# Chapter 8
# Solidarity Economy in Brazil: Towards Institutionalization of Sharing and Agroecological Practices


**Kei Otsuki and Fabio de Castro**

**Abstract** Solidarity economy is often focused on autonomous initiatives outside the regular market system. In Brazil, the leftist national government during the 2000s has supported a number of solidarity economy initiatives by institutionalizing the ideal and practices of sharing and sustainable production and consumption within the regular market system. New actors, policies, and procedures have been instrumental in this institutionalization. However, the questions of how the actors, policies, and procedures interact and how the interaction becomes socially and politically relevant remain largely unaddressed. In this chapter we will explore implications of the interactions for the establishment of solidarity economy based on agroecological practices carried out by small family farmers in Brazil. We firstly give an overview of the national context in which the agroecological practices were linked to the practice and economy of sharing. We then analyze cases of the Program of Food Acquisition in the south of Brazil and agroforestry systems in the Amazon region in order to highlight different patterns of the involved actors' interaction and eventual articulation of solidarity economy in relation to the promotion of sustainability. The chapter concludes by discussing the linkage between actors at different levels, new institutional arrangements, and monetary and nonmonetary values added to the solidarity economy.

**Keywords** Agroecology · Redistribution · Sharing · Social movements · Solidarity economy · Brazil

K. Otsuki (✉)
Department of Human Geography and Spatial Planning, Faculty of Geosciences, Utrecht University, Utrecht, The Netherlands
e-mail: K.Otsuki@uu.nl

F. de Castro
Centre for Latin American Research and Documentation, Faculty of Humanities, University of Amsterdam, Amsterdam, The Netherlands
e-mail: f.decastro@cedla.nl



O. Saito (ed.), *Sharing Ecosystem Services*, Science for Sustainable Societies,
https://doi.org/10.1007/978-981-13-8067-9_8

## 8.1 Introduction

In the past decade, substantial debates emerged on the need to envision a new form of economy. This trend incorporates a vision of environmental sustainability and equitable social development or a vision "to build more resilient and sustainable society in harmony with nature" (Saito, this book). Although some approaches remain "green" or "social" variants of the mainstream economic model, others offer alternatives to the much critiqued neoliberal free-market economy, associated with aggravating environmental degradation and inequality (Allard et al. 2008). In particular, sharing and solidarity economy, underpinned by the redistributive ideal, is drawing an increasing academic as well as practical attention. As McLaren and Agyeman (2015: 4) shows, "humans are natural sharers," whereas this trait was rapidly forgotten "in the face of commercialization of the public realm" under neoliberalism and free marketization. The emerging focus on the economy of redistribution will shed light on implications of tacit and everyday practices of sharing and establishment of reciprocal social relationships for realizing more resilient and sustainable society.

In fact, such a focus on sharing has been central to many of our social science disciplines. For example, in the classic social anthropology by Mauss (1990 [1950]), it was established that any society is a form of exchange, based on civic and institutionalized acts of gifting and "the obligation to return it." Graeber (2001, 2007) revisits Mauss' theoretical considerations regarding solidarity as a basis of our societies that generate redistribution effects (see also Titmuss 1970). In short, the current efforts to recover the human basic actions of everyday sharing and gifting as an academic subject indicate a recognition that we need to explore further the nature and extent of the emerging new economy, which does not rely on the dominant free market model (McLaren and Agyeman 2015).

In this context, solidarity economy emerged as a pragmatic way to reshape the conventional free market model and establish a new economy of sharing and redistribution. Such a new economy entails:

> […] new forms of value, new kinds of equivalence, new practices of calculation, new relations between human agency and the nonhuman, and new distinctions between what was real and the forms of its representation. (Mitchell 2002: 5 quoted in Otsuki 2014)

This means that the solidarity economy is not only about a cultural shift in how to value labor and products but, more fundamentally, about a political action against dehumanization of the conventional economic model. Through the solidarity economic model, citizens challenge the ultimate liberal form of exchange – price-oriented market – to justify the practice of sharing and shape a collective experience of coproducing both monetary and nonmonetary values and exchange relations.

In this collective experience of solidarity economy, the natural and social capitals become central. Sustainable production and consumption are important aspects of the new system that valorizes the natural and social sustainability. However, little has been understood about how the new forms of economic relations can be politicized and then institutionalized. In other words, we still know little about processes

by which everyday sharing practices add value to nonmonetary processes of redistribution, sustainable production, and consumption.

In this chapter, we argue that exploring the possibilities for the establishment of solidarity economy requires a close examination of relationships between various actors who collectively shape the new sustainable economy in solidarity – including governments at different levels, private businesses, citizens, and most importantly those who have been relegated into vulnerable positions in the course of economic development (Otsuki and van Helvoirt 2017). As elaborated by Karl Polanyi (2001 [1944]), emerging hybrid forms of institutional designs challenge the clear-cut division between capital accumulation by market, redistribution by the state, and reciprocity through social relations. How do the interactions between different actors take place to establish institutional arrangements for the new economy of redistribution that develops in harmony with nature? How, in turn, does this economy, supported by nonmonetary values with redistribution and sustainability effects, further become sociopolitically relevant?

We explore these questions by investigating solidarity economy experiences of Brazil based on agroecological practices. While solidarity economy is often focused on autonomous initiatives outside the regular free market system, in Brazil, a number of solidarity economy initiatives have been developed within or at least in relation to the regular market system, with an intervention by the leftist national government during the 2000s. During this period, new actors, policies, and procedures intermediated redistribution markets in order to institutionalize grassroots initiatives of cooperative production and sustainable consumption (Castro 2014). We aim to analyze these initiatives experienced by small-scale rural producers in both the south and north of Brazil. The experiences show opportunities and challenges that solidarity economy faces in the context of mainstreaming sustainable production and consumption underpinned by the practices of sharing.

In what follows, we firstly give an overview of the national context in which the intermediated institutionalization of solidarity economy has taken place, influenced by politicization of agriculture and demands for supporting small-scale family farmers and their agroecological practices. We then show two specific case studies: one on the Program of Food Acquisition practiced in the south of Brazil and the other on agroforestry systems in the Amazon region. Given that the debates on the new economy tend to center on initiatives emerging in cities of the Global North, we aim to look into the experiences of solidarity economy institutionalized in rural contexts and in the Global South and to highlight its relationship with the natural environment and the effects of political action. The case studies will be followed by a discussion on how the mechanism of institutionalizing solidarity economy could work in different social, political economic, and ecological contexts. We will conclude by exploring the linkages between actors at different levels, new institutional arrangements, and monetary and nonmonetary values added to the solidarity economy. We argue that establishing such linkages is essential towards making the new sustainable economy of sharing relevant in the Global South.

## 8.2 Solidarity Economy in Brazil: The National Context

Brazil is a country of contrast. This highly urbanized country, with over 85% of the population living in cities, heavily relies on the rural space for development of its national economy. Since its independence in the nineteenth century, the country has been integrated into global economy through extractivism and large-scale agribusinesses based on monocrop plantations of coffee, sugarcane and, more recently, soya. In recent years, Brazil has risen to reposition itself as an important emerging economy, mainly driven by the commodity boom in the last decade.

Brazil's current position as one of the largest world economies, however, contrasts with the persisting and acute social and economic inequality. Despite some relevant industrial development over the last half century, the commodity frontier expansion of the last decade has deepened inequality and induced deforestation and marginalization of small-scale farming in the country. The Gini coefficiency regarding the national income distribution over 0.5 contrasts with the Gini coefficient of rural land distribution over 0.8 due to land property concentration that has existed since the colonial period. For example, the soybean cultivation has become one of the main drivers of land concentration and deforestation in the Brazilian savanna.

Active contestations against this process are well known in Brazil. The peasant movements, which have been expanding since the mid-1940s to claim agrarian reform (e.g., land security, rural employment, and family farming), have been largely successful, not only in promoting land redistribution through occupations and development of agroecology among family farmers but also in influencing national politics (Welch 2009; Carter 2015). Together with other social movements, peasant movements backed the then labor union leader Luiz Inácio Lula da Silva (Lula) of the Workers' Party, in his successful presidential campaign in 2003. His predecessor Fernando Henrique Cardoso, a social democrat, had initiated social reforms in combination with neoliberal free marketization of commodities in the late 1990s, and Lula further advanced this redistributive neoliberal agenda. He did so by creating a series of institutional instruments to promote social development while economically engaging in the commodity export.

For example, Lula's government created the Ministry of Social Development by which one of the world's largest conditional cash transfer programs called Bolsa Familia was developed as a part of the Zero Hunger project (Hall 2006). This Ministry further expanded the budget scale of the government (up to 15% of the GDP) to enrich school food programs and other food security and nutrition-related programs (Otsuki 2011). The budget was allocated from the agribusinesses and the so-called neo-extractivist activities, developed based on foreign direct investments in large-scale mining and oil extraction projects (Acosta 2013; Burchardt and Dietz 2014). Finally, the National Secretary of Solidary Economy (SENES) was created in 2003 under the Ministry of Labor. Under the coordination of the academic-activist in cooperativism, Paul Singer, SENES developed a large network of initiatives to support local entrepreneurship with principles of solidarity economy with

support of the Brazilian Development Bank (BNDES). In creating the space for solidarity economy in the national government, Singer developed important linkages between politicians, researchers, and activists. He became a leading author on solidarity economy in the academic circle (e.g., Singer 2002) while playing a key role in turning the field into policy and practice (Lechat 2004).

In short, Brazil has officially developed contrasting agendas: on the one hand, it continued to engage in an active promotion of the commodity export driven by globalized economy; on the other, it advanced the socialist reform focusing on poverty alleviation and addressed inequality and needs for solidarity. At the earlier stage of Lula's presidency, these agendas made the international community hail Brazil as an embodiment of a new model of development (The Economist 2009). With the current economic downturn and the political turmoil, this model's relevance is being reexamined. Nevertheless, so far, the country has shown various possibilities to institutionalize new economy of redistribution while conventionally promoting the neoliberal economic policies. Solidarity economy emerged as one of such possibilities of institutionalization in the activism-based social-economic policy-making.

### *8.2.1 The Emergence of Solidarity Economy in Harmony with Nature*

Originally, solidarity economy in Brazil was developed as a label of economic activities that citizens initiated autonomously in order to cope with unemployment under the neoliberal economic policies of the 1990s (Lamaitre and Helmsing 2012). Out of necessity, those unemployed citizens established self-employed small-scale enterprises and cooperatives for their survival, leading to a creation of the new economy, based on various collective arrangements of exchange. This trend officially became the solidarity economy network in 1997,[1] which aimed to bridge different societal actors and sectors and to shape a movement underpinned by political activism, practice, and research (Solidarity Economy Association 2018). After the leftist government took power in the beginning of the 2000s, many cooperatives and enterprises were institutionalized under the Brazilian Forum of Solidarity Economy (FBES), which formed the so-called solidarity economy movement. The FBES became a key collaborator of the World Social Forum that started its annual meeting in 2001 (Bowman and Stone n.d.; Fisher and Ponniah 2015). Various grassroots initiatives of small-scale production and community banking, including those whom municipal governments officially supported, emerged to advance their cooperative activities in the framework of FBES.

One of the founding members of FBES was the Landless Rural Workers' Movement, known as MST (FBES 2018). The MST is often regarded as one of the largest and, though arguably, the most successful peasant movements in the world

[1] https://www.solidarityeconomy.coop/wp-content/uploads/2017/08/declaration_lima_eng.pdf

(Hammond 1999). Emerged in the late 1970s, the movement has constituted a forefront of the Brazilian social movements, demanding agrarian reform to address social and economic inequality in rural areas (Carter 2015). Their involvement in FBES symbolizes that solidarity economy in Brazil is also a part of the political agenda for addressing rural poverty and the needs for land property redistribution.

At the same time, it also reminds us that traditional practices of building solidarity and sharing have taken place mainly in rural communities. In rural Brazil, practices of solidarity can be observed in forms of alternative education, pastoral intervention by the Catholic Church, and cooperativism, and they are concerned with ecological sustainability (Freire 2003 [1930]). In other words, solidarity economy in the Brazilian rural sphere has a clear connotation that it develops in harmony with nature. In this sense, it has been developed not only as the survival strategy for the poor to engage in alternative economic activities but also as a strategy for them to strengthen their identity and acquire and maintain the right to sustainably control the means of production and consumption.

In short, solidarity economy in Brazil is a part of recovering and recognizing the importance of everyday practices of sharing among small rural producers and consumers. We can find one of the practices leading to the solidarity economy in the theory and practice of agroecology.

## 8.3 Agroecology and Sharing Practices

Agroecology has its roots in various, traditional social movements, such as liberation theology movements of the Catholic Church in the 1960s–1970s and the peasant movements (including MST). These movements proposed agroecology as an alternative to transform agricultural development models from the large-scale agribusinesses to models that build on sustainable agriculture at a smaller, family-based scale (Caporal and Costabeber 2004; Altieri and Nicholls 2005). During the 1990s, when environmental concerns became widespread due to the high rate of deforestation in the Amazon region in Brazil, scholars started to recognize indigenous practices of agroforestry – plantations of various perennial fruit trees mixed with annual subsistence crops – as a valuable method of agroecology (Smith et al. 1998). Facing the widespread agribusiness development, the social movements and supporting researchers promoted agroecology as an alternative agenda for the agribusiness and mono-cropping (Altieri and Rosset 1996).

In principle, agroecology emphasizes the importance of mix-cropping in order to diversify sources of food, nutrition, and cash income for smallholders. The diversification enables smallholders to maintain their control over the production by reducing dependency on one crop as the source of income and make the small-scale agriculture socially and ecologically sustainable. The focus on maintaining control and conducting sustainable agriculture in the face of agribusiness expansion coincided with the emerging scholarly and political agenda to establish a concept and

method of food sovereignty worldwide in the late 1990s (Wittman 2009; Rosset and Martinez-Torres 2012).

While the conventional agriculture focuses on the quantity of food production to achieve food security, agroecology emphasizes that the quality of food production (and consumption at the farm level) is necessary to achieve food sovereignty. And, the scholars and activists are beginning to understand that the achievement of food sovereignty involves careful observations of farmers' everyday practices of sharing. For example, agroecological farmers usually opt to produce own seeds instead of purchasing from seed companies. The production of seeds involves exchange of seed varieties and farming practices and local ecological knowledge. They also coproduce farming services and share equipment in cooperative manners. In addition, the agroecological farmers are more reflexive on their own engagement with the natural environment and politics (Botelho et al. 2016). In other words, ensuring of sovereignty through agroecological practices has been involving exchange and sharing, leading to the ideal of solidarity economy.

At the same time, the peasant movements involved in FBES claim that consolidation of such a reciprocal agroecology as a part of solidarity economy requires basic institutional conditions to secure sustainability of production and consumption. One well-known condition for the institutionalization is collaboration between scientists and producers to evaluate sustainability of the production and ecosystems in which the production activities are embedded (Wezel et al. 2011; Petersen et al. 2013). The collaboration is also necessary for the agroecological farmers to access technical assistance, to improve soil fertility, and to enhance land productivity without relying on expensive chemical inputs. Such collaborations are known to entail political partnerships between farmers, governmental extension agencies, and non-governmental service providers (Botelho et al. 2016).

Yet, institutional conditions for opening the market for agroecological produce remain a less explored domain. As the conventional economy of scale and the logic of quantity do not apply to agroecology, such a new market involves an intermediated mechanism of redistribution and the establishment of new values and the reframed "practices of calculation" (Mitchell 2002: 5 quoted in Otsuki 2014). The creation of such a market entails planned intervention outside the operation of free market, and this involves different actors other than usual businesses and producer organizations, most notably, the governments at various levels that can shape policies for "procurement interventions" (World Food Program 2008). With a more progressive government in power, Brazil experimented such procurement interventions and created a market based on deliberate institutionalization of agroecological practices.

In what follows, we illustrate how the procurement interventions and the creation of new markets of agroecological produce can actually work, using two case studies. The first case builds on a review of the governmental program called the Program of Food Acquisition, known as PAA.

## 8.4 The Program of Food Acquisition (PAA)

The PAA is a Brazil's national governmental program that procures food for public institutions such as public schools and hospitals. The food procurement by the government involves a mechanism of tendering to which food producers should be able to freely apply by offering potential prices. Usually, governments choose to follow the free market logic in order to justify the so-called most economically advantageous tender, which tends to only benefit large-scale or industrial producers (Morgan and Sonnino 2007). However, in order to pursue the new economy of redistribution while guaranteeing reasonable prices, another logic to ensure the quality and affordability of redistribution must be in place. In practice, this means that small-scale food producers should be able to participate and compete in the tendering process on the basis of providing sufficient good quality food by conducting sustainable agriculture.

Therefore, food procurement in the context of promoting smallholder participation requires an enabling environment. According to the United Nations' World Food Program (2008), the enabling environment can be established through at least four dimensions of procurement interventions: (1) the creation of a market for small-scale producers, (2) the contribution to changing market structures so that a larger proportion of the market price goes to local producers, (3) the creation of a stronger role for local farmers in the supply chain through reducing the relevance of intermediaries in the purchasing process, and (4) ensuring that small producers produce a sufficient supply of good quality products to enable them to respond to market demand (Otsuki 2011: 215). The PAA was initiated in 2003 in order to promote these four dimensions in Brazil.

More specifically, the PAA emerged as a method of "direct purchase" (*compra direta*) of produce from beneficiaries of agrarian reform settlement projects. The beneficiaries who have acquired land through peasant movements or negotiations with the government are first required to organize themselves, using existing organizations or creating a new producers' association or a cooperative. They can then ask government rural extension services to assist with their application for the family agriculture credit program. While it is rare that the extension services directly instruct agroecological practices in settlement projects, farmers can use their own association or the cooperative to diversify their production in collaboration with the extension workers or researchers and practitioners from other supportive civil society, nongovernmental, or scientific organizations.

After the new sustainable agriculture is supported, the National Corporation of Provision of the Ministry of Agriculture, Livestock and Provision (CONAB) intermediates the tender published by the municipal or sometimes the state government. The government must use a certain percentage of their budget to procure local produce directly from family-based farmers. According to the 2009 law, the percentage

was set to minimum 30% (Law 11.947, 16/6/2009).[2] The procured local produce – e.g., vegetables, fruits – is then distributed among the municipal's schools and other institutions that require public food provision.

While every municipality has a different degree of engagement with PAA, the mechanism at least allows governments to open a market for small-scale producers to commercialize their produce while accessing the necessary assistance. The program also generates a broad sense of solidarity because the government is supportive of local food production and distribution and uses the produce for enriching public food provision in schools and hospitals.

### *8.4.1 The Campinas Experience*

Among all, more than 5500 municipalities in Brazil, the municipality of Campinas in the state of São Paulo has been known for its active engagement with PAA since the program's inception. The municipality's Supply Center and Assistance Services (CEASA) is the institution that makes this engagement possible. In every major city of Brazil, CEASA operates as the principal wholesaler of food. The CEASA-Campinas is one of the largest in Brazil, with 1600 registered both large and small wholesalers and producers. Using the produce directly purchased from small farmers through CONAB, they execute the public school food program for all the 560 public schools within the entire municipality. In addition, they host the Food Bank based on donations from food industries and produce from local producers so that the beneficiaries of social program such as Bolsa Familia can receive basic food baskets each month.

In developing menus for schools, CEASA employs nutritionists who closely collaborate with the municipal's School Feeding Committee consisting of a government representative and teacher and parent representatives. These institutions further provide a mechanism to ensure the quality of food provided for the school children.

The experience of Campinas shows that the interactions between the municipal wholesalers CEASA, the municipal's school committee that include representatives of consumers, and the national program such as PAA establish an institutional arrangement that opens up the redistribution market. Such a market does not freely develop but needs to be institutionalized with procurement interventions. And, such a market is only possible as long as public services remain in the public domain: therefore the redistribution does not work in the private sphere such as private schools.

[2] Japan is another country that has the similar percentage of procurement of locally produced food to be used for school meals.

### *8.4.2 The Challenge*

During the 2010s, the PAA model was exported to African countries at pilot scales (World Food Programme 2015). This pilot experience has so far highlighted logistical challenges surrounding tendering and the necessity of cooperative institutions for small farmers to effectively become a part of the new institutional arrangement. This shows that the model cannot be easily transferred to another social and political context or the context in which the *public* has not been developed in the same way as it has been in Brazil. Because of the history of social movements, demands for redistributive politics and existing institutional setup, the PAA has worked in Brazil. This does not readily happen in another context. Moreover, as one CEASA official has said, "school food is not an expense but an investment" which should give the country sufficient returns in the future (Otsuki 2011: 221). It is important to have the awareness that the PAA model represents such a wider moral economy perspective.

The PAA example suggests that institutionalization of solidarity economy at the national scale could be possible when governments intervene and collaborate with various actors in creating new markets for those who cannot easily participate in the price-oriented economy of quantity. In particular, when the government at municipal level is in line with the national policies, the implementation process may be highly effective as shown in the case of Campinas. But how this possibility is sustained goes back to the point of whether it has a grassroots support, stemming from existing practices of production and appreciation of sharing.

## 8.5 The Amazon Agroforestry

The northern part of Brazil is covered with the world's largest remaining rainforest – the Amazon. Here, agroforestry systems have a particularly relevant position for our thinking about agroecological practices and the institutionalization of the solidarity economy that also contributes to sustainability. Agroforestry is a particular agroecological practice that deliberately uses woody perennials in a productive system. Built on socioeconomic and ecological pillars of sustainability, agroforestry systems are defined as:

> …dynamic, ecologically based, natural resource management system that, through the integration of trees in farm- and rangeland, diversifies and sustains smallholder production for increased social, economic and environmental benefits. (Leakey 1996)

Due to their creativity and experimental approach to develop tree cultivation techniques and crop systems, Brondizio and Siqueira (1997) conceptualize agroforestry producers as "forest farmers." The authors argue that such a definition is fundamental to emphasize agency in knowledge production for sustainable and efficient production system.

In the Amazon, agroforestry has been common practice since pre-Colombian times (Clement 1999) and comprises a large range of crop systems, from management of single forest species such as acai palm (Brondizio 2008) to indigenous game refuges such as apetês (Posey 1985). Knowledge around new species varieties, multi-crop consortia, and management practices have been built through sharing mechanisms embedded in cultural norms and social practices such as gifts, intermarriage, and migration, among others. In the last decades, however, agroforestry has become more visible among researchers, policy makers, practitioners, and companies as a way to address biodiversity, rural poverty, and exclusion issues. In the context of reforestation and forest conservation, agroforestry has become a key added value to sustainability at local and global levels.

### *8.5.1 Institutionalizing Agroforestry Systems in the Amazon*

In their overview on agroforestry development in the Amazon, Porro et al. (2012) describe the institutionalization of agroforestry in policies and practices developed over the last decade. In addition to the PAA program and special credit line in the national program for family farmers, governmental support to the development of agroforestry systems in the Amazon has been mainly channeled through the National Agrarian Research Agency (Embrapa) and the Commission for the Planning of Cocoa Farming (CEPLAC). Both agencies have been instrumental in promoting research, rural extension service, and network building. In particular, the creation of the Brazilian Association of Agroforestry in 2000 and biannual national conferences became central in knowledge co-production. This network has led to research outcomes across disciplines addressing both pillars of agroforestry systems – ecological (biodiversity, carbon stock, soil) and socioeconomic (food production and commercialization) in the region.

However, despite optimisms towards the potential of agroforestry to replace unsustainable land use practices in the Amazon (Trembley et al. 2015), economic and political factors limit the development of agroforestry systems to become a more subsistence supporting economic component in farmers' economy (Porro et al. 2012). For example, due to poor infrastructure and logistics, the technical assistance needed for the full implementation of procurement interventions such as PAA hardly benefits remote and small farmer communities in the Amazon. In this context, a remarkably successful case of commodity agroforestry system developed by descendent Japanese farmers in the Eastern Amazon (Yamada 1999) deserves special attention.

### *8.5.2 The Tomé-Açu Experience*

The Agroforestry System of Tomé-Açu (SAFTA)[3] emerged as a solution to a farming crisis in the municipality of Tomé-Açu in the Eastern Amazon. Grounded in strong entrepreneurial logics, Japanese migrant farmers arrived in the region in the 1920s and engaged in a successful commodity and mono-copping production system – black pepper – in the 1950s. They were forced to design a more resilient farming system after their crops were devastated by a pest outbreak in the 1970s. Built on knowledge from traditional populations, the migrant farmers developed a commercial agroforestry system locally referred to as SAFTA. This system is based on a set of species combining tropical fruit, oil seeds, and timber that are commercialized in national and international markets such as in the USA and Japan (Figs. 8.1 and 8.2). This process has been an outcome of building and sharing knowledge among farmers, researchers, and practitioners in which a local cooperative played a key institutional role.

Founded in 1949 by the Japanese migrant farmers, the Multi-Purpose Cooperative of Tomé-Açu (CAMTA) became the connecting space for sharing knowledge and experiences among farmers and external actors. Since the 1990s, the CAMTA, rooted in strong commitment and collaborative behavior among their members, has been cooperating with researchers, governmental agencies, companies, and practitioners in order to develop further their production system, product processing, and commercialization. The SAFTA has become a driver of reforestation in the region

**Fig. 8.1** Agroforestry system based on black pepper (*Piper nigrum*), banana (*Musa* sp.), and cupuaçu (*Theobroma grandiflorum*) in Tomé-Açu, Brazil – date August 2018 by Fabio de Castro

[3] From the Portuguese: Sistema Agroflorestal de Tomé-Açu.

**Fig. 8.2** Agroforestry system based on black pepper (*Piper nigrum*) and acai (*Euterpe oleracea*) in Tomé-Açu, Brazil – date August 2018 by Fabio de Castro

(Batistella et al. 2013) and awarded by several prestigious national and international organizations, and their product holds eight different certification systems.

The sustainable production image built by CAMTA has opened opportunities to new markets (e.g., sustainable consumers in the Global North), new partners interested in sustainable production (e.g., the cosmetic company Natura), and new financing sources from international NGOs and bank credit. However, the most remarkable role of CAMTA has been dissemination of their SAFTA techniques to local peasants through a number of initiatives. Since 2010, they organize an annual seminar on SAFTA mostly targeted to family farmers in the region to be informed about agroforestry systems and exchange knowledge with their peers. In addition, under their "Family Farmer Support Program," they carry out regular training programs in peasant communities where farmers are interested in building their own agroforestry systems. The CAMTA has its own technical assistants who provide the farmers with information on principles and management practices developed by the SAFTA producers. The agroforestry system is then co-designed with each farmer according to their particular context (e.g., land, labor force, knowledge, and preferences). Currently, several communities are part of this program financed by NGOs, governmental agencies, and private companies.

Finally, smallholders adopting SAFTA in their production system are invited to become suppliers of the CAMTA's fruit processing plant under particular quality requirements. This way, local producers do not only benefit from the agroforestry knowledge on products of high commercial value in the conventional market shared by the SAFTA producers but also from accesses to a new and valuable market through the partnership with CAMTA. As one of the major SAFTA producers has said: "we are giving the local knowledge we used to develop our SAFTA back to the

local farmers from whom we've learned about agroforestry practices." This is the essence of the gift economy (Mauss 1990 [1950]) which seems to be remarkably relevant in the context of promoting sustainable agriculture based on the mechanism of solidarity in the Amazon.

## 8.6 Discussion

The two cases described in this chapter – PAA in Campinas and SAFTA in Tomé-Açu – show how the ideal of sharing and solidarity shaped a new economy as an alternative to but in relation to the conventional free market economy. In both cases, supportive policies, academic knowledge, and extension programs have been vital in the institutionalization of solidarity economy based on family and small farmers' agroecological practices and everyday sharing. They both combine science, traditional knowledge, and a variety of social and political movements that link sites of production and consumption and rural and urban spaces.

At the same time, what actor and what institutional mechanism that become central in advancing the experience may vary (Table 8.1). In the case of PAA in Campinas, the municipality's wholesale market and school meal committees act as points of redistribution of actual produce and knowledge of setting up an institution for sharing. In the case of the Japanese-migrants' cooperative in Tomé-Açu, the Japanese farmer cooperative is central to connect business partners and supportive governmental as well as nongovernmental organizations.

The involved actors are strongly committed with creating nonmonetary value of social and environmental sustainability through the involvement of smallholders and use of agroecological products. They have also facilitated diffusion of knowledge as they actively share their practices with other municipalities (in the case of PAA) or with farmers who are not necessarily the members of the cooperative (in the case of SAFTA). By the same token, outcomes of these two cases converge to generate both market and nonmarket values. In addition to the opening of new opportunities to access food market and generate income, the cases examined above created paths for recognizing often overlooked aspects of production autonomy, collective work, knowledge co-production, and forest conservation.

At this point, we come back to explore answers to our initial questions: How do the interactions between different actors take place to establish institutional arrangements for the new economy of redistribution that develops in harmony with nature? How, in turn, does this economy, based on nonmonetary values with redistribution and sustainability effects, further become sociopolitically relevant?

First of all, in answering the first question, we recognize that small producers themselves need to internalize the needs to learn from each other and to exchange knowledge, and supportive organizations such as the government agencies and NGOs as well as partnering businesses must appreciate such a process of reflexive learning and actual, often experimental, production. Then, as the case of agroforestry has shown, the existing social capital (such as the cooperative) and favorable

**Table 8.1** Actors and institutionalization of sharing economy in agroecology practices in Brazil

| | PAA (public food procurement) | SAFTA (agroforestry development) |
|---|---|---|
| Actors | Farmer (smallholder) | Farmer (migrant middle-scale farmer and smallholder) |
| | National government | National government |
| | Local (municipal) government | Business partner |
| | Consumer (teacher, parent, children) | NGO |
| | Nutritionist/researcher | Consumer |
| | | Researcher |
| Institutionalization | Farmer organization (agrarian reform participation) | Cooperative |
| | Agrarian reform program | Embrapa – Agrarian research on agroforestry |
| | Rural extension | Ceplac – the Commission for the planning of farming |
| | Direct purchasing program | Sustainable and responsible business programs |
| | Wholesaler – food (re)distribution program | Credit lines |
| | School feeding committee | Support family farmer agroforestry program |
| | Participation in the school feeding committee | Sustainable consumption in the Global North |
| Added value | Market access | Market access |
| | Income generation | Income generation |
| | Sustainable production | Sustainable production, reforestation |
| | Food sovereignty | Food sovereignty |
| | Collective action/associativism | Knowledge co-production |

ecological conditions facilitate collective action and co-production of sustainable production systems. The case of PAA has revealed that such collective action and co-production can be further integrated into national public service provisions through political engagement. In order to further sustain this local-national institutionalization, global consumer demands for sustainable products or international actors' interests in poverty alleviation become essential. The institutionalization at these different levels could keep the ideal of making small-scale agricultural production develop in harmony with nature. The interactions between these various actors across nations also make the institutional arrangement flexible, experimental, and adaptive to political economic and ecological changes and thus potentially more resilient (e.g., Peat et al. 2017).

However, at the same time, as Davies and Spicer (2014) discuss, involvement of various actors in shaping up solidarity also creates a ground for conflicts when the logistics do not work as planned or knowledge sharing is not done sufficiently or in transparent manners. This is why social movements and mobilization of people and public opinions continue to be important in order to monitor whether solidarity

economy is indeed beneficial to those who are involved. At the same time, successful experiences cannot be replicated without taking the multilevel context into account. As the PAA case in Africa has shown, the existence of and articulation between social and natural capitals must be taken into account as much as infrastructure and logistics in order to facilitate knowledge sharing and actual procurement interventions.

This leads to the second question about the social and political relevance of the solidarity economy based on agroecological practices. Once a new economy of redistribution is established, in which poverty, inequality, injustices, and exclusion are key elements to be addressed, traditional practices of sharing seeds, agricultural knowledge, plantation techniques, and materials become more visible and valued in nonmonetary terms. The visibility of agroecological practices as a sharing mechanism justifies the linkage between redistribution of nationally and globally accumulated capital and sustainability concerns. In this sense, in solidarity economy, sharing has a moral dimension which cannot be measured only in financial terms but can be accepted as a new nonmonetary value for societal and sustainable development. Combined with the mounting sustainability concerns, if we continue to prove the relevance of sustainable agriculture for solidarity economy and recognition of sharing, we will be able to make the solidarity economy socially and politically relevant.

By the same token, when interventions change priorities, the moral dimension might be exposed to cynicism. Currently, Brazil is politically going through a major backlash against the social democratic agenda of redistribution, as the new government regained political support from those who advocate more neoliberal and developmentalist agenda of accumulation. This is leading to a weakening of political support for peasant and other social movements (e.g., Motta 2017). Internationally, neoliberal forces remain strongly articulating the logic of free market, and the redistribution markets intermediated by state institutions or cooperative structures are continually exposed to the risk of budget cuts and being overridden by big businesses. Yet, experiences of sharing and its institutionalization as solidarity economy at least remain, offering possibilities for new forms of mobilization, reflections, learning, and valuation of everyday practices of sustainable production and consumption. As both solidarity economy and agroecology have gradually turned into a transversal political principle across a range of social movements in Brazil, it is possible that this perspective will play a major role in the fight against the new conservative turn.

## 8.7 Conclusions

This chapter has discussed the nature and extent of institutionalizing agroecological and sharing practices by drawing on the example of solidarity economy developed in Brazil. In contrast with the Northern experience of sharing economy, which has been promoted as a smart technological innovation or a new corporate and

consumer model mainly targeting urban middle class (as described in the introductory chapter of this book), the Brazilian experience first and foremost shows an importance of redistributive dimension of sharing in the context of historically evolved acute social inequality, poverty, and exclusion.

In particular, the chapter has made two main contributions. Firstly, the chapter has shown relevance of considering agroecological practices, promoted by social and peasant movements, in discussing the new economy of redistribution. The solidarity economy based on agroecology highlights that the sharing is embedded in the everyday context of sustainable food production, procurement, commercialization, and consumption and the new economy needs to build on an appreciation of knowledge that emanates from such practices.

Secondly, the chapter has discussed often overlooked issues related to institutional arrangement and transformative power of solidarity economy at a societal level. More than an "outside of the market and government" autonomous experience, the two cases of agroecology-based solidarity economy in Brazil have illustrated the close connections between governmental policies, existing market mechanisms, and a wide range of organizational and individual actors. The actors in these cases are not necessarily trying to focus on alternative markets as seen in the Global North context. Rather, they try to engage in the regular market while changing the rules of the game, involving policy interventions and cooperatives. In this respect, solidarity economy is not only an economic model but a political statement for the needs of socially inclusive and environmentally sustainable market development.

Therefore, in addition to the emphasis on citizen-driven economy, solidarity economy in Brazil and in the Global South more broadly claims for the national government to take its redistribution role to the market level. This process leads to a hybrid institutional arrangement combining market-based principles, policy-oriented supports, and socially reciprocal relations. To make the engagement sustainable, social struggles and political mobilization must be supported. The PAA is an example of how claims from social movements can be institutionalized through a very concrete policy mechanism to promote the nonmonetary value of sharing and collective action. The agroforestry systems indicate an example of how an institution of a strong cooperative can diffuse its experience in reciprocal manners.

In conclusion, solidarity economy in the Global South must be analyzed in the context of inequality, political volatility, and poverty on one side and rich resources, social capital, and agency on the other. Apolitical sharing experiences may, in fact, deepen inequalities in the Global South if the access to means of production, infrastructure, and market remains in the hands of elite groups. Moreover, we need to explore how consumers in the Global North can become in solidarity in the southern, small-scale producers who daily struggle for their land and commercialization opportunities. Therefore, the institutional support to solidarity economy, involving various actors at different levels, has a particular relevance in highly unequal societies for imagining our future resilient and sustainable society that develops in harmony with nature. Its power of mobilizing a wide range of actors and creating nonmonetary values itself becomes an important capital for promoting farming in

ecosystems whose sustainability is continually threatened. Observing experiences in Brazil, we further need to think about how to sustain the necessary interventions and infrastructure in order to institutionalize the ongoing and mundane sharing practices.

## References

Acosta A (2013) Extractivism and neoextractivism; two sides of the same curse. In: Lang M, Mokrani D (eds) Beyond development: alternative visions from Latin America. Transnational Institute/Rosa Luxemburg Foundation, Amsterdam

Allard J, Davidson C, Matthaei J e (2008) Solidarity economy: building alternatives for people and planet. ChangeMaker Publications, Chicago

Altieri MA, Nicholls CI (2005) Agroecology and the search for a truly sustainable agriculture. Available from: http://www.agroeco.org/doc/agroecology-engl-PNUMA.pdf. Accessed on 25 May 2018

Altieri MA, Rosset P (1996) Agroecology and the conversion of large-scale conventional systems to sustainable management. Int J Environ Stud 50(3–4):165–185

Batistella M, Bolfe EL, Moran E (2013) Agroforestry in Tomé-Acu: an alternative to pasture in the Amazon. In: Brondizio E, Moran E (eds) Human-environment interactions: current and future directions. Springer, Dordrecht, pp 321–342

Botelho MIV, Cardoso IM, Otsuki K (2016) "I made a pact with God, with nature, and with myself": exploring deep agroecology. Agroecol Sustain Food Syst 40(2):116–131

Bowman B, Stone B (n.d.) The world social forum at a crossroads. Available from: http://www.geo.coop/node/137. Accessed on 17 Apr 2018

Brondizio ES (2008) Amazonian Caboclo and the Acai Palm: forest farmers in the global market. New York Botanical Garden Press, New York

Brondizio ES, Siqueira AD (1997) From extractivists to forest farmers: changing concepts of *caboclo* agroforestry in the Amazon estuary. Res Econ Anthropol 18:234–279

Burchardt HJ, Dietz K (2014) (Neo-) extractivism: a new challenge for development theory from Latin America. Third World Q 35(3):468–486

Caporal FR, Costabeber JA (2004) Agroecologia: Alguns conceitos e princípios. Available from: http://www.fca.unesp.br/Home/Extensao/GrupoTimbo/Agroecologia-Conceitoseprincipios.pdf. Accessed on 25 May 2018

Carter M (ed) (2015) Challenging social inequality: the landless rural workers movement and agrarian reform in Brazil. Duke University Press, Durham

Castro F (2014) Environmental policies in the Lula Era: accomplishments and contradictions. In: Castro F, Koonings K, Wiesebron M (eds) Brazil under the workers' party: continuity and change from Lula to Dilma. Palgrave Macmillan, London, pp 229–255

Clement CR (1999) 1492 and the loss of Amazonian crop genetic resources. The relation between domestication and human population decline. Econ Bot 53:188–202

Davies J, Spicer A (2014) Interrogating networks: towards an agnostic perspective on governance research. Environ Plan C 33(2)

FBES (Fórum Brasileiro de Economia Solidária) (2018) Linha de tempo. Available from: http://fbes.org.br/linha-de-tempo/. Accessed on 25 May 2018

Fisher WF, Ponniah T (2015) Another world is possible: world social forum proposals for an alternative globalization. Zed Books, London

Freire P (2003 [1930]) Pedagogy of the Oppressed. 30th Anniversary Edition. The Continuum International, New York

Graeber D (2001) Toward an anthropological theory of value: the false coin of our own dreams. Palgrave, New York

Graeber D (2007) Possibilities: essays on hierarchy, rebellion, and desire. AK Press, Oakland
Hall A (2006) From *Fome Zero* to *Bolsa Família*: social policies and poverty alleviation under Lula. J Lat Am Stud 38:689–709
Hammond JL (1999) Law and disorder: the Brazilian landless farmworkers' movement. Bull Lat Am Res 18(4):469–489
Lamaitre A, Helmsing AHJ (2012) Solidarity economy in Brazil: movement, discourse, and practice analysis through a Polanyian understanding of the economy. J Int Dev 24(6):745–762
Leakey RRB (1996) Definition of agroforestry revisited. Agrofor Today 8(1):5–7
Lechat NMP (2004) Trajetórias intelectuais e o campo da economia solidária no Brasil. Doctorate thesis, State University of Campinas, Campinas, SP
Mauss M (1990 [1950]) The gift: the form and reason for exchange in archaic societies. Routledge, London
McLaren D, Agyeman J (2015) Sharing cities: a case for truly smart and sustainable cities. The MIT Press, Cambridge, MA
Mitchell T (2002) Rule of experts: Egypt, techno-politics, modernity. University of California Press, Berkeley
Morgan K, Sonnino R (2007) Empowering consumers: the creative procurement of school meals in Italy and the UK. Int J Consum Stud 31(1):19–25
Motta R (2017) Peasant movements in Argentina and Brazil. In: Engels B, Dietz K (eds) Contested extractivism, society and the state: struggles over mining and land. Development, justice, and citizen book series. Springer International, London, pp 171–195
Otsuki K (2011) Sustainable partnerships for a green economy: a case study of public procurement for home-grown school feeding. Nat Res Forum 35:213–222
Otsuki K (2014) Social economy of quality food. Int J Soc Econ 41(3):233–243
Otsuki K, van Helvoirt B (2017) Pro-poor partnerships for infrastructure development in Africa: where are local communities? In: Leitão J, Sarmento EM, Aleluia J (eds) Handbook on public-private partnerships in developing & emerging economies. Emerald Publishing, London
Peat M et al (2017) Creating institutional flexibility for adaptive water management: insights from two management agencies. J Environ Manag 202(1):188–197
Petersen P, Mussoi EM, Soglio FD (2013) Institutionalization of the agroecological approach in Brazil: advances and challenges. Agroecol Sustain Food Syst 32:103–114
Polanyi K (2001 [1944]) The great transformation: the political and economic origins of our time. Beacon Press, Beacon
Porro R et al (2012) Agroforestry in the Amazon region: a pathway for balancing conservation and development. In: Nair P, Garrity D (eds) Agroforestry: the future of global land use. Advances in agroforestry, vol 9. Springer, Dordrecht
Posey D (1985) Indigenous management of tropical forest ecosystems: the case of the Kayapó indians of the Brazilian Amazon. Agrofor Syst 3(2):139–158
Rosset P, Martinez-Torres ME (2012) Rural social movements and agroecology: context, theory and press. Ecol Soc 17(3):17
Singer P (2002) Introdução à Economia Solidária. Fundação Perseu Abramo, São Paulo
Smith N, Dubois J, Current D, Lutz E, Clement C (1998) Agroforestry experiences in the Brazilian Amazon: constraints and opportunities. The World Bank, Rainforest Unit, Brasília
Solidarity Economy Association (2018) Lima Declaration. Available at: https://www.solidarityeconomy.coop/wp-content/uploads/2017/08/declaration_lima_eng.pdf. Accessed on 25 May 2018
The Economist (2009) Brazil takes off. Available from: https://www.economist.com/node/14845197. Accessed on 25 May 2018
Titmuss RM (1970) The gift relationship: from human blood to social policy. Penguin Books, London
Tremblay S, Lucotte M, Revéret JP et al (2015) Agroforestry systems as a profitable alternative to slash and burn practices in small-scale agriculture of the Brazilian Amazon. Agrofor Syst 89:193

Welch C (2009) *Camponses*: Brazil's peasant movement in historical perspective (1946–2004). Lat Am Perspect 36(4):126–155

Wezel A, Bellon S, Doré T, Francis C, Vallod D, David C (2011) Agroecology as a science, a movement and a practice. In: Lichtfouse E, Hamelin M, Navarrete M, Debaeke P (eds) Sustainable agriculture volume 2. Springer International, Dordrecht

Wittman H (2009) Reworking the metabolic rift: La Vía Campesina, agrarian citizenship, and food sovereignty. J Peasant Stud 36(4):805–826

World Food Programme (2008) Home grown school feeding: a framework to link school feeding with local agricultural production. WFP, Rome

World Food Programme (2015) Lessons learned from the "Purchase from Africans for Africa Initiative". Available from: https://www.wfp.org/purchase-progress/news/blog/lessons-learned-purchase-africans-africa-initiative. Accessed on 25 May 2018

Yamada M (1999) Japanese immigrant agroforestry in the Brazilian amazon: a case study of sustainable rural development in the tropics, PhD thesis, University of Florida, Gainesville