

[Agro-extractivism inside and outside BRICS: Agrarian change and development trajectories]

# Conference Paper No. 4

'Counter-movements' in Brazil and China agrifood Systems?

Some experiences in linking production and consumption through the construction of new, nested markets

Fabiano Escher and Sergio Schneider

## Organized jointly by:















**Disclaimer:** The views expressed here are solely those of the authors in their private capacity and do not in any way represent the views of organizers and funders of the conference.

October, 2016

#### Follow us on websites and social media:

#### Websites:

www.iss.nl/bicas
http://cohd.cau.edu.cn/
www.plaas.org.za/bicas
http://www.ufrgs.br/english/home
www.tni.org
www.future-agricultures.org

Weibo:



http://weibo.cn/developmentstudies

WeChat:



Check regular updates via BICAS website: www.iss.nl/bicas

For the conference information, please visit: <a href="http://cohd.cau.edu.cn/bicas">http://cohd.cau.edu.cn/bicas</a>

# 'COUNTER-MOVEMETS' IN BRAZIL AND CHINA AGRIFOOD SYSTEMS? SOME EXPERIENCES IN LINKING PRODUCTION AND CONSUMPTION THROUGH THE CONSTRUCTION OF NEW, NESTED MARKETS

Fabiano Escher; Sergio Schneider

#### **Abstract**

In BICAS Working Paper n.7, we presented a comprehensive Polanyian-Gramscian approach, intending to capture the 'double movement' between hegemonic forces of commodification and globalization of agrifood systems and counter-hegemonic forces driving the emerging rural development dynamics, both shaping the recent development trajectories of Brazil and China. This article builds on specific issues raised in that paper. The purpose here is to understand in more detail some concrete experiences that could be charac-terized as part of that countermovements in response to contradictory consequences of domi-nant trends of the agrifood systems of Brazil and China. Although corporate agribusiness and food empires are the hegemonic actors of the current food regime, there are other challenging forms of production, distribution and consumption of food that can coexist, persist or emerge, being marginalized or encouraged in this dispute arena. Examples of these challenging forms have been characterized as 'alternative food networks' as well as 'new nested markets'. They constitute responses of social actors, able to exercise its agency and to institutionalize collec-tive action devices through social struggles. But such are not just confrontational struggles, against the system; they also involve the active construction of new social practices, livelihood strategies and economic institutions. In Brazil and China, these experiences have emerged from mobilization processes, especially in the realm of circulation, linking food producers and consumers – for what is possible to talk about 'new economic social movements'. Our empirical focus relies on emerging initiatives that are taking place in both countries. In Brazil, we describe the case of Rede Ecovida de Agroecologia, a set of local groups and regional nucleus of producers and consumers of ecological foodstuffs organized and articulated as an agro-ecology network. And in China, we describe the case of community supported agricultu-re (CSA) experiences, with groups of consumers around farming producers, making payments in advance, sharing risks and eliminating intermediaries by building direct relations. Both cases are related to the development of ecological agriculture practices, alternative logistical infrastructures and accreditation systems of food quality. Additionally, farmers' markets also relate very closely with these experiences and will be discussed to some extent. For analytical purpose, three general aspects are considered, in a comparative perspective, for the cases of Brazil and China. First, we investigate the social origins and the evolutionary dynamics of ecological agriculture and the markets for its products. The second point to consider regards the nature and character of the relations between producers and consumers and of both with the certification systems. And the third consideration concerns the challenges and perspec-tives of ecological agriculture and the construction of new, nested markets facing the problem of 'conventionalization' of organics. At the end of the paper we assess the meaning of these initiatives in the wider political economy context they are inserted in order to provide a better understanding of such experiences as part of concrete manifestations of the countermovement.

#### 1 Introduction

This article focuses on the topic of 'alternative food networks' and 'new, nested mar-kets' emerging from farmers, consumers and social movements' collective actions in response to the contemporary 'agrifood question'. Today, it's widely acknowledged that the globalized agrifood system, under the aegis of liberalized markets controlled by large corporate agribu-siness, food industry and retail trade, is facing increasing contradictions. The neo-malthusian argument assigns centrality to the problem of how to feed 9.5 billion mouths in the world in 2050. However, the 'new food equation' includes other, no less important, 'variables'. In addition to the traditional demographic issue on the need to increase production and quantity of food supplies before the stubborn problem of hunger, there are at least three factors of vul-nerability and contestation of the current dominant model of production, circulation and con-sumption of food. The first factor relates to the dependence of industrial agriculture and the modern food system on the sources of fossil energy used for production, transportation and processing of agricultural inputs and food products, as well as the uncertainties concerning substitutability and risks of biofuels and the geostrategic importance of oil. The second factor regards environmental problems (contamination, pollution, land, air and water degradation, deforestation, wastes, biodiversity losses, CO2 emissions) arising from the increasing impacts of human activities on large ecological balances (the 'metabolic rift'), aggravated by climate change. And the third factor concerns the harmful consequences on human health, associated with shifts in eating habits and class diets under the background of the 'nutrition transition' that follows the advance of urbanization and income levels of 'affluent' shares of population, with higher incidence of obesity and chronic non-communicable diseases, not to mention the frequent occurrence of food scares and safety scandals (Sage 2013; Lang, Heasman 2006). Meanwhile, against this context has emerged a series of experiments based on ecological and sustainable farming practices, direct circuits or short supply chains of food distribution and commercialization, and more proactive and engaged attitudes and behaviors of consumers. In line with these new processes, there is a growing academic interest, with a significant share of attention from scholars of rural studies on topics like origin, place and quality of food and production-consumption relations (Goodmann et al. 2012; Tregear 2011)

Notwithstanding, these debates have been carried out based principally on the reality of developed countries of Western Europe and North America. The presence of reflections supported by the realities of developing countries in Asia and Latin America is still very timid. Aiming to fill part of this gap, the purpose of this paper is to go further on the analysis of some specific issues raised in a former paper of the same authors (Escher, Schneider, Ye 2015), with a comparative perspective of the cases of China and Brazil. The question we want to answer is: how it can be interpreted the emergence of alternative food networks and new nested markets in China and Brazil? And what is the relationship between these experiences and the rural development dynamics underway in both countries since the mid-1990s?

Our argument is that these experiences could be characterized as part of Polanyian countermovements in response to the contradictory consequences of dominant trends in Brazil and China agrifood systems. Although corporate agribusiness and food empires are the hegemonic actors of the current food regime, there are other challenging forms of production, distribution and consumption of food that can coexist, persist or emerge, being marginalized or encouraged in this dispute arena. They constitute responses of social actors able to exercise its agency and collective action through social struggles and active construction of new social practices, livelihood strategies and economic institutions, linking producers and consumers of food in the realm of circulation. Our empirical focus relies on emerging initiatives of alternative food networks and new nested markets that are taking place in both countries. In Brazil, we draw upon the case of *Rede Ecovida de Agroecologia*, a set of local groups and regional nucleus of producers and consumers of ecological foodstuffs organized and articula-ted as an agro-ecology network. And in China, we survey the case of community supported agriculture (CSA) experiences, with groups of consumers around farming producers, making payments in advance, sharing risks and eliminating intermediaries by establishing direct relationships. Farmers' markets are a crucial constituent part of both experiences. These food initiatives are all built

upon the development of ecological agriculture practices, alternative logistical and marketing infrastructures and informal accreditation systems of food quality.

The paper is structured in six sections beyond this introduction. The second section briefly explores theoretical debates on alternative food networks and new nested markets and put it into a Polanyian-Gramscian framework. The third section describes the context of the cases of China and Brazil and presents some methodological issues. In the fourth section we track back the social origins and institutional evolution of ecological agriculture and organic markets. In the fifth section we address the nature and character of the relationships between producers and consumers and of both with the certification systems. In the sixth section we point out the problems and challenges of ecological agriculture and the construction of new, nested markets facing the debate on the 'conventionalization' of organics. Finally, we conclude assessing the possible contributions of such a kind of agrifood initiatives in China and Brazil to rural development dynamics and proposing a research agenda in this regard.

#### 2 Alternative food networks and new, nested markets as 'countermovements'

Since the late 1990s there have been theoretical and methodological shifts in rural and agrifood studies in Europe and the US, which only recently are significantly rebounding in developing countries. From an agricultural economics and rural sociology perspective, essen-tially oriented to the supply side and the realm of production, and concerned with issues of quantity and price, current studies are increasingly interdisciplinary, incorporating the demand side and the realm consumption, and contemplating issues of quality and value. In the midst of this 'quality turn', concepts such as embeddedness, trust, localization and conventions has become recurrently used to understand the differences and specificities of alternative net-works, short supply chains and localized food systems in contrast to mainstream, dominant and commodities agrifood markets. It is out of our purpose to make a critical review of the theoretical approaches and analytical achievements and shortcomings of this literature, once other renowned authors have already done so with great skill (Goodmann et al. 2012; Tregear 2011). Our intention is simply to consider some issues of these debates that might shed light on the analysis of the experiences of China and Brazil, as exposed below.

The first issue to consider relates to the heuristic potential of the concept of 'embed-dedness'. Since the reading of Polanyi made by Granovetter, this notion has been used to distinguish the nature and character of the various agrifood systems from a territorial point of view. But according to Sonnino and Marsden (2006), most of the specialized empirical litera-ture has largely assumed the existence of a strict polarization between disembedded (conven-tional and globalized) and embedded (alternative and localized) agrifood systems, producing an inadequate (dichotomous and static) categorization. While recognizing the correction of the territorial emphasis, they point out two limitations of this literature: the exclusive focus on social networks, leaving the dimensions of culture and power without a thorough theorizing; and the absence of a historical explanation of the (de/re)embeddedness process. In line with the original approach of Polanyi, they propose that instead of looking at alternative and conventional agrifood systems as two circumscribed and separate spheres, the more appro-priate is to see them relationally, analyzing their contradictions, conflicts and disputes, and examining the border shifts and spatial boundaries between them. According to Hebinck, Ploeg and Schneider (2015), although the relations between producers and consumers are analyzed in one way or another, what is crucially missing in this literature is that these alter-native food networks actually constitute market places, requiring a less normative and more critical analysis in the realm of circulation. Thus, they suggest treating experiences such as alternative food networks (AFNs) as new, nested markets (NNM), understood as specific seg-ments of wider agrifood markets, but with a distinct nature and dynamics, and different actors and governance patterns. And Wilkinson (2008), in turn, suggest to treat them as 'new eco-nomic social movements', whose demands are geared primarily to markets and less directly to the state, seeking to produce changes in values, practices and conventions governing the circulation

of food products. Analytically, what we propose here to deal with this issue is to scrutinize the social origins and institutional evolution of the experiences under study.

The second issue to consider is about the politics of scale, bringing even closer the geographic (or territorial) dimension mentioned above. The crucial point, strongly emphasi-zed by Goodmann et al. (2012), is that the local cannot be taken as good or positive and the global as evil or negative for granted – they must be investigated. The virtues and vices of the food systems are not inherent to one scale or another. It is necessary to analyze the scalar processes that draw out the asymmetries of power between different actors and the insti-tutional forms through which their relations and interactions articulate global, national and local aspects in particular places and territories. A way to solve it analytically is to take into account the social heterogeneity of the experiences studied in China and Brazil, especially producers' and consumers' values, interests, expectations and practices in the processes of construction of quality conventions, be it through certification systems or not.

And the third issue to consider regards on how the experiences of ecological agricul-ture and construction of new markets for its products are affected by the phenomena of 'con-ventionalization' of organics. As highlighted by Guthman (2004), the conventionalization can occur from the moment that the markets for organic products are institutionalized, standard-ized and stabilized through certification systems, opening the possibility of leading firms of the corporate agrifood sector which did not feel attracted begin to enter into this markets, appropriating and emulating healthiness and sustainability values in seeking to respond criti-cisms and take advantage with segmentation and niche strategies. This implies the entry of large scale specialized producers substituting productive inputs, large industries in processing operations and large retail chains in the distribution of organic food, as well as the prolife-ration of private certifying bodies and the repositioning of political mediators (as the 'green economy' supporters and 'social responsibility' promoters). We will provide efforts to assess, at least preliminarily, the ways that producers and consumers involved in the cases studied in China and Brazil are being influenced by this conventionalization trend.

After all, it is likely to understand the contradictory dynamics of these issues as instances of what Polanyi (2000) called a 'double movement', which the outcomes are cir-cumscribed to the concrete 'correlation of forces', in Gramsci's (2002) terms. When applied to the contemporary agrifood question, the Polanyian-Gramscian framework suggests that the hegemonic forces of liberalization and globalization of developing countries' agrifood systems (Wilkinson 2009), driven by the power of appropriation and control of food empires (Ploeg 2008), can undergo strong criticism and contestation from counter-hegemonic forces (Giménez, Shattuk 2011), giving rise to collective actions of farmers and consumers, intellect-uals, activists and social movements to actively respond the contradictions of global markets they are confronted with, through the construction of AFNs and NNM (Hebinck, Ploeg, Schneider 2015). However, whether the outcomes of this 'double movement' in the field of rural and agrifood issues will follow a direction of neoliberal retrenchment or no more than cosmetic reforms or will reach progressive changes or even radical transformation is an open-ended question that a comparative perspective of China and Brazil can help to apprise.

#### 3 Description of the cases of Brazil and China and research method

In this section, we initially introduce some general data in order to characterize the socioeconomic and institutional dimensions of ecological agriculture and markets of organic products in China and Brazil. And in the sequence we offer a brief explanation of the research method and data sources used in the analysis performed in the following sections.

In China there are three categories of certified food according to ecological production standards: i) 'Green food', targeting its production mainly to the domestic market, but already achieving foreign recognition, with certification by product since 1990, following very strict standards that allow just a limited use of chemical inputs; ii) 'Organic food', with production focused initially on exports, but

slowly conquering the domestic market, and certification by process since 1994, following international standards that does not allow any use of chemical inputs; iii) and 'Hazard-free food', targeting its production to the domestic market, with certi-fication by product since 2001, following less stringent standards (basically a conventional production with non-abusive levels of chemical use) (Scott et al. 2014). These three catego-ries cover 45 million hectares and 28% of cultivated land in China, being that 61.6% is of hazard-free food, 29.3% of green food and 2.5% of organic food. And the value of production is respectively 54%, 32% and 12% for each type. The premium prices are from 10% to 50% for green food and up to 50% to 500% for organic food (Paull 2008). There are also various forms of emerging experiences of ecological agriculture articulated around alternative food networks, including community supported agriculture (CSA), organic fairs of farmers' mar-kets, buying clubs and recreational rental gardens, which usually dispenses certification labels, being preferred forms of informal inspection called 'certification by conscience', based on trust mechanisms between consumers and producers (Si et al. 2015).

Over the last two decades, Brazil has undergone many changes in terms of production, social recognition and public regulation of ecological agriculture and organic markets. Certified organic agriculture is growing at annual rates of over 20% in Brazil, which now has about 20.000 farmers and 1.75 million hectares certified, is the third largest country in area and the fifth in production of organics in the world; 60% of organics are exported and premium prices range from 30% to 50% higher than conventional foods (Blank, Kledal 2012; Conceição, Fernam 2011). However, the Agricultural Census of 2006 showed a higher num-ber of 90.497 rural establishments producing organics, 1.8% of the total (IBGE, 2009), proba-bly because it included non-certified 'agroecological' family farming producers. Thus, since 2009 there are three types of certification for organic quality assurance in Brazil: i) traditional Third Party Certification, audited by independent private companies; ii) Participatory Guaran-tee Systems, operated by entities called Participatory Organizations of Organic Conformity Assessment (OPAC), including farmers, traders, transporters, consumers and technicians; and iii) Social Control Systems for Direct Sales Without Certification, in which the farmer should be regularly registered in the regulatory body and member of a Social Control Organization (OCS) (cooperative, association, etc.). In the latter two cases, the production meets demand in markets built on trust relationships between producers and consumers (Passos, Torres 2013).

The following analysis is performed based on a selection and review of relevant litera-ture on the subject on screen in both countries. In the case of China, the main sources are the works of Si (2014), Schumilas (2014), Scott et al. (2014) and Si et al. (2015). And in the case of Brazil, the main sources are the works of Radomsky (2013), Passos and Torres (2013), Niederle (2014, 2014a) and Radomsky et al. (2015). In both countries, the first two studies are fruits of individual works of doctoral theses and the last two are collective researches. Taken together, data from these studies congregate interviews, surveys and ethnographies conducted with farmers and consumers, managers and marketing operators, organizers of farmers' markets, representatives of buying clubs, certification agencies, NGOs staff and government officials. Our intention is to make some analytical considerations following the comparative method, applied here in two basic steps. Initially, based on the very theoretical reflection made earlier, we identify the key problems reported from the reading of the main empirical and interpretative works carried out by researchers in both countries. And then, we aim to identify the main specificities highlighted by the experiences of China and Brazil, as well as the commonalities distinguishing them from the realities of developed countries.

#### 4 Origins and evolution of ecological agriculture and organic markets

In this section we analyze the social origins (relevant actors and their motivations) and institutional evolution (the role of the state and regulatory mechanisms) of ecological agriculture and markets for their products in China and Brazil in a comparative perspective. In this sense, one can say that in

China it was essentially produced as a 'top-down' process, whereas in Brazil, strictly speaking, it could be characterized as a 'bottom-up' process.

The growth of ecologic agriculture in China – in contrast to the traditional Chinese agriculture and modern conventional agriculture along the lines of the green revolution pro-moted in the Mao era – has been much in response to people's longings, as an alternative with potential to mitigate a set of negative impacts linked to the problem of pollution and increa-singly recurrent food safety scandals. And although there are good reasons to remain skeptical about the ability of market mechanisms to promote sustainable rural development, to the extent that ecologic farming has lower environmental impact and lower costs, market reforms in China have, howsoever, provided opportunities for farmers who are dedicated to produce food in this way, because the creation of a growing urban demand (Shi 2002; Sanders 2006).

Communism of Mao era left a statist, productivist and scientistic legacy for applied technology in agriculture, food security and Chinese social life. And these values remains in effect and are even strengthened after the reforms that triggered the decollectivisation of agri-culture and the establishment of household responsibility system in the Deng era. Although the positive results in terms of production and productivity are undeniable, so are the negative consequences on the environment and food safety. China is now the second largest producer and consumer of pesticides, accounting for 35% of all global consumption (Schumilas 2014), and its agrifood system is responsible for about 25% of national greenhouse gas emissions (Garnett, Wilkes 2014). But food safety scandals are the main problem, generating much alarm in the population, on the one hand, and stimulating the search for ecological products, on the other. Since 2003 China has reported cases of 'bird flu' every year except 2011, found illegal additives residues in pork produced on a large scale, such as clenbuterol and ractopa-mine (lean meat powders), and Dragon Head Entreprises (DHEs) suppliers of the American fast food chain KFC were found feeding their chickens with more than 18 kinds of antibiotics, antiviral drugs and hormones to accelerate birds' growth. However, the case of greater impact was certainly the milk scandal of melamine tainted infant formula in 2008, which resulted in the death of six children and more than 30,000 patients with kidney stones and other compli-cations. Twenty-two dairy companies were involved, and Sanlu Group, the company with the highest contamination rates, had its president sentenced to life imprisonment and two other directors executed, in addition to compensation payments to the victim households. And yet, the government has also stricted regulations on the diary food chain (Sharma, Rou 2014).

In the meantime, ecological agriculture, even by evoking ancient traditional practices, also born under the imperative discourse of 'agricultural modernization'. In the mid-1980s, a group of economists and agronomists who have studied in the US and Europe got the state support to conduct research that would be the basis of the three certification systems listed above, which represent the historical and legal marks of organic markets in China (Schumilas 2014). In fact, the current growth of hazard-free food production, which has greater range in the popular consumer market, but also organic and green food products, more geared to niche markets, is a reaction to those scandals. Only recently the process began to gain strength from the bottom, with the emergence of an educated new middle class to the consumer market. A growing group of consumers, motivated by the anxiety about food safety scandals, insatisfac-tion with pollution and environmental degradation, and sympathy for the improvement of farmers' livelihoods, embarked in the construction of alternative food networks and have become social actors in the nascent Chinese civil society (Shi et al. 2015). CSAs began deve-loping in 2008, and it is estimated the existence of 80 to 200 farms operating through this system today across the country, be it peasant-run, entrepreneur-led urban businesses or not-for-profit projects. Organic farmers' markets has only recently appeared in Beijing, Shanghai, Chengdu, Guangzhou, Xian and several other large cities. In these markets, promoted pri-marily through social media sites, small scale farmers and artisanal producers sell directly to urban consumers, contrasting to traditional 'wet markets', controlled by wholesalers. Through the social same networks of farmers' markets and sourcing food from CSAs, in some cities producers and consumers are connecting to each other and organizing informal buying clubs and box schemes. All these initiatives show an activist, critical

stance, against not only the conventional food system, but also the state-sponsored organic labeling (Scott et al. 2014).

And in Brazil, ecological agriculture originated in the 1980s, from the criticism of a number of civil society actors contesting the technocratic and authoritarian model of chemical agriculture of the green revolution promoted by the state during the military regime and the proposition of a set of techniques and practices at the time called 'alternative farming'. In the late 1990s, many actors and militant organizations on issues of environment and sustaina-bility, alternative technologies, family farming, agrarian reform and food security, converged toward the 'agroecology movement'. However, only after 2003 the historical pressures of social movements really reached the state recognition, resulting in the institutionalization of agroecology and stabilization of organic markets, with a set of production norms, certification systems and other public policies (Picolotto, Brandenburg 2013; Blank , Kledal 2012).

In the 1980s, many cases of contamination of farmers and rural workers with pesti-cides began to appear, especially in tobacco, tomato and others crops. And recently – as in China – contestations to abusive pesticides' use and genetically modified organisms (GMO) have grown among urban consumers as well. The best source of information is the 'Dossiê ABRASCO' (Carneiro et al. 2015), a document released by the Brazilian Association of Collective Health. Between 2002 and 2012, while the global pesticides market grew 93%, the Brazilian market grew 190%. Since 2008, Brazil is the world largest pesticides importer, with 19% of the total consumption, and an average of 12 liters/ha and 4.5 liters/inhabitant. This high consumption rate is related to factors such as the expansion of transgenic crops, the increase of crop diseases and the increasing pest resistance. Infamous cases of environmental and human contaminations have been recurrent. Among them one can cite the death of tons of fish by pouring 8,000 liters of organochlorine in the Paraíba do Sul river, 'poison rains' on the population during aerial spraying, causing frequent complaints of headache, vomiting, nausea, allergies, acute poisoning, cancer, birth defects and respiratory problems, and the detection of 10 toxic substances in breast milk. And regarding pesticide residues on food, one third of the vegetables daily consumed by Brazilians are contaminated. By all means, albeit industry's food safety scandals of frauds and contaminants are not rare in Brazil, the abusive use of pes-ticides (agrotóxicos) in agriculture is really the most prominent problem, which triggered in-tense public debates, civil society mobilizations and backlashes from corporate agribusiness.

Therefore, it is still in the 1980s that we must seek the origin of ecological agriculture in Brazil. With the convergence of economic crisis and loss of legitimacy of the military regi-me, the criticism to pesticides was added to wider movements of contestation of the agricul-tural modernization model and the struggle for democracy. A set of social actors converged to it, in a process of organization of the subaltern classes in the countryside and promotion of public debate on issues such as agriculture, environment and rural development. The root of this movement is the molecular work of popular education, awareness and organization carried out by progressive trends of Catholic and Lutheran Churches, adherents of the Libera-tion Theology. This was the trigger for the organization of family farmers, peasants and rural workers around the construction of a new rural unionism with a new agenda and strategy. And the mobilization of marginalized rural segments, subject to impoverishment and disposses-sion, gave birth to the landless movement (MST). The creation of a complex network of NGOs, getting together young agronomists and other professionals in works of technical and political advisory, also came from these experiences. And one cannot fail to mention the role of academic intellectuals with a left-wing identity and a research agenda on agrarian and environmental issues. Due to the pressure of these actors in the late 1990s – only later corpo-rate actors enter the stage – the first regulations for organic agriculture and agroecology in Brazil were established. But it is only between 2003 and 2007 that the current architecture for these markets was definitely instituted. And also under pressure from agroecology, family farmers unionism and food and nutrition security actors were created new differentiated policy instruments to strengthen ecological agriculture, especially 'institutional markets', such as the Food Procurement Program (PAA), National School Feeding Program (PNAE) and Sociobiodiversity Products Minimum Prices Program (PGPM-Bio). The main measures in line include family farming and traditional peoples as priority suppliers, payment of

premium prices of 30% for organic products, and purchase of typical products linked to sustainable practices of natural resource management (Picolotto, Brandenburg 2013; Schmitt, Grisa 2013)

If we could risk a word to characterize the specificity of the ecological agriculture and organic markets in China and Brazil, that word would be heterogeneity. On the one hand, he-terogeneity in the institutional architecture of this market, with three distinct labels represen-ting different certification systems – only the standard of IFOAM label (International Foun-dation for Organic Agriculture) is the same in both countries and the rest of the world. On the other hand, this also reflects the enormous social and productive heterogeneity of Chinese and Brazilian agriculture and countryside, with their diversity of 'farming styles', to use the notion of Ploeg (2008). In addition, this brief historic of the topic in these two countries shows us that, at an early time, the organic institutionalization process was top-down and consumer-driven in China and bottom-up and producer-driven in Brazil. But then, in the most recent period, the impulses start to run in all directions, from above and from below, to export and domestic agrifood markets, with the relationships between producers and consumers blurring and shifting the boundaries of embeddedness and taking a crucial role in setting future trends.

#### 5 Relationships between producers and consumers and the certification systems

In this section we analyze relationships between producers and consumers and of both with the certification systems in China and Brazil in a comparative perspective. In China, where the certification systems are older and more bureaucratic, new mechanisms based on trust and reciprocity relations are just emerging, while in Brazil, where such kind of interact-ions have a longer career, the very official certification systems is more flexible and adaptable.

In the case of China, since the melamine tainted milk scandal in 2008, it has been observed a phenomenon of disruption of institutional trust in food safety regulatory agencies of the country, which has also largely rebounded in a distrust on the official standards of food certification. On the one hand, a significant proportion of consumers are skeptical about the reliability of certified food products labeled as 'green' and 'organics'. A large number of customers are simply not convinced that these products really meet the standards promised by the official labels. The reason why is that, as shown by Wang et al. (2015) through the state-ments of their interviewees, many consumers believe that government agencies do not have a good inspection and monitoring service and are prone to fraud and bribes acceptance from capital-intensive, large-scale entrepreneurial organic producers. This kind of distrust appears even in media reports cited by the authors. On the other hand, the promoters of ecological farmers' markets and managers of community supported agriculture farms, in general do not feel motivated to use official certification for their products to be marketed. They consider that their higher costs just do not compensate, and also that label certificates are definitely not necessary to ensure food quality or to attract more consumers. Furthermore, the explosion of eventually conflicting information in the media and social networks has generated a cacopho-ny of 'what can we eat?' and increased the risk perception among citizens-consumers, adding to the causes of disruption of trust in formal institutions of food safety regulation.

However, in contrast to this patent distrust in the food safety regulatory system in general and the organic and green officially certified labels in particular, the last years has increased the number of urban residents motivated to buy food in other than conventional channels and even to participate in the organization of alternative food networks (Schumilas 2014; Si et al. 2015). What the research of Wang et al. (2015) indicates as the main reason behind this is the reconstitution of trust in interpersonal and organizational bases, partially substituting the institutional confidence shaken by frequent food scandals. The cases of CSAs in Anlong Village, near Chengdu, Sichuan Province, and Little Donkey Farm, at Beijing's vicinity, as well as the ecological farmers' market Beijing Country Fair, documented by the works of Si (2014), Si et al. (2015) and Wang et al. (2015), clearly illustrate this phenomenon. One mechanism used to enhance trust is direct reciprocity, by building stronger connections between vendors and customers through face-to-face contacts in long-term relations and

engendering commitments through frequent transactions. Direct communication between cus-tomers and vendors in the farmers' markets is a way to build this personal and mutual trust. Another way is through regular customers' visits to the vendors' farms, often without pre-vious appointment. Indirect reciprocity is also another mechanism to develop individual trust, basically through the dissemination of information and the construction of vendors' reputation among the customers. And a quite simple and effective way of creating indirect reciprocity identified in these experiences is through 'word to mouth' communications from one custo-mer to another. Rather than organic food labels certifications, consumers just trust the assess-ment of friends or relatives who already bought from a farmer or vendor. In another way, it can be done through the internet, by sharing information in the social networks (Weibo).

It is worth noting the attempt from Beijing Country Fair to develop the first Participa-tory Guarantee System of China, by establishing a set of criteria for the selection of marketers and an inspection committee with the participation of producers, consumers, academics and NGOs. By establishing endogenous rules, set up from the interactions between these various actors, it is possible to regulate vendors' behavior, to maintain the fair's reputation and to en-sure the consumers' interests without resorting to third party certificates. It is emphasized the existence of non-business relationships and interactions, guided by altruistic values (health, social justice and environment concerns) – which, after all, strengthen the bases for organiza-tional trust and stabilize the very exchange relations (Wang et al. 2015). However, according to Schumilas (2014), the fair's organization is informal and volunteer-driven, standing in the 'grey zone' of official and legal regulations. Hence it can be politically sensitive. The organi-zers have begun to discuss the need to formalize the structure of these farmers' markets, as the current informal networked structure poses limit to its expansion. They don't want to register it as a business and as an NGO it is not likely to 'worth the effort'. As a result, these experien-ces of ecological farmers' markets are evading bureaucracy by not pursuing official status, moving its location each week in partnership with other organizations that can 'host' them under the auspices of their registration, announcing the location by Weibo and Facebook.

In Brazil, in turn, this type of trust in interpersonal and organizational bases already has a longer career regarding the relations between producers and consumers of organic and agro-ecological products. As asserted by several researchers (Ploeg, Ye, Schneider 2012; Niederle 2014, 2014a; Radomsky et al. 2015), one of the most prominent and innovative examples is arguably Rede Ecovida de Agroecologia, which brings together ecological farmers, organic consumers, rural extensionists and advisory organizations. Ecovida Network congregates more than 3,5 thousand ecological farmers distributed through 170 municipalities of the states of Rio Grande do Sul, Santa Catarina, Paraná and São Paulo, organized in associations or cooperatives structured in 300 'local groups' articulated in 28 'regional nucleus'. Further-more, the network is also compound by 8 consumers' cooperatives and 35 NGOs. Together, all these actors are engaged in the operation of a number of commercialization circuits, like farmers' markets, buying clubs, specialized shops and institutional markets (PAA and PNAE), etc. Ecovida Network was founded in 1998 and took part in the whole process of recognition and institutionalization of Participatory Guarantee Systems for organic certification. All over this time, probably its main practical achievement was the creation of transportation and mar-keting logistical infrastructures, a 'routing system', linking places of production (eventually processing) and consumption, by which it is assured the provision of a diversified range of products supplied in more than 100 organic farmers' markets (of 413 currently existing in Brazil) where Ecovida's members do participate. It allows Ecovida works as a 'food hub' that reduces costs and adds value for the farmers. Afterwards, in 2009, from an informal network they were juridically constituted as an OPAC (Association Ecovida of Participatory Certifica-tion). In the participatory certification system, farmers contribute with just a small annual fee for issuing and printing the labels, although participation in this scheme does not entail any other cost beyond the time and dedication they obligatory need to devote taking part in exter-nal reviews for conformity assessment of their peers' farmers, and eventually in other net-work's related activities, such as the ethics committee and regional coordination committee. However, the adherence to certain values (co-responsibility, active participation, agroecolo-gical lifestyle) reflected in practices, discourses and technical procedures make up a cultural repertoire that becomes a source of social identity for the members of Ecovida Network.

What is at stake for Ecovida members is mainly the formation of shared meanings driving the operation of a collective action device (Niederle 2014b). That as interesting as the logistics infrastructure and lower cost certification label created by the network, which allow to mediate the relationship between producers and consumers and extend the geographic reach of local markets, is the participatory guarantee system incorporating agroecology as a value and integrating the certification process to the reproduction of trust and reciprocity ties. When the certification has become a necessity to reach more conventional markets, participa-tory systems have emerged as a creative alternative. In addition to safeguarding the metho-dological principles of 'agroecological transition', they also seek to express a set of evaluative dimensions (craftsmanship, tradition, knowhow and territoriality) which defines the quality of ecological food products. However, it is impossible to transfer a label this whole range of meanings. Hence the importance and priority given to direct marketing strategy in the farmers' markets, which are the central link between almost all the other channels, including the growth of buying clubs. Another way is indirect reciprocity (word to mouth) via friend-ship and kinship relations. Be that as it may, the labels themselves are rarely mobilized as crucial symbolic device in these circuits, as if they were 'proof of quality'. More than selling spaces, the farmers' markets (and purchasing groups) are a locus of sociability, where in addi-tion to economic exchanges, cultural interfaces reproduced there facilitate the 're-enchant-ment of food'. Through these initiatives, the actors engaged in Ecovida Network actually claim a new quality convention, which is not only supported by seals, brands and certificates (although they make use of these mechanisms), but mainly by solidarity and reciprocal social relations between producers and consumers within an organized social movement through active participation, reflexivity and shared practices (Radomsky 2013; Niederle 2014).

Surely these unique experiences do not deny the existence of consumers who are sim-ply oriented toward an 'ego-trip' lifestyle in search of healthy food in a convenient way and without any commitment to broader social issues, or of opportunistic producers who may be able to even cheat and deceive in their search for extraordinary, easy profits. However, if such contradictions could not be avoided as a real possibility, it is a fact that these experiences at screen in China and Brazil show a different picture. The certifications play a key role in the commodification of food products; but, at the same time, it qualifies them as differentiated from the conventional ones, such as organic, natural, craft, green, etc. Therefore, they create standards based on material principles and prescriptive criteria symbolically identified in seals and labels. In the case of China, the ecological quality accreditation systems (organic, green, hazard-free) have an essentially bureaucratic origin and enforcement, as it was created in order to intervene in reality and shape the farming practices and food markets; while in Brazil, although in part they also have been created to match the supply to export markets, to a large extent these certification systems emerged to regulate practices that were already happening, so that participatory guarantee systems has its origin in demands and pressures of the agroecology movement. Nevertheless, the fact is that, in either case, third party verification standards have been sharply criticized by civil society movements engaged in the construction of alternatives food networks and new, nested markets. In both cases, the participants' actions involve a set of practices that extends far beyond guaranteeing the intrinsic qualities of products. What is at stake is the production of knowledge and the construction and sharing of social values and meanings that characterize particular ways of farming and particular ways of consuming food. In this sense, be it through an official label or not, what matters most is the connection between distinct elements linking process, products, places and people in the formation of new marketplaces and opening room for collective learning and actions that con-tend established rules and creates new conventions in the contemporary agrifood system.

#### 6 Problems and challenges concerning the 'conventionalization' debate

In this section we analyze the problems and challenges concerning the debate on the conventionalization of organics in China and Brazil in a comparative perspective. By large, in China the organic market was born conventional and only recently began to 'alternativize', while in Brazil it came from all alternative and only recently struck up to 'conventionalize'.

Si et al. (2015) offer an interesting analysis in which they make efforts to 'unpack' the 'alternativeness' of China's alternative food networks into its different constitutive elements, assessing the contradictions and conventional values that pervade these experiences. And Schumilas (2014), by realizing elements of entrepreneurial and consumerist ethics eventually present in alternative food networks in China, features the motivations and behaviors of their operators as pragmatic and instrumental. They report that there is a portion of Chinese peasant farmers who have been able to meet the requirements to certify their production according to the official standards, but in fact most the production of certified organic or green food comes from large-scale entrepreneurial producers. Including due to the large entrance of private capital in organic agriculture the last few years, there are reports of many business' farms coopting the term 'CSA' and using it for mere marketing purposes, with little attention paid to ecological sustainability or risk sharing. And they also warn that, nevertheless, even in 'real' AFNs one must recognize that most initiatives are not initiated or managed by the peasants or farmers themselves, whose most often are rural workers contracted as employees of the CSAs. In the words of Schumilas (2014: 95), 'there is a clear separation of management and labour functions with no ethos of worker participation in farm decision-making and governance. China's CSA operators shape the conditions of employment of peasant workers, believing the waged peasants are ignorant of organic farming techniques.' Consequently, it is not casual that most of the CSAs initiators and operators are indeed young entrepreneurs of urban origins, who are motivated by the search for new market opportunities and, at the same time, for engagement in social activism too. However, they have a low profile stance, being politically cautious to avoid any action that may appear to be a direct confrontation with the government. Certainly, it largely seems to reflect the relative absence of a strong organized civil society in China, as this is still rising, just in the early stages of its development.

Another aspect related to the problem of conventionalization is that consumers strong-ly share concerns about health and food safety with the AFNs operators, but are less interested in environment and social justice issues. Some interviews by Si et al (2015) suggest that many CSA shareholder members (consumers) do trust and prefer to interact with the farm managers (well-educated entrepreneurs called 'new peasants') but not the peasant farm workers them-selves (the direct producers of their food), who are stereotyped typically as selfish and short-sighted, what prevents to 'empower' them or boost their social status. The same with farmers' markets: customers from every corner of the cities are usually white collar workers, mothers of young children, or elders with a delicate health who have strong demand for healthy food. Thus, the loyalty of these consumers is typically based on their trust in safety and quality, rather than in a deeper interest in connecting with producers. Meanwhile, even that among food activists there are attempts to politicize consumptions, they maintain a non-confronta-tional stance to avoid hurting consumer's susceptibility (their focus on consumerism, choice and convenience). After all, AFNs are evolving as a response to the emergence of an affluent new middle class and an increased demand for high quality and safe food (Shi et al. 2011). Even so, AFNs' operators do believe that the pursuit of these attributes by consumers can be used as a strategy for their gradual awareness and connection to broader social values. And despite this relatively pragmatic and instrumental nature, Schumilas (2015) argues that several characteristics clearly distinguish Chinese AFNs from mainstream economic relations, as the ways in which land and labor are treated as common pool resources, the focus on livelihoods, self-financing and decentring of surplus, and the prevalent discourse on the social economy.

And in Brazil, since the enactment of the law in 2003 and its regulation in 2007, which established certification systems, the organic market was stabilized, creating the conditions for commoditization, increased scale and demand growth. The growth of organic sales in large retail has given greater power of supermarkets to impose a set of requirements to producers: minimum scales of production, diversification of the basket of products, regularity of delivery, norms and quality standards. Most of the farmers able to meet these requirements are the large scale, specialized and capital intensive ones. This has generated a loss of the ori-ginal references of 'alternative agriculture' and the 'principles of agroecology', to the extent that this space becomes increasingly occupied by entrepreneurial producers and private certi-fying standards. However, Niederle and Almeida (2013) claim that this conventionalization trend did not result in homogenization but in diversification and segmentation of

marketing channels. Beyond creating distinction from the conventional, the seals also opened doors for producers to access new and diversified markets. The coexistence of organic and conventional farming practices within the same rural establishment, with the respective sales' channels for their products, is not uncommon. Or even more recurrent is a farmer to use more than one seal issued by different certification systems in the same product: a third party one to sell in super-markets and a participatory one to sell at fairs, institutional markets and specialty stores.

In this very regard, see some concrete examples of Ecovida Network (Radomsky et al. 2015). One concerns the emergence of a dilemma between the 'risk of decharacterization' and the preservation of an 'agroecological lifestyle'. The paradox is not whether or not to expand production and enter new markets, but how to do it maintaining the autonomy of farmers' groups and the network as a whole, in terms of decision-making and control. The question is not to fear larger sales and higher revenues per se, but how to deal with the risk of eroding the behaviors, values, and ethics that sustain the network. A good example is provided Econativa, a farmers' cooperative member of Ecovida (Conceição et al. 2015). They produce more than 70 products in natura and 45 processed goods, and sell it through four main market channels: 24% to a large supermarket chain; 23% to the school feeding program (PNAE); 23% to the food acquisition program (PAA); and 41% to farmers' markets and specialty stores. The supermarket chain proposed them an exclusivity contract to buy their whole produce. But they refused, for two reasons: the requirements of plastic packages, which many farmers do not agree, not only because the highest cost but also for environmental concerns; and for a clear decision to do not specialize in the supply of a few products to only one buyer, in detriment of a diversification strategy ('Don't put all the eggs in the same basket'). Similarly, Radomsky et al. (2015) also report the entry of 'family agroecological entrepreneurs' in Ecovida, primarily in search of the lower costs of participatory certification, with increased production scales, specialization, intensification and aggressive strategies for internet marketing to meet new markets. They catalyzed criticisms from many people and internal debates about the legiti-mate values and identities to be accepted and nestled in Ecovida Network. However, others recognized as a valuable contribution the fact they brought new skills and capacities to the network (information technologies, wider networking abilities, logistical innovations, etc.).

Yet, a brief note on the role of consumers in Ecovida Network. Radomsky (2013) points out that also in Brazil health and food safety are the main motivations of consumers of organic products, paying less concern for environmental and social justice issues. However, he also states that in Ecovida Network it is not any rare to find consumers who care about farmers' livelihoods, environmental sustainability and localization of food production. To a certain extent in the farmers' markets, but particularly in the context of collective purchase groups, where it happen regular meetings between producers and consumers for occasion of delivery of the food baskets, there is a strong discussion beyond food quality issues, regarding the power of consumption in changing behaviors and promoting political mobilization. Eco-vida's collective purchase groups do not have the aim of facilitating things, making it more convenient for consumers. Rather, they provide codes of conduct that aims to break with the 'producer = active/consumer = passive' logic, making it not only a space of search for healthy food, but also a space of social participation, identity construction and collective action.

Regarding this conventionalization debate, a general conclusion that can be drawn from the cases of China and Brazil is that, by different ways, today in both countries there are contradictions and disputes between the various actors on the framework of values that cha-racterize and differentiate the markets for organic and agroecological products. Theoretically, the basic and rather obvious question, but to some extent ignored by the literature on AFNs, which is often invested in an excessively normative view, is that AFNs experiences are not only about relations of production and consumption *per se*, but the interactions between both, which takes place in the realm of circulation. In other words, what is lacking in AFNs analysis is the clarification of a critical and undeniably contradictory feature of AFNs, i.e., they are markets. In this sense, the criticism of Goodmann et al. (2012) is quite correct when they claim against a trend of AFNs studies which, from certain social values and normative portrayals of the local as a place of conflict-free interactions, tends to idealize a 'politics of perfection'. Our case studies, howsoever, show that although imperfect the experiences at stake are politically

relevant. If properly capitalist relations of production are present in entrepreneurial large-scale farms, they could be – but not necessarily are – partially or even completely precluded in such experiences. And albeit organic and agroecological products take distinct meanings and the exchange relations they are object of represent focuses of production and sharing of know-ledge and practices, they do not cease of being commodities. However, through the valoriza-tion of environmental and social qualities of food besides individual and family health con-cerns, the politicization of consumption and the adherence of consumers to family farming's 'cause', it is possible to say that the construction of 'alternative' food markets is intrinsically based on a reversal of commodity fetishism, or a 'defetishization of food'. That is why change in the agrifood systems through the emergence of new economic social movements (Wilkin-son 2008) with bold initiatives undertaken into the contradictory realm of circulation and the construction of new nested markets (Ploeg et al. 2012) with distinct infrastructures and modes of governance, control and distribution can be understood as part of a countermovement.

#### 7 Concluding remarks

In this article we sought to interpret the meaning of some emerging experiences described in the international literature as 'alternative food networks' (farmers' markets, community supported agriculture and buying clubs), comparing the cases of China and Brazil. We investigated the social origins and institutional evolution of ecological agriculture and the markets for its products, the relations between food producers and consumers and of both with the certification systems, and the problems and challenges posed by a trend known as conventionalization of organics. In a quite sketched phrasing, one can say that in China it was basically a top-down process, with bureaucratic implementation, which began officially con-ventional and just recently started to alternativize from the bottom. While in Brazil it was essentially a bottom-up process, with popular profusion, which began from all alternative and more recently started to conventionalize. However, that is just a stylization of the facts as patterns to remark the specificities of each country. In reality things are much more complex and hard to fit in any simple model. Actually, beyond the specificities of each country, the most important thing, at least in theoretical terms, is the commonalities shared by both. In this sense, what the analysis exposed here shows is that in both countries these experiences the international literature describes as AFNs in fact constitute new marketplaces, constructed through organizational processes of local actors of civil society mobilized as social move-ments, which works based on a distinctively different set of social values, quality conventions and producer-consumer relations than that of the mainstream agrifood markets.

As already anticipated, building upon a previous work (Escher, Schneider, Ye 2015) we interpret this phenomenon documented in China and Brazil as part of a Polanyian (and Gramscian) countermovement in response to the negative consequences and contradictions of the globalization of developing countries' agrifood systems under the aegis of the current food regime. The operation of these new economic social movements-led new, nested markets is structurally different from the global markets controlled by agribusiness corporations, tra-ding companies, agro-industrial capital and specially supermarket chains. Confirming the ana-lysis offered by Hebinck, Ploeg and Schneider (2015) and Ploeg, Ye and Schneider (2012), in Brazil and China these initiatives were initiated from criticisms and contestations, shaped by local or territorial governance frameworks, and structured around locally available resources and cultural repertoires. However, as any sort of market, these new, nested markets, which are by definition special segments of wider markets, are often subjected to a contradictory dynamics, as exemplified by the conventionalization trend. Notwithstanding, these initiatives provide a countervailing power to the hegemonic institutions governing global markets. As argued in Escher, Schneider and Ye (2015), the hegemonic movement of food empires can be viewed as 'Gramsci's moment', while the counter-hegemonic movement of new, nested mar-kets can be viewed as 'Polanyi's moment', when the affected actors (particularly farmers and consumers) become aware of the negative consequences of the agrifood system's operation on livelihoods, health and the

environment, and opens up the possibility of identifying common interests and create new social commitments that, at the heart, politicize food markets.

Thus, the construction of these new, nested markets plays a crucial role in the rural development (RD) dynamics underway in Brazil and China since the mid-1990s (Escher, Schneider, Ye 2015). And RD – expressed through practices and policies – is an attempt to redress the contradictions of the conventional agrifood markets as an active response to it (Ploeg, Ye, Schneider 2012), such as the abusive use of agro-toxics in Brazil and the perva-sive food safety crisis in China. According to Hebinck, Ploeg and Schneider (2015: 5-6) 'at the conceptual level, [RD] can be viewed as a sociomaterial process of transition that invol-ves re-modelling distributive mechanisms (for products, services and added value) [and] leads to the re-shaping of agriculture, food production, rural livelihoods and the countryside.' The new markets we studied here are concrete examples of operation of these mechanisms. And they have some specific features regarding their nature, dynamics and governance patterns.

The main economic feature is that in general the prices taken by the farmers are higher and the prices paid by consumers are lower, because many, if not all, the intermediaries are eliminated. But the most distinctive feature is quality. Socially, through mutual learning, the consumer specify its expectations and the producer offers new possibilities, the consumer receives improved products and develops new tastes and the producer receives feedbacks and develops new skills. And symbolically, the consumer gets distinction from the producer's dedication in making a differentiated product and the producer is recognized as a talented one from the consumer's demonstration of appreciation and investment of time and attention. Another feature is the creation of different infrastructures for the distribution of products – a set of artifacts and rules used to channel the flows of goods and services between spaces and people. Through (often informal) participatory certification systems, marketing channels, transport and logistical devices, information systems, etc., nested markets provide 'shortcuts' that divert the 'obligatory passage point' of conventional markets and bridge their 'structural holes' by directly connecting otherwise separated actors and processes of production, process-ing, distribution and consumption, stabilizing the social relations in which these markets are embedded and reworking positions to challenge vested interests. And the last feature concerns the social struggles to withstand competitive pressures and institutionalize the nested markets. Relations, processes and routines of circulation have been actively reorganized within these new markets in order to improve the livelihoods of those who depend on it, because actors get aware of the unfairness and harmfulness of conventional standards. Combining resistance and construction, nested markets are a result of collective actions that take place according to a set of rules, shared practices and meanings and relationships of trust and reciprocity that regulate its operation, producing mutual benefits and avoiding opportunistic and predatory behavior. Thus, perhaps it can be said that nested markets are fundamentally defined by the collective actions of social actors (the new economic social movements) in establishing quality conventions distinctively different from those governing conventional markets. Moreover, these new quality conventions operate a true disruption of the commodity fetishism of food. That is, it is not because food is circulated through a nested market that it ceases of being a commodity, after all, it is still bought and sold. What happens is that the relationship between consumer and producer ceases to be a simple exchange of things (money commodity for food commo-dity) in an alienated relationship and becomes a producer of meaningful relationships.

Nevertheless, a lot of things remains unanswered and claim for further investigation. A research agenda on rural development through collective actions of new economic social movements in the construction of new nested markets as countermovements could focus on some issues. The first question that requires further study refers to a better understanding of the factors that can stimulate or hinder the emergence of these nested markets in each case. It is necessary to better understand the very nature of the process of embeddedness of these markets and analyze how they are formed and evolve. A second set of studies to be pursued in different contexts refers to the role of the state and public policies in the construction of these markets. In both Brazil and China are examples of how some public policies were important, but there are also examples of the limiting generated, as is the case of sanitary and logistical issues, which are crucial for access to broader marketing channels. Finally, the

issue of scaling out of these initiatives and the ability to extend its scope without falling into the conventionalization traps and the formation of niches for privileged producers and consumers. The point here is to better understand the complementarities between economies of scale and scope such that the nested markets are not only an alternative to few and can become resilient in face of the hostile environment represented by the competition with other enterprises.

#### References

- BLANC, J; KLEDAL, P.R. (2011). The Brazilian organic food sector: prospects and constraints of facilitating the inclusion of smallholders. Journal of Rural Studies, 30: 1-13.
- CARNEIRO, F.F.; AUGUSTO, L.G.S.; RIGOTTO, R.M.; FRIEDRICH, K.; BÚRIGO, A.C. (Org) (2015). Dossiê ABRASCO: um alerta sobre os impactos dos agrotóxicos na saúde. São Paulo, Rio de Janeiro: Expressão Popular.
- CASTRO, B.S. (2013). Civil society and social movements in the debate of genetically modified organisms (GMO) in Brazil. Revista del CESLA, 16: 243-260.
- CONCEIÇÃO, C.; FERMAM, R.K.S. (2011). Certificação e acreditação: política de fortalecimento da agricultura orgânica brasileira. Revista de Política Agrícola, 20(2): 66-79.
- GOODMAN, D.; DUPUIS, M.; GOODMAN, M. (2012). Alternative food networks: knowledge, practices, and politics. London, New York: Routledge.
- GUTHMAN J. (2004). The trouble with 'organic lite' in California: a rejoinder to the 'conventionalisation' debate. Sociologia Ruralis, 44: 301-316.
- HO, P.; VERMEER, E.B.; ZHAO, J.H. (2006). Biotechnology and food safety in China: consumers' acceptance or resistance? Development and Change, 37(1): 227–253.
- HOLT-GIMÉNEZ, E.; SHATTUCK, A. (2011). Food crisis, food regimes and food movements: rumblings of reforms or tides of transformation? Journal of Peasant Studies, 38 (1): 109-144.
- LANG, T; HEASMAN, M. (2006). Food Wars. The battle for minds, mouths and markets. London: Earthscan.
- NIEDERLE, Paulo A. (2014). Os agricultores ecologistas nos mercados para alimentos orgânicos: contramovimentos e novos circuitos de comércio. Sustentabilidade em Debate, Brasília, 5(3): 79-97.
- . (2014a). Políticas de valor nos mercados alimentares: movimentos sociais econômicos e a reconstrução das trajetórias sociais dos alimentos agroecológicos. Século XXI Revista de Ciências Sociais, 4(1): 162-189.
- NIEDERLE, P.A.; ALMEIDA, L. (2013). A nova arquitetura dos mercados para produtos orgânicos: o debate da convencionalização. In: NIEDERLE, P.A.; ALMEIDA, L.; VEZZANI, F.M. (Org.) Agroecologia: práticas, mercados e políticas para uma nova agricultura. Curitiba: Kairós.
- PASSOS, M.; TORRES, K. (2013). Certificação na prática: a Rede Ecovida e os desafios da implementação de sistemas participativos de garantia. In: NIEDERLE, P.A.; ALMEIDA, L.; VEZZANI, F.M. (Org.) Agroecologia: práticas, mercados e políticas para uma nova agricultura. Curitiba: Kairós.
- PAULL, J. (2008). The greening of China's food: green food, organic food, and eco-labelling. Sustainable Consumption and Alternative Agri-Food Systems Conference, Liege University, Arlon, Belgium, 2008, May 27-30.
- PELAEZ, V. (2009). O estado de exceção no marco regulatório dos organismos geneticamente modificados no Brasil. In: 46° Congresso da Sociedade Brasileira de Economia, Administração e Sociologia Rural, SOBER, Rio Branco, 26 a 30 de julho de 2009.
- PICOLOTTO, E.L.; BRANDEMBURG, A. (2013). Sindicalismo da agricultura familiar, modelos de desenvolvimento e tema ambiental. In: NIEDERLE, P.A.; ALMEIDA, L.; VEZZANI, F.M. (Org.) Agroecologia: práticas, mercados e políticas para uma nova agricultura. Curitiba: Kairós.
- PLOEG, J.D. van der. (2015). Newly emerging, nested markets: a theoretical introduction. In: HEBINK, P; PLOEG, J; SCHNEIDER, S. Rural development and the construction of new markets. London: Routledge.
- PLOEG, J.D. van der; YE, J.; SCHNEIDER, S. (2012). Rural development through the construction of new, nested, markets: comparative perspectives from China, Brazil and European Union. Journal of Peasant Studies, 39(1): 133-173.

- RADOMSKY, G. (2013). Certificações, sistemas participativos de garantia e agricultura ecológica: aspectos da relação entre agricultores e consumidores. In: NIEDERLE, P.A.; ALMEIDA, L.; VEZZANI, F.M. (Org.). Agroecologia: práticas, mercados e políticas para uma nova agricultura. Curitiba: Kairós.
- RADOMSKY, G.; NIEDERLE, P.; SCHNEIDER, S. (2015). Participatory systems of certification and alternative marketing networks: the case of the Ecovida Agroecology Network in South Brazil. In: HEBINK, P; PLOEG, J.D; SCHNEIDER, S. Rural development and the construction of new markets. London: Routledge.
- SAGE, C. (2013). The interconnected challenges for food security from a food regimes perspective: energy, climate and malconsumption. Journal of Rural Studies, 29: 71-80.
- SANDERS, R. (2006). A market road to sustainable agriculture? Ecological agriculture, green food and organic agriculture in China. Development and Change, 37(1): 201-226.
- SCHUMILAS, T. (2014). Alternative food networks with Chinese characteristics. Thesis (Doctorate in Geography), University of Waterloo, Ontario.
- SCOTT, S.; SI, Z.; SCHUMILAS, T.; CHEN, A. (2014). Contradictions in state-and civil society-driven developments in China's ecological agriculture sector. Food Policy, 45: 158–166.
- SHARMA, S.; ROU Z. (2014). China's dairy dilemma: the evolution and future trends of China's dairy industry. Washington: Institute for Agriculture and Trade Policy (IATP). (Global Meat Complex: The China Series).
- SHI, T. (2002). Ecological agriculture in China: bridging the gap between rhetoric and practice of sustainability. Ecological Economics, 42: 359-368.
- SHI, Y.; CHENG, C.; LEI, P.; WEN, T.; MARRIFIELD, C. (2011). Safe food, green food, good food: Chinese Community Supported Agriculture and the rising middle class. International Journal of Agricultural Sustainability, 9(4): 551-558.
- SI, Z. (2014). Alternative food networks and rural development initiatives in China: characterizations, contestations and interactions. Thesis (Doctorate in Geography), University of Waterloo, Ontario.
- SI, Z.; SCHUMILAS, T.; SCOTT, S. (2015). Characterizing alternative food networks in China. Agriculture and Human Values, 32: 299-313.
- SONNINO, R.; MARSDEN, T.K. (2006). Beyond the divide: rethinking relations between alternative and conventional food networks in Europe. Journal of Economic Geography, 6: 181-189.
- STEVENSON, G.W.; RUHF, K.; LEZBERG, S.; CLANCY, K. (2007). Warrior, builder and weaver work: strategies for changing the food system. In: HINRICHS, C.C.; LYSON, T.A. Remaking the North American food system: strategies for sustainability. Lincoln, London: University of Nebraska.
- TREGEAR, A. (2011). Progressing knowledge in alternative and local food networks: critical reflections and a research agenda. Journal of Rural Studies, 27(4): 419-430.
- WANG, Y.R.; SI, Z.; NG, C.N.; SCOTT, S. (2015). The transformation of trust in China's alternative food networks: disruption, reconstruction, and development. Ecology and Society, 20(2): 1-12. Altieri, Miguel A., and Clara I. Nicholls. 2008. "Scaling up Agroecological Approaches for Food Sovereignty in Latin America." *Development* 51 (4): 472–80.

Agro-extractivism inside and outside BRICS: agrarian change and development trajectories

The 4th International Conference of BICAS November 28-30, 2016 China Agricultural University, Beijing, China

## About the Author(s)

**Fabiano Escher** is an economist, Master and PhD in Rural Development by the Rural Development Post-Graduation Programme (PGDR) of the Federal University of Rio Grande do Sul (UFRGS). Contact: <a href="mailto:escher\_fab@hotmail.com">escher\_fab@hotmail.com</a>;

**Sergio Schneider** is a sociologist, PhD in Sociology and Professor in the Rural Development Post-Graduation Programme (PGDR) and the Sociology Post-Graduation Programme (PPGS) of the Federal University of Rio Grande do Sul (UFRGS). Contact: schneide@ufrgs.br.

