

An index of food relocalisation in England and Wales

There are great differences in the distribution of 'local' food throughout England and Wales.

The production and marketing of 'local' food seems to be taking place in different areas.

Summary

The potential benefits of 'local' food have been well rehearsed in recent years, but where are local food systems more or less developed? This research, undertaken as part of a PhD project, by Jane Ricketts Hein of Coventry University, looks at the development of local food systems using an 'Index of Food Relocalisation' to identify areas of local food activity in England and Wales. The Index is based on indicators that, when taken together, describe features of the local food system.

The Index shows the domination of the south of England with a few northern counties also scoring well. Urban areas may be expected to score poorly; northern urban areas appear to be less developed than London and the West Midlands. Noticeable differences are apparent between production and marketing sections of the local food sector.

The Index cannot explain the patterns that it shows, but can help describe the distribution of activities and some of the subtleties of the local food sector.

Main findings and conclusions

Where are 'local' food systems in England and Wales most developed?

Recently there has been a great deal of interest in the potential benefits of 'local' food, relating to both its production and distribution. However, apart from attempts to measure the local food sector, through the Food and Local Agriculture Information Resource (FLAIR), few studies have attempted to show where local food systems are more developed. Thus, an 'Index of food relocalisation' was calculated in order to assess where food supply systems have become relocalised in England and Wales. This will also provide an important baseline from which further research can be undertaken, such as comparing future changes in local food development.

Box 1: Indicators of food relocalisation*	
PRODUCTION INDICATORS	Number of local food directories.
	Number of local food producers advertising in local food directories.
	Number of organic farmers and growers licensed with the Soil Association.
MARKETING INDICATORS	Number of farm shops selling food items registered with the Farm Retail Association.
	Number of Women's Institute co-operative markets.
	Number of farmers' markets.

* Each measured in terms of numbers per county.

Since this research was conducted, the Farm Retail Association and the National Association of Farmers' Markets have merged into a new organisation FARMA (National Farmers Retail and Markets Association). This does not invalidate the Index, as the Index counts the number of farmers' markets, rather than NAFM membership, and thus the rank order for farmers' markets is unlikely to change.

An 'Index of food relocalisation'

The Index of food relocalisation is based on a formula developed in the 1970's to measure the 'level of living' in England and Wales, and was later used to assess comparative levels of social well-being in Europe. As there is no single definition of 'local' food, diagnostic indicators were selected. Six were chosen; three relating to production factors and three to marketing. These are shown in Box 1.

Every county in England and Wales was then ranked according to the number of each indicator found in that county, and the resulting rank scores entered into the following formula:

$$I_j = 100 \sum \frac{R_j}{N.C.}$$

where I_j = Index of food relocalisation index of county j

R_j = sum of individual rank-scores for county j

N = number of indicators

C = number of cases (counties)

Figures for Cornwall, Northamptonshire and Pembrokeshire may be used to illustrate the Index.

Box 2: Rank scores for selected counties									
County	1	2	3	4	5	6	R_j	N.C	Index score
Cornwall	2	2	2	24	2	17	49	366	13.4
Pembrokeshire	18	17	4	48	49	20	146	366	42.6
Northamptonshire	45	45	45	39	25	24	223	366	60.9

1 = Local food directories
 2 = Local food producers
 3 = Organic producers
 4 = Farm Retail Association members
 5 = Farmers' markets
 6 = WI co-operative markets
 R_j = Total rank scores
 N.C = Number of indicators (6) x number of cases (counties) (61)

Lower index values indicate a higher level of engagement with the local food system, while higher values denote less activity. Thus, Cornwall, which was ranked second for most of the indicators, may be seen as being more involved in the local food sector than either Pembrokeshire or Northamptonshire.

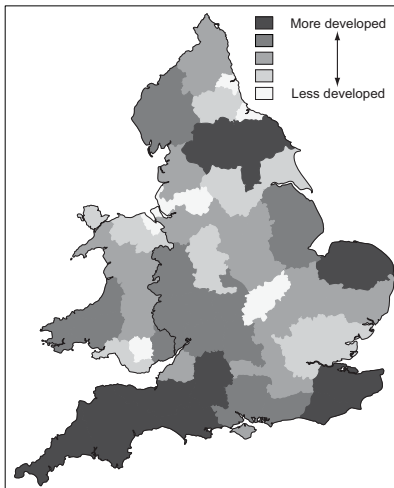
Local food activity in England and Wales

Sub-Indices may be created by grouping together certain indicators, for example the first three indicators can be used to create a production-related sub-Index, while the second three indicators can be used to create a marketing-related sub-Index. These results are shown in Figure 1a and 1b, while the results of the complete Index of food relocalisation are given in Figure 2.

A number of interesting comparisons may be drawn between the two sub-Indices shown in Figure 1.

- Firstly, the south of England generally scores well, indicating that there are well-developed local food production and marketing sectors in these areas, while north-east Wales, Merseyside and the urban areas of north-east England score consistently poorly.

Figure 1a: Production sub-Index



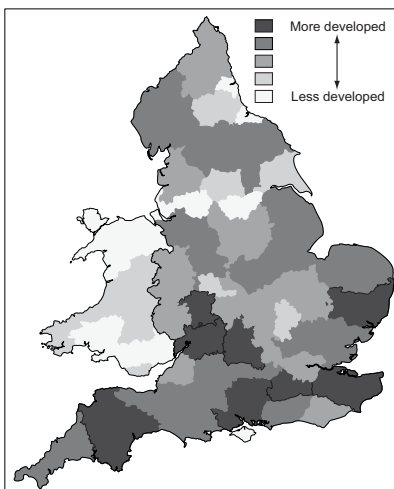
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- Secondly, except for Kent and Devon, there is a clear disparity between the areas that are better developed in terms of local food production and where such food is sold. Generally, production is more concentrated in the west, with marketing (and perhaps consumption) occurring in more eastern areas. This discrepancy is particularly noticeable in parts of west Wales, and suggests that marketing opportunities are being missed.
- Finally, a number of counties show remarkably differing fortunes between the two Indices. East Sussex, North Yorkshire and Carmarthenshire score well on the Producer Index, but fairly poorly on the Marketing Index. Such examples may occur where food with a 'local' identity may be produced for wider markets; for instance, a product with a distinct 'local' branding may be intended for national or even international markets.

The final Index of Food Relocalisation is a combination of all six indicators and is illustrated in Figure 2. It clearly shows:

- the domination of the South West and, to a lesser extent, the South East.
- Wales and the north tend to score poorly, except for North Yorkshire and Cumbria.

Figure 1b: Marketing sub-Index



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Interestingly, both of these northern counties have National Parks within reasonably easy reach of large urban populations. Therefore, it is possible that tourism and day trips are one element in the development of local food. The type of tourism is perhaps also important, as certain types of self-catering visitors often tend to bring their own food with them and shop in local supermarkets, whereas older visitors, who tend to travel out of the main summer season, may be more likely to appreciate distinctive local products.

Urban areas may be expected to achieve poor rankings, and indeed the northern urban areas between Merseyside, Greater Manchester, South Yorkshire and Humberside, along with the Welsh Valleys, do so. However, the West Midlands and Greater London score more highly than may be expected for urban areas, apparently being more developed than rural counties such as Durham, Northamptonshire and Anglesey. This may reflect the levels of disposable income in certain areas.

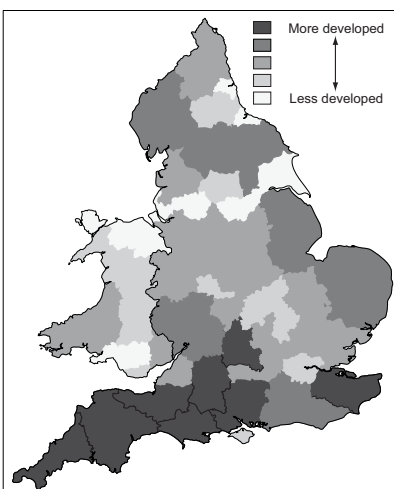
Using the 'Index of Food Relocalisation'

The complete Index highlights those counties that are the most and least developed in terms of local food production and marketing. This helps to emphasise how far along the food relocalisation path counties like Devon and Kent have gone compared to the rural counties of Durham, Bedfordshire, Anglesey and Northamptonshire. It shows that all urban areas are not the same, with differing scores for Greater London and the West Midlands compared with Merseyside and Greater Manchester, and that even neighbouring areas, such as Northamptonshire and Oxfordshire, may have very differing fortunes in local food activities.

Questions that may be asked of such counties in order to try and explain these differences could include those related to:

- tourism and day-trips,
- the wealth or poverty of inhabitants,
- employment,
- type of local food production,
- soil types,
- environmental designations,
- cultural identity and
- the distribution of supermarkets.

Figure 2: Index of Food Relocalisation



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The Countryside Agency research notes

The southern parts of England appear to dominate the 'local' food sector.

The 'Index of food relocalisation' is a descriptive tool, rather than an explanatory one.

The Index cannot explain why this situation should arise, but can describe some of the subtleties that seem to be occurring within the local food system as a whole. For example, it highlights the differing fortunes of each area within the local food system, such as having many local food producers but few marketing opportunities. It also illustrates how areas thought to be similar in some respects, such as urban areas, have embraced local food systems to varying extents. By substituting different indicators, the emphasis of the Index can be altered, perhaps to consider distribution systems or concentrate more fully on one aspect, such as marketing. It is a first step in examining other aspects of the local food system and can provide a justification for undertaking further research in certain areas.

References/further reading

Council for the Protection of Rural England, 2001. *Sustainable local foods*.

Council for the Protection of Rural England, London.

FLAIR, 2002. *The local food sector: its size and potential*. f3, Bristol.

FLAIR, 2003. *FLAIR report 2003: the development of the local food sector 2000 to 2003 and its contribution to sustainable development*. f3, Bristol.

Ilbery, B. W., 1984. Core-periphery contrasts in European social well-being. *Geography*. 69, 289-302.

Knox, P. L., 1974. Spatial variations in level of living in England and Wales in 1961. *Transactions of the Institute of British Geographers*. 62, 1-24.

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