

## The employment benefits of organic farming

M GREEN & R MAYNARD

*Soil Association, Bristol House, 40-56 Victoria Street, Bristol, BS1 6BY*

### Summary

Organic farming in the UK provides a range of economic and social benefits. In particular, it provides 32% more jobs per farm than equivalent non-organic farms. These new findings are based on the first national survey of employment on UK organic farms, carried out by the University of Essex for the Soil Association. Organic farming is helping to reverse the decline in the UK's agricultural workforce, which has fallen by 80% in the last 50 years. In contrast to the ageing overall farming population, organic farmers are, on average, seven years younger than their non-organic counterparts. Organic farmers are also three times more likely to be engaged in business innovations activities, such as direct marketing and on-farm processing. If all UK farmers adopted organic farming, it would produce an additional 93,000 on-farm jobs. These findings have significant implications for developing countries where a skilled agricultural workforce is vital to safeguard livelihoods and ensure global food security.

**Key words:** Organic farming, employment, food, sustainability, rural development, developing world.

### Introduction

There is an urgent need for a reappraisal of the role of farm labour in agriculture. The loss of farmers and farm workers from the British countryside at an ever-increasing rate seriously compromises our ability to produce good quality food and care for the countryside. The evidence presented in the Soil Association's *Organic* works report demonstrates that organic farming is helping to reverse the decline in UK agriculture by creating more jobs, revitalising rural economies and encouraging younger, more optimistic people into agriculture (Maynard & Green, 2006). Organic farming represents an alternative that increases employment, as well as being economically productive and socially and environmentally sustainable.

Various attempts have been made to quantify the employment dividend of organic farming in Europe and studies have generally found that organic farms employ more people than non-organic farms. One review of over 40 European studies found that, on average, organic farms provided 10 to 20% more jobs per hectare (Offerman & Nieberg, 2000). However, until now there has been a lack of empirical research into employment on organic farms in the UK. The Soil Association commissioned the University of Essex to conduct the first national survey of employment on organic farms in the UK.

## Materials and Methods

### *University of Essex survey*

In order to quantify the additional employment created by organic farming – the jobs dividend – the Soil Association commissioned the first UK-wide study of labour on organic farms. This independent research was conducted by the Centre for Environment and Society and Department of Biological Sciences at the University of Essex in 2003. The detailed study has been peer-reviewed and published in the *International Journal of Agricultural Sustainability* (Morison *et al.*, 2005). The questionnaire survey covered 25% of all organic farms in the UK (1,018), accounting for 24% of total organically managed land (171,361 ha), see 1. An additional 126 organic farms covering 29,850 ha were also surveyed in the Republic of Ireland. This high response rate makes the findings significant and robust and the authors concluded that the survey data was ‘representative of organic farms’. The number of people employed on organic farms was converted into full time equivalent jobs (FTE).

The University of Essex then compared the organic farm survey data to national statistics for farm employment from the Department for Environment, Food and Rural Affairs’ (Defra) June 2002 agricultural census, representing employment on non-organic farms in the UK. Whilst the agricultural census does include organic farms, the latter accounts for just 4.3% of the total farmed area and 1.3% of total holdings, and therefore has little impact on the total farming figures. The University of Essex acknowledged that “a direct comparison of the [organic] survey with national statistics is difficult”. In particular, there is a current imbalance in the types and sizes of farms that have so far converted to organic production since many have been extensive grassland farms. The researchers took two measures to overcome this imbalance. Firstly, 40 very large organic farms over 1,000 ha in size were excluded from the jobs per 100 hectares calculation. These farms are not representative of most UK organic farms and are mostly very large extensive upland estates, which tend to employ a small number of people. In any case a significant number of these large hill farms have subsequently ceased organic production. Secondly, the organic survey data was weighted to make the figures representative of the balance of farm sizes nationally. This overcomes the current imbalance in the types of farms that have so far converted to organic.

### *Comparing like with like*

The Defra statistics include a large number of non-commercial or non-agricultural holdings, such as people with goats in their backyard or hobby farmers. The organic survey only included farms which were certified organic and, therefore, commercially active. Therefore, the Soil Association removed non-commercial holdings from the agricultural census to provide a representative and ‘like-with-like’ comparison between organic and non-organic farms. All holdings below 4 European Size Units (ESUs) were removed from the 2003 agricultural census data and compared to the organic farm survey data. In addition, the Soil Association also removed the 40 large farms and the same weighting methodology as the University of Essex in order to represent the balance of farm sizes nationally. These results are detailed in Table 1.

### *Literature review*

The Soil Association sought to put this new quantitative research in context by reviewing previous studies of employment on organic farms. Particular attention was given to a recent Defra-funded study of the impact of organic farming on the rural economy conducted by the University of Exeter (Lobley *et al.*, 2005). This study surveyed 302 organic and 353 non-organic farms in three English regions. In addition to confirming the fact that organic farms provide more jobs than their non-organic counterparts (64% more jobs per farm, 39% more jobs per hectare), this study examined the wider contribution of organic farming to rural development, including entrepreneurialism, business diversification, education and skills.

## Results

Calculations by the Soil Association based on the University of Essex survey, demonstrates that organic farming in the UK provides 32% more jobs per farm than equivalent non-organic farms. Weighted to represent the balance of commercial farm sizes nationally, organic farms provide 2.77 jobs per farm compared to 2.09 jobs on commercial non-organic farms. The University of Essex survey demonstrates that it is the system of organic farming itself that creates and demands more labour. Whilst on-farm processing and direct sales activities are distinctive factors for the success and survival of many organic enterprises, the vast majority (81%) of the total employment on organic farms is generated by the farming system itself. Of the total 3.08 jobs per organic farm (unweighted), 2.50 are accounted for by agricultural employment with 0.57 (19%) provided through on-farm processing and direct marketing. These employment differences result from fundamental differences between organic and non-organic farming systems. The management-based approach of organic farming requires a greater range of skills and labour for crop, soil and animal husbandry. Selected data from the University of Essex survey of organic farms and from Defra statistics on non-organic farms are presented in Table 1 below.

Table 1. *Summary of key findings*

	Organic farms surveyed	Commercial non-organic farms (> 4 ESU)	Increased employment on organic farms
Number of farms	1,018	137,950	
Area farmed (hectares)	171,361	15,199,802	
Total people employed	N/A	394,526	
Total jobs (FTE)	3,135	288,612	
Jobs per farm (weighted)	2.77	2.09	32%
Jobs per farm (unweighted)	3.08	2.09	47%
Jobs per 100 hectares (unweighted)	2.49	1.9	31%

Thirty nine per cent of the organic farms across the UK and Ireland were engaged in processing or direct marketing. Despite lack of government data on the split of agriculture and agriculture-related jobs, two recent studies have shown that organic farms more processing and direct sales activities than non-organic farms. The University of Exeter study found that organic farms surveyed in England were three times more likely to be involved in marketing (39%), compared to non-organic farms (13%). An ADAS (2004) survey, found that only 19% of non-organic farmers were likely to market directly in the near future, compared to 47% of organic farmers.

The University of Essex survey demonstrates that, in contrast to the trend on non-organic farms, small organic farms can be productive and provide jobs. The study found the smallest organic farms employ more people than any other type of farm with 5.23 jobs per farm – 70% more than organic farms overall (3.08 jobs). These farms were, on average, 36 ha and grew vegetables, soft fruit or had orchards. Organic farming currently represents 4% of farmland in the UK. If all UK farming converted to organic production, this would create an estimated 93,000 more on-farm jobs. This is almost 16 times more people than were employed by the Rover car company when it closed in April 2005.

## Discussion

### *A declining farm population*

The evidence presented in Organic works contradicts the narrow and negative thinking aimed at ‘shedding’ farm labour which has dominated agricultural policy for the past 60 years. Although

the provision of jobs and achieving full employment are generally agreed to be desirable social goals, for more than half a century governments and industry leaders have seen 'shedding labour' as a key measure of the efficiency of the agricultural industry. Technological changes, underpinned by a support structure of Government grants, drove the shift to the dominant, industrial model of highly mechanised, chemical-dependent farming. These trends have fostered an increasingly isolated and ageing farming population, with few young farmers or new entrants to the agricultural industry: between 1951 and 2003 there was a 79% drop in UK farm workers (Defra, 2004); during a single decade (1993 to 2003), the proportion of UK farmers aged 55 and over increased from 48% to 56% (Defra, 2005); and in 2003, one farm worker committed suicide every seven days (Office for National Statistics, 2006).

### *Reversing the decline*

In contrast to these trends, organic farming is helping to reverse the decline in UK farming by creating more jobs, revitalising rural economies and encouraging younger, more optimistic people into agriculture. The arrival of this dynamic new population into UK farming runs counter to the exodus of farmers and farm workers from the land in the last half a century.

This new research demonstrates that farming jobs are a positive indicator of a healthy and vibrant farming model. Not only does organic farming increase agricultural employment, but it is also economically productive and socially and environmentally sustainable. Jobs on farms and farming-related businesses provide a wide range of benefits for the national and regional economy, including community cohesion, social stability and cultural identity. Reversing the decline in the numbers of people working on farms will mark a reversal in the social and economic decline of many rural communities. A skilled agricultural workforce will also be needed to make the transition away from current fossil fuel dependent farming whilst maintaining food production in the UK.

Government policy for UK food and farming should state explicitly that farming systems that provide greater employment in agriculture, and farm-related businesses, will be encouraged. Employment in agriculture is also an issue of global humanitarian importance. In the developing world, a skilled agricultural workforce is vital to safeguard livelihoods and ensure food security. Rather than replacing this valuable human resource with increasingly expensive and scarce inputs of oil-based agrochemicals, developing countries should adopt and develop sustainable food production systems that keep people working on and living off the land.

### **Acknowledgements**

The findings in this paper are based on the Soil Association report, *Organic works*, written by Robin Maynard and Michael Green, downloadable at [www.soilassociation.org/organicworks](http://www.soilassociation.org/organicworks) The authors would like to thank Jules Pretty, James Morison and Rachel Hine of the University of Essex for carrying out the survey of organic farms upon which the *Organic works* report is based, as well for their assistance in producing the report. The contributions and guidance of Gundula Azeez and Peter Melchett were also instrumental in producing the report.

### **References**

- ADAS Consulting Ltd. 2004.** *Farmers' Voice 2004, Summary Report: Organic Farming.* ADAS
- Defra. 2004.** *Agriculture in the United Kingdom 2003.* HMSO, The Stationery Office
- Defra. 2005.** *Agriculture in the United Kingdom 2004.* HMSO, The Stationery Office
- Lobley M, Reed M, Butler A. 2005.** *The Impact of Organic Farming on the Rural Economy in*

*England*. Final Report to Defra. University of Exeter.

**Maynard R, Green M. 2006.** *Organic works. Providing more jobs through organic farming and local food supply*. Soil Association

**Morison J, Hine R, Pretty J. 2005.** 'Survey and Analysis of Labour on Organic Farms in the UK and Republic of Ireland,' *International Journal of Agricultural Sustainability*, 3, 1:24–43

**Offerman F, Nieberg H. 2000.** *Economic performance of organic farms in Europe. Organic Farming in Europe: Economics and Policy, Volume 5*. University of Hohenheim

**Office for National Statistics. 2006.** *Proportional mortality ratios for suicide and undetermined injury in farmers, etc, persons aged 20-74, England and Wales 1993-2004*. ONS