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Editors

# Coexistence and Confrontation of Agricultural and Food Models

A New Paradigm of Territorial Development?

Foreword by Jan Douwe van der Ploeg  
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# Chapter 1

## From Agro-industrial Specialisation to a Plurality of Models in Southern Brazil



Claire Cerdan

In this chapter, we analyse the processes of specialisation and diversification of food systems in the southern Brazilian state of Santa Catarina. For a long time, this state was known for its unique dynamics of development based on a balanced distribution of consumption centres (secondary cities) and local production systems spread throughout the territory. From the 1950s onwards, it was an example of diffuse industrialisation based on a flexible, skilled, low-cost and entrepreneurial workforce (Vieira et al., 2009). The economist Raud (1997) identified six specialised production clusters in Santa Catarina: metalworking/mechanics (Joinville), textiles/clothing (Blumenau), ceramics (Criciúma), furniture (São Bento), paper/cellulose (Lages) and agrifood (Chapecó). These clusters are based on a process of specialisation with the development of small and medium-sized companies, alongside companies with national and international visibility and reach.

The success of this development model, based on a balanced distribution of local productive systems, is well known (Storper, 1997; Vieira, 2002). However, since the late 1980s, the gradual loss of competitiveness of these different systems has raised questions about this model's sustainability (Vieira et al., 2009). What do diffuse industrialisation and sectoral specialisation contribute to these different regions? What are the elements that have contributed to the processes of specialisation and diversification? How do recent developments call into question the modalities of coexistence of agricultural models?

To answer these questions, we draw on research conducted in the Chapecó region among small family agro-industries (on-farm and artisanal processing) and larger agro-industries (poultry and pork) between 2004 and 2011 (Mior, 2004; Andion, 2006; da Silva, 2009; Vitrolles, 2011).

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The Chapecó agrifood cluster, located in Santa Catarina's westernmost region, is specialised in the production and processing of meat products (pork and poultry). A study of the region's historical trajectory helps us understand the conditions of emergence of this local productive system organised around agro-industries, which are now leaders on the world market, and small on-farm processing units, based on know-how and on the production of traditional products resulting from European colonisation at the end of the nineteenth century (cheeses, cold meats, breads, fruit-based preparations and desserts). An analysis of the dynamics of specialisation and diversification makes it possible to identify the power relations between actors and the interactions between different development models.

## 1 The 1970s: The Integrated Production Model

Santa Catarina state<sup>1</sup> originally developed through a process of settlement of several waves of European migrants.<sup>2</sup> On arrival, migrants were given a plot of land of about 20 ha. With their agricultural and artisanal skills, they established a subsistence agricultural development model based on multicrop farming and livestock husbandry on small farms. This model persisted until the 1960s.

The federal government's agricultural modernisation programme in the 1970s marked a turning point by supporting the establishment of agro-industries and off-farm livestock production (intensive systems). Some families in the region already involved in the processing of animal products expanded their facilities. A few became international leaders in the processed meat sector (Sadia, Perdigão).<sup>3</sup>

One of the most significant challenges for these companies was to increase production volumes. This was achieved by implementing integrated production throughout the state. Production was organised in a manner originally observed in the 1950s, associating family producers with large industries. Industry signed contracts with producers and supplied animals (chicks, piglets) and inputs, and provided technical advice. For their part, the producers invested in the construction of buildings and raised the animals. The industry then took back the finished animals. In addition, spouses and children of farmers were often employed at the slaughtering and cutting units, which were located in urban areas.

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<sup>1</sup> Santa Catarina is one of the smaller states in Brazil. It accounts for 1.12% of the country's surface area, is home to 3.39% of the Brazilian population and contributes 4.2% of the gross domestic product (GDP).

<sup>2</sup> The state experienced several waves of settlement between the sixteenth and twentieth centuries. The study area was mainly settled after 1870 by descendants of Italians and Germans who came from the country's south in search of available land.

<sup>3</sup> In 2019, these two food industry giants merged with 28 other brands to form Brasil Foods S.A. This company now represents over 13,000 integrated producers, 30,000 suppliers and 200,000 customers in over 140 countries.

This system of integration was to make a decisive contribution to the development of pig and meat poultry production in the region. It allowed for the rapid dissemination of new production technologies and flexible financing of breeding activity. It also ensured significant economies of scale, optimisation of equipment and available resources, a decrease in production and transaction costs, and reduction in commercial risks for breeders. Access to national markets (São Paulo, Rio de Janeiro) and export markets motivated all the actors of the sector and of the territory to invest in the production of meat and meat products.

At the time, the industries were concerned about the qualification and training of their workers and producers. They set up training programmes that helped in the flexible specialisation of the workforce. Thus, for example, when working on the butchering of animals, the worker was trained to intervene at all stages of the production process: slaughtering, cutting, packaging and/or quality control. We will see later how this training policy had an important impact on the evolution of activities in this territory.

In this way, the system of integration made it possible to maintain small farms with multicrop-livestock farming. Family labour was used to raise animals. Chicken feed was produced on the farm (maize and, to a lesser extent, soya, squash and manioc). Only feed concentrate was purchased. Thus, when the chicks were received, the family was assured of a financial income as well as indirect benefits (self-consumption and use of the litter from the chicken houses to fertilise fields). These were the reasons behind the enthusiasm of the farmers for this system. They also admitted that the presence of one or more processing units on their farms was a distinguishing sign, a social recognition: 'There are those who have been able to jump on the modernisation bandwagon, but the others....,' one producer said (our interviews, 2009).

This new economic process motivated public actors to invest in research. In 1975, Embrapa<sup>4</sup> built a research centre specialising in agro-industrial meat production in the region. Eight years later, Santa Catarina state inaugurated a family farming research and development centre (Research Centre for Family Farming—Agricultural Research and Rural Extension Company, Epagri/Cepaf).

The 1970–1980 period was marked by strong economic growth and a common vision of the actors on the future of their territory, i.e. to make it a specialised cluster for the production and processing of pigs and poultry. This led to the emergence of a localised agrifood system with positive externalities such as the availability of a skilled workforce, the emergence of a large number of service providers and suppliers (equipment manufacturers, suppliers of ingredients, additives and condiments, transport), a good reputation and remunerative markets.

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<sup>4</sup> Embrapa: *Empresa Brasileira de Pesquisa Agropecuária* (Brazilian Agricultural Research Corporation).

## 2 The 1980s and 1990s: Concentrating Production and Specialising

The move towards specialisation that began in the 1970s continued over the next two decades. Agro-industries consolidated through a process of intensification, specialisation and concentration of activities. This specialisation strategy enabled the region to gain international recognition. The territory's ability to produce quality meat at a low cost thanks to the existence of a qualified workforce both in production and in processing forged its reputation. New businesses sprang up. Some of them were created by the producers themselves, who formed their own cooperatives. Integrated production remained the reference.

Signs of increased specialisation appeared within farms. For example, studies have pointed to a certain disconnect between maize production and livestock activities (Testa, 2004). Increasingly, animal feed was made from ingredients produced off-farm. Land formerly used for maize cultivation was repurposed for the construction of new livestock buildings to accommodate larger numbers of animals. Among pig farmers, this process resulted in specialisation depending on the animals' growth phase: pig breeder, farrow-to-finish farmers, and fattening farmers.

These different developments jeopardised the economic viability of farms. Producers gradually lost their autonomy, with the industry supplying piglets, feed and medication. This led to the exclusion of a large number of pig farmers,<sup>5</sup> who were unable to meet the additional costs of feed, infrastructure expansion, and waste management (previously recycled on the farm).

Tensions crystallised between the agro-industries and the farmers, and, at the end of the 1990s, led to strong social mobilisation and the emergence of trade unions to defend farmer interests (Mior, 2004).

Later, and to a lesser extent, the meat poultry agri-chain went through the same process. As contracts became more and more demanding, farmers had to invest in modernising their buildings.<sup>6</sup>

While the 1970s and 1980s had been marked by a 'win-win' relationship between family farmers and agro-industries, the late 1990s saw them being divided into winners and losers. The winners were the equipment suppliers, the agro-industries and those who marketed maize. The losers were the breeders who had to bear the costs of the intensive production model. These developments led to the emergence of a process of diversification at the level both of industries as well as of the producers.

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<sup>5</sup> There were 67,000 pig farmers in the region in the early 1980s. Their numbers steadily declined, to 45,000 in 1985, 30,000 in 1990 and 20,000 in 1995.

<sup>6</sup> Later, in 2006, measures against bird flu resulted in the disappearance of many farms, unable to bear the additional costs of protecting chickens. Regulations required the installation of a disinfectant gate at the entrance to the farm and the fencing of the animal facilities to prevent the possible contamination of flocks by infected animals and birds.

### 3 The 1990–2000 Period: A Dual Process of Diversification

The 1990s were marked by the opening up of the Brazilian economy, a movement that threatened the viability of the economic models of many regions (production costs that were too high). The agro-industries adopted new diversification strategies within and outside the territory to keep the industrial units profitable. These strategies had an impact on farms and the territory.

#### 3.1 *Diversifying Production Areas to Supply Agro-industries*

To begin with, the industries introduced selection criteria based on the capacity to produce a greater number of animals per farm, their proximity to processing units (to reduce transport costs), and a sufficient ‘safety’ distance from water courses to avoid ‘trouble’ with environmental authorities. For this reason, the industries had to cast a wider geographical net to find eligible suppliers.

The agro-industries started looking at other regions of Santa Catarina and elsewhere in Brazil. They provided subsidies to businessmen and investors to set up new livestock units in the country’s centre-west, a region specialising in large-scale grain production (maize, soya). The proximity of the feed production locations and the size of the units allowed a significant reduction in production costs.<sup>7</sup> In the 2010s, several agro-industries expanded to the tobacco growing regions of northern Santa Catarina. One industrialist told us: ‘We receive aid<sup>8</sup> to set up, tobacco producers already have experience with integrated agri-chains, they are also pluriactive farmers... and the low concentration of livestock units in their region eliminates the risk of bird flu’ (interview with a cooperative manager, 2009).

This migration of industries to other agricultural regions worried farmers and local communities. Several press articles announced the end of pig and poultry production in Santa Catarina (da Silva, 2009). However, these fears were proven to be unfounded; the industries remained and continued to source from Santa Catarina. Despite the higher cost of production, the industrialists recognised the advantages of production in western Santa Catarina: the skills of the breeders, their ability to respect commitments and specifications, the family workforce and the pluriactivity of the breeders, all of which facilitated negotiations on the animal procurement prices paid by the industry.

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<sup>7</sup> In June 2006, the total cost of chicken delivered to the factory was 1.176 reais/kg in Goiás (a central-western state) based on an average flock size of 25,000 finished birds, with air-conditioned livestock facilities, while it was 1.263 in Santa Catarina based on flocks of 12,000 chickens (Embrapa, 2006).

<sup>8</sup> In 2006, Article 17 of Decree 5.658.2006 of the World Health Organisation’s Framework Convention on Tobacco Control (WHO FCTC) provided for support for the development of viable alternative economic activities for tobacco workers and growers. Support was thus provided for diversification projects in tobacco-producing regions.

In addition, the capacities and qualifications of the workers in the Santa Catarina factories were widely recognised and appreciated by the agro-industries. For chicken processing, the workers in the industrial units of Chapecó had the best carcass butchering performance. As the manager of an agro-industry told us, ‘When a chicken passes through the hands of a worker from the western region of Santa Catarina,<sup>9</sup> not a gram of flesh remains on the bones and this in a very short time. They are very good workers!’

### ***3.2 Developing New Processed Products and Leveraging Agro-industrial Know-How***

Another way in which the agro-industries diversified was to offer new frozen products and ready-made meals in order to expand their range not only for the national market (cuts, salami, sausages, ready-made meals), but also for export. Today, western Santa Catarina is known as one of the main production clusters for chicken nuggets for fast-food restaurants in many countries.

The 30 years of specialisation have contributed to a large extent to the emergence of significant industrial know-how and the consolidation of a network of actors and service providers: equipment manufacturers and input suppliers in the region. In 1996, these actors decided to leverage their skills in the field of agro-industrial production. With the support of public authorities, they organised the first international food industry fair, Mercoagro. The first edition brought together 148 exhibitors. The 12th edition of this event was held in 2018 with 250 exhibitors and more than 15,000 visitors.

This fair reflects the dual process of specialisation/diversification underway in the region. Specialisation has indeed contributed to the emergence of specific capacities: industrial know-how, equipment, food ingredients, etc. It is therefore leading to the creation of activities that are complementary to food production, mainly the sale of equipment and inputs to food industries, and training. Chapecó’s production system is thus both recognised for its production of meat products and more generally as a centre of excellence for the food industry.

## **4 The Return to a Diversified Agricultural Model for Family Farms**

In the 1980s, the contracts that bound different entities were the result of negotiations and compromises. Tensions over the purchase price of inputs or the sale price of animals contributed to the structuring and collective organisation of farmers. Several agricultural unions originate from this region, including the Federation of

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<sup>9</sup> These workers are often simply called the ‘catarinas’.



Family Farmers (Fetraf Sul) and the Agricultural Workers' Union. Non-governmental organisations (NGOs) such as the Apaco association are also active (Box 1).

**Box 1 Association of Small Producers of Western Santa Catarina (Apaco)**

Apaco is an NGO created in 1989 following a seminar on agricultural cooperation. It brings together 76 groups of producers who wished to participate in collective projects. Apaco provides technical assistance and promotes appropriate technologies. In the 1990s, it helped set up solidarity credits to help these farmers invest in small-scale processing units (fruit, meat, fish). These artisanal units were very successful and it soon became necessary to organise the sale of their production. The association then helped the farmers to set up cooperatives to sell their products, to sell directly at open-air markets and to sell some of their produce to the region's supermarkets. In the late 1990s, it helped conduct a fair-trade experiment with several groups of producers.

These trade union organisations and social movements have promoted diversification projects for farmers who have been excluded from the integrated system and those who have simply refused to participate in the integration model of the agro-industries. They are also supported by the Research Centre for Family Farming (Epagri/Cepaf). For them, development projects must 'think of another way of working with family farmers by creating innovative organisational structures' (interview, Apaco director, 2009). According to Apaco officials, the challenge is indeed not only to improve farmers' incomes and living conditions, but also to discuss collectively a 'new development model, based on cooperation between family production units, on solidarity, on the independence of farmers with regard to the unit, on the use of technologies that reduce production costs and preserve natural resources' (interview, Apaco director, 2009). With support from their organisations and NGOs, rural families have gradually turned towards individual or collective diversification projects: dairy production, on-farm processing of traditional products (fruit compotes, cheese, meat products). New development models and projects for the territory have emerged and have been supported by a large number of farmers. These initiatives have been facilitated by new government measures aimed at the professionalisation of family farming.

The trajectory of two small-scale agro-industries illustrates how family farmers have implemented these diversification activities (Box 2).

**Box 2 Trajectory of two family-owned agro-industries: the Santa Rosa de Modelo agro-industry and the Pinhalzinho-Santa Catarina slaughter unit**

In 2001, all the families in the commune of Modelo produced their own sugarcane and sugar. With the support of the mayor and the Epagri centre, three families came together to set up a sugarcane processing unit. They received financial support and technical advice. The construction of the building took four years, the time it took to gather the necessary funds; the equipment was acquired with the three families' own resources. By 2009, five other families had joined them and the facility was producing a diverse range of sugarcane products (8000 L of eau-de-vie (fruit brandy) per year and more than 10 tonnes of sugar). Some of their customers buy products at the site. The rest of the production is sold directly or in retail shops in a nearby area. However, one of the partners has maintained his contract to raise industrial chickens for Sadia, a leading company in the field.

The second example is a pig slaughtering and processing unit run by two producers from Pinhalzinho. They own 17 ha of farmland, 6 of which are reserved for maize and soya bean cultivation. These producers work for a cooperative that is integrated with an agro-industry. Following the pork crisis in 1992, in order to 'survive', they decided to add value to the sale of pigs by producing meat and processed products themselves. The first trials were satisfactory and motivated them to formalise their activity. The farmers received State aid to construct the building. The equipment was offered to them under the 'Development and added value' programme of the Ministry of Agriculture's Family Farming Secretariat. The slaughterhouse is now associated with agro-industry networks and affiliated to Apaco, which allows them to use the latter's umbrella brand, Sabor Colonial, while also using with their own brand.

*Source* Interviews (Vitrolles, [2011](#)).

These illustrations highlight the fact that the know-how mobilised in the artisanal units is based not only on traditional knowledge, but also on more recent skills acquired during the years of specialisation on farms and in industries. We refer here to the observation made above on the willingness of industrialists to train their staff. The knowledge and skills acquired while working in industry stand them in good stead for their artisanal processing unit, and it must be noted that compliance with standards and procedures is satisfactory on the whole.

Thanks to public programmes for supporting family farming, the number of artisanal units has grown. The presence of many intermediate towns has facilitated the sale of products through short supply chains. While agro-industrial products are exported, artisanal products are mainly sold and consumed locally (direct sales or in supermarkets), including in the canteens of agro-industries. In 2010, there were more than 1000 small-scale processing units in the western region of the state, the majority of them involved in fruit processing, sugarcane processing, bread-making

(corn bread) and milk derivatives. They represented more than 45% of the artisanal food units in Santa Catarina. Apaco's umbrella brand, Sabor Colonial, is helping build the reputation of the region's products and is raising the reputation of the farming profession.

## 5 Identifying the Interplay of Actors in the Processes of Specialisation/Diversification of Activities

The dynamics of specialisation and diversification are at the origin—and are also the product—of power relations and the actors' representations of the future of the territory and the development models they advocate.

### 5.1 *The Interplay of Actors Between 1970 and 1990: 'What is Good for Agro-industry is Good for the Territory!'*

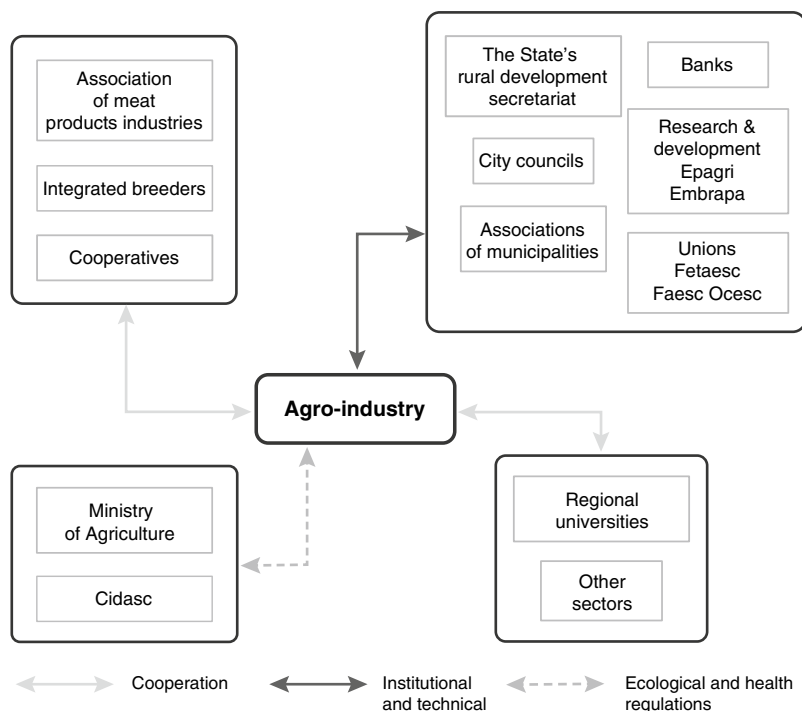
Figure 1 shows the system of actors involved in meat production: breeders, agricultural support services, and representatives of the public authorities at the local and federal levels. During the 1970–1990 period, a shared vision of the territory prevailed, and all stakeholders collaborated in the development of this specialised cluster of pig and poultry production and processing.

Research was oriented towards improving industrial processes, animal breeds and the production of animal feed. Banks financed new livestock projects, and municipalities facilitated land acquisition for new industrial units and the development of new urban neighbourhoods for workers' families. The meat production sector was organised around associations between meat industries, integrated producers and a few cooperatives.

This convergence of vision can be explained not only by the economic dynamism of the specialisation process, but also by the involvement of some industry leaders in the political sphere, such as Attilio Fontana,<sup>10</sup> who co-founded the Sadia company in 1944. However, given the companies' paternalistic relationships with the other actors, there was little opportunity during this period for the integrated producers, the employees or the company managers to challenge the existing arrangements (Fig. 1).

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<sup>10</sup> For many years, A. Fontana (1925–2000), while being head of his company, took on many public functions. He was responsible for improving road infrastructure, investment in workforce training (creation of schools, specialised technician courses, adult literacy initiatives, continuing education for workers), and subsidised credit programmes for the modernisation of agro-industrial units.

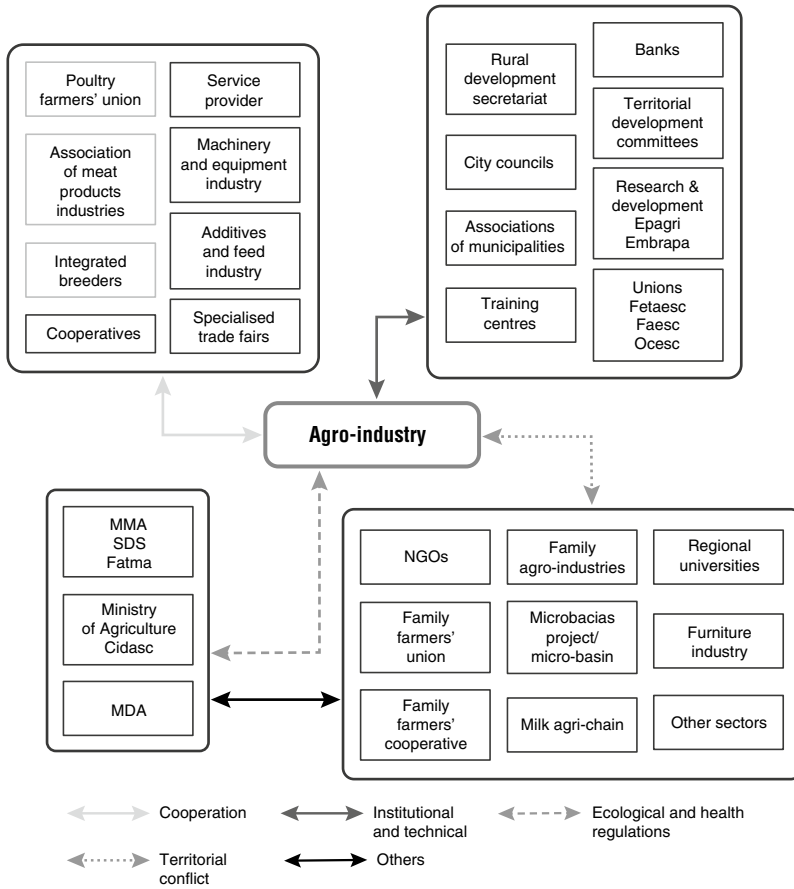


**Fig. 1** Mapping of actors and their relationships in the Santa Catarina meat production territory, 1970–1990. Epagri: Agricultural Research Company; Embrapa: Brazilian Agricultural Research Corporation; Fetaesc: *Federação dos Trabalhadores na Agricultura do Estado de Santa Catarina*; Faesc Ocesc: *Federação da Agricultura e Pecuária do Estado de Santa Catarina Organização das Cooperativas do Estado de Santa Catarina*; Cidasc: *Companhia Integrada de Desenvolvimento Agrícola de Santa Catarina*. Source Cerdan

## 5.2 From the 1990s Onwards, a System of Actors Spanning a Plurality of Territorial Projects

From the 1990s onwards, the system of actors became more complex and diversified. The exclusion of a large number of livestock farmers from the agro-industrial model called into question the idea of a specialised hub for the production and processing of meat products. A number of initiatives were taken and programmes created to offer alternatives to the existing model (Fig. 2).

These developments were part of the democratic change process of 1988. Armed with political and fiscal autonomy, the municipalities involved all their inhabitants and union representatives in the development of local policies. This led to the deconstruction of the integrated production model and the emergence of new development models, based on forms of solidarity and incorporating values of ethical and sustainable development.



**Fig. 2** Mapping of actors and their relationships in the Santa Catarina meat production territory, 1990–2019. Epagri: Agricultural Research Company; Embrapa: Brazilian Agricultural Research Corporation; Fetaesc: *Federação dos Trabalhadores na Agricultura do Estado de Santa Catarina*; Faesc Ocesc: *Federação da Agricultura e Pecuária do Estado de Santa Catarina Organização das Cooperativas do Estado de Santa Catarina*; MMA: Ministry of Environment; SDS: Sustainable Development Secretariat; Fatma: *Fundação do Meio Ambiente*; MDA: Ministry of Agrarian Development; Cidasc: *Companhia Integrada de Desenvolvimento Agrícola de Santa Catarina*. Source C. Cerdan

However, the interplay of actors at the end of the 2000s highlighted a passive (or peaceful) coexistence between the agro-industrial model and the on-farm and artisanal production model. Producers developed small-scale processing capabilities, while continuing to raise and supply animals for industry. Provided that artisanal production does not increase health risks, the industry is not opposed to a diversification of household incomes. Quite the contrary! Indeed, we noted that agro-industrial companies offered local and artisanal products in their company restaurants canteens.

Finally, the development of the milk sector, the emergence of family processing units, fruit growing and organic production have also led to new development models for the territory, without however challenging the agro-industrial model.

## 6 Conclusion

This study confirms the hypothesis that diversification and specialisation are part of the same process of adaptation of productive spaces to the global system. The processes oriented towards specialisation are responses to market challenges and societal demands. They are also the product of the interplay of the actors involved and their ability to coordinate collectively to influence territorial dynamics. We can thus assert that these specialisation/diversification processes are based on effective coordination and on support from public authorities.

The economic development of western Santa Catarina is currently based on the presence of specialised industries that represent a source of employment and of numerous alternative micro-activities. Unlike other rural regions of Brazil, which have seen an exodus of their populations, this agricultural region has benefited from the presence of food industries to retain the working population (especially young people) in rural, urban and peri-urban areas. This population is now the main market for family agro-industries.

A historical look at processes of specialisation/diversification helps us better understand the determinants of these changes. It also shows that development models are dynamic in nature and take shape gradually according to the objectives of local actors and the opportunities they have. In our case study, the agro-industrial model is the result of a process of flexible specialisation driven by a productive organisation that was original at the beginning, but which has also subsequently been strongly called into question. Faced with these new challenges, the actors aspire for other development models. These actors can either be against the agro-industrial model or position themselves on the basis of a passive coexistence of different models.

## References

- Andion, C. (2006). Développement territorial durable en milieu rural, gouvernance et rôle des organisations non gouvernementales: l'État du Santa Catarina au Brésil. *Mondes en Développement*, 136(4), 85–100.
- Da Silva, E. I. (2009). O papel da avicultura na construção do território e na reprodução social da agricultura familiar: O caso de Chapeco e Quilombo no oeste catarinense. *Mémoire de mestrado Agroecossistemas*, Universidade Federal de Santa Catarina, Centro de Ciências Agrárias, 1, Florianópolis, Brazil, UFSC, 114 p.
- Embrapa. (2006). Relatório anual de atividades 2006 [da] Embrapa Suínos e Aves, Concórdia, Embrapa Suínos e Aves.

- Mior, L. C. (2004). *Agricultores familiares, agroindústrias, e território: a dinâmica das redes de desenvolvimento rural no Oeste Catarinense*. Doctoral thesis in Humanities, Society and Environment, supervised by Julia Silvia Guivant and Terry Mardsen, UFSC, 2003, 316 p. Federal University of Santa Catarina.
- Raud, C. (1997). Potentiel et modalités d'une industrialisation décentralisée au Brésil. *Espaces et Sociétés*, 88(88/89), 161–183.
- Storper, M. (1997). *The Regional World* (p. 338). Guilford Press.
- Testa, V. M. (2004). Desenvolvimento sustentável e suinocultura do Oeste Catarinense: Desafios econômicos, sociais e ambientais. In *Desafios para o desenvolvimento sustentável da suinocultura*, Argos, Chapeco, Brazil, pp. 23–72.
- Vieira, P. (2002). *A pequena produção e o modelo catarinense dde desenvolvimento* (p. 377), APED, Florianópolis, Brazil.
- Vieira, P., Cazella, A. A., Cerdan, C., & Andion, C. (2009). Potencialidades e obstáculos à construção de territórios sustentáveis no estado de Santa Catarina. *Política e Sociedade*, 8(14), 335–380.
- Vitrolles, D. (2011). *La promotion de l'origine au Brésil*. Geography thesis, Université Lumière de Lyon-2, 325 p. + Annexes.