The spatial dynamics of Organic farming – the example of England

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Abstract

Discussion paper

The genesis of this stems from being engaged by a client to study organic farming and asking the apparently simple question of where they might be found. In deciding where to allocate research effort it became apparent that the current distribution of organic farms in England was little understood. The work of geographers, who had considered the reasons behind the apparent concentrations of organic farms, was socially reductive and did not provide an adequate basis for future research. This paper represents an open attempt to provide a theoretical framework for research on the spatial distribution of organic farms and farmers. In doing so it looks towards creating a sophisticated socio-spatial understanding of the practices of organic farmers and consumers.

The spatial distribution of organic farms is important for a number of reasons. Academically, it is important as it poses questions that have yet to be thoroughly investigated. Currently the relationship between social movements and innovative industrial sectors is not well understood, and the resulting spatial practices are even less well theorised. Practically, it is of importance as a range of policy initiatives have been implemented, whilst often supposedly national in character, it would be useful to know if they actually are nationally effective and the reasons behind their differential implementation. Finally, in questions of sustainability, it is evident that some communities have access to local organic food and others do not, understanding the reasons behind this may be important in implementing policies of local food provision.

This paper begins with a critique of the existing studies of the geography of organic farming, outlining a critical appreciation of its contribution to

date. This is followed by a discussion of other research into organic farming and how the insights gained from viewing it as part of a wider social movement provides a theoretical base from which spatial research can depart. The paper outlines how the 'territorialization' of a social movement might be observed and the research that would identify such patterns. We then move to test our theoretical constructions against empirical investigation; in turn we consider the dynamics of the organic movement and sector, the patterns of relative spatial concentration, evidence of localised clusters of organic farms and the composition of the organic farm business. We conclude by outlining our future research and anticipate the future development of our argument.

Organic geographies

The specific study of the geography of organic farming has been scant, reflecting the relative marginality of organic farming. Ilbery and his collaborators noted that new theory was necessary to explain the spatial distribution of organic farms, but took very few steps to provide such an analysis. Through the use of the location quotient (LQ) techniques[1], measuring relative density (see below), they had identified a core of organic counties where organic farms appeared to be more densely concentrated than might be expected. They also observed that many farmers were converting their farms to organic status then reverting after a few years but they were unable to investigate it further. They argued that a process of 'spatial rationalisation' was occurring, although 'there is

[1] Footnote explaining LQ here

little understanding of why this is happening' (Ilbery, Holloway, and Arber 1999). To establish what lay behind this process they suggested research focussing on the process of conversion to organic farming, the attitudes of conventional farming to organics, the behaviour of consumers and finally the institutions of the organic sector. The networks of the organic farmers were only considered as a subsection of the enquiry into the process of conversion.

We pick up some of the cues from their suggestions, but only from a critical understanding of their original work. Our criticism is no doubt informed by the considerable body of new research conducted since their enquiry (see below), but also on a critical reading of their argument. The first and most important criticism is that organic farmers and their supporters lack any concept of social or spatial agency. Among the reasons they advanced for the rise of organic farming, at no point do they credit the activities of organic farmers or their organizations. This streams into not viewing farming as a social activity, one that creates meanings, places, spaces, discourses and bodies, rather the reader is offered farming as solely commodity production or a policy support receiving activity. As part of this reduced perspective on farming they find that the location quotient, a measurement of *relative* density, adequate for describing the importance of organic farming, rather than *absolute* density which might reveal very different patterns. The measurement of relative density is a statistical abstraction, whilst absolute density accords with the presence of actual people. Although at the end of their paper they make every effort to construct a research

agenda that is expansive although it is based on a method that is socially reductive.

Conventionalisation

Rural sociology in contrast to much of agricultural geography has offered a rich vein of work on organic farming, which whilst not ostensibly concerned with its spatial characteristics, offers significant insights. The work of Tovey about organic farming in Ireland and that by Buck, Getz and Guthman in California marked a sharp turn in the study of organic farming, as they argued, respectively, that organic farming constitutes a social movement and that it is being increasingly incorporated into the conventional circuits of agricultural capitalism (Buck, Getz, and Guthman 1997; Tovey 1997). These two arguments proved to be fecund routes of enquiry for the study of organic agriculture, which initially were largely discussed within the then dominant frame of political economy. Tovey's work foregrounded the relative autonomy of the organic movement and how despite the demands of the state and the market, it retained the power to define and achieve some of its own goals. She argued that the less valuable agricultural land in Ireland provided a space for experimentation that was both agricultural and social. In insisting that a social movement underpinned organic farming she introduced an important new element to the analysis of the phenomena.

Buck, Getz and Guthman in their study of organic agriculture in California provided an overview of both its development and its increasing 'conventionalization', as it became part of the general circuits of agri-

business. Whilst this conformed to the general political economy view that agri-business would come to dominate all other farming systems but even within their study there were countervailing tendencies. They noted that "to some degree the organic sector has more the character of a 'social movement' than of an industry" (Buck, Getz, and Guthman 1997) and that many actors in the sector were opposed to being subsumed by the values of mainstream business. Yet they concluded "the organic sector is providing fertile ground for its own capitalisation" (Buck, Getz, and Guthman 1997). The conventionalisation thesis has continued to provoke debate and analysis, with Guthman revising but not withdrawing the central aspects of it.

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Comment: Re-write

The riposte to Buck, Getz and Guthman's paper came from Campbell and Coombes in their study of organic farming in New Zealand (Coombes and Campbell 1998). Rejecting the linear assumptions of the study of California, they presented evidence of an organic farming sector highly differentiated between those serving domestic and export markets. Firstly, they countered the argument that organic farming would inevitably be subsumed into the dominant circuits of capitalism. They argued that much of the same argument had been made about family farmers for many years, but this form of enterprise persisted through their ability to adapt to changing circumstances and the barriers presented by the natural processes on farms to capitalistic appropriation. Whilst the observations of Buck, Getz and Guthman may have been apposite for California, Coombes and Campbell argued that they should not be universally extended. The development of organic farming in New Zealand showed a bifurcation between those farms serving the domestic

market and those looking to produce for export. Often those focused on export were close to a processing plant, grew different crops and as such were clustered in separate locations from those growing for the domestic market. Although distinct in business orientation and physical location, the two arms of the sectors had a degree of interdependence being joined by technical collaboration and a commitment to the integrity of the certification agency.

Despite the differences between these studies they demonstrated a shared set of observations that provide valuable insights when considering the spatial distribution of organic farms. First of which is that organic farming is based on a social movement that is intertwined with, but not necessarily dependent on, a more profit orientated or growth orientated organic industry. Secondly, there are no universal patterns but the particular history of the development of the local movement and market and regulatory regime with which it intersects. Finally, although the market conditions and business practices of organic farmers are important factors a wider understanding of the social processes around organic food is necessary. Whilst these insights did not derive from specifically geographical research on organic farming, they are central in answering questions about the spatial distribution of organic farms.

Social Movements

In her initial paper Tovey, did not use any specific model of a social movement, although later she adopted that of Jamison and Eyerman (Eyerman and Jamison 1991; Tovey 1999; Tovey 2002). Although

useful this conceptualisation of social movements has little say about the organisational sociology of movements. In common with other commentators we have adopted the more widely used work by della Porta and Diani (della Porta and Diani 1999). Their work represents an integration of the European (the Why?) and North American (the How?) traditions of social movement analysis, which provides a useful base for analysing the features of a social movement (Melucci 1996; Tarrow 1996). They identify four core features of a social movement – informal interaction networks, shared beliefs and solidarity, collective action focusing on conflicts and the use of protest. Taking each in turn it is possible to identify these features in organic agriculture.

The *informal networks* - are between individuals, organizations and institutions; these include the farmers and consumers, the farm businesses, retailers, sector bodies and lobby groups that make up the movement.

Shared beliefs and solidarity - are evident in the codified standards of organic production, such as the symbol schemes but also in the belief in the importance of organic farming – its health benefits, environmental virtues and even spiritual aspects. For evidence of solidarity one need only consider the recent mobilisation of opinion against Genetically Modified (GM) food by many organic consumers.

Collective action focused on conflicts - members of the organic movement contest the safety and sustainability of 'conventional' agriculture. In a rurally based social movement protest in the form

of rallies or marches are uncommon, but in the organic movement the growing and purchasing of organic food has been constructed as a form of perpetual personalised protest. In aggregation these actions, reversing the logic of the boycott, can bring considerable benefit to the movement and focus discussion.

Use of protest - recently organic farming has attracted supporters prepared to break the law in defence of organic farms and as noted above, personal consumption can be construed as collective protest. The final example of protest is that of the demonstration of organic farming itself, standing as a practical example of an alternative, each farm can be constructed as a protest.

One of the central features of the organic agriculture is the porous perimeter it has, in that participation is not exclusive and the reasons for participation may be multifactorial. It is quite possible to consume organic goods and not subscribe to the ideals of the movement or it may be possible to do the same as a farmer producing solely for the profit. Equally, it is possible to subscribe to the movement's aims and not be able to access or afford organic food, or to farm organically and not be able to register your land in a scheme. For some this ambivalence is suggestive of a politics or strategy that is not well thought through or carefully enunciated. If we are to take seriously Melucci's observations about social movements they are perhaps more understandable. Melucci argued that most of the time social movement networks were submerged in daily life as people attempted to put into practice their ideals. Rather than waiting for a great change, these 'prophets without enchantment'

are experimenting in the present. This lack of the clear boundaries is suggestive of this tendency to experimentation, as well as the efforts of others aimed at appropriation of any profits or the garnering of social status.

The importance of informal networks in this definition of a social movement has led to an increasing interest in measuring concrete social networks through the use of the social network analysis techniques. Diani in a recent work has suggested that social movements might display four types of such networks, which provide some explanation of the composition and activities of the movement (ref). He argues that the network view of social movements moves research away from accounts of aggregates of actors towards specific chains of actors, creating a connection between events and the fabrication of meanings or actions. In the context of this discussion the analysis of specific social networks would also allow a more nuanced account of the inter-relationships between movement actors and those in the organic industry, as well as the process of conversion and possibly reversion (Padel 2001). The nature and form of concrete social networks may also allow an explanation of the spatial clustering of organic farms that is determined by the social activities of those involved, rather than the anonymous logics of the market alone (Burt 1997; Kamman 1998; McCarty, Bernard, Killworth, Shelley, and Johnsen 1997; Oerlemans, Meeus, and Boekema 1998).

As the consideration of social movements has until now been principally been the concern of political sociology, the spatial and business aspects

of social movements have not been widely considered. Many accounts have focused on how social movements grow or amplify their activities, but we are proposing to consider a distinct process – how a social movement *territorializes* itself (McAdam, Tarrow, and Tilly 2001). The networks submerged in daily life discussed above, the laboratories of the alternative have to have somewhere to take place. Movement members will have living spaces, movement organizations will set up offices, as will the businesses serving and drawing from the movement. Further to that a movement will have spatial aspirations; it will want to see its goals implemented across ever-wider areas. For some movements this may be the recognition of formal rights over a national territory or the enactment of policies they favour across a specified area.

Movements seek to control or govern aspects of spaces, as well as having direct control of a range of places. All movements at certain times will seek to govern a territory. This process of territorialization will vary between movements and particular circumstances, but the contest over a social stake will always have spatial implications. The purpose of territorialization for a social movement, is not to gain control of space or territory rather it is to sway people and then control land or property: "What counts essentially is this complex of men and things: property and territory are merely one of its variables" (Foucault 2000:page). Analytically this is central as it will always be easier to measure the 'things', which are more readily made representable, but they are always linked to people. The understanding of the spatial distribution of the things is dependent on investigation of the dispositions and purposes of

the people entangled with them, although the distribution of the 'things' will yield valuable insights as to where such an investigation might begin.

Organic Territorialization

For the organic movement the drive to take territory is implicit within its goals. The social stake it is contesting is the form and ends of agriculture and food production, it is explicitly seeking to persuade people to farm organically. As it seeks to have organic food available, activists in the movement will move to create the goals the movement aspires to realise in the present, hence the founding of organic farms, food processors and suppliers. These places act as resources to the movement providing a cadre dependent on the continued success of the movement for their livelihoods, they also provide organisational resources in the form of places to meet and organise, finally they act as demonstrations of the potential of the movement to effect meaningful change. In producing, processing and retailing organic produce these enterprises seek to amplify through diffusion the movement's membership. How these 'resources' are distributed will in part reflect the strength of the movement in a particular locality or the operation of the market for organic produce.

This process of diffusion will not just attract adherents it will also potentially spread conflict and attract those who wish to appropriate profits from the movement. The demonstration effect of an organic farm may catalyse discussion in a local community, as it acts as an explicit challenge to those who currently control the space for the dominant

farming system. It may introduce new members to a rural community or mark the changing allegiances of those already in the community; in either instance this will provoke the debate and discussion of the movements aims. The same process it can be argued can be said to occur in organic retailing as the presence of organic goods provokes debate and potentially conflict. In some circumstances such as during the trials of GM crops in the UK, organic farms have catalysed public protests as the protestors sought to protect them from contamination by the GM material. The control of places is an important part of diffusing the conflict in which the movement is engaged.

The process of certifying produce as organic provides an excellent example of territorialization. At different times various national movements have sought to standardise and regulate those producing 'organic' products to ensure their conformity with the goals of the wider movement. In this way organic production has been frequently governed by the wider movement, although often this was done initially in a low key, trust based manner. Where the state has sought to intervene in this process, either as part of part of consumer protection or to implement support schemes, there has been a contest about who governs organic production. Some countries have state led monopolies in certification (Denmark), others have certification schemes dominated by the movement (the UK) and in others this process of national certification is still contested. This process of standardization and enumeration provides a potential tool for the movement, as it makes it more easily representable to the techniques of government the territory governed by the movement. Rather than a handful of holdings in a particular area, it

can be compared statistically with other farming systems and enter into the main networks of policy formation. The process of certification remains the movement's tool in regulating production and increasingly the statistical aggregation of these places is central in contesting the wider goals within policy formation.

Those who wish to appropriate the profits of the movement or rather the trade that was initiated by the movement are placed in a difficult situation. Whilst, for many there is money to be made from selling organic produce there are considerable barriers. In having to subscribe to organic production standards they are consenting to a degree of governance by the organic movement and also have to go through the process of conversion. There is considerable discussion still as to whether this inevitably leads to a process of conventionalisation. In considering conventionalisation it might be useful to consider the physical distance between the consumer and the producer, the density of association between organic producers as well as the economic structures of the area. It could be quite possible, as in the case of New Zealand that different clusters of organic business are serving different clienteles and are also spatially distinct. It may be useful to differentiate between the organic industry – the businesses involved in the production, processing and retailing of organic produce, and the organic movement – the underpinning social movement. Any such distinction would have an uncertain boundary as it will be continually contested, it may however provide some clarity. The play of power between the industry and the movement will require constant attention but there is no a priori

assumption that one will always dominate or even that their interests will always be divergent.

New Avenues of Research

To return to the question of how these might condition the spatial patterns of organic farms then the insights of social movement theory would lead us to postulate that the following would be observable.

Dense networks of people and businesses - as recruitment to a social movement is largely through informal contacts that these would be personal, horizontal and generally localised. The production of organic food, its distribution and consumption would be intertwined with ideological affinities.

Demonstration effects - that organic farms and farmers as exemplars of an alternative if successful would attract others to seek organic status. These could be recruits to the movement or industry, the demonstration could be formalised or be through the associative networks above. Similar processes might be observed in those involved in processing, retail and consumption.

Clusters of organic farms – because of either proximity to friends and associates and/or proximity to a ready market, or the demonstration effect, organic farms would not be evenly geographically distributed but clustered to together.

Group dynamics - once in the movement, the career of the individual within that group would have some influence on their propensity to either produce or consume organic products. Adherence to group norms may be as important economic factors in retaining membership. The form and intensity of membership may vary over time.

Distinctive enterprises - organic enterprises would be distinct from conventional agriculture enterprises, as their success is dependent on transactions conducted within a distinct network of consumers and other enterprises.

New entrants - that those becoming organic farmers might contain a greater number from non-farming backgrounds, as they seek what is an 'activist' role within the movement.

To demonstrate these theoretical postulations in concrete findings is methodologically challenging, however some intimations are already apparent in the data already available.

Contemporary dynamics

To understand the contemporary spatial dynamics of the organic movement at a national level we have combined the available data at various levels of analysis and move progressively from a regional to a

postcode district level. We have used the technique of ranking, as well as the location quotient. The data is a combination of figures produced by DEFRA, the Soil Association and the Organic Farmers and Growers. At a regional level the growth of the amount of land registered as organic is highly differentiated, with very different patterns of change (see Table 1). The south of England remains the predominant area with the South West region being the leader in the amount of land currently organic, more than then next four regions combined and with more land in conversion. As a percentage of agricultural land, it leads the English regions (5.4%), although the North East is highly dynamic with the amount of land with organic status set to double in the next two years. The very low levels in Yorkshire and Humberside and the Eastern Regions are worthy of further investigation (0.8% of agricultural land in both). Focusing on the amount of land alone rather than the number of farms may not be illuminating as to the importance of organic farming in a particular area, as it may reflect large areas of poor land registered as organic rather than actual activity.

The aggregation that is necessary in considering a region can be broken down if the analysis is conducted at the level of the County. In Table 2 we have brought together a number of possible measures at the County level. Devon has the highest number of holdings with the adjacent counties of Cornwall and Somerset taking second and third places respectively. The ranking of the LQ for each County shows Wiltshire to have the highest relative concentration of organic holdings. This corresponds broadly to the areas that Ilbery and his colleagues identified as the 'organic core' in 1999, but as is apparent the actual number of holdings can be very low.

Our next calculation, which we were only able to conduct for Soil Association holdings, was to approximately calculate their date of registration as organic producers. Those who registered before 1990 and who are still producing at the same location are recorded, whilst we have also accounted for those who converted between 1991-1996. Both of these figures are very small against those currently registered, that are expressed as a percentage of existing holdings. This makes apparent that Devon has the largest absolute number of older holdings (27), but Berkshire has the highest relative concentration of such farms (39.3). In contrast Northumberland has only 1 organic holding registered before 1996, indicating that the appearance of organic holdings may be relatively recent.

Considered together this data presents a complex set of interlocking scenarios, as to whether absolute or relative density is the most important aspect. If we compare for example Berkshire with Somerset the differences become apparent. Berkshire has very few holdings; only 20% of those of Somerset but nearly 40% of them are more than 8 years old. This suggests that either there are not many agricultural holdings in the County or that they are all quite large, but that the organic movement is quite stable in that area. Somerset in contrast has a high absolute number but a low relative density of farms, with the same number (11) of holdings registered for more than 8 years, suggesting a far less stable network of farms.

Although these figures confirm the thrust of table 1 that the South West is the most important region for organic farming, it does not necessarily bring the discussion any closer to resolving the problem of understanding such patterns. We resolved to enquire at a level that was not determined by local government boundaries, which are important largely for government functions but not necessarily for business or associative networks. Instead of such boundaries we chose to consider postal code sectors, as being relatively arbitrary but consistently used measures of space and chose Devon as representing the largest pool of holdings. We mapped the location of the holdings as shown in figures 1, 2 and 3. We observed that 67% of organic farms in Devon are in a postcode area where there are at least 4 other organic farms. By considering the different certification agencies, there again appears to be some tendency for farms close to one another to share the same certification agency. This is most pronounced in a collection of farms straddling the Devon/Somerset border in the Brendon Hills. We identified 16 postcode areas with more than five organic holdings and 6 of them had 10 or more farms, which suggests that these farms are clustering together. There did not appear to be related to either farm type or the farming characteristics of the land.

Farm Business structure

We have reanalysed the data from the recent DEFRA Farm Diversification Baseline study, as part of trying to discern if organic farm businesses have any structural differences which might influence their spatial distribution (Turner, Winter, Barr, Fogerty, Errington, Lobley, Reed, and

Whitehead 2002). Only 4.5% of the total sample of farms in the survey were registered as organic, although this amounted to 113 farms. As is evident from table 3, dairy farming would appear to be particularly important but this may also reflect that 52% of the organic farms that took part were in the South West, but is also reflects the emergence of organic dairying as a new market. It is also noteworthy of the importance of heterogeneous farm types: mixed, cattle and sheep (lowland) and Other types in the organic sector. There was also a tendency for organic farms to be smaller, see table 4, although the relationship between farm size and enterprise type is not initially apparent.

It would appear that organic farms engage with the market in a different way to their conventional counterparts in terms of their diversified enterprises. Organic farms are more likely to be more diversified, on average organic holdings run 2.6 enterprises as compared to the 2.2 of conventional holdings. The types of business are similarly very different only 31% of organic holdings provided agricultural services, 10% less than their conventional peers. Organic holdings are more likely to offer accommodation (25% conventional, 40% organic) or be involved in trading enterprises (41% organic, 36% conventional) and to be involved in processing and production of unconventional products. Generally, organic holdings are more likely to be engaged with markets outside of the wider agricultural industry and to be involved in enterprises that are focused on business to person rather than business-to-business.

The source of funds for these diversification projects reveals again new patterns in the focus and structure of organic farm businesses. Organic

holdings were more likely to receive public funds, 15.2% compared to 5.2% of conventional holdings. There is also evidence that very small organic holdings are run as economically active units, 2% of very small, diversified, non-organic holdings have received grant aid, compared to 14% of comparable organic holdings. The success of organic farmers in gaining grants for diversification from non-traditional sectors was higher than that of conventional farmers but this was reversed with regard to traditional routes such as DEFRA. Although not presented as spatial data these findings could have profound geographical impacts, as these differences will represent some existing geographic differences – availability of land, market opportunities and public funding. In turn it will also result in some emerging differences as these organic farms have a different impact on the economy and landscape of the areas they are operating within. Taken together this data on diversification suggests that organic farming may have a distinctive impact on the local economy.

Conclusions

In this paper we have sought to analyze some of the processes behind the spatial distribution of organic farms, using England as an example. In viewing organic farming as the product of as a social movement we have sought to provide an explanation for some of the social processes behind the development of the organic industry and the location of existing organic farms. The relationship between the organic industry and movement will always be difficult analytically and certainly requires continued research, but certainly in a European context we have yet to see compelling evidence of conventionalization. In bringing together

agricultural geography, farm management studies and rural sociology we have sought to bring new insights to each and have suggested a number of empirical findings that might validate our theory.

At present we have only a limited amount of evidence to present in support of our contentions, but we certainly have identified clusters of organic farms and also that they have a distinct business model from their conventional peers. There are clusters of organic farms in the south west of England situated close to one another and certainly certified by the same organization. As to whether these businesses are aware of one another or trade together has yet to be established and certain the processes behind their entry into organic is not known yet. It is also certainly evident from our data that organic farms pursue a very different business model to their conventional peers, looking to a very different market and apparently based on economies of scope rather than those of scale. A considerable proportion of these farms appear to be adept at drawing down public funds, which may be an important factor in shaping the distribution of the farms.

Despite the research conducted in recent years into organic agriculture it remains far less understood than other areas of agriculture. In part this is the complexity of the interaction of what we have termed the industry with the movement, the debate about whether this has led to conventionalization has taken up a great deal of energy leaving other avenues of enquiry unattended. In looking to understand the socio-spatial dynamics of the social movement we aim to throw more light and pose more questions about the distribution and development of organic

agriculture. We are actively engaged in collecting more data and will report on how this confirms with the theoretical framework we have sought to establish here.

Table 1- Projected amount of organic land in England 2005, by region.

Region	In Conversion (Ha)	organic Land (Ha)	Projected Land In 2 years time	Land in conversion % of land presently Organic	Ranking 2003	Ranking 2005
North East	15,332	12,415	27747	123.1	5	4
North West	7708	15,096	22084	51	4	5
Yorkshire and Humberside	2257	6,968	9225	32.4	8	8
East Midland	2900	11,959	14859	24.25	6	6
West Midlands	5977	23,423	29400	25.5	2	3
Eastern	4140	7,753	11893	53.4	7	7
South West	17,976	78,082	98058	23	1	1
South East	11,501	23,348	34849	49.25	3	2

Source: Centre for Rural Research from DEFRA data

Table 2- The most 'organic' English counties and analysis of their oldest organic holdings

County	No. of Holdings	No. ranking	LQ ranking	Pre- 1990	1991-1996 registration	% of existing holdings
WILTSHIRE	117	4	1	4	11	13.4
DORSET	106	5	2	5	6	10.4
BERKSHIRE	28		3	4	7	39.3
OXFORDSHIRE	57		4	2	4	10.5
GLOUCESTERSHIRE	101	6	5	2	7	8.9
EAST SUSSEX	64		6	2	4	9.4
DEVON	307	1	7	11	16	8.8
HEREFORDSHIRE	90	7	8	7	9	17.8
SOMERSET	135	3	9	4	7	8.1
CORNWALL	136	2	10	1	7	5.9
NORTHUMBERLAND	38		12		1	2.6
SHROPSHIRE	82	8	13	6	6	14.6
KENT	67	10	14	4	5	13.4

Source: Centre for Rural Research from DEFRA and Soil Association data

Table 3 - A comparison of Farm type between Organic and Non-Organic producers

	Non-organic	Organic
Cereals	20.6%	9.6%
General cropping	10.0%	3.8%
Horticulture	6.4%	4.6%
Pigs & poultry	4.2%	4.0%
Dairy	15.3%	22.2%
Cattle & sheep (LFA)	10.0%	3.4%
Cattle & Sheep (Lowland)	11.7%	15.9%
Mixed	10.4%	13.4%
Other types	11.5%	23.2%
	100.0%	100.0%

Source: Centre for Rural Research from DEFRA data

Table 4 - Size of Holding, Organic and Non-Organic compared

	Non-organic	Organic
Less than 10	18.4%	19.1%
10 - < 35	21.1%	26.3%
35 - < 70	20.8%	19.6%
70 - < 125	17.7%	18.3%
125 and over	22.1%	16.8%

Source: Centre for Rural Research from DEFRA data

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