td></td><td>9</td><td>3</td><td>7</td><td>5</td><td>29</td><td>10</td></tr<>		9	3	7	5	29	10	
General farm costs       6       6       8       6       11       10         Rent and finance       3       6       5       4       15       11         Total fixed costs       44       38       59       46       111       68         Total actual costs       67       68       100       94       151       114         Net margin over actual costs       -17       -23       0       -9       -47       -20         Total imputed costs       30       30       36       37       55       54         Total costs including imputed       96       98       136       131       206       168         Net margin over all costs       -47       -53       -36       -46       -102       -74         Other related outputs (ORO)       Corganic Farming Scheme Payment       20       11       16       9       28       12         Organic Farming Scheme Payment       4       0       2       0       0       0         Single Payment Scheme       30       22       29       25       36       29         Total other related outputs       53       33       47       34       65       41	Power and machinery	22	19	33	24	44	29	
Rent and finance       3       6       5       4       15       11         Total fixed costs       44       38       59       46       111       68         Total actual costs       67       68       100       94       151       114         Net margin over actual costs       -17       -23       0       -9       -47       -20         Total imputed costs       30       30       36       37       55       54         Total costs including imputed       96       98       136       131       206       168         Net margin over all costs       -47       -53       -36       -46       -102       -74         Other related outputs (ORO)       Corganic Farming Scheme Payment       20       11       16       9       28       12         Organic Farming Scheme Payment       4       0       2       0       0       0         Single Payment Scheme       30       22       29       25       36       29         Total other related outputs       53       33       47       34       65       41	Land and buildings	5	4	6	5	11	8	
Total fixed costs       44       38       59       46       111       68         Total actual costs       67       68       100       94       151       114         Net margin over actual costs       -17       -23       0       -9       -47       -20         Total imputed costs       30       30       36       37       55       54         Total costs including imputed       96       98       136       131       206       168         Net margin over all costs       -47       -53       -36       -46       -102       -74         Other related outputs (ORO)       0       11       16       9       28       12         Organic Farming Scheme Payment       4       0       2       0       0       0         Single Payment Scheme       30       22       29       25       36       29         Total other related outputs       53       33       47       34       65       41	General farm costs	6	6	8	6	11	10	
Total actual costs         67         68         100         94         151         114           Net margin over actual costs         -17         -23         0         -9         -47         -20           Total imputed costs         30         30         36         37         55         54           Total costs including imputed         96         98         136         131         206         168           Net margin over all costs         -47         -53         -36         -46         -102         -74           Other related outputs (ORO)         UFA and agri-environmental payments         20         11         16         9         28         12           Organic Farming Scheme Payment         4         0         2         0         0         0           Single Payment Scheme         30         22         29         25         36         29           Total other related outputs         53         33         47         34         65         41	Rent and finance	3	6	5	4	15	11	
Net margin over actual costs         -17         -23         0         -9         -47         -20           Total imputed costs         30         30         36         37         55         54           Total costs including imputed         96         98         136         131         206         168           Net margin over all costs         -47         -53         -36         -46         -102         -74           Other related outputs (ORO)           LFA and agri-environmental payments         20         11         16         9         28         12           Organic Farming Scheme Payment         4         0         2         0         0         0           Single Payment Scheme         30         22         29         25         36         29           Total other related outputs         53         33         47         34         65         41	Total fixed costs	44	38	59	46	111	68	
Total imputed costs         30         30         36         37         55         54           Total costs including imputed         96         98         136         131         206         168           Net margin over all costs         -47         -53         -36         -46         -102         -74           Other related outputs (ORO)         5         50         11         16         9         28         12           Organic Farming Scheme Payment         4         0         2         0         0         0           Single Payment Scheme         30         22         29         25         36         29           Total other related outputs         53         33         47         34         65         41	Total actual costs	67	68	100	94	151	114	
Total costs including imputed         96         98         136         131         206         168           Net margin over all costs         -47         -53         -36         -46         -102         -74           Other related outputs (ORO)           LFA and agri-environmental payments         20         11         16         9         28         12           Organic Farming Scheme Payment         4         0         2         0         0         0           Single Payment Scheme         30         22         29         25         36         29           Total other related outputs         53         33         47         34         65         41	Net margin over actual costs	-17	-23	0	-9	-47	-20	
Net margin over all costs         -47         -53         -36         -46         -102         -74           Other related outputs (ORO)           LFA and agri-environmental payments         20         11         16         9         28         12           Organic Farming Scheme Payment         4         0         2         0         0         0           Single Payment Scheme         30         22         29         25         36         29           Total other related outputs         53         33         47         34         65         41	Total imputed costs	30	30	36	37	55	54	
Other related outputs (ORO)           LFA and agri-environmental payments         20         11         16         9         28         12           Organic Farming Scheme Payment         4         0         2         0         0         0           Single Payment Scheme         30         22         29         25         36         29           Total other related outputs         53         33         47         34         65         41	Total costs including imputed	96	98	136	131	206	168	
LFA and agri-environmental payments       20       11       16       9       28       12         Organic Farming Scheme Payment       4       0       2       0       0       0         Single Payment Scheme       30       22       29       25       36       29         Total other related outputs       53       33       47       34       65       41	Net margin over all costs	-47	-53	-36	-46	-102	-74	
LFA and agri-environmental payments       20       11       16       9       28       12         Organic Farming Scheme Payment       4       0       2       0       0       0         Single Payment Scheme       30       22       29       25       36       29         Total other related outputs       53       33       47       34       65       41	Other related outputs (ORO)							
Organic Farming Scheme Payment       4       0       2       0       0       0         Single Payment Scheme       30       22       29       25       36       29         Total other related outputs       53       33       47       34       65       41	• • •	20	11	16	9	28	12	
Single Payment Scheme         30         22         29         25         36         29           Total other related outputs         53         33         47         34         65         41		4	0		0	0	0	
Total other related outputs 53 33 47 34 65 41		30	22	29	25	36	29	
NM over all costs (inc. ORO) 6 -20 11 -12 -37 -33	- ·	53	33	47	34	65	41	
- 111 - 12 - 11 - 12 - 13 - 13 - 13 - 13	NM over all costs (inc. ORO)	6	-20	11	-12	-37	-33	

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the ratio of livestock units per enterprise and the proportion of the farm area in forage production

<sup>#</sup> Includes unpaid labour, imputed rent and interest on tenants capital

<sup>\*\*</sup> Conventional data are from whole farm analysis clustered conventional farms

Table 14 Summary of organic and conventional crop gross, net margins (£/ha, 2012/13, full samples)

Crop Enterprise	Win Wh		Spr Wh	_	Spr Bar	_	Win Oa	
	Org	Conv	Org	Conv	Org	Conv	Org	Conv
Number of enterprises	29	212	13	10	40	111	16	30
Average farm area - actual ha	273	217	324	220	316	181	215	204
Average business size (ESU)	168	152	191	182	159	107	132	110
Area of crop grown (ha.)	41	74	24	21	28	17	17	18
Total production (tonnes/units)	120	521	65	87	76	91	62	111
Yield tonnes/units per hectare	3.0	7.1	2.7	4.2	2.7	5.2	3.7	6.3
Crop Value (£ per tonne/unit)	286	179	302	219	262	178	259	176
Enterprise output (£/ha)								
Revenue	747	1233	739	844	601	794	858	1048
Feed used on farm	99	31	88	65	110	141	106	60
Straw	61	59	36	32	70	87	68	83
Total enterprise output	907	1323	864	941	781	1021	1032	1191
Variable Costs (£/ha)								
Seeds	91	69	93	94	85	71	78	57
Fertilisers	39	238	36	185	53	152	56	165
Crop protection	5	200	4	117	4	98	4	98
Other crop costs	24	36	17	34	38	32	26	37
Total variable costs	159	542	149	429	180	353	163	357
Gross margin (£/ha)	747	780	715	512	601	668	869	834
Fixed Costs \$ (£/ha)								
Labour	74	61	161	19	82	43	62	38
Power and machinery	446	417	480	366	480	479	534	391
Land and buildings	50	60	52	31	51	56	41	37
General farm costs	76	79	77	74	76	83	99	79
Rent and finance	90	96	81	89	118	70	161	83
Total fixed costs	736	714	851	578	808	731	897	629
Total actual costs	896	1256	1000	1007	988	1084	1061	985
Net margin over actual costs (£/ha)	11	67	-136	-66	-207	-63	-29	205
Total imputed costs#	158	210	179	187	113	194	214	202
Total costs including imputed	1054	1466	1179	1195	1102	1278	1275	1187
Net margin over all costs (£/ha)	-147	-143	-315	-254	-320	-257	-243	4
Other related outputs (ORO)								
LFA and agri-environment	106	85	155	116	138	80	131	84
Organic Farming Scheme	3	0	1	0	2	0	0	0
Single Payment Scheme	181	186	181	189	179	177	165	156
Total other related outputs	290	271	338	305	319	256	297	241
NM over all costs (inc. ORO) (£/ha)	143	128	23	52	-1	-1	54	245

Table 14 cont'd

Crop Enterprise	Spring	g Oats	Feed	Beans	Pota	toes		rket den
	Org	Conv	Org	Conv	Org	Conv	Org	Conv
Number of enterprises	23	8	19	33	6	19	9	11
Average farm area - actual ha	318	191	341	270	183	188	208	279
Average business size (ESU)	116	81	163	181	253	190	292	328
Area of crop grown (ha.)	26	8	30	23	17	15	31	28
Total production (tonnes/units)	74	35	49	96	398	478	-	-
Yield tonnes/units per hectare	2.8	4.4	1.6	4.2	23.9	31.3	_	-
Crop Value (£ per tonne/unit)	253	175	319	278	252	221	-	-
Enterprise output (£/ha)								
Revenue	664	652	425	1128	6012	6898	9411	2024
Feed used on farm	55	124	89	27	15	11	0	0
Straw	55	100	3	1	0	0	0	0
Total enterprise output	773	876	517	1156	6027	6909	9411	2024
Variable Costs (£/ha)								
Seeds	75	63	87	80	1404	678	712	296
Fertilisers	36	125	20	66	5	458	22	131
Crop protection	1	63	3	146	216	528	78	155
Other crop costs	45	44	15	25	819	333	1168	248
Total variable costs	156	296	125	317	2445	1996	1980	830
Gross margin (£/ha)	617	581	392	839	3582	4913	7431	1194
Fixed Costs \$ (£/ha)								
Labour	121	8	56	66	488	580	1635	453
Power and machinery	451	415	326	379	1272	957	1890	334
Land and buildings	42	35	54	49	81	66	142	59
General farm costs	53	65	61	77	140	126	140	133
Rent and finance	55	75	81	80	337	112	242	150
Total fixed costs	721	597	577	650	2318	1841	4048	1129
Total actual costs	877	893	703	967	4763	3837	6028	1959
Net margin over actual costs (£/ha	-104	-17	-186	188	1264	3072	3383	65
Total imputed costs#	114	156	131	232	384	651	614	338
Total costs including imputed	991	1049	833	1199	5147	4488	6643	2297
Net margin over all costs (£/ha)	-218	-173	-316	-43	880	2421	2768	-273
Other related outputs (ORO)								
LFA and agri-environment	119	89	104	74	147	82	202	78
Organic Farming Scheme	3	0	0	0	0	0	0	0
Single Payment Scheme	189	181	189	186	137	195	159	201
Total other related outputs	311	270	293	260	285	277	360	279
NM over all costs (inc. ORO) (£/ha	93	97	-24	217	1164	2698	3129	6

<sup>\$</sup> Fixed costs are allocated to enterprise according to crop area as a % of total farm area

<sup>#</sup> Includes unpaid labour, imputed rent and interest on tenants capital

# 4. Benchmark costs of production

Detailed cost of production data for dairy and sheep are shown in Appendix 3 (page 87), but summary data are shown in Table 15 to Table 16.

Cost of production data are presented for cropping and dairy enterprises in England and Wales, (as in 2011/12, there were insufficient data to present beef and sheep results). Comparable conventional farm data were also calculated and represents results for all farms for which costs of production data were collected. The clustering approach used for selecting comparable conventional farms for the whole-farm data presented in this report could not be used in this case. The England and Wales samples use enterprise data from conventional farms that were part of clusters for the whole farm analysis.

The cost of production data are calculated according to standard procedures whereby the variable costs relate to actual enterprise costs while the forage costs are apportioned according to the weighting of the livestock enterprise on the basis of livestock units associated with each livestock enterprise. This method is also carried out for allocating the fixed/overhead costs and other outputs, except that there is a further adjustment to account for the weighting of any arable enterprises within the whole farm system. Here, values are allocated on the basis of livestock units and the percentage area that is utilised by the livestock enterprises as a whole. This method assists in preventing the allocation of arable costs to the livestock enterprises. All outputs and costs are then divided by the unit of production (litres for milk, tonnes of yield for arable).

To fully reflect costs and put businesses on a comparable basis with respect to use of own labour, land and capital resources, imputed values are estimated for unpaid labour (farmer/spouse/other), interest on the farmer's share of tenant's capital (the total on-farm value of buildings, machinery, livestock and milk quota calculated at an interest rate of 6%) and imputed rent (rental value of owner occupied land excluding buildings). These costs are allocated on the same basis as for other fixed costs described above.

Organic variable costs are often lower than conventional due to a lower level of input usage, though fixed costs are often higher per unit of production due to lower physical production over which to spread these costs. (Whole farm data, presented elsewhere in this report does not show a strong pattern of organic farms having higher fixed costs). Although the total cost of production can be higher on organic systems, these are usually off-set by higher levels of support payments.

#### 4.1 Dairy enterprise production costs

Three different samples of data were available to calculate dairy costs of production. The Defra dataset for England and Wales provided data from 42 organic and 143 comparable conventional holdings, as well as an identical sample of 39 organic and 65 conventional for 2011/12 and 2012/13. The England and Wales data is summarised in Table 15; more detailed results are shown in Appendix 3 starting on page 87.

#### **England & Wales Identical Sample**

The identical sample data indicated a decreased milk yield for both organic and conventional holdings, with enterprise output rising slightly for both conventional and organic farms. However, both organic and conventional variable costs were also higher, as were fixed costs. Overall, the organic and conventional net margins (excluding support payments) were lower, though the inclusion of support payments allows the organic margin to remain positive whilst the conventional margin is negative.

#### **England & Wales Full Sample**

The full sample indicates a similar pattern of greater organic output but higher variable and fixed costs, resulting in a similar net margin between sectors.

Table 15 Summary of costs of production data for milk (ppl, 2011/12 and 2012/13, identical and full samples)

Sample Type		Identica	Identical Sample Full Sampl				
Herd characteristics	Orga	nic	Convent	ional**	Orga	Conv.**	
Year	2011/12	2012/13	2011/12	2012/13	2011/12	2012/13	2012/13
Number of herds	39	39	65	65	45	42	143
Average size of herd (dairy cows)	139	129	131	133	134	124	120
Average milk yield (litres per cow)	6314	6078	7800	7508	6315	6049	7397
Average farm size (effective ha)	157	159	145	145	152	168	129
Average size of the farm business (ESU)	163	154	167	168	156	153	151
Enterprise output (pence per litre)							
Milk disposals	31.9	33.7	27.9	28.5	31.8	33.8	28.2
Other output less transfers in	-1.3	-1.4	-1.9	-1.8	-1.4	-1.5	-1.3
Dairy outputs	30.6	32.3	26.0	26.7	30.4	32.3	26.9
Variable Costs							
Concentrates	9.1	9.9	7.9	9.2	9.1	10.0	9.1
Other feed and keep	0.8	0.8	0.3	0.4	0.8	0.8	0.5
Other livestock costs - dairy	3.7	4.5	3.1	3.3	3.8	4.6	3.4
Total variable costs	13.6	15.2	11.3	12.9	13.7	15.4	12.9
Herd replacement	1.1	1.1	0.8	0.9	1.2	1.1	0.9
Forage variable costs	0.5	0.4	1.3	1.5	0.5	0.4	1.5
Gross margin including forage costs	15.4	15.6	12.5	11.4	15.1	15.4	11.6
Fixed Costs\$							
Labour	3.1	3.7	2.0	2.6	2.9	3.8	2.2
Power and machinery	4.3	5.1	3.4	3.8	4.4	5.1	4.0
Land and buildings	1.1	1.4	0.9	1.0	1.1	1.4	1.0
General farm costs	1.7	1.9	1.4	1.5	1.7	1.9	1.5
Rent and finance	1.4	1.3	1.0	1.1	1.4	1.3	0.9
Total fixed costs	11.5	13.4	8.7	9.8	11.5	13.5	9.6
Total actual costs	26.7	30.2	22.2	25.1	26.7	30.4	24.9
Net margin over actual costs	3.9	2.1	3.8	1.6	3.6	1.9	2.0
Total imputed costs#	4.2	4.9	3.5	3.7	4.4	4.9	3.8
Total costs including imputed	30.9	35.1	25.7	28.8	31.1	35.3	28.7
Net margin over all costs	-0.3	-2.8	0.3	-2.1	-0.7	-3.0	-1.8
Other related outputs (ORO)							
Agri-environment payments (exc OFS)	0.8	1.0	0.2	0.2	0.8	1.1	0.2
Organic Farming Scheme Payment	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Single Payment Scheme	0.2	0.2	0.4	0.3	0.2	0.3	0.3
Byproducts & forage	2.5	2.5	1.6	1.4	2.5	2.7	1.6
Total other related outputs	3.5	3.8	2.1	1.9	3.5	4.1	2.1
NM over all costs (inc. ORO)	3.2	1.0	2.5	-0.2	2.8	1.1	0.3
\$ Fixed costs are proportioned to enterprise a					2.0	1.1	0.3

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the ratio of livestock units

per enterprise and the proportion of the farm area in forage production

<sup>#</sup> Includes unpaid labour, imputed rent and interest on tenants capital

<sup>\*\*</sup> Conventional data are from whole farm analysis clustered conventional farms

# 4.2 Cropping enterprise production costs

Costs of production data for crops are based on net margin data per hectare converted to per tonne output figures. In general the data shows organic gross margins to be higher due to lower input costs, but higher organic fixed costs due to lower production yields. Overall however, organic net margins per tonne are often higher than conventional levels, especially with the inclusion of support payments.

Table 16 Summary of organic and conventional crop costs of production (£/t, 2012/13, full samples)

Crop Enterprise	Winter Wheat		Spring Wheat		Spring Barley		Winter Oats	
	Org	Conv	Org	Conv	Org	Conv	Org	Conv
Number of enterprises	29	212	13	10	40	111	16	30
Average farm area - actual ha	273	217	324	220	316	181	215	204
Average business size (ESU)	168	152	191	182	159	107	132	110
Area of crop grown (ha.)	41	74	24	21	28	17	17	18
Total production (tonnes/units)	120	521	65	87	76	91	62	111
Yield tonnes/units per hectare	3.0	7.1	2.7	4.2	2.7	5.2	3.7	6.3
Crop Value (£ per tonne/unit)	286	179	302	219	262	178	259	176
Enterprise output (£/t)	£/t	£/t	£/t	£/t	£/t	£/t	£/t	£/t
Revenue	253	174	270	203	221	151	231	166
Feed used on farm	34	4	32	16	41	27	28	9
Straw	20	8	13	8	26	17	18	13
Total enterprise output	307	187	315	226	288	195	277	189
Variable Costs (£/t)								
Seeds	31	10	34	23	31	14	21	9
Fertilisers	13	34	13	44	20	29	15	26
Crop protection	2	28	1	28	2	19	1	16
Other crop costs	8	5	6	8	14	6	7	6
Total variable costs	54	77	54	103	66	67	44	57
Gross margin (£/t)	253	110	261	123	221	127	233	133
Fixed Costs \$ (£/t)								
Labour	25	9	59	5	30	8	17	6
Power and machinery	151	59	175	88	177	91	143	62
Land and buildings	17	8	19	7	19	11	11	6
General farm costs	26	11	28	18	28	16	27	13
Rent and finance	30	14	30	21	44	13	43	13
Total fixed costs	249	101	311	139	298	139	241	100
Total actual costs	303	178	365	242	364	206	285	157
Net margin over actual costs (£/t)	4	9	-50	-16	-76	-12	-8	33
Total imputed costs#	53	30	65	45	42	37	58	32
Total costs including imputed	356	207	430	287	406	243	343	189
Net margin over all costs (£/t)	-50	-20	-115	-61	-118	-49	-65	1
Other related outputs (ORO)								_
LFA and agri-environment	36	12	57	28	51	15	35	13
Organic Farming Scheme	1	0	1	0	1	0	0	0
Single Payment Scheme	61	26	66	46	66	34	44	25
Total other related outputs	98	38	123	73	118	49	80	38
NM over all costs (inc. ORO)	48	18	8	12	0	0	14	39

<sup>\$</sup> Fixed costs are allocated to enterprise according to crop area as a % of total farm area

<sup>#</sup> Includes unpaid labour, imputed rent and interest on tenants capital

Table 16 cont'd

Crop Enterprise	Spring	g Oats	Feed	Beans	Potatoes		
	Org	Conv	Org	Conv	Org	Conv	
Number of enterprises	23	8	19	33	6	19	
Average farm area - actual ha	318	191	341	270	183	188	
Average business size (ESU)	116	81	163	181	253	190	
Area of crop grown (ha.)	26	8	30	23	17	15	
Total production (tonnes/units)	74	35	49	96	398	478	
Yield tonnes/units per hectare	2.8	4.4	1.6	4.2	23.9	31.3	
Crop Value (£ per tonne/unit)	253	175	319	278	252	221	
Enterprise output (£/t)	£/t	£/t	£/t	£/t	£/t	£/t	
Revenue	234	147	264	271	252	220	
Feed used on farm	19	28	55	6	1	0	
Straw	19	23	2	0	0	0	
Total enterprise output	273	197	321	278	252	221	
Variable Costs (£/t)							
Seeds	27	14	54	19	59	22	
Fertilisers	13	28	12	16	0	15	
Crop protection	0	14	2	35	9	17	
Other crop costs	16	10	10	6	34	11	
Total variable costs	55	67	78	76	102	64	
Gross margin (£/t)	218	131	244	202	150	157	
Fixed Costs \$ (£/t)							
Labour	43	2	35	16	20	19	
Power and machinery	159	94	203	91	53	31	
Land and buildings	15	8	33	12	3	2	
General farm costs	19	15	38	19	6	4	
Rent and finance	19	17	50	19	14	4	
Total fixed costs	254	135	359	156	97	59	
Total actual costs	309	201	437	233	199	123	
Net margin over actual costs (£/t)	-37	-4	-115	45	53	98	
Total imputed costs#	40	35	81	56	16	21	
Total costs including imputed	350	237	518	288	215	143	
Net margin over all costs (£/t)	-77	-39	-197	-10	37	77	
Other related outputs (ORO)						_	
LFA and agri-environment	42	20	64	18	6	3	
Organic Farming Scheme	1	0	0	0	0	0	
Single Payment Scheme	67	41	117	45	6	6	
Total other related outputs	110	61	182	63	12	9	
NM over all costs (inc. ORO)	33	22	-15	52	49	86	

<sup>\$</sup> Fixed costs are allocated to enterprise according to crop area as a % of total farm area # Includes unpaid labour, imputed rent and interest on tenants capital

### 5. Appendices

Appendix 1	Detailed wh	ole farm results	28			
	Table A1	Cropping	28			
	Table A2	Horticulture	36			
	Table A3	Dairy	44			
	Table A4	LFA cattle and sheep	52			
	Table A5	Lowland cattle and sheep	60			
	Table A6	Mixed	68			
Appendix 2	Detailed gro	ss and net margin results	76			
Appendix 3	Detailed cos	its of production results	87			
Appendix 4	The farm cla	assification system	89			
Appendix 5	Definition o	f terms and abbreviations	90			
Appendix 6	Numbers of	Numbers of farms to be sampled/recruited by type and region				
Appendix 7	Organic and conventional farm comparisons					

### **Appendix 1 Detailed Whole Farm Results**

Table A1.1 CROI	PPING FARM RESULT										
OUTPUTS AND INP	PUTS	I	Identical	sample			Full so	ample			
	_	2011/	/12	2012/	/13	2011/	/12	2012/	13		
Sample number		17		17		21		20			
Average farm size (UA	AA)	281		280		247		254			
Business size (ESU)		194	ļ	190	)	175	í	175			
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha		
Dairy -	milk output	0	0	0	0	0	0	0	0		
	cattle	0	0	0	0	0	0	0	0		
	net quota	0	0	0	0	0	0	0	0		
	valuation change	0	0	0	0	0	0	0	0		
Other cattle	output	2454	9	3445	12	8779	36	4148	16		
CI	valuation change	1504	5	1972	7	1428	6	1484	6		
Sheep -	total output	0	0	0	0	170	1	0	0		
Other livestock	valuation change	$0 \\ 0$	0	0	0	114 570	0 2	0	0		
Arable crops	output	299170	1065	278700	994	266680	1080	246764	973		
Arable crops	protein/energy support	1289	5	0	0	1075	4	0	0		
By products forage and		22996	82	23598	84	18718	76	20905	82		
	rmhouse benefit value)	53862	192	50404	180	51030	207	45871	181		
Miscerianeous (mei. 10	- organic grants	1867	7	1253	4	1511	6	1065	4		
	- other agri-env.payments	22961	82	27117	97	19916	81	24720	97		
	- subsidy/single farm paymer		216	56450	201	53456	217	50980	201		
	FARM REVENUE	466829	1661	442940	1579	423447	1715	395936	1561		
INPUTS											
Feeds	purchased concentrates	191	1	272	1	262	1	275	1		
D 1 1011 T	homegrown concentrates	535	2	668	2	1339	5	568	2		
Purchased fodder, Tac	_	74 244	0	29	0	60	0	99 264	0		
Veterinary and medicity Other livestock costs	nes	244 379	1 1	218 643	1 2	305 1551	1 6	264 674	1 3		
Seeds -	purchased and homegrown	28414	101	33138	118	27205	110	30083	119		
Fertilisers	purchased and nomegrown	10210	36	9913	35	6794	28	8500	34		
Crop protection		3029	11	4039	14	2596	11	3457	14		
Other crop costs		31512	112	24158	86	25717	104	20937	83		
Labour	paid incl. paid management	31970	114	36996	132	35304	143	33066	130		
240041	casual	14295	51	17589	63	13318	54	15656	62		
Machinery	contract	44599	159	47022	168	32687	132	41582	164		
	repairs	21069	75	19941	71	19965	81	17880	71		
	fuels	23117	82	19209	68	22283	90	17597	69		
General farming costs		34544	123	34347	122	31320	127	32509	128		
Land expenses		20269	72	12550	45	16859	68	11416	45		
Rent	_	26209	93	26459	94	27994	113	23258	92		
	FARM EXPENSES	290659	1034	287191	1024	265560	1076	257818	1017		
Excess of revenue over	er expenses	176170	627	155749	555	157886	640	138117	545		
Notional inputs											
- rental value/imputed	rent	43490	155	46194	165	32157	130	41937	165		
- unpaid labour		3011	11	4671	17	2437	10	3971	16		
- machinery depreciat	ion	31260	111	35130	125	30247	123	32629	129		
		77761	277	85995	307	64842	263	78536	310		
NET FARM INCOME	E (excl. BLSA)	98409	350	69754	249	93045	377	59581	235		
NET FARM INCOME	E (incl. BLSA)	98804	352	69754	249	94785	384	59603	235		

Table A1.1 CROP	PING FARM RESULTS	S		(	CONVI	ENTION	<b>A</b> L		
OUTPUTS AND INP	UTS	Identical .		! sample		Full sa		ımple	
	_	2011/	12	2012	/13	2011/	12	2012/	13
Sample number		144		144		180		178	
	Average farm size (UAA)		,	235		221		211	
Business size (ESU)		174		172		174		158	
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
Dairy -	milk output	0	0	0	0	0	0	12	0
	cattle	0	0	0	0	0	0	2	0
	net quota	0	0	0	0	0	0	0	0
0.1	valuation change	0	0	0	0	0	0	-4	0
Other cattle	output	5743	24	5197	22	7032	32	4825	23
C1	valuation change	174	1	910	4	430	2	687	3
Sheep -	total output	2408	10	2536	11	1948	9	2110	10
Other livestock	valuation change	597 172	3	260 214	1 1	298 1165	1 5	292 412	1 2
Arable crops	output	254476	1080	235692	1002	247541	1119	221710	1050
Arable crops	protein/energy support	242	1000	233092	0	187	1119	0	0
By products forage and		20147	85	16981	72	19706	89	15128	72
Miscellaneous (incl. far		39717	169	42025	179	35078	159	39225	186
minecialicous (mei. iai	- organic grants	0	0	0	0	0	0	0	0
	- other agri-env.payments	10717	45	9283	39	8383	38	8092	38
	- single payment scheme	48671	207	45364	193	44595	202	40990	194
	FARM REVENUE	383064	1625	358462	1524	366362	1656	333480	1580
INPUTS									
Feeds	purchased concentrates	1531	6	1776	8	2149	10	1622	8
	homegrown concentrates	1197	5	1718	7	1568	7	1362	6
Purchased fodder, Tack		212	1	134	1	215	1	97	0
Veterinary and medicin	ies	596	3	531	2	361	2	469	2
Other livestock costs		1409	6	1669	7	1456	7	1684	8
Seeds -	purchased and homegrown	13839	59	15294	65	16005	72	14984	71
Fertilisers		35013	149	41092	175	31361	142	37737	179
Crop protection		28714	122	34170	145	26951	122	31505	149
Other crop costs		9154	39	9037	38	10815	49	9089	43
Labour	paid incl. paid management		73	18277	78	20656	93	17393	82
37.11	casual	3300	14	2802	12	3737	17	4897	23
Machinery	contract	22417	95	21792	93	19833	90	19499	92
	repairs	14466	61	13117	56 72	13746	62	11976	57 71
Company 1 formating a south	fuels	15671 26336	66 112	17053 27238	72	15774 25514	71 115	15014 25012	71 119
General farming costs Land expenses		20330 9441	40	9238	116 39	10044	45	8190	39
Rent		22249	94	21117	90	16481	74	19726	93
Kent	FARM EXPENSES	222772	945	236053	1004	216666	979	220255	1044
Excess of revenue ove		160292	680	122409	520	149696	677	113225	536
Notional inputs - rental value/imputed - unpaid labour - machinery depreciation		30355 5137 29531 65023	129 22 125 276	32821 5178 31396 69395	140 22 133 295	34183 5256 28335 67774	155 24 128 306	28481 4614 28961 62056	135 22 137 294
NET FARM INCOME	(excl. BLSA)	95268	404	53014	225	81923	370	51168	242
NET FARM INCOME	(incl. BLSA)	95991	407	53444	227	82518	373	51522	244

## Table A1.2 CROPPING FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LA	BOUR &					F. II -	1 -	
INCOME MEACUDES	201	Identica	•	2/12	Full sample 2011/12 2012/13			
INCOME MEASURES	£/farm	1/12 £/ha	£/farm	2/13 £/ha	£/farm	£/ha	£/farm	£/ha
NET FARM INCOME (excl. BLSA)	98409	350	69754	249	93045	377	59581	235
plus unpaid labour (excludes farmer and spouse)	3011	11	4671	17	2437	10	3971	16
plus imputed rent and rental value	42574	152	45175	161	31343	127	41011	162
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottages		2	543	2	725	3	462	2
minus insurance repairs & net interest payments	6582	23	9443	34	5609	23	9708	38
minus build & works depreciation	8231	29	9163	33	5965	24	8083	32
minus non-agric activity and director costs	4608	16	3031	11	4004	16	2577	10
FARM BUSINESS INCOME	124029	441	97419	347	110520	448	83734	330
LABOUR USE AND LABOUR INCOMES	• •		2.2		0.4		2.0	
Annual Labour Units per farm	2.8		3.2		3.1		3.0	
of which farmer & spouse	0.7		0.7		0.8		0.7	
of which paid family labour	0.1		0.1		0.1		0.1	
of which unpaid labour	0.1		0.2		0.1		0.2	
Notional value of farmer/spouse labour	12499		13027		15500		14035	
Value of paid family labour	3168		2797		2655		2377	
Labour income per Annual Labour Unit	45774		34355		40920 86721		31691	
Family labour income per Family Work Unit	108800 106		69430 90		2593		55083 76	
Value of paid managerial input	100		90		2393		70	
TENANT'S CAPITAL								
Machinery	201584	717	209568	747	197988	802	192933	761
Livestock	6183	22	8118	29	17026	69	8821	35
Crops	53376	190	50792	181	46774	189	45353	179
Stores	31620	113	35312	126	31056	126	31015	122
TOTAL	292763	1042	303790	1083	292845	1186	278122	1097
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value
Land and Property	2447275	2657807	2657807		1732283	1874545	2467316	
Buildings, improvements and fixtures	69862	74077	74077	82772	48658	53405	65367	73003
Machinery	198902	204265	205148	213987	191857	204120	187646	198221
Livestock	5234	7132	7132	9104	15377	18675	8067	9574
Produce and goods in store	86484	107476	108547	107711	78501	96809	94935	95244
Quotas and single payment asset value	73943	79436	79436	74801	63819	69903	71891	67637
Credit balances	147013	97444	110028		137208	102468	99434	96853
TOTAL	3028713	3227638	3242175	3545586	2267702	2419924	2994657	3276018
EXTERNAL LIABILITIES								
Long and medium term loans	148702	239009	239027	223354	123711	199198	243545	229227
Short term loans	48907	76739	80635	57494	53813	78950	69106	53712
Overdrafts	24383	24009	24105	17354	22238	20211	28769	26071
TOTAL	221992	339757	343767	298202	199763	298358	341421	309010
NET WORTH	2806721	2887880	2898408	3247384	2067939	2121566	2653236	2967008
RETURNS TO CAPITAL								
Owner Equity (%)	89.5		91.6		87.7		90.6	
FBI/Net worth (%)	4.4		3.4		5.3		3.2	
Management and Investment Income	86410		56816		81878		45644	
Return on tenant's capital (%)	29.5		18.7		28.0		16.4	
Return on all capital (%)	2.9		1.8		3.6		1.5	

# Table A1.2 CROPPING FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LA	BOUR &					F 11	7		
INCOME MEACHDEC	201	Identica	-	2/12	Full sample 2011/12 2012/13				
INCOME MEASURES	£/farm	1/12 £/ha	£/farm	2/13 £/ha	£/farm	£/ha	£/farm	2/13 <b>£/ha</b>	
NET EADM INCOME (aval. DI SA)	95268	<b>3/11a</b> 404	53014	225	81923	370	51168	242	
NET FARM INCOME (excl. BLSA) plus unpaid labour (excludes farmer and spouse)	5137	22	5178	223	5256	24	4614	242	
plus imputed rent and rental value	29202	124	31678	135	33001	149	27626	131	
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0	
minus imputed rent on farmhouse & farm cottage		3	683	3	507	2	798	4	
minus insurance repairs & net interest payments	7716	33	7253	31	4274	19	6522	31	
minus build & works depreciation	6741	29	6950	30	7399	33	6126	29	
minus non-agric activity and director costs	2134	9	1566	7	1767	8	1406	7	
FARM BUSINESS INCOME	112323	477	73420	312	106233	480	68559	325	
THE POST (ESS IT (COME	112020	• , ,	70.20	012	100200	100	0000	020	
LABOUR USE AND LABOUR INCOMES									
Annual Labour Units per farm	2.0		2.0		2.2		2.1		
of which farmer & spouse	0.8		0.8		0.8		0.8		
of which paid family labour	0.1		0.1		0.1		0.1		
of which unpaid labour	0.2		0.3		0.3		0.2		
Notional value of farmer/spouse labour	15591		15799		15511		16420		
Value of paid family labour	1378		1490		1601		1538		
Labour income per Annual Labour Unit	49839		29321		43206		27929		
Family labour income per Family Work Unit	84439		37370		74264		35901		
Value of paid managerial input	221		246		257		273		
TENANT'S CAPITAL									
Machinery	157936	670	169154	719	148120	670	157329	745	
Livestock	12372	52	13931	59	12484	56	12955	61	
Crops	118445	503	119227	507	95084	430	107478	509	
Stores	47819	203	47698	203	44469	201	45729	217	
TOTAL	336572	1428	350010	1488	300157	1357	323491	1533	
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing	
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value	
Land and Property			1721786			1910641	1518740		
Buildings, improvements and fixtures	63087	63482	63482	65456	60913	67256	54506	57591	
Machinery	151037	164835	164893	173414	141827	154412	153159	161499	
Livestock	11627	13117	13113	14748	11901	13067	12276	13634	
Produce and goods in store	170468	184592	186993	168282	139840	160845	168516	154664	
Quotas and single payment asset value	57649	63446	63446	59950	53156	57869	57441	54203	
Credit balances	92104	108389	108512	122450		137376		104535	
TOTAL	2127582	2315978	2322225	2594600	2308082	2501466	2059443	2307980	
EXTERNAL LIABILITIES	120011	125101	125101	125700	7.4701	00270	110000	115004	
Long and medium term loans		135101		135789	74791	89279		115894	
Short term loans	54053	59623	60572	57249	39839	45838	54083	49115	
Overdrafts	35727	34799	34799	44954	28433	25991	32859	39800	
TOTAL	219591	229523	230472	237991	143062	161108	197168	204809	
NET WORTH	1907990	2086456	2091753	2356608	2165020	2340358	1862276	2103171	
DETRIBUTE TO CARITA									
RETURNS TO CAPITAL	00.1		00.0		02.6		01.1		
Owner Equity (%)	90.1		90.8		93.6		91.1		
FBI/Net worth (%)	5.9		3.5		4.9		3.7		
Management and Investment Income	80620		37891		67264		35375		
Return on tenant's capital (%)	24.0		10.8		22.4		10.9		
Return on all capital (%)	3.8		1.6		2.9		1.7		

## Table A1.3 CROPPING FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

LAND UTILISATIO	ON AND CROP PERFORMA		4:1	1 -			Full sa	1 -	
I AND UTILICATIO	N hostones non form	2011/12		<i>sample</i> 2012/13		2011/12		2012/13	
Tillage - maincrops	ON - hectares per farm Wheat	43.8		49.3		48.0		44.5	13
rmage - manicrops	Barley	51.1		36.5		38.7		34.8	
	Other cereals	26.4		32.6		36.7 14.4		27.7	
		0.0		0.0		0.0		0.0	
	Oil seed rape Linseed	0.0		0.0		0.0		0.0	
	Peas/Beans	33.7				28.1		20.1	
				23.6					
	Potatoes	5.6		4.7		5.1		4.0	
	Sugarbeet	0.0		0.0		0.0		0.0	
	Horticulture	11.3		12.2		10.5		11.8	
	Other crops	10.1		16.1		19.3		15.1	
	Total cropping	181.9		175.8		164.1		158.7	
	Set-aside	0.0		0.0		5.9		0.0	
Tillage - fodder		2.0		3.4		3.3		2.9	
Grassland	Grazing, hay and silage	40.3		49.1		42.8		47.2	
Fallow and land let		56.8		52.2		30.7		44.9	
Rough grazing	Effective	0.0		0.0		0.0		0.0	
	al area (Effective ha.)	281.0		280.5		246.9		253.6	
Woods, roads and buil		18.7		18.8		17.1		18.8	
TOTAL AREA (Act	ual ha.)	299.7		299.2		264.0		272.4	
effective forage area		42.3		52.5		46.1		50.3	
Bare land and forage h	nired in	1.0		2.0		0.8		1.9	
CROP PERFORMA	NCE *								
- Yields (tonnes per l	nectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat	•	4.3	13	2.9	13	4.5	17	2.9	15
Barley		3.8	12	2.6	10	4.1	15	2.5	12
Oilseed Rape		_	0	_	0	_	0	_	0
Potatoes		_	2	_	2	_	3	_	2
Sugar Beet		-	0	-	0	-	0	-	0
- Prices (£ per tonne)	*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		250	13	308	13	250	17	305	15
Barley		238	12	282	10	236	15	278	12
Oilseed Rape		-	0	-	0	-	0	-	0
Potatoes		-	2	-	2	-	3	-	2
Sugar Beet		_	0	-	0	-	0	-	0
<del>-</del>									

<sup>\*</sup> Yield and price data is implied

## Table A1.3 CROPPING FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

		Idei	ntical s	sample			Full sa	mple	
LAND UTILISATIO	N - hectares per farm	2011/12		2012/13		2011/1	2	2012/	13
Tillage - maincrops	Wheat	97.6		98.7		85.0		87.6	
	Barley	19.0		17.0		19.2		15.7	
	Other cereals	3.8		3.7		4.0		3.1	
	Oil seed rape	35.4		32.7		27.9		30.2	
	Linseed	4.1		3.7		1.7		3.0	
	Peas/Beans	6.9		6.8		5.8		6.2	
	Potatoes	2.9		3.0		3.9		2.7	
	Sugarbeet	5.8		6.3		9.2		5.2	
	Horticulture	4.0		3.7		5.5		4.0	
	Other crops	1.3		1.9		1.5		1.5	
	Total cropping	180.7		177.4		163.6		159.3	
	Set-aside	2.9		0.0		0.0		0.0	
Tillage - fodder		1.2		1.2		0.8		1.1	
Grassland	Grazing, hay and silage	22.1		22.5		17.6		21.0	
Fallow and land let		28.6		34.0		38.8		29.6	
Rough grazing	Effective	0.1		0.1		0.4		0.1	
Utilisable agricultura	l area (Effective ha.)	235.7		235.2		221.2		211.1	
Woods, roads and buil	dings	8.8		8.8		9.4		7.9	
TOTAL AREA (Actu	ıal ha.)	244.5		244.1		230.6		219.0	
effective forage area		24.0		24.4		19.5		22.7	
Bare land and forage h	ired in	0.5		0.6		0.9		0.5	
CROP PERFORMA	NCE *								
- Yields (tonnes per h	ectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		8.2	17	6.8	17	8.0	21	6.8	19
Barley		5.8	17	6.0	16	5.3	18	5.9	20
Oilseed Rape		4.1	17	3.2	17	4.2	20	3.1	19
Potatoes		43.3	6	28.4	6	41.0	9	27.1	8
Sugar Beet		67.6	7	58.8	7	72.3	12	56.9	8
- Prices (£ per tonne)	*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		156	17	182	17	156	21	183	19
Barley		164	17	178	16	160	18	177	20
Oilseed Rape		381	17	392	17	376	20	392	19
Potatoes		94	6	177	6	97	9	212	8
Sugar Beet		31	7	32	7	33	12	33	8

<sup>\*</sup> Yield and price data is implied

## Table A1.4 CROPPING FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

		Identical	sample		Full sample			
	201		2012	2/13	2011/12 2012			2/13
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0	0.0	0
Beef cows	2.9	4	4.0	5	5.4	7	4.1	5
Other cattle	4.7	9	5.2	10	9.9	18	5.1	10
Breeding sheep	1.8	16	2.0	18	4.1	38	1.7	16
Other sheep	0.0	0	0.0	0	0.2	3	0.0	0
Pigs	0.0	0	0.0	0	1.7	10	0.0	0
Poultry	0.0	0	0.0	0	0.0	2	0.0	0
Other livestock	0.0	1	0.0	1	0.0	1	0.0	1
TOTAL (L.U.)	9.4		11.2		21.4		10.9	
STOCKING RATES								
Stocking rate (LU per eff.ha)	0.0		0.0		0.1		0.0	
GLU/forage effective hectare*	0.2		0.2		0.5		0.2	
* for organic farms, pigs, poultry and other live  LIVESTOCK PERFORMANCE  - Yield*	stock are deem	ed to be gr	razing live	estock n	litres	n	litres	n
Milk yield/cow	-	0	-	0	-	0	-	0
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	-	0	-	0	-	0	-	0
Dairy calves	-	0	-	0	-	0	-	0
Dairy heifers in calf	-	0	-	0	-	0	-	0
Beef heifers in calf	-	0	-	0	-	0	-	1
Finished cattle	-	2	-	3	-	4	-	4
Beef store cattle 1-2 yrs	-	0	-	0	-	2	-	0
Beef stores <1 yr	-	0	-	1	-	0	-	1
Ewes	-	0	-	0	-	0	-	0
Ewe hoggs	-	0	-	0	-	0	-	0
Finished lambs	-	0	-	0	-	1	-	0
Store lambs	-	0	-	0	-	0	-	0
Finished Pigs	-	0	-	0	-	0	-	0
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	-	0	-	0	-	0	-	0
Wool (pence per kg)	-	0	-	0	-	0	-	0
Eggs (pence per dozen)	-	0	-	0	-	1	-	0

<sup>\*</sup> Yield and price data is implied

# Table A1.4 CROPPING FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

		Identical	sample		Full sample			
	201	1/12	2012	2/13	2011/12 2012/13			2/13
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0	0.0	0
Beef cows	3.0	4	3.1	4	2.4	3	2.7	4
Other cattle	5.9	11	5.6	11	7.5	13	5.7	10
Breeding sheep	3.8	36	4.5	44	3.2	30	3.9	39
Other sheep	1.3	27	1.7	33	1.1	24	1.7	32
Pigs	0.0	0	0.0	0	0.1	1	0.0	0
Poultry	0.0	1	0.0	1	0.8	49	0.0	4
Other livestock	0.1	2	0.2	0	0.0	1	0.1	2
TOTAL (L.U.)	14.1		15.0		15.2		14.2	
STOCKING RATES								
Stocking rate (LU per eff.ha)	0.1		0.1		0.1		0.1	
GLU/forage effective hectare*	0.1		0.1		0.1		0.1	
OLO/forage effective flectare.	0.0		0.0		0.8		0.0	
* for conventional farms, pigs, poultry and other livestock are deemed to be non-grazing livestock								
LIVESTOCK PERFORMANCE								
- Yield*	litres	n	litres	n	litres	n	litres	n
Milk yield/cow	-	0	-	0	-	0	-	1
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	-	0	-	0	-	0	-	0
Dairy calves	-	0	-	0	-	0	-	0
Dairy heifers in calf	-	0	-	0	-	0	-	0
Beef heifers in calf	-	1	-	0	-	1	-	1
Finished cattle	1047	12	1160	11	1002	13	1155	14
Beef store cattle 1-2 yrs	824	6	942	6	996	7	1152	8
Beef stores <1 yr	-	3	-	3	-	4	-	4
Ewes	-	3	-	3	88	5	-	4
Ewe hoggs	-	3	-	3	-	3	-	4
Finished lambs	80	14	81	11	82	12	80	13
Store lambs	72	5	-	4	68	7	72	5
Finished Pigs	-	0	-	0	-	0	-	0
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	-	0	-	0	-	0	-	1
Wool (pence per kg)	108	14	132	13	112	12	130	14
Eggs (pence per dozen)	-	0	-	0	-	2	-	0

<sup>\*</sup> Yield and price data is implied

Table A2.1 HORTICULTURE FARM RESULTS

Table A2.1 HORT										
OUTPUTS AND INP	UTS		Identical	sample			Full so	ımple		
	_	2011		2012	/13	2011		2012/13		
Sample number		10		10		15		14		
Average farm size (UA	AA)	61		61		25		54		
Business size (ESU)		108	3	108	3	146	5	102	2	
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	
Dairy -	milk output	0	0	0	0	0	0	0	0	
	cattle	0	0	0	0	0	0	0	0	
	net quota	0	0	0	0	0	0	0	0	
	valuation change	0	0	0	0	0	0	0	0	
Other cattle	output	18367	303	14633	240	1834	73	13518	252	
	valuation change	-3630	-60	1490	24	1424	57	1612	30	
Sheep -	total output	1664	27	-456	-7	2265	90	1835	34	
	valuation change	92	2	4517	74	74	3	3618	67	
Other livestock		3809	63	4075	67	2985	119	3255	61	
Arable crops	output	145210	2393	131211	2148	189173	7541	115893	2159	
	protein/energy support	29	0	0	0	20	1	0	0	
By products forage and		3301	54	1940	32	280	11	1710	32	
Miscellaneous (incl. fa	*	28631	472	31240	512	18415	734	23437	437	
	- organic grants	0	0	0	0	0	0	0	0	
	- other agri-env.payments	9358	154	7233	118	3939	157	5497	102	
	- subsidy/single farm paymer_		203	11434	187	4020	160	9783	182	
	FARM REVENUE	219147	3611	207315	3395	224427	8946	180157	3356	
INPUTS										
Feeds	purchased concentrates	2297	38	2716	44	1504	60	2936	55	
recus	homegrown concentrates	210	3	474	8	499	20	1106	21	
Purchased fodder, Tack	_	146	2	0	0	143	6	0	0	
Veterinary and medicir	-	1005	17	1222	20	556	22	1164	22	
Other livestock costs		2626	43	2879	47	975	39	2724	51	
Seeds -	purchased and homegrown	2951	49	4103	67	15773	629	5992	112	
Fertilisers	purchased and nomegrown	1500	25	2328	38	6065	242	1863	35	
Crop protection		4159	69	6152	101	2585	103	4465	83	
Other crop costs		50357	830	39793	652	45118	1798	30458	567	
Labour	paid incl. paid management	29292	483	29353	481	43331	1727	27036	504	
Lucoui	casual	11856	195	12712	208	19847	791	10273	191	
Machinery	contract	8317	137	5207	85	2782	111	4592	86	
1.1401111101	repairs	10306	170	7955	130	7292	291	6939	129	
	fuels	5549	91	7570	124	5083	203	7181	134	
General farming costs	14015	21407	353	21329	349	23990	956	18648	347	
Land expenses		7781	128	4953	81	6333	252	3919	73	
Rent		218	4	216	4	1361	54	563	10	
	FARM EXPENSES	159975	2636	148960	2439	183238	7304	129859	2419	
Excess of revenue ove	er expenses	59172	975	58355	956	41190	1642	50298	937	
NI-41 1 *										
Notional inputs - rental value/imputed	rent	31420	518	28225	462	18666	744	22391	417	
•	Tent									
- unpaid labour	on	4857	80	6033	99 265	3023	120	5238	98 250	
- machinery depreciati	OII -	15487 51764	255 853	16198 50455	265 826	10477 32166	418 1282	13824 41452	258 772	
		J170 <del>1</del>	055	50455	020	32100	1202	71732	112	
NET FARM INCOME	(excl. BLSA)	7408	122	7899	129	9024	360	8846	165	
NET FARM INCOME	(incl. BLSA)	9079	150	8343	137	9276	370	9263	173	

<b>Table A2.1 HORTICULTUR</b>	E FARM RESULTS
OUTPUTS AND INPUTS	1
	2011/
Sample number	52

OUTPUTS AND INPUTS			Identical	! sample		Full sample				
		2011		2012	/13	2011		2012/13		
Sample number	•	52	,	52	!	66	5	75		
Average farm size (UA	A)	35		35		22		35		
Business size (ESU)		109	9	99	)	14	1	93		
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	
Dairy -	milk output	0	0	0	0	0	0	0	0	
•	cattle	0	0	0	0	0	0	0	0	
	net quota	0	0	0	0	0	0	0	0	
	valuation change	0	0	0	0	0	0	0	0	
Other cattle	output	1160	33	2106	60	2218	102	1772	51	
	valuation change	1156	33	-125	-4	-267	-12	232	7	
Sheep -	total output	0	0	0	0	153	7	30	1	
	valuation change	0	0	0	0	77	4	0	0	
Other livestock		1073	30	1386	40	1828	84	1041	30	
Arable crops	output	324988	9233	289530	8282	396208	18185	217702	6239	
D1	protein/energy support	6	0	1020	0	7	0	1007	0	
By products forage and		1692	48	1038	30	709	33	1907	55 1066	
Miscellaneous (incl. far		56701 0	1611 0	53862 0	1541 0	46005	2112	37186 0	1066	
	<ul><li> organic grants</li><li> other agri-env.payments</li></ul>	2780	79	3332	95	0 780	0 36	2256	0 65	
	- single payment scheme	6848	195	6453	185	3990	183	6393	183	
	FARM REVENUE	396403	11262	357582	10228	451706	20733	268519	7695	
INPUTS								- 40		
Feeds	purchased concentrates	432	12	676	19	956	44	640	18	
D 1 10 11 TF 1	homegrown concentrates	724	21	646	18	31	1	595	17	
Purchased fodder, Tack		0	0	0	0	0	0	46	1	
Veterinary and medicin	ies	42	1	26	1	99 40 <b>5</b>	5	130	4	
Other livestock costs Seeds -	numahasad and hamasmarin	1833 27184	52 772	1239 25080	35 717	405 52354	19 2403	963 21573	28 618	
Fertilisers	purchased and homegrown	7624	217	7507	215	13458	618	7595	218	
Crop protection		12064	343	14648	419	7532	346	10957	314	
Other crop costs		110698	3145	87962	2516	83451	3830	55938	1603	
Labour	paid incl. paid management		1395	47715	1365	103960	4772	42139	1208	
Luodui	casual	58193	1653	55984	1601	44261	2032	33222	952	
Machinery	contract	2510	71	3276	94	3534	162	3945	113	
J	repairs	7589	216	8128	232	9083	417	6601	189	
	fuels	5582	159	5489	157	10699	491	4860	139	
General farming costs		23925	680	24796	709	41317	1896	21024	602	
Land expenses		3782	107	3169	91	7029	323	3137	90	
Rent	_	4185	119	4234	121	3323	153	3658	105	
	FARM EXPENSES	315473	8963	290576	8312	381494	17510	217023	6219	
Excess of revenue ove	r expenses	80930	2299	67006	1917	70212	3223	51496	1476	
Notional inputs										
- rental value/imputed	rent	11378	323	11732	336	7953	365	9900	284	
- unpaid labour		5270	150	5225	149	4115	189	4676	134	
- machinery depreciation	on	16458	468	16286	466	9268	425	12565	360	
7 1	•	33106	941	33243	951	21336	979	27140	778	
NET FARM INCOME	(evcl RISA)	47824	1359	33763	966	48876	2243	24356	698	
NET PARM INCOME	(CAUL DLDA)	4/024	1339	33/03	900	400/0	2243	24330	070	
NET FARM INCOME	(incl. BLSA)	47824	1359	33763	966	48938	2246	24376	699	

# Table A2.2 HORTICULTURE FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

		Identica	l sample		Full sample				
INCOME MEASURES	201	1/12	-	2/13	201		2012/13		
	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	
NET FARM INCOME (excl. BLSA)	7408	122	7899	129	9024	360	8846	165	
plus unpaid labour (excludes farmer and spouse)	4857	80	6033	99	3023	120	5238	98	
plus imputed rent and rental value	30738	506	28153	461	18191	725	22275	415	
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0	
minus imputed rent on farmhouse & farm cottages		0	0	0	0	0	0	0	
minus insurance repairs & net interest payments	4172	69	5941	97	3253	130	4388	82	
minus build & works depreciation	16209	267	14380	235	10938	436	10991	205	
minus non-agric activity and director costs	0	0	0	256	4646	185	0	0	
FARM BUSINESS INCOME	22622	373	21764	356	11401	454	20979	391	
LABOUR USE AND LABOUR INCOMES									
Annual Labour Units per farm	3.5		3.5		4.7		3.3		
of which farmer & spouse	1.0		1.0		1.1		1.1		
of which paid family labour	0.0		0.0		0.0		0.0		
of which unpaid labour	0.2		0.3		0.2		0.3		
Notional value of farmer/spouse labour	21887		22064		22294		23690		
Value of paid family labour	0		99		182		71		
Labour income per Annual Labour Unit	13027		13561		15185		13296		
Family labour income per Family Work Unit	-268		-24		4255		1593		
Value of paid managerial input	0		0		758		118		
TENANT'S CAPITAL									
Machinery	80826	1332	95550	1565	52147	2079	79553	1482	
Livestock	21835	360	24159	396	7794	311	25007	466	
Crops	21802	359	9334	153	10061	401	7827	146	
Stores	3692	61	4685	77	5000	199	6648	124	
TOTAL	128155	2112	133728	2190	75002	2990	119036	2217	
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing	
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value	
Land and Property	966266	1044434	1044434	1125123	571397	615483	892260	957291	
Buildings, improvements and fixtures	208782	178995	178995	160694	148092	127886	134625	121779	
Machinery	74651	87001	87001	104099	50588	53707	73723	85383	
Livestock	22742	20929	20929	27390	6906	8682	22173	27842	
Produce and goods in store	116170	110691	110691	126133	69235	63980	84511	95775	
Quotas and single payment asset value	14850	16820	16820	15525	5438	6289	14483	13289	
Credit balances	46822	93394	93394	97592	62176	95746	78942	80556	
TOTAL	1450283	1552263	1552263	1656556	913833	971772	1300717	1381915	
EXTERNAL LIABILITIES									
Long and medium term loans	125860	141655	141655	130707	65856	81628	101182	93362	
Short term loans	30372	23017	23017	30088	29436	22816	18524	23785	
Overdrafts	18172	35048	35048	38876	12172	23365	26370	30010	
TOTAL	174404	199720	199720		107465	127809	146076	147157	
NET WORTH	1275880	1352543	1352543	1456886	806368	843963	1154641	1234758	
RETURNS TO CAPITAL									
Owner Equity (%)	87.1		87.9		86.8		89.4		
FBI/Net worth (%)	1.8		1.6		1.4		1.8		
Management and Investment Income	-12808		-13721		-12260		-14310		
Return on tenant's capital (%)	-10.0		-10.3		-16.3		-12.0		
Return on all capital (%)	-0.9		-0.9		-1.3		-1.1		

# Table A2.2 HORTICULTURE FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LA	BOUR &					F 11	1	
INCOME MEACHDEC	201	Identica:	•	0/12	Full sample 2011/12 2012/13			
INCOME MEASURES	£/farm	1/12 <b>£/ha</b>	£/farm	2/13 £/ha	£/farm	£/ha	£/farm	£/ha
NET EADM INCOME (aval. DI SA)	47824	1359	33763	966	48876	2243	24356	£/11a 698
NET FARM INCOME (excl. BLSA) plus unpaid labour (excludes farmer and spouse)	5270	150	5225	149	4115	189	4676	134
plus imputed rent and rental value	11113	316	11477	328	7255	333	9486	272
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottage		2	60	2	86	4	108	3
minus insurance repairs & net interest payments	4301	122	4421	126	3978	183	4082	117
minus build & works depreciation	4684	133	4828	138	2861	131	3187	91
minus non-agric activity and director costs	4915	140	3911	112	7437	341	3787	109
FARM BUSINESS INCOME	50244	1428	37244	1065	45884	2106	27352	784
LABOUR USE AND LABOUR INCOMES								
Annual Labour Units per farm	7.4		7.0		9.5		5.3	
of which farmer & spouse	1.1		1.1		1.2		1.1	
of which paid family labour	0.1		0.1		0.0		0.0	
of which unpaid labour	0.2		0.2		0.2		0.2	
Notional value of farmer/spouse labour	21881		22052		22059		21374	
Value of paid family labour	1474		1223		518		732	
Labour income per Annual Labour Unit	20635		19203		20534		18090	
Family labour income per Family Work Unit	33922		22344		35248		15960	
Value of paid managerial input	293		295		21		249	
TENANTIC CADVEAU								
TENANT'S CAPITAL	0,000	2460	02465	2645	51207	2250	60727	1000
Machinery	86889	2469	92465	2645	51387	2359	69737	1998
Livestock	1852	53	2387	68	2866	132	3606	103
Crops	37973	1079	40966	1172	37066	1701	39518	1132
Stores	12280	349	12413	355	19650	902	14337	411
TOTAL	138993	3949	148231	4240	110969	5093	127199	3645
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value
Land and Property	582373	613875	613875	666545	400154	426118	617613	669902
Buildings, improvements and fixtures	52573	52157	52157	52565	58430	56485	40473	40710
Machinery	79541	94236	94236	90695	48551	54223	68493	70982
Livestock	1278	2427	2460	2315	2762	2969	3489	3723
Produce and goods in store	113512	118387	119544		76983	83366	98467	103330
Quotas and single payment asset value	7991	9180	9180	8627	4828	5640	9281	8577
Credit balances	63897	74494	74378	79250	70450	82925	59946	63062
TOTAL	901166	964757	965830	1028758	662158	711725	897763	960286
EXTERNAL LIABILITIES	47100	6 <b>7.1.2</b> 0	< <b>7</b> 000	77.40.4	62272	5.5500	02002	00000
Long and medium term loans	47190	67129	67082		63272	55789	83882	90009
Short term loans	50394	42922	42536		44000	55006	31172	31867
Overdrafts	18945	14791	15457	19304	14911	18321	26713	27847
TOTAL	116529	124842	125075	135218	122183	129116	141767	149723
NET WORTH	784637	839915	840755	893540	539976	582609	755997	810563
RETURNS TO CAPITAL								
Owner Equity (%)	87.1		86.9		81.9		84.4	
FBI/Net worth (%)	6.4		4.4		8.5		3.6	
Management and Investment Income	26236		12006		26900		3251	
Return on tenant's capital (%)	18.9		8.1		24.2		2.6	
Return on all capital (%)	2.9		1.2		4.1		0.4	
on an exp. (/v)	2.7		1.2		7.1		Or	

## Table A2.3 HORTICULTURE FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

LAND UTILISATIO	ON AND CRUP PERFURMA		sample		Full sample				
LAND UTILISATIO	N - hectares per farm	2011/12	nicui s	2012/13		2011/12	uu sun	2012/1	3
Tillage - maincrops	Wheat	4.9		4.4		1.9		3.8	
8	Barley	2.9		1.9		0.4		1.8	
	Other cereals	2.5		2.5		0.3		2.0	
	Oil seed rape	0.0		0.0		0.0		0.0	
	Linseed	0.0		0.0		0.0		0.0	
	Peas/Beans	0.8		0.0		0.6		0.0	
	Potatoes	0.0		0.0		0.5		0.9	
	Sugarbeet	0.0		0.0		0.0		0.0	
	Horticulture	16.8		17.2		11.3		14.3	
	Other crops	0.9		0.9		0.1		0.7	
	Total cropping	28.7		26.9		15.0		23.4	
	Set-aside	0.0		0.0		0.5		0.0	
Tillage - fodder		0.0		0.0		0.0		0.0	
Grassland	Grazing, hay and silage	29.3		31.5		8.4		28.3	
Fallow and land let		2.7		2.7		1.2		1.9	
Rough grazing	Effective	0.0		0.0		0.0		0.0	
Utilisable agricultural area (Effective ha.)		60.7		61.1		25.1		53.7	,
Woods, roads and buildings		2.6		2.6		2.1		2.2	
TOTAL AREA (Actual ha.)		63.3		63.7		27.2		55.9	,
effective forage area		29.3		31.5		8.4		28.3	
Bare land and forage h	nired in	0.0		0.0		0.0		0.0	
CROP PERFORMA	NCE *								
- Yields (tonnes per l	nectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		_	2	-	2	-	2	-	3
Barley		-	1	-	1	-	1	-	2
Oilseed Rape		-	0	-	0	-	0	-	0
Potatoes		-	1	-	1	-	1	-	2
Sugar Beet		-	0	-	0	-	0	-	0
- Prices (£ per tonne)	*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		-	2	-	2	-	2	-	3
Barley		-	1	-	1	-	1	-	2
Oilseed Rape		-	0	-	0	-	0	-	0
Potatoes		-	1	-	1	-	1	-	2
Sugar Beet		-	0	-	0	-	0	-	0

<sup>\*</sup> Yield and price data is implied

## Table A2.3 HORTICULTURE FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

		Iden	tical s	ample		F	ull san	nple	
LAND UTILISATIO	ON - hectares per farm	2011/12		2012/13		2011/12		2012/1	3
Tillage - maincrops	Wheat	3.7		4.7		1.0		4.8	
	Barley	0.8		0.7		0.3		2.7	
	Other cereals	2.0		0.9		0.9		0.9	
	Oil seed rape	0.9		0.7		0.6		1.0	
	Linseed	0.7		0.8		0.0		0.4	
	Peas/Beans	0.2		0.2		0.2		0.1	
	Potatoes	0.2		0.2		0.3		0.3	
	Sugarbeet	0.0		0.0		0.1		0.0	
	Horticulture	17.8		17.6		9.9		14.6	
	Other crops	0.0		0.0		0.0		0.1	
	Total cropping	26.3		25.8		13.3		24.8	
	Set-aside	0.2		0.0		0.0		0.0	
Tillage - fodder		0.0		0.0		0.0		0.4	
Grassland	Grazing, hay and silage	3.3		3.4		3.9		3.5	
Fallow and land let		5.4		5.8		4.6		6.2	
Rough grazing	Effective	0.0		0.0		0.0		0.0	
Utilisable agricultur	al area (Effective ha.)	35.2		35.0		21.8		34.9	
Woods, roads and buildings		2.8		2.7		1.9		2.6	
TOTAL AREA (Actual ha.)		38.0		37.6		23.7		37.5	
effective forage area		3.5		3.4		4.1		3.9	
Bare land and forage	hired in	0.2		0.0		0.2		0.0	
CROP PERFORMA	NCE *								
- Yields (tonnes per		t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat	,	_	2	_	3	_	3	_	4
Barley		-	2	-	2	_	2	_	3
Oilseed Rape		-	1	-	1	_	2	_	2
Potatoes		-	1	-	1	_	4	_	2
Sugar Beet		-	0	-	0	-	1	-	0
- Prices (£ per tonne	)*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		-	2	-	3	-	3	-	4
Barley		-	2	-	2	-	2	-	3
Oilseed Rape		-	1	-	1	-	2	-	2
Potatoes		-	1	-	1	-	4	-	2
Sugar Beet		-	0	-	0	-	1	-	0

<sup>\*</sup> Yield and price data is implied

## Table A2.4 HORTICULTURE FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

		Identical	sample		Full sample			
	201	1/12	2012	2/13	2011		2012/13	
LIVESTOCK CARRIED - L.U. per far	m LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0	0.0	0
Beef cows	9.2	12	8.9	12	2.5	3	8.6	12
Other cattle	10.2	22	11.2	22	2.6	5	10.4	20
Breeding sheep	1.6	15	3.6	34	2.2	21	4.7	45
Other sheep	0.4	9	0.7	14	0.5	11	1.4	30
Pigs	1.5	18	1.3	18	1.0	12	0.9	13
Poultry	0.1	8	0.1	6	0.2	15	0.2	16
Other livestock	0.0	0	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	23.0		25.6		9.0		26.3	
STOCKING RATES								
Stocking rate (LU per eff.ha)	0.4		0.4		0.4		0.5	
GLU/forage effective hectare*	0.8		0.8		1.1		0.9	
* for organic farms, pigs, poultry and other  LIVESTOCK PERFORMANCE  - Yield*  Milk yield/cow	er livestock are deem	ed to be gr n 0	razing live	estock n 0	litres	n 0	litres	n 0
·	-	U		U		U		U
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	-	0	-	0	-	0	-	0
Dairy calves	-	0	-	0	-	0	-	0
Dairy heifers in calf	-	0	-	0	-	0	-	0
Beef heifers in calf	-	0	-	1	-	0	-	1
Finished cattle	-	1	-	1	-	2	-	2
Beef store cattle 1-2 yrs	-	1	-	1	-	0	-	1
Beef stores <1 yr	-	0	-	1 0	-	0	-	1
Ewes	-	1 0	-	0	-	1 1	-	1 1
Ewe hoggs Finished lambs	-	2	-	2	-	2	-	3
Store lambs	-	0	-	0	-	0	-	1
	-	0	-	0	-	0	-	0
Finished Pigs		U		U		U		U
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	-	0	-	0	-	0	-	0
Wool (pence per kg)	-	1	-	2	-	2	-	3
Eggs (pence per dozen)	-	1	-	1	-	2	-	3

<sup>\*</sup> Yield and price data is implied

# Table A2.4 HORTICULTURE FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

STOCKING AND LIVESTOCK TERFORMANC		Identical	sample		Full sample			
	2011		2012	2/13	2011		2012/13	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.0	0	0.0	0
Beef cows	0.0	0	0.0	0	0.0	0	0.8	1
Other cattle	2.3	4	2.6	4	1.9	3	2.0	4
Breeding sheep	0.0	0	0.0	0	0.5	5	0.0	0
Other sheep	0.0	0	0.0	0	0.2	4	0.0	0
Pigs	0.0	0	0.0	0	0.1	1	0.0	0
Poultry	0.1	27	0.1	25	0.3	56	0.1	20
Other livestock	0.0	2	0.0	0	0.0	0	0.0	2
TOTAL (L.U.)	2.4		2.7		2.9		2.9	_
STOCKING RATES	0.4		0.4		0.4		0.4	
Stocking rate (LU per eff.ha)	0.1		0.1		0.1		0.1	
GLU/forage effective hectare*	0.7		0.8		0.7		0.7	
* for conventional farms, pigs, poultry and other lives	stock are	deemed to	be non-g	grazing live	estock			
LIVESTOCK PERFORMANCE								
- Yield*	litres	n	litres	n	litres	n	litres	n
Milk yield/cow	-	0	-	0	-	0	-	0
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	-	0	-	0	-	0	-	0
Dairy calves	-	0	-	0	-	0	-	0
Dairy heifers in calf	-	0	-	0	-	0	-	0
Beef heifers in calf	-	0	-	0	-	0	-	0
Finished cattle	-	1	-	1	-	2	-	2
Beef store cattle 1-2 yrs	-	0	-	1	-	2	-	1
Beef stores <1 yr	-	0	-	0	-	0	-	1
Ewes	-	0	-	0	-	0	-	0
Ewe hoggs	-	0	-	0	-	0	-	0
Finished lambs	-	0	-	0	-	2	-	1
Store lambs	-	0	-	0	-	2	-	0
Finished Pigs	-	0	-	0	-	0	-	0
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	-	0	-	0	-	0	-	0
Wool (pence per kg)	-	0	-	0	-	2	-	0
Eggs (pence per dozen)	-	0	-	0	-	0	-	1

<sup>\*</sup> Yield and price data is implied

Table A3.1 DAIRY	ORGANIC									
OUTPUTS AND INPU		1	dentical				Full so	ımple		
		2011/		2012	/13	2011		2012	/13	
Sample number	•	36	,	36		49		42		
Average farm size (UA	A)	158	}	162	2	159	)	152	2	
Business size (ESU)		163		162	2	165	5	153	3	
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	
Dairy -	milk output	278070	1759	282266	1738	289816	1818	263402	1731	
Daily -	cattle	-11155	-71	-10453	-64	-10763	-68	-9961	-65	
	net quota	0	0	0	0	-507	-3	0	0	
	valuation change	-2082	-13	-1605	-10	-2076	-13	-1970	-13	
Other cattle	output	52932	335	56536	348	52545	330	52030	342	
	valuation change	9021	57	-532	-3	9166	58	572	4	
Sheep -	total output	2073	13	1901	12	1523	10	2004	13	
•	valuation change	165	1	-163	-1	121	1	-136	-1	
Other livestock	-	456	3	338	2	421	3	1078	7	
Arable crops	output	11261	71	11475	71	13765	86	10358	68	
	protein/energy support	75	0	0	0	72	0	0	0	
By products forage and	cults	2812	18	3466	21	3109	20	3100	20	
Miscellaneous (incl. far	mhouse benefit value)	13951	88	13970	86	13751	86	14031	92	
	- organic grants	467	3	469	3	755	5	402	3	
	- other agri-env.payments	10380	66	11878	73	10156	64	11418	75	
	- subsidy/single farm paymer		219	32937	203	34859	219	30611	201	
	FARM REVENUE	403106	2550	402483	2478	416715	2615	376938	2478	
TA IDI ITIG										
INPUTS	1 1	70266	502	0.405.6	517	0.4500	521	70606	517	
Feeds	purchased concentrates	79366	502	84056	517	84598	531	78606	517	
Dumahasad faddan Taak	homegrown concentrates	13552 8482	86 54	14658 7374	90 45	13621 7391	85 46	13539 7081	89 47	
Purchased fodder, Tack Veterinary and medicin	-	8990	57	9377	58	9988	63	8872	58	
Other livestock costs	ies	33690	213	38863	239	34015	213	35237	232	
Seeds -	purchased and homegrown	4075	26	4210	26	4636	29	3830	25	
Fertilisers	purchased and nonlegiown	790	5	971	6	1529	10	1065	7	
Crop protection		8	0	355	2	188	10	324	2	
Other crop costs		1563	10	1827	11	1843	12	1780	12	
Labour	paid incl. paid management		254	41886	258	40204	252	37448	246	
	casual	3595	23	3803	23	3236	20	3521	23	
Machinery	contract	17884	113	20189	124	21233	133	18836	124	
·	repairs	13663	86	13373	82	13940	87	13008	86	
	fuels	11178	71	11253	69	11921	75	10886	72	
General farming costs		25873	164	27492	169	27680	174	26092	172	
Land expenses		7758	49	8564	53	8410	53	8127	53	
Rent	_	17400	110	18686	115	19024	119	16606	109	
	FARM EXPENSES	288016	1822	306936	1890	303457	1904	284856	1872	
Excess of revenue over	r expenses	115090	728	95547	588	113258	711	92082	605	
Notional inputs										
- rental value/imputed	rent	19560	124	21679	133	19240	121	20997	138	
- unpaid labour		4194	27	4391	27	4286	27	5255	35	
- machinery depreciation	on	20164	128	21905	135	20249	127	21225	140	
_	•	43918	278	47975	295	43775	275	47476	312	
NET FARM INCOME	(excl. BLSA)	71172	450	47572	293	69483	436	44606	293	
NET FARM INCOME	(incl BLSA)	88928	562	47305	291	86631	544	44929	295	
I I I I I I COME	()	00720	502	11505	2/1	50051	J TT	17/4/	2/5	

Table A3.1 DAIRY	Y FARM RESULTS	FARM RESULTS CONVENTIONAL							
OUTPUTS AND INPU	UTS	i	Identical	sample		Full sample			
	_	2011/	/12	2012	/13	2011	/12	2012/13	
Sample number	_	212	2	212	2	291	Į.	238	3
Average farm size (UA	A)	134		136		145		130	
Business size (ESU)		161		165	5	165	5	160	)
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
Dairy -	milk output	279638	2089	279951	2054	271696	1874	270257	2082
	cattle	-12566	-94	-8503	-62	-15964	-110	-8633	-66
	net quota	0	0	0	0	0	0	0	0
	valuation change	1375	10	-802	-6	965	7	-424	-3
Other cattle	output	48977	366	56331	413	55208	381	55154	425
	valuation change	6082	45	4272	31	8845	61	3685	28
Sheep -	total output	4010	30	3700	27	2981	21	3574	28
	valuation change	209	2	-299	-2	-55	0	-252	-2
Other livestock		735	5	785	6	1353	9	688	5
Arable crops	output	23081	172	22424	164	36130	249	21627	167
	protein/energy support	2	0	0	0	4	0	0	0
By products forage and		7467	56	5033	37	7485	52	4857	37
Miscellaneous (incl. far		11005	82	13623	100	13984	96	12671	98
	- organic grants	0	0	0	0	0	0	0	0
	- other agri-env.payments	3396	25	3740	27	3952	27	3514	27
	- single payment scheme	30969	231	28416	208	30668	211	27075	209
	FARM REVENUE	404380	3020	408669	2998	417252	2877	393792	3033
INPUTS									
Feeds	purchased concentrates	82440	616	100416	737	78776	543	96932	747
10005	homegrown concentrates	11833	88	13153	96	11675	81	12378	95
Purchased fodder, Tack	_	3675	27	4767	35	4332	30	4708	36
Veterinary and medicin		10703	80	11105	81	11627	80	10793	83
Other livestock costs		26238	196	29173	214	27044	187	28217	217
Seeds -	purchased and homegrown	4371	33	4407	32	4951	34	4184	32
Fertilisers	parenasea and nomegrown	19378	145	20909	153	18123	125	20129	155
Crop protection		3584	27	5154	38	5955	41	4902	38
Other crop costs		2560	19	2511	18	2756	19	2459	19
Labour	paid incl. paid management	25521	191	25099	184	27426	189	24189	186
	casual	4246	32	10063	74	3860	27	8956	69
Machinery	contract	17814	133	17734	130	18371	127	16851	130
·	repairs	12796	96	12862	94	13597	94	12458	96
	fuels	13705	102	14024	103	13524	93	13323	103
General farming costs		24238	181	25766	189	27457	189	25048	193
Land expenses		9392	70	11212	82	7958	55	10670	82
Rent		12521	94	13585	100	15397	106	12987	100
	FARM EXPENSES	285017	2129	321939	2362	292828	2019	309182	2381
Excess of revenue over	r expenses	119363	892	86730	636	124424	858	84610	652
Notional inputs									
- rental value/imputed	rent	23189	173	24388	179	22512	155	23173	178
- unpaid labour		9915	74	9568	70	13259	91	8928	69
- machinery depreciation	on _	24753	185	25906	190	24875	172	24797	191
		57857	432	59862	439	60646	418	56898	438
NET FARM INCOME	(excl. BLSA)	61506	459	26868	197	63778	440	27712	213
NET FARM INCOME	(incl. BLSA)	70584	527	28510	209	79284	547	29391	226

**ORGANIC** 

## Table A3.2 DAIRY FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LAI	SOUK &	Identica				Full so	ample	
INCOME MEASURES	201	1/12	-	2/13	201			2/13
I (OOM MINISTRES	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
NET FARM INCOME (excl. BLSA)	71172	450	47572	293	69483	436	44606	293
plus unpaid labour (excludes farmer and spouse)	4194	27	4391	27	4286	27	5255	35
plus imputed rent and rental value	19488	123	21618	133	19187	120	20944	138
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottages	596	4	657	4	887	6	634	4
minus insurance repairs & net interest payments	6681	42	6206	38	6384	40	5669	37
minus build & works depreciation	7405	47	8013	49	7384	46	7635	50
minus non-agric activity and director costs	1979	13	1714	11	1454	9	1469	10
FARM BUSINESS INCOME	78191	495	56990	351	76847	482	55397	364
LABOUR USE AND LABOUR INCOMES								
Annual Labour Units per farm	3.6		3.5		3.5		3.4	
of which farmer & spouse	1.4		1.4		1.4		1.4	
of which paid family labour	0.1		0.1		0.1		0.1	
of which unpaid labour	0.2		0.2		0.2		0.3	
Notional value of farmer/spouse labour	26533		27125		25674		26589	
Value of paid family labour	1828		1369		2250		2196	
Labour income per Annual Labour Unit	27475		21151		27696		20478	
Family labour income per Family Work Unit	34245		17796		33856		16932	
Value of paid managerial input	44		405		229		347	
TENANT'S CAPITAL								
Machinery	115495	731	123477	760	114291	717	119356	785
Livestock	211555	1338	224593	1383	210703	1322	211823	1392
Crops	14784	94	16043	99	15573	98	14743	97
Stores	11414	72	12394	76	12001	75	11271	74
TOTAL	353247	2234	376506	2318	352568	2212	357193	2348
A CONTROL	Opening	Closing	Opening	_	Opening	Closing	Opening	Closing
ASSETS	Value							
Land and Property	884451	965259	1019829		817531	894534		1103313
Buildings, improvements and fixtures	58791	69156	69387	75233	61901	69671	65646	71938
Machinery	108983	122007	122007	124946	108400		116105	122606
Livestock Produce and goods in stone	199122 26197	223987 27509	225876 29847	223309 29743	198514 27525	222892 28587	212430 27187	211216 27170
Produce and goods in store	43064	46082	47561	43813	44790	47681	44483	41080
Quotas and single payment asset value Credit balances	74641	89398	95725	75157	77049	97781	87872	68509
TOTAL					1335709			
	1373231	1545576	1010231	1717017	1333707	140132)	1340001	10-15055
EXTERNAL LIABILITIES								
Long and medium term loans		167457		174207		139363		161256
Short term loans	43106	39830	39830	42274	45687	45030	36054	40820
Overdrafts	33549	35090	33330	32998	32939	33456	31662	31969
TOTAL	235599	242376	240271	249479	212468	217849	222726	234045
NET WORTH	1159652	1301021	1369959	1470339	1123241	1263480	1317876	1411788
RETURNS TO CAPITAL								
Owner Equity (%)	84.3		85.5		85.3		85.8	
FBI/Net worth (%)	6.7		4.2		6.8		4.2	
Management and Investment Income	62439		20585		61186		18687	
Return on tenant's capital (%)	17.7		5.5		17.4		5.2	
Return on all capital (%)	4.5		1.3		4.6		1.2	

### Table A3.2 DAIRY FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LAI	ROUR &	CAPITA	J.	CONVI	ENTION	AL		
INCOME MEASURES AND RETURNS TO LAI	book &	Identical				Full s	ample	
INCOME MEASURES	201	1/12	-	2/13	201	1/12	2012/13	
	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
NET FARM INCOME (excl. BLSA)	61506	459	26868	197	63778	440	27712	213
plus unpaid labour (excludes farmer and spouse)	9915	74	9568	70	13259	91	8928	69
plus imputed rent and rental value	23121	173	24315	178	22380	154	23057	178
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottages	750	6	750	6	802	6	751	6
minus insurance repairs & net interest payments	7111	53	7133	52	6844	47	7009	54
minus build & works depreciation	9084	68	10147	74	8618	59	9517	73
minus non-agric activity and director costs	254	2	320	2	927	6	261	2
FARM BUSINESS INCOME	77343	578	42402	311	82226	567	42158	325
LABOUR USE AND LABOUR INCOMES								
Annual Labour Units per farm	3.2		3.4		3.5		3.2	
of which farmer & spouse	1.3		1.3		1.4		1.3	
of which paid family labour	0.1		0.1		0.2		0.1	
of which unpaid labour	0.6		0.5		0.7		0.5	
Notional value of farmer/spouse labour	21952		22724		27978		22998	
Value of paid family labour	2352		2777		2900		2514	
Labour income per Annual Labour Unit	24968		14362		24359		14658	
Family labour income per Family Work Unit	30100		4674		27418		5731	
Value of paid managerial input	9		16		2		15	
TENANT'S CAPITAL								
Machinery	142948	1068	152809	1121	136495	941	145822	1123
Livestock	186517	1393	196882	1444	202218	1395	191579	1476
Crops	18657	139	19292	142	24108	166	17957	138
Stores	12495	93	14011	103	20494	141	13843	107
TOTAL	360617	2694	382994	2810	383315	2643	369201	2844
	Opening	Closing	Opening		Opening	Closing	Opening	Closing
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value
Land and Property	693679		735280		863251		705029	770224
Buildings, improvements and fixtures	84258	83849	83853	94600	77184	79337	79143	88778
Machinery	136878	149018	149110	156508	132486		142461	149183
Livestock	178147	194887	194481	199283	189597	214839	189240	193919
Produce and goods in store	32729	36117	36169	33907	42713	49888	34151	32385
Quotas and single payment asset value	50153	46311	46313	45488	41188	43384	44071	43158
Credit balances	38231	49385	49385	46511	60921	65847	46867	44430
TOTAL	1214075	1294692	1294591	13/90/1	1407340	1518372	1240962	1322077
EXTERNAL LIABILITIES								
Long and medium term loans	127940	136619	133704	133598	145611	146038	129200	128519
Short term loans	39618	43114	43114	46560	56354	54009	40941	43659
Overdrafts	47927	38095	38053	49707	58366	48287	36590	46702
TOTAL	215485	217828	214871	229865	260330	248333	206731	218880
NET WORTH	998591	1076865	1079720	1149207	1147010	1270039	1034231	1103197
RETURNS TO CAPITAL								
Owner Equity (%)	83.2		83.3		83.6		83.4	
FBI/Net worth (%)	7.7		3.9		7.2		4.1	
Management and Investment Income	48641		5801		51308		6409	
Return on tenant's capital (%)	13.5		1.5		13.4		1.7	
Return on all capital (%)	4.0		0.4		3.6		0.5	

## Table A3.3 DAIRY FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

		Iden	Identical sample			Full sample				
LAND UTILISATIO	ON - hectares per farm	2011/12		2012/13		2011/12	2	2012/1	3	
Tillage - maincrops	Wheat	3.6		5.6		5.6		4.8	,	
	Barley	4.4		4.7		4.9		4.1		
	Other cereals	1.7		1.9		1.8		2.0		
	Oil seed rape	0.0		0.0		0.0		0.0		
	Linseed	0.0		0.0		0.2		0.0		
	Peas/Beans	1.9		2.0		2.1		1.9		
	Potatoes	0.1		0.0		0.1		0.0		
	Sugarbeet	0.0		0.0		0.0		0.0		
	Horticulture	0.0		0.0		0.0		0.0		
	Other crops	0.0		0.0		0.0		0.0		
	Total cropping	11.7		14.3		14.7		12.9		
	Set-aside	0.0		0.0		0.1		0.0		
Tillage - fodder		8.1		9.4		10.7		8.7		
Grassland	Grazing, hay and silage	133.1		133.1		128.9		124.9		
Fallow and land let		2.1		2.7		2.7		2.3		
Rough grazing	Effective	3.2		2.9		2.3		3.3		
Utilisable agricultur	al area (Effective ha.)	158.1		162.4		159.4		152.1	,	
Woods, roads and buildings		3.6		4.0		3.6		3.9		
TOTAL AREA (Actual ha.)		161.7		166.4		163.0		156.0	,	
effective forage area		155.3		163.2		153.1		152.2		
Bare land and forage l	hired in	10.9		17.8		11.2		15.4		
CROP PERFORMA	NCE *									
- Yields (tonnes per l	hectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n	
Wheat		4.6	7	3.1	6	4.7	10	3.1	6	
Barley		4.7	7	3.4	6	4.5	12	3.3	7	
Oilseed Rape		-	0	-	0	-	0	-	0	
Potatoes		-	1	-	0	-	2	-	1	
Sugar Beet		-	0	-	0	-	0	-	0	
- Prices (£ per tonne)	)*	£/t	n	£/t	n	£/t	n	£/t	n	
Wheat		238	7	283	6	233	10	283	6	
Barley		201	7	220	6	204	12	216	7	
Oilseed Rape		-	0	-	0	-	0	-	0	
Potatoes		-	1	-	0	-	2	-	1	
Sugar Beet		-	0	-	0	-	0	-	0	

<sup>\*</sup> Yield and price data is implied

## Table A3.3 DAIRY FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

		Ide	ntical :	sample			Full sample			
LAND UTILISATIO	N - hectares per farm	2011/12	,	2012/13	3	2011/1	2	2012/	13	
Tillage - maincrops	Wheat	9.5		12.9		17.0		11.9		
	Barley	5.3		4.7		7.3		5.0		
	Other cereals	0.1		0.1		0.4		0.1		
	Oil seed rape	1.6		1.4		3.1		1.4		
	Linseed	0.0		0.0		0.0		0.0		
	Peas/Beans	0.5		0.3		0.3		0.2		
	Potatoes	0.1		0.1		0.0		0.1		
	Sugarbeet	0.2		0.1		0.1		0.3		
	Horticulture	0.0		0.0		0.0		0.0		
	Other crops	0.2		0.2		0.4		0.2		
	Total cropping	17.6		19.8		28.6		19.2		
	Set-aside	0.1		0.0		0.0		0.0		
Tillage - fodder		15.7		15.7		17.8		14.6		
Grassland	Grazing, hay and silage	94.8		94.9		95.0		90.7		
Fallow and land let		4.7		4.8		3.2		4.4		
Rough grazing	Effective	1.0		1.0		0.4		1.0		
Utilisable agricultural area (Effective ha.)		133.9		136.3		145.0	"	129.8		
Woods, roads and buildings		4.0		4.0		3.9		3.8		
TOTAL AREA (Actual ha.)		138.0		140.3		148.9		133.6		
effective forage area		115.8		117.2		119.3		111.8		
Bare land and forage h	ired in	6.8		7.2		7.3		7.0		
CROP PERFORMA	NCE *									
- Yields (tonnes per h		t/ha	n	t/ha	n	t/ha	n	t/ha	n	
Wheat		8.2	16	5.8	24	8.5	30	5.8	25	
Barley		6.6	27	5.5	29	6.4	34	5.7	30	
Oilseed Rape		3.9	6	3.3	6	3.8	14	3.3	7	
Potatoes		25.1	5	18.4	5	_	2	13.6	7	
Sugar Beet		-	2	-	2	-	1	-	2	
- Prices (£ per tonne)	*	£/t	n	£/t	n	£/t	n	£/t	n	
Wheat		152	16	174	24	151	30	175	25	
Barley		145	27	164	29	147	34	164	30	
Oilseed Rape		390	6	427	6	371	14	416	7	
Potatoes		193	5	215	5	-	2	460	7	
Sugar Beet		-	2	-	2	-	1	-	2	

<sup>\*</sup> Yield and price data is implied

## Table A3.4 DAIRY FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

		Identical sample Full sam					mple	
	201	1/12	2012	2/13	2011	/12	2012	2/13
LIVESTOCK CARRIED - L.U. per far	m LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	137.8	138	136.6	137	139.2	139	128.2	128
Beef cows	1.3	2	1.3	2	1.2	2	1.2	2
Other cattle	67.2	125	66.0	124	67.6	125	61.4	115
Breeding sheep	3.0	34	2.9	33	2.5	27	3.1	36
Other sheep	1.2	24	1.3	26	0.9	18	1.3	25
Pigs	0.1	0	0.1	0	0.1	0	0.1	1
Poultry	0.1	15	0.0	4	0.1	14	0.5	128
Other livestock	0.0	0	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	210.6		208.1		211.4		195.7	
STOCKING RATES								
Stocking rate (LU per eff.ha)	1.3		1.3		1.3		1.3	
GLU/forage effective hectare*	1.4		1.3		1.4		1.3	
GEO/Totage effective ficetime	1.7		1.3		1.7		1.3	
* for organic farms, pigs, poultry and other	r livestock are deem	ed to be g	razing live	estock				
LIVESTOCK PERFORMANCE								
- Yield*	litres	n	litres	n	litres	n	litres	n
Milk yield/cow	6324	36	6034	36	6301	48	5959	42
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	695	35	713	35	697	48	683	41
Dairy calves	104	20	123	19	104	26	122	23
Dairy heifers in calf	962	6	961	5	1039	7	1077	7
Beef heifers in calf	-	0	-	0	-	0	-	0
Finished cattle	915	10	994	10	954	14	963	11
Beef store cattle 1-2 yrs	627	19	728	13	618	27	702	15
Beef stores <1 yr	210	21	213	21	210	27	211	26
Ewes	-	3	-	3	-	3	-	3
Ewe hoggs	-	2	-	2	-	2	-	2
Finished lambs	86	7	78	8	86	7	77	9
Store lambs	-	2	-	3	-	2	-	3
Finished Pigs	-	0	-	0	-	0	-	0
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	31.3	36	32.6	36	31.2	49	32.5	42
Wool (pence per kg)	93	6	83	5	93	6	91	6
Eggs (pence per dozen)	-	0	-	0	-	1	-	1

<sup>\*</sup> Yield and price data is implied

## Table A3.4 DAIRY FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

		Identical sample			Full sample			
	2011	/12	2012	2/13	2011	/12	2012/13	
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	131.4	131	133.5	134	127.9	128	129.2	129
Beef cows	0.2	0	0.1	0	0.3	0	0.2	0
Other cattle	68.5	127	71.2	133	69.2	129	69.2	129
Breeding sheep	5.7	59	5.8	60	3.1	31	5.5	57
Other sheep	2.7	54	2.6	50	1.3	27	2.5	49
Pigs	0.0	0	0.0	0	0.5	3	0.0	0
Poultry	0.6	34	0.5	32	0.5	30	0.4	28
Other livestock	0.0	0	0.0	0	0.0	0	0.0	0
TOTAL (L.U.)	209.0		213.8		202.8		207.2	
STOCKING RATES								
Stocking rate (LU per eff.ha)	1.6		1.6		1.4		1.6	
GLU/forage effective hectare*	1.8		1.8		1.4		1.0	
GLO/forage effective flectare.	1.0		1.0		1./		1.9	
* for conventional farms, pigs, poultry and other	livestock are	deemed to	be non-g	grazing liv	estock			
LIVESTOCK PERFORMANCE								
- Yield*	litres	n	litres	n	litres	n	litres	n
Milk yield/cow	7450	36	7120	36	7457	40	7081	36
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	678	36	728	36	721	49	721	39
Dairy calves	110	34	120	36	113	39	124	39
Dairy heifers in calf	1635	13	1197	8	1198	23	1212	11
Beef heifers in calf	-	1	-	2	-	0	-	2
Finished cattle	870	34	1004	33	903	44	1010	36
Beef store cattle 1-2 yrs	655	32	691	33	755	45	700	36
Beef stores <1 yr	219	31	306	26	194	42	279	27
Ewes	-	2	64	8	109	9	66	9
Ewe hoggs	-	3	-	3	-	3	-	4
Finished lambs	88	22	81	22	87	28	81	25
Store lambs	-	4	63	9	77	8	64	11
Finished Pigs	-	0	-	0	-	0	-	0
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	26.8	36	27.5	36	27.1	49	27.6	39
Wool (pence per kg)	94	22	120	22	90	25	121	25
Eggs (pence per dozen)	-	2	-	2	160	7	-	2

<sup>\*</sup> Yield and price data is implied

Table A4.1 LFA C	CATTLE & SHEEP FAR	RM RES	ULTS	(	RGAN	NIC			
OUTPUTS AND INP	UTS		dentical	-			Full so	-	
a	-	2011/	/12	2012/	13	2011/	/12	2012/	13
Sample number	<b>A</b> \	41		41		54	,	47	
Average farm size (UA	A)	176	)	184 47		177		192	
Business size (ESU)		45		47		42		46	
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
Dairy -	milk output	1517	9	1232	7	1152	7	1074	6
	cattle	-45	0	-265	-1	-34	0	-231	-1
	net quota	0	0	0	0	0	0	0	0
	valuation change	8	0	-80	0	6	0	-70	0
Other cattle	output	36557	207	38592	210	35561	201	37699	197
C1	valuation change	1228	7	5707	31	1098	6	4876	25
Sheep -	total output	49148	279	49633	270	50203	284	50109	261
Other livestock	valuation change	7145 68	41 0	2849 106	16 1	6861 1274	39 7	2873 93	15 0
Arable crops	output	5445	31	7741	42	127 <del>4</del> 4494	25	6753	35
Arable crops	protein/energy support	0	0	0	0	0	0	0/33	0
By products forage and		2861	16	2240	12	2932	17	1965	10
Miscellaneous (incl. far		8656	49	6966	38	7366	42	6737	35
	- organic grants	3309	19	3286	18	3758	21	3521	18
	- other agri-env.payments	25742	146	23027	125	23039	130	23335	122
	- subsidy/single farm paymer	41326	235	38575	210	40957	232	38847	203
	FARM REVENUE	182965	1038	179610	978	178667	1010	177582	926
INPUTS		10072	60	10150	70	11016	60	12505	7.1
Feeds	purchased concentrates	10873	62	13152	72	11016	62	13595	71
Durchasad foddor Taal	homegrown concentrates	1121 3250	6 18	1637 3959	9 22	1063 2757	6 16	1428 3525	7 18
Purchased fodder, Tack Veterinary and medicin		5619	32	5939 5997	33	5401	31	5995	31
Other livestock costs	ies	9793	56	11776	64	9920	56	11552	60
Seeds -	purchased and homegrown	1766	10	1713	9	1713	10	1691	9
Fertilisers	parenased and nomegrown	3941	22	3827	21	3609	20	4065	21
Crop protection		254	1	496	3	195	1	433	2
Other crop costs		1183	7	1490	8	1018	6	1369	7
Labour	paid incl. paid management	6540	37	7210	39	5739	32	6737	35
	casual	3054	17	2988	16	3201	18	2961	15
Machinery	contract	9443	54	8781	48	9395	53	8591	45
	repairs	6715	38	6573	36	6523	37	6417	33
	fuels	8238	47	8611	47	7727	44	8143	42
General farming costs		11836	67	12588	69	11680	66	12638	66
Land expenses		7092	40	6087	33	6576	37	6048	32
Rent	<del>.</del>	10218	58	10726	58	9055	51	10261	53
	FARM EXPENSES	100938	573	107612	586	96589	546	105451	550
Excess of revenue ove	r expenses	82028	466	71997	392	82078	464	72131	376
Notional inputs									
- rental value/imputed	rent	12399	70	13001	71	13279	75	14302	75
- unpaid labour		3847	22	4015	22	3663	21	3888	20
- machinery depreciation	on	13391	76	14328	78	12761	72	14257	74
	•	29637	168	31343	171	29702	168	32448	169
NET FARM INCOME	(excl. BLSA)	52391	297	40654	221	52376	296	39683	207
NET FARM INCOME	(incl. BLSA)	59887	340	43023	234	59212	335	41878	218

Table A4.1 LFA C	CATTLE & SHEEP FAR	RM RES	ULTS	(	CONVI	NVENTIONAL			
OUTPUTS AND INP			dentical				Full so	ımple	
		2011/		2012	/13	2011		2012	/13
Sample number	-	273		273	3	524		312	2
Average farm size (UA	.A)	158	;	158	3	151		163	3
Business size (ESU)		42		42		41		42	
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
Dairy -	milk output	2812	18	2729	2/11a 17	3054	20	2320	2/11a 14
Dan'y -	cattle	-156	-1	68	0	-338	-2	60	0
	net quota	0	0	0	0	0	0	0	0
	valuation change	83	1	-241	-2	214	1	-210	-1
Other cattle	output	31724	200	32936	208	31220	206	31340	192
	valuation change	2946	19	4685	30	2205	15	3931	24
Sheep -	total output	48806	308	47030	297	49651	328	48520	298
<b>T</b>	valuation change	3866	24	1587	10	3739	25	1844	11
Other livestock		510	3	418	3	379	3	369	2
Arable crops	output	3434	22	2561	16	1955	13	2366	15
1	protein/energy support	13	0	0	0	0	0	0	0
By products forage and		2624	17	2002	13	2373	16	1810	11
Miscellaneous (incl. far		5864	37	7084	45	5613	37	6856	42
	- organic grants	45	0	0	0	0	0	0	0
	- other agri-env.payments	14239	90	12481	79	13418	89	12855	79
	- single payment scheme	34181	216	31793	201	34070	225	32843	202
	FARM REVENUE	150991	953	145132	917	147551	975	144903	889
INPUTS		4.55.45		10051	120		102	10007	110
Feeds	purchased concentrates	15747	99	19051	120	15564	103	19235	118
D 1 16 11 TD 1	homegrown concentrates	2298	15	2347	15	1455	10	2156	13
Purchased fodder, Tack		3230	20	3070	19	3345	22	3299	20
Veterinary and medicin	ies	4324	27	5014	32	4497	30	4830	30
Other livestock costs		8751	55	9733	62	8896	59	9869	61
Seeds -	purchased and homegrown	739 8127	5	755	5 55	690	5	700	4
Fertilisers Crop protection		604	51 4	8701 534	33 3	8049 460	53	8315 513	51 3
Crop protection		1173	7	965	6	1025	3 7	943	6
Other crop costs Labour	paid incl. paid management	3910	25	4503	28	3240	21	4256	26
Laboui	casual	1864	12	4303 1947	12	1699	11	1935	12
Machinery	contract	4923	31	4939	31	4277	28	4651	29
Machinery	repairs	4482	28	4544	29	4483	30	4577	28
	fuels	6388	40	7073	45	6605	44	7004	43
General farming costs	rucis	10628	67	10888	69	10280	68	10681	66
Land expenses		4513	28	4508	28	4455	29	4447	27
Rent		7337	46	7347	46	7232	48	8134	50
Ttont	FARM EXPENSES	89037	562	95919	606	86252	570	95541	586
Excess of revenue ove	er expenses	61953	391	49214	311	61299	405	49361	303
N-4!1! 4									
Notional inputs		10476	70	12010	0.1	11062	7.4	12115	90
- rental value/imputed	rent	12476	79	12819	81	11263	74	13115	80
- unpaid labour	on	6179	39	6697	42	6746	45 76	7038	43
- machinery depreciati	OII -	11420 30075	72 190	12630 32146	203	11518 29527	76 195	12985 33137	203
		30073	190	32140	203	29321	193	33137	203
NET FARM INCOME	(excl. BLSA)	31879	201	17068	108	31772	210	16224	100
NET FARM INCOME	(incl. BLSA)	37189	235	18591	118	36080	238	17599	108

## Table A4.2 LFA CATTLE & SHEEP FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL ORGANIC

		Identica	l sample		Full sample			
INCOME MEASURES	201	2011/12 2012/13			2011/12 2012/13			
	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
NET FARM INCOME (excl. BLSA)	52391	297	40654	221	52376	296	39683	207
plus unpaid labour (excludes farmer and spouse)	3847	22	4015	22	3663	21	3888	20
plus imputed rent and rental value	12365	70	12997	71	13253	75	14299	75
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottages		2	293	2	222	1	255	1
minus insurance repairs & net interest payments	2188	12	1539	8	2563	14	1888	10
minus build & works depreciation	3034	17	3372	18	3305	19	3770	20
minus non-agric activity and director costs	0	0	0	0	0	0	0	0
FARM BUSINESS INCOME	63089	358	52463	286	63202	357	51958	271
LABOUR USE AND LABOUR INCOMES								
Annual Labour Units per farm	1.8		1.8		1.8		1.8	
of which farmer & spouse	1.1		1.1		1.1		1.1	
of which paid family labour	0.0		0.0		0.0		0.0	
of which unpaid labour	0.2		0.2		0.2		0.2	
Notional value of farmer/spouse labour	18197		18515		17946		18687	
Value of paid family labour	416		354		316		309	
Labour income per Annual Labour Unit	28939		22036		29900		21487	
Family labour income per Family Work Unit	35181		23950		36589		23081	
Value of paid managerial input	59		60		45		52	
TENANT'S CAPITAL								
Machinery	79596	452	83651	456	75200	425	83256	434
Livestock	130821	742	144193	785	124972	707	143266	747
Crops	6507	37	8008	44	5950	34	7540	39
Stores	3355	19	3195	17	3043	17	2975	16
TOTAL	220280	1250	239047	1302	209166	1183	237037	1236
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value
Land and Property	564078	604884	604884	661572	687047	707695	703062	762378
Buildings, improvements and fixtures	30777	31576	31576	34821	32824	33737	35909	38525
Machinery	77803	81390	81390	85912	73169	77231	81622	84890
Livestock	122877	138765	138759	149627	117570	132375	138319	148212
Produce and goods in store	16572	16126	16141	15306	16034	16140	17163	15939
Quotas and single payment asset value	52126	51960	51960	51629	53082	51196	52099	51864
Credit balances	30997	36022	36022	38253	29018	36451	38433	35679
TOTAL	895230	960724	960732	1037120	1008744	1054824	1066606	1137487
EXTERNAL LIABILITIES								
Long and medium term loans	37863	37362	37362	22799	40192	39993	47486	35780
Short term loans	15301	13583	13600	13850	12675	11622	13024	12627
Overdrafts	13782	18692	18692	17929	17626	16977	18757	18781
TOTAL	66945	69637	69654	54577	70493	68592	79267	67188
NET WORTH	828284	891087	891078	982542	938250	986232	987339	1070299
RETURNS TO CAPITAL								
Owner Equity (%)	92.8		94.7		93.5		94.1	
FBI/Net worth (%)	7.6		5.9		6.7		5.3	
Management and Investment Income	41749		24568		41311		23243	
Return on tenant's capital (%)	19.0		10.3		19.8		9.8	
Return on all capital (%)	4.7		2.6		4.1		2.2	

# Table A4.2 LFA CATTLE & SHEEP FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LA	BOUR &					Full se	ampla	
INCOME MEASURES	201	<i>Identica</i> 1/12	-	2/13	201		-	2/13
INCOME MEASURES	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
NET FARM INCOME (excl. BLSA)	31879	201	17068	108	31772	210	16224	100
plus unpaid labour (excludes farmer and spouse)	6179	39	6697	42	6746	45	7038	43
plus imputed rent and rental value	12475	79	12816	81	11255	74	13112	80
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottages		2	374	2	373	2	334	2
minus insurance repairs & net interest payments	3366	21	4073	26	2854	19	4011	25
minus build & works depreciation	3610	23	3674	23	2919	19	3547	22
minus non-agric activity and director costs	0	0	0	0	0	0	0	0
FARM BUSINESS INCOME	43182	273	28460	180	43626	288	28483	175
LABOUR USE AND LABOUR INCOMES								
Annual Labour Units per farm	1.8		1.8		1.8		1.9	
of which farmer & spouse	1.1		1.1		1.1		1.1	
of which paid family labour	0.1		0.1		0.1		0.1	
of which unpaid labour	0.4		0.4		0.4		0.4	
Notional value of farmer/spouse labour	19175		19436		18359		19606	
Value of paid family labour	1039		1132		928		1265	
Labour income per Annual Labour Unit	17918		9683		18151		9160	
Family labour income per Family Work Unit	17869		4861		18422		4186	
Value of paid managerial input	35		30		39		26	
TENANT'S CAPITAL								
Machinery	71225	450	75270	476	72797	481	76416	469
Livestock	113400	716	123097	778	110481	730	122744	753
Crops	6089	38	6110	39	4609	30	5730	35
Stores	3461	22	3560	23	3412	23	3445	21
TOTAL	194175	1226	208037	1315	191300	1264	208335	1278
	0	Clasia.	0	C1 :	0	C1:	0	Classia.
ASSETS	Opening Value	Closing Value	Opening Value	Closing Value	Opening Value	Closing Value	Opening Value	Closing Value
Land and Property	536387	566122	566148	611700	524060	547885	573181	618006
Buildings, improvements and fixtures	38914	38864	38873	39565	32507	31157	37452	38240
- ·	69357		73314	77225	69889		74803	78028
Machinery		73092			105241	75705		
Livestock	107287	119514	119339	126855		115722	119303	126186
Produce and goods in store	15157	16208	16200	13742	12200	12509	15259	13073
Quotas and single payment asset value	47307	44045	44032	44200	48197	43695	44272	44524
Credit balances TOTAL	29523	32253	32288	32679	22977	27704 854377	32404 896673	31456
IOIAL	843931	890098	890194	945966	815070	854377	896673	949513
EXTERNAL LIABILITIES								
Long and medium term loans	53567	61985	61985	61187	39963	40930	62359	60988
Short term loans	8964	9825	9878	12179	8032	10303	10122	11716
Overdrafts	21609	18843	18843	20855	23901	21850	19850	23358
TOTAL	84140	90652	90705	94221	71896	73083	92331	96062
NET WORTH	759792	799446	799488	851745	743175	781294	804342	853451
DETIIDNS TO CADITAL								
RETURNS TO CAPITAL Owner Equity (%)	89.8		90.0		91.4		89.9	
Owner Equity (%) ERI/Net worth (%)	89.8 5.7		3.6		5.9		3.5	
FBI/Net worth (%)			-816				3.5 -1981	
Management and Investment Income	18049		-816 -0.4		17759			
Return on tenant's capital (%)	9.3				9.3		-1.0	
Return on all capital (%)	2.1		-0.1		2.2		-0.2	

# Table A4.3 LFA CATTLE & SHEEP FARM RESULTS ORGANIC LAND UTILISATION AND CROP PERFORMANCE

		Iden	tical .	sample		F	ull sai	mple	
LAND UTILISATIO	ON - hectares per farm	2011/12		2012/13		2011/12		2012/1	3
Tillage - maincrops	Wheat	1.9		2.7		1.6		2.4	
	Barley	1.4		2.6		1.2		2.2	
	Other cereals	1.5		2.0		1.3		1.7	
	Oil seed rape	0.0		0.0		0.0		0.0	
	Linseed	0.0		0.0		0.0		0.0	
	Peas/Beans	1.0		0.1		0.8		0.1	
	Potatoes	0.0		0.0		0.0		0.0	
	Sugarbeet	0.0		0.0		0.0		0.0	
	Horticulture	0.0		0.0		0.0		0.0	
	Other crops	0.0		0.0		0.0		0.0	
	Total cropping	5.9		7.4		4.9		6.4	
	Set-aside	0.0		0.0		0.0		0.0	
Tillage - fodder		3.1		1.9		3.1		1.8	
Grassland	Grazing, hay and silage	135.2		137.6		140.6		146.6	
Fallow and land let		1.7		1.6		1.3		1.4	
Rough grazing	Effective	30.3		35.1		27.0		35.6	
Utilisable agricultur	al area (Effective ha.)	176.2		183.6		176.9		191.8	,
Woods, roads and bui	ldings	11.1		11.0		9.5		10.4	
TOTAL AREA (Act	ual ha.)	195.2		194.6		193.5		202.2	
effective forage area		182.9		189.5		182.5		197.2	
Bare land and forage l	hired in	14.3		14.8		11.8		13.2	
CROP PERFORMA	NCE *								
- Yields (tonnes per l	hectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		-	3	-	4	-	4	-	4
Barley		3.5	8	2.7	7	3.8	9	2.7	7
Oilseed Rape		-	0	-	0	-	0	-	0
Potatoes		-	0	-	0	-	0	-	0
Sugar Beet		-	0	-	0	-	0	-	0
- Prices (£ per tonne)	)*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		-	3	-	4	-	4	-	4
Barley		195	8	217	7	193	9	217	7
Oilseed Rape		-	0	-	0	-	0	-	0
Potatoes		-	0	-	0	-	0	-	0
Sugar Beet		-	0	-	0	-	0	-	0

<sup>\*</sup> Yield and price data is implied

## Table A4.3 LFA CATTLE & SHEEP FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

				sample			Full sa	mple	
LAND UTILISATIO	N - hectares per farm	2011/12	,	2012/13		2011/1	2	2012/	13
Tillage - maincrops	Wheat	0.7		0.8		0.3		0.7	
	Barley	2.1		1.5		1.4		1.5	
	Other cereals	0.4		0.6		0.3		0.6	
	Oil seed rape	0.0		0.0		0.0		0.0	
	Linseed	0.0		0.0		0.0		0.0	
	Peas/Beans	0.3		0.0		0.0		0.0	
	Potatoes	0.0		0.0		0.0		0.0	
	Sugarbeet	0.0		0.0		0.0		0.0	
	Horticulture	0.0		0.0		0.0		0.0	
	Other crops	0.0		0.0		0.0		0.0	
	Total cropping	3.5		3.0		2.1		2.8	
	Set-aside	0.0		0.0		0.0		0.0	
Tillage - fodder		1.0		1.5		1.1		1.4	
Grassland	Grazing, hay and silage	120.1		119.9		118.9		122.9	
Fallow and land let		1.8		1.8		1.5		1.7	
Rough grazing	Effective	31.9		32.0		27.8		34.2	
Utilisable agricultura		158.4		158.2		151.4		163.0	<u>.</u>
Woods, roads and buildings		5.3		5.3		4.8		5.3	
TOTAL AREA (Actual ha.)		176.4		163.5		171.3		168.3	
effective forage area		160.9		160.9		157.3		168.6	
Bare land and forage h	ired in	8.1		7.7		9.7		10.3	
CROP PERFORMA	NCE *								
- Yields (tonnes per h	nectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		6.0	6	4.2	7	4.7	10	3.8	5
Barley		6.2	16	4.9	14	6.2	28	4.8	12
Oilseed Rape		-	0	-	1	-	0	-	0
Potatoes		-	0	-	0	-	0	-	0
Sugar Beet		-	0	-	0	-	0	-	0
- Prices (£ per tonne)	*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		151	6	175	7	130	10	167	5
Barley		148	16	176	14	145	28	176	12
Oilseed Rape		-	0	-	1	-	0	-	0
Potatoes		-	0	-	0	-	0	-	0
Sugar Beet		-	0	-	0	-	0	-	0

<sup>\*</sup> Yield and price data is implied

Table A4.4 LFA CATTLE & SHEEP FARM RESULTS
STOCKING AND LIVESTOCK PERFORMANCE
ORGANIC

STOCKING AND LIVESTOCK TERRY	JKWANCE	Identical sample				Full sample			
	201		2012	2/13	2011		2012	2/13	
LIVESTOCK CARRIED - L.U. per fari		No's	LU	No's	LU	No's	LU	No's	
Dairy cows	0.9	1	0.8	1	0.7	1	0.7	1	
Beef cows	33.1	44	35.1	47	30.5	41	33.5	45	
Other cattle	44.6	88	45.3	89	42.6	84	45.1	88	
Breeding sheep	55.8	696	57.5	717	55.2	689	59.8	746	
Other sheep	26.7	577	26.0	555	25.9	558	26.6	562	
Pigs	0.0	0	0.0	0	0.0	0	0.0	0	
Poultry	0.0	1	0.0	1	0.2	16	0.0	1	
Other livestock	0.0	0	0.0	0	0.0	0	0.0	0	
TOTAL (L.U.)	161.2		164.6		155.2		165.6		
STOCKING RATES									
Stocking rate (LU per eff.ha)	0.9		0.9		0.9		0.9		
GLU/forage effective hectare*	0.9		0.9		0.9		0.9		
GLO/forage effective ficetare	0.7		0.7		0.7		0.0		
* for organic farms, pigs, poultry and other	livestock are deem	ed to be g	razing liv	estock					
LIVESTOCK PERFORMANCE	11.		11.		11.		11.		
- Yield*	litres	n	litres	n	litres	n	litres	n	
Milk yield/cow	-	1	-	1	-	2	-	1	
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n	
Dairy cows	-	1	-	1	-	1	-	1	
Dairy calves	-	1	-	1	-	1	-	1	
Dairy heifers in calf	-	1	-	1	-	1	-	1	
Beef heifers in calf	-	4	-	2	959	5	-	2	
Finished cattle	1068	20	1281	15	1076	27	1232	20	
Beef store cattle 1-2 yrs	735	24	884	25	780	30	877	27	
Beef stores <1 yr	525	13	589	11	509	16	589	11	
Ewes	121	11	87	11	120	12	83	13	
Ewe hoggs	85	9	81	11	85	11	82	12	
Finished lambs	72	37	66	37	73	48	66	42	
Store lambs	50	20	50	15	52	24	49	17	
Finished Pigs	-	0	-	0	-	0	-	0	
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n	
Milk (pence per litre)	-	1	-	1	-	1	-	1	
Wool (pence per kg)	96	39	118	39	97	49	115	44	
Eggs (pence per dozen)	-	0	-	0	-	1	-	0	

<sup>\*</sup> Yield and price data is implied

## Table A4.4 LFA CATTLE & SHEEP FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

#### CONVENTIONAL

	Identical sample				Full sample				
	201	1/12	2012	2/13	2011	1/12	2012/13		
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's	LU	No's	
Dairy cows	1.5	2	1.2	1	1.6	2	1.0	1	
Beef cows	26.9	36	26.9	36	26.1	35	26.1	35	
Other cattle	38.8	76	39.8	77	38.5	75	37.4	73	
Breeding sheep	58.6	732	60.0	750	58.0	725	62.9	785	
Other sheep	24.2	531	25.7	554	24.7	543	28.6	625	
Pigs	0.1	1	0.0	0	0.1	1	0.0	0	
Poultry	0.0	2	0.0	2	0.0	1	0.0	2	
Other livestock	0.1	2	0.1	0	0.1	1	0.1	1	
TOTAL (L.U.)	150.2		153.8		149.1		156.2		
STOCKING RATES									
Stocking rate (LU per eff.ha)	0.9		1.0		1.0		1.0		
GLU/forage effective hectare*	0.9		1.0		0.9		0.9		
* for conventional farms, pigs, poultry and other liv	estock are	deemed to	be non-g	grazing liv	estock				
LIVESTOCK PERFORMANCE									
- Yield*	litres	n	litres	n	litres	n	litres	n	
Milk yield/cow	-	4	-	2	5462	7	-	2	
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n	
Dairy cows	-	4	-	2	809	7	-	2	
Dairy calves	-	2	-	0	-	2	-	0	
Dairy heifers in calf	-	1	-	0	-	2	-	0	
Beef heifers in calf	1012	7	-	4	956	10	1142	5	
Finished cattle	1037	39	1139	40	1042	45	1138	43	
Beef store cattle 1-2 yrs	781	41	884	40	778	53	877	46	
Beef stores <1 yr	550	32	587	33	522	42	584	38	
Ewes	117	32	110	34	109	42	107	39	
Ewe hoggs	85	27	91	26	90	36	87	31	
Finished lambs	70	41	64	41	71	54	64	47	
Store lambs	50	35	47	35	54	44	47	40	
Finished Pigs	-	0	-	0	-	0	-	0	
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n	
Milk (pence per litre)	-	4	-	2	25.6	7	-	2	

87

41

107

41

88

54

108

47

2

Wool (pence per kg)

Eggs (pence per dozen)

<sup>\*</sup> Yield and price data is implied

Table A5.1 LOWLAND CATTLE & SHEEP FARM RESULTS ORGANIC

Table A5.1 LOWI OUTPUTS AND INP	LAND CATTLE & SHE		M RES Identical		ORGAN	NIC	Full sample		
		2011/		2012	/13	2011/		2012	/13
Sample number	-	34		34	-	46		41	
Average farm size (UA	A)	138	3	141		148	3	145	i
Business size (ESU)		34		35		36		35	
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
Dairy -	milk output	0	0	0	0	0	0	0	0
	cattle	0	0	0	0	168	1	0	0
	net quota	0	0	0	0	0	0	0	0
04 44	valuation change	0	0	0	0	-183	-1	0	0
Other cattle	output	36763	267	43260	306	36269	244	39004	269
Chaon	valuation change	9666 20649	70 150	2396	17	8854	60 125	4516	31
Sheep -	total output valuation change	1736	150 13	20283 -592	143 -4	18526 2073	125 14	19085 -442	132 -3
Other livestock	valuation change	3558	26	-392 2425	- <del>4</del> 17	2649	18	-442 4161	-3 29
Arable crops	output	3336 7947	58	6977	49	9763	66	7755	54
Arable crops	protein/energy support	36	0	0977	0	58	0	0	0
By products forage and		3554	26	5114	36	3430	23	5333	37
Miscellaneous (incl. far		17739	129	22098	156	15434	104	23452	162
wiscentaneous (mei. iai	- organic grants	621	5	465	3	459	3	386	3
	- other agri-env.payments	16706	121	14778	104	17533	118	16203	112
	- subsidy/single farm paymer	28880	209	27493	194	29933	202	29682	205
	FARM REVENUE	147856	1072	144698	1023	144966	977	149136	1029
INPUTS									
Feeds	purchased concentrates	4871	35	4646	33	4059	27	5903	41
	homegrown concentrates	3668	27	2432	17	3467	23	2363	16
Purchased fodder, Tack	_	1833	13	1839	13	1433	10	2204	15
Veterinary and medicin		2633	19	2917	21	2377	16	2940	20
Other livestock costs		9272	67	8540	60	8557	58	8623	60
Seeds -	purchased and homegrown	2261	16	2813	20	2485	17	3005	21
Fertilisers		292	2	975	7	449	3	828	6
Crop protection		26	0	230	2	30	0	191	1
Other crop costs		1060	8	1147	8	1363	9	1035	7
Labour	paid incl. paid management	8864	64	9266	66	8334	56	10384	72
	casual	2188	16	1738	12	2022	14	1594	11
Machinery	contract	7539	55	8791	62	6938	47	7902	55
	repairs	5382	39	5528	39	5437	37	6137	42
	fuels	6626	48	6593	47	6535	44	6562	45
General farming costs		15425	112	17509	124	14847	100	16274	112
Land expenses		5813	42	5105	36	5740	39	4738	33
Rent	<del>-</del>	7332	53	8002	57	7494	51	10101	70
	FARM EXPENSES	85084	617	88071	623	81568	550	90786	627
Excess of revenue ove	r expenses	62772	455	56627	400	63398	427	58351	403
Notional inputs									
- rental value/imputed	rent	17365	126	18378	130	17054	115	16589	115
- unpaid labour		5331	39	5577	39	4388	30	4964	34
- machinery depreciati	on	11559	84	15363	109	12598	85	15620	108
	-	34254	248	39318	278	34040	229	37173	257
NET FARM INCOME	(excl. BLSA)	28518	207	17309	122	29358	198	21178	146
NET FARM INCOME	(incl. BLSA)	35874	260	18554	131	36472	246	22745	157
	•								

<b>Table A5.1</b>	<b>LOWLAND</b>	<b>CATTLE &amp; SH</b>	EEP FARM RES	SULTS CONVENTIONAL
-------------------	----------------	------------------------	--------------	--------------------

Table A5.1 LOWLAND CATTLE & SHE OUTPUTS AND INPUTS  Sample number Average farm size (UAA) Business size (ESU)		EEP FARM RESULTS CONVENTIONAL  Identical sample Full sample							
		2011/12 215 125 34		2012/13		2011/12		2012/13	
				215		269		287	
				129		132		133	
				34		34		35	
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
Dairy -	milk output	101	1	0	0	49	0	146	1
	cattle	183	1	0	0	-14	0	448	3
	net quota	0	0	0	0	0	0	0	0
	valuation change	-171	-1	0	0	16	0	-466	-3
	output	41492	331	38608	299	38526	291	37116	278
	valuation change	5481	44	3108	24	6431	49	2912	22
	total output	25017	200	20354	158	25028	189	21570	162
	valuation change	1584	13	3875	30	1833	14	2998	22
Other livestock		501	4	570	4	625	5	881	7
*	output	9723	78	10139	79	9646	73	10913	82
	protein/energy support	0	0	0	0	0	0	0	0
By products forage and co		8834	71	6754	52	8053	61	6162	46
Miscellaneous (incl. farm		17062	136	16994	132	18923	143	16375	123
	organic grants	0	0	5792	0	7067	0	5226	0
	other agri-env.payments	6051	48	5783	45	7067	53	5236	39
	single payment scheme FARM REVENUE	22566	180	20527	159	23798	180	21041	158 940
	FARM REVENUE	138423	1105	126711	983	139981	1058	125332	940
INPUTS									
Feeds	purchased concentrates	9489	76	9894	77	8233	62	9567	72
	homegrown concentrates	3200	26	4171	32	3243	24	4178	31
Purchased fodder, Tack a	nd stock keep	1764	14	2249	17	1636	12	2084	16
Veterinary and medicines	_	2939	23	3239	25	2881	22	3348	25
Other livestock costs		7828	63	7389	57	7726	58	7509	56
Seeds -	purchased and homegrown	1716	14	1792	14	1617	12	1841	14
Fertilisers		6446	51	7309	57	6546	49	7648	57
Crop protection		1775	14	1680	13	1679	13	1760	13
Other crop costs		1446	12	1740	13	1073	8	1694	13
Labour	paid incl. paid management	7547	60	7268	56	7540	57	7126	53
	casual	1948	16	2089	16	1931	15	2114	16
<b>-</b>	contract	5677	45	6796	53	5750	43	6348	48
	repairs	5911	47	6100	47	5673	43	5949	45
	fuels	5353	43	6295	49	5390	41	6191	46
General farming costs		11251	90	11870	92	11969	90	11910	89
Land expenses		4234	34	4075	32	4084	31	3949	30
Rent		6407	51	6757	52	6189	47	6680	50
	FARM EXPENSES	84932	678	90713	704	83159	628	89896	674
Excess of revenue over expenses		53492	427	35998	279	56821	429	35436	266
Notional inputs									
- rental value/imputed rent		13587	108	14163	110	14160	107	13449	101
- unpaid labour		3308	26	3540	27	3646	28	3793	28
- machinery depreciation		9834	79	10575	82	9894	75	10814	81
		26729	213	28279	219	27701	209	28057	210
NET FARM INCOME (excl. BLSA)		26763	214	7720	60	29121	220	7379	55
NET FARM INCOME (incl. BLSA)		33445	267	7492	58	35979	272	7039	53

Table A5.2 LOWLAND CATTLE & SHEEP FARM RESULTS ORGANIC INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LA	воск а	Identica	l sample					
INCOME MEASURES	201	1/12	-	2/13	201	Full so 1/12	-	2/13
	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
NET FARM INCOME (excl. BLSA)	28518	207	17309	122	29358	198	21178	146
plus unpaid labour (excludes farmer and spouse)	5331	39	5577	39	4388	30	4964	34
plus imputed rent and rental value	17077	124	18045	128	16736	113	16260	112
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottages		1	147	1	239	2	195	1
minus insurance repairs & net interest payments	5592	41	6486	46	5240	35	6213	43
minus build & works depreciation	3791	27	3721	26	3622	24	3337	23
minus non-agric activity and director costs	917	7	896	6	678	5	743	5
FARM BUSINESS INCOME	40479	294	29681	210	40703	274	31914	220
LABOUR USE AND LABOUR INCOMES								
Annual Labour Units per farm	1.8		1.8		1.8		1.9	
of which farmer & spouse	1.0		1.0		1.0		1.0	
of which paid family labour	0.1		0.1		0.1		0.1	
of which unpaid labour	0.3		0.3		0.2		0.3	
Notional value of farmer/spouse labour	18144		18367		18988		19374	
Value of paid family labour	2906		2219		2156		2229	
Labour income per Annual Labour Unit	18707		11908		18573		13480	
Family labour income per Family Work Unit	18391		6579		18509		9517	
Value of paid managerial input	103		103		76		100	
TENANT'S CAPITAL								
Machinery	64921	471	79991	565	66856	451	81244	561
Livestock	101618	737	111504	788	99588	671	109907	759
Crops	9398	68	10144	72	11398	77	9413	65
Stores	2666	19	2917	21	2534	17	3244	22
TOTAL	178604	1295	204556	1446	180376	1216	203808	1407
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value
Land and Property	1170900	1284844	1215005	1327778	1198346	1260868	1102269	1206554
Buildings, improvements and fixtures	32329	41275	41275	40850	31601	38152	36318	36138
Machinery	57673	72169	72169	87813	59705	74007	73999	88488
Livestock	92486	110751	110002	113005	90842		107105	112709
Produce and goods in store	15313	17084	17094	16596	18880	20343	15578	16014
Quotas and single payment asset value	34772	38593	38593	36956	36503	40876	42372	40092
Credit balances	31074	30613	28487	27159	35433	31869	25882	25320
TOTAL	1434546	1595328	1522626	1650158	1471311	1574449	1403523	1525314
EXTERNAL LIABILITIES								
Long and medium term loans	84197	122827	122827	134717	83144	110871	121216	130077
Short term loans	14061	15260	15260	18770	16354	16957	19039	22138
Overdrafts	16499	24352	24582	24262	18480	26939	21437	22066
TOTAL	114757	162439	162669	177749	117977	154767	161693	174281
NET WORTH	1319789	1432889	1359957	1472409	1353334	1419682	1241830	1351033
RETURNS TO CAPITAL								
Owner Equity (%)	89.8		89.2		90.2		88.6	
FBI/Net worth (%)	3.1		2.2		3.0		2.6	
Management and Investment Income	17833		290		17561		3471	
Return on tenant's capital (%)	10.0		0.1		9.7		1.7	
Return on all capital (%)	1.2		0.0		1.2		0.2	

Table A5.2 LOWLAND CATTLE & SHEEP FARM RESULTS CONVENTIONAL INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

INCOME MEASURES AND RETURNS TO LAI	BOUR &				F 11 1				
INCOME MEAGLIDEG	Identical sample         Ful           2011/12         2012/13         2011/12						l sample 2012/13		
INCOME MEASURES	£/farm	1/12 <b>£/ha</b>	£/farm	2/13 <b>£/ha</b>	£/farm	1/12 <b>£/ha</b>	£/farm	£/ha	
NET FARM INCOME (excl. BLSA)	26763	214	7720	<b>£/11a</b> 60	29121	220	7379	£/11a	
plus unpaid labour (excludes farmer and spouse)	3308	26	3540	27	3646	28	3793	28	
plus imputed rent and rental value	13381	107	13892	108	13911	105	13210	99	
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0	
minus imputed rent on farmhouse & farm cottages		2	304	2	330	2	299	2	
minus imputed tent on farmiouse & farm cottages minus insurance repairs & net interest payments	2334	19	2635	20	1997	15	2639	20	
minus build & works depreciation	3717	30	3514	27	3362	25	3284	25	
minus ound & works depreciation minus non-agric activity and director costs	260	2	458	4	197	1	380	3	
FARM BUSINESS INCOME	36837	294	18242	141	40790	308	17781	133	
LABOUR USE AND LABOUR INCOMES									
Annual Labour Units per farm	1.7		1.6		1.7		1.6		
of which farmer & spouse	1.0		1.0		1.0		1.0		
of which paid family labour	0.0		0.0		0.0		0.0		
of which unpaid labour	0.2		0.2		0.2		0.2		
Notional value of farmer/spouse labour	19387		20070		19993		20375		
Value of paid family labour	692		571		917		582		
Labour income per Annual Labour Unit	17931		6095		19221		5949		
Family labour income per Family Work Unit	16896		-2474		18982		-2701		
Value of paid managerial input	0		0		0		1		
TENANT'S CAPITAL									
Machinery	55505	443	59903	465	56267	425	60418	453	
Livestock	93736	748	103884	806	91881	694	102504	769	
Crops	8902	71	9069	70	8745	66	8737	66	
Stores	7019	56	7392	57	7457	56	7516	56	
TOTAL	165162	1319	180247	1398	164350	1242	179175	1344	
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing	
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value	
Land and Property	778343		843448	930410	839142		799826	883218	
Buildings, improvements and fixtures	36147	35887	34217	33979	32971	32804	32339	31866	
Machinery	52461	58549	58549	61257	53393	59141	58862	61974	
Livestock	86991	100482	100489	107279	84351	99410	100083	104925	
Produce and goods in store	16166	18667	18657	17149	17852	19613	19822	16268	
Quotas and single payment asset value	28934	30233	30233	28509	30501	32029	31851	29074	
Credit balances	35908	38713	38200	31571	31733	34998	36803	32319	
TOTAL					1089942				
EXTERNAL LIABILITIES	<b>53</b> 001	40020	40110	55465	1001.1	20205	400.60	5.00.00	
Long and medium term loans	52091	48830	49110	55465	40914		48869	56062	
Short term loans	10207	12921	12920	12198	11096	13504	14074	13020	
Overdrafts TOTAL	19467 81766	18351 80101	18353 80382	19905 87568	17190 69200	16853 69662	18019 80962	18659 87741	
	01700	00101	00302	07500	0,200	0,002	00702	07711	
NET WORTH	953183	1045839	1043410	1122586	1020743	1119524	998624	1071904	
RETURNS TO CAPITAL									
Owner Equity (%)	92.9		92.8		94.1		92.4		
FBI/Net worth (%)	3.9		1.7		4.0		1.8		
Management and Investment Income	14059		-12578		15986		-13335		
Return on tenant's capital (%)	8.5		-7.0		9.7		-7.4		
Return on all capital (%)	1.4		-1.1		1.5		-1.2		

Table A5.3 LOWLAND CATTLE & SHEEP FARM RESULTS ORGANIC LAND UTILISATION AND CROP PERFORMANCE

		Identical sample			F	ull sa	ample		
LAND UTILISATIO	ON - hectares per farm	2011/12		2012/13		2011/12		2012/1	3
Tillage - maincrops	Wheat	3.2		2.5		3.1		2.3	
	Barley	2.4		2.5		2.1		2.4	
	Other cereals	1.8		2.8		3.1		4.7	
	Oil seed rape	0.0		0.0		0.0		0.0	
	Linseed	0.0		0.0		0.0		0.0	
	Peas/Beans	0.8		1.2		1.7		1.2	
	Potatoes	0.0		0.0		0.0		0.0	
	Sugarbeet	0.0		0.0		0.0		0.0	
	Horticulture	0.0		0.0		0.0		0.0	
	Other crops	0.0		0.0		0.7		0.0	
	Total cropping	8.2		9.0		10.6		10.5	
	Set-aside	0.0		0.0		0.0		0.0	
Tillage - fodder		3.9		3.9		2.9		4.7	
Grassland	Grazing, hay and silage	119.1		122.3		128.7		116.5	
Fallow and land let		3.9		3.5		3.5		3.5	
Rough grazing	Effective	2.8		2.7		2.6		9.6	
Utilisable agricultura	al area (Effective ha.)	137.9		141.5		148.3		144.9	,
Woods, roads and bui	ldings	5.5		5.6		15.6		5.1	
TOTAL AREA (Act	ual ha.)	143.4		147.1		164.0		150.0	
effective forage area		129.7		132.6		137.2		134.1	
Bare land and forage l	hired in	3.8		3.7		3.0		3.3	
CROP PERFORMA	NCE *								
- Yields (tonnes per l	hectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		4.0	6	3.4	6	4.1	8	3.8	8
Barley		3.5	7	2.8	6	3.7	9	2.9	8
Oilseed Rape		-	0	-	0	-	0	-	0
Potatoes		-	0	-	0	-	0	-	0
Sugar Beet		-	0	-	0	-	0	-	0
- Prices (£ per tonne)	)*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		226	6	257	6	229	8	252	8
Barley		209	7	236	6	208	9	233	8
Oilseed Rape		-	0	-	0	-	0	-	0
Potatoes		-	0	-	0	-	0	-	0
Sugar Beet		-	0	-	0	-	0	-	0

<sup>\*</sup> Yield and price data is implied

Table A5.3 LOWLAND CATTLE & SHEEP FARM RESULTS CONVENTIONAL LAND UTILISATION AND CROP PERFORMANCE

		Idei	ntical s	cal sample			Full sa	ample	
LAND UTILISATIO	ON - hectares per farm	2011/12		2012/13		2011/1	2	2012/	13
Tillage - maincrops	Wheat	3.3		3.7		3.1		3.9	
	Barley	6.1		5.6		6.2		6.0	
	Other cereals	0.8		0.4		0.9		0.5	
	Oil seed rape	0.4		0.4		0.4		0.5	
	Linseed	0.0		0.0		0.0		0.1	
	Peas/Beans	0.0		0.0		0.0		0.2	
	Potatoes	0.0		0.0		0.0		0.0	
	Sugarbeet	0.0		0.0		0.0		0.0	
	Horticulture	0.0		0.0		0.0		0.0	
	Other crops	0.0		0.0		0.1		0.0	
	Total cropping	10.5		10.2		10.7		11.2	
	Set-aside	0.0		0.0		0.0		0.0	
Tillage - fodder		3.8		2.6		3.7		2.5	
Grassland	Grazing, hay and silage	103.8		109.1		109.6		107.1	
Fallow and land let		5.5		5.3		6.9		5.6	
Rough grazing	Effective	1.7		1.7		1.4		7.0	
Utilisable agricultural area (Effective ha.)		125.3		128.9		132.4		133.3	
Woods, roads and buildings		5.0		5.1		4.7		4.9	
TOTAL AREA (Act	ual ha.)	130.4		134.0		137.2		138.2	
effective forage area		113.0		116.8		117.7		120.0	
Bare land and forage l	hired in	8.3		7.9		7.0		8.3	
CROP PERFORMA	NCE *								
- Yields (tonnes per	hectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		8.1	22	6.4	21	7.4	21	6.2	23
Barley		5.9	29	5.0	27	6.0	29	5.0	28
Oilseed Rape		-	2	-	2	-	3	-	2
Potatoes		-	0	-	0	-	0	-	2
Sugar Beet		-	0	-	0	-	0	-	0
- Prices (£ per tonne)	)*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		150	22	181	21	150	21	184	23
Barley		151	29	170	27	148	29	170	28
Oilseed Rape		-	2	-	2	-	3	-	2
Potatoes		-	0	-	0	-	0	-	2
Sugar Beet		-	0	-	0	-	0	-	0

<sup>\*</sup> Yield and price data is implied

Table A5.4 LOWLAND CATTLE & SHEEP FARM RESULTS ORGANIC STOCKING AND LIVESTOCK PERFORMANCE

		Identical			Full sample			
	2011		2012		2011			
LIVESTOCK CARRIED - L.U. per farm	LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	0.0	0	0.0	0	0.2	0		C
Beef cows	27.9	37	27.1	36	29.1	39	2012/ LU 0.0 27.7 56.9 22.5 8.8 2.4 0.2 0.0 118.5 0.8 0.9 litres - £/head - 1149 850 462 111	37
Other cattle	55.1	101	57.2	104	52.4	97		103
Breeding sheep	25.8	246	25.0	241	24.5	234		218
Other sheep	10.5	228	10.0	205	9.8	212		179
Pigs	2.5	16	2.9	18	1.9	12		15
Poultry	1.0	85	0.1	22	0.8	64		93
Other livestock	0.0	1	0.0	1	0.0	2		3
TOTAL (L.U.)	122.9		122.2		118.6		118.5	
STOCKING RATES								
Stocking rate (LU per eff.ha)	0.9		0.9		0.8		0.8	
GLU/forage effective hectare*	0.9		0.9		0.9		0.9	
I IVECTOCK DEDECODMANCE								
- Yield*	litres	n 0	litres	n 0	litres	n 0	litres	r
- <b>Yield*</b> Milk yield/cow	-	0	-	0	-	0	-	(
- Yield* Milk yield/cow - Prices (£ per head)*	litres - £/head	0 n	£/head	0 n	litres - £/head	0 n	£/head	1
- Yield* Milk yield/cow - Prices (£ per head)* Dairy cows	-	0 n 0	£/head	0 n 0	£/head -	0 n 1	£/head -	1
- Yield* Milk yield/cow - Prices (£ per head)* Dairy cows Dairy calves	-	0 n 0 0	£/head - -	0 n 0 0	£/head - -	0 n 1 0	£/head - -	1
- Yield* Milk yield/cow - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf	-	0 n 0 0	£/head - -	0 n 0 0	£/head - -	0 n 1 0 2	£/head - -	1
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf	£/head - - -	0 n 0 0 1	£/head - - -	0 n 0 0 0	£/head - - -	0 n 1 0 2 0	£/head	1 ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle	£/head - - - - 1004	0 n 0 0 1 0 25	£/head - - - - 1143	0 n 0 0 0 0 23	£/head - - - - 1002	0 n 1 0 2 0 34	£/head - - - - 1149	() () () () () ()
Milk yield/cow  - Prices (£ per head)*  Dairy cows  Dairy calves  Dairy heifers in calf  Beef heifers in calf  Finished cattle  Beef store cattle 1-2 yrs	£/head - - -	0 n 0 0 1 0 25 10	£/head - - - - 1143 883	0 n 0 0 0 0 23 10	£/head - - - 1002 664	0 n 1 0 2 0 34 15	£/head - - - - 1149 850	() () () () () () () ()
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr	£/head - - - - 1004	0 n 0 0 1 0 25 10 4	£/head 1143 883 467	0 n 0 0 0 0 0 23 10 7	£/head 1002 664 510	0 n 1 0 2 0 34 15 8	£/head 1149 850 462	11 () () () () () () () () ()
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr Ewes	£/head - - - - 1004	0 n 0 0 1 0 25 10 4 4	£/head - - - - 1143 883	0 n 0 0 0 0 23 10 7 6	£/head - - - 1002 664	0 n 1 0 2 0 34 15 8 5	£/head 1149 850 462 111	1 ( ( ( ( 2 12 8
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr Ewes Ewe hoggs	£/head 1004 665	0 n 0 0 1 0 25 10 4 4 1	£/head 1143 883 467 102	0 n 0 0 0 0 23 10 7 6 0	£/head 1002 664 510 68	0 n 1 0 2 0 34 15 8 5 2	£/head 1149 850 462 111	1 ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr Ewes Ewe hoggs Finished lambs	£/head - - - - 1004	0 n 0 0 1 0 25 10 4 1 20	£/head	0 n 0 0 0 0 23 10 7 6 0 19	£/head 1002 664 510 68 - 76	0 n 1 0 2 0 34 15 8 5 2 26	£/head	11 () () () () () () () () () () () () ()
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr Ewes Ewe hoggs Finished lambs Store lambs	£/head 1004 665 75	0 n 0 0 1 0 25 10 4 4 1	£/head 1143 883 467 102	0 n 0 0 0 0 23 10 7 6 0	£/head 1002 664 510 68	0 n 1 0 2 0 34 15 8 5 2	£/head	11 () () () () () () () () () () () () ()
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr Ewes Ewe hoggs Finished lambs Store lambs Finished Pigs  - Prices (pence per unit)*	£/head 1004 665 75	0 n 0 0 1 0 25 10 4 1 20 4 0	£/head	0 n 0 0 0 0 23 10 7 6 0 19 4 0	£/head 1002 664 510 68 - 76 61	0 n 1 0 2 0 34 15 8 5 2 26 6 0	£/head	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr Ewes Ewe hoggs Finished lambs Store lambs Finished Pigs  - Prices (pence per unit)* Milk (pence per litre)	£/head 1004 665 75 - p/unit	0 n 0 0 1 0 25 10 4 1 20 4 0	£/head	0 n 0 0 0 0 23 10 7 6 0 19 4 0	£/head	0 n 1 0 2 0 34 15 8 5 2 26 6 0 n 0	£/head	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
- Yield* Milk yield/cow  - Prices (£ per head)* Dairy cows Dairy calves Dairy heifers in calf Beef heifers in calf Finished cattle Beef store cattle 1-2 yrs Beef stores <1 yr Ewes Ewe hoggs Finished lambs	£/head 1004 665 75	0 n 0 0 1 0 25 10 4 1 20 4 0	£/head	0 n 0 0 0 0 23 10 7 6 0 19 4 0	£/head	0 n 1 0 2 0 34 15 8 5 2 26 6 0	£/head	r ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (

<sup>\*</sup> Yield and price data is implied

Table A5.4 LOWLAND CATTLE & SHEEP FARM RESULTS CONVENTIONAL STOCKING AND LIVESTOCK PERFORMANCE

STOCKING AND L	IVESTOCK PERFORMA							_	
			Identical			201	Full so		
		2011		2012		2011		2012	
LIVESTOCK CARI	RIED - L.U. per farm	LU	No's	LU	No's	LU	No's	LU	No's
	Dairy cows	0.1	0	0.0	0	0.1	0	0.1	0
	Beef cows	24.0	32	23.2	31	24.1	32	22.2	30
	Other cattle	44.4	83	43.1	80	41.2	77	42.5	79
	Breeding sheep	29.5	280	32.0	305	30.4	289	33.2	317
	Other sheep	11.2	243	11.6	245	11.3	243	12.1	252
	Pigs	0.1	0	0.0	0	0.1	0	0.1	1
	Poultry	0.2	12	0.2	15	0.1	9	0.3	17
	Other livestock	0.0	3	0.0	0	0.0	6	0.0	3
	TOTAL (L.U.)	109.4		110.2		107.2		110.4	
STOCKING RATES	S								
Stocking rate (LU per		0.9		0.9		0.8		0.8	
GLU/forage effective	*	1.0		0.9		0.9		0.9	
* for conventional far	rms, pigs, poultry and other	livestock are	deemed to	be non-g	grazing liv	estock			
LIVESTOCK PERF	FORMANCE								
- Yield*		litres	n	litres	n	litres	n	litres	n
Milk yield/cow		-	1	-	0	-	2	-	1
- Prices (£ per head)	*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows		-	1	-	0	-	2	-	1
Dairy calves		-	1	-	0	-	0	-	0
Dairy heifers in calf		-	2	-	2	-	3	-	4
Beef heifers in calf		1004	5	1081	8	-	4	1072	8
Finished cattle		992	33	1095	32	1041	44	1090	38
Beef store cattle 1-2 y	rs	768	32	820	31	745	42	814	38
Beef stores <1 yr		2062	22	989	21	503	32	932	25
Ewes		123	18	85	13	121	22	80	16
Ewe hoggs		122	12	113	12	138	14	110	16
Finished lambs		80	33	74	32	81	44	74	39
Store lambs		64	23	56	24	63	32	57	30
Finished Pigs		-	0	-	0	-	0	-	0
- Prices (pence per u	nit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)		-	1	-	0	-	2	-	1
XX7 1 / 1 \		100	2.1	100	2.1	104	4.4	101	20

Wool (pence per kg)

Eggs (pence per dozen)

<sup>\*</sup> Yield and price data is implied

Table A6.1 MIXE	ED FARM RESULTS	RESULTS ORGANIC							
OUTPUTS AND INP	PUTS	1	Identical	sample			Full so	ımple	
		2011/		2012	/13	2011/		2012	/13
Sample number	•	13		13		17		27	
Average farm size (UA	AA)	209	)	212	2	204	ļ	228	3
Business size (ESU)		122	ļ	122	2	83		111	l
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
Dairy -	milk output	1062	5	1289	6	812	4	8641	38
	cattle	563	3	179	1	430	2	-380	-2
	net quota	0	0	0	0	0	0	0	0
	valuation change	-542	-3	7	0	-415	-2	83	0
Other cattle	output	31719	152	52517	247	28281	139	43930	192
~~	valuation change	10248	49	-4788	-23	6235	31	30	0
Sheep -	total output	14408	69	11697	55	9164	45	9335	41
	valuation change	-316	-2	917	4	-614	-3	86	0
Other livestock		96005	459	123756	583	5724	28	71200	312
Arable crops	output	73208	350	60322	284	56651	278	70787	310
	protein/energy support	171	1	0	0	276	1	0	0
By products forage and		4934	24	5365	25	5420	27	5652	25
Miscellaneous (incl. fa	rmhouse benefit value)	31034	149	35272	166	28451	140	37521	164
	- organic grants	502	2	475	2	501	2	320	1
	- other agri-env.payments	21555	103	22398	106	23508	115	24120	106
	- subsidy/single farm paymer		219	41452	195	44464	218	44542	195
	FARM REVENUE	330258	1580	350858	1653	208890	1026	315870	1383
INDLUTC									
INPUTS		72402	247	00006	410	6002	24	E 1065	220
Feeds	purchased concentrates	72493	347	88886	419	6883	34	54265	238
Donahaaad faddan Taa	homegrown concentrates	6771	32	4425	21	5318	26	4506	20
Purchased fodder, Tac	-	1513 3350	7 16	1313 4490	6 21	1448 1948	7 10	1438 3507	6 15
Veterinary and medici Other livestock costs	nes	13051	62	14001	66	8907	44	12815	56
Seeds -	murchased and homeomorum	15303	73	13750	65	12829	63	14443	63
Fertilisers	purchased and homegrown	2053	10	2835	13	587	3	2771	12
		831	4	2833 957	5	39	0	1214	5
Crop protection		4611	22	5539	26	2356	12	4664	20
Other crop costs									
Labour	paid incl. paid management		178	36998	174	28758	141	36715	161
Maahimami	casual	4079	20	4624	22 89	6354 17013	31 84	5066	22
Machinery	contract	21855	105	18850				15429	68
	repairs fuels	10490 10944	50 52	9042 10151	43 48	9658 9175	47 45	10725 11733	47 51
Canaral farming agets	Tuels	26352	126	30925	46 146	19885	98	30501	134
General farming costs		9100	44	11261	53	9986	98 49	12591	55
Land expenses Rent		16153	77	16668	79	12081	59	17812	
Kent	FARM EXPENSES	256140	1226	274713	1294	153226	753	240195	78 1051
	TARM EM ENGES	230140	1220	2/4/13	1274	133220	755	240173	1031
Excess of revenue over	er expenses	74118	355	76144	359	55664	273	75675	331
Notional inputs									
- rental value/imputed	rent	33824	162	32653	154	28896	142	31793	139
- unpaid labour		4392	21	4559	21	1913	9	3078	13
- machinery depreciat	ion	23408	112	27006	127	17284	85	24378	107
deprociat	•	61623	295	64219	303	48093	236	59249	259
NIET EADA INICOAT	Const. DLCA								
NET FARM INCOME	E (excl. BLSA)	12495	60	11926	56	7571	37	16426	72
NET FARM INCOME	E (incl. BLSA)	18294	88	13248	62	11862	58	16938	74

Table A6.1 MIXE	CONVENTIONAL									
<b>OUTPUTS AND INPU</b>	JTS	1	Identical	sample			Full so	ımple		
		2011/		2012	/13	2011	/12	2012	/13	
Sample number	•	170	)	170	)	87		380	)	
Average farm size (UA	A)	178	3	183	;	172		187	7	
Business size (ESU)		84		84		85		90		
OUTPUTS		£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	
Dairy -	milk output	275	2	284	2	1039	6	10647	57	
	cattle	-7	0	-10	0	-71	0	5648	30	
	net quota	0	0	0	0	0	0	0	0	
	valuation change	4	0	6	0	-33	0	-6167	-33	
Other cattle	output	58647	329	59970	328	68725	401	61525	329	
	valuation change	6551	37	4250	23	12540	73	7602	41	
Sheep -	total output	18083	101	13129	72	15128	88	13933	75	
	valuation change	375	2	2090	11	450	3	1943	10	
Other livestock		6273	35	6511	36	3191	19	5928	32	
Arable crops	output	87967	494	84719	464	89701	523	87210	467	
By products forage and	protein/energy support	76 17896	0 100	0 16416	0 90	66 15433	0 90	0 15241	0 82	
Miscellaneous (incl. far		24552	138	22460	123	32575	190	21587	116	
,	- organic grants	24332	0	0	0	0	0	0	0	
	- other agri-env.payments	8008	45	7788	43	9189	54	8583	46	
	- single payment scheme	38464	216	34317	188	37741	220	35990	193	
	FARM REVENUE	267164	1499	251930	1379	285674	1665	269670	1443	
	111111111111111111111111111111111111111	207101	1 1,77	231730	1377	203071	1005	207070	1113	
INPUTS										
Feeds	purchased concentrates	17269	97	13491	74	21276	124	16919	91	
	homegrown concentrates	9033	51	8465	46	11863	69	11798	63	
Purchased fodder, Tack	and stock keep	975	5	778	4	1030	6	1045	6	
Veterinary and medicine	es	2679	15	2770	15	2653	15	3241	17	
Other livestock costs		11920	67	12279	67	13715	80	13453	72	
Seeds -	purchased and homegrown	6161	35	6410	35	6153	36	6819	36	
Fertilisers		19787	111	21539	118	19600	114	22112	118	
Crop protection		10918	61	13304	73	10675	62	14061	75	
Other crop costs		3731	21	3905	21	3937	23	4188	22	
Labour	paid incl. paid management	10035	56	11471	63	12499	73	12512	67	
	casual	2607	15	2346	13	2413	14	2165	12	
Machinery	contract	9098	51	10855	59	11234	65	12820	69	
	repairs	9312	52	10077	55	10217	60	11094	59	
C 16 :	fuels	12824	72	12761	70	14041	82	14371	77	
General farming costs		18777	105	21020	115	19862	116	20347	109	
Land expenses		6180	35 62	5115	28	6782	40	5530	30	
Rent	FARM EXPENSES	11015 162323	911	11992 168576	923	11015 178966	1043	14561 187038	78 1001	
	PARITEAT ENSES	102323	911	106570	923	170900	1043	10/030	1001	
Excess of revenue over	expenses	104840	588	83354	456	106708	622	82631	442	
Notional inputs										
- rental value/imputed i	rent	19188	108	20486	112	17171	100	20938	112	
- unpaid labour		5963	33	6400	35	5383	31	10516	56	
- machinery depreciation	on	18608	104	18961	104	19168	112	23158	124	
, i	•	43758	246	45847	251	41721	243	54612	292	
NET FARM INCOME	(excl. BLSA)	61082	343	37507	205	64987	379	28020	150	
	·				010					
NET FARM INCOME	(Incl. BLSA)	67288	378	38718	212	69946	408	28871	154	

# Table A6.2 MIXED FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

#### **ORGANIC**

INCOME MEASURES AND RETURNS TO LA	BOUR &				Full sample				
INCOME MEASURES	201	Identica	•	2/13	201			2/13	
INCOME MEASURES	£/farm	1/12 £/ha	£/farm	£/ha	£/farm	1/12 <b>£/ha</b>	£/farm	£/ha	
NET FARM INCOME (excl. BLSA)	12495	£/11a	11926	56	7571	37	16426	<b>£/11a</b> 72	
plus unpaid labour (excludes farmer and spouse)	4392	21	4559	21	1913	9	3078	13	
plus imputed rent and rental value	33756	162	32441	153	28762	141	31626	138	
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0	
minus imputed rent on farmhouse & farm cottages		3	692	3	593	3	778	3	
minus insurance repairs & net interest payments	5158	25	6955	33	5060	25	5525	24	
minus build & works depreciation	15923	76	14324	67	6851	34	11720	51	
minus non-agric activity and director costs	0	0	0	0	0	0	0	0	
FARM BUSINESS INCOME	28869	138	26954	127	25742	126	33106	145	
LABOUR USE AND LABOUR INCOMES									
Annual Labour Units per farm	3.3		3.2		2.8		3.4		
of which farmer & spouse	1.0		1.0		1.0		1.1		
of which paid family labour	0.0		0.1		0.0		0.1		
of which unpaid labour	0.2		0.2		0.1		0.2		
Notional value of farmer/spouse labour	18141		18314		18723		20525		
Value of paid family labour	0		1853		0		1364		
Labour income per Annual Labour Unit	12176		12159		10823		12701		
Family labour income per Family Work Unit	-4929		-4480		-6520		28		
Value of paid managerial input	204		204		156		2159		
TENANT'S CAPITAL									
Machinery	138773	664	151593	714	99243	488	137051	600	
Livestock	100100	479	107981	509	81429	400	102147	447	
Crops	40494	194	37304	176	42455	209	40207	176	
Stores	13687	65	15974	75	11470	56	16564	73	
TOTAL	293054	1402	312852	1474	234597	1152	295969	1296	
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing	
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value	
Land and Property		1485690	1485690			1854289		1787366	
Buildings, improvements and fixtures		113570		112434	54974	63806	96437	97749	
Machinery	134109	143436		159750	94596	103889	133081	141022	
Livestock	92512	107687	103641	112322	76671	86187	99057	105236	
Produce and goods in store	52584	55921	56111	50444	55204	54400	61103	60004	
Quotas and single payment asset value	54046	59571	59571	54366	53022	59482	63602	59164	
Credit balances	59855	94904	60030	56946	41693	54314	62375	56367	
TOTAL					2071646				
EXTERNAL LIABILITIES									
Long and medium term loans	126806	188804	184076	191488	78103	90687	135197	154566	
Short term loans	37236	71213	48160	47036	33449	25057	43318	43856	
Overdrafts	29677	9257	9257	12372	26190	11643	12467	10019	
TOTAL	193719		241493		137742	127386	190972	208441	
NET WORTH	1618638	1791505	1780557	1919756	1933904	2148981	1931741	2098467	
RETURNS TO CAPITAL									
Owner Equity (%)	86.9		88.4		94.4		91.0		
FBI/Net worth (%)	1.8		1.5		1.3		1.7		
Management and Investment Income	356		-4862		-6705		-1428		
Return on tenant's capital (%)	0.1		-1.6		-2.9		-0.5		
Return on all capital (%)	0.0		-0.2		-0.3		-0.1		
•									

# Table A6.2 MIXED FARM RESULTS INCOME MEASURES AND RETURNS TO LABOUR & CAPITAL

#### **CONVENTIONAL**

INCOME MEASURES AND RETURNS TO LA	BOUR &				Full sample			
INCOME MEASURES	201	<i>Identica</i> 1/12	-	2/13	201		-	2/13
INCOME MEASURES	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha	£/farm	£/ha
NET FARM INCOME (excl. BLSA)	61082	343	37507	205	64987	379	28020	150
plus unpaid labour (excludes farmer and spouse)	5963	33	6400	35	5383	31	10516	56
plus imputed rent and rental value	18869	106	20038	110	16794	98	20645	110
plus semi-integrated non-agric activities output	0	0	0	0	0	0	0	0
minus imputed rent on farmhouse & farm cottages		3	555	3	574	3	707	4
minus insurance repairs & net interest payments	7720	43	6695	37	9706	57	7290	39
minus build & works depreciation	5002	28	4996	27	4005	23	5503	29
minus non-agric activity and director costs	562	3	583	3	559	3	359	2
FARM BUSINESS INCOME	72076	404	51116	280	72321	422	45322	243
LABOUR USE AND LABOUR INCOMES								
Annual Labour Units per farm	2.1		2.2		2.1		2.3	
of which farmer & spouse	1.2		1.2		1.1		1.1	
of which paid family labour	0.0		0.1		0.1		0.1	
of which unpaid labour	0.3		0.3		0.3		0.5	
Notional value of farmer/spouse labour	23817		24185		22210		22557	
Value of paid family labour	852		2163		979		2023	
Labour income per Annual Labour Unit	29580		18373		32233		14442	
Family labour income per Family Work Unit	36706		17239		42320		8788	
Value of paid managerial input	80		297		79		261	
TENANT'S CAPITAL								
Machinery	103845	583	112149	614	101899	594	130616	699
Livestock	105658	593	116021	635	110349	643	123611	661
Crops	36869	207	42924	235	37988	221	43689	234
Stores	23856	134	24890	136	19847	116	24357	130
TOTAL	270229	1516	295984	1620	270082	1574	322273	1724
	Opening	Closing	Opening	Closing	Opening	Closing	Opening	Closing
ASSETS	Value	Value	Value	Value	Value	Value	Value	Value
Land and Property			1204512				1150404	
Buildings, improvements and fixtures	48979	46074	46090	46298	37645	37773	49687	50716
Machinery	96556	111135	110430		95108	108690	128223	133010
Livestock	98960	112357	112261	119781		119364		125697
Produce and goods in store	59609	74434	76214	73002	58752	73519	79192	71011
Quotas and single payment asset value	47120	50587	50587	46849	44956	48044	51998	48831
Credit balances	48088	48479	48590	46238	50981	49966	51685	50589
TOTAL					1391235			
TOTAL	1314012	1047576	1040002	1707027	1371233	1314113	1032/13	1731100
EXTERNAL LIABILITIES								
Long and medium term loans	102792	93881	93852	96631	118401	118954	143595	146568
Short term loans	31680	37262	36269	32286	33134	40137	35456	32079
Overdrafts	41975	33393	33207	33948	49971	35331	33820	40212
TOTAL	176446	164536	163328	162865	201506	194422	212870	218859
NET WORTH	1338166	1483042	1485354	1626964	1189729	1319691	1419843	1532300
DETUDNOTO CARTAL								
RETURNS TO CAPITAL	00.0		00.0		07.2		07 F	
Owner Equity (%)	90.0		90.9		87.2		87.5	
FBI/Net worth (%)	5.4		3.4		6.1 47814		3.2	
Management and Investment Income	43551 16.1		14829 5.0		4/814 17.7		6575 2.0	
Return on tenant's capital (%) Return on all capital (%)	2.9		0.9		3.4		0.4	
Return on an capital (70)	2.9		0.9		3.4		0.4	

# Table A6.3 MIXED FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

#### **ORGANIC**

		Idei	ntical	sample			Full sa	mple	
LAND UTILISATIO	N - hectares per farm	2011/12		2012/13		2011/12	2	2012/1	13
Tillage - maincrops	Wheat	30.9		22.0		27.4		24.8	
	Barley	18.8		14.6		20.8		17.8	
	Other cereals	16.5		22.7		16.7		19.3	
	Oil seed rape	0.0		0.0		0.2		0.0	
	Linseed	0.0		0.0		0.0		0.9	
	Peas/Beans	4.4		4.1		9.1		8.5	
	Potatoes	0.9		0.8		0.5		1.1	
	Sugarbeet	0.0		0.0		0.0		0.0	
	Horticulture	4.5		4.9		0.9		2.8	
	Other crops	0.3		0.6		2.6		12.8	
	Total cropping	76.3		69.6		<b>78.2</b>		88.0	
	Set-aside	0.0		0.0		0.5		0.0	
Tillage - fodder		2.7		2.8		9.8		5.7	
Grassland	Grazing, hay and silage	121.2		129.3		102.3		120.0	
Fallow and land let		7.7		9.5		12.6		13.4	
Rough grazing	Effective	1.1		1.1		0.2		1.3	
Utilisable agricultura	al area (Effective ha.)	209.0		212.3		203.6		228.4	
Woods, roads and buil	ldings	8.1		8.0		9.2		10.2	
TOTAL AREA (Act	ual ha.)	217.1		220.3		212.8		238.7	
effective forage area		130.9		139.0		116.8		130.5	
Bare land and forage h	hired in	6.3		5.9		4.8		3.4	
CROP PERFORMA	NCE *								
- Yields (tonnes per l	hectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		3.7	10	2.4	8	3.3	12	2.9	14
Barley		3.3	8	2.3	7	3.5	10	2.7	14
Oilseed Rape		-	0	-	0	-	1	-	0
Potatoes		-	2	-	2	-	1	-	4
Sugar Beet		-	0	-	0	-	0	-	0
- Prices (£ per tonne)	)*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		244	10	296	8	242	12	295	14
Barley		219	8	283	7	231	10	268	14
Oilseed Rape		-	0	-	0	-	1	-	0
Potatoes		-	2	-	2	-	1	-	4
Sugar Beet		-	0	-	0	-	0	-	0

<sup>\*</sup> Yield and price data is implied

# Table A6.3 MIXED FARM RESULTS LAND UTILISATION AND CROP PERFORMANCE

#### **CONVENTIONAL**

LAND UTILISATIO	N AND CROP PERFORMA		1	Full sample					
I AND UTILICATIO	N. 1 4			sample		2011/1		-	12
	N - hectares per farm	2011/12		2012/13		2011/1		2012/	13
Tillage - maincrops	Wheat	36.8		35.8		35.3		40.3	
	Barley	17.9		19.2		19.3		20.7	
	Other cereals	4.4		4.2		3.9		2.9	
	Oil seed rape	9.7		12.0		10.3		10.7	
	Linseed	0.9		0.1		2.2		0.4	
	Peas/Beans	2.4		1.9		2.5		2.4	
	Potatoes	0.4		0.4		0.5		0.3	
	Sugarbeet	0.8		0.8		1.5		0.8	
	Horticulture	0.0		0.0		0.0		0.0	
	Other crops	0.0		0.1		0.0		0.0	
	Total cropping	73.4		74.4		<b>75.5</b>		<b>78.5</b>	
	Set-aside	0.4		0.0		0.0		0.0	
Tillage - fodder		5.6		5.1		4.6		6.5	
Grassland	Grazing, hay and silage	92.3		91.3		84.5		88.0	
Fallow and land let		6.1		8.0		6.2		9.8	
Rough grazing	Effective	0.5		3.9		0.8		4.1	
Utilisable agricultura	al area (Effective ha.)	178.2		182.7		171.6		186.9	
Woods, roads and buil	Woods, roads and buildings			7.4		6.9		5.9	
TOTAL AREA (Actu	ıal ha.)	185.6		190.1		178.4		192.8	
effective forage area		106.1		105.9		94.8		103.7	
Bare land and forage h	ired in	8.2		6.0		5.0		5.5	
CROP PERFORMA	NCE *								
- Yields (tonnes per h	nectare)	t/ha	n	t/ha	n	t/ha	n	t/ha	n
Wheat		7.6	13	6.2	13	8.0	17	6.1	27
Barley		6.0	13	5.3	13	5.7	17	5.4	27
Oilseed Rape		4.0	9	2.8	11	3.7	14	3.1	22
Potatoes		_	4	-	4	_	3	20.3	10
Sugar Beet		-	4	-	4	91.6	9	71.1	9
- Prices (£ per tonne)	*	£/t	n	£/t	n	£/t	n	£/t	n
Wheat		159	13	180	13	155	17	180	27
Barley		153	13	173	13	149	17	175	27
Oilseed Rape		379	9	381	11	353	14	383	22
Potatoes		<u>-</u>	4	-	4	-	3	266	10
Sugar Beet		_	4	_	4	27	9	29	9
<i>5</i>						•	-	-	-

<sup>\*</sup> Yield and price data is implied

# Table A6.4 MIXED FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

#### **ORGANIC**

		Identical	sample			Full sa	mple	
	2011		2012	2/13	2011		2012	2/13
LIVESTOCK CARRIED - L.U. per f	arm LU	No's	LU	No's	LU	No's	LU	No's
Dairy cows	1.8	2	1.5	2	1.4	1	4.6	5
Beef cows	23.6	31	22.5	30	21.6	29	22.9	30
Other cattle	58.2	103	52.3	92	48.4	85	50.6	90
Breeding sheep		161	17.6	167	11.5	110	15.5	147
Other sheep	6.3	137	5.8	123	3.5	72	4.5	94
Pigs	0.8	5	0.8	5	3.0	24	4.4	27
Poultry	13.1	6891	17.4	9284	0.5	56	16.0	4979
Other livestock		1	0.0	1	0.0	0	0.0	0
TOTAL (L.U.	120.7		117.9		89.9		118.4	
STOCKING RATES								
Stocking rate (LU per eff.ha)	0.6		0.6		0.4		0.5	
GLU/forage effective hectare*	0.9		0.8		0.8		0.9	
* for organic farms, pigs, poultry and ot  LIVESTOCK PERFORMANCE - Yield*	her livestock are deem	n	litres	n	litres	n	litres	n
Milk yield/cow	-	1	-	1	-	1	-	2
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	-	1	-	1	-	1	-	2
Dairy calves	-	0	-	0	-	0	-	0
Dairy heifers in calf	-	1	-	0	-	1	-	0
Beef heifers in calf	-	1	-	1	-	2	-	1
Finished cattle	1006	11	1163	11	1042	12	1152	20
Beef store cattle 1-2 yrs	632	7	775	5	723	7	884	9
Beef stores <1 yr	-	2	-	4	-	2	453	5
Ewes	-	1	-	0	-	1	-	2
Ewe hoggs	- 01	1	78	0	- 02	1	- 90	0
Finished lambs	81	7 3	78	6 2	83	6 1	80 58	11 5
Store lambs Einished Pigs	-	0	-	0	-	0		0
Finished Pigs		U		Ü		0	-	Ü
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	-	1	-	1	-	1	-	2
Wool (pence per kg)	91	7	104	6	97	6	113	10
Eggs (pence per dozen)	-	2	-	2	-	2	-	4

<sup>\*</sup> Yield and price data is implied

# Table A6.4 MIXED FARM RESULTS STOCKING AND LIVESTOCK PERFORMANCE

#### **CONVENTIONAL**

STOCKING AND LIVESTOCK PE	KFUKWIANCE	Identical	sampla			Full so	ımnle	
	201	14eniicai 1/12	2012	2/13	2011		тріе 2012	2/13
LIVESTOCK CARRIED - L.U. per		No's	LU	No's	LU	No's	LU	No's
Dairy cows	0.2	0	0.2	0	1.0	1	4.3	4
Beef cows	22.5	30	20.8	28	16.3	22	17.2	23
Other cattle	60.4	107	60.3	106	71.8	120	70.8	125
Breeding shee	ep 20.6	196	21.7	209	16.7	157	19.2	189
Other sheep	8.1	180	9.3	197	7.1	161	8.1	172
Pigs	1.5	10	1.5	10	0.5	3	3.2	23
Poultry	1.4	388	1.6	406	0.4	209	0.9	226
Other livestoo		2	0.0	0	0.0	1	0.0	1
TOTAL (L.U	J.) 114.7		115.3		113.8		123.6	
STOCKING RATES								
Stocking rate (LU per eff.ha)	0.6		0.6		0.7		0.7	
GLU/forage effective hectare*	1.1		1.1		1.2		1.2	
* for conventional farms, pigs, poultry	and other livestock are	deemed to	be non-g	grazing liv	estock			
LIVESTOCK PERFORMANCE								
- Yield*	litres	n	litres	n	litres	n	litres	n
Milk yield/cow	-	1	-	1	-	1	9245	6
- Prices (£ per head)*	£/head	n	£/head	n	£/head	n	£/head	n
Dairy cows	-	1	-	1	-	1	920	6
Dairy calves	-	1	-	1	-	0	98	5
Dairy heifers in calf	-	1	-	1	-	0	2437	8
Beef heifers in calf	-	0	-	3	-	0	-	4
Finished cattle	1001	13	1155	12	1013	16	1157	26
Beef store cattle 1-2 yrs	986	11	1174	10	924	13	944	22
Beef stores <1 yr	501	6	429	9	463	9	371	18
Ewes	86	6	75	6	90	6	112	12
Ewe hoggs	87	5	95	5	95	6	104	13
Finished lambs	83	13	76 50	12	83	13	76	26
Store lambs	58	8	50	7	61	8	51	13
Finished Pigs	-	0	-	0	-	0	-	0
- Prices (pence per unit)*	p/unit	n	p/unit	n	p/unit	n	p/unit	n
Milk (pence per litre)	-	1	120	1	- 07	1	27.3	6
Wool (pence per kg)	96	13	128	13	97	12	116	26
Eggs (pence per dozen)	-	2	-	2	-	3	-	4

<sup>\*</sup> Yield and price data is implied

## **Appendix 2 Detailed Gross Margin and Net Margin Data**

Table A8.1 Organic dairy gross and net margins (£/cow), 2012/13 (conventional for comparison)

Herd characteristics	<100 cows	>100 cows	North Eng	Central Eng	SWest Eng	Wales	Top 5*	All org. herds	Conventional**
	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13
Number of herds	20	22	10	8	21	3	5	42	143
Average farm area - actual ha	139	212	149	200	187	140	170	177	137
-effective ha	126	205	137	191	180	122	168	168	129
Average size of the farm business (ES)	89	212	127	181	161	119	199	153	151
Average size of herd (dairy cows)	67	175	100	145	129	107	159	124	120
Average milk yield (litres per cow)	5321	6287	5998	6101	5690	5486	7988	6049	7397
Implied milk price (ppl)	33.1	33.7	33.3	32.9	33.8	32.7	33.6	33.4	27.9
Enterprise output (£ per cow)									
Milk disposals (1)	1842	2114	2292	2010	2014	1641	2753	2044	2087
Calves - sales and transfers out	138	90	100	110	95	137	102	102	105
Bulls & cows - sales and transfers out	120	173	306	97	137	114	392	159	177
Net milk quota	0	0	0	0	0	0	0	0	0
Valuation change	-10	-14	-172	59	1	105	-117	-13	-8
Less: purchases & transfers in	309	351	376	282	355	313	420	340	370
Total enterprise output	1781	2012	2151	1994	1893	1684	2710	1952	1990
Variable Costs (£ per cow)									
Concentrates	573	615	793	521	575	564	873	604	671
Purchased bulk feed	40	33	29	61	25	41	20	35	27
Stock keep	5	17	9	13	17	8	18	14	6
Veterinary & medicines	55	63	63	48	67	46	55	61	75
Other livestock costs - dairy	210	219	188	227	228	178	211	217	176
Total variable costs	882	947	1082	869	912	836	1176	930	955
Margin over concentrates	1208	1396	1357	1473	1317	1120	1837	1348	1320
Gross margin before forage costs	898	1064	1069	1125	981	848	1534	1022	1035
Forage variable costs (£ per cow)									
Seeds	9	15	13	21	12	10	18	14	13
Fertilisers	3	1	0	2	1	6	0	2	77
Sprays	0	1	0	2	0	0	0	0	10
Other forage costs	9	8	8	7	9	10	9	8	10
Total forage variable costs per cow	21	25	22	31	22	27	28	24	110
% of forage variable costs to dairy	58	66	62	70	63	61	67	64	61
Gross margin including forage costs	878	1039	1047	1094	959	821	1506	998	926

<sup>\*</sup> Top five farms are based on highest gross margin per cow (including forage costs)

<sup>\*\*</sup> Conventional data are from whole farm analysis clustered conventional farms

	<100 cows	>100 cows	North Eng	Central Eng	SWest Eng	Wales	<b>Top 5*</b>	All herds Co	onventional**
	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13
Fixed Costs (£ per cow)\$									
Paid labour	183	247	220	295	223	94	184	231	162
Casual labour	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Machinery - contract work	87	93	74	102	94	78	90	91	74
- repairs	57	55	48	65	56	36	52	55	47
- fuels	43	47	51	48	41	59	52	46	51
-depreciation	119	75	90	74	83	150	112	86	90
Buildings depreciation	37	54	38	96	39	16	20	49	37
General farm costs	74	58	62	78	54	78	62	62	55
Water	27	21	12	29	24	14	33	22	19
Electricity	32	30	33	27	31	23	31	30	31
Land expenses	38	33	27	32	40	23	34	35	39
Insurance	48	26	31	31	30	51	34	32	34
Rent	47	50	49	89	38	5	59	49	40
Interest payments	21	30	17	21	36	8	16	27	27
Total fixed costs	812	817	750	987	789	634	780	816	707
Total actual costs	1715	1790	1854	1887	1723	1497	1984	1770	1772
Net margin over actual costs	65	222	297	106	170	187	726	182	219
Imputed costs									
Unpaid labour (farmer, spouse, other)	308	126	168	174	173	180	172	173	197
Imputed rent	95	79	80	77	86	87	58	83	80
Interest on tenant's capital (6% rate) #	85	62	70	70	65	87	83	68	66
Total imputed costs	487	266	318	321	324	354	312	324	343
Total costs including imputed	2202	2056	2172	2208	2047	1851	2296	2094	2114
Net margin over all costs	-421	-44	-21	-214	-154	-167	414	-142	-124
Other related outputs (ORO)									
LFA and agri-environmental payments	95	58	65	81	64	77	36	68	16
Organic Farming Scheme Payment	4	1	0	0	0	30	0	2	0
By products and forage	13	18	4	23	22	-1	12	17	19
Single Payment Scheme	209	144	168	162	161	164	150	163	120
Total other related outputs	317	219	236	266	246	240	198	248	155
NM over all costs (inc. ORO)	-104	175	215	52	92	73	612	106	31

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the ratio of livestock units per enterprise and the proportion of the farm area in forage production (hay, silage and grazing area)

<sup>#</sup> Tenants capital concerns livestock and machinery values minus actual interest paid in fixed costs

Table A8.2 Organic beef gross and net margins (£/cow), 2011/12 and 2012/13 (conventional data for comparison)

Location		I	Less-favoi	ired Area					Low	land		
Enterprise type	Suck	ler Finisl	ning	Su	ckler Sto	e	Suck	der Finisl	ning	Su	ickler Sto	re
Organic/Conventional	Orga	nic	Conv.	Orga	anic	Conv.	Orga	anic	Conv.	Org	anic	Conv.
Year	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13		2012/13	2012/13		2012/13	2012/13
Number of herds	10	8	28	24	22	122	39	34	52	17	21	58
Average farm area - actual ha	213	170	202	358	344	229	215	274	174	150	143	125
-effective ha	170	154	165	167	189	151	206	253	168	137	129	120
Average size of the farm business (ES)	62	53	53	34	43	38	81	93	79	66		38
Average size of herd (breeding cows)	66	65	56	36	45	39	52	56	43	37	33	33
Enterprise output (£ per cow)												
Calf Sales	0	0	4	154	100	102	10	5	7	231	193	184
Other store cattle - sales & transfers or	640	387	247	587	703	660	218	262	213	399	402	617
Bulls & cows - sales & transfers out	76	91	106	149	123	117	158	149	146	84	108	169
Finished cattle sales	880	909	1207	64	68	43	901	984	1500	25	55	290
Valuation change	109	171	145	-43	78	116	182	113	178	54	57	116
Less: purchases & transfers in	720	350	475	204	296	259	381	364	679	193	228	489
Total enterprise output	986	1207	1233	708	776	779	1089	1149	1366	600	588	887
Variable Costs (£ per cow)												
Concentrates	113	107	333	85	97	160	118	100	345	39	27	135
Purchased bulk feed	31	35	34	24	54	23	16	32	44	23	23	17
Stock keep	63	36	8	6	23	13	7	7	12	0	4	7
Veterinary & medicines	34	38	50	57	45	43	36	34	50	35	27	44
Other livestock costs - beef	121	157	132	112	116	103	151	160	151	78	100	133
Total variable costs	361	373	556	284	335	341	328	333	602	175	181	335
Gross margin before forage costs	625	834	677	424	441	438	761	816	764	425	407	551
Forage variable costs (£ per cow)												
Seeds	10	7	7	14	11	5	46	58	15	18	17	12
Fertilisers	42	7	128	28	15	81	21	35	95	6	11	80
Sprays	0	0	3	0	0	2	0	1	10	1	0	5
Other forage costs (excl. contracting)	16	12	9	11	9	10	19	19	26			11
Total forage variable costs	68	27	147	53	36	98	86	113	145	30	33	108
% of forage variable costs to enterprise	58	59	53	43	47	42	75	75	74	67	70	61
Gross margin including forage costs	557	808	529	371	405	341	675	703	618	394	374	443

Location		I	Less-favor	ured Area					Low	land		
Enterprise type	Suck	der Finisl	ning	Su	ckler Sto	re	Sucl	der Finisl	hing	Sı	ickler Sto	re
Organic/Conventional	Orga	anic	Conv.	Orga	anic	Conv.	Orga	anic	Conv.	Org	anic	Conv.
Year	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13
Fixed Costs (£ per cow)\$												
Paid labour	62	80	65	55	38	38	305	365	177	106	125	78
Machinery - contract work	46	44	76	52	69	46	109	97	71	111	107	80
- repairs	46	65	52	47	46	41	69	80	76	50	44	62
- fuels	57	86	75	56	62	65	85	92	88	57	50	71
-depreciation	135	159	128	100	103	120	127	168	151	83	119	135
Buildings depreciation	35	25	87	31	36	40	74	62	84	158	157	56
General farm costs	60	61	53	59	60	48	88	95	72	93	111	72
Water	5	1	8	1	1	4	13	14	16	14	14	18
Electricity	6	6	7	7	7	7	14	15	11	10	24	10
Land expenses	59	52	27	25	29	20	45	43	38	44	38	31
Insurance	41	42	42	40	39	36	46	52	47	37	48	47
Rent	52	32	36	26	42	33	84	123	67	46	57	59
Interest payments	10	6	23	28	16	36	57	77	84	73	84	52
Total fixed costs	614	659	679	526	548	535	1116	1284	982	882	978	770
Total actual costs	1044	1058	1383	863	919	974	1530	1730	1730	1088	1192	1213
Net margin over actual costs	-58	149	-150	-155	-143	-195	-441	-580	-364	-488		
Imputed costs (£ per cow)												
Unpaid labour (farmer, spouse, other)	140	176	249	219	210	261	307	310	369	256	363	374
Imputed rent	95	108	103	71	67	59	183	160	149			
Interest on tenant's capital (6% rate) #	181	173	127	85	113	87	125	118	112	49	74	
Total Imputed costs	416	456	480	375	390	407	614	588	630	539	636	
Total costs including imputed	1460	1515	1863	1239	1309	1381	2145	2317	2360	1627	1828	1847
Net margin over all costs	-474	-308	-630	-531	-533	-602	-1056	-1168	-994	-1027	-1241	-961
Other related outputs (ORO)												
LFA and agri-environmental payments	225	139	112	268	234	133	212	264	81	283	295	100
of which Organic Farming Scheme	8	9	0	54	45	0	7	5	0	0		
By products and forage	21	15	21	21	8	12	64	80	179	_		-
Single Payment Scheme	377	303	326	419	375	331	529	551	415	466		
Total other related outputs	622	457	459	707	617	476	804	895	675	803		
NM over all costs (inc. ORO)	148	150	-171	177	84	-126	-251	-272	-319	-224	-377	-454

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the ratio of livestock units per enterprise and the proportion of the farm area in forage production (hay, silage and grazing area) # Interest on livestock, deadstock and machinery values minus actual interest paid (see fixed costs)

Table A8.3 Organic breeding sheep gross and net margins (£/ewe), 2011/12 and 2012/13

Flock type		]	Less-favo	ured Area	l			Lowland	
Productivity*		Lower			Higher			All flocks	
Organic/Conventional	Org	anic	Conv.	Orga	anic	Conv.	Org	anic	Conv.
Year	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13
Number of flocks	13	14	70	34	26	140	37	41	116
Average farm area - actual ha	398	346	277	285	289	184	196	195	159
-effective ha	160	153	158	190	216	143	186	180	154
Average size of the farm business (ES)	35	37	44	50	55	43	85	73	68
Average size of flock (breeding ewes)	530	537	700	698	726	659	285	244	317
Finished lambs sold per ewe	0.5	0.6	0.5	1.0	1.0	0.9	1.0	1.0	1.0
Enterprise output (£ per ewe)									
Lamb sales - finished	26.8	35.6	28.3	80.7	72.3	64.4	79.0	77.8	74.9
- store	7.5	6.7	6.0	8.5	5.5	4.5	5.0	9.9	8.4
Ewe and ram sales	2.0	3.9	6.8	15.0	18.9	14.5	3.3	10.4	6.9
Other sheep sales	6.2	5.3	5.4	12.4	9.5	8.5	10.2	13.9	10.1
Wool sales	1.7	2.4	2.0	2.5	3.1	2.6	3.2	4.1	3.8
Valuation change	1.5	-0.4	1.2	14.0	6.5	2.9	8.0	-0.1	7.5
Less: sheep purchases	2.6	4.2	4.9	21.7	15.9	12.5	9.3	12.0	17.1
Total enterprise output	43.1	49.4	45.0	111.8	99.8	84.8	100.8	104.0	94.5
Variable Costs (£ per ewe)									
Concentrates	6.0	7.6	11.5	13.2	17.1	20.6	9.9	13.5	19.3
Purchased bulk feed	1.4	2.8	2.6	3.3	2.0	2.9	3.2	1.8	1.1
Stock keep	0.5	1.0	1.3	1.7	1.3	2.1	0.5	0.5	0.6
Veterinary & medicines	3.2	4.2	3.6	6.4	6.8	5.2	5.5	7.8	6.5
Other livestock costs - sheep	4.7	4.7	5.6	8.6	10.4	8.7	10.4	12.2	10.9
Total variable costs	15.8	20.3	24.6	33.2	37.7	39.5	29.4	35.9	38.5
Gross margin before forage costs	27.3	29.1	20.4	78.6	62.1	45.3	71.3	68.2	56.0
Forage variable costs (£ per ewe)									
Seeds	0.5	0.6	0.2	1.1	0.8	0.4	2.1	2.6	0.9
Fertilisers	1.0	1.4	4.8	2.6	2.0	7.3	0.3	0.1	5.8
Sprays	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.1	0.5
Other forage costs	0.7	0.5	0.5	0.6	0.6	0.7	0.6	1.0	0.8
Total forage variable costs	2.2	2.5	5.6	4.3	3.4	8.6	3.1	3.7	7.9
% of forage variable costs to enterprise		49.1	53.0	51.6	51.1	53.4	29.2	27.6	41.2
Gross margin including forage costs	25.1	26.7	14.8	74.3	58.7	36.7	68.2	64.4	48.1

Flock type		1	Less-favo	ured Area				Lowland	
Productivity*		Lower			Higher			All flocks	
Organic/Conventional	Org	anic	Conv.	Orga	anic	Conv.	Org	anic	Conv.
Year	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13	2011/12	2012/13	2012/13
Fixed Costs (£ per ewe)\$									
Paid labour	7.7	8.6	2.6	10.4	6.9	5.4	21.9	29.3	10.5
Machinery - contract work	2.8	3.1	2.0	6.5	7.0	3.2	7.6	8.2	4.6
- repairs	3.5	4.2	3.0	5.9	5.5	3.7	5.6	7.8	5.5
- fuels	6.0	5.3	4.5	6.7	7.5	5.8	6.9	7.9	6.0
-depreciation	9.1	8.9	8.6	13.5	12.2	11.1	13.2	18.9	11.9
Buildings depreciation	2.4	2.9	3.3	3.4	3.4	3.5	6.0	6.6	4.6
General farm costs	3.4	3.7	3.3	4.5	5.1	3.7	6.9	7.8	5.9
Water	0.1	0.1	0.2	0.2	0.1	0.3	0.8	0.9	0.8
Electricity	0.6	0.6	0.5	0.5	0.5	0.6	0.9	1.3	0.9
Land expenses	0.9	1.8	0.9	3.3	2.5	1.7	3.8	3.8	2.5
Insurance	1.9	2.0	2.5	2.7	3.2	2.6	3.1	3.6	3.8
Rent	0.9	1.3	1.8	4.2	3.9	2.8	5.6	8.2	6.6
Interest payments	0.9	1.5	4.7	1.6	1.1	1.3	5.0	6.7	4.5
Total fixed costs	40.2	43.8	37.9	63.5	59.1	45.6	87.3	111.1	68.1
Total actual costs	58.2	66.5	68.1	101.0	100.2	93.7	119.8	150.7	114.5
Net margin over actual costs	-15.1	-17.1	-23.1	10.7	-0.3	-8.9	-19.1	-46.6	-20.0
Imputed costs									
Unpaid labour (farmer, spouse, other)	22.0	17.6	21.8	18.8	19.1	23.9	27.1	31.1	34.3
Imputed rent	4.5	4.6	4.2	6.6	6.2	4.8	14.3	14.9	10.9
Interest on tenant's capital (6% rate) #	7.6	7.8	3.7	9.5	10.6	8.6	9.3	9.2	8.5
<b>Total Imputed costs</b>	34.1	29.9	29.7	34.8	35.8	37.3	50.7	55.2	53.7
Total costs including imputed	92.2	96.4	97.8	135.9	136.0	131.0	170.5	205.9	168.2
Net margin over all costs	-49.2	-47.0	-52.8	-24.1	-36.1	-46.1	-69.7	-101.9	-73.7
Other related outputs (ORO)									
LFA and agri-environmental payments	36.0	22.7	10.0	18.6	17.7	8.0	18.3	22.2	5.9
of which Organic Farming Scheme	4.3	4.0	0.0	2.3	2.1	0.0	0.3	0.2	0.0
By products and forage	0.6	0.8	1.0	1.5	0.4	1.4	3.6	6.1	5.9
Single Payment Scheme	32.2	29.9	22.3	31.8	28.7	25.1	34.8	36.2	29.0
Total other related outputs	68.8	53.4	33.3	51.9	46.9	34.5	56.8	64.5	40.8
NM over all costs (inc. ORO)	19.6	6.4	-19.5	27.8	10.7	-11.7	-13.0	-37.3	-32.9

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the ratio of livestock units per enterprise and the proportion of the farm area in forage production (I # Interest on livestock, deadstock and machinery values minus actual interest paid (see fixed costs)

Table A8.4 Organic arable crop gross/net margins (£/ha) and costs of production (£/tonne), 2011/12 and 2012/13 (non-organic for comparison)

Crop enterprise		1	Winter	wheat				5	Spring v	wheat					Triti			
		Orga	nic		Con	v.		Orga	nic		Con	v.		Orga	anic		Conver	шопа
Year	2011/	<b>12</b>	2012/	13	2012	/13	2011/	/12	2012/	/13	2012/	/13	2011/	12	2012	/13	2012	/13
Number of enterprises	37		29		212	2	18		13		10		13		13	3	5	
Average farm area - actual ha	249	)	273	3	21	7	296	5	324	4	220	)	190	)	27	5	104	
-effective ha	238	3	261	l	209	9	282	2	301	1	214	4	168	3	24	1	100	
Average business size (ESU)	146	5	168	3	152	2	171	1	191	1	182	2	146	5	14	7	98	
Area of crop grown (ha.)	31		41		74		27		24		21		14		19	)	7	
Total production (tonnes/units)	139	)	120	)	52	1	83		65		87		45		52		28	
Yield tonnes/units per hectare	4.4		3.0	)	7.1	1	3.1		2.7		4.2	2	3.2		2.7	7	4	
Crop Value (£ per tonne/unit)	250	)	286	286		9	255	5	302	2	219	)	188	3	23	2	159	
Enterprise output	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t
Closing valuation	413	93	189	64	497	70	433	139	350	128	271	65	226	71	274	102	213	56
Revenue	657	148	558	189	736	104	331	106	390	142	573	138	79	25	195	73	0	0
Farm house consumption, in kind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feed used on farm	41	9	99	34	31	4	32	10	88	32	65	16	292	92	153	57	388	103
Crop enterprise output	1111	250	846	286	1264	179	<b>796</b>	255	827	302	909	219	597	188	622	232	600	159
-output from straw and beet tops	79	18	61	20	59	8	33	11	36	13	32	8	90	28	82	30	187	50
Total enterprise output	1190	268	907	307	1323	187	829	266	864	315	941	226	687	216	703	262	788	209
Variable Costs																		
Seeds	89	20	91	31	69	10	112	36	93	34	94	23	112	35	88	33	79	21
Fertilisers	21	5	39	13	238	34	28	9	36	13	185	44	2	1	24	9	156	41
Crop protection	3	1	5	2	200	28	2	1	4	1	117	28	0	0	0	0	121	32
Other crop costs	29	7	24	8	36	5	22	7	17	6	34	8	12	4	26	10	22	6
Total variable costs	142	32	159	54	542	77	164	52	149	54	429	103	126	40	138	51	377	100
Gross margin	1048	236	747	253	780	110	665	213	715	261	512	123	561	177	565	211	410	109

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the crop area as a % of total actual farm area

<sup>#</sup> Interest at 6% on deadstock and machinery values minus actual interest paid (see fixed costs)

Crop enterprise		,	Winter	wheat				;	Spring	wheat					Triti	cale		
		Orga	anic		Con	v.		Orga	nic		Con	v.		Orga	nic		Conver	ntiona
Year	2011	/12	2012	/13	2012	/13	2011	/12	2012	/13	2012	/13	2011	/12	2012	2/13	2012	2/13
Fixed Costs \$	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t
Paid labour	78	18	74	25	61	9	96	31	161	59	19	5	76	24	54	20	13	3
Machinery - contract work	112	25	96	32	95	13	118	38	125	46	108	26	144	45	208	78	146	39
- repairs	99	22	94	32	67	10	62	20	108	39	69	17	74	23	87	33	105	28
- fuels	103	23	94	32	82	12	82	26	87	32	77	19	66	21	57	21	85	22
-depreciation	157	35	154	52	162	23	120	38	147	54	101	24	63	20	113	42	138	37
Buildings depreciation	27	6	31	10	35	5	19	6	39	14	15	4	82	26	47	18	23	6
General farm costs	59	13	54	18	49	7	45	14	52	19	37	9	50	16	34	13	34	9
Water	9	2	5	2	5	1	9	3	6	2	8	2	7	2	5	2	17	5
Electricity	9	2	8	3	10	1	6	2	12	4	11	3	13	4	10	4	17	5
Land expenses	26	6	20	7	25	4	25	8	13	5	16	4	26	8	14	5	15	4
Insurance	19	4	17	6	25	4	20	6	19	7	29	7	24	8	19	7	24	6
Rent	93	21	54	18	68	10	56	18	46	17	64	15	16	5	37	14	76	20
Interest payments	25	6	36	12	28	4	25	8	35	13	25	6	19	6	20	8	21	6
<b>Total fixed costs</b>	816	184	736	249	714	101	683	219	851	311	578	139	661	208	706	264	714	189
Total actual costs	958	216	896	303	1256	178	846	271	1000	365	1007	242	<b>787</b>	248	844	315	1092	289
Net margin over actual costs	232	52	11	4	67	9	-18	-6	-136	-50	-66	-16	-100	-31	-141	-53	-304	-81
Imputed costs																		
Unpaid labour (farmer/spouse)	67	15	36	12	76	11	27	9	64	23	66	16	36	11	43	16	34	9
Imputed rent	91	21	114	39	116	16	82	26	107	39	97	23	178	56	81	30	94	25
Interest on tenant's capital#	17	4	7	2	18	3	20	7	8	3	24	6	18	6	5	2	37	10
<b>Total Imputed costs</b>	175	39	158	53	210	30	130	42	179	65	187	45	232	73	129	48	165	44
Total costs incl. imputed	1133	255	1054	356	1466	207	976	313	1179	430	1195	287	1019	321	973	363	1256	333
Net margin over all costs	57	13	-147	-50	-143	-20	-148	-47	-315	-115	-254	-61	-332	-105	-270	-101	-469	-124
Other related outputs (ORO)																		
LFA and agri-environment	79	18	78	27	34	5	108	35	114	41	46	11	79	25	112	42	32	8
Organic Farming Support	4	1	3	1	0	0	1	0	1	1	0	0	3	1	0	0	0	0
By products and forage	37	8	31	11	51	7	36	12	43	16	70	17	17	5	36	13	31	8
Single Payment Scheme	199	45	181	61	186	26	203	65	181	66	189	46	179	56	197	74	214	57
Total other related inputs	314	71	290	98	271	38	348	112	338	123	305	73	274	86	345	129	277	73
NM over all costs (inc. ORO)	372	84	143	48	128	18	200	64	23	8	52	12	-58	-18	75	28	-192	-51

Table A8.4 (cont.)

Crop enterprise		5	Spring l	oarley					Winter	oats					Spring	goats		
		Orga	nic		Con	v.		Orga	nic		Con	v.		Orga	anic		Cor	ıv.
Year	2011/	<b>12</b>	2012/	13	2012	/13	2011/	/12	2012	/13	2012	<b>'13</b>	2011	/12	2012	/13	2012	/13
Number of enterprises	44		40		11	1	17		16		30		20	)	23	3	8	
Average farm area - actual ha	264	1	316	5	183	1	241	1	215	5	204	1	288	8	31	8	19	1
-effective ha	243	3	288	3	165	5	225	5	205	5	197	7	259	9	28	0	17	2
Average business size (ESU)	144	1	159	)	107	7	100	)	132	2	110	)	128	8	11	6	81	l
Area of crop grown (ha.)	27		28		17	,	11		17		18		17		26	5	8	
Total production (tonnes/units)	101	l	76		91		47		62		111	1	60	)	74	1	35	5
Yield tonnes/units per hectare	3.8	3	2.7	'	5.2	2	4.1		3.7	1	6.3	;	3.5	5	2.3	8	4	
Crop Value (£ per tonne/unit)	231	l	262	2	178	3	246	5	259	)	176	5	250	0	25	3	17	5
Enterprise output	£/ha	£/t	£/ha	€/ha £/t		£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t
Closing valuation	283	74	199	73	173	33	262	63	341	92	397	63	469	134	435	154	618	139
Revenue	432	114	402	148	620	118	698	169	517	139	651	103	333	96	228	81	35	8
Farm house consumption, benefits	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Feed used on farm	163	43	110	41	141	27	55	13	106	28	60	9	70	20	55	19	124	28
Crop enterprise output	878	231	<b>711</b>	262	935	178	1015	246	964	259	1107	176	872	250	718	253	776	175
-output from straw and beet tops	62	16	70	26	87	16	82	20	68	18	83	13	47	14	55	19	100	23
Total enterprise output	940	247	781	288	1022	195	1097	266	1032	277	1191	189	920	264	773	273	876	197
Variable Costs																		
Seeds	85	22	85	31	71	14	75	18	78	21	57	9	93	27	75	27	63	14
Fertilisers	23	6	53	20	152	29	11	3	56	15	165	26	32	9	36	13	125	28
Crop protection	1	0	4	2	98	19	1	0	4	1	98	16	2	1	1	0	63	14
Other crop costs	22	6	38	14	32	6	22	5	26	7	37	6	19	5	45	16	44	10
Total variable costs	131	35	180	66	353	67	109	26	163	44	357	57	146	42	156	55	296	67
Gross margin	809	213	601	221	669	127	988	239	869	233	834	133	773	222	617	218	581	131

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the crop area as a % of total actual farm area

<sup>#</sup> Interest at 6% on deadstock and machinery values minus actual interest paid (see fixed costs)

Crop enterprise		,	Spring	barley					Winter	oats					Spring	oats		
		Orga	anic		Con	v.		Orga	nic		Con	v.		Orga	nic		Con	ıV.
Year	2011/	/12	2012	/13	2012	/13	2011	/12	2012	/13	2012	/13	2011	/12	2012	/13	2012	/13
Fixed Costs *	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t
Paid labour	88	23	82	30	43	8	86	21	62	17	38	6	81	23	121	43	8	2
Machinery - contract work	142	37	189	69	154	29	110	27	101	27	90	14	85	25	155	55	108	24
- repairs	88	23	72	27	74	14	116	28	118	32	72	11	88	25	67	24	55	12
- fuels	103	27	84	31	92	18	98	24	107	29	78	12	96	27	73	26	77	17
-depreciation	152	40	123	45	147	28	213	52	201	54	144	23	186	53	148	52	170	38
Buildings depreciation	30	8	30	11	34	6	18	4	26	7	25	4	21	6	26	9	24	5
General farm costs	47	12	50	18	47	9	63	15	69	18	47	7	37	11	30	11	35	8
Water	8	2	6	2	9	2	8	2	5	1	6	1	5	1	4	1	5	1
Electricity	8	2	12	4	11	2	8	2	6	2	6	1	8	2	7	2	4	1
Land expenses	28	7	21	8	22	4	31	7	16	4	12	2	23	6	16	6	11	2
Insurance	18	5	20	8	27	5	24	6	26	7	27	4	21	6	19	7	25	6
Rent	94	25	85	31	43	8	61	15	143	38	65	10	54	16	33	12	65	15
Interest payments	28	7	33	12	28	5	15	4	18	5	17	3	16	4	22	8	10	2
Total fixed costs	835	220	808	298	731	139	851	206	897	241	629	100	720	206	721	254	597	135
Total actual costs	966	254	988	364	1084	206	960	233	1061	285	985	157	866	248	877	309	893	201
Net margin over actual costs	-26	-7	-207	-76	-62	-12	138	33	-29	-8	205	33	53	15	-104	-37	-17	-4
Imputed costs																		
Unpaid labour (farmer, spouse, oth	46	12	28	10	56	11	79	19	99	27	85	14	26	7	24	8	79	18
Imputed rent	79	21	85	31	125	24	73	18	88	24	92	15	74	21	81	29	53	12
Interest on tenant's capital (6% rate	8	2	1	0	14	3	21	5	27	7	25	4	23	7	9	3	25	6
Total Imputed costs	133	35	113	42	194	37	173	42	214	58	202	32	123	35	114	40	156	35
Total costs incl. imputed	1099	289	1102	406	1278	243	1133	275	1275	343	1187	189	989	284	991	350	1049	237
Net margin over all costs	-159	-42	-320	-118	-256	-49	-36	-9	-243	-65	4	1	-69	-20	-218	-77	-173	-39
Other related outputs (ORO)																		
LFA and agri-environment	98	26	96	36	31	6	93	23	79	21	31	5	95	27	98	35	50	11
Organic Farming Support	4	1	2	1	0	0	0	0	0	0	0	0	2	1	3	1	0	0
By products and forage	37	10	44	16	49	9	41	10	53	14	53	8	21	6	24	8	39	9
Single Payment Scheme	195	51	179	66	177	34	195	47	165	44	156	25	206	59	189	67	181	41
Total other related inputs	329	87	319	118	256	49	329	80	297	80	241	38	322	92	311	110	270	61
NM over all costs (inc. ORO)	170	45	-1	0	0	0	293	71	54	14	245	39	253	72	93	33	97	22

Table A8.4 (cont.)

Crop enterprise		I	Beans fo	r feed				1	Vare Po	tatoes				Field	d-scale v	egetal	oles	
		Orga	anic		Con	v.		Orga	anic		Con	v.		Orga	anic		Con	v.
Year	2011	/12	2012	/13	2012	/13	2011	/12	2012	/13	2012/	<b>'13</b>	2011/1	12	2012/	13	2012/	13
Number of enterprises	26	,	19	)	33		6		6		19		9		9		11	
Average farm area - actual ha	303	3	34	1	270	C	183	1	183	3	188	3	209		208	;	279	)
-effective ha	272	2	327	7	264	4	173	1	173	3	185	5	195		193		273	3
Average business size (ESU)	13	1	163	3	183	1	290	)	253	3	190	)	297		292		328	3
Area of crop grown (ha.)	33		30	)	23	}	22		17		15		30		31		28	
Total production (tonnes/units)	94		49		96	·	635	5	398	3	478	3	-		- - -		-	
Yield tonnes/units per hectare	2.8	}	1.6	5	4.2	2	28.	7	24		31		-		-		-	
Crop Value (£ per tonne/unit)	300	)	319	9	278	8	242	2	252	2	221	1	-		-		-	
Enterprise output	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t
Closing valuation	236	84	166	103	534	128	747	26	255	11	1345	43	554	-	106	-	593	-
Revenue	581	206	259	161	594	143	6165	215	5757	241	5553	177	9076	-	9304	-	1430	-
Farm house consumption, benefits	0	0	0	0	0	0	0	0	2	0	1	0	0	-	0	-	0	-
Feed used on farm	29	10	89	55	27	6	16	1	15	1	11	0	0	-	0	-	0	-
Crop enterprise output	846	300	514	319	1155	278	6928	242	6029	252	6911	221	9630	-	9411	-	2024	-
-output from straw and beet tops	9	3	3	2	1	0	0	0	0	0	0	0	0	-	0	-	0	-
Total enterprise output	855	303	517	321	1156	278	6928	242	6029	252	6911	221	9630	-	9411	-	2024	-
Variable Costs																		
Seeds	87	31	87	54	80	19	1062	37	1404	59	678	22	755	-	712	-	296	-
Fertilisers	19	7	20	12	66	16	50	2	5	0	458	15	110	-	22	-	131	-
Crop protection	0	0	3	2	146	35	70	2	216	9	528	17	137	-	78	-	155	-
Other crop costs	8	3	15	10	25	6	1068	37	819	34	333	11	1557	-	1168	-	248	-
Total variable costs	115	41	125	78	317	76	2250	78	2445	102	1996	64	2559	-	1980	-	830	-
Gross margin	740	263	392	244	839	202	4678	163	3585	150	4914	157	7071	-	7431	-	1194	-

<sup>\$</sup> Fixed costs are proportioned to enterprise according to the crop area as a % of total actual farm area

<sup>#</sup> Interest at 6% on deadstock and machinery values minus actual interest paid (see fixed costs)

Crop enterprise	Beans for feed					7	Vare Po	tatoes			Field-scale vegetables							
		Orga	nic		Con	v.		Orga	nic		Con	v.	Organic				Con	v.
Year	2011	/12	2012	/13	2012	/13	2011	/12	2012	/13	2012	/13	2011/	/12	2012	/13	2012/	13
Fixed Costs *	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t	£/ha	£/t
Paid labour	76	27	56	35	66	16	439	15	488	20	580	19	1458	-	1635	-	453	-
Machinery - contract work	114	40	84	52	89	21	1122	39	1058	44	234	7	705	-	554	-	110	-
- repairs	73	26	54	34	72	17	108	4	33	1	154	5	436	-	402	-	40	-
- fuels	64	23	87	54	69	17	181	6	85	4	181	6	384	-	345	-	44	-
-depreciation	86	30	93	58	139	33	104	4	80	3	371	12	594	-	571	-	116	-
Buildings depreciation	24	8	29	18	28	7	45	2	53	2	27	1	107	-	111	-	31	-
General farm costs	59	21	42	26	46	11	99	3	96	4	58	2	104	-	91	-	69	-
Water	5	2	8	5	5	1	42	1	12	0	39	1	21	-	10	-	30	-
Electricity	9	3	7	4	10	2	17	1	16	1	18	1	16	-	18	-	24	-
Land expenses	20	7	25	15	21	5	45	2	29	1	39	1	50	-	30	-	28	-
Insurance	16	6	12	7	27	6	25	1	33	1	29	1	31	-	39	-	34	-
Rent	26	9	46	29	63	15	406	14	308	13	96	3	234	-	195	-	57	-
Interest payments	28	10	35	22	17	4	19	1	29	1	16	1	41	-	47	-	93	-
Total fixed costs	600	213	577	359	650	156	2652	92	2318	97	1841	59	4180	-	4048	-	1129	-
Total actual costs	714	253	703	437	967	233	4902	171	4763	199	3837	123	6739	-	6028	-	1959	-
Net margin over actual costs	140	50	-186	-115	188	45	2026	<b>71</b>	1266	53	3073	98	2891	-	3383	-	65	-
Imputed costs																		
Unpaid labour (farmer, spouse, oth	27	10	27	17	89	21	191	7	198	8	503	16	417	-	453	-	217	-
Imputed rent	128	46	106	66	110	27	80	3	116	5	103	3	297	-	141	-	150	-
Interest on tenant's capital (6% rate	4	1	-3	-2	32	8	78	3	70	3	45	1	26	-	20	-	-29	-
Total Imputed costs	159	56	131	81	232	56	349	12	384	16	651	21	740	-	614	-	338	-
Total costs incl. imputed	874	310	833	518	1199	288	5251	183	5147	215	4488	143	7479	-	6643	-	2297	-
Net margin over all costs	-19	-7	-316	-197	-43	-10	1677	58	882	37	2422	77	2151	-	2768	-	-273	-
Other related outputs (ORO)																		
LFA and agri-environment	77	27	76	48	24	6	71	2	67	3	17	1	79	-	87	-	29	-
Organic Farming Support	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0	-
By products and forage	21	8	27	17	50	12	32	1	80	3	64	2	83	-	115	-	49	-
Single Payment Scheme	201	71	189	117	186	45	142	5	137	6	195	6	165	-	159	-	201	-
Total other related inputs	299	106	293	182	260	63	245	9	285	12	277	9	327	-	360	-	279	-
NM over all costs (inc. ORO)	281	100	-24	-15	217	52	1921	67	1167	49	2699	86	2478		3129		6	

## **Appendix 3 Detailed Costs of Production Data**

Table A9.1 Costs of production - dairy, identical sample, 2011/12 & 2012/13 (p/litre)

•	_			
	Orga			ntional
	2011/12	2012/13	2011/12	2012/13
Sample size	39	39	65	65
Herd size - numbers	139	129	131	133
Herd size - LU	140	130	132	133
Total Grazing LU	211	201	211	213
Litres of milk produced per cow	6314	6078	7800	7508
Percentage Dairy LU to Total GLU	67	65	62	62
Farm size - effective hectares	157	159	145	145
Farm size - ESU	163	154	167	168
% of area used for forage/grazing	96	95	87	87
Enterprise output (pence per litre)				
Dairy - milk	31.9	33.7	27.9	28.5
- livestock purchases, sales and transfers	-1.2	-1.2	-2.0	-2.2
- net milk quota	0.0	0.0	0.0	0.0
- valuation change	-0.2	-0.2	0.0	0.3
<u> </u>				
Total dairy output	30.6	32.3	26.0	26.7
Costs (pence per litre)				
Concentrates	9.1	9.9	7.9	9.2
Purchased bulk feed (hay & straw)	0.6	0.6	0.3	0.3
` • • · · · · · · · · · · · · · · · · ·	0.0	0.0		0.3
Stock keep			0.0	
Veterinary and medicines	0.9	1.0	1.0	1.0
Other livestock costs - dairy	2.9	3.5	2.1	2.3
Herd replacement	1.1	1.1	0.8	0.9
Total variable costs	14.7	16.4	12.2	13.8
Seeds	0.2	0.2	0.2	0.2
Fertilisers	0.1	0.0	0.9	1.0
Sprays	0.0	0.0	0.1	0.2
Other forage costs	0.1	0.1	0.1	0.1
Total forage costs	0.5	0.4	1.3	1.5
Cross manain including farage costs	15.4	15.6	12.5	11.4
Gross margin including forage costs	13.4	13.0	12.3	11.4
Paid labour	3.1	3.7	2.0	2.6
Machinery - contract work	1.3	1.5	0.9	0.9
- repairs	0.8	0.9	0.6	0.6
- fuels	0.7	0.8	0.6	0.7
-depreciation	1.1	1.5	1.0	1.1
Buildings depreciation				
0 1	0.5	0.8	0.5	0.5
General farm costs	0.8	1.0	0.7	0.7
Water	0.4	0.4	0.3	0.3
Electricity	0.4	0.5	0.4	0.4
Land expenses	0.6	0.6	0.5	0.5
Insurance	0.5	0.5	0.4	0.4
Rent	0.8	0.8	0.6	0.7
Interest payments	0.5	0.5	0.4	0.4
Total fixed costs	11.5	13.4	8.7	9.8
Total actual costs	26.7	30.2	22.2	25.1
Net margin over actual costs	3.9	2.1	3.8	1.6
Imputed costs				
Unpaid labour (farmer, spouse, other)	2.1	2.5	1.6	1.8
Imputed rent				
1	1.2	1.4	1.0	1.0
Interest on tenant's capital (6% rate)	1.0	1.1	0.8	0.9
Total imputed costs	4.2	4.9	3.5	3.7
Total costs (inc. imputed costs)	30.9	35.1	25.7	28.8
Net margin over all costs	-0.3	-2.8	0.3	-2.1
Other related outputs (ORO)				
Agri-environment payments (exc OFS)	0.8	1.0	0.2	0.2
Organic Farming Scheme Payment	0.1	0.0	0.0	0.0
By products and forage	0.2	0.2	0.4	0.3
Single Payment Scheme	2.5	2.5	1.6	1.4
Total other related outputs (ORO)	3.5	3.8	2.1	1.9
Net margin over all costs (inc. ORO)	3.2	1.0	2.5	-0.2

Table A9.2 Costs of production - dairy, full sample, 2011/12 & 2012/13 (p/litre)

Table 117.2 Costs of production	-	_		Conventional
	2011/12	Organic 2012/1		2012/13
Sample size	45	Top 5	42	143
Herd size - numbers	134	159	124	120
Herd size - LU	135	160	124	120
Total Grazing LU	205	240	195	198
Litres of milk produced per cow	6315	7988	6049	7397
Percentage Dairy LU to Total GLU	66	67	64	61
Farm size - effective hectares	152	168	168	129
Farm size - ESU	156	199	153	151
% of area used for forage/grazing	96	87	93	90
Enterprise output (pence per litre)				
Dairy - milk	31.8	34.5	33.8	28.2
- livestock purchases, sales and transfers	-1.1	0.9	-1.3	-1.2
- net milk quota	0.0	0.0	0.0	0.0
- valuation change	-0.4 <b>30.4</b>	-1.5 <b>33.9</b>	-0.2 <b>32.3</b>	-0.1 <b>26.9</b>
Total dairy output	30.4	33.9	32.3	20.9
Costs (pence per litre)				
Concentrates	9.1	10.9	10.0	9.1
Purchased bulk feed (hay & straw)	0.5	0.2	0.6	0.4
Stock keep	0.2	0.2	0.2	0.1
Veterinary and medicines	0.9 2.9	0.7 2.6	1.0 3.6	1.0 2.4
Other livestock costs - dairy Herd replacement	1.2	0.8	1.1	0.9
Total variable costs	14.8	15.5	16.5	13.9
Seeds	0.2	0.2	0.2	0.2
Fertilisers	0.1	0.0	0.0	1.0
Sprays	0.0	0.0	0.0	0.1
Other forage costs	0.1 <b>0.5</b>	0.1 <b>0.3</b>	0.1 <b>0.4</b>	0.1 1.5
Total forage costs	0.5		0.4	1.5
Gross margin including forage costs	15.1	18.1	15.4	11.6
Paid labour	2.9	2.3	3.8	2.2
Machinery - contract work	1.3	1.1	1.5	1.0
- repairs	0.8	0.7	0.9	0.6
- fuels	0.7	0.7	0.8	0.7
-depreciation	1.2	1.4	1.4	1.2
Buildings depreciation	0.5	0.2	0.8	0.5
General farm costs	0.8	0.8	1.0	0.7
Water Electricity	0.4 0.4	0.4 0.4	0.4 0.5	0.3 0.4
Land expenses	0.4	0.4	0.5	0.4
Insurance	0.5	0.4	0.5	0.5
Rent	0.9	0.7	0.8	0.5
Interest payments	0.5	0.2	0.5	0.4
Total fixed costs	11.5	9.8	13.5	9.6
Total actual costs	26.7	25.6	30.4	24.9
Net margin over actual costs	3.6	8.3	1.9	2.0
Imputed costs	2.2	1.7	2.4	1.0
Unpaid labour (farmer, spouse, other) Imputed rent	1.2	1.7 0.7	1.4	1.9 1.1
Interest on tenant's capital (6% rate)	1.0	2.0	1.1	0.9
Total imputed costs	4.4	4.4	4.9	3.8
Total costs (inc. imputed costs)	31.1	30.1	35.3	28.7
Net margin over all costs	-0.7	3.9	-3.0	-1.8
•	-0.1	3.7	3.0	-1.0
Other related outputs (ORO)	0.8	0.5	1 1	0.2
Agri-environment payments (exc OFS) Organic Farming Scheme Payment	0.8	0.5 0.0	1.1 0.0	0.2 0.0
By products and forage	0.1	0.0	0.0	0.0
Single Payment Scheme	2.5	1.9	2.7	1.6
Total other related outputs (ORO)	3.5	2.5	4.1	2.1
_				
Net margin over all costs (inc. ORO)	2.8	6.3	1.1	0.3

### **Appendix 4 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 Output (SO). These SO are expressed in European Currency Units, with 1200 such units equivalent to 1 European Size Unit (ESU). In this report, 2004 SO coefficients have been used. The coefficients will be updated in future reports.

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 businesses 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 SO total accounted for by each enterprise. Precise details of the typology are complex, but may be summarised as follows:

Farm type Characteristics

Cereals Farms on which cereals and other crops generally found in cereal

rotations account for more than two thirds of their total SO.

General cropping Farms on which arable crops (including field scale vegetables)

account for more than two thirds of their total SO excluding farms

classified as cereals.

Horticulture Holdings on which fruit (including vineyards), hardy nursery stock,

> glasshouse flowers and vegetables, market garden scale vegetables, outdoor bulbs and flowers, and mushrooms account for more than two

thirds of their total SO.

Farms where poultry account for over two thirds of total SO. **Poultry** 

**Dairy** Farms where the dairy enterprise, including followers, accounts for

> over two thirds of the total SO. A holding is classified as a Less Favoured Area (LFA) holding if 50% or more of its total area is in the

LFA.

LFA Cattle and Sheep Farms in the LFA on which cattle, sheep and other grazing livestock,

other than dairy cattle account for over two thirds of total SO.

Includes holdings classified as Severely Disadvantaged Area (SDA) if land is 50% or more within the SDA, and Disadvantaged Area (DA),

if land is more than 50% within the DA.

Lowland Cattle and Sheep 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 SO, 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 SO.

Mixed Includes mixed pig and poultry farms as well as farms with a mixture

of crops and livestock, not classified elsewhere due to their mixed

status.

### Appendix 5 Definition of terms and abbreviations

### **Breeding Livestock Appreciation (BLSA)**

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

#### **Cash Income**

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

#### **Effective Hectares (Eff. ha)**

The effective hectares constitutes the total farm area minus the area occupied by roads, woodland, wasteland and buildings, and with rough grazing 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 grazing.

#### **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.

#### **Farm Business Income**

Farm Business Income (FBI) represents the return to all unpaid labour (farmers, spouses and others with an entrepreneurial interest in the farm business) and to all their capital invested in the farm business including land and farm buildings. It is defined as Total Farm Output (TFO) plus profit/loss on sale of assets minus costs (C), where: TFO is defined as the sum of output from: crop enterprises, adjustment for disposal of previous crops, livestock enterprises, separable non-agricultural diversification, single farm payment, agri-environmental payments, other grants and subsidies, miscellaneous receipts; C is defined as variable costs plus fixed costs.

#### 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

#### 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:

ALU – Annual Labour Units

CCF – Comparable Conventional Farms

ESU - Economic Size Unit

FBI - Farm Business Income

FBS – Farm Business Survey

GM - Gross Margin

LFA – Less Favoured Area

LU – Livestock Unit

MII – Management and Investment Income

NM – Net Margin

NFI – Net Farm Income

OFS - Organic Farming Scheme

SFP – Single Farm Payment

SGM – Standard Gross Margins

SO – Standard Output

UAA – Utilisable Agricultural Area

### Appendix 6 Numbers of farms to be sampled/recruited by type and region

The recruitment targets set in 2006/07 were based on an analysis of registered organic businesses in 2005, classified by farm type and GOR (government office region), and have been maintained into 2012/13. The guideline target samples try to ensure that the population distribution is reflected. To increase the useable data, new businesses recruited should have more than 70% fully organic land.

For England from 2006/07, it was agreed with Defra that guidelines for a minimum of 140 farms (70 in the main FBS and 70 from the supplementary data collection covered by this project) should provide for a minimum of 6 in each type category (see table), except:

- a) In the case of the LFA (DA & SDA) cattle and sheep categories, as these can be combined with each other and with Welsh data to achieve the 5 minimum.
- b) Horticulture, where the priority should be to achieve a minimum of 6 for each of 'small-scale market garden' and 'larger scale field vegetables' within the other horticulture category. If recruitment enables the specialist glass and fruit categories to be increased to 5 or 6, that would be welcome, but was not a requirement.
- c) Specialist poultry and pigs, where the organic population is too small.

For Wales, the recruitment priorities identified, taking account of the existing samples, are:

- a) Improve balance between LFA and lowland dairy if any lowland dairy farms drop out
- b) Recruit horticultural businesses if any cropping or mixed farms drop out
- c) Maintain current lowland cattle and sheep numbers
- d) Focus on recruiting LFA (DA) cattle & sheep businesses.
- e) Within the SDA groups, cattle and sheep businesses are over-represented, and specialist sheep are underrepresented, so if any drop out of the former, they could be replaced by the latter if possible.

Table A10 Distribution of 2005/06 organic holdings in England and Wales by type and region and recruitment targets for 2006/07

FBSGor	Cereals	Dairy (LFA)	Dairy (Lowland)	General Cropping	Grazing Livestock (DA)	Grazing Livestock (Lowland)	Mixed	Other Cattle & Sheep (SDA)	Other Horticulture	Specialist Fruit	Specialist Glass	Specialist HNS	Specialist Horses	Specialist Pigs	Specialist Poultry	Specialist Sheep (SDA)	Grand Total England	Guideline target	Current FBS (2005/6)	To recruit
EAST	44		6	53		10	8		11	8	10	2	1	2	4		159	11	13	-2
EM	32	5	18	33	6	17	20	2	6	1	3	1			8		152	11	9	2
NE&YH	29	7	15	30	6	10	28	13	11		2	1	2		3	20	177	13	12	1
NW	5	8	40	7	1	18	12	16	5	1	6	1	3		3	7	133	10	6	4
SE&LON	59		21	27		58	47		17	17	11		4		9		270	20	10	10
SW	75	12	175	44	12	196	147	12	40	15	19	3	15	2	11	3	781	57	19	38
WM	27	8	52	33	4	42	34	8	17	11	4		3		4	1	248	18	2	16
Grand Total England	271	40	327	227	29	351	296	51	107	53	55	8	28	4	42	31	1920	140	71	70
Guideline target (min 6)	20	6	24	16	3	25	22	4	16	0	0	0	0	0	6	3	145	-5		
Wales guideline target		5	3	1	9	5	2	7	2							6		40	30	10
Total guideline target	20	11	27	17	12	30	24	11	18	0	0	0	0	0	6	9		180		
Current FBS (2005/6) En	10	3	15	6	2	7	11	5	2	1	3	0	0	1	3	2	71	<u>.</u>		
To recruit England	10	3	9	10	1	18	11	0		10			0	0	3	1	70			
Current FBS Wales	0	2	5	1	2	5	4	8	0	0	0	0	0	0	0	3	30			
To recruit Wales	0	1		0	6	1	0	2	(2 if other	cropping fa	arms drop	out)	0	0	0 se	e other	10			

### **Appendix 7 Organic and conventional farm comparisons**

A key aspect of this research work was to derive a cluster of similar 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.

#### 5.1.1 Background

Issues relating to comparing results from organic and conventional farms have been discussed by Lampkin and Padel (1994)<sup>5</sup> and Offermann and Nieberg (2000).<sup>6</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 for comparisons has been carried out before (Fowler et al., 1999)<sup>7</sup>, using a hierarchical cluster analysis technique on the basis of Euclidean squared difference; however, the method of clustering has been changed in this study.

#### 5.1.2 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, 2007)<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 business is normally independent of the organic or conventional management, and is a reflection of the resources with which the farm manager can run the farm business.

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

- Region (FBS province) assists with selecting farms with similar production conditions (i.e. location, market distance, institutional and policy frameworks);
- Less Favoured Area and Non- Less Favoured Area status (See Table A9);
- Altitude (See Table A10);

• Main farm type, which is a more descriptive typology than the robust type (see Table A11).

<sup>&</sup>lt;sup>5</sup> Lampkin, NH and S Padel (1994) *Economics of Organic Farming – an international perspective*. CAB International, Wallingford.

<sup>&</sup>lt;sup>6</sup> Offermann, F. and Nieberg, H. (2000) *Economic performance of organic farms in Europe*. Organic farming in Europe: Economics and Policy. Vol. 5. University of Hohenheim, Germany.

<sup>&</sup>lt;sup>7</sup> Fowler, S.; Lampkin, N. H. and Midmore, P. (2000) Organic Farming Incomes in England and Wales 1995/96-1997/98. Report to MAFF. Institute of Rural Studies, University of Wales, Aberystwyth.

<sup>&</sup>lt;sup>8</sup> Department for Environment, Food and Rural Affairs (Farm Business Division). Farm Business Survey Data, 2005/06 [Computer File]. Colchester, Essex: The Data Archive [Distributor] 4<sup>th</sup> December 2007.

Table A11 Recoding of LFA codes to simplify the clustering procedure

Less Favoured Area Codes		LFA types
All land outside LFA	1	1
All land inside severely disadvantaged area (SDA)	2	2
All land inside disadvantaged area (DA)	3	<i>L</i>
50%+ in LFA of which 50%+ in SDA	4	3
50%+ in LFA of which 50%+ in DA	5	
<50%+ in LFA of which 50%+ in SDA	6	4
<50%+ in LFA of which 50%+ in DA	7	4

Table A12 Altitude codes for farms in the FBS/FADN system

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

Table A13 Main type and robust types used in the FBS/FADN system

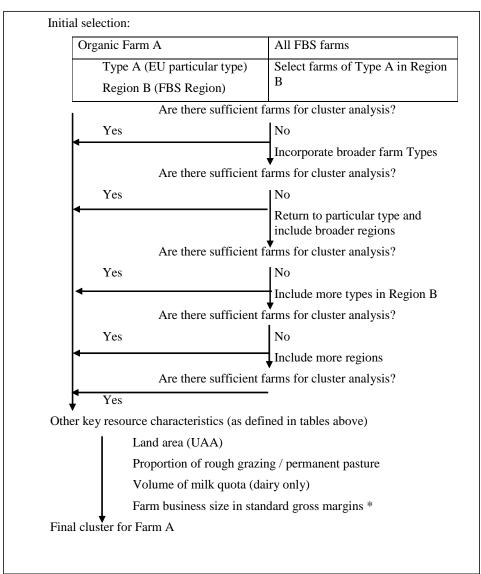
Farming Description	Main type	Robust type
Cereals	1	C :
General cropping	2	Cropping
Specialist fruit	3	
Specialist glass	4	Houti oultum
Specialist hardy nursery stock	5	Horticulture
Other horticulture	6	
Specialist pigs	7	Pigs and poultry
Specialist poultry	8	rigs and pourtry
Dairy (LFA)	9	Doim
Dairy (lowland)	10	Dairy
Specialist sheep (SDA)	11	
Specialist beef (SDA)	12	LEA cottle and shoon
Mixed cattle & sheep (SDA)	13	LFA cattle and sheep
Cattle & sheep (DA)	14	
Cattle & sheep (lowland)	15	Lowland cattle and sheep
Cropping and dairy	16	
Cropping, cattle & sheep	17	
Cropping, pigs & poultry	18	Mixed
Cropping & mixed livestock	19	
Mixed livestock	20	

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

To identify comparable farm data with similar resource endowment, pre-defined ranges were used for land (UAA), milk quota ownership (dairy farms only), proportion of permanent pasture and rough grazing land, and the farm business size in standard gross margins (ESU) per farm. The range was defined by a percentage deviation from the value of the respective organic farm (e.g. +/- 20%) and/or an absolute value to prevent organic farms with small values being lost from the sample. Overall, the combination of variables for deriving farm clusters 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 CCFs in 33% 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 A13).

**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.

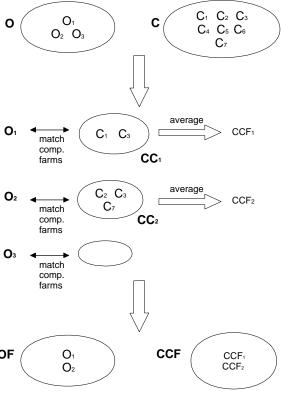
Table A14 Summary table to show the procedure used per farm type and the CCF results achieved (2011/12 farms)

Farm type	Cereals	Gen. Crop	Hort.	Dairy	Cattle a	nd sheep	Mixed	Total
				All	LFA	Lowland		
Total organic farms	23	12	16	49	55	41	15	211*
Baseline clustering criteria								
LFA status/altitude	identical							
Main type	identical							
Region	identical							
Utilisable agricultural area [UAA] (+/- %)	30	30	30	30	30	30	30	
Quota owned (+/- %)	n/a	n/a	n/a	30	n/a	n/a	30	
Permanent Pasture [PP] (+/- %)	30	30	30	n/a	30	30	30	
Rough Grazing [RG] (+/- %)	30	30	30	n/a	30	30	30	
Economic Size Units [ESU] (+/- %)	30	30	30	30	30	30	30	
No. of farms for which baseline cluster obtained (min 3 farms)	15	0	0	27	21	19	2	84
(as a percent)	65%	0%	0%	55%	38%	46%	13%	40%
Modifications required to achieve clusters for remaining farms								
Main type (incorporate broader farm type definition)	0	2	5	0	8	0	0	<b>7%</b>
Regional (broader selection)	2	1	1	10	5	6	5	14%
Main type and regional (broader selection)	1	4	0	2	5	4	1	8%
Regional/main type and UAA/ESU/RG/PP (broader selection)	4	0	4	8	6	4	3	14%
LFA/altitude (non-identical criteria)	0	1	1	0	0	0	2	2%
Combination of above	1	0	5	2	8	7	2	12%
Not clustered	0	0	0	0	2	1	0	1%
Resulting final cluster statistics								
Average number of farms in cluster per organic farm	11.04	5.67	4.56	5.73	6.49	4.95	5.20	6.2
No. of organic farms with 5 or more farms (CCF) per cluster	16	6	7	26	27	18	7	107
% of organic farms with 5 or more farms (CCF) per cluster	70%	50%	44%	53%	51%	45%	47%	51%
Range of CCF per organic farm per farm type: Minimum	3	3	3	3	3	3	3	3
Maximum	33	15	7	15	31	11	14	18

<sup>\*=</sup>Additionally, there were 2 "poultry" farms and 4 "other" typology farms in the dataset

Once the comparable conventional farm data were identified from the main Farm Business Survey database (sample C in Box 2) and for the organic farms (sample O), the comparable conventional farm data for each cluster (CC<sub>n</sub>) were averaged. This effectively creates a single ('artificial') comparable conventional farm CCF<sub>n</sub> for each organic farm (O<sub>n</sub>). Note that farms from sample C could be used more than once (in different clusters). All organic farms with no comparable data were removed from sample O, leaving set OF as the subset of sample O with matching clusters, and CCF as the set of averages for each cluster of non organic businesses drawn from sample C. The robust type comparative analysis presented in this report is based on average values for businesses matching the robust type criteria drawn from OF, compared with average values for their corresponding clusters drawn from CCF.

Box 2. Procedure for determining comparable farm data per farm type



Source: Offermann, 2004. 9

#### 5.1.3 Interpretation of results

As discussed earlier, the farms have been classified by Standard Output (SO), a typology system originally devised for conventional agricultural systems (see Appendix 2) and therefore not entirely appropriate for organic farms. 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 sample size for the comparison clusters is sufficiently large for a degree of confidence in the average value; however, there is still a possibility for outliers (especially larger farms) to have some disproportionate influence on the average.

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).