

Available online at www.sciencedirect.com**ScienceDirect**

Agriculture and Agricultural Science Procedia 8 (2016) 324 – 331

Agriculture and Agricultural Science

Procedia

Florence “Sustainability of Well-Being International Forum”. 2015: Food for Sustainability and not just food, FlorenceSWIF2015

Building Alternatives from the Bottom-up: The Case of Alternative Food Networks

Filippo Barbera^a, Joselle Dagnes^{a*}

^a*Department of Culture, Politics and Society – University of Torino, Lungo Dora Siena 100, 10153 Torino, Italy*

Abstract

Alternative food networks (AFNs) are a comprehensive body of practices related to food provisioning which are different from the mainstream food systems. In this paper we deepen this topic from a sociological standpoint, focusing on a wide range of AFNs located in the Piemonte region of Italy. We articulate our analytical and empirical study focusing on three central concepts: 1) accessibility, which refers both to the point of sales to the agri-food goods; 2) sustainability, both from the environmental and the economic perspective; 3) quality, conceived as a contested field within which forms of coordination between actors can emerge.

© 2016 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of Fondazione Simone Cesaretti

Keywords: Alternative Agri-Food Networks; Food Quality; Sustainability; Quality Conventions; Zero-Mile Food.

* Corresponding author. Tel.: +39 011 6702606; fax: +39 011 6702612.
E-mail address: joselle.dagnes@unito.it

1. Introduction

Alternative food networks (AFNs) are a comprehensive body of practices related to food provisioning which, in a general sense, are different from the mainstream food systems (Murdoch et al. 2000). Although it is difficult to identify exhaustively the phenomena that fall within the designation of AFNs, proximity is a crucial feature of all these networks. Indeed, AFNs are characterized by a short production and distribution chain, integrating dimensions of spatial, economic, and social proximity (Kebir and Torre 2012). Proximity is therefore intended in not only a geographical sense, related to how consumers and producers are physically close to one another, but also concerning attention given to the economic support of local communities and the development of fair and trusting relationships between actors.

The term AFNs is usually used for grassroots experiments in re-organising a portion of the agri-food sector, in accordance with some ethical and moral principles. For instance, participants in AFNs may be concerned about the environmental sustainability of the supply chain, or about sustainable living in rural communities, and wanting to help local farmers protect their profit margins against the aggressive pricing policies carried out by the supermarket retailers. In addition, AFNs aim to provide agri-food goods with high standards of safety and quality. For these reasons, AFNs are often classified as a kind of social activism and described as a unitary movement. The underlying idea is that consumption is a political act: by eating differently, people can change the food market and the living conditions of all those who are involved. However, the alternative supply chains can take on many and diverse forms, ranging from completely isolated and self-interested experiments to extremely networked and community-oriented initiatives.

Despite these differences, in almost all cases AFNs share the characteristic of being self-organized, with a central role of local individual actors, and a meager involvement of institutions. In other terms, AFNs are a social innovation built from the bottom-up. However, the support by public policies – as well as the loss of some aspects of radical opposition against the hegemonic system – might be essential to ensure that the AFNs would not be a niche phenomenon, but rather substantially affect the food system. Only in this case, in fact, may they become a feasible alternative to the mass food market instead of an elitist project.

In this paper we will deepen these arguments from a sociological standpoint, focusing on a wide range of AFNs located in the Piemonte region of Italy. In section 2, we start by defining the alternative food supply chains both from a quantitative and qualitative point of view, underlining the diffusion of the main types of AFNs existing in Italy and then, in more detail, in Piemonte. We also describe, in a stylized way, some key players involved in short supply chains, especially in the local agri-food area of Piemonte. Then in section 3, we articulate our analytical and empirical study focusing on three central concepts for the AFNs and their reproduction over time: 1) accessibility, which on the one hand, refers to the point of sales and its convenience, for instance in terms of opening hours and location, and on the other hand, to the agri-food goods in themselves, that are to be available for the everyday consumption at affordable prices; 2) sustainability, both from the environmental and the economic perspective; 3) quality, conceived as a contested field within which coalitions and forms of coordination between actors can emerge.

2. The Italian way to alternative food networks

As we mentioned above, it is difficult to provide a comprehensive definition of alternative food networks, given the increasing differentiation within the unconventional food markets. Furthermore, the boundaries between conventional and alternative supply chains are more and more blurred. For instance, some kinds of alternative agri-food goods – like organic products, or local and locality foods – are now available in the mainstream retail stores, while the attractiveness to consumers of the “alternative” label has led to the proliferation of initiatives with unreliable features.

The scenario is even more complicated because, if it is true that the supermarket retailers are trying to build on the success of the AFNs to make profit by promoting their own alternative products, it is equally true that in some cases the unconventional supply chains need to rely on the large-scale system in order to achieve their goals. One example of this is occurred in Italy, as described by our key informants, when the leading organization of fair trade Altromercato decided to sell a selection of its products in the hypermarket chains, in order to ensure an adequate volume of orders for fresh produce, e.g. bananas.

More in general, in Italy – as well as in other southern European countries, and unlike what happens in northern Europe – AFNs are often regionally embedded, with circuits of production and consumption organised locally and independently (Dansero and Puttilli 2014). The Italian context is particularly interesting also because it combines some innovative practices related to the agri-food sector (for instance, box schemes, community-supported agriculture, solidarity-based purchasing groups) with the renovation and the reinterpretation of some traditional supply forms, such as some kinds of on-farm and off-farm direct sales by farmers. Particularly relevant is the case of traditional local markets, which are very widespread in Italy and frequently host direct sales stands.

Although complete data on the spread of AFNs in Italy are not available, we can argue that these practices have experienced a growing popularity in our country in recent years. As regards the producers, data show that the farms involved in some form of direct sale are on the rise. According to Coldiretti, the number of the agricultural holdings doing direct sales increased by 44% from 2001 and 2008¹. In 2010, 16.7%, of the Italian agri-food holdings, equal to over 270,000 units, directly sold its products, in combination or as an alternative to other methods of sale². Among these, over 210,000 sell on site, while almost 90,000 are involved in off-farm sales³, through channels like farmers markets, zero-mile food shops, etc.

The number of farmers markets have also increased: they were virtually non-existent in the Italian context until 2007 (Gardini and Lazzarin 2007), but then spread rapidly, reaching 500 units in 2010 and about 1,200 in 2014⁴. Solidarity-based purchasing groups (GASs) have experienced an explosive growth in recent years too, especially with the coming of the economic crisis. In fact, they start appearing in the mid-nineties and, according to Retegas, the Italian network of purchasing groups gradually spread, reaching about 300 units in 2006. Then the growth rate became more intense, since in 2011 the number of groups registered to the network exceeded one thousand. Because online registration is voluntary, and on the basis of some researches that were carried out locally, Retegas estimates that there are about twice as many registered purchasing groups (Grasseni 2013).

Finally, from the point of view of consumers, the AFNs are still a marginal purchase place for the Italian households, where only 1.2% of their total spending is for fruit and vegetables. Nonetheless, in recent years the purchase of agri-food products related to the world of the AFNs is enlarging: for instance, the amount of expenditure in organic, fair trade, and local products greatly increased from 2001 to 2012⁵. A special case is represented by the traditional local markets, which are very popular, attracting 21.1% of the total household agri-food spending.

In this scenario, Piemonte is one of the Italian regions where AFNs have spread more and where there is a particularly favourable local context for the development of an alternative food culture (Dansero and Puttilli 2014). The percentage of farms involved in direct sales is higher than the average Italian figure (21.7% in Piemonte, 16.7% in Italy). The on-farm sales are very common (Piemonte 16.4%, Italy 13%), as well as the off-farm sales, whose value is nearly twice the national one (Piemonte 9.4%, Italy 5.2%). Moreover, about 1,000 traditional local markets are regularly held in the region⁶, most of them on a daily basis, while 87 farmers' markets take place periodically (Pettenati and Dansero 2015). Lastly, there are not less than 170 solidarity-based purchasing groups operating in Piemonte (Ibid.).

Another sign of regional dynamism is related to the presence of several institutional, nonprofit, and private actors involved in the local agri-food sector, whose activity provides a breeding ground for the AFNs. With no claim of

¹ Source data: International Observatory on Direct Sales managed by Agri2000 and Coldiretti.

² Source data: 2010 Italian Census of Agriculture.

³ Thus, almost 30,000 farms sell using both an internal and an external channel.

⁴ Source data: Coldiretti, Campagna Amica Foundation.

⁵ Source data: Macfruit Observatory on Fruit Consumption of Italian Families (see: <http://www.macfrut.com>).

⁶ Piemonte Region Department of Trade (see: www.regione.piemonte.it/gestione/commercio/mercati/dynIndex.php).

being exhaustive, we first mention the national farmers' organizations, primarily Coldiretti and Confederazione Italiana Agricoltori. Their local branches in Piemonte are active in promoting initiatives related to the regional food culture, both in terms of educational projects in schools and farmers' markets to foster direct sales. There are also numerous associations on a territorial scale, bringing together the farmers located in the same area and/or cultivating the same specific product. Although in a discontinuous way, also the public institutions have promoted some initiatives aimed at creating or supporting the alternative supply chains. An example is represented by the GACs, collective purchasing groups, promoted since 2005 by the Province of Torino Administration, as a resource to contrast the impoverishment of families. For that matter, it is noteworthy that the purchasing groups in Piemonte show a remarkable ability of self-organization and networking, for example by setting up intermediate structures to cope with situations not manageable by a single group. For instance, this is the case of the association GASTorino: a network of GASs managing the purchase orders of the products that require a complex logistics, i.e. the order of citrus fruits from Sicily. Lastly, a pivotal actor in the context of Piemonte is the Slow Food movement founded in the eighties, and which now has over 100,000 members in 150 countries⁷. Slow Food aims to safeguard local food cultures and traditions, focusing on the link between food and other aspects of the life, such as politics, agriculture, and environment. The movement organizes several attractive initiatives in Piemonte, such as Salone del Gusto, the world's largest food and wine fair, and Terra Madre, a network of food communities around the world that meet together in Torino every two years. Slow Food also founded, in collaboration with the regional administration in Piemonte, the University of Gastronomic Sciences, a unique international academic institution devoted to develop skills in the production, distribution, and cultural promotion of high-quality foods⁸. Many of the Slow Food initiatives are supported, in different forms, by local public actors, private companies, and banking foundations embedded in the region. Slow Food also inspired and sponsored Eataly, a store and eating-place specialized in quality food. The first point of sale opened in Torino in 2007, then in the following years, many additional stores inaugurated in other Italian cities and in foreign countries. On a lower scale, other entrepreneurial initiatives related to the AFNs and the local food culture have developed in the region. In this regard, we mention the case of M**bun, a chain of burger bars with natural local food (defined as a *slow fast food* chain); and Negozio Leggero, a franchising network of grocery stores selling unpackaged food and household products.

The dynamism shown by the agri-food context in Piemonte makes this region suitable for a case study that aims to deepen the main characteristics of the AFNs and the extent to which they can represent a viable alternative to the mass food system. The next section is devoted to this purpose.

3. Exploring the alternative: accessibility, sustainability, and quality in the AFNs

In order to explore the potential of the AFNs to affect the conventional food industry, constituting a real alternative for mass consumption, three dimensions are central: accessibility, sustainability, and quality. First, the possibility of the spreading of an alternative is commensurate with the ease with which it is adoptable by a large number of people. Second, alternatives may be reproduced over time only if they are sustainable by the actors involved and for the context in which they live. Third, alternatives in the agri-food sector must provide a level of quality at least comparable to that provided by the mainstream supply chain. We will now analyse these dimensions in detail.

3.1. Accessibility

Accessibility can be interpreted in different ways. In a first meaning, it can be connected to the ease of access and participation in AFNs. From a spatial point of view, this means that the AFNs are distributed within the territory and easily reachable by the people who want to use them. How this can occur obviously depends, at least in part, on the specific characteristics of each supply chain. Focusing on the farmers devoted to direct sales in Piemonte, we can

⁷ See www.slowfood.com.

⁸ See www.unisg.it.

observe that the metropolitan area acts as a strong catalyst for them. In fact, most of them are located in a 40 km radius from Torino, and are distant no more than 45 minutes by car from there (Pettenati e Dansero 2015). Symmetrically, a large amount of AFNs is concentrated in the capital of the region or in its immediate vicinity. For instance, every day Torino hosts more than 40 traditional markets that involve overall around 400 local farmers; 13 farmers markets also take place periodically. Regarding the GASs, over 130 of about 170 total are located in the province of Torino. These figures confirm that, even if many of the observed initiatives are quite widespread in the region, the metropolitan area plays a central role in fostering and activating the AFNs. In other terms, we might say that the AFNs are a phenomenon related more with the urban dimension than with the rural one: consumers from the city and its surroundings seem to be more interested in looking for alternative food chains, perhaps because they experience a strict separation between the conventional supermarket model and other supply chains. On the contrary, in rural areas this difference may be more nuanced, and traditional forms of distribution – for instance the local grocery stores – can be perceived as suitable for providing agri-food products through a short chain from-farm-to-fork. No wonder then that even the entrepreneurial initiatives related in some way to agribusiness alternatives – such as Eataly and many others – so far have developed in the city rather than in the countryside.

Adopting another point of view, accessibility can be seen in relation to the products. Leaving aside the question of the seasonality – zero-mile food necessarily implies a limitation in the choice of fruit and vegetables available in each period of the year – an extremely important aspect is related to the price of the agri-food goods. On the one hand, in fact, the proximity between production and distribution, with few intermediaries, should contain rising prices along the supply chain. However, on the other hand, the commitment to ensuring a fair compensation for farmers that distinguishes many AFNs can result in a price that is not competitive with the mainstream supermarket models. In this regard, supporters of the AFNs argue – sometimes with good reason – that a comparison can be inappropriate, since alternative supply chains provide agri-food of higher quality than the conventional food system. But, nevertheless, price is a key element to understanding the appeal that the AFNs can have for the general public. Unfortunately, there are very little data on this subject and they are often provided by biased sources. For this reason, their conclusions – a significant savings in the purchase of fruit and vegetables through AFNs instead of the conventional chains – should be evaluated with caution. That said, we notice that according to the Confederazione Italiana Agricoltori, one of the main national farmers' organizations, agri-food products of similar quality cost 30% less when purchased directly on-farm. In a similar way, savings on fruit and vegetables in season are estimated at approximately 20-30% in the GASs (Grasseni 2013) and in the farmers' markets⁹. Therefore, according to these data, the price does not seem to constitute an obstacle to the spreading of the AFNs, because they allow an appreciable saving on agri-food goods. Nonetheless, further research is needed in order to clarify this point.

3.2. Sustainability

A second important point is related to the sustainability of the alternative networks. In this paper, we explore this concept from two different perspectives: the environmental one and the economic one.

From the ecological point of view, a farming activity is sustainable if its polluting emissions and its use of natural resources have a low impact on the natural environment, namely that they can be supported in the long term. Several researches have shown that – contrary to common sense – zero-mile foods are frequently less ecologically sustainable than the conventional agri-food goods (Schlich and Fleissner 2005). In fact, there is usually an overestimation of the environmental impact related to food transport (which in any case is relevant, but it covers a large amount of goods all at once), while the so-called ecological “local trap” is underestimated (Born and Purcell 2006). This means that production dispersed throughout the territory among thousands of small farms, prevents achieving ecologies of scale, as well as the well-known economies of scale: in fact, both the production economy and ecology depend on the number of produced items (Schlich and Fleissner 2005). Preliminary data on the AFNs in Piemonte highlights that also in this case, the environmental impact of the AFNs can be higher than the conventional supply chain (Peano et al. 2015). This depends, among other elements, on the different packaging used

⁹ Source data: Coldiretti, Campagna Amica Foundation.

(paradoxically the wooden crates, used by the farmers, have a shorter operating time and a greater environmental impact than the plastic packaging adopted by the supermarkets), and on the transport logistic (for instance, farmers directly selling in local markets or farmers markets drive 28 km on average, often with highly polluting vehicles, in order to reach the point of sale).

The sustainability of the AFNs can also be understood in the economic sense, by adopting a long-term vision. Even if the proximity between producers and consumers minimizes the intermediate stages of the distribution, in the AFNs it is frequently difficult to bring to light the cost structure, due to the many implicit costs existing. In fact, in these alternative economies the labor-intensive duties related to distribution are carried out by the actors involved and their families. This happens both on the side of the farmers – for example in relation to the time dedicated to the direct sales – and on the side of the consumers – considering, for instance, the time and resources dedicated to the organization of a purchasing group (Barbera et al. 2014). Therefore, in order to evaluate the economic sustainability of the AFNs, it would be necessary to also consider these implicit costs, which can be voluntarily borne for a defined period of time, but obviously not in a long-term perspective. This analysis would clarify, for example, whether the economic benefits associated with the participation in an AFN, for both producers and consumers, are real and not just passed on to other actors of the supply chain, as occurs in the mainstream chains (Bowman et al. 2014).

3.3. Quality

Unlike the other dimensions explored so far, there are no simple indicators and parameters for the concept of quality. In this sense, quality is a contested field: the semantic uncertainty about its definition creates a space in which powerful actors can enter into conflict or cooperate in order to affirm common quality conventions (Callon et al. 2002; Boltanski and Thévenot 2006). According to the conventions theory, this is a process through which a mutual judgment about quality emerges, changes, and, eventually, even disappears. The phenomenon is particularly interesting to observe in the AFNs, where quality conventions are not supply-driven, but rather they spread from consumers to producers. Thus, within these short market chains, consumers can provide quality specifications to producers, thereby shaping the governance of the value chain and its organizational structure.

In order to explore the different conceptions of quality existing in the agri-food supply chains, and following Thévenot's contribution, we have focused on seven conventions of quality which can be adopted by consumers: i) commercial, based on price and commercial value of goods; ii) industrial, assessing the compliance with technical standards and reliability; iii) domestic, which are related to the concepts of interpersonal trust and traditional modes of production; iv) public, concerning the importance given to trademarks and brands; v) civic, which refer to the societal and community benefits of local products; vi) inspirational, based on the value of the passion conveyed by the products; vii) ecological, relating to the environmental sustainability of the goods and the production process (Thévenot 1998; Murdoch et al. 2000).

In the Piemonte case study, we have tested these conventions among the consumers in four different supply chains: i) traditional local markets; ii) farmers' markets; iii) high-end food markets; iv) supermarkets¹⁰. Figure 1 graphically shows the key findings. Two main conceptions of quality emerge. The first one, labelled "hard quality", relies on easily identifiable external features in order to estimate the agri-food quality, such as the price, the industrial standards followed, and the attribution of trademarks and awards. The second conception, labelled "soft quality", is instead related to more blurred aspects, emphasizing the conditions of the actors involved and the local context, referring to the role of tradition, trust relationships, respect for the environment, community values, and the farmers' passion. We notice that, in the different supply chains, consumers tend to have different ideas of quality, in some cases articulating in subcomponents the hard and the soft conceptions. In particular, we can observe that

¹⁰ 700 questionnaires have been administered to a random sample of consumers from the four supply chains. Respondents were asked to rate different items related to the above-mentioned quality conventions with a score from 1 to 10. A principal component analysis (PCA) has been carried out on the collected data.

consumers tend to articulate the quality conception that feels more familiar and better known. In traditional local markets, farmers’ markets, and high-end food markets (namely Eataly), a unitary idea of the hard quality prevails, while multiple conceptions about the soft quality take shape. Some of them are somehow quite extensive, bringing together some very different soft aspects; instead, others are highly specific. For example, for a part of the consumers in the high-end food markets, quality goods are simply those produced according to tradition. Conversely, among the consumers in the supermarkets, there is a unitary conception of the soft quality, which summarizes all the traits mentioned above, while fine-grained distinctions are made between the price component and standards-and-trademarks component within the hard quality concept.

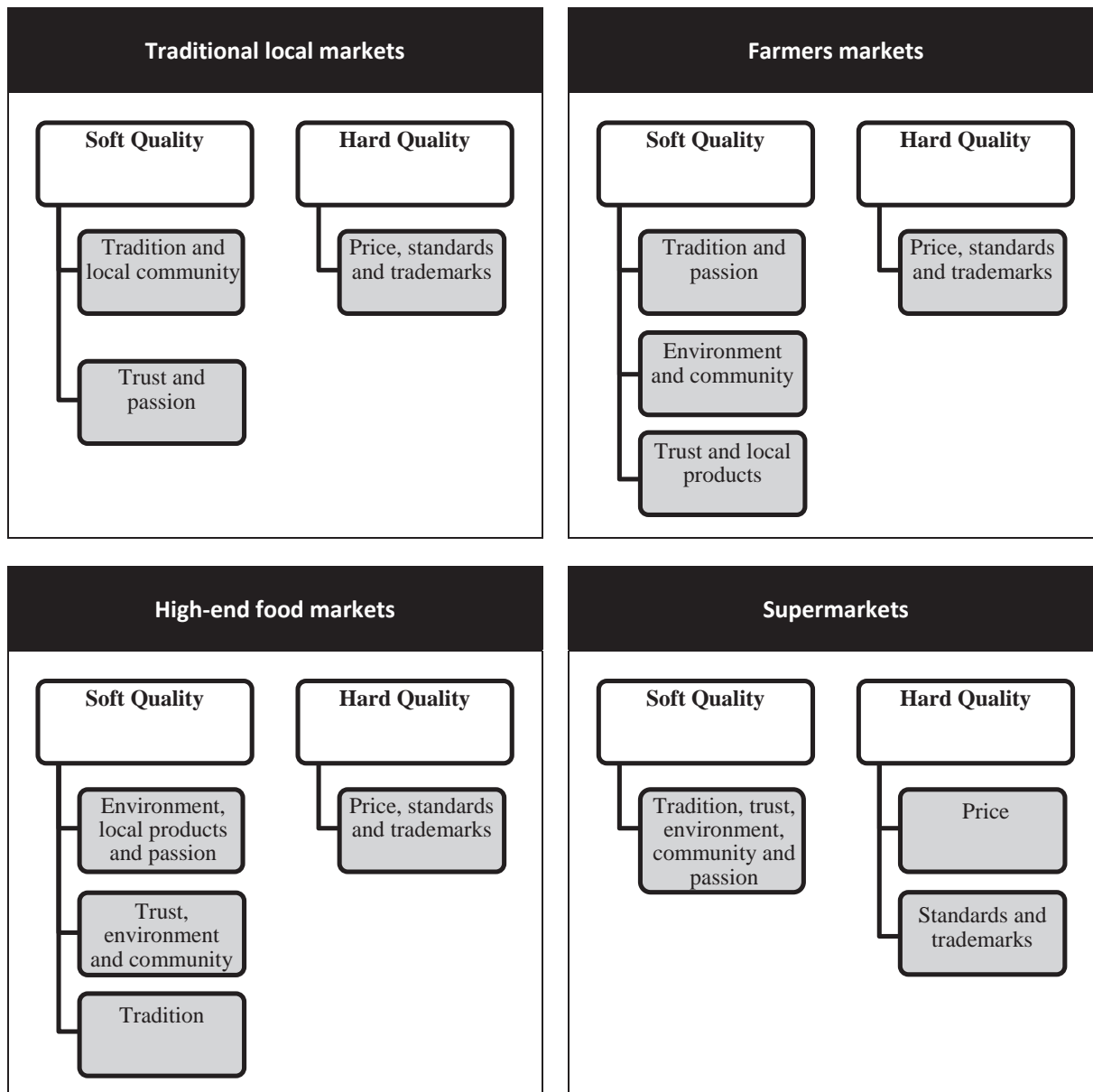


Fig. 1. Articulation of the concept of quality in four supply chains.

The articulation observed in the definition of food quality highlights the complexity of this field. Soft quality is clearly more significant in the AFNs than in the mainstream chains; despite this, also the consumers in the supermarkets express an idea and, consequently, a demand for soft quality, although this is more imprecise than the one addressed by the AFNs' consumers. Both the fragmentation of the soft quality conception emerging from the unconventional system and its existence in the mainstream chain point to the possibility of a greater spreading of agri-food goods characterized by spatial, economic, and/or social proximity between producers and consumers.

4. Conclusions

AFNs are a multifaceted world composed of different forms of organization in the agri-food system. Despite their differences, they have in common the fact that they represent an alternative to the mainstream market. Nevertheless, to overcome the niche position that they currently occupy, the AFNs need to find a way of dialogue and coexistence with the conventional system by exploiting the opportunities it can provide to them. Furthermore, different AFNs need to collaborate and network, in order to compensate for their weaknesses and enhance each other's strengths. In this process, the local actors of the territory – primarily the institutional ones – can play a strategic role by fostering new politics of food, as well as the consumers, who are the real agents of change.

Acknowledgements

This paper has been prepared in the framework of a research project entitled “AFNIA – Alternative Food Networks: an Interdisciplinary Approach”. The project is carried out in collaboration with other colleagues from the University of Torino and funded as a “Strategic project” by the University of Torino and the Compagnia di San Paolo.

References

- Barbera, F., Corsi, A., Dansero, E., Giaccaria, P., Peano, C., Puttilli, M., 2014. Cosa c'è di alternativo negli Alternative Food Networks? Un'agenda di ricerca per un approccio interdisciplinare. *Scienze del Territorio* 2, 35-44.
- Boltanski, L., Thévenot, L., 2006. *On Justification: Economies of Worth*. Princeton University Press, Princeton, pp. 400.
- Born, B., Purcell, M., 2006. Avoiding the Local Trap: Scale and Food Systems in Planning Research. *Journal of Planning Education and Research* 26, 195-207.
- Bowman, A., Froud, J., Johal, S., Law, J., Leaver, A., Moran, M., Williams, K., 2014. *The end of the experiment? From competition to the foundational economy*. Manchester University Press, Manchester, pp. 192.
- Callon, M., Méadel, C., Rabeharisoa, V., 2002. The economy of qualities. *Economy and Society* 31, 194-217.
- Dansero E., Puttilli, M., 2014. Multiple territorialities of alternative food networks: six cases from Piedmont, Italy. *Local Environment: The International Journal of Justice and Sustainability* 19, 626-643.
- Gardini, C., Lazzarin, C., 2007. La vendita diretta in Italia. *AgriRegioniEuropa*. Available from: <http://www.agriregionieuropa.univpm.it/>.
- Grasseni, C., 2013. *Beyond alternative food networks. Italy's purchase groups*. Bloomsbury Academic, London, pp. 224.
- Kebir, L., Torre, A., 2012. Geographical proximity and new short food supply chains. In: Lazzarotti, L. (Ed.). *Routledge*, London, pp. 328.
- Murdoch, J., Marsden, T., Banks, J., 2000. Quality, nature, and embeddedness: some theoretical considerations in the context of the food sector. *Economic Geography* 76, 107-125.
- Peano, C., Tecco, N., Girgenti V. *Sostenibilità ambientale e aspettative del consumatore*. AFNIA workshop. Torino, Italy, Feb. 2015.
- Pettenati, G., Dansero, E. *La territorialità degli AFN: rappresentazioni, processi e politiche*. I risultati della mappatura. AFNIA workshop. Torino, Italy, Feb. 2015.
- Schlich, E., Fleissner, U., 2005. The Ecology of Scale: Assessment of Regional Energy Turnover and Comparison with Global Food. *The International Journal of Life Cycle Assessment* 10, 219-223.