Food Miles

Food miles has once again become a topical issue. Events in recent weeks have highlighted the problems associated with a food system that is based on global sourcing and complicated, transport-intensive supply chains.

The first has been described as the **'food miles dilemma'**.[i] Many organic foods are imported and some travel a long way to reach shops in the UK. The dilemma exists because one of the reasons why the consumer chooses organic is that the environmental benefits of organic production include less energy use and therefore lower greenhouse gas emissions. However, when imported the transport involved, as well as refrigeration and packaging, produces greenhouse gases. If organic products are transported long-distance, particularly by plane, the emissions are far greater than the reduced emissions resulting from organic, rather than conventional farming.

Patrick Holden, director of the Soil Association has stated that: "We do not take into account how far food has traveled, but we might well do in the future." This is not a new issue – the first Food Miles Report was published over ten years ago and in 2001 the EFRC/Sustain report Eating Oil focused on post-farm gate environmental impacts and organic food chains in particular.

The supply of organic foodstuffs has come to rely even more heavily than the conventional sector on global sourcing, with import levels remaining static at 56 per cent in 2003-04. The sourcing policy of the large supermarkets has played a significant role in the balance between UK produced and imported organic food. Members of HDRA are currently conducting a survey at supermarkets across the UK and recording the price, availability and source of organic produce. Initial results have shown that only 27 per cent of organic vegetables in supermarkets are UK sourced and no stores stocked UK organic broccoli, lettuce or sweet corn when in season.

Until 1999, the multiple retailers concentrated their efforts on marketing organic fresh fruit and vegetables and were yet to offer a comprehensive range of organically produced meat products. With this in mind it is interesting to note that in 1999, 82 per cent of the organic fruit and vegetables consumed in the UK were imported whereas organic meat imports stood at 5 per cent. The following year, imports rose to 30 per cent when the supermarkets became involved in marketing organic meat. This trend – of supermarkets importing organic meat has continued. In 2004 the Soil Association found that over 75% of the organic pork on sale in Asda was imported. In Tesco, only half the pork and less than half the organic beef was British.

'Food miles' has been used to compare and contrast the distance that food travels to reach the supermarket shelf and in alternative, more localised systems such as farmers' markets. However, food miles is, and always has been, about more than distance. As a concept, it is intended to raise awareness of the changes taking place in the food system and highlight the consequences, which the consumer and policy-maker may not be aware of due to the lack of information. The aim has also been to highlight the fact that a truly sustainable food product is one in which the total environmental impact across the whole supply chain is minimised.

If the consumer wants a low-carbon food product then the best option is organic from a farmers' market, as the produce is sourced locally, normally from within a 30 mile

radius (see new study below). Many box schemes have a ‘no airfreight policy’ and also source produce locally when available and work with producers to improve the quantity and continuity of local supplies.

It is not only the distance between farm and plate that is of concern; **the consumer has become both physically and psychologically distanced from the processes and practices in the contemporary food supply chain.** The link between the land, food producers and the consumer is lost. The shift to highly processed products has exacerbated the problem and has led to the situation in which the consumer has little information on the origin of food products or awareness of the social and environmental impacts associated with food production and distribution.

The ‘out of sight, out of mind’ culture is at the heart of our current economic system and the process of globalisation. This seems to suit the large retailers, for what you don’t know you don’t worry about and more importantly you can’t change. In terms highlighting best practice, it also makes it virtually impossible to compare the environmental impacts associated with supermarket supply chains for particular foodstuffs and those of the local alternatives. As Richard Wakeford, Sustainable Development Commissioner and Chief Executive of the Countryside Agency, has noted - “It’s hard to find out how the food [the large chain stores] sell was produced, let alone where it’s been in their giant distribution systems.” The extent to which supermarkets are reluctant to provide information is demonstrated in a statement by Paul Bowtell of ASDA - "No supermarkets are going to give information on food miles; it is like giving a rope to hang yourself with.”

Tracability and Food Safety

Distancing effects are at the heart of the second issue to hit the headlines - the contamination of over 600 processed food products with the dye Sudan 1, resulting in the largest product recall.

The latest episode of food contamination was discovered in June 2003, at which time it was thought that Sudan 1 was confined to spices imported from India. However, the cancer-causing red dye used to adulterate low quality chilli powder, was found in ready to eat meals 20 months later in February 2005. Sudan 1 is normally used as a dye in shoe polish, industrial solvents and petrol. A Food Standards Agency (FSA) spokesman admitted, "We don't know how long Sudan 1 has been used in this way. People could have been eating it for many years,” The products that the FSA attempted to recall included Tesco Finest Beef in Madeira, Waitrose and Pret a Manger Tuna Mayonnaise and Asda mini chicken bites. The range of foodstuffs affected was staggering and included vegetable soup, lasagne, shepherd's pie, caesar salad, bangers and mash and prawn cocktail.

This is yet another example of the inherent dangers associated with a food system that is industrialised, consists of complicated food chains and in which ingredients are sourced and food products distributed on a global scale. Traceability is even more difficult when a contaminated ingredient from one source is used in thousands of processed products, as in the case of Sudan 1.

Food safety and the provision of quality produce of high nutritional content is something that the public should be able to take for granted. This is something that the modern food system has failed to deliver. Pesticide residues, BSE, salmonella and many other incidents have undermined public trust in the food they eat. Contamination of a small farm or processing unit in which the products are distributed locally puts a number of people at risk but can be contained. However, when food products or livestock are produced on a large scale and are distributed nationally or globally, as in the case of the foot and mouth outbreak in 2001 and Sudan 1, a large population is at risk and an outbreak can become extremely difficult to contain.

New evidence of the benefits of local organic food

Food miles hit the headlines again in March following the publication of a study that considered the external costs of the food system by the University of Essex and City University.[ii] These costs are a result of industrialised farming, road freight distribution, shopping by car and waste generation and include ill-health resulting from air pollution, clean-up costs associated with the removal of pesticides and nitrate from drinking water and the environmental impacts of pollution and waste. They are described as being external as they are not paid for directly by the producer, distributor, retailer or consumer.

The results of the study show that the external costs of a basket of food amount to £2.91 per person per week, 11.8% more than the price paid in the shop (£24.79).

The consumer should be aware that although the external costs of pollution do not appear on a supermarket receipt they will be part of their water and council tax charges as well as the NHS bill. Of even more concern is the fact that the food system is now a major contributor to climate change - the cost of which is beyond measure.

On a national level the financial benefits of adopting more sustainable production and distribution systems are substantial. If all farms were organic it would save £1.1bn a year, sourcing food locally would save £2.1bn and avoiding shopping by car a further £1.1bn; a total saving of over £4 billion.

This is the first attempt to quantify the external costs of the contemporary foor system and estimate the economic benefits of a shift to organic farming, local food systems and sustainable transport by reducing external environmental costs.

Andy Jones
Senior Researcher

[1] Terry Kirby - *Shoppers who go the extra mile for food under fire* and the editorial *Consumers should pay more attention to the real cost of food.* The Independent 12th February 2005.

11 J.N. Pretty, A.S. Ball, T. Lang, and J.I.L. Morison. Farm costs and food miles: An assessment of the full cost of the UK weekly food basket. (2005) *Food Policy* (forthcoming) Centre for Environment and Society, University of Essex and Department of Health Management and Food Policy, City University, London.

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