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# Alternative food systems: using space, time, integration and rules as narratives for sustainability transitions

El Bilali, Hamid a\*, Michael Hausera, Maria Wurzinger and Lorenz Probsta

a University of Natural Resources and Life Sciences (BOKU), Centre for Development Research, Vienna, Austria; \*Email: hamid.elbilali@boku.ac.at

b International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Nairobi, Kenya

#### **Abstract**

Considering the urgent need to make food systems more sustainable, alternative food systems (AFSs) are seen as starting points for sustainability transitions in the wider agro-food arena. AFSs include a wide array of food systems that are different from and more sustainable than the 'conventional' or 'industrial' ones. However, the literature often employs the term 'AFS' without further differentiation — we propose that by developing intuitive categories to describe AFSs, we can create more powerful narratives to support AFSs with transformative potential. This review proposes a novel categorisation of AFSs derived from an overview of their history and movements that shaped them. We propose to categorise AFS along four systemic attributes: space, time, integration and rules. It should be highlighted that these attributes are not mutually exclusive. The space attribute refers to the fact that AFSs tend to be more small-scaled, localised and horizontally integrated — examples include community-supported agriculture, farmers' markets, farm food outlets, box schemes, farm to school programs, or local public procurement initiatives. A second attribute is time; emerging AFSs have put an emphasis on giving food enough time to grow, to be prepared with care and to be enjoyed in a social experience (e.g. Slow Food). A third attribute is integration; a broad family of AFSs (e.g. organic and biodynamic agriculture) were inspired by the science of agroecology — thus attempting to increase the integration of agroecosystem elements. A fourth defining attribute of AFSs is the attempt to change the rules and institutions that govern the interaction of value chain actors. Some initiatives (e.g. Fairtrade) have focused on the adaptation of trade linkages towards social justice and empowerment. Others, such as the food sovereignty movement - promoted by La Via Campesina - and local food cooperatives, are more radical and transformative. We believe that referring to space, time, integration and rules, offers a unique opportunity to

We believe that referring to space, time, integration and rules, offers a unique opportunity to create compelling narratives for promoting sustainability transitions in food systems. Such narratives are needed to guide strategic support for initiatives with genuine transformative potential and ambition. We propose to explicitly test the proposed narratives in different settings.

**Keywords**: Agroecology, Alternative food systems, Food sovereignty, Local food systems, Organic farming, Slow Food, Sustainability transitions

# Introduction

Although the term 'alternative food system' (AFS) is widely used, meanings vary greatly between different authors and schools of thought. Some refer to AFSs as a way of production, processing, marketing and consumption of food that adheres to high sustainability standards (e.g. Nousiainen et al., 2009). Others consider AFSs to oppose the vertically integrated, highly

organized industrial food system (e.g. Terragni et al., 2009). Abrahams (2007) defined AFSs as "... food supply that, in part or in fully, contests or opposes the dominance of the conventional food networks...". All AFSs definitions seem to have emerged in response to the negative externalities of conventional agriculture. Clearly defined attributes, however, are missing for AFSs. Transitions from conventional to alternative food systems therefore often lack definable targets. Jarosz (2008) proposed a set of characteristics that many AFSs have in common: short distances between producers and consumers; smaller farming scale or a holistic approach to food production; alternative institutions such as food cooperatives, farmers' markets, and Community-Supported Agriculture and local food-to-school linkages. Beyond claims of socio-economic fairness and ecologically sound production, AFSs also promise access to fresh, tasty food from a trusted source (Freidberg & Goldstein, 2011). Based on these characteristics, we categorize AFS along the following attributes: space, time, integration, and rules. These attributes are not mutually exclusive. We believe these attributes could help to create compelling narratives to guide transitions to sustainable food systems.

# **Space**

Space (local vs. global) refers to the distance between the production, processing and consumption of food. AFSs aim to reduce these distances and to keep value chains short. Local food systems (LFSs), for example, rely on fewer intermediaries and use direct marketing strategies. Examples of LFSs include Community-Supported Agriculture, farmers' markets, farm food outlets, box schemes and farm to school programs. One of the main characteristic of LFSs is the face-to-face contact between food system actors, which potentially increases trust and accountability. LFSs can thus create socio-economic benefits as they recreate a sense of connectedness in communities and may stabilize local economies by supporting local businesses and small-scale farms (Feenstra, 1997; Whatmore et al., 2003). LFS can also reduce the environmental footprint of food systems by reducing food miles.

Typical expressions of LFSs are *farmers' markets* (Milestad et al., 2010). After farmers' markets had mostly disappeared in industrialized countries during the 20<sup>th</sup> century, concerns about health and the loss of tradition led to a re-emergence starting in the 1970s. Frequently, the Japanese *teikei* ('putting the producer face on the product') are considered to be the first of such initiatives (Mundler, 2007). Similarly, group purchasing associations appeared in several European countries e.g. 'GASAP' in Belgium, 'AMAP' in France, 'GAS' in Italy. Another type of LSFs are *Community-Supported Agriculture* (CSA) schemes inspired by the Swiss communitarian farming model (Mundler, 2007; Groh & McFadden, 1998). Early CSA schemes founded in the 1980s in Europe, Japan and the US required members to work on the farms (Parker, 2005). Over the years, CSA schemes have diversified and are now mostly started by farmers who seek to stabilize their income (Lamine, 2005). Finally, alternative *urban food systems* as well as initiatives to reduce *food losses and waste* (e.g. *food banks*) are increasingly gaining attention and being put high on the food policy agenda.

#### Time

Time refers to the duration granted for the production and consumption of food (e.g. just-in-time vs. the-time-it-takes) as well as seasonality. Slow Food, for example, is an alternative to unified fast food. *Slow Food* was initiated by Carlo Petrini and a group of activists in the 1980s to defend regional traditions, good food, gastronomic pleasure and a slow pace of life. Officially, Slow Food was founded in 1989 in Paris. Slow Food proposes that food is tied to many aspects of life, including culture, politics, agriculture and the environment. It has grown into a global movement involving millions of people in over 160 countries, working to ensure everyone has access to good, clean and fair food. Slow Food initiatives include projects (e.g. Ark of Taste, Slow Food Presidia, Slow Food Convivia, 10000 Gardens in Africa, Earth Markets), campaigns (e.g. Slow Fish, Slow

Meat), networks (e.g. Slow Food Youth Network, Terra Madre, Indigenous Terra Madre) as well as a University of Gastronomic Sciences in Italy (Slow Food International, 2017).

# Integration

Through integration (systemic vs. specialized), AFSs actors promote synergetic connections between system components, such as soils, crops, livestock and humans. *Agroecology* is an approach that dates back to the beginning of the 20<sup>th</sup> century. The principles of agroecology (e.g. Altieri, 1980; Gliessman, 1998) inspired a broad family of ecologically minded farming approaches that include organic agriculture as well as biodynamic agriculture and permaculture. *Organic agriculture* is recognized to increase the sustainability of food systems (Pretty, 2008; Strassner et al., 2015). It is a holistic approach to farming that attempts to create integrated socially, environmentally and economically viable agroecosystems (Lampkin 1994). Beyond the farm, organic agriculture is considered a step towards an alternative food system (Biao et al., 2003; Avery, 2007).

### **Rules**

The rule attribute refers to principles and procedures that govern food systems. Food sovereignty, for example, aims to transform food systems towards social justice (NGO/CSO Forum for Food Sovereignty, 2002; Nyéléni, 2007). It is largely rooted in peasant movements that have joined forces in the umbrella organization La Via Campesina (Pimbert, 2008). Food sovereignty has gained prominence over the past several years and is now on the agenda of actors ranging from local food policy councils to intergovernmental forums. It is, however, also a national policy objective of many governments (Schiavoni, 2017). While food sovereignty calls for deeper transformation of food systems, Fairtrade is an adaptation of the rules governing relations between producers, intermediaries and consumers. In Fairtrade value chains, producers should have greater control over the trade of their produce and thus yield fairer prices. Fairtrade thus tries to reduce the market power of traders. Certification can be considered as a rule-inspired market governance mechanism. Third party certification, Internal control systems, and Participatory guarantee systems/schemes are widely used in *Organic farming*. Cooperative food systems can cover both the farmer end (cf. farming cooperatives) and the consumer end (cf. consumer cooperatives). Consumer cooperatives often refer to food cooperatives (food co-ops) where members buy a share in the store. Food co-ops do not work for profit, potentially keeping prices more cost representative. The benefits of cooperatives are largely in the redistribution of risk and responsibility (Deininger, 1995). They represent a form of citizen engagement with food production. CSA as well as other box schemes can be described as "cooperative local food systems" thus having simultaneously space and rules as twin-narratives.

## **Conclusions and Outlook**

All too often, the term AFS is used without further qualification. Such lack of qualification results in ambiguous food system definitions. We believe that referring to space, time, integration and rules, offers the opportunity to create compelling and narratives to guide the strategic support for sustainability initiatives with genuine transformative potential and ambition. Although the proposed attributes do not allow a clear-cut distinction between AFSs as they are not mutually exclusive, the intuitiveness of the categorization is a contribution to making the discourse relevant beyond academia. We propose to further develop the four attributes into measurable metrics and, subsequently, test the proposed categorisation in different settings.

# References

Abrahams C. (2007). Globally useful conceptions of alternative food networks in the developing south: the case of Johannesburg's urban food supply system. In, Maye D., L. Holloway, M. Kneafsey eds.; Alternative Food Geographies: Representation and Practice. Elsevier, pp. 95–114.

Altieri M.A. (1980). Agroecology: The Science of Sustainable Agriculture. Westview Press, CO. Avery A. (2007). Going organic. Crops & Soils 40(1):8-12.

Biao X., Wang X., Ding Z., Yang Y. (2003). Critical impact assessment of organic agriculture. J. Agric. Environ. Ethics 16: 297-311.

Deininger K. (1995). Collective agricultural production: A solution for transition economies? World Development 23/8: 1317-1334.

Feenstra G. (1997). Local food systems and sustainable communities. American journal of alternative agriculture 12(1): 28-36.

Freidberg S. & Goldstein L. (2011). Alternative food in the global south: Reflections on a direct marketing initiative in Kenya. Journal of Rural Studies 27(1): 24–34.

Gliessman S.R. (1998). Agroecology: Ecological Processes in Sustainable Agriculture. Ann Arbor Press, Chelsea, MI.

Groh T. & McFadden S. (1998). Farms of Tomorrow Revisited: Community-Supported Farms - Farm-Supported Communities. Kimberton, Pennsylvania.

Jarosz L. (2008). The city in the country: Growing alternative food networks in Metropolitan areas. Journal of Rural Studies 24: 231–244.

Lamine C. (2005). Settling shared uncertainties: local partnerships between producers and consumers. Sociologia Ruralis 45: 324–345.

Lampkin N. (1994). Organic farming: sustainable agriculture in practice. In: Lampkin N., Padel S. (eds.), The Economics of Organic Farming - An International Perspective. CABI, Oxford. Milestad R., Westberg L., Geber U. (2010). Enhancing Adaptive Capacity in Food Systems: Learning at Farmers' Markets in Sweden. Ecology and Society 15 (3): 29.

Mundler P. (2007). Les Associations pour le maintien de l'agriculture paysanne (AMAP) en Rhône-Alpes, entre marché et solidarité. Ruralia 20(2007). <a href="http://ruralia.revues.org/1702">http://ruralia.revues.org/1702</a> NGO/CSO Forum for Food Sovereignty (2002). Food Sovereignty: A Right For All - Political Statement of the NGO/CSO Forum for Food Sovereignty.

http://www.foodsovereignty.org/public/documenti/political statement - ngo forum.doc Nousiainen M., Pylkkänen P., Saunders F., Seppänen L., Vesala K.M. (2009). Are Alternative Food Systems Socially Sustainable? A Case Study from Finland. Journal of Sustainable Agriculture 33/5: 566-594.

Nyéléni (2007). Declaration of Nyéléni. http://www.nyeleni.org/spip.php?article290

Parker G. (2005). Sustainable food? Teikei, Co-operatives and food citizenship in Japan and the UK. Working Papers in Real Estate & Planning 11/05; The University of Reading, UK.

Pimbert M. (2008). Towards Food Sovereignty: Reclaiming Autonomous Food Systems. International Institute for Environment and Development, London.

Pretty J. (2008). Agricultural sustainability: concepts, principles and evidence. Philosophical Transactions of the Royal Society of London B: Biological Sciences 363(1491): 447-465.

Schiavoni C. M. (2017). The contested terrain of food sovereignty construction: toward a historical, relational and interactive approach. The Journal of Peasant Studies 44(1): 1-32.

Slow Food International (2017). Our initiatives. <a href="http://www.slowfood.com">http://www.slowfood.com</a>

Strassner C., Cavoski I., Di Cagno R., Kahl J., Kesse-Guyot E., Lairon D., Lampkin N., Løes A., Matt D., Niggli U., Paoletti F., Pehme S., Rembiałkowska E., Schader Ch., Stolze M. (2015). How the Organic Food System Supports Sustainable Diets and Translates These into Practice.

Front Nutr. 2: 19. DOI: 10.3389/fnut.2015.00019

Terragni L., Torjusen H., Vittersø G. (2009). The dynamics of alternative food consumption: contexts, opportunities and transformations. Anthropology of Food. <a href="https://aof.revues.org/6400">https://aof.revues.org/6400</a> Whatmore S., Stassart P., Renting H. (2003). What's alternative about alternative food networks? Environment and Planning A 35: 389–392.