Alternative Food Networks

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• Associated topic: Urban and peri-urban agriculture
Food system in disarray

• This topic is associated to the work of Prof. Tim Lang and others (e.g., “Food, Social Policy and the Environment: Towards a New Model”).

• They point out a number of problems with the food system as it is now.

• Note that the focus of the work is largely the UK. However, many of the points can be considered as applicable to Europe or trends of food systems around the world (see for instance Carlo Petrini in Italy).

• According this literature, by the end of the 2000s it had become increasingly apparent the fact that UK food and agriculture policy was in some difficulties.
Food system in disarray

• For the two previous decades, **a series of health scandals and problems** were questioning the performance of the postwar food and agricultural framework (it could be described as productivist and neo-liberal).

• Examples of crisis in the system were the **food crisis of the 1980s**:
  - use of additives, pesticide residues, nitrate residues,
  - BSE,
  - Salmonella in eggs,
  - the introduction of genetically modified (GM) foods,
  - foot and mouth disease (FMD).
Food system in disarray

• **With regard to health**, evidence mounted from the 1950s of the link between diet and the rise of degenerative diseases. These include coronary heart disease, some cancers (breast, colon, etc.), diabetes and dental decay.

• In **terms of environmental problems**, evidence also mounted of damage to soil structure, biodiversity, water systems and wildlife, as well as of environmental implications associated with changed lifestyle and shopping patterns.

• With the food revolution of the post-World War II period, the **distance food travels between primary producer and end consumer rises**, the so-called “food miles” problem.
Food system in disarray

• The bill for these environmental costs is **externalized**, i.e. not included in the price the consumer pays at the checkout. These costs are **borne either by the taxpayer** or, in the case of global climate change, **by no one**.

• **In social policy**, evidence mounted again from the 1970s that problems of **food poverty**—assumed to have been abolished by post-World War II prosperity—had not departed but merely altered.

• Research showed that **access to shops was not just a matter of income but also of geospatial restructuring of the retail sector**. Existence **“food deserts”** (Department of Health’s Low Income Project Team) is due to the collapse of local shops and the rise of supermarkets.
New supply chain arrangements

• In recent years, as global food chains have expanded, other arrangements have emerged that are innovative re-organisations of food supply chains aiming at re-connecting producers and consumers and re-localising agricultural and food production.

• According the some of the literature, these new arrangements either respond to a food system in disarray or are a potential solution.

• These arrangements include short supply chains, alternative food networks, local farming systems and direct sales.

• On the policy side, several EU Member States have developed legal frameworks and incentives to support such types of food chains:
  – France, for example, defined precisely the notion of a short chain in the framework of the 2009 Action Plan to develop them.
  – Italy has also established legislative decrees for the regulation of Farmers Markets.
New supply chain arrangements

• At EU level, this kind of initiative benefits from Rural Development funding, and the European Commission proposed, within the ‘CAP towards 2020’ proposals that short supply chains may be subject to thematic sub-programmes within Rural Development programmes.

• Much of the academic research has attempted to define what type of supply chain should be at the heart of the reflection on re-localisation and re-connection of agriculture and food production.

• Both aspects (localisation of the production and length of the supply chain in terms of number of stakeholders involved) have been studied by several EU funded research programmes such as IMPACT, SUPPLIERS or FAAN.
Local food (localization)

• They generally defined ‘Local Food Systems’ as those where the production, processing, trade and consumption of food occur in a defined reduced geographical area (depending on the sources and reflections, of about 20 to 100 km radius).

• What does local mean? (hard to define)
  – ‘There is no single definition of local food. The most widely accepted definition is that used by farmers’ markets to identify producers who are entitled to sell there. This can be summarised as: food produced, processed, traded and sold within a defined geographic radius, often 30 miles.’ (Defra 2003)
  – Local food or the local food movement is a "collaborative effort to build more locally based, self-reliant food economies - one in which sustainable food production, processing, distribution, and consumption is integrated to enhance the economic, environmental and social health of a particular place.” (Feenstra, 2002)
Local food

• It is part of the concept of local purchasing and local economies; a preference to buy locally produced goods and services rather than those produced by corporatised institutions.

• It is stated that local food can:
  – revitalise neighbourhoods and villages,
  – support a thriving farming sector and,
  – in the best cases, cut our environmental footprint.
Demand for local food

• Almost a third of UK shoppers say they buy local food.
• Yet, they do not buy much: small proportion of food is sold locally.
• ‘Research released by the Institute of Grocery Distribution (IGD) in January (2010) shows that in food the demand for local product is continuing to grow despite the recession. Of those surveyed, 30% had bought locally produced food in the past month - double that in 2006.’
• Shoppers’ reasons for buying locally vary, according to the IGD report:
  – 57% purchasing local food because it was fresher and
  – 54% wanting to support local producers and farmers - up from 29% in 2006.
Short food supply chains (length)

• ‘Short Supply Chains’ on the other hand are where the number of intermediaries is minimised, the ideal being a direct contact between the producer and the consumer.

• Building on seminal papers of Marsden et al. (2000) and Renting et al. (2003), as well as on definitions proposed by the French authorities or the European Commission, Kneafsey et al (2013) proposed the following definition of SFSC:

• “The foods involved are identified by, and traceable to a farmer. The number of intermediaries between farmer and consumer should be ‘minimal’ or ideally nil.”
Short food supply chains

- The term "Short food supply chain" identifies a broad range of food production-distribution-consumption configurations, such as farmers' markets, farm shops, collective farmers' shops, community supported agriculture, solidarity purchase groups.

- More in general, a food supply chain can be defined 'short' when it is characterized by short distance and/or small number of intermediaries between producers and consumers.

- They involve a closer relation between producers and consumers gives producers the opportunity to develop a richer communication, and to identify market niches.
Short food supply chains

- As Ilbery and Maye state, “…the crucial characteristic of SFSCs is that foods which reach the final consumer have been transmitted through an SC that is `embedded' with value-laden information concerning the mode of production, provenance, and distinctive quality assets of the product.”

- Marsden et al. (2000) state that “a common characteristic, however, is the emphasis upon the type of relationship between the producer and the consumer in these supply chains, and the role of this relationship in constructing value and meaning, rather than solely the type of product itself.”
EU funded research on LFS/SFSCs

<table>
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<tr>
<th>Project name</th>
<th>Date</th>
<th>Project description</th>
<th>Key outputs</th>
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<tr>
<td>IMPACT</td>
<td>Not known (4th Framework)</td>
<td>Examined impact of rural development policies. Recognized at the time that there was a lack of official data of sufficient reach and quality, and their own research across 7 EU countries was exploratory (Netherlands, Ireland, Germany, UK, Spain, Italy). Estimated that a total of 1.4 million farmers were involved in direct selling. SFSCs were most developed in Mediterranean countries and Germany. They estimated that in Germany, Italy and France, SFSCs had reached the highest socio-economic impact, adding 7 – 10% to the total NVA realised in agriculture.</td>
<td>Renting et al. 2003</td>
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<td>SUS-CHAIN</td>
<td><a href="http://www.sus-chain.org">http://www.sus-chain.org</a></td>
<td>2003-5  Although it did not focus primarily on SFSCs, it provided some valuable case studies on regional marketing from 7 different countries (Netherlands, UK, Switzerland, Italy, Belgium, Latvia, Germany).</td>
<td>De Roep and Wiskerke 2006</td>
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Source: Kneafsey et al (2013) Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics
## EU funded research on LFS/SFSCs

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<td>COFAMI</td>
<td>Not known VI Framework</td>
<td>Comparative analysis of the social, economic, cultural and political factors that limit/enable the formation and development of collective marketing initiatives in 10 EU countries (The Netherlands, Denmark, Germany, Italy, France, Austria, Switzerland, Latvia, Hungary, and Czech Republic).</td>
<td>Knickel et al. 2008</td>
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<td>FAANWEB: Facilitating Alternative Agro-food Networks: Stakeholder Perspectives on Research Needs. Austria, UK, France, Hungary, Poland.</td>
<td>2008-2010</td>
<td>Reported that LFS promote social, economic and environmental benefits. Concluded that LFS offer an opportunity for small scale quality farming to gain value through processing products and direct selling. Thus LFS contribute to local employment through agriculture, processing, and economic regeneration. Argued that although supermarkets increasingly promote products as ‘quality’ and ‘even as local,’ LFS depend on producer-consumer proximity as a different basis for trust.</td>
<td>Kainer et al. 2010</td>
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Source: Kneafsey et al (2013) Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics
Main types of short food supply chains

• Marsden et al. (2000), and later Renting et al. (2003), identify three, all of which engender some form of ‘connection’ between the food consumer and producer:

1. **Face-to-face**: consumer purchases a product direct from the producer/processor on a face-to-face basis. Authenticity and trust are mediated through personal interaction.

The internet presents opportunities for a variant of face-to-face trading – although research by Canavan et al. (2007) has to some extent questioned the extent to which internet trading can replicate the experience of buying direct from the person who has made the food. Examples of face-to-face SFSCs are: farmgate sales, Pick-Your-Own, farm shops, farmers markets, roadside sales.
Main types of short food supply chains

2. **Spatial proximity**: products are produced and retailed in the **specific region of production**, and consumers are made aware of the ‘local’ nature of the product at the point of sale.

- This category overlaps with the ‘face-to-face’ category and includes the same retail spaces as noted above.
- In addition, this category could include **specialist retailers** (e.g. delicatessens, bakeries, butchers, grocers) which sell ‘local’ produce and also elements of the hospitality industry which sell local foods (e.g. restaurants, pubs, hotels and other accommodation).
- This category could also **include public sector food provision**, such as hospitals, schools, universities, care homes, prisons and so on which either sell or provide locally sourced foods.
- It could also include examples of **supermarkets retailing locally sourced foods**
Main types of short food supply chains

3. **Spatially extended**: information about the place and processes of production is communicated to consumers who are outside of the region of production itself, and who may have no personal experience of that region.

   - All types of **retail space** are potentially appropriate for this type of SFSC.
   - The **product information is communicated through product packaging and promotion, branding**, and the use of certification and legislation to protect named products with distinct geographical origin.
   - The main examples are **PDO (Protection of Designated Origin) or PGI (Protected Geographical Indications)**
   - This legally enforced system **sidesteps** the whole problem of defining ‘the local’ itself, by insisting instead that the crucial point of definition is whether a food product’s characteristics are attributable wholly or in part to the features of a distinct geographical area.
# Types of short food supply chains

<table>
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<th>SFSC</th>
<th>Sub-classification</th>
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<td>CSA (Community Supported Agriculture) (or equivalent: AMAP, GAS, etc.)</td>
<td>have variations according to different regions and countries, but follow same essential principles whereby subscribers receive a share of the harvest in return for money and labour. On Farm Sales: - Farm shops - Farm based hospitality (e.g. table d'hôte, B&amp;B) - Roadside sales - Pick-Your-Own</td>
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<td>Sales in proximity. These may be achieved by farmers acting individually or collectively, but produce has to be traceable back to a named farmer.</td>
<td>Off Farm Sales – commercial sector: - Farmers' markets and other markets - Farmer owned retail outlet - Food Festivals / tourism events - Sales directly to consumer co-operatives / buying groups - Sales to retailers who source from local farmers and who make clear the identity of the farmers. - Sales to HoCaRe* as long as the identity of the farmer is made clear to end consumers.</td>
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<td></td>
<td>Off Farm Sales – catering sector: - Sales to hospitals, schools etc. The catering sector institution in this case is understood as the 'consumer.'</td>
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<td>Sales at a distance. These may be achieved by farmers acting individually or collectively, but produce has to be traceable back to a named farmer.</td>
<td>Farm Direct Deliveries: - Delivery schemes (e.g. veg box)</td>
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Kneafsey et al. Classifies as two types:
- Sales in proximity
- Sales in distance

Source: Kneafsey et al (2013) Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics
Some examples: Alternative food systems

- The Fife Diet is an example of a local eating experiment, which aims to relocalise food production and distribution on a regional basis as a response to globalisation and climate change.

Examples of types:
- Community supported agriculture
- Farmer’s markets
- Box Schemes
- Urban/City farming
- Grow your own
- Farm Shops

Associated with a range of movements
- 100 mile diet (e.g. Fife diet in Scotland)
- Food sovereignty
- Slow food movement
Some examples: Alternative food systems

- "Food sovereignty" is a term coined by members of Via Campesina in 1996 to refer to the "right" of people to define their own food, agriculture, livestock and fisheries systems, in contrast to having food largely subject to international market forces.

- **Slow Food** is an international movement founded by **Carlo Petrini in 1986**. Promoted as an **alternative to fast food**, it strives to preserve traditional and regional cuisine and encourages farming of plants, seeds and livestock characteristic of the local ecosystem. It was the first established part of the broader Slow movement. The movement has since expanded globally to over **100,000 members in 132 countries**.
Some examples: Alternative food systems

- **Community Supported** Agriculture (CSA) consists of a community of individuals who **pledge support to a farming operation** where the growers and consumers share the risks and benefits of food production.

- CSAs usually consist of a system of weekly delivery or pick-up of vegetables and fruit, in a vegetable box scheme, and sometimes includes dairy products and meat.
Benefits of local food

According to Maye and Kirwan (2010) the benefits of local food are:

- A reduction in food miles.
- Supporting your local economy and local producers.
- Fresh, seasonal produce.
- Full traceability and greater understanding between producers and consumers.
- Food security is maximised as dependence on imports and fossil fuel transportation is reduced.
- Better for the environment.
- Local foods are also equated with being safe, pure, natural, high quality.
An emerging critique: avoid the ‘local trap’

• Local does not necessarily equate with quality, nor with food safety, nor with concern for the environment, nor indeed for wider agro-food sustainability.

• Food miles are a poor indicator of the environmental and ethical impact of food production:
  • Life Cycle Analysis (Edward Jones et al, 2009; Coley et al., 2009)
  • Whole Chain Analysis (Ilbery et al., 2010)
  • Defra report on food miles.
Edwards-Jones et al. (2008). Testing the assertion that ‘local food is best’: the challenges of an evidence-based approach

• Advocates of ‘local food’ claim it serves to reduce food miles and greenhouse gas emissions, improve food safety and quality, strengthen local economies and enhance social capital.

• The paper review the philosophical and scientific rationale for this assertion, and consider whether conventional scientific approaches can help resolve the debate.

• The paper concluded that food miles are a poor indicator of the environmental and ethical impacts of food production.

• Only through combining spatially explicit life cycle assessment (which uses coefficients reflect the reality of production in different localities) with analysis of social issues can the benefits of local food be assessed. This type of analysis is currently lacking in several food chains.
Additional issues with claims - Policing is difficult

Telling lies - misleading menus
Misleading claims on restaurants' menus included:

- "Welsh lamb" that came from New Zealand.
- "Local Devon chicken" that had been imported.
- "Fresh local cream" that was cream substitute containing vegetable fat.
- "Somerset butter" that came from Scotland.
- "West Country fish fillets" that came from the West Country but were filleted in China.
Associated topic: Urban and peri-urban agriculture

It is associate to short food supply chains

- According to FAO, Urban and Peri-urban Agriculture (UPA) is **perceived as agriculture practices within and around cities** which compete for resources (land, water, energy, labour) that could also serve other purposes to satisfy the requirements of the urban population.

- Important sectors of UPA include horticulture, livestock, fodder and milk production, aquaculture, and forestry but **there are additional benefits**.

- See review paper by Zasada (2011) “Multifunctional peri-urban agriculture”, which addresses the different roles that urban and peri-urban agriculture play in developed countries.
Associated topic: Urban and peri-urban agriculture

• Urban and peri-urban agriculture tries to address an number of challenges:
  – **Rapid urbanisation** (already in Developed countries and increasingly a problem in Developing countries).
  – **Urbanisation of poverty**: food insecurity, unemployment, underemployment.
  – **Environmental and health impacts of urbanisation**, especially in mega-cities.

• They provide:
  – **Products to the growing urban demand** for crop and animal products.
  – **Ready access** to diverse markets for perishable, high value products
  – Availability of **underutilised and “hidden” resources**: land, water, nutrients, fragmented labour.
Issues on urban and peri-urban agriculture

Consumers: Safe and Nutritionally Adequate Food

- When carried out properly under safe conditions, UPA can contribute to food supply in three ways:

  1. Firstly, urban agriculture also appears to enhance food security during times of crisis and severe scarcity.

  2. Secondly, UPA enhances the freshness of perishable foods reaching urban consumers, increasing overall variety and the nutritional value of food available.

  3. Thirdly, UPA offers opportunities for productive employment in a sector with low barriers to entry. UPA is estimated to involve 800 million urban residents worldwide in income-earning and/or food-producing activity.
Issues on urban and peri-urban agriculture

Producers: Efficiency of Supply Methods

- On the efficiency of agricultural and forestry production:
  1. **Cost savings due to proximity to consumers** of less need for an extensive and expensive infrastructure for transportation and preservation of perishable products.
  2. **Quality increases due to greater responsiveness to consumer preferences** as well as availability of products that cannot be obtained from rural producers, such as wood energy.

- **However**, there is a strong perception of the unsuitability of agriculture in the urban and peri-urban areas.
  1. Competition for resources (land, water, labour, and energy)
  2. Incompatible uses (smells, noises, pollution).

- Need of appropriate management and monitoring of resources.
Issues on urban and peri-urban agriculture

**Society**: the **sustainability** of the urban environment for society

- **Doubts** have been raised about the contribution of UPA to a city's environmental sustainability - in the sense of the quantity and quality of urban natural resources being maintained.

- **Basic resources** (water, soil) needed for agricultural production **are in competition with other priority urban needs** (drinking and industrial water use, infrastructure construction, etc.)

- As there is **real risk involved in food production in and near cities**, there is also the possibility of improving the urban environment if food production and forestry are managed appropriately.