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EcoSol-agroecology networks respond to the Covid-19 crisis: building an economy of proximity in Brazil's Baixada Santista region

Les Levidow^a, Davis Sansolo^b and Monica Schiavinatto^b

^aDevelopment Policy and Practice (DPP), Open University, Milton Keynes, UK; ^bInstituto de Políticas Públicas e Relações Internacionais (IPPRI), Universidade Estadual Paulista (UNESP), São Paulo, Brazil

ABSTRACT

In 2020–2021 the Covid-19 crisis worsened the harms from the hegemonic agribusiness model, while also providing opportunities for alternatives. Since long before the crisis, Latin American civil society networks had been building an agroecology-based solidarity economy (here EcoSol-agroecology for short). These networks have linked agroecological production methods with collective marketing through short food-supply chains (*circuitos curtos*), establishing closer relationships with consumers. Such initiatives have been expanded, despite adverse government policies and Covid-19 obstacles. This expansion has been widely understood as strengthening social proximities. As the analytical contribution here, EcoSol-agroecology networks build an 'economy of proximity', based on proximate purposes such as mutual aid, democratic self-management, women's leadership, food security and biodiverse resource conservation. These solidaristic purposes help to activate other proximities (geographical, organisational, institutional, and cultural), while also linking them. Collective capacities have developed those proximities in context-specific ways. This strategic perspective has informed EcoSol-agroecology networks in Brazil's Baixada Santista region, the site of grassroots voices in this case study. Diverse contributions have been integrated into a composite culture as a symbolic site of belonging. As global elites seek to restore the hegemonic agri-food system after the Covid-19 pandemic, a different future depends on building the social proximities of EcoSol-agroecology.

KEYWORDS

Hegemonic agribusiness model; solidarity economy (economia solidária); EcoSol-agroecology; short supply chains (*circuitos curtos*); Covid-19 crisis; food and nutritional security

1. Introduction: a return to the normal agri-food system?

The hegemonic agri-food system has increasingly become a focus of societal conflict. It combines a capital-intensive techno-diffusionist model, globalised supply chains for standard commodity crops, and resource plunder, especially in the global South. This system

CONTACT Les Levidow  les.levidow@open.ac.uk  Development Policy and Practice (DPP), Open University, Milton Keynes, MK7 6AA, UK

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has undermined producers' livelihoods, exhausted natural resources and degraded food quality through ultra-processing.

The Covid-19 crisis both revealed and intensified various harms from that system. There were infection outbreaks among workers on farms and in meat-packing plants. Measures to contain the disease disrupted those food chains, leading many people to panic buying. The most vulnerable populations were hardest hit; they lacked resources to cope with losing employment and income, alongside higher food prices (HLPE 2020a). These difficulties remain endemic in long-distance complex supply chains which readily spread contaminants or disease.

Underlying such harms, moreover, the hegemonic development model contributed to the Covid-19 crisis, in particular: its systemic causes in agri-industrial intensification (Davis 2005; IPBES 2020; Wallace 2020; Wallace et al. 2020), its socially unequal effects (FIAN 2020), and weak institutional capacities to limit the harm in the global North as well as the South (McCormack and Jones 2020; Davis 2020; Borlini 2010; Sankey 2020).

The 2020–2021 pandemic worsened persistent hunger and malnutrition from recent decades. Such problems should be understood more broadly as chronic malnutrition, micronutrient deficiencies, obesity and diet-related non-communicable diseases. Food insecurity derives from 'deep inequalities in terms of power, income, gender and access to natural resources and services', according to an FAO expert group (HLPE 2020b, 14).

This long-time vulnerability has resulted from global commodity chains of the agri-industrial system. These have been 'prioritizing industrial production, specialization and trade, at the expense of food system diversity' (Clapp and Moseley 2020, 1305). Yet the elite has sought to stabilise and even extend those chains as crucial for food security.

After the pandemic began, many governments and global elites sought 'a return to 'normal'. Or more subtly, they sought means towards 'building back better', i.e. overcoming systemic vulnerabilities to restore economic growth. Under the banner of The Great Reset, the global elite has claimed moral authority for 'management of a global commons' (WEF 2020), despite having regularly degraded and enclosed the commons.

Global elites have counterposed global trade to any export restrictions. Such 'food protectionism' would threaten food security, said the World Economic Forum (Reinhart and Subbaraman 2020). Moreover, 'global commodity markets are in a strong position to respond to the crisis' if they face no trade restrictions. 'Lessons from previous crises have taught us that export restrictions increase food insecurity for vulnerable populations', according to the World Trade Organization (WTO 2020, 2). This diagnosis inverts reality: globalised markets have incentivised new enclosures which undermine resource access and productive capacities for local food needs, thus worsening food insecurity.

In Latin America, many people have raised the slogan, 'No return to normality because normality was the problem'. This originated in Chile's anti-austerity protests in 2019. Since the Covid-19 crisis, the slogan has been given a broader meaning, towards transforming production-consumption systems (Fonseca 2020; Pantuliano 2020).

As a significant alternative to global markets, short supply chains have built closer relations between small-scale producers and consumers, especially for agroecological products. These initiatives exemplify territorial markets that specialise in selling food that is produced, distributed and consumed within a specific territory (Kay 2016). Territorial market arrangements that serve local food needs also strengthen the livelihoods of

local food producers, processors, and sellers, while reducing dependence on transnational corporations that dominate and concentrate global supply chains (HLPE 2020b).

The Covid-19 crisis posed difficulties for short food-supply chains, especially farmers' markets as a basis for closer relationships with consumers. In dealing with the crisis, agroecological producers have often adapted or created collective means to restore or extend such relationships, thus strengthening solidaristic relationships and social cohesion in new forms (Van der Ploeg 2020, 964–965). By contrast with large-scale capital-intensive methods, agroecological peasant farming better withstood the difficulties of the pandemic, especially by relying on biodiverse resources (Van der Ploeg 2020, 959).

The pandemic stimulated more civil society groups to advocate transformative change through food systems that build food sovereignty and local markets. 'Transformational change in agriculture must be accompanied by a shift from a market economy to a solidarity economy, from fossil fuel to renewable energy, from big corporations to cooperatives' (Altieri and Nicholls 2020, 894). In such ways, 'the active promotion of more diverse and resilient food systems can help to overcome some of the problems of the approaches of the previous 70 years that the COVID-19 pandemic has laid bare' (Clapp and Moseley 2020, 1409).

In conflicts over agri-food systems, 'food security' has been a contested, flexible concept. When early versions provoked controversy in the 1990s, global social movements counterposed food sovereignty as democratic control over food production and distribution (LVC 2003; Patel 2009). Advocates have given the concept various emphases such as local food sufficiency, gender equality and democratic choice in agri-production priorities (Agarwal 2014). International discussions sought to identify complementary aspects of food security and sovereignty (Gordillo 2013).

When Brazil developed its National Plan for Food and Nutritional Security (CAISAN 2011), social movements incorporated some perspectives from food sovereignty, thus bringing the two concepts closer together (da Silva 2020; see also CLACSO 2020). Likewise stimulated by social movements, a policy document promoted *comida de verdade* (real food) as the guardian of life and guarantor of food sovereignty (CONSEA 2015, 28). Given that 'food and nutritional security' is government policy, some advocacy groups have recast the concept to resonate with food sovereignty, agroecology and solidarity economy.

This paper analyses such strategies for an agroecology-based solidarity economy (*economia solidária*), here called EcoSol-agroecology for short. In Latin America, short food-supply chains are often called *circuitos curtos*. Beyond simply avoiding profit-driven middlemen, the term short/curto has positive meanings of solidaristic mutual aid.

Such strategic responses to the Covid-19 crisis will be analysed here through a Brazilian case study. It has the following structure:

Section 2: Agribusiness versus EcoSol-agroecology as rival agri-food models in Latin America;

Section 3: Analytical frameworks for scaling agroecology towards an agroecological transition;

Section 4: Baixada Santista case-study context, research questions and methods;

Section 5: EcoSol-agroecology networks responding to the Covid-19 crisis;

Section 6: Three producers' initiatives for collective marketing

Section 7: Conclusion.

As the analytical contribution here, EcoSol-agroecology networks build an 'economy of proximity', based on proximate solidaristic purposes; these help to activate other proximities (geographical, organisational, institutional, and cultural), while also linking them. Collective capacities have developed those proximities in context-specific ways. Diverse contributions have been integrated into a composite culture as a symbolic site of belonging.

2. Rival agri-food models in Latin America

The hegemonic agri-food system has been pejoratively characterised as agribusiness or agri-industrial, denoting a capital-intensive factory-like process. Proponents have instead used the term 'modernisation', denoting technology packages, e.g. hybrid or GM seeds, agrichemicals, machinery and financial credit. These investments have been meant to maximise productivity, which is often a misnomer for yield, i.e. output per unit land. Both terms will be used here.

The hegemonic agribusiness model has shifted farmers' practices towards more complex technological tools and institutional arrangements seeking a competitive advantage in distant markets. State and corporate structures have centrally planned a societal change that conceives farmers and their communities as passive receptacles for new ways to do agriculture – rather than as social actors bringing their own projects, capacities and trajectories (Long and van der Ploeg 2011; also van der Ploeg and van Dijk 1995). The hegemonic model has provoked resistance and agroecological alternatives, especially in Latin America. This section sketches conflicts between the two models, whose rivalry sets the context for our case study.

2.1. Hegemonic agribusiness model

Throughout Latin America, agri-industrial systems have promoted vast monocultures and agrochemical inputs. Such systems have undermined small-scale producers, their livelihoods, traditional knowledge, land rights, the natural resource base and locally developed biodiverse seeds (PIADAL 2013). Despite this damage, Latin American governments have generally promoted such systems.

The hegemonic agri-industrial system structures production for a competitive advantage in distant anonymous markets. When small-scale producers have attempted to imitate or accommodate this model, male farmers could more easily access loans to buy technology packages and then await payments for the harvest. But they have faced structural disadvantages in competing on the same terms; they have lost much of the value-added to profit-driven middlemen. Some have incurred long-term debt and abandoned farming.

As Brazil's historical background: Portugal's colonial regime established an exploitative agribusiness model for Brazil's coastal areas to produce agri-food exports, initially sugarcane and then coffee. Since the mid-twentieth century 'Green Revolution', that model has been extended to more land areas and crops. This political-economic agenda has been jointly promoted by some universities, the Agriculture Ministry and the agri-research agency Embrapa (Empresa Brasileira de Pesquisa Agropecuária). According to Embrapa strategists, agricultural modernisation has conquered new frontiers; it has brought

technological progress raising productivity, increasing production especially of animal feed and so boosting exports (Alves and Contini 1988; Alves, Contini, and Hainzelin 2005).

Brazil's agri-modernisation agenda has had several stages. During 1964–1985 the military junta promoted technology packages and loans benefiting mainly larger-scale farmers to increase productivity for export markets; this 'conservative modernisation' constrained the agrarian reform objectives to broaden land tenure. In the early 1990s, the post-junta government identified 2.4 million agricultural units able to achieve a 'family farm transition to modern agriculture' by imitating large-scale agri-industrial methods. It categorised approximately half the family farms as 'transition family farming', i.e. conducive to modernisation (Guanziroli, Buainain, and Sabbato 2013).

From 1995 onwards, Brazil's PRONAF (National Programme for Strengthening Family Farming) aimed to increase agricultural productivity, alleviate poverty and enhance food security. Eventually, it expanded credit access to more lower-income family farmers. However, it funded and encouraged such farmers to imitate the capital-intensive methods of large farms. Through chemical-intensive technology packages, this techno-diffusionist development model has dominated rural extension services. Through PRONAF, lower-income family farmers sought to overcome their unequal access to land, credit and inputs. After some difficulties, many questioned the productivist orientation of the programme, which conflicted with the lived realities of many family farmers (Niederle et al. 2019a, 279).

Benefiting from the productivist model and its support policies, Brazil's large agri-industrial chemical-intensive farms hold most of the land but produce mainly export commodities (IBGE 2006, 2017). By contrast, Brazil's 4.4 million family farms comprise 85% of agricultural establishments; they use less than 25% of the agricultural land to produce 70% of the food consumed nationally. Some have adopted capital-intensive methods similar to agribusiness, yet most still continue traditional practices. Such smallholders still produce most of the food which is sold by wholesalers through supermarket chains and outdoor markets; those middlemen keep consumers separate from producers, who lose much of the sale price.

This outcome has been analysed as a 'new unequal modernization', aggravating social exclusion and regional inequalities (Tonneau, de Aquino, and Teixeira 2005). Most peasants have faced structural constraints in gaining the promised benefits. Hence various studies have recommended more appropriate support measures for the majority of farmers who cannot or will not follow the capital-intensive agri-modernisation pathway (Cabral et al. 2016; Medina et al. 2015).

2.2. EcoSol-agroecology convergence

The hegemonic model has caused multiple harms, provoking resistance by peasant and civil society movements. They have opposed a rural development model which seeks to industrialise agriculture and thus 'modernise the countryside to bring it out of backwardness', as put sarcastically by critics (Caporal and Costabeber 2004, 6). More peasants have been rejecting the language of modernisation, efficiency, productivity, economies of scale, trade liberalisation, free markets, etc. They seek relative autonomy from competitive markets for credit, inputs and outputs (Rosset and Martínez-Torres 2012, 17).

To go beyond the hegemonic agri-food system, agroecology agendas reframe issues. Knowledge-intensive agroecological methods use locally available resources, towards an agriculture which is socio-environmentally and economically sustainable. Advocacy networks motivate farmer families to improve their traditional production methods, or to undertake difficult shifts away from agri-industrial methods, both pathways understood as an agroecological transition (Caporal and Costabeber 2004, 40–47, 79).

Such methods reproduce biodiverse seeds, maintain wider biodiversity for crop resilience, and recycle nutrients, together minimising environmental harm. These practices likewise enhance livelihoods by avoiding external inputs and so minimising costs. This continent-wide agenda eventually became grounded in social agrarian agendas and social movements, especially in resistance to capitalist modernisation, i.e. dependence on technology packages of the Green Revolution (Altieri 2002; Altieri and Nichols 2008; Altieri and Toledo 2011).

When state agencies initially offered advice on agroecological methods, however, they often continued the previous techno-diffusionist model, e.g. transferring ‘agroecological techniques’ from specialists to farmers (Petersen, Mussoi, and Soglio 2013, 2020). To fill the gap, civil society groups have promoted knowledge-exchange (*diálogo de saberes*) and reinforced peasants’ demands for appropriate rural extension services. Small-scale producers and civil society groups have been jointly promoting agroecological methods. This alternative constructs a ‘dialogue capacity and collective learning’. Sustainability depends on improving everyday practices rather than providing external techniques (Caporal and Costabeber 2004, 120; also Delgado and Rist 2016).

There was a parallel rise in social movements for agroecology and for the *Economía Social e Solidária* (EcoSol for short). The EcoSol movement built cooperative mutual-aid relationships within and among economic activities, each gaining collective capacities for self-management. This aims to improve livelihoods and overcome inequalities. Through the EcoSol agenda, short supply chains have brought producers closer to consumers, who thereby support the production methods (dos Santos and Carneiro 2008; RIPESS 2015; Schüttz and Gaiger 2006; Singer and de Souza 2000; Singer 2002). This alternative depends on political mobilisations for demands such as better public services and labour conditions (Coraggio 2016, 24).

Since the late twentieth century, Brazil’s EcoSol network has popularised such means towards a just, sustainable development and has demanded support measures. When the Partido dos Trabalhadores (PT) led the new government in 2003, it established a National Council for Solidarity Economy (CNES) within the Ministry of Labour and Employment. It carried out consultations on relevant support measures and helped to establish local EcoSol networks (such as the one in our case study). CNES principles included: democratic self-management, mutual trust, reciprocity, proximity and solidaristic marketing. These provide means to ensure broad social inclusion (of women, youth and traditional communities), as well as EcoSol initiatives to overcome poverty, food insecurity and inequalities among lower-income people (CNES 2015). Women have played leadership roles in Brazil’s EcoSol initiatives, likewise globally (RIPESS 2012, 2013).

Since the 1990s, Brazil’s peasant and civil society movements have been demanding state measures to support traditional farming skills, biodiverse resources and fairer market access. Over the past decade, national (and continent-wide) networks previously promoting either EcoSol or agroecology converged towards integrating them. As a

turning point, in 2011 the National Agroecology Articulation (ANA) and Forum Brasileiro de Economia Solidária (FBES) jointly organised an event for linking the agendas for agroecology and solidarity economy (FBES 2011; Schmitt 2020, 39).

As key roles, agroecological producers have been building local networks of a solidarity economy, conserving natural and cultural heritages (ANA 2012, 3). Conversely, agroecology was being incorporated into the EcoSol agenda (FBES 2012). This convergence has extended solidaristic mutual-aid practices from traditional agriculture. In agroecological initiatives, reciprocity serves as a general means of enhancing social integration, quality work, local culture, and communitarian belonging (Schmitt 2020, 273). Such efforts have created solidaristic bonds between urban environmentalist initiatives and peri-urban or rural producers. Their circuitos curtos have a counter-hegemonic potential in contesting the commercial markets of anonymous food.

In response to their demands, the convergence was accommodated by the 2003–2016 governments led by the Partido dos Trabalhadores (PT). Its agroecology agenda brought together many relevant policies including solidarity economy (CIAPO 2013, 16; also Schmitt et al. 2017). Conversely, its solidarity economy policy emphasised such a basis for technical training in agroecology (CNES 2015, 16, 32). Several relevant programmes are explained here.

As a significant contribution, the Fome Zero (Zero Hunger) campaign was structured in ways creating new markets for small-scale peasant farmers to improve their livelihoods. As a key aim, the programme was ‘fostering food supply and structuring fair and decentralised systems based on an agroecological and sustainable approach to food production, extraction, processing and distribution’ (MDA 2015, 277). Secure land tenure was granted to many more land occupations, whose settlers began to adopt agroecological methods. Agroecological knowledge-exchange helped peasants to better use locally available natural resources rather than external inputs, thus countering the hegemonic agri-modernisation process (van der Ploeg and Schneider 2012, 134, 147).

For such capacity-building, a central role was played by the Programa de Aquisição de Alimentos (PAA) or Family Farming Food Acquisition Programme. This brought together small-scale family farmers to learn cooperative skills for collective marketing. A major opportunity was institutional sales to local authorities, which in turn supplied schools or gave the food to vulnerable people. The PAA enabled many family farmers to cover their many production costs across the entire food chain. For consumers, it expanded the diversity and quality of the food available to them, helping to preserve regional food habits and cultures (MDA 2015, 221).

Under the PAA, agroecological producers have learned how to manage an Organização de Controle Social (OCS). This option responded to long-time civil society demands on the Agriculture Ministry for organic certification based on a farmers’ knowledge-exchange process (MAPA 2007, 2020). The OCS option provides a low-cost solidaristic alternative to the expensive third-party auditoria route. Organic certification helps to gain a higher price and consumer support.

A major opportunity has been public procurement for school meals through the Programa Nacional de Alimentação Escolar (PNAE). Public institutions pay a 30% premium price for organic and agroecological products, making these methods economically more viable for producers and likewise improving food quality. The programme has sought to enhance students’ biophysical development, learning and training in healthy food habits,

especially to fulfil their nutritional needs during the school term (Brasil 2009). Local procurement programmes favour such products from small family farms (CIAPO 2013). Such programmes have helped family farms to strengthen their self-esteem, improve their agroecological methods and diversify their production (Grisa et al. 2010).

In parallel agroecological initiatives have also established short food-supply chains directly to consumers, especially on the basis that their purchases support cooperative work organisation and environmentally sustainable practices. Forms include *Feiras do Agricultor* (farmers' markets) and food baskets for subscribers of Community-Supported Agriculture. Small-scale producers bypass conventional markets, rather than seek a futile competition on the same terms.

Such solidaristic markets, collective self-certification schemes and their public credibility have been facilitated by national support networks such as the Rede Ecovida de Agroecologia. Since 2006 this has done group training in skills for collective certification of agroecological products (Ecovida 2007). Through cooperative efforts, it has also addressed the pervasive problem of supplying food with the appropriate, quantity, diversity and quality for year-round contracts. Participants have periodically agreed on product swaps, their prices and operational costs to be shared (Magnanti 2008). Its member-producers have coordinated long-distance transport networks for flexibly swapping products from places where they are in surplus, thus maximising producers' income and consumers' food diversity (van der Ploeg and Schneider 2012, 158–159; also Schmitt 2020). This experience set ambitious, high-profile precedents for local product swaps during the Covid-19 crisis.

As an impetus for women join or lead these alternatives, the modernisation process has generated multiple damages necessitating more care activities, while placing the major burden upon women. In response, feminist initiatives have sought to share, revalorise and de-domesticate women's roles in social reproduction (Hillenkamp, Guérin, and Verschuur 2014, 18; 2017, 52). Going beyond the false alternatives of free or waged labour, EcoSol activities have sought to make women's care roles more visible and valorised.

Through women's leadership in EcoSol-agroecology, such initiatives have become larger and more diverse, while also contesting gender stereotypes and overcoming inequalities (Schmitt 2020, 277). Called *protagonismo feminino*, women's leadership has enlivened such initiatives, while reconfiguring women's roles in family agriculture (ANA 2019, 21). They have exercised more decisions over family income and agroecosystem resources, thus overcoming inequalities (Action Aid 2010, 272). The concept *protagonismo feminino* has described and inspired women's leadership in EcoSol-agroecology networks.

Since the 2016 legislative-judicial *coup d'état* against President Dilma Rousseff, Right-wing governments reduced or abolished support measures for small-scale family farming, especially for EcoSol-agroecology initiatives, as well as measures for food and nutritional security (Niederle et al. 2019b, 2021, 2022; Sabourin, Craviotti, and Milhorange 2020). Meanwhile, there has been a stronger drive for capital-intensive monoculture production for unhealthy ultra-processed food and export markets. Nevertheless, some EcoSol-agroecology initiatives had already built capacities, civil society networks and public support. They have gained or retained support from some local authorities (Sabourin 2019). This support base was mobilised during the Covid-19 crisis, as we will see.

3. Analytical framework: scaling EcoSol-agroecology

Our research questions (see Introduction) relate to global strategy discussions on resisting a ‘family farm transition to modern agriculture’ and counterposing an ‘agroecological transition’. This ‘requires redirection of investments and efforts to design and implement innovative approaches, including agroecological approaches, that provide concrete alternatives to the hegemonic model and open transition pathways towards sustainable food system’ (HLPE 2019, 18). According to the Rede Ecoforte, an agroecological transition means ‘a gradual process of changing management practices of traditional or conventional agroecosystems by transforming the productive and social basis of using land and natural resources, leading to agricultural systems which incorporate principles and technologies on an ecological basis’ (Schmitt 2020, 74).

Although helpful, those definitions omit the economic basis. As a general obstacle, agri-food products have a low market price, sometimes due to subsidies intentionally lowering the price to facilitate exports. This weakens the incentives for farmers to invest in agri-innovations, especially agroecological ones. It is necessary for sales to remunerate the producer’s costs (Rosset and Altieri 2018, 159).

To increase their remuneration, a widespread means has been short supply chains of a solidarity economy (FAO 2018), as in our phrase EcoSol-agroecology. Such chains include farmers’ markets and Community-Supported Agriculture (CSA). In Latin America, this comprehensive agenda is known as ‘scaling agroecology’ or ‘escalonar agroecologia’, likewise as efforts to massify or ‘massificar agroecologia’. This agenda has generated various analytical schemas to inform strategies, as explained here.

3.1. Scaling agroecological circuitos curtos

Since two decades ago, scaling agroecology has been conceptualised as dual complementary forms: horizontal scaling out and vertical scaling up. ‘The horizontal process refers to the wide diffusion through communities and institutions, transcending geographical limits ... The vertical process refers to the strengthening of institutional support’, including public policies (Gonsalves 2001, 5; cf. Rosset and Altieri 2017, 2018, 153–180). That schema helps to identify specific relationships among producers, consumers and support bodies.

A different analytical schema emphasises eight drivers: crises, social organisation, agroecological farming practices, constructivist teaching-learning processes, discourse mobilisation, external allies, favourable markets, and favourable policies (Cacho et al. 2018). Those drivers correspond mainly with horizontal outscaling, while support measures correspond with vertical upscaling. External allies bring resources and support in various forms: publicity; material (e.g. funds); moral (e.g. social legitimacy); and organisational or human (e.g. knowledge, abilities, and volunteers). Such support comes from several areas including government, media, academia, political parties, religious institutions, and NGOs (Cacho et al. 2018, 652).

More than simply allies, solidarity networks depend on knowledge-exchange among producers and with external experts who can facilitate the process (Rosset and Martínez-Torres 2012). A ‘dialogue capacity and collective learning’ recognises that

sustainability depends on improving everyday practices rather than providing external techniques (Caporal and Costabeber 2004, 120; also Delgado and Rist 2016).

As a key concept for EcoSol-agroecology, *Bem Viver* has various meanings, e.g. 'a harmonious life respecting Mother Nature' (e.g. FBES 2012). It originates from indigenous Andean languages (Bolivia 2008). Here Nature denotes agro-biodiversity, complementing socio-cultural diversity (Leff 2001), as a basis for nature conservation and culturally diverse foods (Schmitt 2020, 71). *Bem Viver* both expresses and inspires capacities to use endogenous resources and strengthen social wealth. Through a strategic management of such resources, peasant agriculture establishes a co-production between nature and social institutions. This helps them to reproduce social values in ways relatively autonomous from markets (Petersen, Mussoi, and Soglio 2013, 89).

Horizontal non-monetary flows build social reciprocity, social capital, a capacity for joint activity and care in production processes. All this can protect or build a local culture and thus a communitarian sense of belonging (Schmitt 2020, 273; citing Sabourin 2011; see later Zaoual 2010). Such practices draw on mutual aid traditions, known as *mutirão*.

Initiatives devise 'creative strategies to mobilise resources, capacities and connections in producing new forms of organizing labour ...' In particular, they develop capacities to generate employment and access finance, towards 'a greater autonomy in the face of markets' (Schmitt 2010, 56, 60). To help expand agroecology, public policies of different governmental bodies must be coherently coordinated for synergies among policies (Schmitt 2020, 283). Governments should 'enhance policy coherence in supportive policies for agroecological approaches' (Parmentier 2014). FAO experts gave more specific advice: policy coherence must promote investments especially for smallholders to access and create new markets, so that agroecological methods can gain better access to the food value chain (HLPE 2013; 2019, 110).

With Brazil's state support, new investments have

made viable the small-scale infrastructure and equipment necessary for artisanal processing and commercial flows of production through *circuitos curtos*. In this sense, investments support horizontal economic-ecological flows as well as strengthen institutional devices for managing these flows among the networks. (Schmitt 2020, 298)

Circuitos curtos involve several functions:

At a territorial scale, the networks take on different functions, which relate to managing knowledge; to articulating between production, food processing and commercialisation; to strengthening socio-cultural identities; to generating credibility for product quality; and to coordinating public policies, among others. (Schmitt 2020, 82)

Such networks are 'organizations acting in a given territory and interacting through a participatory, cooperative dynamic', broader than formal cooperatives (Schmitt 2020, 71). They create synergies across activities, thus enhancing the effects of public policies, while also proposing how to improve them (Schmitt 2020, 12–13).

3.2. Building an economy of proximity

For *circuitos curtos* between producers and consumers, the term 'short' often has been elaborated as socially proximate. The concept 'proximate markets' has been taken up

by some agroecology networks (e.g. Soberania Alimentaria 2020). According to a prominent report, agroecology promotion should ‘Ensure proximity and confidence between producers and consumers through promotion of fair and short distribution networks and by re-embedding food systems into local economies’ (IPES-Food 2021, 4).

More profoundly, an ‘economy of proximity’ creates a symbolic site of a solidarity economy. The concept *homo situs* denotes a ‘recomposed man’, who identifies with a place as a symbolic site of belonging. Diverse contributions can be integrated into a ‘composite culture of social networks and belonging’ (Zaoual 2010, 31, 34). In this sense, circuitos curtos depend on ‘a geographical and relational proximity between producers and consumers’ (Darolt, Lamine, and Brandenburg 2013, 10). Beyond spatial or personal proximity, what could this mean?

As a conceptual contribution here, EcoSol builds an ‘economy of proximity’ in multiple senses (Rodrigues da Silva et al. 2018, 214–216). In particular:

- Cultural proximity includes common cultural characteristics, elders’ wisdom, religious rituals, festivals, and traditional agricultural knowledge. Participatory methods can help to link the latter with technical knowledge, generating forms which better connect with consumers.
- Geographical proximity can be used to establish social cohesion, solidary relationships and equitable relations that provide financial and learning gains for all members of the productive chain. All this can increase their income and total value generated within a territory, reduce their costs, and enhance product quality for consumer needs.
- Organisational proximity brings together producers so that they can mutualise their resources within and across such groups. This is necessary to establish relationships of confidence, reciprocity and solidarity among producers.
- Institutional proximity includes interactions with professional staff in public authorities which can provide support measures for EcoSol activities. This support can be facilitated by such professionals integrating their expertise through a local EcoSol forum.

Participatory action research can help to activate and link those proximities (Rodrigues da Silva et al., 2018, 214). Their synergies help make a solidarity economy viable. ‘Identifying a territory with solidarity economy contributes to local development and can generate competitive advantages based on aggregate value, being sold as ‘original product of solidarity relationships ... The extensionist can articulate and animate this process’ (Rodrigues da Silva et al., 2018, 216). Moreover, extensionists help build capacities for managing enterprises, associations and cooperation as EcoSol principles, towards greater socio-economic inclusion (Rodrigues da Silva et al., 2018, 217–218).

In an EcoSol initiative, participants reach a common interest by reconciling their various objectives (Rodrigues da Silva et al., 2018, 2010). After the Covid-19 pandemic began, the authors made more explicit such common purposes, e.g. democratic self-management, mutual aid, socioeconomic inclusion, respect for the environment, etc. These help to activate and link the various proximities. Moreover, this role involves collective capacities to construct circuitos curtos for EcoSol (Rodrigues da Silva et al. 2020). Together these provide a basis for an EcoSol transition as an economic form, a life-mode and resistance against the hegemonic capitalist system (Rodrigues da Silva 2021).

This analytical schema came from agricultural extensionists managing EcoSol training programmes in our case-study area, the Baixada Santista. They subsequently set up a regional solidarity network. This provided a partnership for our participatory action research, as means to identify, facilitate and strengthen relevant collective capacities.

4. Baixada Santista case study: EcoSol capacity-building and our research methods

This paper explores and answers the following research questions:

- During the Covid-19 crisis, how did agroecological circuitos curtos encounter new difficulties, address them and use new opportunities?
- How did their responses extend circuitos curtos by linking agroecological production with distribution, building closer relationships among participants?
- How did these efforts draw on and extend collective capacities?
- How do these practices indicate a potential future different than a post-Covid 'return to normal', i.e. beyond the hegemonic agri-food system?

Those questions will be explored through our case study: the Baixada Santista, a metropolitan area on the southwest coast of São Paulo state. It differs from other contexts of EcoSol-agroecology networks, for example: When the landless workers' movement MST established numerous settlements, participants collectively worked some areas of agroecological production and collectively market the surplus through democratic self-management (Pahnke 2015). In many coastal areas, traditional communities have developed agroecological forestry practices, which are threatened by real-estate expansion, heavy tourism development and nature conservation areas (Levidow, Sansolo, and Schiavinatto 2021).

Although similar threats exist in the Baixada Santista, it has distinctive features: Santos is a major port city linked with international markets; eight small towns have artisanal production. Although there is some peri-urban agriculture, the region produces only a small fraction of the food which is locally consumed, thus remaining dependent on imports by dominant food companies and supermarket chains. EcoSol-agroecology networks have sought to expand local production and circuitos curtos for low-cost, accessible healthy food (see film, Sansolo 2022). This section first describes the pre-pandemic capacity-building process of EcoSol-agroecology initiatives. Then it describes our research methods engaging with their responses to the pandemic.

4.1. Pre-pandemic EcoSol capacity-building

For at least a decade, the Baixada Santista has had strong efforts to build collective capacities for EcoSol-agroecology networks. Training programmes have been financed nationally and supported locally by municipalities and Federal agencies. The latter featured the Serviço Social do Comércio (SESC) and Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (SEBRAE, a service for SMEs). For agroecological practices in particular, São Paulo state ran a two-stage programme: 'Microbacias I: Management of Soil and Water' and then 'Microbacias II' (Access to Markets) during 2011–2018. These

programmes were organised by the Coordenadoria de Assistência Técnica Integral (CATI, coordination of technical assistance); funds came from the World Bank and the São Paulo state government (Rodrigues da Silva 2021). The latter aimed mainly to strengthen indigenous Guarani producers, though it also helped other agroecological producers.

The state government saw the training programmes as bringing better market access and income for small-scale family farmers, implying that each producer was a separate competitive enterprise (SP Governo 2018a). Beyond those official aims, however, the extensionist-organisers helped to build collective capacities for knowledge-exchange methods and cooperative activities; these generated wider solidarity networks for an 'economy of proximity' (Rodrigues da Silva et al. 2018; see previous section). The courses 'had success only when constructing a sociotechnical network and when the extensionist ... promoted the necessary alliances among the other actors for the construction of the network', gaining the confidence of the beneficiaries (Rodrigues da Silva and Pinto 2015, 3; also Rodrigues da Silva et al. 2018). Supplementing the state programmes, an extra course trained *EcoSol policy managers* to promote an associative organisational form, with self management and direct democracy, providing a fair distribution of the results [income] between all members of the enterprise.

Alongside the programme, public-policy managers established a network for EcoSol support measures (Microbacias II 2017). Moreover, some course organisers helped to establish the Fórum de Economia Solidária da Baixada Santista (FESBS), with support from the Federal policy unit for EcoSol (CNES 2015). The region-wide Fórum has defined EcoSol as 'the set of economic activities – production, distribution, consumption, savings and credit – organised in the form of self-management'. Amidst paradigm shifts in the world of work, it is necessary to ensure that such changes 'reduce inequalities and improve the quality of life'. Wealth should be 'centered on valuing the human being, characterized by equality' (FESBS 2020a).

The Fórum stimulated further training events, generally hosted by municipalities during 2016–2018. Topics included Plantas Alimentícias Não Convencionais (PANCs, non-conventional plants), which valorise agro-biodiversity and its related socio-cultural diversity. They provide means to produce herbal medicines and/or traditional foods. Fruits can be lightly processed into tasty products which have a longer shelf life, gain more income and avoid waste, which befalls approx. 40% of fresh food in Brazil. With appropriate care (*carinho*) in lightly processing the fruit, the products remind people of favourite childhood tastes and aromas. All these features helped Feira stallholders to build closer relationships with consumers (webinars on 28.05.2020 and 05.06.2020; cf. nation-wide strategies in Schmitt 2020, 118). Training topics also included community-based tourism, likewise based on cooperatives, though implementation was impeded by the pandemic. The EcoSol training and subsequent network encompassed many other artisanal activities, e.g. clothing, jewellery, services, etc.

Agricultural extension services have continued through the Assistência Técnica e Extensão Rural (ATER). As those experts recognise, any agri-innovation may be rejected from a traditional peasant perspective of *saber-fazer* (savoir-faire). So extensionists face the challenge to facilitate peasants' integration of traditional and modern scientific knowledge through a *diálogo de saberes*.

All those efforts strengthened self-management capacities of participants. Many were peri-urban, lower-income, female small-scale producers. Some were new to food sales or even to cultivation. Groups of women or indigenous Guaranis formed producers' associations eligible for participation in the PAA and/or PNAE. Some co-organised Feiras do Agricultor with a municipality. Some women had already been growing food in their backyard (*quintal*) or other spaces; the extra income made visible their contribution to the food supply and to household expenses. This role likewise helped to enhance their societal status and socio-economic equity.

Women's cooperatives and networks have played central roles. Within the FESBS the feminist collective EcoSol Mulher held regular events on ways to strengthen women's autonomy. As a recurrent [slogan](#), 'When each one ceases her silence, the collective voice is made strong, vibrant and sharp in finding the way'.

4.2. Research methods with FESBS

From the start, our research project aimed to investigate collective capacities for an agroecology-based solidarity economy through participatory action research with case-study partners, including the Fórum de Economia Solidária da Baixada Santista (FESBS). Initially we did literature reviews on several topics, e.g. EcoSol-agroecology in Latin America, participatory action research methods, record-keeping of the process, and gender inequalities. As the next step, the project planned to hold its first meeting to finalise methods for multi-stakeholder workshops in each case-study area. But the Covid-19 restrictions precluded this plan. Facing similar constraints to their sales, EcoSol-agroecology networks devised creative cooperative solutions. To investigate these, the project found several online information sources.

First, town-based solidarity networks were using social media to publicise circuitos curtos, expanding their activities, connecting more groups, appealing for practical support, etc. Facebook pages provided textual and visual information about new activities. Our text provides exact permalinks wherever feasible, rather than insert normal citations of author/year.

Second, the Fórum de Economia Solidária da Baixada Santista (FESBS) regularly held webinars, generally called 'lives' or 'rodas de conversas' (roundtables; see References, Annex of webinars). These events initially brought together 50–80 individuals and then did live-streaming to accommodate larger numbers. Participants included agri-extensionists, municipal staff, [public-policy managers](#), solidarity networks, producers' associations, Feira organisers, etc.; specific groups are cited in the mini-case studies in the next section. Each event had a topic such as circuitos curtos, womens' associations, public policies, EcoSol managers, fisherfolk, a single town, etc. Our research project participated in such events and hosted similar webinars (AgroEcos 2020). These discussions identified new challenges from the pandemic and reported on practical solutions. Our Brazilian research team had been involved in the FESBS training programme before the pandemic and then extended the partnership during the pandemic (Figure 1).

Third, combining the webinar transcripts with other online documents, the texts were pre-coded according to several key terms and then were analysed through Nvivo

Experiências da Baixada Santista em Economia Solidária no cenário atual

Roda de conversa com gestores de EcoSol dos municípios de Bertioga, Itanhaém, Mongaguá e Peruíbe.

Realização:

FÓRUM DE ECONOMIA SOLIDÁRIA DA BAIKADA SANTISTA

07 de maio 15h

Thais Muraro
Departamento de Agricultura da Prefeitura de Itanhaém

Juanita Trigo Nasser
Diretora de Agricultura, Pesca e Abastecimento da Prefeitura de Peruíbe

MEDIAÇÃO:
Davis Sansolo
Prof. da UNESP/SV

Roda de conversa no Hangouts Meet
O link será enviado uma hora antes pelo Whatsapp

Camila Mie
FESBS - Bertioga

Hemerson Calgaro
Mongaguá
Extensionista/CDRS/SAA

Obs.: é preciso baixar o Hangouts Meet no celular. No computador, esse procedimento não é necessário.

Figure 1. Publicity for Roda de Conversa with Baixada Santista map and FESBS logo, 07.05.2020.

(Sansolo, Gross, and Levidow 2021). The team also investigated how EcoSol initiatives were facing practical difficulties, e.g. Covid restrictions undermining Feiras, consumers seeing themselves as clients, poor roads jeopardising goods transport to Feiras, policy support declining or absent, producers' cooperatives lacking full participation, etc. In these ways, the analysis sought to develop participatory action research as much as possible via online methods. The patterns gave many prompts for internet searches, e.g. the wider context, historical origin, resistance to the hegemonic agri-industrial model and alternative agendas. Sources included: grey literature, policy reports, stakeholder documents, academic papers, etc.

Fourth, drawing on those sources, the research team extended the research questions into specific interview questions. These were put to representatives of four initiatives. Questions about policy support were put to two municipal officers involved in the FESBS. Interview transcripts provide detailed information for specific initiatives.

Thus those research materials express grassroots voices of EcoSol-agroecology. The paper has hyperlinks to many sources on Facebook pages, in addition to items in the References section. They have been analysed here as multiple proximities of circuitos curtos, linked with other concepts (as in Section 3). All this addresses our central research question about identifying and strengthening collective capacities.

5. Baixada Santista: solidarity networks respond to the Covid-19 crisis

After briefly presenting Brazil's nation-wide context of the Covid-19 pandemic, the case study will be presented as initiatives of two types: solidarity networks in this Section 6, and then producers' collective marketing initiatives in Section 7. Each illustrates how actors' common purposes help mobilise complementary forms of proximity.

5.1. Brazil's pandemic context

Since 2016 Right-wing government policies had worsened a long-time socio-economic crisis featuring problems of food insecurity, poverty and dispossession. The Covid-19 pandemic intensified those threats, as highlighted by João Pedro Stédile, a national leader of the MST, the Landless Rural Workers Movement. Beyond assigning blame to the government, he proposed:

It is especially important to improve our production of healthy food through agroecology and by practicing solidarity with the urban poor, who are being contaminated by the virus in conditions of social isolation and need, without access to health care. We must practice solidarity with the working people of the cities, bringing food, donating blood, etc. (Sauer 2020, 929)

EcoSol networks made efforts and demands along those lines.

After the Covid-19 pandemic began, state authorities shut down schools to limit infections. In April 2020 a new law authorised emergency distribution of food to schoolchildren's parents, e.g. via cooked meals or weekly meal kits. Funds came from PNAE, the school meals programme, which had been preferentially purchasing food from family and agroecological farmers (de Amorim et al. 2020). Some local authorities used PNAE budgets for food distribution beyond schools, responding to public pressure and/or civil society partners for food distribution.

This effort responded to chronic problems of food insecurity. Under the first decade of the PT-led government, food insecurity declined but still befell one-quarter of Brazil's population. The problem soon worsened as unemployment rose, incomes fell, and Right-wing governments reduced state support for food security, especially under the Sistema Nacional de Segurança Alimentar e Nutricional (de Amorim et al. 2020, 1136-1137). Low-income people became more dependent on cheap ultra-processed food, lacking nutritional quality, especially in peri-urban 'food deserts'. The pandemic revealed and worsened those structural problems of food insecurity and malnutrition.

When Brazil's state governments imposed protective measures of hygiene and social distancing, heavier burdens fell on lower-income people and small-scale producers. The new requirements posed special difficulties for open-air farmers' markets, generally called *Feiras do Agricultor* or *Productor*. These Feiras are Brazil's second largest retail outlet for food and a crucial outlet for agroecological producers (Matte and Preiss 2019).

The new hygiene standards required several measures: disinfecting the food stalls, maintaining a minimum distance between them, and avoiding infection through product handling, packaging, plastic bags or payment methods. Farmers' markets were mainly sited outdoors; few had running water. They made special efforts to adopt hygiene measures, e.g. disinfectants, gloves, etc. Some markets had extra assistance from municipal authorities, but others could not comply and had to shut down (Preiss 2020). Women's associations had already played a leading role in agroecological farmers' markets and then did likewise in making adaptations for circuitos curtos to continue, especially through social media (SOF 2021, 67). Members mobilised trust relationships, which were based on memories, emotional bonds and inter-personal relationships (SOF 2021, 34).

During the Covid-19 crisis, the Brazilian Agroecology Association appealed for various solidarity actions with these mottos: 'Real Food: family agriculture continues to produce

healthy food in the pandemic. Stay at home. Buy local' (ABA 2020). Small-scale family farms sought ways to continue valorising their products through short supply chains. The national agroecology articulation raised the twitter slogans: '#BuyLocal, #Buy without Poison, #Buy Well' (ANA 2020a). Adapting those slogans, local networks asked supporters for greater efforts at mutual aid: 'Your help can save lives', 'Family agriculture against the coronavirus', 'Prevention is everything', etc. (ANA 2020a).

Solidarity initiatives sought to strengthen the social fabric through knowledge exchange about natural medications, defence of common goods against territorial expropriation, and agroecological practices for self-consumption, donations and barter of surplus products (SOF 2021, 74). For example, Slow Food Brasil created an interactive map of small-scale producers to facilitate such activities. The Brazilian Institute for Consumer Defence created such a map for bringing sustainable family farms closer to consumers (IDEC 2020).

In March 2020 a Porto Alegre textile cooperative, UNIVENS ('United We Will Win'), initially produced 600 facemasks for free distribution to health centres, Feiras do Agricultor and other public places. The fabric was donated by the *Justa Trama* (fair-trade loom) network, which routinely supplies organic cotton to UNIVENS. The latter announced, 'We take care and care for others. It is a mission'. *Justa Trama* 'believes in solidaristic fair trade in relations of production without exploitation'. Our sustainable brand 'constructs citizenship by valorising human labour and preserving the environment'. Gaining much publicity, UNIVENS' actions inspired similar efforts elsewhere.

5.2. Baixada Santista: regional solidarity networks

Let us turn to solidarity networks in the Baixada Santista. Taking up the UNIVENS example from Porto Alegre, the NGO Eco Vida made and distributed facemasks; short films depicted their manufacture and use at every stage from harvest to market. The local Rede Solidária (solidarity network) collected surplus food to feed those who lack sufficient income to purchase it or means to reach sales points, as well as for elderly people.

As a newly formed social movement, the *Frente da Baixada Santista pela Vida* initially aimed to take care of vulnerable groups through donations, which were distributed according to needs of each locality. Priority was given to elderly and self-isolating individuals. The Frente linked or stimulated solidarity networks in the region's many towns. By August 2020 its programme had regularly fed more than 9000 people, both rural and urban. The Frente held an online *celebration*, where women speakers from low-income neighbourhoods told stories about their mutual aid activities and collective pride, thus countering the social stigma that they had experienced every day.

The Frente also asked municipalities to organise donations. They eventually set up collection points for emergency food and hygiene materials. Municipalities also began to distribute weekly food baskets to school students and vulnerable individuals, even those without children or adolescents. As FESBS emphasised, such *donations* are not charity: 'In gift relationships, the goal is to establish a social bond'. Donations were promoted as *solidarity* and reciprocity (FESBS Facebook page, 18.09.2020).

In response to solidarity networks, Peruíbe municipality increased its food purchases, sometimes from longer distances to make up the aid baskets. Eventually, in mid-2021 it

began the *Cesta Verde* 'green basket' scheme of fruits and vegetables 'from the family farmer to your table'. This initially bought food from 15 farmers for weekly deliveries to 200 vulnerable families under the Programa de Aquisição de Alimentos (PAA), thus contributing to food and nutritional security.

Beyond donations, solidarity networks creatively adjusted *circuitos curtos* to avoid or overcome blockages, as a means to keep income flowing to food producers. New strategies had regular discussions, coordinated by managers of EcoSol public policies (e.g. FESBS webinars of 18.05.2020 and 08.10.2020). As one participant said: Before the pandemic, agroecological farmers' markets were women's discussion spaces about feminism, agroecology and fair trade. 'During the pandemic we face the challenge of expressing virtually our artisanal production of quality'. The challenge was doubly virtual, i.e. discussing strategies online and then attracting consumers or voluntary labour via online media (FESBS webinar, 23.07.2020). Solidarity networks mobilised collective capacities to maintain and expand *circuitos curtos* of various kinds.

5.3. Santos: *Livres Coop de Consumidores Conscientes*

In the region's main city, Santos, a new solidarity network had formed about a year before the pandemic. Called *Livres Coop Consumidores Conscientes*, they locally 'link producers and conscientious consumers'. The term *Livres* (free) has several meanings, e.g. products free of pesticides, labour exploitation and profit-driven middlemen. They have highlighted the resource conservation and socially just livelihoods accruing from agroecological production methods: 'We promote popular access to *produtos de bem*'. The latter term evokes the concept *Bem Viver*, denoting more than simply 'good products'. Their cloth carrier bag displays the slogan, 'Community constructing another economy'. These aims have been promoted through its Community-Supported Agriculture (CSA) box scheme, building a cultural proximity between producers and consumers.

The pandemic stimulated new solidarity linkages and activities. For people who could not reach its distribution point, the *Livres* helped to arrange smaller pick-up points or home deliveries for agroecological products that otherwise would have no outlet. They helped to organise food baskets with a mutually agreed price so that producers would gain a stable fair remuneration, the basket assemblers received some payment for their labour, and lower-income consumers could afford to buy the baskets.

Home deliveries depended on the *eco-bikers* network, using a novel app which promoted the alternative vision and avoided user charges (AgroEcos webinar, 17.06.2020). As the discussions recognised, such solidaristic intermediaries should be favourably distinguished from profit-driven middlemen, known as *atravessadores* (FESBS webinars, 28.05.2020 and 17.06.2020). These arrangements have helped to build an organisational proximity among Santos participants.

By July 2020 the weekly baskets were being sourced from five rural producer-cooperatives, some long distances away such as Campinas and Vale de Ribeira. They were supplying 120 consumer-subscribers, whose numbers reached 200 later in the year (Rodrigues da Silva et al. 2020). This greater demand exhausted the available supply. The *Livres* have highlighted rural problems of youth flight, declining peasant production and less accessible food there; hence the solidaristic purchases help to address these problems

and keep youth in farming. Subscribers receive regular reports about rural associations and individuals who supply the food products (Livres 2021).

As a major challenge for the Livres, conventional markets regularly provide numerous food options through global imports, making the system environmentally destructive but superficially attractive. Most consumers have become accustomed to these year-round food options. To change consumer habits, the *Livres* popularised regional and seasonal foods as an environmentally sustainable alternative; it also explained how to use or cook unfamiliar foods from unconventional plants (PANCS, AgroEcos webinar, 17.06.2020). This practical education further built a cultural proximity among all the participants, despite the diverse social composition and long geographical distances of agroecological producers.

In such ways, the network increasingly linked producers, consumers, couriers, volunteers, etc. During the pandemic, active participants multiplied several times; by August 2020 they exceeded **one thousand** subscribers and twice as many Facebook followers. The Livres also organised donations to vulnerable individuals. As a play on words, the motto 'reexistência' combines resistance with existence. During the pandemic, the Livres overcame many obstacles through its solidaristic relationships: 'Despite being abused and devastated, this earth does not cease to feed us' (Livres 2021).

Beyond the Livres, donations were carried out on a larger scale by **Mesa Brasil e SESI Santos**. Mesa Brasil SESC already had a national network of food banks; Sesi is the Serviço Social da Indústria, social service of industry. The Serviço Social do Comércio (SESC) also promoted food donations as solidaristic mutual aid rather than charity (SESC webinar, 23.10.2020).

To continue safely in a physical form, the weekly outdoor fair for organic products asked everyone to 'Save our market', i.e. to comply with **safety norms** of social distancing and minimise food handling. Elderly people should 'stay at home', where they could receive deliveries. The market venue was sufficiently large to maintain the necessary distance between food stalls, as well as for a drive-thru sales point.

The numerous webinars and initiatives of the FESBS resonated with some residents in food deserts, generally lower-income peripheral urban areas which lack low-cost healthy food. They began to establish local food cooperatives. They collectively arranged weekly purchases from agroecological farmers, assembled food baskets and distributed them to members, thus enhancing both incomes and food security.

6. Baixada Santista: producers' collective marketing

Having surveyed EcoSol networks, let us next look at producers' initiatives for collective marketing. As historical background, important capacities had been developed during the PT governments (2003–2016). Under the Programa de Aquisição de Alimentos (PAA), agroecological producers learned how to manage an *Organização de Controle Social (OCS)* for organic certification. Some cooperatives also ran collective stalls at Feiras. The PAA budget was much reduced after 2016 under Right-wing governments. Indeed, they dismantled or weakened support measures (Niederle 2021, 2022).

Nevertheless in the Baixada Santista many agroecological producers had already benefited from the training, and the FESBS continued to spread the skills. Among the producers' initiatives for collective marketing, only some members had organic certification,

and many more sought advice on commercial aspects. So there were requests for training, which led to a short course on agroecological transition encompassing *circuitos curtos* (UNESP 2021). This featured a *Protocol on Agroecological Transition*, which emphasised solidaristic relationships through partnerships, cooperativism and diverse marketing channels (CATI 2021).

The three mini-cases below illustrate forms of collective marketing, *circuitos curtos*, policy support measures and state bodies providing them. Each sub-section explains their pre-pandemic context and then how they dealt with the pandemic.

6.1. Peruíbe: União Mulheres Produtoras de EcoSol (UMPES)

In Peruíbe, a small coastal town, the municipality has been promoting EcoSol-agroecology networks for nearly a decade, supported by the FESBS. Its Environment and Agriculture Secretariat has hosted training courses especially including women. Topics included: finance, leadership, producers' cooperatives and non-conventional food plants (PANCS). Participation had been encouraged by the *Sempreviva Organização Feminista (SOF)* and by their future Director, who had come from a quilombolo family elsewhere, bringing their mutual aid culture to UMPES. Through *mutirão* the women learned to cultivate plants without pesticides (AgroEcos internal webinar, 16.06.2021). She also introduced quilombolo cuisine, whose sales became popular.

The municipality provided a venue for the women's direct sales in a weekly outdoor market. From these training and sales activities, in 1987 there emerged the *União Mulheres Produtoras de EcoSol (UMPES)*, the Union of Women Producers of EcoSol. It has managed the weekly *Feira do Agricultor* and promoted women's participation in professional improvement courses. When some gained organic certification through an *Organização de Controle Social (OCS)*, they obtained a higher income and promoted an environmental consciousness (interview, 30.06.2021).

A common purpose has been mutual aid as the basis for dignity and higher income: 'Whenever a women asks for assistance, we offer a helping hand. By working together, it is easier to deal with difficulties ... Whenever we talk, we create emotional bonds' (interview, UMPES, 30.06.2021). This process facilitates an organisational proximity: 'We believe in self-management; here we have no boss or employee'. We aim 'to guarantee women's rights and leadership ... in a space where women exchange experiences, learn together and mutually improve forms of income generation' (UMPES Facebook page).

The UMPES Director describes the process as emancipatory:

EcoSol extends family traditions to use natural resources, exchange surpluses and so avoid food waste. The collective helps us to improve our production methods. Whenever I feel alone, EcoSol brings a warmth of good people: together we talk, eat and take care of our children, without needing to pay money. We gain economic autonomy. It's not necessary to ask the husband for money. This is our emancipation ... (Imaculada Favini, FESBS webinar, 23.07.2020).

Institutional proximity went beyond the earlier training programmes: Before the pandemic, several UMPES members were supplying food to the municipality under the school meals programme PNAE. Some also supplied food when the municipality began providing food baskets to vulnerable people. To make these arrangements

more viable, UMPES sought to ensure that the women receive a stable income (interview, 30.06.2021).

During the pandemic the Feira do Agricultor could not continue to operate in its previous form, mainly for two reasons: the virus risks deterred its usual customers, and the facilities could not be easily adapted to the hygiene requirements. Deliveries were offered to alternative pick-up points or to people's homes. Women producers pooled their products, assembled food baskets at the Feira site and afterwards distributed the income according to criteria which they had democratically agreed (Rodrigues da Silva et al. 2020). By exchanging their surplus products, moreover, UMPES members could offer greater variety to consumers and increase their income. All this had a solidaristic role: 'We valorise product exchanges, seen as a necessary practice to create more just relationships' (Capozzi, Coutinho, and Gastaldo 2020).

When the pandemic posed difficulties for the farmers' market, UMPES established a weekly virtual [online fair](#). It initially had 13 food producers, mainly individual women (RSdP 2020). By July it had eight production and marketing collectives (Rodrigues da Silva et al. 2020). By October 2020 they had increased to 25 collectives, selling a broader range of products to more consumers.

Maintaining the physical fair was also important. Many UMPES members lacked internet access for fulfilling online orders; and many had been selling artisanal products beyond food (interview, 03.04.2021). Some UMPES members devised a drive-thru system for purchases from food stalls so that 'people feel more comfortable and safe' (Itanhaém Prefeitura 2020; AgroEcos webinar, 28.05.2020). During the pandemic, UMPES maintained consumer trust through cooperative efforts to ensure and publicise compliance with WHO advice on hygiene measures (Capozzi, Coutinho, and Gastaldo 2020) (Figures 2 and 3).

The [Rede Solidária de Peruíbe](#) has brought together artisanal producers of various kinds for mutual aid and joint publicity, more recently through social media and online fairs with UMPES. The Rede has been 'uniting diverse professionals, producers, artisans, service



Figure 2. UMPES poster emphasises women's multiple burdens. Credit: Les Levidow.



Figure 3. UMPES co-manages the Feira do Agricultor, which established a drive-thru option during the pandemic. Credit: Calgaro, Nasser, and Villela (2021).

providers: we cooperate to create new consumer alternatives'. The network 'understands that the responsibility for products lies with each producer and consumer, based on the trust relationships established between them' (Facebook page). In the pandemic, this relationship depended even more upon trust in hygiene measures and product quality.

During the November 2020 local elections, the FESBS EcoSol manifesto was reinforced by UMPES' *Carta de Compromisso* ('commitment letter'). This was signed by several candidates, whose short films were posted on the Facebook page. The demands aimed to overcome gender inequalities, especially through a solidarity economy.

UMPES developed knowledge-exchange and support networks, which strengthened collective capacities for democratically self-managing circuitos curtos. During the first year of the pandemic,

We won victories: a new office, approved projects, a sewing workshop, subsidy through the Lei Aldir Blanc [supporting cultural production] and a permanent site for the Feira despite the social distancing. Finally we took on new tasks with combative, committed companheiras in the struggle for women's rights (Facebook post, 31.12.2020).

By requesting popular support, UMPES members gained more opportunities to debate political issues, to be accepted as credible, and to attract more women who had similar aims (interview, 30.06.2021). Responding to many political pressures, in 2021 the municipality began to promote women's agricultural activity within broader policies such as the Peruipe Business Plan and the Women's Municipal Plan (interview, civil servant, 06.05.2021). This policy offers agroecological producers more training programmes from several agencies, especially the Assistência Técnica e Extensão Rural (ATER), emphasising circuitos curtos for income-generation. By 2022 the municipality was co-sponsoring

several weekly farmers' fairs and a monthly EcoSol show with the slogan, 'Another economy happens'.

In all those ways, EcoSol networks have strengthened the various social proximities which underlie circuitos curtos. Women have gained a more prominent public role as political actors promoting a wider EcoSol network.

6.2. Itanhaém: Associação dos Produtores Rurais da Microbacia Hidrográfica de Itanhaém (AMIBRA)

A small coastal town, Itanhaém is the base of the rural producers' association AMIBRA. With help from the municipality's experts, it began as an informal network in 2007. Then it eventually gained juridical identity in 2018. A common purpose has been mutual aid: '~We have always learned to support each other ... We decide collectively whatever is good for the majority' (interview, AMIBRA, 06.03.2021).

The municipality has provided training courses in EcoSol-agroecology for many years, often in partnership with the FESBS. The training strengthened collective self-management skills and strategic vision of the local producers, especially AMIBRA (Itanhaém 2013). Through the programme, in 2018 some women producers gained certification as family farmers (SIPAF), thus raising their self-esteem and public visibility (SP Governo 2018b). When some also gained organic self-certification under an *Organização de Controle Social (OCS)* initiative, their products became eligible for advantageous prices through the government's PNAE for supplying school meals. Some AMIBRA cooperatives regularly supplied products to Itanhaém municipality before the 2020 pandemic.

As regards organisational proximity: FESBS training events helped to increase women's participation and leadership. Among the many workshops, one was entitled, 'Ecosol Mulher: Emancipar pela economia solidária': women's emancipation through solidarity economy. The programme included talks on nutrition and health. It strengthened the productive and organisational capacities of women-led initiatives (Itanhaém 2018). Like UMPES, AMIBRA members regularly carry out exchanges of surplus products, symbolising reciprocity: 'We have this exchange to help each other. We are very united in the association' (interview, AMIBRA, 06.03.2021).

As a cultural proximity of AMIBRA members, most are elderly, some gaining help from sons or daughters. Elderly producers often have a closed mind to new methods. 'But through the training course, they opened their minds to the entire world', according to the coordinator. (interview, AMIBRA, 06.03.2021). They benefited from various training programmes, especially from Brazil's agri-extension service, the *Assistência Técnica e Extensão Rural (ATER)*; Calgaro, Nasser, and Villela 2021). Of AMIBRA's 70 producers, only a few members have OCS certification, though most avoid agrochemicals. Many have been undergoing a transition to agroecological production methods through a knowledge-exchange process among producers and with agri-extensionists.

As regards institutional proximity: Along with the municipality, for many years AMIBRA was co-managing the Feira do Agricultor, featuring collective stalls. To improve the Feira, in 2019 the municipality made a large investment in a Centro Técnico Rural. This included a large area 'to store various implements for small-scale agriculture and food processing, a training room, offices, kitchens, demonstration plots for new technologies and a living

pharmacy' for herbal remedies. The Feira's new site attracted more consumers to buy fresh products from small-scale agroecological producers (Itanhaém 2019). AMIBRA regularly borrows a municipal truck to transport products for sale there and return unsold products to the producer (interview, AMIBRA, 06.03.2021).

During the 2020 pandemic the municipality helped the *Feira do Agricultor* to find a larger site, which had fewer stalls in order to maintain the necessary distance between producers and consumers. Organisers asked everyone to comply with the hygiene standards, with help from the municipality. Facemasks were sold at a low price. Facebook pages featured films demonstrating the hygiene measures for several reasons, e.g. to reassure consumers and to request universal compliance.

At the larger site the *Feira do Agricultor* set up a collective stall to combine products of several producers. It also set up a drive-thru facility for consumers. Its messages emphasised food quality for health: 'You are what you eat, so you should eat healthy food'. Consumers are asked to support local family producers: 'These products have a social value much greater than you can imagine. Be a conscientious consumer!' (AMIBRA Facebook, 29.05.2021). The women's' greater income came from relationships of reciprocity and solidarity, thereby 'a product gains a social value much greater than its price' (municipal officer quoted in Rodrigues da Silva et al. 2020).

Further to institutional proximity: For more than a decade, the municipality had run a Banco de Alimentos, purchasing products for school meals and vulnerable people under the PNAE. Each AMIBRA member was guaranteed sale of at least R6500 per year at a state-supported price (interview, AMIBRA, 06.03.2021). When Itanhaém suspended the PNAE during the pandemic, its municipal officer helped AMIBRA to gain food-supply contracts with two other municipalities which were continuing the PNAE, Mongaguá and Guarujá (AMIBRA Facebook post, 23.03.2021; interview, AMIBRA, 06.03.2021). Later the local Coordenadoria de Desenvolvimento Rural Sustentável (CDRS) also provided food to vulnerable individuals; some supplies came from AMIBRA members (Facebook, 27.04.2021). Through these institutional purchases, agroecological producers were able to maintain their pre-pandemic income.

To facilitate their circuitos curtos and gain more income, AMIBRA asked the municipality for several support measures, including: equipment for lightly processing food, a refrigerated truck, a nursery for new plants, and a rural workers' centre (interview, AMIBRA, 06.03.2021). These requests reinforced the general demand that local authorities support EcoSol activities (FESBS 2020b).

6.3. Bertioga: Coletivo Banana Verde

As a collective marketing initiative, the *Coletivo Banana Verde* brings together several producers' associations: 'We are a collective of family farmers and small producers of artisanal foods and drinks, engaged in creating a network of producers and consumers, towards constructing a new economy' (Facebook page). A common purpose has been mutual aid: 'Each supports the other ... Competition does not exist. The organic producer is accustomed to working in a group. We're fighting head-on with the market. Money is a political weapon to support a new economy' (interview, 18.04.2021).

As regards organisational proximity, the *Coletivo* originated during the pandemic, when the closure of traditional Feiras led 20 producers to initiate collective marketing.

Rather than a formal cooperative, the Coletivo combines producers and associations with their own separate identities. In the cultural sense, 'We speak different languages, but we try to be in tune with each other. The women have a fundamental rich presence. But we miss learning how to work as a group, so that members understand that this movement is ours'. Online means limited active participation. During the pandemic, Coletivo meetings were held via Whatsapp, but few members actively participated in the debates and conversations; most preferred that others make the decision (interview, 18.04.2021).

Collective marketing has been done through pre-paid online orders. With this arrangement, producers have lower losses than they did in Feiras. Every customer must flip through the [many pages](#) of product offers before finalising an order. This gives an opportunity to all the producers, as a solidaristic feature.

Although their producer-members use agroecological methods, this term is unknown to most consumers. Organic certification is important because 'the consumer does not believe my word and so likes to see the organic label' (interview, 18.04.2021). One AMIBRA affiliate, the Associação dos Produtores Orgânicos do Alto Tietê ([Aproate](#)), emphasises its organic certification methods on the website. It invites supporters to 'know super-heroes of nature', i.e. farmers who develop and improve agroecological methods conserving natural resources.

The Coletivo tries to educate consumers about agri-food alternatives. 'Consumers must understand that they are a fundamental active part of maintaining a space' for agroecological methods. So it is necessary to put this concept everywhere (interview, 18.04.2021). The publicity emphasises agroecological methods for seasonal products: 'The products are delivered weekly in accordance with the availability of ingredients and the rhythms of Nature!' ([Banana Verde](#) Facebook, 23.06.2020). This helps to educate consumers about environmental benefits and food quality from the producers' methods. The Coletivo uses various media to promote its message. 'We produce a lower quantity but better quality, e.g. of medicinal plants, Asian cuisine plants, PANCS, etc.', as publicised in an online radio programme ([Radio Praia FM](#), Sala de Imprensa, 26.05.2021).

As regards geographical proximity, the Coletivo's members and circuitos curtos are spatially dispersed: Based in the coastal town Bertioga, the Coletivo does weekly deliveries there and in the nearby town Guarujá. It has members running regular Feiras do Agricultor in Bertioga, Guarujá and Mogi das Cruzes, 90 miles away. Common purposes can help to overcome difficulties of geographical distance.

As regards institutional proximity, the Coletivo has gained modest support from several state bodies. Before the pandemic, many members sold their products at the local Feira under an alliterative theme, *sabores e saberes*: 'Flavours and Knowledges: local artisanal producer'. The Feira was hosted by Social Service of Commerce (SESC), which assists small businesses. When the pandemic began, SESC became an incubator of many regional initiatives including the producers' plan to establish the Coletivo, which became a legal entity. In addition, the Waldorf School provided a weekly space where the Coletivo organises its products for delivery (interview, 18.04.2021).

The Coletivo wanted to share its collective marketing experience to stimulate a wider solidarity economy: 'Others should shape a similar model and so replicate it in other places'. An ideal means would be the in-person SESC courses which had run before the pandemic. The Coletivo asked whether UNESP could run such a workshop or mini-

course (interview, 01.06.2021). Similar requests from other initiatives led to a new course on agroecological transition (as described above: CATI 2021; UNESP 2021).

7. Conclusion: activating proximities of EcoSol-agroecology

Alongside globalised markets, the hegemonic agribusiness model has caused systematic harms and provoked resistance, as in Brazil. Opponents there have resisted the government agenda for 'a family farm transition to modern agriculture', a euphemism for dependence on agribusiness. They have counterposed an agroecological transition.

Amplifying (or massifying) agroecology provides crucial means. This depends on expanding short supply chains, known as *circuitos curtos* in Latin America. Beyond simply avoiding middlemen, *circuitos curtos* have been positively constructed as mutual-aid relationships of a solidarity economy (EcoSol). This convergence is called EcoSol-agroecology here.

In early 2020 the Covid-19 crisis disrupted previous *circuitos curtos* of EcoSol-agroecology, especially collective marketing at Feiras do Agricultor, which faced new hygiene restrictions. Brazil's programme favouring agroecological family farmers for school meals likewise was suspended, though sometimes expanded provision to vulnerable groups. Facing these disruptions, small-scale agroecological producers created new opportunities for *circuitos curtos* beyond the person-to-person interfaces of Feiras.

As Brazil's national context, the Covid-19 crisis aggravated a long-time endemic food insecurity, partly due to worsening socio-economic inequalities and malnutrition from ultra-processed food. EcoSol-agroecology networks highlighted the food insecurity threat, organised emergency food aid, and asked local authorities to establish larger aid programmes with food from agroecological producers. They cited the 2006 national policy on food and nutritional security, whose instruments had been neglected or degraded by Right-wing governments since 2016.

EcoSol-agroecology networks further popularised *comida de verdade* as an essential means for food and nutritional security, likewise for sociobiodiversity protection and an agroecological transition (ABA 2020; ACCV 2022, 3; cf. CONSEA 2015). Support networks have facilitated such solidaristic arrangements, especially institutional purchases for school meals and vulnerable individuals (ANA 2020b, 2021). They advocated greater agroecological production for local needs, Beyond expanding this supply, they advocated *circuitos curtos* with distant rural producers. EcoSol-agroecology initiatives have demonstrated various feasible means of such arrangements, as exemplified by the case study here.

Solidaristic responses to the pandemic extended interest in EcoSol as social proximity: EcoSol builds an 'economy of proximity' in multiple senses. This concept originated in our case-study area and informed earlier strategies for *circuitos curtos* there (Rodrigues da Silva et al. 2018, 214–216). Later it became more explicit in responses to the pandemic (Rodrigues da Silva 2020). Hence it has provided a conceptual basis for participatory action research to engage EcoSol initiatives resisting the hegemonic agri-food system and creatively extending an alternative model. Each initiative features grassroots voices of EcoSol-agroecology practitioners.

To elaborate the concept of proximities, this paper focused on four initiatives for agroecological collective marketing. Three are run by producers, and one by consumers

(Livres Coop). Each initiative has proximate purposes activating and linking other social proximities, as in these general patterns:

- Proximate purposes: The collective marketing initiatives seek to deepen reciprocal mutual-aid and democratic self-management. They develop collective knowledge for agroecological production methods, based on biodiverse resources (sometimes called Nature or Bem Viver). This provides a basis to gain consumer support, raise producers' incomes and overcome socio-economic inequalities including food insecurity. Women's leadership (*protagonismo feminino*) aims to strengthen their capacities, highlight their economic contribution and overcome gender inequalities (especially UMPES and Coletivo Banana Verde). These common purposes have activated and linked other types of proximity.
- Geographical: Spatial proximity has facilitated some town-based initiatives (e.g. UMPES and AMIBRA) but has not been essential. Large geographical distances have been bridged by solidaristic cooperation among producers and with consumers (e.g. Coletivo Banana Verde and Livres Coop, respectively).
- Organisational: Training programmes have helped producers' associations to develop democratic self-management; this facilitates relationships of mutual confidence, reciprocity and solidarity. In adapting to the pandemic, Feiras devised adaptations such as drive-thru facilities. Collective marketing initiatives have been linking online orders with a new delivery system, involving extra roles or actors (e.g. Coletivo Banana Verde and Livres' eco-bikers). But the pandemic restrictions necessitated decision-making by online means, posing an obstacle for many producers and so limiting participation.
- Cultural: Diverse agri-food traditions have been revived for reconnecting producers with consumers. Seasonal foods are promoted as more environmentally sustainable, with consumer education about cooking methods (e.g. Livres, Coletivo Banana Verde, UMPES). Some products are lightly processed, enhancing longevity and aesthetic appeal. Some remind people of favourite childhood tastes and aromas. Traditional agricultural knowledge has been integrated with technoscientific knowledge.
- Institutional: Having requested various support measures from public authorities, some initiatives have gained public procurement contracts, facilities for Feiras, drive-thru, transport, food basket assembly, etc. This support has been facilitated by FESBS bringing together EcoSol professionals, integrating their expertise and circulating creative adaptations during the pandemic.

Thus our main research question can be answered as follows: EcoSol-agroecology expands through collective capacities to activate and link various social proximities. Diverse contributions have been integrated into a 'composite culture of social networks and belonging', connecting traditional and other sources (Zaoual 2010). This elaborates concepts of solidarity as social proximity along more specific lines. It enriches analytical frameworks of amplifying agroecology through horizontal outscaling and vertical upscaling (Gonsalves 2001, 5; cf. Rosset and Altieri 2017, 2018, 153–180).

Despite the Covid-19 crisis, Baixada Santista's EcoSol network has expanded circuits curtos, raised their public profile as an alternative, and at least maintained income for many small-scale agroecological producers. They did so by extending the prior collective

capacities for self-managing circuitos curtos. The network has been strengthening solidaristic bonds among various artisanal activities beyond agri-food products. This scope broadens global agendas for scaling agroecology through a solidarity economy (FAO 2018). EcoSol networks have been elaborating 'another economy', as a stronger basis to demand and gain policy support measures for artisanal production.

What implications for public policies? Despite the Federal government weakening or dismantling support measures for EcoSol-agroecology, this regional network promotes EcoSol as a socially just alternative to the hegemonic system. By bringing together all such initiatives, the solidarity network has helped their demands for gain support measures. In this sub-region, some municipalities had adopted EcoSol policies but did not implement them. During the November 2020 local election campaign, the EcoSol regional manifesto put forward many specific demands to build 'an economy of proximity' which could overcome inequalities in employment, income and food security (FESBS 2020a, 2020b, 5; Vasques 2020). Under such pressures, some municipalities established special units or procedures to devise support measures with EcoSol networks.

These networks resonate with national ones linking EcoSol self-management, agroecological production and food security. Two examples: Through *protagonismo femenino*, women's agroecological initiatives have constructed political processes as collective subjects who militate for a more just world for everyone, rather than depend on top-down policies, according to a feminist network (SOF 2021, 74). EcoSol needs a bottom-up basis of support measures, which thereby could be held accountable to the beneficiaries, according to a policy officers' network (Rede de Gestores 2018, 2021). For this strategic perspective, a basis lies in EcoSol networks with the collective capacities described here, initially at local and regional level.

This regional case has wider relevance. Many places have analogous opportunities to create solidaristic bonds between agroecological producers and urban consumers, whenever common purposes can activate and link various social proximities. Such efforts have a counter-hegemonic potential in contesting the hegemonic agribusiness model. As global elites seek 'a return to normal', a different future depends on building collective capacities for scaling EcoSol-agroecology, as means towards an agroecological transition.

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References

- ABA. 2020. *Comida de Verdade: Agricultura familiar segue produzindo saúde em época de pandemia*. Associação Brasileira de Agroecologia (ABA). <https://www.facebook.com/AssociacaoBrasileiraDeAgroecologia/>.
- ACCV. 2022. *Contribuições para o debate sobre abastecimento alimentar: possibilidades futuras e demandas de políticas públicas*. Brasília: Ibirapitanga, Ação Coletiva Comida de Verdade (ACCV).
- Action Aid. 2010. *Mulheres e agroecologia. Sistematização de experiências de mulheres agricultoras*. Rio de Janeiro: ANA. http://actionaid.org.br/wp-content/files_mf/1584562583MulhereseAgroecologia.pdf
- Agarwal, B. 2014. "Food Sovereignty, Food Security and Democratic Choice: Critical Contradictions, Difficult Conciliations." *Journal of Peasant Studies* 41 (6): 1247–1268.
- AgroEcos. 2020. *Seminário: Baixada Santista enfrenta a pandemia Covid-19*, 17 de junho. <https://www.youtube.com/watch?v=Eq1nXwpdoDw>.
- Altieri, M. A. 2002. *Agroecologia: Bases Científicas para uma Agricultura Sustentável*. Guaíba: Agropecuária.
- Altieri, M., and C. I. Nicholls. 2020. "Agroecology and the Reconstruction of a Post-COVID-19 Agriculture." *Journal of Peasant Studies* 47 (5): 881–898.
- Altieri, M. A., and C. Nichols. 2008. "Scaling up Agroecological Approaches for Food Sovereignty in Latin America." *Sustainable Agriculture Reviews* 11: 1–29.
- Altieri, M. A., and V. M. Toledo. 2011. "The Agroecological Revolution in Latin America: Rescuing Nature, Ensuring Food Sovereignty and Empowering Peasants." *Journal of Peasant Studies* 38: 587–612.
- Alves, E. and E. Contini. 1988. "A modernizacao da agricultura brasileira." In *Os principais problemas da agricultura brasileira: análise e sugestões*, en A. Brandão (org.), 49–98. Rio de Janeiro: IPEA/INPES. <https://www.embrapa.br/busca-de-publicacoes/-/publicacao/83929/a-modernizacao-da-agricultura-brasileira>
- Alves, E., E. Contini, and E. Hainzelin. 2005. "Transformações da agricultura brasileira e pesquisa agropecuária." *Cadernos de Ciência & Tecnologia*, Brasília 22 (1): 37–51.
- ANA. 2012. *Propostas para a Política Nacional de Agroecologia e Produção Orgânica*. Rio de Janeiro: Articulação Nacional de Agroecologia (ANA). <http://www.agroecologia.org.br/files/importedmedia/propostas-ana-para-a-politica-nacional-de-agroecologia-e-organicospdf.pdf>
- ANA. 2019. *Redes de agroecologia para o desenvolvimento dos territórios: aprendizados do Programa Ecoforte: Sumário Executivo*, Anna Cecília Cortines (org.). Rio de Janeiro: Articulação Nacional de Agroecologia (ANA).
- ANA. 2020a. *Coronavírus: solidariedade e políticas públicas, 23 de março*. Articulação Nacional de Agroecologia (ANA).
- ANA. 2020b. *Agroecologia nas eleições: propostas de políticas de apoio à agricultura familiar e à agroecologia e de promoção da soberania e segurança alimentar e nutricional em nosso município*. <https://agroecologia.org.br/2020/10/01/agroecologia-nas-eleicoes/>.
- ANA. 2021. *Pesquisa-ação: Comida de Verdade nas Escolas do Campo e da Cidade: Agroecologia e Alimentação Escolar*.
- Bolivia. 2008. *Constitución da Asamblea Constituyente de Bolivia*. <http://www.laconstituyente.org/>.
- Borlini, L. M. 2010. "Há pedras no meio do caminho do SUS - os impactos do neoliberalismo na saúde do Brasil." *Textos & Contextos (Porto Alegre)* 9 (2): 321–333.
- Brasil. 2009. *Lei N° 11.947, Programa Nacional de Alimentação Escolar (PNAE)*, 16 de junho de 2009.
- Cabral, L., A. Favareto, L. Mukwereza, and K. Amanor. 2016. "Brazil's Agricultural Politics in Africa: More Food International and the Disputed Meanings of Family Farming." *World Development* 81: 47–60.
- Cacho, M. M. y. T. G., O. F. Giraldo, M. Aldasoro, H. Morales, B. G. Ferguson, P. Rosset, and A. K. y. C. Campos 2018. "Bringing Agroecology to Scale: Key Drivers and Emblematic Cases." *Agroecology and Sustainable Food Systems* 42 (6): 637–665.

- CAISAN. 2011. *Plano Nacional de Segurança Alimentar e Nutricional, 2012/2015*. Brasília, DF: Câmara Interministerial de Segurança Alimentar e Nutricional (CAISAN). https://www.mds.gov.br/webarquivos/publicacao/seguranca_alimentar/Plano_Caisan.pdf.
- Calgaro, H. E., J. T. Nasser, and L. G. V. Villela. 2021. "A atuação da ATER nos circuitos curtos de comercialização e na economia solidária do município de Peruíbe." In *Política Pública de Assistência Técnica e Extensão Rural: avanços e desafios para a construção do desenvolvimento rural sustentável*, A.F. Santos (org), Grupo De Estudos e Pesquisa em Assistência Técnica e Extensão Rural (GEATER) 14–35. João Pessoa – PB: Mídia Gráfica e Editora.
- Caporal, R., and J. A. Costabeber. 2004. *Agroecologia e extensão rural: contribuições para a promoção do desenvolvimento rural sustentável*. Brasília: EMATER.
- Capozzi, A., S. Coutinho, and V. Gastaldo. 2020. "Em tempo de pandemia, Peruíbe cria Rede de Economia Solidária." *Folha Santista*, 6 de maio. <https://folhasantista.com.br/baixadasantista/peruibe/em-tempo-de-pandemia-peruibe-cria-rede-de-economia-solidaria/>.
- CATI. 2021. *Protocolo de Transição Agroecológica*. São Paulo: Coordenadoria de Assistência Técnica Integral (CATI), Coordenadoria de Desenvolvimento Rural Sustentável (CDRS). <https://codeagro.agricultura.sp.gov.br/transicao-agroecologica/introducao>, PPT file at https://drive.google.com/drive/folders/1S_yhNQvgRgW3ujYEU2rKEX8T8epJq1Mg.
- CIAPO. 2013. *Brasil Agroecológico: Plano Nacional de Agroecologia e Produção Orgânica (PLANAPO)*. Ministério do Desenvolvimento Agrário. Câmara Interministerial de Agroecologia e Produção Orgânica (CIAPO) and Proyecto Alianza por la agroecología. http://www.mda.gov.br/sitemda/sites/sitemda/files/user_img_19/BrasilAgroecologico_Baixar.pdf.
- CLACSO. 2020. *Comida y comunidad: innovación socioterritorial e acción pública para a promoção da soberania e da segurança alimentar e nutricional*. CLACSO and FAO: Ciudad Autónoma de Buenos Aires.
- Clapp, J., and W. G. Moseley. 2020. "This Food Crisis is Different: COVID-19 and the Fragility of the Neoliberal Food Security Order." *Journal of Peasant Studies* 47 (7): 1393–1417.
- CNES. 2015. *1º Plano Nacional de Economia Solidária (2015- 2019): para promover o direito de produzir e viver de forma associativa e sustentável*. Brasília: Conselho Nacional de Economia Solidária (CNES), Ministério do Trabalho e Emprego (MTE). http://www.unisolbrasil.org.br/2015/wp-content/uploads/2015/06/plano_nacional_de_ecosol_12062015_com_capa.pdf.
- CONSEA. 2015. *Comida de Verdade no Campo e na Cidade*. Brasília, Relatório Final da 5ª Conferência Nacional de Segurança Alimentar e Nutricional (CONSEA).
- Coraggio, J. L. 2016. "La economía social y solidaria (ESS): niveles y alcances de acción de sus actores: el papel de las universidades." In *Economía Social y Solidaria: conceptos, prácticas y políticas públicas*, en C. Puig (org.), 15–40. Bilbao: UPV/EHU. https://www.coraggioeconomia.org/jlc/archivos%20para%20descargar/Libro_ESS.pdf.
- Darolt, M. R., C. Lamine, and A. Brandenburg. 2013. "A diversidade dos circuitos curtos de alimentos ecológicos: ensinamentos do caso brasileiro e francês." *Agriculturas* 10 (2): 8–13. Rio de Janeiro.
- da Silva, M. Z. T. 2020. "A segurança e a soberania alimentares: conceitos e possibilidades de combate à fome no Brasil." *Configurações* 25: 97–111. <http://journals.openedition.org/configuracoes/8626>.
- Davis, M. 2005. *The Monster at Our Door: The Global Threat of Avian Flu*. New York: New Press. <https://thenewpress.com/books/monster-our-door>.
- Davis, M. 2020. "Reopening the Economy Will Send Us to hell." *Jacobin*, 27 April. <https://www.jacobinmag.com/2020/04/mike-davis-economy-coronavirus-crisis-trump>.
- de Amorim, A. L. B., J. R. Sousa Ribeiro Junior, and D. H. Bandoni 2020. "Programa Nacional de Alimentação Escolar: Estratégias para enfrentar a insegurança alimentar durante e após a COVID-19." *Revista de Administração Pública* 54 (4): 1134–1145. https://www.researchgate.net/publication/343955312_Programa_Nacional_de_Alimentacao_Escolar_estrategias_para_enfrentar_a_inseguranca_alimentar_durante_e_apos_a_COVID-19/link/5f5b19a4299bf1d43cf998a6/download.
- Delgado, F., and S. Rist. 2016. *Ciências, diálogo de saberes y transdisciplinariedad: aportes teórico metodológicos para sustentabilidade alimentaria y del desarrollo*. La Paz: Agruco. <https://www.crim.unam.mx/patrimoniobiocultural/sites/default/files/PL7.pdf>.

- dos Santos, A. M., and V. G. Carneiro. 2008. "O movimento da economia solidária no Brasil: uma discussão sobre a possibilidade da unidade através da diversidade." *e-cadernos ces*. <https://journals.openedition.org/eces/1260>. <http://eces.revues.org/1260>.
- Ecovida. 2007. *Caderno de formação: certificação participativa de produtos ecológicos*. Florianópolis: Rede Ecovida de Agroecologia.
- FAO. 2018. Scaling up agroecology initiative: Transforming food and agricultural systems in support of the SDGs. Rome: FAO [Iniciativa para ampliar la escala de la agroecología]. <http://www.fao.org/3/I9049ES/i9049es.pdf>.
- FBES. 2011. *Encontro Nacional de Diálogos e Convergências: agroecologia, saúde e justiça ambiental, soberania alimentar, economia solidária e feminismo*. Brasil: Forum Brasileiro de Economia Solidária. https://fbes.org.br/wp-content/uploads/Acervo/Publica%C3%A7%C3%B5es/fbes_encontro_dialogo_e_convergencias_documento_referencia.pdf.
- FBES. 2012. Comissão Organizadora da V Plenária Nacional de Economia Solidária, Brasília: Fórum Brasileiro de Economia Solidária (FBES). <https://fbes.org.br/2013/06/25/lancamento-do-documento-final-da-v-plenaria-nacional-de-economia-solidaria/>.
- FESBS. 2020a. *Bem-Vindo ao Grupo do Fórum de Economia Solidária da Baixada Santista*. <https://www.facebook.com/groups/1384849224929289/>.
- FESBS. 2020b. Propostas do Fórum De Economia Solidária da Baixada Santista (FESBS) para os Candidatos às Câmaras Municipais Prefeituras Da Baixada Santista, 24 de junho, also webinar 17.07.2022 [demands also in Vasques, 2020].
- FIAN. 2020. *Voices from the Ground: From Covid-19 to Radical Transformation of Our Food Systems*. [https://www.fian.org/files/files/EN-COVID_FULL_REPORT-2020%5B1%5D\(1\).pdf](https://www.fian.org/files/files/EN-COVID_FULL_REPORT-2020%5B1%5D(1).pdf).
- Fonseca, I. 2020. "Não podemos voltar ao normal, porque o normal era o problema." *Resiliência*, 31 de março. <https://www.resilienciama.com/nao-podemos-voltar-ao-normal-porque-o-normal-era-o-problema/>.
- Gonçalves, J. F. 2001. "Escalar: lo que hemos aprendido en los últimos talleres." *LEISA: Revista de Agroecología* 17 (3): 5–9. <http://leisa-al.org/web/images/stories/revistapdf/vol17n3.pdf>.
- Gordillo, G. 2013. *Seguridad y Soberanía Alimentarias: documento base para discusión*. Rome: FAO. <https://www.fao.org/3/ax736s/ax736s.pdf>
- Grisa, C., C. J. Schmitt, L. F. Mattei, Maluf R. S., and Leite S. P.. 2010. *O Programa de Aquisição de Alimentos (PAA) em Perspectiva: apontamentos e questões para o debate*. Seminário Temático Programa de Aquisição de Alimentos.
- Guanziroli, C. E., A. Buainain, and A. Sabbato. 2013. "Family Farming in Brazil: Evolution Between the 1996 and 2006 Agricultural Censuses." *Journal of Peasant Studies* 40 (5): 817–843.
- Hillenkamp, I, Guérin, I. E., Verschuur, C. 2014. Economie solidaire et theories feministes: pistes pour une convergence necessaire, *Revista de Economia Solidaria*, ACEEESA, 4–43. https://base.socioeco.org/docs/hillenkamp_20140130_texte_final.pdf
- Hillenkamp, I., I. E. Guérin, and C. Verschuur. 2017. "Cruzando os caminhos da da economia solidária da feminismo: passos para uma convergência necessária." *Revista Economía* 69 (109): 43–59.
- HLPE. 2013. *Investing in Smallholder Agriculture for Food Security*. Rome: FAO, High-Level Panel of Experts (HLPE). www.fao.org/cfs/cfs-hlpe
- HLPE. 2019. *Agroecological and Other Innovative Approaches for Sustainable Agriculture and Food Systems That Enhance Food Security and Nutrition*. Rome: FAO, High-Level Panel of Experts (HLPE).
- HLPE. 2020a. *Interim Issues Paper on the Impact of COVID-19 on Food Security and Nutrition (FSN)*. Rome: High Level Panel of Experts on Food Security and Nutrition (FSN) of the Committee on World Food Security.
- HLPE. 2020b. *Food Security and Nutrition: Building a Global Narrative Towards 2030*. Rome: High Level Panel of Experts on Food Security and Nutrition (FSN) of the Committee on World Food Security.
- IBGE. 2006. *Censo Agropecuário 2006: Agricultura Familiar. Primeiros Resultados*. Brasília: Instituto Brasileiro de Geografia e Estatística (IBGE).
- IBGE. 2017. *Censo Agropecuário 2017: Agricultura Familiar. Primeiros Resultados*. Brasília: Instituto Brasileiro de Geografia e Estatística (IBGE).

- IDEC. 2020. *IDEC cria plataforma para divulgar iniciativas que comercializam alimentos saudáveis durante a pandemia do Covid-19, 6 abril*. <https://idec.org.br/release/idec-cria-plataforma-para-divulgar-iniciativas-que-comercializam-alimentos-saudaveis-durante>.
- IPBES. 2020. *IPBES Workshop Report on Biodiversity and Pandemics*, Bonn: UNEP. <https://www.unep.org/resources/report/ipbes-workshop-report-biodiversity-and-pandemics>.
- IPES-FOOD. 2021. *A Unifying Framework for Food Systems Transformation*. https://www.ipes-food.org/_img/upload/files/sfsENhq.pdf.
- Itanhaém Prefeitura. 2013. *Itanhaém realiza II Seminário de Segurança Alimentar e Nutricional da Baixada Santista, 7 de novembro*.
- Itanhaém Prefeitura. 2018. *Emancipar pela EcoSol*, 27 March 2018. <http://www2.itanhaem.sp.gov.br/2018/03/27/itanhaem-sera-representada-em-primeira-reuniao-da-ecosol-mulher/>.
- Itanhaém Prefeitura. 2019. *Prefeitura investe na agricultura e moderniza espaço para produtores familiares, 8 outubro*. <http://www2.itanhaem.sp.gov.br/2019/10/08/prefeitura-investe-na-agricultura-e-moderniza-espaco-para-produtores-familiares>. <https://feirapopulardeitanhaem.blogspot.com/>.
- Itanhaém Prefeitura. 2020. *Banco de Alimentos adota esquema drive-thru para receber doações às famílias vulneráveis, 27 de marco*. <http://www2.itanhaem.sp.gov.br/2020/03/27/banco-de-alimentos-adota-esquema-drive-thru-para-receber-doacoes-as-familias-vulneraveis/>.
- Kay, S. 2016. *Connecting Smallholders to Markets: Analytical Guide*. Rome: FAO. <http://www.csm4cfs.org/connecting-smallholders-markets-analyticalguide/>.
- Leff, E. 2001. *Saber Ambiental: sustentabilidade, racionalidade, complexidade, poder*. Petrópolis, Rio de Janeiro: Vozes.
- Levidow, L., D. G. Sansolo, and M. Schiavinatto. 2021. "Agroecological Practices as Territorial Development: An Analytical Schema from Brazilian Agroforestry Case Studies." *Journal of Peasant Studies* 48 (4): 827–852.
- Livres Coop. 2021. *Nossa colheita comum: resultados Agroecológicos do Livres Coop no semestre*. Santos: Livres Coop Consumidores Conscientes. <https://livresbs.com.br>.
- Long, N. E., and J. D. van der Ploeg. 2011. "Heterogeneidade, ator e estrutura: para a reconstrução do conceito de estrutura." In *Os atores do desenvolvimento rural: perspectivas teóricas e práticas sociais*, S. Schneider e M. Gazolla (Orgs), 21–48. Porto Alegre: PGDR/UFRGS.
- LVC. 2003. *What is food sovereignty? La Via Campesina*. <https://viacampesina.org/en/food-sovereignty/>.
- Magnanti, N. J. 2008. "Circuito Sul de circulação de alimentos da Rede Ecológica de Agroecologia." *Agriculturas* 5 (2): 26–29. <http://www.cepagro.org.br/uploads/circuito.pdf>.
- MAPA. 2007. *Decreto N° 6.323 de 27 de dezembro de 2007. Regulamenta a Lei no 10.831, de 23 de dezembro de 2003, que dispõe sobre a agricultura orgânica, e dá outras providências*. Brasília: Ministério de Agricultura, Pecuária e Abastecimento (MAPA).
- MAPA. 2020. *Guia prático de organizações de controle social (OCS)*. Brasília: Ministério da Agricultura, Pecuária e Abastecimento (MAPA). <https://www.gov.br/agricultura/pt-br/assuntos/agricultura-familiar/publicacoes/projeto-mercados-verdes-e-consumo-sustentavel/guias/guia-ocs-formacao-de-organizacoes-de-controle-social-ocs>.
- Matte, A., and P. V. Preiss. 2019. "Protagonismo de produtores e consumidores na construção de mercados alimentares sustentáveis, em *Alimentação e sustentabilidade*. Centro de Comunicação, Turismo e Artes (CCTA), Universidade Federal da Paraíba, pp. 125-56.
- McCormack, T., and L. Jones. 2020. *Covid-19 and the failed post-political state, 17 April*. <https://www.thefullbexit.com/covid19-state-failure>.
- Medina, G., C. Almeida, E. Novaes, J. Godar, and B. Pokorny. 2015. "Development Conditions for Family Farming: Lessons from Brazil." 74: 386–396. doi:10.1016/j.worlddev.2015.05.023.
- Microbacias II. 2017. *Curso inovador e gratuito capacita gestores em economia solidária na Baixada Santista, 28 de novembro*. <http://www.cdrs.sp.gov.br/microbacias2/midia-noticias-detalhes?id=950>.
- Niederle, P. A., C. Grisa, E. L. Picolotto, and D. Soldera. 2019b. "Narrative Disputes Over Family-Farming Public Policies in Brazil: Conservative Attacks and Restricted Counter-movements." *Latin American Research Review* 54 (3): 707–720. doi:10.25222/larr.366.

- Niederle, P., P. Petersen, E. Coudel, C. Grisa, C. Schmitt, E. Sabourin, E. Schneider, A. Brandenburg, and C. Lamine. 2021. "Rupturas na transição agroecológica: mudança institucional e desmantelamento das políticas públicas no Brasil." https://www.researchgate.net/publication/353035899_Rupturas_na_transicao_agroecologica_mudanca_institucional_e_desmantelamento_das_politicas_publicas_no_Brasil.
- Niederle, P., P. Petersen, E. Coudel, C. Grisa, C. Schmitt, E. Sabourin, E. Schneider, A. Brandenburg, and C. Lamine. 2022. "Ruptures in the Agroecological Transitions: Institutional Change and Policy Dismantling in Brazil." *Journal of Peasant Studies*. <https://www.tandfonline.com/doi/full/10.1080/03066150.2022.2055468>.
- Niederle, P. A., C. J. Schmitt, M. L. Ávila, and P. de Petersen. 2019a. "A trajetória brasileira de construção de políticas públicas para a agroecologia." *Redes (Santa Cruz do Sul. Online)* 24 (1): 270–291.
- Pahnke, A. 2015. "Institutionalizing Economies of Opposition: Explaining and Evaluating the Success of the MST's Cooperatives and Agroecological Repeasantization." *Journal of Peasant Studies* 42 (6): 1087–1107.
- Pantuliano, P. 2020. *Covid-19: we won't get back to normal because normal was the problem*, 1 April. London: Overseas Development Institute (ODI). <https://www.odi.org/blogs/16815-covid-19-we-won-t-get-back-normal-because-normal-was-problem>.
- Parmentier, S. 2014. *Scaling-Up Agroecological Approaches: What, Why and How?*. Oxfam-Solidarity, Belgium. <https://www.oxfamso.be/fr/scaling-agroecological-approacheswhatwhyand-how>.
- Patel, R. 2009. "Food Sovereignty." *Journal of Peasant Studies* 36 (3): 663–706.
- Petersen, P., E. Coudel, C. Grisa, C. Schmitt, E. Sabourin, E. Schneider, A. Brandenburg, and C. Lamine. 2020. *Lume: A Method for the Economic-Ecological Analysis of Agroecosystems*. Univ. of Coventry: Centre for Agroecology, Water and Resilience (CAWR).
- Petersen, P., E. M. Mussoi, and F. D. Soglio. 2013. "Institutionalization of the Agroecological Approach in Brazil: Advances and Challenges." *Agroecology and Sustainable Food Systems* 37 (1): 103–114.
- PIADAL. 2013. *Agricultura y desarrollo en América Latina. Gobernanza y políticas públicas*. Buenos Aires: TESEO, Panel Independiente sobre Agricultura para el Desarrollo de América Latina (PIADAL).
- Preiss, V. 2020. *O impacto da epidemia nas feiras e iniciativas de comercialização direta. Opinião Pública*, 25 março. <https://www.sul21.com.br/opiniaopublica/2020/03/o-impacto-da-epidemia-nas-feiras-e-iniciativas-de-comercializacao-direta-por-poitira-preiss/>.
- Rede de Gestores de Políticas Públicas de Economia Solidária. 2018. *A participação democrática e o controle social na construção da economia solidária*. <http://www.rededegestoresecosol.org.br/wp-content/uploads/2015/11/rede-gestores-cartilha-01.pdf>.
- Rede de Gestores de Políticas Públicas de Economia Solidária. 2021. *Oficina de Planejamento da Economia Solidária na Gestão Municipal*. <https://www.rededegestoresecosol.org.br/oficina-de-planejamento-economia-solidaria-nas-prefeituras>.
- Reinhart, C. M., and R. Subbaraman. 2020. *How Can We Prevent a COVID-19 Food Crisis?* World Economic Forum, 16 May. <https://www.weforum.org/agenda/2020/05/preventing-a-covid-19-food-crisis/>.
- RIPeSS. 2012. *Declaration of the Social and Solidarity Economy Movement*, Rio +20, Rio de Janeiro, June 2012, RIPESS (Réseau Intercontinental de Promotion de L'économie Sociale Solidaire). <http://www.ripest.org/declaration-ripest-rio20>.
- RIPeSS. 2013. *La Economía Social Solidaria (ESS) con una perspectiva de género*. http://www.ripest.org/wp-content/uploads/2017/03/Declaracion-ESS-y-G%C3%A9nero-encuentro-Manila-2013_ESP.pdf.
- RIPeSS. 2015. *Visión global de la economía social solidaria: convergencias y contrastes en los conceptos, definiciones y marcos conceptuales*. http://www.ripest.org/wp-content/uploads/2017/08/RIPeSS_Vision-Global_ESP1.pdf
- Rodrigues da Silva, N. 2021. *Transição para a economia solidária: conhecer, praticar e transformar. Folha Santista*, 13 de fevereiro. <https://folhasantista.com.br/colunas/transicao-para-a-economia>

solidaria-conhecer-praticar-e-transformar/?fbclid=IwAR1-IDgM5Te4n7bn0EQSs35fN1eUP27CScE7ZQ1loZXAdNrWxuRM8EJ2wjg.

- Rodrigues da Silva, N., et al. 2021. "Rede sociotécnica de ATER indígena da Baixada Santista: construção e resultados." In *Política Pública de Assistência Técnica e Extensão Rural: avanços e desafios para a construção do desenvolvimento rural sustentável*, A.F. Santos (org), Grupo De Estudos e Pesquisa em Assistência Técnica e Extensão Rural (GEATER), 194–216. João Pessoa – PB: Mídia Gráfica e Editora.
- Rodrigues da Silva, N., J. T. Nasser, G. Prado, and T. M. M. da Silva. 2020. Ativar proximidades para construir a economia solidária. *Folha Santista*, 29 julho. <https://folhasantista.com.br/noticias/ativismo/ativar-proximidades-para-construir-a-economia-solidaria>.
- Rodrigues da Silva, N., and A. G. Pinto. 2015. *Extensão rural, economia solidária e redes sociotécnicas*. ftp://ftp.sp.gov.br/ftppeca/EXTENSAO_RURAL8dez15.pdf.
- Rodrigues da Silva, N., Pinto, A.G., Lopez, EFM, Mikolasek, O. 2018. Quadro teórico de apoio à atuação de extensionistas para o fortalecimento da economia solidária. *Economia social e pública* [recurso eletrônico], pp.186-221, Organizador Lucca Simeoni Pavan. Ponta Grossa (PR): Atena Editora. <http://agritrop.cirad.fr/588907/>. doi:10.22533/at.ed.277180409
- Rosset, P., and M. Altieri. 2017. *Agroecology: Science and Politics*. Manitoba: Fernwood.
- Rosset, P., and M. Altieri. 2018. *Agroecología: ciencia y política*. Sociedad Científica Latinoamericana de Agroecología (SOCLA), based on previous item.
- Rosset, P. M., and M. E. Martínez-Torres. 2012. "Rural Social Movements and Agroecology: Context, Theory and Process." *Ecology and Society* 17 (3): 17. doi:10.5751/ES-05000-170317.
- RSdP. 2020. *Feira do Produtor Rural Virtual, 19 de abril*. Rede Solidaria de Peruipe. <https://www.facebook.com/groups/redesolidariaperuipe/permalink/2610315799208670>.
- Sabourin, E. 2011. *Sociedades e organizações camponesas: uma leitura através da reciprocidade*. Porto Alegre: UFRGS/PGDR.
- Sabourin, E., E. Craviotta, and C. Milhorange. 2020. "The Dismantling of Family Farming Policies in Brazil and Argentina." *International Review of Public Policy* 2 (1): 45–67. <https://journals.openedition.org/irpp/799>.
- Sabourin, E., S. Guéneau, J. Colonna, and L. R. Tadeu da Silva. 2019. *Construção de Políticas Estaduais de Agroecologia e Produção Orgânica no Brasil: avanços, obstáculos e efeitos das dinâmicas subnacionais*. Eric Sabourin, Stéphane Guéneau, Julianna Colonna, Luiz Raimundo Tadeu da Silva (organizadores) – Curitiba: CRV. http://agritrop.cirad.fr/594171/1/Sabourin%26al- LIVRO%20PEAPO%20-%202020967_vers%C3%A3o%20do%20autor.pdf.
- Sankey, K. 2020. An economic storm is going to devastate Latin America very soon. *Jacobin*, 11 May. <https://www.jacobinmag.com/2020/05/latin-america-economy-coronavirus-pandemic>.
- Sansolo, D. (dir.) 2022. *Baixada Santista. Brasil, redes solidárias agroecológicas* [filme]. By Orvalho Filmes for Projeto AgroEcos, youtube channel. https://www.youtube.com/channel/UCTHr_m07BdMnU1bembYe_hQ.
- Sansolo, D., Gross, G.V. and Levidow, L. 2021. *Pesquisa-ação-participativa na pandemia: aspectos metodológicos*. 15 March 2021. <https://projetoagroecos.wixsite.com/meusite/post/pesquisa-a%C3%A7%C3%A3o-participativa-na-pandemia-aspectos-metodol%C3%B3gicos>; [translation] *Participatory Action Research during the Covid-19 pandemic: Methodological aspects*. <http://www.open.ac.uk/ikd/blog/participatory-action-research-during-covid-19-pandemic-methodological-aspects>
- Sauer, S. 2020. "Covid-19, Right-Wing Populism and Agrarian Struggles in Brazil: Interview with João Pedro Stédile, National Leader of the MST." *Journal of Peasant Studies* 47 (5): 927–943. <https://www.tandfonline.com/doi/full/10.1080/03066150.2020.1782892>.
- Schmitt, C. J. 2010. "Economia Solidária e Agroecologia: Convergências e Desafios na Construção de Modos de Vida sustentáveis." *Mercado de Trabalho* 42: 55–64.
- Schmitt, C., Niederle, P., Avila, M. e Sabourin, E. 2017. "La experiencia brasileña de construcción de políticas públicas a favor de la Agroecología." In *Políticas públicas a favor de la agroecología em América Latina y El Caribe*, Eric Sabourin et al. (organizadores), 73–122. Porto Alegre: Evangraf. Criação Humana, Red PP-AL/FAO.

- Schmitt, C. J. 2020. *Redes de agroecologia para o desenvolvimento dos territórios: aprendizados do Programa Ecoforte*. Rio de Janeiro: Articulação Nacional de Agroecologia (ANA).
- Schüttz, G. D., and L. I. Gaiger. 2006. "O mister de reaprender os vínculos entre a economia e a vida social." In *Educação e Sócio-Economia Solidária: Interação Universidade–Movimentos Sociais. Série Sociedade Solidária*, Zart e J.C. Santos (Orgs), Vol. 2, 50–64. Cáceres-MT: Editora Unemat. <http://www.ctamt.org.br/storage/publicacao/publicacao/educacao-e-socio-economia-solidaria-livro.pdf>
- SESC Santos. 2020. Webinar, 'Economia Solidária. Para Além da Crise: Culinária e Gastronomia', 23.10.2020, Santos, Serviço Social do Comércio (SESC). <https://www.facebook.com/SESCSantos>. <https://www.facebook.com/watch/?v=483894182568403>. https://www.youtube.com/watch?v=UzJVhHs_yoo.
- Singer, P. 2002. *Introdução à Economia Solidária*. São Paulo: Editora Fundação Perseu.
- Singer, P., and A. R. de Souza. (Orgs) 2000. *A economia solidária no Brasil: a autogestão como resposta ao desemprego*. São Paulo: Contexto.
- Soberania Alimentaria. 2020. Movilización sin precedentes a favor de la alimentación de proximidad. <https://soberaniaalimentaria.info/otros-documentos/luchas/728-movilizacion-sin-precedentes-a-favor-de-la-alimentacion-de-proximidad>.
- SOF. 2021. *Um meio tempo preparando outro tempo: cuidados, produção de alimentos e organização de mulheres agroecológicas na pandemia*. Miriam Nobre (Org.). São Paulo: SOF Sempre Viva Organização Feminista. https://www.sof.org.br/wp-content/uploads/2021/04/210407_ummeiotempo_sof_08_rev.pdf.
- SP Governo. 2018a. Apoio aos agricultores: Microbacias II gera resultados positivos em SP, 22 de fevereiro, Governo del Estado de São Paulo. <https://www.saopaulo.sp.gov.br/spnoticias/apoio-aos-agricultores-microbacias-ii-gera-resultados-positivos-em-sp/>.
- SP Governo. 2018b. Agricultores familiares de Itanhaém são prestigiados em evento, 19 do maio, Governo del Estado de São Paulo. <https://www.saopaulo.sp.gov.br/ultimas-noticias/agricultores-familiares-de-itanhaem-sao-prestigiados-em-evento/>.
- Tonneau, J. P., J. R. de Aquino, and O. R. Teixeira. 2005. "Modernização da agricultura familiar e exclusão social: o dilema das políticas agrícolas." *Cadernos de Ciência & Tecnologia* 22 (1): 67–82. Brasília.
- UNESP. 2021. *Curso de Transição Agroecológica: Construindo Agroecologia e Economia Solidária*, two sessions at https://www.youtube.com/channel/UCTHr_m07BdMnU1bembYe_hQ.
- Van der Ploeg, J. D. 2020. "From Biomedical to Politico-Economic Crisis: The Food System in Times of Covid-19." *Journal of Peasant Studies* 47 (5): 944–972.
- van der Ploeg, J. D., and S. Schneider. 2012. "Rural Development Through the Construction of new, Nested, Markets: Comparative Perspectives from China, Brazil and the European Union." *Journal of Peasant Studies* 39 (1): 133–173.
- van der Ploeg, J. D., and G. van Dijk. 1995. *Beyond Modernization: The Impact of Endogenous Development*. Assen: Van Gorcum.
- Vasques, L. 2020. Fórum de Economia Solidária da Baixada Santista apresenta propostas a candidatos da região, *La Folha Santista*, 20 de julho. <https://folhasantista.com.br/noticias/ativismo/forum-de-economia-solidaria-da-baixada-santista-apresenta-propostas-a-candidatos-da-regiao/>.
- Wallace, R. 2020. *Big Farms Make Big Flu: Dispatches on Infectious Disease, Agribusiness, and the Nature of Science*. New York: Monthly Review Press. https://monthlyreview.org/product/big_farms_make_big_flu/.
- Wallace, R., A. Liebman, L. Fernando Chaves, and R. Wallace. 2020. "Covid-19 and circuits of capital." *Monthly Review*, 1 May. <https://monthlyreview.org/2020/05/01/covid-19-and-circuits-of-capital/>.
- WEF. 2020. "The Great Reset initiative". World Economic Forum. <https://www.weforum.org/great-reset/>.
- WTO. 2020. *Responding to the COVID-19 Pandemic with Open and Predictable Trade in Agricultural and Food Products*. Geneva: World Trade Organization (WTO), General Council Committee on Agriculture. https://trade.ec.europa.eu/doclib/docs/2020/april/tradoc_158718.pdf.
- Zaoual, H. 2010. "O homo situs e suas perspectivas paradigmáticas." *Oikos* 9 (1): 13–39. www.revistaioikos.org.

Annex. Online sources from Baixada Santista solidarity networks

Webinars

FESBS youtube channel has the webinars in reverse chronological order.

For this paper, the most relevant ones are listed below in chronological order; the date has the youtube hyperlink:

- 07.05.2020: 'Baixada Santista em economia solidária no cenário atual', FESBS roda de conversa.
 26.05.2020: 'Pesca artesanal frente a Covid-19', FESBS roda de conversa.
 28.05.2020: 'Cadeias curtas de comercialização', 5º Encontro Virtual do Projeto Conexão Mata Atlântica.
 05.06.2020: 'Conexão Mata Atlântica promove debate sobre cadeias curtas de comercialização', BS Instituto BioSistêmico
 17.06.2020: 'Baixada Santista enfrenta a pandemia Covid-19', Projeto AgroEcos seminar.
 10.07.2020: 'Comercialização do pescado da pesca artesanal, FESBS
 17.07.2020: 'Candidatos as Câmeras Municipais', FESBS webinar.
 16.07.2020: 'Alternativas digitais que facilitam a comunicação entre produtores e consumidores', FESBS
 23.07.2020: 'EcoSol pra emancipação da mulher?', FESBS Coletivo EcoSol Mulher.
 03.09.2000: 'Economia Solidária e movimento cultural', webinar FESBS.
 08.10.2020: 'Gestão de Políticas Públicas de Economia Solidária', FESBS webinar.
 23.10.2020: 'Economia Solidária. para além da crise: culinária e gastronomia', SESC Santos webinar.
 20.10.2020: 'Gestão de Políticas Públicas de Economia Solidária', FESBS webinar.
 29.10.2020: 'Eleições 2020 empreendimentos econômicos solidários falam', FESBS webinar.
 17.12.2020: 'Gestoras Públicas da Economia Solidária e o fortalecimento do feminismo'
 29.01.2021: 'Tecnologias de gestão para comercialização de produtos agroecológicos'
 16.06.2021: AgroEcos internal webinar on the Baixada Santista: research results

Interviews

Projeto AgroEcos also has its own youtube channel with webinars and research interviews.

Each date has hyperlink for the interview transcript, with youtube link at the end.

- 30.06.2021: Peruíbe: União Mulheres Produtoras de EcoSol (UMPES), [youtube link](#)
 18.04.2021: Bertioga: Coletivo Banana Verde, [youtube link](#)
 20.03.2021: Itanhaém: Associação dos Produtores Rurais da Microbacia Hidrográfica de Itanhaém (AMIBRA), [youtube link](#)
 05.06.2021: Peruíbe: municipal officer

Initiatives' websites with hyperlinks

AMIBRA, Itanhaém

Articulação Nacional de Agroecologia (ANA), National Agroecology Articulation

Associação Brasileira de Agroecologia (ABA), Brazilian Agroecology Association

Banco de Alimentos, Itanhaém Prefeitura

Coletivo Banana Verde, Bertioga

Coletivo Morro das Panelas, Peruíbe

Fórum de Economia Solidária da Baixada Santista (FESBS)

Rede De Gestores de Políticas Públicas de Economia Solidária, <http://rededegestoresecosol.org.br>

Livres Coop Consumidores Conscientes, Santos

Rede Solidaria de Peruíbe

UMPES: União Mulheres Produtoras de EcoSol, Peruíbe

Les Levidow is a Senior Research Fellow, Development Policy and Practice (DPP), Open University, UK, UK, <http://www.open.ac.uk/people/ll5>

Davis Sansolo is Director, Instituto de Políticas Públicas e Relações Internacionais (IPPRI), Universidade Estadual Paulista (UNESP), São Paulo, <https://www.escavador.com/sobre/4319076/davisgrubersansolo>

Monica Schiavinatto is a researcher at the Instituto de Políticas Públicas e Relações Internacionais (IPPRI), Universidade Estadual Paulista (UNESP), São Paulo, <https://www.escavador.com/sobre/388207489/monica-schiavinatto>