provided by Digital.CSIC

Journal of Rural Social Sciences, 26(2), 2011, pp. 30–51.

Copyright © by the Southern Rural Sociological Association

FAMILY FARMING AND ECONOMIC COOPERATION: THE EMERGENCE AND DECLINE OF AGRARIAN CONDOMINIOS IN SOUTHERN BRAZIL

FLAVIO SACCO DOS ANJOS

FEDERAL UNIVERSITY OF PELOTAS, RIO GRANDE DO SUL, BRAZIL

EDUARDO MOYANO ESTRADA

INSTITUTE FOR ADVANCED SOCIAL STUDIES, CÓRDOBA, SPAIN

and

NADIA VELLEDA CALDAS

FEDERAL UNIVERSITY OF PELOTAS, RIO GRANDE DO SUL, BRAZIL

ABSTRACT

In this work the authors analyze the *Condominios* as an example of economic cooperation adapted to the characteristics of family farming in the Brazilian state of Santa Catarina. The process of modernization of Brazilian agriculture that took place in the 1960s and 1970s under the military governments is analyzed with special attention to the selective and exclusionary effects this process had on the small farmers, along with a study of the development of cooperativism. The consolidation of macro-cooperative models demonstrated reflect the interests and characteristics of modernized, export-oriented agriculture. The origins and development of *Condominios* as an alternative to the large agricultural cooperatives in Santa Catarina are also addressed. Finally, the authors discuss these models of association, which are adapted to the characteristics of small producers, and place them in Chayanov's views on family farming and the peasantry.

Changes and continuities in the rural world have inspired a new generation of researchers dedicated to understanding how peasants and family farmers persist in our societies, especially under the effects of the globalization of the economy. The rise and development of cooperation is very important for understanding this phenomenon in all countries of the world. However, agricultural cooperation originated long before globalization.

Initially, cooperativism was characterized by a mutualist dimension, by a concept of solidarity in the activities of its members and by democratic participation. These features gave the cooperative movement its particular character and in some countries justified the passing of specific legislation that sought to protect the cooperatives from competition by means of positive discrimination. When analyzing the general tendencies in agricultural modernization and the integration of agriculture in the agri-food sector of countries with a market economy (which largely took place in the 1960s and 1970s), it becomes evident that

this process signified an important challenge to cooperativism. It also meant that a balance had to be found between their original mutualist dimension and the need for the cooperatives to become more efficient to meet market demands.

Given the need for the cooperative movement to adapt to an increasingly competitive market, large cooperative models (macro-cooperatives) guided by a market-oriented logic gradually replaced the original characteristics of mutualism and solidarity among the members (Entrena and Moyano 1998). In this context, and especially in countries where modernization was not accompanied by agricultural policies that could counterbalance the negative effects of the free market on small farmers, cooperativism became ever more selective, excluding farmers with less efficient and less competitive farms. Thus, small farmers, either encouraged by union movements or influenced by official bodies in charge of rural extension, sought to seek new formulas of economic cooperation that were better adapted to their family farms. This situation has been repeated in many countries where market-oriented macro-cooperative models have co-existed with smaller scale cooperatives that give priority to mutualist principles.¹

This paper analyzes the phenomenon in Brazilian agriculture. Specifically, it studies the case of cooperativism in southern Brazil and the emergence of Condominios as a new form of economic cooperation that contributes to the social and economic reproduction of family farms. Condominios came about in the early 1980s in the pig sector of the Brazilian State of Santa Catarina, and to understand the context in which they emerged, the most important features of the process of Brazilian agricultural modernization are highlighted and its selective effects on family farming are discussed. Secondly, a cooperative model that developed parallel to this process is analyzed, a model of macro-cooperatives marked by the exclusion of small farmers. The most relevant features of agriculture in Santa Catarina and the importance of family farms are also analyzed as the context in which Condominios emerged and developed. In the final section, the most significant traits of these new cooperative forms are discussed as interesting alternatives to the macro-cooperative model. The authors conclude by demonstrating how Condominios reflect some of the views put forward by the Chayanov School, in particular those that stress the need for cooperatives to adapt to the characteristics of family farming. The paper is based on twenty years (1984-2004) of work and research by

¹For more on the evolution of cooperativism in the European Union and the relationship between cooperatives and farmer's unions, see Just (1990). For an excellent analysis of cooperativism, see Bager (1996), where the author establishes a bridging of rational choice and institutional approaches.

the first author in states of Southern Region of Brazil, including more than 20 months of ethnographic fieldwork in municipalities of the north of Santa Catarina.

THE MODERNIZATION OF BRAZILIAN AGRICULTURE

The modernization of Brazilian agriculture is a subject analyzed by numerous authors (Delgado 1985; Graziano da Silva 1982, 1983; Kageyama and Graziano da Silva 1983; Sacco dos Anjos 2003) either by considering the factors and circumstances that produced it or by considering the effects modernization has had on rural society. Obviously, opinions differ on this process. Some consider it merely as a process of change in basic production techniques with the consequent substitution of traditional organic-based inputs with modern chemical-based inputs. Others believe that it constitutes an important element of change, given the profound impact it had on all spheres of economic, social, political and cultural life in Brazil.

Although the introduction of modern inputs began in an isolated manner in some farming areas in southern Brazil during the first two decades of the 20th Century (e.g., wheat and irrigated rice production in the state of Rio Grande do Sul), when discussing agricultural modernization in this country, we are generally referring to the changes that took place in the 1970s. These were changes that came about because of developmental plans devised by the military governments following the *coup d'état* that overthrew the constitutional President Goulart in March 1964 (Hidalgo da Silva 1994). These plans stressed the inefficiency of the farming sector in Brazil and its systems of storage, commercialization and transportation as well as its underqualified work force (Brum 1987; Tambará 1985). They also stressed the need for state intervention to solve this problem through appropriate policies either by directly financing the process of modernization, by creating the necessary infrastructures for it, or even by subsidizing noncompetitive agricultural sectors.

The basis of this rationale lay in the strategic role these plans placed on export agriculture (whose growth became the highest priority and the core of the model) and in the objective of maintaining the existing farming structures and production relations. Consequently, some authors called this process of modernization that emerged from these plans "conservative modernization" (Graziano da Silva 1982). With this term, they sought to highlight the fact that while the changes that took place in the processes of production resulted in greater mechanization, seeds with a high production potential, and an increase in the use of insecticides and chemical

fertilizers, land ownership in Brazil continued to be concentrated in the hands of a select few (Sacco dos Anjos 2003).

The most intensive stage of modernization occurred from 1968-1973, known as the "Brazilian miracle." During this period, however, the selective nature of the project gave priority to export agriculture, and certain crops linked to family agriculture that had always been aimed at the internal market were now excluded. Dependence upon imports of agricultural products such as wheat, a characteristic feature of the Brazilian economy, would become even greater in a country that as Romeiro (1994:118) reminds us, paradoxically possesses the greatest area of potential agricultural production on the planet but is incapable of providing for its own basic agricultural needs.

AGRARIAN COOPERATIVISM IN BRAZIL

No matter how we evaluate the results of agricultural modernization, we agree on its selective nature given that it has benefitted only a small group of farmers with export-oriented crops by guaranteeing prices, offering special credits and large state subsidies. In this context, cooperativism, which was imbued with a selective and exclusive rationale, accompanied the process of modernization and played a fundamental role in bringing this style of modernization to the Brazilian countryside. Consequently, a cooperative model, which was wholly oriented to the export market and inspired in a business rationale, was consolidated. It was a model that minimized the importance of the mutualist principal, the hallmark of the original Brazilian cooperatives.

The Origins and Development of Agrarian Cooperativism in Brazil

The first cooperative experience in Brazil occurred in the early 20th Century in the state of Rio Grande do Sul – the birthplace of Brazilian cooperativism (Fialho 1996). In certain rural communities then, where German, Austrian and Swiss immigrants lived, Catholic parish priests founded the first *Reiffensen*-type rural savings banks following their success in European countries, particularly in Germany and Switzerland. These savings banks sought to promote the development of family farms through a common, autonomous structure integrated into the rural communities. The so-called "non Iberian European settlers" found themselves confronted by all sorts of problems. In particular, finding land available

²Term coined by military governments to highlight their success in economy growth (the Brazilian GNP increased by 10 percent annually).

to create new production units was difficult for young people. The rural savings banks provided an important means of support and were also responsible for financing new settlements by purchasing land in the neighboring state of Santa Catarina to the north of Rio Grande do Sul. Actions by the Catholic Church were equally important in the Italian immigrant communities of the area. Besides setting up religious, cultural and educational centers, the Church encouraged economic associations by means of incentives and organized the first dairy and grape-growing cooperatives that quickly spread (Kliemann 1986:119).

This initial stage of agricultural cooperativism ended in the late 1920s because of unsuccessful cooperative initiatives, which had a negative impact on the movement as a whole. Some authors (e.g., Tambará 1985:55) attribute this failure to such factors as the administrative inexperience of the cooperative leaders, the economic difficulties Brazil was undergoing at the time, the dishonesty of certain directors, and a slur campaign spearheaded by sectors who felt their interests to be at risk from the growing cooperatives.

Although these first cooperative experiences were important, they had little to do with the cooperativism that became established in the southern states of Brazil (Rio Grande do Sul and Santa Catarina) during conservative modernization of Brazilian agriculture in the 1960s. Then cooperativism played an important role and is considered by some authors to be the "helping hand for capitalism to penetrate the Brazilian countryside" (Tambará 1985:56) by carrying out the following functions: channeling the state system of subsidized credits toward farmers with export-oriented agriculture, contributing to the introduction of industrial inputs on members' farms, and favoring the concentration of agricultural production for agribusiness.

The selective nature of the cooperative movement was favored by the authoritarianism of the military governments. In fact, the creation of new cooperatives required government authorization, which was granted only if the new cooperatives shared the same characteristics as modernized farms or farms with a potential for modernization. Cooperativism grew quickly during this period and without free syndicalism, took on an organizational function in the most modern sector of Brazilian agriculture. Supported by the military governments, many cooperatives greatly increased their production and membership by adopting a model of macro-cooperatives through mergers. These cooperatives were then organized into second and third tier structures, especially in the two most important states of southern Brazil (Rio Grande do Sul and Paraná) where the largest concentration of grain production (soybean, wheat and rice) is found.

Wheat and soybean production is especially worthy of mention. In the late 1960s, this strong cooperativist sector, headed by Centralsul³, was not only responsible for production, distribution of inputs, technical assistance and the commercialization and transformation of products, but also went on to manufacture agricultural pesticides and veterinary products. By the early 1980s, Centralsul held 80 percent of the national market and 85 percent of the market in Rio Grande do Sul for the principal herbicide used in cereal production (Tambará 1985:57). This example illustrates an undeniable fact: the cooperative movement was converted into a necessary tool for the expansion of capitalism in the Brazilian countryside with the consequent abandonment of the mutualist principles that had marked its origins.

Because of this change in direction, important changes began to take place in the internal operation of the cooperatives such as a gradual loss of democratic participation. The expansion of macro-cooperatives meant that their social base was structured internally in a very heterogeneous way, and small and large farmers had to compete for the same economic space. Although the legal framework guarantees equal rights according to the democratic principle of "one man, one vote," in reality, decisions were increasingly made under the influence of large farmers who, often, became members of the cooperatives to take advantage of the tax and financial benefits offered by the State. In the opinion of the small farmers, this resulted in a loss of legitimacy for the cooperatives. These changes were largely responsible for the farmers' difficulties in managing ever more complex cooperative structures. Consequently, many cooperatives had to be run by technical and administrative teams usually made up of people who were alien to the realities of local agriculture.

Simultaneously, the large expanding cooperatives began to carry out functions that went beyond their normal duties and further undermined the already precarious situation of the unions, to such a degree, in fact, that there was almost no reason for the unions' existence. Many of these large cooperatives began to sell

³As Benetti (1985) indicates, in 1958, the Federation of the Cooperatives of Wheat (Fecotrigo) of the Rio do Sul state was founded, which congregates 29 singular cooperatives. In 1980, two big entities coexisted. One, in a strict sense political, is the Fecotrigo. The other organization – the Centralsul (Central of Cooperatives of the Agricultural Producers of Rio do Sul State) – is based on economics. This corporation assumes a wide set of activities and initiatives. The beginning of the 1980s coincides with the financial collapse of the Centralsul and the cooperatives overall.

⁴It is a general norm under authoritarian regimes that the functions traditionally carried out by the farmer's unions are usurped by the cooperative moment, which in turn becomes the sole point of reference for the farmers (Moyano 1990; 2000).

subsidized medicines, hired doctors, set up supermarkets to sell goods to their members, and even bought land in Central Brazil to encourage young people to settle in the area. All these initiatives can be understood as mechanisms to compensate the farmers at a time when there was a breakdown in the traditional agricultural model.

Cooperativism in the Framework of the Democratic Transition

From the late 1980s to the early 1990s, the cooperative model in southern Brazil was subjected to a thorough revision and questioning by the small farmers because of the issues we have presented. This period of reflection was favored by the new democracy that followed the military dictatorship in 1986. The development of democratic syndicalism allowed wide sectors of small farmers to gain a greater awareness by regarding the negative effects of the large cooperatives. A critical discourse against macro-cooperatives began to extend from the heart of the new farmers' unions, who accused them of exploiting their members, ignoring mutualist principles, and behaving like the large agribusinesses.

This view of cooperativism, which was shared by a large sector of the Brazilian farmers' unions, has been a response to the changes experienced by the cooperative movement and the transformations that have been occurring in agriculture and the rural world, changes that are similar to what has been happening in other countries (Entrena and Moyano 1998). The productivist paradigm had dominated agricultural policy between the 1960s until 1970s and dramatically influenced the evolution of cooperativism in Brazil.

In this context, compared with macro-cooperatives, new models of economic cooperation emerge that adapt themselves more successfully to the characteristics of the sector in which they act. The *Condominios* are an example of this dynamic, being a flexible form of small-scale cooperativism that responds better than other models to the social and economic demands of small family farmers. Nevertheless, this system will also experience a crisis, which will be detailed.

FAMILY FARMING IN SANTA CATARINA STATE

To understand the importance and organizational characteristics of the *Condominios* in Santa Catarina, it is not only necessary to examine the historical context in which they came about, but also the fundamental features of the economy and the farming sector in this Brazilian state. Santa Catarina is the smallest of the three southern states including Rio Grande do Sul and Paraná, that make up the Southern Region of Brazil. It is the twentieth smallest of all the 27 Brazilian states,

yet its small dimensions do not correspond at all to the economic importance that it holds in the national economy as a leader in many sectors and productive activities. Although it occupies only 1.12 percent of Brazilian territory, Santa Catarina generates nearly 3.3 percent of Brazil's Gross National Product. Economically, it is seventh in order of importance of all the Brazilian states. Agribusiness products represent between 35-40 percent of the total value of exports, particularly meat and products of animal origin, the main exports in Santa Catarina. Like its neighboring states, Santa Catarina's industrial activity is geographically concentrated in the eastern area of its territory, although in the last three decades, it has expanded and diversified geographically, creating new centers of development.

The agribusiness sector of Santa Catarina consists of a total of 1,300 companies. In the agricultural sphere, Santa Catarina participates actively in other important sectors beyond the noteworthy position that the poultry and pig production sectors hold at a national level. For example, this is the main reason that national imports of garlic have fallen drastically over the last fifteen years; almost one-third of the nation's garlic is now produced in the territory. Another important crop in Santa Catarina agriculture is onions, which constitute almost 35 percent of national production. Temperate climate fruit production in this state is very important to Brazil (it is the largest producer of apples nationwide) as is the production of tobacco (the second producer after Rio Grande do Sul).

The Importance of Family Farming

Santa Catarina is one Brazilian state where land ownership is less concentrated. Whereas Brazil had a Gini coefficient of 0.854, in Santa Catarina it was already 0.671 during the 1980s. The agricultural structure is based on smaller farms rather than the large farms found in other parts of Brazil. This is explained by the historical origins of Santa Catarina and, fundamentally, because of the importance of non-Iberian immigration in colonization.

There were three waves of territorial occupation. The first colonists occupied the southern coast and beyond Florianopolis and were largely made up of Portuguese in settlements that reached as far as Rio de la Plata. The second wave began in the second half of the 19th Century in the north, moved west, and was largely made up of non-Iberian European immigrants (German, Austrian, Italians and Polish) who developed very diverse family-type farms. The third wave of occupation, which began in the late 19th Century and intensified after 1930, reached western Santa Catarina and occupied an area as far as the country's border with

Argentina. These lands were occupied by *caboclos* (people of mixed indigenous and Portuguese descent) expelled from the large *haciendas* or ranches of Rio Grande do Sul, as well as first and second generation German and Italian settlers and other immigrants such as craftspeople and merchants who lived in the so-called "old colony" founded in the first two decades of the 19th Century.

Although large farms can be found in the mountain range of Santa Catarina, in the area known as *campos limpos de Lages* and *Curitibanos*, the most predominant social form of production is the small family farm found throughout the territory. These small family farms are the identifying feature of Santa Catarina agriculture, producing 70 percent and 75 percent of the gross value of vegetable and animal production, respectively, on farms that are less than 50 hectares in size. This type of agricultural unit is equal to 89.6 percent of the total number of farms and yet only occupies 40.5 percent of the existing farmland. Their presence is especially significant in pig and poultry production, both of which are integrated into the agribusiness complexes and in the horticulture sector.

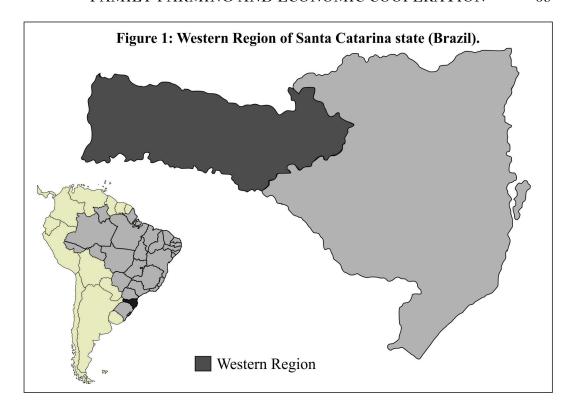
ORIGINS AND DEVELOPMENT OF CONDOMINIOS

Condominios⁵ are of recent origin. They initially emerged in the mid-1980s in an area of pig production in western Santa Catarina (Buchmann 1992; Mior 2005, 2008). In this region (see Figure 1), pig production had been the principal activity of the small family farmers. Since its consolidation, pig production has enjoyed a fairly high degree of technological development and has been associated with a large agribusiness complex via contracts of vertical integration or to the macrocooperatives with whom they have maintained very similar dependency-based relationships.

Vertical Integration in the Pig Sector of Santa Catarina

According to this system, small farmers are subordinated to the technical requirements of the integrating company, which sells feed, controls all the inputs necessary for the production process, and provides veterinary and technical assistance, as well as purchasing their fattened pigs. The large amount of literature available in Brazil (Belatto 1985; Coradini and Fredericq 1979; Paulilo 1990; Santos

⁵Literally, the word refers to the common ownership of a thing. More specifically, it refers to a type of society regulated by a series of legal, financial, and accounting precepts that are more simplified than those of commercial societies. This is a result of the simplified nature of its objectives, strongly anchored in the social and collective role it plays.



1978; Sorj 1980; Sorj, Pompermayer and Coradini 1982; Tedesco 1994) regarding the nature of the relationships established between farmers and agribusiness highlight the "masked proletarization" that characterizes this model of vertical integration for the small farmers and their families. Researchers point out that small farmers only hold a formal ownership over the means of production, given the degree of economic dependence upon the integrating companies. This dependence is so extensive that some families depend exclusively upon the sale of animals to these companies for their income, no matter whether they are cooperatives or not, because production on the farms is increasingly specialized. Consequently, farmers lose autonomy in the production process and lose control over their source of social reproduction. The small producers enter a circle of intensification and specialization that prevents them from carrying out other complementary activities.

Nevertheless the system of vertical integration does offer important advantages for the small producers, which explains its widespread development in large sectors of southern Brazil, particularly in pig and poultry production. In a survey carried out by Sacco dos Anjos and Velleda Caldas (2007), farmers confirmed the fact that

⁶ About this matter see also Mior (1992), Prim (1996), Testa et al. (1996) and Dorigon, Silvestro and Mello (2000).

there are more people interested in becoming members of integrating companies than those who are not, thus demonstrating their support of the system.

However, relations between farmers and agribusiness have always been conflictive (Ortega 1994). To understand this situation, we must keep in mind that pig production in southern Brazil is developed on small family-type farms through systems of intensive production, where the farmer and his/her family are exclusively dedicated to raising and fattening breeds such as the Landrace, Duroc and Large White. It is a sector characterized by periodic crises that have resulted in a permanent state of instability in prices paid for a kilo of fattened pork. It was precisely within this context of dependency and instability that proposals were made to create new forms of cooperation among the small pig producers in light of the loss of legitimacy that, in their eyes, the macro-cooperative models had suffered as an alternative to traditional production.

The Origins of Condominios

In the mid-1980s, the Rural Extension Service⁷ in Santa Catarina sought solutions to overcome the difficulties faced by pig producers, especially the problem of social and economic exclusion that was being created in this sector by the trend toward intensive, specialized production. The officers of the Service realized that pig producers had very little influence on prices paid by agribusiness and admitted that confrontation could worsen the conflicts and be detrimental to the small producers. Therefore, the only option left to them was to seek alternatives that would reduce production costs and thus improve profits for the pig farmers.

The rural extensionists decided that all pig producers must have a basic structure of production available to them (e.g., installations and necessary equipment) for raising and fattening pigs. They also determined that sows and sires must be replaced periodically when they were no longer of use. This, however, meant high fixed costs for the small pig producers; a sector that had not been backed by an agricultural policy adapted to their needs and had always been a refuge for family farmers in Brazil. After analyzing the production process and evaluating the degree to which macro-cooperativism had lost legitimacy among the small farmers, they concluded that *Condominios* were a type of association that could be adapted to the needs of small pig producers to lower production costs. Similar

⁷In 1981, the first condominium of pig producers in the *Coronel Freitas* municipality was created. Ten years later, the region of the *Oeste Catarinense* (Western of Santa Catarina) possessed 98 *condominios* of this type, including 824 family producers (Mior 2005:229).

to what has happened in many other countries, the authorities (top-down) promoted the process of social and economic organization according to the theory regarding the role of the State in the regulation of agriculture and its decisive function in the reproduction of family agriculture (Servolin 1999).

Nature, Organization, and Management of the Condominios

The Condominios are associations managed by the producers themselves. The members, whose numbers do not usually exceed 12, normally live in the same rural community and are related to one another (Mior 2008:12). The president, the secretary, and other managerial posts are elected in a general assembly for a term of one to two years so that the posts are rotated and all the members can participate. From a legal perspective, the Condominios are associations with regulations, statutes, and agreements registered before a notary. The nucleus of the Condominio is the Suckling-pig Production Unit (SPPG), which is in charge of overseeing pig breeding. The producers are given a set number of pigs to raise and fatten according to the productive capacity of their farm and the available infrastructure. Unlike other kinds of cooperatives, in the Condominios the members share the production stage of the pigs and in this way share the cost of production, also. Once the SPPG gives the producers suckling-pigs, each member takes individual responsibility for raising and fattening them, buying feed on the market, and freely selling the fattened animals to the company of their choice.

In comparison to the classical model of cooperatives, the *Condominio* is a more flexible system for the pig producers since only the initial phase of production is shared, and thus large investments are avoided. There are several advantages to this system. From a technical perspective, the *Condominio* guarantees the members a program for breeding pigs and makes them available according to the farm's capacity, while simultaneously assuring high veterinary and sanitary standards. From an economic point of view, the *Condominio* facilitates reduced costs in the purchase of pigs since they are produced in the SPPG. Because other stages of production and transformation are not cooperativized, its members run very little financial risk. In the social and cultural sphere, since the *Condominio* model is a small-scale model, it often reinforces common ties between the producers and allows for the exchange of ideas among them since the group's administrative body live *in situ* and manages itself directly. It can be said that the *Condominios* are built upon relationships of trust among the members to carry out transactions with other external actors for the purchase of inputs or for the sale of their production; an

autonomous dimension is incorporated into the social capital, preventing the creation of overly restrictive cooperative models.⁸

Effects on the Pig Sector of Santa Catarina

The emergence of the *Condominios* coincides with a period of technological changes and intensification of *productivism* in Brazilian agriculture. This type of collective organization has been of crucial importance to the viability of the many family farms in pig sectors of Santa Catarina. Before the first *Condominios*, the sector had achieved a high degree of intensive production by the 1970s. According to data provided by Paulilo (1990:107), between 1969 and 1976 the average rate of sales of animals on each farm increased from 61 percent to 169 percent. More recent data (Instituto Cepa 2004:15) indicate that technological advances clearly follow the treadmill pattern defined by Cochrane (1979). Whereas in 1985 offspring numbered 13.1 per sow, by 2000 that number had reached 23.3 per sow. During this period, the number of fattened animals per sow had increased from 10.9 to 19.7 and the rate of slaughter rose from 128 percent to 191 percent.

Although the results were promising, they did not always go hand in hand with an improvement in the standard of living of the producers. Their activities continued to be subject to a permanent process of selection and exclusion where only the most efficient producers managed to remain active. According to data from an agricultural census (IBGE 1997), between 1985 and 1996 the total number of Santa Catarina pig producers had decreased from 54,176 to 24,382. This decline would have been even greater had it not been for the role that the *Condominios* played in the Santa Catarina pig sector.

When analyzing the role of the *Condominios* and their development, it should be kept in mind that initially these new cooperative forms came up against the opposition of the large agribusiness complexes that viewed them with fear. In the first place, there existed a certain amount of distrust because of the belief that the *Condominios* system could lead to second-level organizations. The agribusiness complex feared that the pig producers who had gained cooperative experience in the first stages of production could opt to cooperativize subsequent stages of

⁸ Much has been written on the concept of social capital. Putnam (1993) proposes a measurement of social capital through the density of voluntary associations. Of interest to our article, we would like to highlight two aspects of the concept: trust as an element of social integration to resolve problems that arise in the first stages in the development of cooperatives, and autonomy, a feature that permits individuals to overcome the restrictions imposed on them by the primary group to which they belong and to undertake large collective projects. For more on this see Woolcock (1998).

production, such as the slaughter and industrial transformation of animals. Secondly, they feared that the pig producers would use the *Condominios* as an instrument through which to organize themselves and dispute decisions made by the agribusiness industry, in particular those concerning the purchase price of fattened animals or the sale of inputs, especially animal feed.

Once this initial distrust was overcome, and it was evident that the small-scale pig producers would not progress to larger cooperative projects, the integrating companies came to view the *Condominios* positively and recognized the advantages that this system had to offer the productive chain. This was especially true regarding the uniformity and type of fattened animals and product quality compared with the traditional system in which each productive stage was carried out individually lacking internal discipline. It can be said, therefore, that the *Condominios* have been a highly functional model for the *filière* as a whole, as the data would suggest. Data provided by EPAGRI (1997) indicate that from the outset, *Condominios* actually aided in increasing production by 50 percent on the pig farms with respect to individualized production in the past. Observations made by the Santa Catarina's Rural Extension Service indicate that while under the individualized system, the average number of weaned pigs totaled 12.0 per sow, whereas under the *Condominios* system, this number reached 18.4.

The Expansion of Condominios

The expansion of *Condominios* in western Santa Catarina in the 1980s was quite significant, reaching its maximum number of 157 in 1986. Later, the number stabilized at approximately 120. According to data compiled directly from an interview with a government officer in charge of the department of agricultural statistics in Santa Catarina, there were 119 *Condominios* registered in the pig sector of this region at the end of the 1980s. These *Condominios* were made up of 1,369 pig producers employing approximately 5,500 people.

Due to the positive outcomes experienced by the pig producers under the *Condominios* system, this model has been in expansion in other forms of production such as storage in areas where rice and corn are produced. Unlike the pig sector, where cooperation occurs only in the initial phase of production, in *Condominios* that provide storage for corn, beans, rice, and other products, the cooperative stage takes place when production is finalized in the post-harvest period. The spread of *Condominios* must be placed within the overall development of group agriculture in Santa Catarina, where other flexible, small-scale associations have emerged in response to the loss of legitimacy of the macro-cooperatives. A good example of this

process are associations for the collective use of machinery and agricultural equipment (like the Farm Machinery Cooperatives in French) or the associations for the artificial insemination of cattle, the beekeeping associations, or the irrigation and drainage associations, which illustrate how this phenomenon of new economic cooperation is thriving in Santa Catarina agriculture.

Some studies (e.g., Oliveira 1999) stress the need to resolve the organizational and managerial problems faced by the *Condominios*. The authors call attention to the issue of the regularization of the proportional share by each member, which should be restricted to a maximum of 20 percent of total capital. This measure is essential to guarantee the necessary balance between individual and collective rights. Likewise, our research suggests that in cases where a member decides to leave the association, the withdrawal of capital by this member should be limited to 80 percent of his/her proportional share. The difference, 20 percent, is considered a product of the collective work and should belong to the *Condominio*. Another aspect involves the fact that in Brazil, specific legislation still does not exist which provides a suitable tax and financial framework compatible with this kind of collective, small-scale agricultural production.

The Decline of the Condominios

The last agricultural census (IBGE 2007) identified the existence of 4,342 agricultural holdings under the form of *Condominio, consortium* and other types of agricultural societies in the state of Santa Catarina. Nevertheless, this information includes a wide spectrum of types of rural cooperation processes. The census indicates that 77.5 percent are identified as family farming and 389 of this group are dedicated to the pig production. Despite this, the study of Massi (2000) identified the existence of 348 types of associations in municipalities of the Western Santa Catarina, with a total of 7,783 implied families, including 127 groups of agrarian cooperation, 18 small community cooperatives, 15 *Condominios* and 3 groups of integration and other farm arrangements.

The decline of *Condominios* of small-scale pig producers was a consequence of many factors and circumstances. For a large part, this type of rural organization collapsed at the end of 1980s when rural extensions went into crisis. Political reforms included the privatization and decentralization of public service rural extension, given the thesis preached by the *Washington Consensus*.

During the last decade, agricultural production in Santa Catarina has increased, while the number of producers have experienced a marked decrease. From 1996 through 2007, pig production in Santa Catarina grew from 4,535 million to 6,588

million heads (approximately 44.5 percent), while the number of agricultural holdings dedicated to pig production decreased 37.2 percent, from 130,819 to 82,198 (IBGE 2007).

Concentration, specialization and exclusion of small farms. These terms are often used to describe the changes that took place in this sector of agricultural in western Santa Catarina. The Condominios remain, but the number and importance of this type of social organization has reduced considerably. According to some studies (e.g., Mior 2005:102) milk production is the main refuge of many producers excluded from pig production. Nevertheless, in the current context new forms of social organizations are emerging in the family farming sector of Western Santa Catarina, involving network structures with varied forms of State (local and federal) and NGO support. This aspect was accentuated in recent studies (Mior 2008) that analyze the processes of aggregation of value to the food-processing products (salami, cheese, sausages, and other artisanal products) and the emergency of new networks of rural cooperation.

Are Condominios an Example of the Chayanov Thesis on the Dynamics of the Peasantry?

The influence that the work of the Russian economist, Alexander Chayanov (1974), has had on the study of the forms and system of peasant production is unquestionable. Chayanov's work led to a school of thought in Rural Sociology known as Peasant Studies, which in the 1970s was further manifested through the publication *Journal of Peasant Studies*⁹. His research and study (Chayanov 1925) on family farms in Russia and other countries at the beginning of the 20th Century aimed to highlight the particular nature of this peasant model based on the assumption that there existed a characteristic dynamic on these farms; a dynamic largely based on the search for an equilibrium between work and consumption.

However, Chayanov's preoccupation was not limited to a strictly academic sphere, for he acted as leader of the School of Peasant Organization, aimed at developing the agricultural sector of his country by seeking a better adaptation of weakly capitalized family farms to technological and organizational advances. There was a tendency in the populist tradition of Russia (neo-populism) which was essentially oriented toward "offering a rational basis to the political project of making socialism compatible with family agriculture" (Abramovay 1992:68). This

⁹The Russian sociologist Shanin (1972; 1988), the Polish sociologist Galeski (1977), the British historian Wolf (1971) and the Spanish sociologists Sevilla-Guzmán and Perez-Yruela (1976) are some of the leading figures adopting this approach.

new tendency rejected the Leninist theory of the social disintegration of peasantry as a necessary condition for capitalism to take place, something that had occurred in other developed countries.

In Chayanov's opinion, the peasantry had to undergo a profound transformation of its social form of production if it wanted to survive under the capitalist system. "Chayanov transferred the focus of his analysis to the possible regulatory state interventions directed at aiding the peasants in their desperate search to adapt themselves to the conditions imposed on them by capitalist development" (Sperotto 1998:177). This can be considered a forerunner of the policies of rural extension promoted among the peasants by the rural extensionists.

To this extent, Chayanov placed great importance upon cooperativism as an instrument for the development of family agriculture since he viewed it as a means of increasing production on small farms and allowing them to reach, the optimal size for an agricultural enterprise through the cooperativization of certain stages of production. As Kerblay (1987:121) states, Chayanov rejected the homogeneity of the technology linked to modernization projects and defended the concept of differentiation adapted to each system of production in the process. He spoke of the existence of a "differentiated optimum for each branch of production" and pointed out that it is precisely in intensive agricultural production (in which a biological process is fundamental) where the advantages of cooperative integration are most evident.

According to Chayanov, cooperativism was the best way to reconcile the advantages of large units of production with the advantages of family farms, especially with intensive production (Kerblay 1987:121). His conception of cooperativism led him to view the cooperatives as new mutualist forms of association between farmers that allowed them to respond to the demands of the modernization process without losing their autonomy and control over production.

It is exactly at this point where the case of the *Condominios* can be analyzed as an example of the practical materialization of Chayanov's theory in the current content affecting family agriculture. Pig production in Santa Catarina and in a large part of southern Brazil is a highly intensive production in terms of labor and capital and is developed almost exclusively on family farms. Cooperative production within the framework of the pig *Condominio* can be viewed as a new form of economic cooperation that increases the individual capacity of the small farms to adapt to the demands of modernization without losing control over production. By transferring the task of breeding pigs to the *Condominio* (SPPG), the small pig producer can invest part of his time and available resources on improving production and the

final quality of the product while rationalizing activity on the farm. From our point of view, this form of association, rather than the mega-cooperatives, more clearly reflects the advantages of cooperation raised by Chayanov. The cooperative model that Chayanov had in mind when he formulated his theory on peasant agriculture is a model for small cooperatives guided by the mutualist principle, a model that is much closer to the present-day *Condominios* than to the large commercial cooperatives.

CONCLUSION

The *Condominios* represent an associative experience that allows us to evaluate the capacity of family-based agriculture to adapt itself to the demands of capitalist development without experiencing social disintegration or losing its singular nature. This phenomenon is so important in a country like Brazil, where family forms of production have never held an important place politically, except in occasional campaign speeches and electoral promises. *Condominios* must be analyzed as both a reaction of the pig producers to the process of social exclusion provoked by the conservative modernization of Brazilian agriculture, as well as a specific alternative to the macro-cooperative models consolidated in the framework of that process and that eventually suffered a loss of legitimacy in the eyes of the small farmers.

The importance of this cooperative model must be seen in relation to the fact that it was not developed by sectors excluded or on the road to extinction, but by the most advanced sector of pig production in Brazil representing nearly 45 percent of all slaughtered pigs in the country; a sector that is wholly integrated into the large agribusiness complexes. The expansion of the Condominios to others sectors of Brazilian agriculture manifests the potential of these flexible forms of cooperation to respond to the demands of the small farmers. Their functionality transcends the strict sphere of agriculture to become a model of reference that encourages collective projects for development in the rural society overall. While their small size permits democratic participation and contributes to increasing the integration dimension of social capital, their operational flexibility gives the members enough autonomy to undertake larger collective projects. The new rural development paradigm, as some studies indicate (e.g., Murdoch 2000), is a framework policy focused on the strengthening of local cooperation and in the support of horizontal and vertical networks. From our point of view the study of the Condominios allows advancement in this direction.

AUTHOR BIOGRAPHIES

Flávio Sacco dos Anjos is a Professor of Rural Sociology at the Federal University of Pelotas, Rio Grande do Sul State, Brazil. His primary research interests are family farming, rural development, and food security. He is currently studying geographic indications in Brazil and Spain under financing support of CAPES – Minister of Education of Brazil. (email: fsacco2000@yahoo.com.br.)

Eduardo Moyano Estrada is a Researcher at the High Council for Scientific Investigation (CSIC), where he is currently Director of the Institute for Advanced Social Studies (IESA) of Córdoba, Spain. He has carried out numerous research projects into group action and coordination of interests, with special reference to organizations of representative nature in agriculture. (email: emoyano@iesa.csic.es.)

Nádia Velleda Caldas is a Sociologist and Professor of Rural Extension at the Federal University of Pelotad, Rio Grande do Sul State, Brazil. Her primary research interests are public policies for the family farming, rural development and certification of organic products in agriculture. (email: velleda.nadia@gmail.com.)

REFERENCES

- Abramovay, Ricardo. 1992. Paradigmas do Capitalismo Agrário em Questão. São Paulo, Brazil: Hucitec/Edunicamp/Anpocs (Estudos Rurais).
- Bager, Torben. 1996. Organizations in Sector. Explaning the Dissemination of Formal Organization in Economic Sectors. Esberg, Denmark: South Jutland University Press.
- Belatto, Dinarte. 1985. "Os Camponeses Integrados". MSc Dissertation , Universidade de Campinas, Campinas, Brazil.
- Benetti, Maria D. 1985. "Endividamento e Crise no Cooperativismo Empresarial do Rio Grande do Sul: Análise do Caso da Fecotrigo/Central Sul-1975-83." *Ensaios FEE* 6 (2):23–55.
- Brum, Argemiro. 1987. *O Desenvolvimento Econômico Brasileiro*. Rio de Janeiro, Brazil: Vozes.
- Buchmann, Eliberto. 1992. "A Redefinição e o Futuro da Unidade Familiar de Produção Frente à Expansão do Capitalismo no Campo." MSc Dissertation, Universidade Federal do Rio Grande do Sul, Porto Alegre.
- Chayanov, Alexander V. 1974. *La Organización de la Unidad Económica Campesina*. Buenos Aires, Argentina: Nueva Visión.
- Cochrane, Willard W. 1979. *The Development of American Agriculture: A Historical Analysis.* Minneapolis, MN: University of Minneapolis Press.

- Coradini, Odacir L. and Antoinette Fredericq. 1979. Agricultura, Cooperativas e Multinacionais. Rio de Janeiro, Brazil: Zahar.
- Delgado, Guilherme C. 1985. "Mudança Técnica na Agricultura, Constituição do Complexo Agroindustrial e Política Tecnológica Recente." *Cadernos de Difusão de Tecnologia* 1:79–97.
- Dorigon, Clóvis, Milton L. Silvestro and Márcio A Mello. 2000. "Construção Social de um Projeto de Desenvolvimento Regional: Possibilidades e Limites." Presented at the X International Congress of Rural Sociology. Rio de Janeiro, Brazil.
- Empresa de Pesquisa Agropecuária e Extensão Rural do Estado de Santa Catarina (EPAGRI). 1997. *Produção de Suínos em Condomínio*. Relatório. Florianópolis, Brazil.
- Entrena, Francisco and Eduardo Moyano. 1998. "Reactions of Spanish Farm Cooperatives to Globalization: The Ideal Discourse Types". *Journal of Rural Cooperation* 26:21–35.
- Fialho, José Renato D. 1996. "Acción Colectiva y Articulación de Intereses en la Agricultura de Rio Grande do Sul." PhD Dissertation, University of Córdoba, Spain.
- Galeski, Boguslaw. 1977. Sociologia del Campesinado. Barcelona, Spain: Peninsula. Graziano da Silva, José. 1982. A Modernização Dolorosa: Estrutura Agrária, Fronteira Agrícola e Trabalhadores Rurais no Brasil. Rio de Janeiro, Brazil: Zahar.
- _____. 1983. *O que é Questão Agrária?* São Paulo, Brazil: Brasiliense (Coleção Primeiros Passos).
- Hidalgo da Silva, Osvaldo. 1994. "Acción Colectiva y Organizaciones Patronales en la Agricultura Brasileña." PhD Dissertation, University of Córdoba, Spain.
- Instituto Brasileiro de Geografia e Estatística (IBGE). 1997. Censo Agropecuário 1995-96, 21, Santa Catarina, Rio de Janeiro, Brazil: IBGE.
- ______. 2007. Censo Agropecuário 2006, Santa Catarina, Rio de Janeiro, Brazil: IBGE.
- Instituto Cepa Instituto de Planejamento e Economia Agrícola de Santa Catarina. 1998. *Números da Agropecuária Catarinense*, July, Florianópolis, CEPA/SC.
- Just, Flemming. 1990. Farmers' Unions and Agricultural Co-operatives in Europe. Esbjerg, Denmark: SUC Publishers.
- Kageyama, Angela and J. Graziano da Silva. 1983. "O Resultado da Modernização Agrícola dos Anos 70." *Estudos Econômicos* 23:533–59.

- Kerblay, Basile A.V. 1987. "Chayanov: Su Vida, Carrera y Trabajos." Pp. 83–137 in *Chayanov y la Teoría de la Economía Campesina*, edited by José Aricó, México, Pyp.
- Kliemann, Luiza H. S. 1986. *Rio Grande do Sul. Terra e Poder. História da Questão Agrária*. Porto Alegre, Brazil: Mercado Aberto.
- Massi, Jacir. 2000. "Diagnóstico da Cooperação Agrícola na Região Oeste de Santa Catarina." Monograph Agronomy, Universidade do Oeste Catarinense, Chapecó, Brazil.
- Mior, Luiz C. 1992. "Empresas Agroalimentares, Produção Agrícola Familiar e Competitividade no Complexo Carnes de Santa Catarina." MSc Dissertation, Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro, Brazil.
- ______. 2005. Agricultores Familiares, Agroindústrias e Redes de Desenvolvimento Rural. Chapecó, Brazil: Argos.
- ______. 2008. "Trajetórias das Agroindústrias Familiares Rurais no Estado de Santa Catarina (Brasil)." Presented et the IV Congresso Internacional de la REDSIAL, Mar del Plata, Argentina.
- Moyano, Eduardo. 1990. "Agricultural Professional Organizations in the European Communities." Pp. 180–227 in *Agrarian Policies and Agricultural Systems*, edited by A. Bonanno. Boulder, CO, USA: Westview Press.
- ______. 2000. "Farmer's Unions and Reestructuring of the European agriculture." Pp. 217–34 in Agricultural Policies, edited by W.Grant and J.T. Keeler . Southampton, USA: Elgar Publisher.
- Murdoch, Jonathan. 2000. "Networks: a New Paradigm of Rural Development?" *Journal of Rural Studies* 16(4):407–19.
- Oliveira, João Augusto V. 1999. "Condominios de Suinoculura: a Experiência Catarinense." Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina, Florianópolis, Brazil. Unpublished manuscript.
- Ortega, Antonio César. 1994. "Acción Colectiva y Articulación de Intereses en los Complejos Agroindustriales Brasileños. Las interprofesiones." PhD Dissertation, University of Córdoba, Spain.
- Paulilo, Maria Ignez S. 1990. Produtor e Agroindústria: Consensos e Dissensos. O caso de Santa Catarina. Florianópolis, Brazil: UFSC.
- Prim, Lorena F. 1996. "Agricultura de Grupo e Projeto Camponês: Avanços e Limites na Construção da Cidadania. O Movimento de Cooperação Agrícola no Oeste Catarinense." MSc Dissertation, Universidade Federal de Santa Catarina, Florianópolis, Brazil.

- Putnam, Robert. 1993. *Making democracy work*. Princeton, USA: Princeton University Press.
- Romeiro, Ademar R. 1994. "Reforma agrária e distribuição de renda." Pp. 105–35 in *A Questão Agrária Hoje*, edited by Stédile, P. Porto Alegre, Brazil: Ed. da UFRGS.
- Sacco dos Anjos, Flávio S. and Nádia Velleda Caldas. 2007. "Pluriactivity and family farming in Brazil: the case of Rio Grande do Sul." *CEPAL Review* 93:149–64.
- Sacco dos Anjos, Flávio. 2003. Agricultura familiar, Pluriatividade e Desenvolvimento Rural no Sul do Brasil. Pelotas, Brazil: EGUFPEL.
- Santos, José Vicente T. 1978. Colonos do Vinho: Estudo sobre a Subordinação do Trabalho Camponês ao Capital. São Paulo, Brazil: Hucitec.
- Servolin, Claude. 1989. *Las Políticas Agrarias*. Madrid, Serie Estudios. Servicio de publicaciones del Ministerio Español de Agricultura.
- Sevilla-Guzmán, Eduardo. and Manuel Pérez-Yruela. 1976. "Para una Definición Sociológica del Campesinado." *Agricultura y Sociedad* 1:15–39.
- Shanin, Teodor. 1988. "El Mensaje de Chayanov: Aclaraciones, Falta de Comprensión y Teoría del Desarrollo Contemporáneo." *Agricultura y Sociedad* 48:141–72.
- _____. 1972. The Awkward Class. Oxford, UK: Carendon Press.
- Sorj, Bernardo. 1980. *Estado e Classes Sociais na Agricultura Brasileira*. Rio de Janeiro, Brazil: Ed. Guanabara.
- Sorj, Bernardo, Malori Pompermayer and Odacir Coradini. 1982. Camponeses e Agroindústria: Transformação Social e Representação Política na Avicultura Brasileira. Rio de Janeiro, Brazil: Zahar.
- Sperotto, Fiorenzo. 1988. "Aproximación la Vida y la Obra de Chayanov." Agricultura y Sociedad 48:173–208.
- Tambará, Elomar. 1985. Rio Grande do Sul. Modernização e Crise na Agricultura. Porto Alegre, Brazil: Mercado Aberto.
- Tedesco, João Carlos. 1994. "O Produtor Familiar e a Agroindústria." *Cadernos de Sociologia*, Porto Alegre, Brazil: UFRGS, v.6:112–32.
- Testa, Vilson M., Raul Nadal, Luiz C. Mior, Ivan T. Baldissera, Ivan T. and Nelson Cortina. 1996. "O Desenvolvimento Sustentável do Oeste Catarinense: Proposta para Discussão." Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina, Florianópolis. Unpublished manuscript.
- Wolf, Eric. 1971. Peasants. Barcelona, Spain: Peninsula.
- Woolcock, Michael. 1998. "Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework." *Theory and Society* 27:151–208.