

ALTERNATIVE FOOD NETWORKS AND NEW PRODUCER-CONSUMER RELATIONS IN FRANCE AND IN BRAZIL¹

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Introduction

Alternative Food Networks - AFNs as they are known in the international literature (GOODMAN *et al.*, 2012) - are a generic academic analytic category to study alternatives to the industrial agrifood model. For Goodman *et al.*, AFNs have certain core characteristics which include: social cooperation and partnerships between producers and consumers; the ability to re-connect production and consumption using sustainable models; and the capacity to boost local markets with regional identity and re-aggregate value to the circulation of quality and differentiated products, for example, organicsⁱ. According to Wilkinson (2008), these networks and social movements encourage the economic inclusion of Brazilian family farmers who had been excluded from the process of agricultural modernization. The institutionalization of ecologically-based products and networks took place in France during the 1980s and in Brazil in the 1990s, underpinned by the principles of trust, fairness and new social relations between producers and consumers which contribute to the emergence of a food democracy based on socio-environmental conceptions (BRANDENBURG, 2002).

Alternative food networks are very diverse and tend to prioritize short distribution channelsⁱⁱ (producers' markets, delivery boxes, small producer shops, farm sales associated

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to agrotourism, institutional sales to schools, amongst other forms of direct sales). Marsden *et al.* (2000) argue that the most important characteristic of short distribution channels is the fact that products reach consumers with information so that they are able to find out where they are produced (place), by whom (producer) and how (system of production), as opposed to standardized food production in industrial agriculture, described by Ploeg (2008) as “food empires”. However, Goodman (2009) warns that these networks and new economic forms have developed within capitalist societies and not in a “parallel universe”. That is why it is important to conduct a critical analysis of power relations and of the social distribution of the profits made by the actors involved.

In 2010, sales in short distribution channels accounted for half the total value of the purchases of certified organic production in the Brazilian internal market (BLANC and KLEDAL, 2012). In Brazil, 42% of consumers have bought at some time organic products in specialized shops, 35% in producers’ markets, although the majority (72%) still buys through long distribution channels, for example, supermarkets (KLUTH; BOCCHI JR.; CENSKOWSKY, 2011). The situation is similar in France where 79% of consumers buy organics in super and hypermarkets, the equivalent to 46% of the total value of organic (*bio*) products purchased in 2013. In both France and Brazil, most food is purchased via long distribution channels. However, a percentage of consumers still prefers to shop using short distribution channels (33% in producer markets (*marché paysan*); 29% in specialized shops and 19% directly from producers in their farms, the equivalent of 48% of total sales), the main reasons being health, quality, flavor and food security (AGENCE BIO, 2014). In both countries, one of the particularities of these networks is that they question some of the main tenets of the conventional system, such as homogenization, product standardization and the large number of intermediaries in trading involving long distances (DEVERRE; LAMINE, 2010). Thus, alternative networks put forward new principles for exchange such as the re-localization of food products and also uphold values and traditions and encourage new relationship models between producers and consumers.

One of the main criticisms made in the international scientific literature relates to the capacity of alternative food networks to create large scale structural changes (GOODMAN, 2003; DEVERRE; LAMINE, 2010). These authors argue that networks can contribute to alter power relations involved in food systems, providing a greater role and participation to consumers and producers in defining the means of production, exchange and consumption (the notion of autonomy or self-sufficiency). They highlight the fundamental link between concrete experiences and social and political movements that fight against the prevailing conventional model.

Social movements need to adopt different strategies to stimulate citizens to be more active by constructing alternative means of purchase and exchange and investing in consumer education, awareness campaigns and political lobbying (DUBUISSON-QUELLIER *et al.*, 2011). Consumer awareness education is a challenge; it involves re-educating consumers so that they can resist accepting and conforming to the offer of the conventional system (JAFFE; GERTLER, 2006). Considering the knowledge acquired via alternative trade networks of agricultural practices and their impacts, as well as culinary and democratic practices involving people and institutions, it could be said that

alternative trade networks empower consumers helping them to become citizens aware of their food habits, or in other words, helping them to become consumer-citizens, or food citizens (WILKINS, 2005; LEVKOE, 2006).

With regard to producers, Brandenburg and Ferreira (2012) argue that when ecological small farmers are organized into social movements, they contribute to the ecologization of the rural world, above and beyond agricultural practices. Here the individual interests of producers are taken forward and transformed into collective projects, pointing the way toward a socio-environmental rationale.

Some articles analyze the potential and the limitations of alternative networks to overcome the social inequalities between producers and consumers. Others discuss the potential for vulnerable populations to have access to quality food via short distribution channels. In order to ensure fairness in terms of food security, various authors point to the crucial role of civil society and the social innovations that come from these experiences in terms of decision-making and models of participatory management. Some studies highlight the notion of “food democracy” (HASSANEIN, 2008; WILKINS, 2005); “citizenship agriculture” (LYSON, 2004) and “citizenship food networks” (RENTING *et al.*, 2012).

Others still question the use of the term alternative food networks (AFNs), arguing that it is often used in a polarized way, part of the dualism between “conventional and alternative” (HOLLOWAY *et al.*, 2007) and that it is important to overcome this conventional-alternative dichotomy so that production and consumption are not reduced to a division between the various “alternative” initiatives and the “conventional” monolithic food system. We believe there can be hybrid forms of food networks that can be both analogous and complementary, as Maye (2013) shows.

Indeed, alternative and conventional networks may be complementary in some ways, as Lamine (2012) highlights, contributing to a transition toward more sustainable agrifood systems. She argues that in order to guarantee this ecological transition, it is important to not only consider the involvement of producers and consumers, but to go further. It is crucial to involve a wide network of actors and institutions including other actors in the food chain such as those involved in rural outreach teaching and research, as well as civil society and governmental bodies. With regard to ecologically-based agricultural products, we follow Perez-Cassarino (2013) in arguing that establishing alternative food networks enables the emergence of new sociabilities and promotes the process of recovering and reconstructing values and principles based on trust, reputation, ethics and solidarity.

The aim of this paper, based on the French and Brazilian experiences, is to show that alternative food networks produce social innovation, diversity and new values that can contribute to reconnect producers and consumers, aggregate value to local markets through short distribution channels and foster the transition to more sustainable production and consumption systems.

We will show that the development of ecologically based family agriculture is further enhanced when associated to short distribution channels and alternative food networks, complemented by partnerships and policies geared toward these initiatives.

Some of the questions steering this research are: What are the different types of short distribution channels for ecological products? What are the main characteristics of the farms involved in these networks and how are they organized? What conditions are necessary in order for short distribution channels to be viable? What are the lessons, challenges and opportunities for producers and consumers participating in alternative food networks?

Finally, the main objective of this study is to analyze the specificities of alternative networks and producer-consumer relations in France and in Brazil. In order to do so, we will describe short food supply chains (SFSCs), how they operate, their main characteristics and the opportunities and challenges for producers and consumers.

Research methods and experiences analyzed

The work methodology involved a descriptive and qualitative study of selected experiences in France and the south of Brazil. First, there was a review of international literature, followed by a preliminary study carried out by a team of French and Brazilian researchers in order to select experiences of ecologically-based agricultural products and services in alternative trade networks. The criteria used for selection were: regional representation, how long the initiatives have been in operation, local recognition, working with ecological products, certification mechanisms, and priority given to short distribution channels and alternative networks.

A total of 40 technical visits were conducted in: 6 markets in Paris, Marseille and the Provence-Alpes-Côte d'Azur Region (PACA); 2 Collective Points of Sale (CPS); 2 Consumer Associations (AMAP - Association for the Maintenance of Peasant Agriculture); 5 shops specialized in organic products (known as "bio"); 1 agricultural cooperative shop; 2 farm shops (*Bienvenue à la Ferme*); and 1 experience of farm hosting (*Accueil paysan*). In addition, qualitative interviews were conducted with different actors participating in the distribution network, 7 with organic smallholders producing fruit and vegetables or sheep and cattle rearing; and with 7 specialists from a number of institutions working with organic agriculture. Information was also collected in 7 research seminars on this topic. The study was carried out between November 2011 and March 2012; 20 interviews were selected based according to the objectives of the research. The study was conducted in the French regions of PACA, Rhône-Alpes and Île de France and in the south of Brazil.

In order to qualitatively compare French and Brazilian experiences, we relied on reports concerning alternative distribution networks for ecological food in the south of Brazil (in particular the Ecovida networkⁱⁱⁱ), described by Darolt (2012). The field work allowed for the development of a diagnosis, based on information gathered in visits, interviews and participation in events. In addition, secondary sources were used to describe primary characteristics (definition; operation; structure; product distribution and marketing methods; and benefits for both consumers and producers) and highlight the main challenges and opportunities. A typology of the different experiences was developed using the information collected which allowed for qualitative and comparative analyses of results, based on the level of development of each experience studied.

French and Brazilian experiences have evolved in different economic, socio-cultural, environmental and political contexts which must be taken into consideration. From the theoretical discussions above, it is possible to observe that food networks have similar features and tendencies in international debates, but different historical roots. In Brazil, many of the pioneers in ecologically-based agriculture emerged at the end of the 1970s as part of a movement to resist the process of agricultural modernization (and its well-known effects such as land concentration, the exclusion of family-based agriculture and the growth in rural-urban migration) and were supported by religious and civil society organizations. More recent movements in Brazil appeared with the institutionalization of organic agriculture and agroecology and are initiatives developed by organized family farmers and consumer groups, together with the support of non-governmental (NGOs) and governmental organizations (such as the Ministry of Agrarian Development, research institutions and extra-curricular university activities). In France, the institutionalization of ecologically-based agriculture (*agriculture bio*) happened earlier - in the 1980s. This is reflected by the fact that the sector is more developed (organic agriculture encompasses 3.93% of all planted area, 5.4% of producers and 2% of the market - AGENCE BIO, 2014). In Brazil, this occurred a little later, in the 1990s, with a smaller growth (approximately 1% of the total cultivated area and 1.5% of the market involve organics - MAPA, 2012).

Whilst the sociological profile of consumers in both France and Brazil are similar (middle-class consumers, with the exception of government programs for low-income families in Brazil), producers are significantly different in some respects. In France most alternative network participants are often neo-rural producers (originally from or influenced by urban areas), with a higher level of education and income and greater contact with urban areas which facilitates interaction with consumers. In Brazil, a characteristic of family farming is that most ecological producers come from the rural areas, have little education and few financial resources. However, according to Darolt (2012), some neo-rural producers also play a part in organic agriculture, in particular in areas close to urban centers.

In this work we will show that despite these specificities, the different experiences of short distribution channels studied have common features that provide producers with a better standard of living, strengthens social links with consumers and contributes to the reskilling of producers and consumers, in contrast to the deskilling which results from industrial food networks.

Defining short food supply chains

The academic debate has led to important advancements in the definition of short food supply chains and in the typology and classification of this phenomenon. In purely economic terms, the distinction between long and short food supply chains is a question of the number of intermediaries (middlemen) operating between producers and consumers; thus, the greater the number of middlemen, the longer the channels and vice-versa. However, the number of intermediaries should not be the only - or even the main - defining factor. There are other characteristics that influence the socio-cultural spheres which

should be highlighted when defining short distribution channels, for example: 1) the capacity for socializing and regionalizing food products, establishing a link between the local areas and the farm where it is produced; 2) redefining producer-consumer relations through information on food origin; 3) developing new relationships taking into account fair prices and (ecological) quality; 4) the connection between consumers and food products (MARSDEN *et al.*, 2000). Using these characteristics, the authors identified different types of short food supply chains, summed up as follows: 1. Direct, face-to-face sales, where trust is based on interpersonal relations; 2. “spatial proximity”, where food is produced and distributed in a region consumers recognize; and 3. “spatially expanded”, where trust is transmitted through a quality guarantee procedure (certification). Thus, other factors as well as distance are considered such as organization parameters (producers and consumers), cultural factors transmitted through trust and through the increased value of local markets and agroecological products.

The Spanish academics Guzmán *et al.* (2012) add that in short distribution channels power relations within food networks should benefit both producers and consumers and not intermediaries or large distributors.

In Brazil, the theoretical debate on alternative food networks (PLOEG, 2008; WILKINSON, 2008) and short distribution channels for ecological food products (FERRARI, 2011; DAROLT, 2012) is still incipient. However, there are a number of different and innovative experiences emerging every year which show that ecological food distribution channels seem to have similar characteristics to those in other countries, in particular, factors such as greater information on the quality of products, a search for a more direct relationship, and interdependence between producers and consumers.

Representatives of the agrifood sector in France use a more pragmatic definition of short food supply chains, describing them as having - at most - one intermediary between producers and consumers (CHAFOTTE and CHIFFOLEAU, 2007; MESSMER, 2013). There are two separate models: direct sales (when producers deliver their products directly to consumers) and indirect sales, via a single intermediary (who could be other producers, a cooperative, an association, a specialized shop, a restaurant or even a small market).

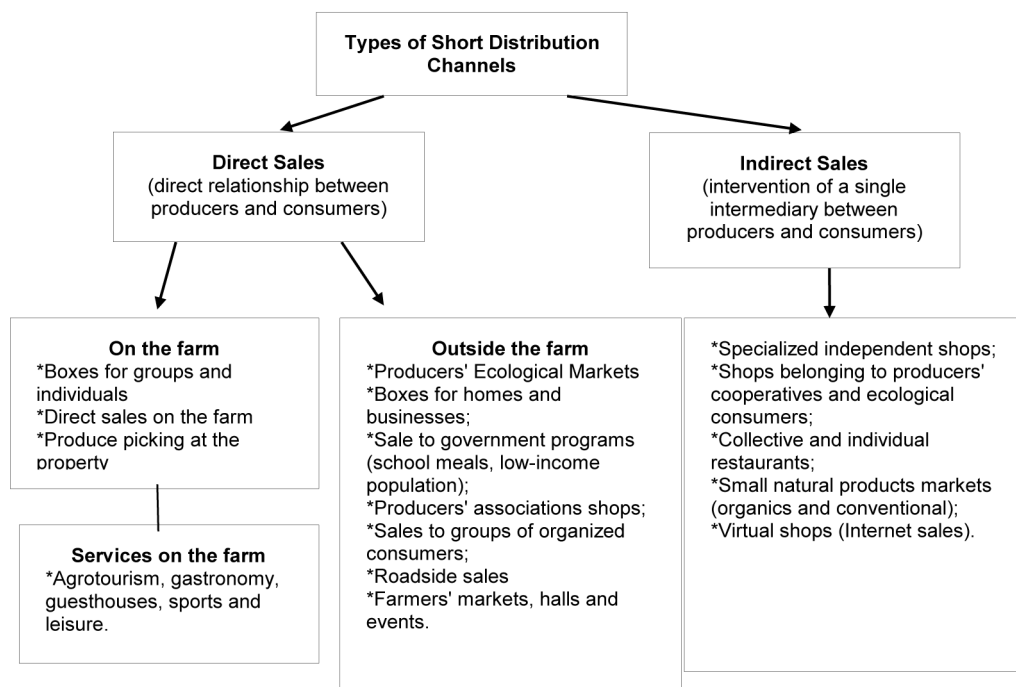
In France and in Europe other terms are also used to reinforce the geographical proximity and social/relational aspects such as the link between consumers and producers and the development of local markets. For example, *proximity channels* (AUBRY; CHIFFOLEAU, 2009) or *local channels* (MARECHAL, 2008). Deverre and Lamine (2010) prefer to use the term *alternative systems* to question the conventional model and propose new exchange principles and a fairer relationship between producers and consumers. In this study we argue that the different dimensions (economic, social, ecological and political) are important to classify and analyze short distribution channels.

Characteristics and Typology of Short Distribution Channels for Ecological Food Products

The classification of short distribution channels proposed in this article (Fig. 1) is in line with the theoretical principles expounded by Marsden *et al.* (2000), Renting *et al.*

(2003) and Mundler (2008) and considers the difference between “direct sales” (where producers have a direct relationship with consumers) and “indirect sales” (where there is only one intermediary), highlighting the interdependence of actors. This typology includes different economic and social dimensions (the direct improvement in the income of producers and the exchange between producers and consumers), as well as the political and ecological dimensions, given that it involves ecologically-based food products and government participation (as in the case of school meals government programs which reach a considerable number of people).

Figure 1 - Types of short distribution channels for ecological products



Source: Produced by the authors, based on Chaffotte and Chiffolleau (2007); Mundler (2008).

It may seem surprising to find similar types of initiatives in such dissimilar historical and geographic contexts. However, social movements fighting for ecologically-based agriculture across the world share very similar ideals that have very strong political meaning which, to a certain extent, allows them to adjust production to more sustainable systems and rethink diets and eating habits, reinforcing the links between rural and urban areas.

Brazilian experiences (table 1) show that most producers use more than one channel at the same time, in particular: 1) producers' markets, 2) home boxes and, more recently, 3) government programs (Food Acquisition Program and the National School Meals Program). We have also observed innovations such as farm shops linked to rural tourism and rural restaurants, specialist shops and producers' points of sale, consumer

cooperatives, and sales in short circuit networks (such as the Ecovida Network which has developed a participatory certification), as well as virtual sales on the internet.

Table 1 - Comparative Analysis of the level of development of short distribution channels for ecological food in France and Brazil.

Types of Alternative Channels	France	Brazil
Producers' Markets (organic/agroecological)	**	***
Collective Points of Sale (CPS)	***	-
AMAP (Consumers' Association)	***	-
Home boxes	**	**
Independent Organic Shops	***	*
Shops belonging to producers and consumers cooperatives	**	*
Distribution Networks (participatory Certification)	-	***
Farm shops	**	*
Farm hosting (gastronomy, leisure, sports, accommodation and educational activities)	***	*
Government programs (school meals; population at nutritional risk)	**	**
Public or private collective restaurants; traditional restaurants	**	*
Virtual shops (internet sites for ecological products)	**	*

Note: - absent or rare; * little developed; ** average; *** well developed (level of development)
Source: produced by the authors.

Table 1 shows a synthesis of experiences with a qualitative comparative analysis of the level of development of short distribution channels in alternative networks in France and Brazil. Generally speaking, the greater level of education and income of family farmers, associated to a greater level of consumer awareness in France, allows for a comparative advantage in relation to the development of these networks. In both countries, cooperation between actors and the political engagement of both producers and consumers allow for a greater level of development.

Farmers' markets are the most common trade mechanisms in Brazil and the main point of entry for ecological producers to local markets. Farmers' markets are spaces for education and leisure, stimulating interaction between producers and consumers and providing family farmers with greater autonomy. A study by IDEC [Brazilian Institute for Consumer Protection] (2012) identified 140 organic markets in 22 of the 27 Brazilian state capitals. This study reveals that in regions where family-based agriculture is strong (for example, the South and the Northeast), there is more market trading. In France we observe that farmers' markets -*marchés paysans*- are more seasonal (more frequent during summer). They are less popular with producers than specialized independent shops and collective producers' shops (CPS) which are open all year round, especially because of weather conditions, strict hours and the time it takes for a market to become consolidated. Traditional markets -*marchés forains "classiques"*- are very popular with consumers and

mix conventional products (non-certified artisan and regional products) and certified organic products (bio). In traditional markets producers, organic or not, are a minority. In both countries, markets selling only organics are more frequent in medium-sized and large cities. According to Chiffolleau (2008) the consolidation of farmers markets usually occurs in four stages as follows: 1) set up: initially, many consumers come to find out about the novelty, stimulating the market; 2) drop (after two or three years): after the novelty period, some clients stop coming and some producers subsequently leave; 3) recovery (during the third or fourth year): the more loyal clients end up doing word of mouth marketing and growth picks up again; and 4) stabilization (after 5 years): after this period, the number of producers and loyal customers stabilizes. The same phenomenon is observed in Brazil (DAROLT, 2012).

In France, particularly in the Rhône Alpes region, *Points de Vente Collectifs* - or **Collective Points of Sale** [CPSs] - are well established. They first appeared in the 1970s and there are now 56 shops, initially relying on the significant participation of neo-rural producers (Lamine, 2012). CPSs are small shops run and managed by producers themselves selling regional products (covering, on average, an area of up to 100 km) and sharing common features and traditions (*terroir* products). The aim of collective shops is to improve working conditions for small farmers, reduce the time spent in sales and distribution and provide consumers with more diversity, regularity and quality products which are typical of a particular region. CPSs require producers to acquire new skills (such as how product transformation and adopt agroecological principles) and re-adapt their operations to meet shop demand (new products, social relationships with customers). It is always possible to meet producers in the shops (each producer needs to staff the shop half a day a week, enabling consumers to meet producers) and all marketing is meant to boost producers and their region.

Another well-established practice in France - and increasingly common in Brazil (through consumer cooperatives and collective purchase groups) - is a wide range of **box schemes for groups of organized consumers**. In France, the so-called AMAPs - *Associations pour le Maintien d'une Agriculture Paysanne* [Association for the Preservation of Peasant Agriculture] first appeared in the early 2000s, inspired by Community Supported Agriculture, in the shape of a partnership agreement between consumers and producers (LAMINE, 2008). In France, consumers are more socially engaged and there is greater participation in socially integrated groups, when compared to the still incipient Brazilian experiences. On the other hand, in Brazil, individual boxes are becoming more popular with consumers because they are practical and prices tend to be lower when compared to supermarkets. However, Brazilian consumers are still much less socially engaged and lack organization.

In France, **specialized shops** selling ecological products have been in existence for a number of years in small, medium-sized and large cities. There is a well-established network of these shops across the country, generally promoting solidarity and partnership with producers, as is the case of *Biocoop*^{iv}. According to Agence Bio (2014) specialized organic shops represented 35% of the total sales of *bio* products in 2013. In Brazil, a considerable number of organic consumers (41%) shop in specialist shops, especially in the

state capitals (KLUTH; BOCCHI JR.; CENSKOWSKY, 2011). In smaller cities, shops are generally associated to family producers or ecological consumers (e.g. Ecotorres and the Três Cachoeiras Cooperativa de Consumidores Ecológicos [Ecological Consumers' Cooperative] in the state of Rio Grande do Sul) or they operate with the support of the local government. Most shops do home deliveries via the internet or telephone, where consumers can choose products from a list of options at a greater convenience and lower prices than supermarkets.

Farm shops are well-established in France, selling in particular wine, cheese and *terroir* products. In Brazil farm shops are expanding and are generally associated to the farms as part of the rural and agroecological tourism circuit (*Accueil paysan* in France; *Acolhida na Colônia* in Brazil) and are more common in peri-urban areas close to metropolitan regions.

Virtual shops selling ecological products are gaining market share both in France and Brazil, with a forecast for growth in the next few years, particularly in the metropolitan regions. However, according to the definition used in this study, not all of these businesses can be said to involve short distribution channels. Virtual shops are, however, popular because they are easy and convenient, offering clients home delivery services and lower prices than supermarkets, meeting the needs of modern life.

Government Programs: opportunities for agroecology in Brazil

The sales of agrifood products in governmental programs and institutional markets were first introduced in Brazil in 2003 with the Food Acquisition Program (PAA) which, according to Schmitt and Grisa (2013), continues to expand. Institutional markets serve collective consumers (social services institutions, hospitals, crèches and schools). These programs use short distribution channels and are considered a form of direct sales by the Brazilian government. In this way, family-based agriculture products are bought directly from individual producers or producer associations and cooperatives by means of government programs and reach the population through government social assistance agencies and state schools. These programs are part of policies aiming to achieve food and nutritional security. In recent years in Brazil there are two main programs for purchasing ecologically-based products: the Food Acquisition Program (PPA) and the National School Meals Program (PNAE).

Organically certified family-based agriculture products purchased via the PAA and the PNAE are granted a 30% premium compared to similar conventional products, thus recognizing the value of nutritional quality and other socio-environmental factors. The guarantee provided by the government stimulates the ecological transition. Furthermore, these programs have an important social dimension because they reach large amounts of people (schools) and involve a wide range of products, taking into account season and local realities.

According to Schmitt and Grisa (2013) there are some operational limitations that need to be overcome in the development of institutional markets in Brazil, such as: delays in releasing funds; problems of access of producers to the documentation required (a need

to decrease bureaucracy); lack of interaction between different policy mechanisms which could provide support to program activities; lack of planning and management problems for the local organizations in monitoring deliveries and with regard to training and education of beneficiaries (nutritionists, kitchen staff, teachers and pupils). Triches and Schneider (2010) add that one of the challenges for institutional programs in purchasing food from family-based agriculture is the legislation on food quality that regulates family agribusinesses (in particular milk, meat and related products).

In France the recent National Plan for Organic Agriculture (Plan Ambition Bio 2017) set an ambitious target of 20% of organic products in school meals and collective restaurants by 2017. Targets vary from region to region, prioritizing not only organic (bio), but primarily local products (local products predominate), given their beneficial impact on regional development. However, evolution in this field continues to be associated to new forms of organization: logistic platforms, work networks, the negotiation and planning of the food product needs of schools and producers.

Experiences with school meals in other European countries show that the government has a decisive role in food purchasing mechanisms and in incentivizing certain models of sustainable production and in public health. Governments can use regulation and decision-making in resources allocation and are key players in the food supply chain, promoting changes in societal behavior (MORGAN; SONNINO, 2008).

Institutional markets reinforce other short distribution channels initiatives and strengthen social organization networks, fostering dialogue between the different actors involved in agroecology. This gives reason for optimism in terms of the promotion of ecological and health food products and contributions, encouraging the transition toward agroecology and agroecological promotion and the respect for the ways of life of traditional populations, strengthening regional food culture and promoting a positive view of socio-biodiversity.

Short Food Supply Chains Networks

Rede Ecovida is developing a pioneering experiment in short food supply chains related to Agroecology in the south of Brazil. The principles followed by this network are as follows: traded products must have the Rede Ecovida seal of agroecological and participatory certification; for an organization or group of producers to participate they must be part of the network; those who sell must also buy from other producers (exchange and circulation of products) (MAGNANTI, 2008).

This system has allowed for the exchange and circulation of products between regions. It has also managed to meet the demands for diversity, maintain regularity and the biological quality of products, given that the network operates exclusively with products certified in a participatory way. Here, discussions around short distribution channels are not based on physical distance and the number of middlemen, but on the social and political dimensions of the participatory certification system and the social movement's organization.

Approximately 50 items are supplied: vegetables (present in 100% of the groups); fruits (80%) grains (80%); flours (70%); sugar (50%) and processed products (20%) (REDE ECOVIDA, 2014). Products are traded mainly in agroecological markets and Government Programs such as PAA and PNAE, via small shops and distributors, food exchange groups (self-consumption), ensuring the food self-sufficiency of the networks' producers.

According to Perez-Cassarino (2013), the challenges presented by this trading model are: documentation standardization for trading between states; packaging standardization, primarily ecological; product standardization for the different centers; investment in human resources to operate the trading processes; improvement and investment in logistics; and planning production to meet a growing demand, particularly school meals.

Characteristics and Organization of the Farms part of Short Food Supply Chains

Both in Brazil and in France, the experiences studied of trading in short distribution channels mainly involve family farms, in particular neo-rural producers working in small sites (on average less than 20 hectares in total) when compared to long distribution channels. One of the fundamentals of this type of agriculture is a workforce made up of family members, with a very demanding workload and who must put their skills together (production, transformation and trading) so as to reduce costs and add value to products.

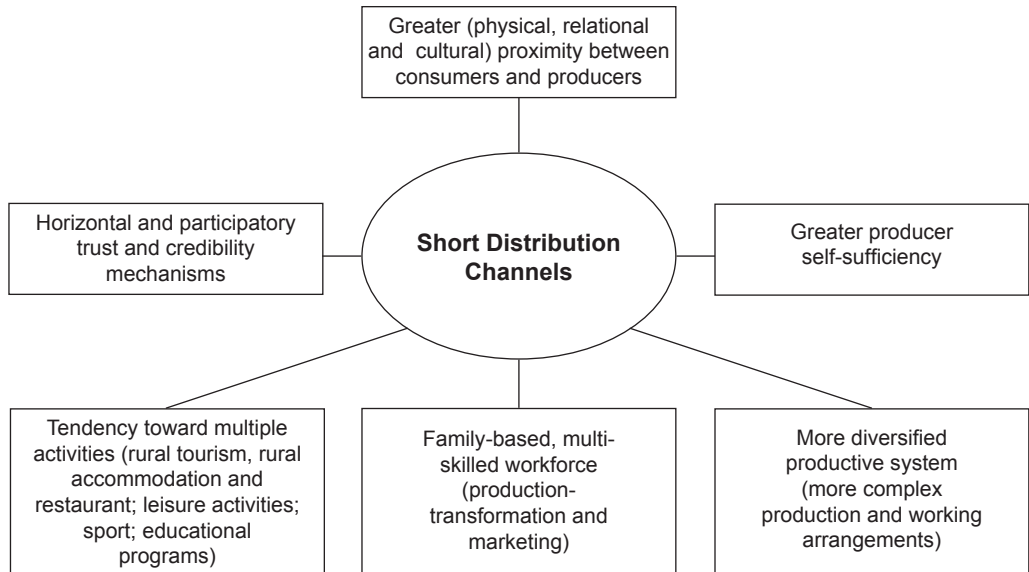
According to Mundler (2008), in France, most of the farms studied involved in short distribution channels are specialized in a particular system of production (fruits, vegetables, milk, eggs and cheese). In Brazil, the organic farms studied were more diversified and involved a more complex system of cultivation and animal rearing. If, on the one hand, this is welcome because it meets agroecological principles, on the other, it makes productive planning more complex. In both countries the range of products is, in general, more diversified when compared with conventional agricultural practices, even when these farms specialize in particular systems. A tendency for diversification in terms of the activities in the farm (agrotourism, gastronomy, leisure and discovery; accommodation and educational programs) was also observed, as highlighted by a number of authors (SCHNEIDER, 2005; MUNDLER; GUERMONPREZ; PLUVINAGE, 2007).

Another feature that stands out in short distribution channels is that producers are more autonomous than those involved in long distribution channels. In Brazil, producers who work closely with other businesses to be able to sell to supermarkets have less control over management where production planning and marketing is the responsibility of these companies. According to Darolt (2012) the production system becomes simplified and limited to one or two products. In these cases it is common to observe the replication of the commercial and industrial logic used in conventional systems for large scale production.

Figure 2 provides a summary of the different characteristics seen in farms involved in short distribution channels. According to Mundler (2008), the combination between ecological agriculture and short distribution channels has positive impacts on different areas such as: the local economy, providing work and income opportunities; the social sphere, by bringing producers and consumers closer together; the environment, by in-

creasing the value of natural resources and the landscape; and the political sphere, by expanding consumer choice.

Figure 2 - Common features observed in short distribution channels for ecological food (Brazil and France).



The complexity of **working arrangements** observed depended on the human and economic resources available at the farm. This study follows Dedieu *et al.* (1999) in arguing that in small family farms it is essential to improve the value of products (through transformation) and, whenever possible, sell them directly, as well as make available other services (such as rural accommodation for consumers).

The most appropriate marketing model for each producer will vary depending on the workforce available, the organization of the production system and the infrastructure. We observed that in most channels studied, agricultural practices, production volumes, types of products and working arrangements were adapted to meet consumer demand. Thus, in agreement with Mundler *et al.* (2007), we observed that the development logic of short distribution channels influences the organization of the farm. In other words, producers in short distribution channels can adapt more easily to changes in demand and supply when compared to those in long distribution channels.

Opportunities and challenges of the production-consumption relations

In theory, short food supply chains require closer geographical proximity, the active participation of and a connection between producers and consumers. This study has shown that this will vary according to the context. Nevertheless, there are some common characteristics such as: better remuneration of producers, fairer prices to consumers, fostering local production and the transition to more sustainable systems. We also highlight

that buying from alternative networks reduces environmental impact by reducing (plastic) packaging and lowering energy used for transportation.

For producers, there are more advantages than disadvantages in short distribution channels such as those shown in table 2. Findings point to the fact that they allow for more producer autonomy, direct contact with consumers, financial transactions without the involvement of middlemen, as well as fairer remuneration and lower risks of losses during trade. As we have seen in the previous section, investment in the training of producers, management of the farm and production planning are key factors for reducing obstacles such as the lack of workforce, adjustments between supply and demand, as well as investment in infrastructure and logistics. Taking into account the historical, social and economic contexts, Brazilian producers have greater challenges when compared to their French counterparts. The experiences studied confirm that the synergy and symbiosis of ecologically-based family agriculture with short distribution channels foster sustainable development.

From the consumers' point of view, alternative networks bring opportunities that lead to changes in dietary habits, encourage taste education, and the organization and mobilization of consumers in campaigns for healthy diets (against agrochemicals and genetically modified production, for example). Thus, alternative networks involve experiences that can help us to develop public policies geared toward sustainable consumer standards. However, it is important to take into account that this is a slow process. That is, it takes time to empower consumers and make them aware of factors such as the seasonality of ecological production, knowledge of the difficulties producers face, changes in attitude with regard to regularity, quantity and diversity, easily fulfilled by industrial agriculture and which are lacking in ecological production.

Final Considerations: new producer-consumer relations

In this work we have studied the experiences of alternative ecological food networks in both France and Brazil. It allowed us to build a typology of the main short food supply chains (SFSCs), as well as analyze their characteristics and observe challenges and opportunities for production and consumption relations.

Indeed, short food supply chains are ways of moving away from the standards imposed by the industrial food system which brings uniformity to ways of life and steers consumption. More than fitting the experiences studied into static definitions and typologies, the wide range of models found in both France and Brazil confirms the innovative potential of alternative food networks in mobilizing actors and searching for suitable solutions for ecologically-based family agriculture, taking into account the different contexts. These initiatives open the way to debates on new conceptions of local development and public policies which can encompass not only technical and productive, economic and environmental variables, but also social, ethical and cultural values. Principles such as autonomy, solidarity, food security, social justice, respect for local culture and traditions can be incorporated into producer-consumer relations.

Table 2 - Opportunities and challenges for producers and consumers involved in short distribution channels

Actors	Opportunities	Difficulties
Producers	<ul style="list-style-type: none"> * Greater profit margin, payment with delivery and in shorter periods (weekly); * Greater links with consumers via direct contact; * Wider range of products, allowing for a reduction in risks; * In the case of boxes and organized groups, guarantee of selling all products; * Work autonomy and greater financial independence (because payment occurs mostly in the short-term and there's an opportunity to make customers loyal); * Reduction in marketing risks, possibility of combining different sales channels; * Increase in the value of local plant species (native seeds) and animals; * Increase in the value of the profession and recognition for ecological producers; * Organize producers to become involved in short distribution networks (product exchange, diversification); 	<ul style="list-style-type: none"> * Lack of a specialized workforce, problems related to the Brazilian labor laws, lack of time for production; * Need for multiple skills to manage the process of production, transformation and marketing (producers are better prepared for production than for sales); * Need to invest in the transformation structure and training for direct sales; * Greater investment in logistics (refrigerated transport, equipment for selling in markets, IT); * Restrictive health surveillance regulations; * Production planning complexity due to greater range of products;
Consumers	<ul style="list-style-type: none"> - * Proximity with producers (knowledge of origin and place of production); * Supply of seasonal and regional foods (better taste, fresher and education on dietary consumption); * Access to quality products in terms of origin, transparency and fair prices; * Learning of new recipes via direct contact with other clients and producers; * Education for consumption (less packaging, shop locally, recycling); * Introduce new consumers into the process and opportunities for organizing groups of consumers; 	<ul style="list-style-type: none"> * More shopping time needed; pre-defined times and difficulties in buying due to weather conditions (outdoor markets); * Problems with the regularity of certain products. Product supply can be limited and concentrated at certain periods, according to season; * Higher prices for specific products compared to conventionals. * Smaller range of products such as fruits, products of animal origin and derived products (meat, dairy, etc.);

Source: Developed by the authors

This study confirms the hypothesis that short food supply chains are viable and can strengthen alternative food networks when associated to features of ecological production (small sites, family workforce, diversified production, producer autonomy, links with consumers, biodiversity preservation, the enhancement of the environment, food quality and health products).

Progress appears to be greater in experiences where networks are created with the support of public policies and include interaction between different actors (government, non-governmental organizations, and groups of producers and consumers) in terms of food distribution and decision-making. These experiences also seem to foster new models of participatory management. Examples are the short distribution network Ecovida in the South of Brazil and school meals programs (in Brazil and France), as well as consumers' associations (AMAPs) in France.

This work points to opportunities, but also highlights the challenges that need to be overcome in terms of production, distribution and consumption. Thus, public policies and future academic studies should be geared toward overcoming obstacles such as the reduced volume of agroecological production; the small range and lack of regularity in the supply of ecological products; discrepancies between supply and demand; as well as problems in infrastructure and logistics. Furthermore, there needs to be more investment in consumer awareness education based on reliable consumer information. The evolution of markets based on short food supply chains can contribute to changes in consumer habits, leading toward healthy eating and the creation of new markets for ecological production. Challenges involve the building of production, distribution and trade support frameworks in conjunction with institutional and financial support as well as policies, in particular those involving organized groups of family producers at the initial stage of the agroecological transition process.

Within this new producers-consumers relationship, consumers search for products that “look like the producer”, where the traits of local communities are visible, such as traditions, ways of life, local know-how, care for the landscape, together with ecological, seasonal products at fair prices. This set of unique characteristics, present in short food supply chains, is in itself what consumers are looking for to boost quality, leading to new social relations and new values. It also rescues the autonomy of producers.

Finally, participating in short food supply chains and alternative food networks involves social, economic, environmental and political values which contribute to conscious consumption. This study has shown the need to reinvent local markets, reconnect producers and consumers and establish new relations between production-distribution-consumption.

Notes

- i In this paper the concept of an ecologically-based production system encompasses the following terms: organic, ecological, agroecological, biodynamic, natural, regenerative, biological, permaculture and others that meet the principles set out in Law 10.831/2003 which addresses the organic system of agricultural production in Brazil. In France, this system is known as biological agriculture (*agriculture biologique*), based on a law passed in 1980. However, there are other forms of alternative agriculture (*agriculture paysanne and agroécologie*) which claim to be more ecological and use short distribution channels.
- ii Short distribution channels (SDs) or short supply chains are defined as a system of inter-relations between those who are directly involved in the production, transformation, distribution and consumption of food (RENTING *et al.*, 2012). This definition highlights two important factors (inter-relation and interdependency) and allows for the possibility of a wide range of interfaces between production and consumption.
- iii The distribution channels circuits of the Ecovida Network are made up of 27 regional centers, encompassing 200 municipalities, 400 groups and associations (involving approximately 3800 families) and approximately 200 agroecological markets in the three southern Brazilian states (www.ecovida.org.br) (REDE ECOVIDA, 2014).
- iv Biocoop is a French network encompassing 330 shops and independent agents, activists and others engaged in the organic agriculture movement (also known as *bio*) (www.biocoop.org)

References

- AGENCE BIO. **Baromètre de consommation et de perception des produits biologiques en France**. Paris: Agence Bio. Édition 2014. Available at: <<http://www.agencebio.org/>>. Accessed on: 20 August 2014.
- AUBRY, C.; CHIFFOLEAU, Y. Le développement des circuits courts et l'agriculture périurbaine: histoire, évolution en cours et questions actuelles. **Innovations Agronomiques**, v.5, p. 53-67, 2009.
- BRANDENBURG, A. Movimento agroecológico: trajetória, contradições e perspectivas. **Revista Desenvolvimento e Meio Ambiente**. Curitiba: Ed UFPR, n. 6, July-Dec 2002, p. 11-28.
- BRANDENBURG, A.; FERREIRA, A.D.D. (Orgs.). **Agricultores ecológicos e o ambiente rural: visões interdisciplinares**. São Paulo: Annablume; CNPq; Petrobras, 2012. p. 21-32.
- CHAFFOTTE, L. ; CHIFFOLEAU, Y. Circuits courts et vente directe: définition, typologie et évaluation. **Cahiers de l'Observatoire CROC**, n. 1-2, fév./mar., p. 1-8, 2007.
- CHIFFOLEAU, Y. Les Circuits courts de commercialisation en agriculture: diversité et enjeux pour le développement durable. In: MARECHAL, Gilles (Org.). **Les circuits courts alimentaires: bien manger dans les territoires / Gilles MARECHAL**. Educagri éditions, 2008, p. 21-30.
- DAROLT, M.R. **Conexão Ecológica: novas relações entre produtores e consumidores**. Londrina: IAPAR, 2012. 162 p.
- DEDIEU, B.; LAURENT, C.; MUNDLER, P. Organisation du travail dans les systèmes d'activités complexes: intérêt et limites de la méthode BT. **Economie rurale**, n° 253, p. 28-35, sept.-oct, 1999.
- DEVERRE C.; LAMINE C. Les systèmes agroalimentaires alternatifs: Une revue de travaux anglophones en sciences sociales. **Economie Rurale** 3, n. 317, p. 57-73, 2010.
- DUBUISSON-QUELLIER, S., LAMINE, C.; LE VELLY, R. Is the consumer soluble in the citizen? Mobilization in alternative food systems in France. **Sociologia Ruralis**, v.51, n.3, p. 304-323, 2011.
- FERRARI, D. **Cadeias agroalimentares curtas: a construção social de mercados de qualidade pelos agricultores familiares em Santa Catarina**. 2011. 347f. Ph.D Thesis in Rural Development Universidade Federal do Rio Grande do Sul, Programa de Pós-Graduação em Desenvolvimento Rural, Porto Alegre, 2011.
- GOODMAN, D. The quality 'turn' and alternative food practices: reflections and agenda. **Journal of Rural Studies**, v.19, n.1, p. 1-7, 2003.
- GOODMAN, D. **Place and space in alternative food networks: Connecting production and consumption**. Department of Geography. King's College London. 36p. 2009.

- GOODMAN, D.; DUPUIS, M.; GOODMAN, M. **Alternative Food Networks: Knowledge, Practice, and Politics**. New York: Routledge, 308 p. 2012.
- GUZMÁN, E.S.; MONTIEL, M.S.; HERNÁNDEZ, D.G.; SÁNCHEZ, I.G.; COLLADO, A.C. **Canales Cortos de Comercialización Alimentaria en Andalucía**. Instituto de Sociología y Estudios Campesinos. Universidad de Córdoba. Fundación Pública Andaluza Centro de Estudios Andaluces: Sevilla, IFO 14, 2012. 164p.
- HASSANEIN, N. Locating food democracy: Theoretical and practical ingredients. **Journal of Hunger and Environmental Nutrition**, n. 3, p. 286–308, 2008.
- HOLLOWAY, Lewis et al. Possible food economies: a methodological framework for exploring food production-consumption relationships. **Sociologia Ruralis: European Society for Rural Sociology**, Oxford, v. 47, n.1, jan. 2007.
- IDEC. Rota dos Orgânicos. **Revista do IDEC**, São Paulo: IDEC, n. 162, p. 20-23, fev. 2012.
- JAFFE, J.; GERTLER, M. Victual vicissitudes: Consumer deskilling and the (gendered) transformation of food systems, **Agriculture and Human Values**, n. 23, p. 143-162, 2006.
- LAMINE, C. **Les Amaps: un nouveau pacte entre producteurs et consommateurs?** Gap: Ed. Yves Michel, 140 p. 2008.
- LAMINE, C. Changer de système: une analyse des transitions vers l'agriculture biologique à l'échelle des systèmes agri-alimentaires territoriaux. **Terrains et Travaux**, n. 20, p. 139-156, 2012.
- LEVKOE, C. Learning democracy through food justice movements. **Agriculture and Human Values**, 23, pp. 89-98, 2006.
- LYSON, T. **Civic agriculture: Reconnecting Farm, Food, and Community**. Lebanon: University Press of New England. 2004, 136p.
- KLUTH,B.; BOCCHI JR.,U.; CENSKOWSKY, U. **Pesquisa sobre o comportamento e a percepção do consumidor de alimentos orgânicos no Brasil – 2010**. München, Germany: Organic Services e Jundiá-SP: Vitalfood, 2011, 38p.
- MAGNANTI, N.J. Circuito sul de circulação de alimentos da Rede Ecovida de Agroecologia. **Agriculturas**, v. 5, n. 2, p. 26-29, jun. 2008.
- MAPA – Ministério da Agricultura, Pecuária e Abastecimento. Produtos orgânicos mais representativos de cada unidade da federação. **In: Produto orgânico: melhor para a vida de todos e do planeta**. Folder, Brasília:MAPA, 2012. 7p.
- MARSDEN, T.; BANKS, J.; BRISTOW, G. Food supply chain approaches: exploring their role in rural development, **Sociologia Ruralis**, 2000, vol. 40, n. 4, pp. 424-438.
- MARECHAL, G. **Les circuits courts alimentaires: bien manger dans les territoires**. Paris: Ed. Educagri, 2008. 216 p.
- MAYE, D. Moving Alternative Food Networks beyond the Niche. **International Journal of Sociology of Agriculture and Food**, 20 (3), pp. 383-389, 2013.

- MESSMER, J.G. **Les circuits courts multi-acteurs**: émergence d'organisations innovantes dans les filières courtes alimentaires. Paris: Rapport INRA-MaR/S, 2013, 69 p.
- MORGAN, K.; SONNINO, R. **The school food revolution**. London: Earthscan, 2008.
- MUNDLER, P.; GUERMONPREZ, B.; PLUVINAGE, J. Les logiques de fonctionnement des petites exploitations agricoles, **Pour** n° 194, p. 55 – 62, 2007.
- MUNDLER, P. (Org.). Petites exploitations diversifiées en circuits courts. **Soutenabilité sociale et économique**. Lyon: Isara, 34 p, 2008.
- PEREZ-CASSARINO, J. Agroecologia, construção social de mercados e a constituição de sistemas agroalimentares alternativos: uma leitura a partir da rede ecovida de agroecologia. In: NIEDERLE, P.; ALMEIDA, L.; VEZZANI, F.M. (Orgs.). **Agroecologia**: práticas, mercados e políticas para uma nova agricultura. Curitiba: Kairós, 2013. p. 171-214.
- PLOEG, J.D. van der. **Camponeses e impérios alimentares**: lutas por autonomia e sustentabilidade na era da globalização. Porto Alegre (RS): Editora da UFRGS, 2008.
- REDE ECOVIDA. **Alguns números da Rede**. Available in: <http://www.ecovida.org.br/a-rede/>. Accessed on: 12 August 2014.
- REDLINGSHOFER, B. Vers une alimentation durable? Ce qu'enseigne la littérature. **Le courrier de l'environnement de l'INRA**, n. 53, p. 83-102, 2006.
- RENTING, A.; SCHERMER, M.; ROSSI, A. Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship. **International Journal of Sociology of Agriculture and Food**, v. 19, n. 3, p. 289-307, jan. 2012.
- SCHMITT, C.J. Encurtando o caminho entre a produção e o consumo de alimentos. **Agriculturas**, v.8, n.3, p. 4-8, set. 2011.
- SCHMITT, C.J.; GRISA, C. Agroecologia, mercados e políticas públicas: uma análise a partir dos instrumentos de ação governamental. In: NIEDERLE, P.; ALMEIDA, L.; VEZZANI, F.M. (Orgs.). **Agroecologia**: práticas, mercados e políticas para uma nova agricultura. Curitiba: Kairós, 2013. p. 215-266.
- SCHNEIDER, S. As novas formas sociais do trabalho no meio rural: a pluriatividade e as atividades rurais não-agrícolas. **Revista Redes**, Santa Cruz do Sul - RS, v. 9, n. 3, p. 75-109, 2005.
- TOVEY, H. Local food as a contested concept: networks, knowledges and power in food-based strategies for rural development. **International Journal of Sociology of Agriculture and Food**, 16 (2), pp. 21-35, 2009.
- TRICHES, R.M. & SCHNEIDER, S. Alimentação Escolar e agricultura Familiar: reconectando o consumo à produção. **Saúde e Sociedade**, v. 19, n.4, p. 933-945, 2010.
- WILKINS, J. Eating Right Here: Moving from Consumer to Food Citizen. **Agriculture and Human Values**, v. 22, n.3, p. 269-273, 2005.
- WILKINSON, J. **Mercados, redes e valores**: o novo mundo da agricultura familiar. Porto Alegre: UFRGS, 2008.

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ALTERNATIVE FOOD NETWORKS AND NEW PRODUCER-CONSUMER RELATIONS IN FRANCE AND IN BRAZIL

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Abstract: This paper presents an analysis about agroecological alternative food networks and new producer-consumer relationships in France and Brazil. The investigation method is based on descriptive and qualitative research about 20 cases (qualitative interviews), selected with stakeholders (farmers, traders, consumers and food experts) in France and Southern Brazil. A typology about the characteristics and organization to short circuits trade is provided. The results show that alternative food networks are very diverse and dynamic, being a social, economic and environmental option to family farming, strengthening local markets and reconnecting producers and consumers. In these countries, the successful initiatives of alternative networks occur in places where there is coordination between food networks stakeholders such as the government, NGOs, private enterprises, farmers and consumers' organizations.

Keywords: Local Food Systems; Organic Food; Agroecology; Fair Trade.

Resumo: O presente trabalho analisa redes alternativas de comercialização de produtos ecológicos e novas relações produção-consumo na França e no Brasil. O método de investigação foi baseado na pesquisa descritiva e qualitativa a partir de 20 experiências selecionadas com atores (agricultores, comercializadores, consumidores e especialistas) que comercializam alimentos ecológicos na França e no sul do Brasil. Como resultado apresenta-se uma tipologia, as características e a organização dos circuitos curtos de comercialização. Os sistemas alternativos são muito diversificados e dinâmicos, sendo uma opção social, econômica e ambiental para a agricultura familiar, fortalecendo os mercados locais e religando produtores e consumidores. Em ambos os países as iniciativas bem-sucedidas em sistemas alternativos acontecem em locais onde existem formas de coordenação em rede e parcerias entre o poder público, entidades não-governamentais, empresas, organizações de agricultores e consumidores.

Palavras-chave: Mercados Locais; Alimentos Orgânicos; Agroecologia; Comércio Justo.

Resumen: Este trabajo analiza las redes alternativas de comercialización de productos ecológicos y nuevas relaciones de producción-consumo. El método de investigación se basó en descriptivo de 20 casos seleccionados y entrevistas cualitativas con los actores (agricultores, comercializadores, consumidores y expertos) del mercado de alimentos ecológicos en Francia y en sur de Brasil. Los resultados ofrecen una tipología, las características y la organización de los circuitos cortos. Los sistemas alternativos son muy diversos y dinámicos, siendo una opción social, económica y ambiental para la agricultura familiar, además de fortalecer los mercados locales y reconectar productores y consumidores. En los dos países las iniciativas de éxito de sistemas alternativos ocurren donde hay formas de coordinación de redes y alianzas entre el gobierno, las organizaciones no gubernamentales, empresas, organizaciones de agricultores y consumidores.

Palavras Clave: Mercados Locales; Comida Orgánica; Agroecología; Comercio Justo.
