THE EVOLUTION OF BRAZILIAN DAIRY COOPERATIVES: A LIFE CYCLE APPROACH

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Grupo de Pesquisa: Instituições e Organizações na Agricultura

Abstract
There is a long debate in the literature regarding the economic role of farmer-owned cooperatives in the agrifood sector. Some scholars argue that cooperatives will have declining importance as the agrifood sector becomes increasingly industrialized and global, whereas others speculate that cooperatives may increase their participation in the agrifood sector to ameliorate market failures, reduce transaction costs, and add value to producers’ incomes. This paper contributes to the literature dealing with the economic role of cooperatives in the agrifood sector by analyzing the evolution of dairy cooperatives in Brazil from a life cycle approach. Based on secondary evidence, interviews and multiple case studies, we use Cook’s (1995) five stages model to describe the formation, organization, growth, crisis and recent restructuring of dairy cooperatives in Brazil. In doing so, we inform the debate on the future role of farmer-owned cooperatives in the Brazilian dairy sector.

Key Words: cooperatives, life cycle, agrifood sector.

1. Introduction

There is a long debate in the literature regarding the economic role of farmer-owned cooperatives in the agrifood sector. On one hand, some scholars argue that cooperatives will have declining importance as the agrifood sector becomes increasingly industrialized and global (e.g., HELMBERGER, 1966; BOEHLJE, 1997; CAVES &
cooperatives may increase their participation in the agrifood sector to ameliorate market failures, reduce transaction costs, and also to add value to producers’ incomes (e.g., ABRAHAMSEN, 1966; SEXTON, 1986; ROYER, 1995; ROGERS, 1997).

In general, agricultural cooperatives play an increasingly important economic role in advanced agricultural countries such as the United States (COOK, 1995) and Western Europe (VAN DIJK, KYRIAKOPOULOS & NILSSON, 1997). Particularly in the dairy industry, farmer-owned cooperatives play a rather dominant role with market shares above 80% in milk collection in the U.S., the major dairy countries in Western Europe and also in Australia and New Zealand (CHADDAD, 2007).

Throughout the twentieth century farmer-owned cooperatives played an increasingly important role in the Brazilian dairy sector. By the end of the 1980s, tier-one, local dairy cooperatives were collecting about 60% of the total milk produced in the country (CARVALHO, 2003). These local dairy cooperatives provided dependable market access to producers and acted as price-setters in their influence areas. In addition, tier-two, central cooperatives were formed in the major milk producing States to process dairy products and develop distribution channels for branded dairy products in the emerging urban centers.

Following the deregulation of dairy markets and international trade liberalization in the early 1990s, which substantially altered the competitive environment faced by dairy cooperatives and exposed them to increased competition, Brazilian dairy cooperatives entered a crisis period with declining profits and market shares. As a result of increased competition from imports and multinational companies, industry consolidation, technological change, and increased bargaining power of retailers, the market share of dairy cooperatives in Brazil fell to 40% of total milk procurement in the early 2000s (MARTINS et. alli, 2004). The share of cooperatives in dairy processing also decreased during this period because many financially distressed cooperatives were forced to divest of processing plants and brand names.

This paper contributes to the literature dealing with the economic role of cooperatives in the agrifood sector by analyzing the evolution of dairy cooperatives in Brazil from a life cycle approach. We espouse the view that “a better understanding of the genesis, growth, decline, and demise of the cooperative business organization” (COOK, 1995, p. 1154) is critical to inform the future role of cooperatives in an increasingly global, competitive and industrialized agrifood system.

In order to address this issue, the paper is organized as follows. The next section discusses the literature on the dynamics of industry structure with respect to the participation on alternative organizational forms. Section 3 presents the methodology employed, while section 4 analyzes the evolution of dairy cooperatives in Brazil using Cook’s (1995) life cycle approach. The last section summarizes the paper and concludes with a discussion on the future role of farmer-owned cooperatives in the Brazilian dairy sector.

2. Conceptual Model

Many scholars have suggested analytical models to describe the dynamics of industry structure with regard to the participation of alternative business forms with special focus on cooperatives. Unfortunately, no formal theory yet exists with the exception of Cook’s (1995) life cycle approach. Some concepts informing a dynamic theory of
cooperative evolution include the following: (i) wave theory; (ii) wind-it-up theory; (iii) pacemaker theory; and (iv) mop-up theory. First, HELMBERGER (1966) suggests that “waves” of new cooperative formation might be expected in depressed times, followed by “waves” of cooperative failures when the agricultural economy is booming. Second, LEVAY (1983) posits that as the cooperative succeeds in its “competitive yardstick” role the members may “wind it up” as they feel it has accomplished its purpose. Third, LEVAY (1983) also articulates the “pacemaker theory” which suggests that the cooperative may continue to exist just to “keep the competitors honest”. And fourth, STAATZ (1987) argues that cooperatives will buy assets from proprietary competitors in declining markets to avoid opportunistic behavior.

In his seminal work, COOK (1995) uses these four notions as a starting point to develop his five stages theory of cooperative evolution (see Table 1 for a summary). In stage one, there is usually a very strong economic justification for cooperative formation as organization costs are in general very high (OLSON, 1965; CRAIG, 1993). The economic justification might be to “bring economic balance under control, usually because of excess supply induced prices” and to “countervail opportunism and hold-up situations encountered when market fails” (COOK, 1995, p. 1155). In both cases, the initial purpose for cooperative formation is “defensive”, i.e., to protect the value of farmers’ assets (COOK AND PLUNKETT, 2006).

Table 1. Cook’s Life Cycle Approach

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
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<tbody>
<tr>
<td>Economic Justification</td>
<td>Cooperatives are formed to protect the value of farmers’ assets in situations of excess supply and/or market failures.</td>
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<tr>
<td>Organizational Design</td>
<td>The institutional environment (e.g., incorporation statutes, tax laws) sets rules (and therefore costs) for cooperative formation and functioning that must be offset by the benefits of collective action for the cooperative to survive.</td>
</tr>
<tr>
<td>Growth and Consequences</td>
<td>Cooperative growth lead to increasing awareness of internal transaction costs, which include the free-rider, portfolio, horizon, control and influence cost problems.</td>
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<tr>
<td>Crisis and Recognition of Conflicts</td>
<td>It becomes increasingly hard to manage the cooperative organization as a result of pressures from the competitive environment and internal transaction costs. Cooperative leaders are confronted with three strategic options: exit, minor changes to the traditional structure, and shift to a new model.</td>
</tr>
<tr>
<td>Restructuring</td>
<td>Cooperative leaders choose between strategic options and a new life cycle begins.</td>
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The second stage is the organization design. The great majority of farmer-owned cooperatives in the United States were formed in the early twentieth century following
three “hard core” principles: service at cost, democratic control, and limited return on capital (COOK, 1993). These principles were embedded in the Capper-Volstead Act of 1922, in state incorporation statutes for cooperatives, and also in federal tax laws. According to these principles, cooperatives must (i) distribute benefits in proportion to patronage; (ii) adhere to the one-member, one-vote principle; and (iii) not reward member capital investment above a limit set by each state law. These principles generate some internal costs (relative to proprietary firms) which must be offset by the benefits from cooperation if the cooperative business is to survive. According to COOK (1995), cooperatives founded for reasons related to excess supply situations were in general short-lived, whereas cooperatives formed to confront market failures usually survived past stage two.

Cooperative organizations that survive stage two enter a growth phase. Growth is often accompanied with a larger and more diverse membership (HANSMANN, 1996). In addition, the conduct of proprietary rivals begins to adjust to the cooperative entry such that terms of trade differ increasingly little. As a result, the “short-run costs of transacting with a cooperative become more scrutinized by members (COOK, 1995, p. 1156). These short-run transaction costs originate from the traditional cooperative ownership structure (CHADDAD & COOK, 2004) and are known as the vaguely-defined property rights constraints (COOK, 1995). These five constraints are the free-rider, portfolio, horizon, control and influence cost problems.

Stage four, known as “crisis and recognition of conflicts”, suggests that cooperative leaders find it increasingly difficult to manage the cooperative organization – in a context of increased competitive pressures from the business environment – despite the fact that quasi-rents might be lost if the cooperative decided to exit. This period is characterized by a “complex analysis of tradeoffs” between internal transaction costs and external opportunities and potential rents. At this stage, three generic options are followed: (i) exit, including liquidation, consolidation or conversion (CHADDAD & COOK, 2007); (ii) continue with minor adjustments to the traditional structure (e.g., NILSSON, 1997; COOK & ILIPOULOS, 1998); and (iii) shift to a non-traditional model such as the new generation cooperative (e.g., NILSSON, 1998; COOK & ILIPOULOS, 1999; CHADDAD & COOK, 2004). In stage five, cooperative leaders often choose between these three strategic options (exit, minor adjustments, and shift) and a new life cycle begins.

3. Methodology

We use Cook’s (1995) five stages life cycle theory of cooperative formation, growth, crisis, and change to analyze the evolution of dairy cooperatives in the Brazilian dairy sector. We ground our discussion of the life cycle of Brazilian dairy cooperatives in real-world examples drawn from the existing literature (secondary sources) and developed from case study evidence and also from interviews with cooperative leaders (primary sources). These examples, case studies and interviews are drawn from tier-one, local and tier-two, central cooperatives operating in southern and southeastern Brazil, which concentrate the greatest number of dairy cooperatives in the country.

1 According to the census of dairy cooperatives sponsored by the Brazilian Confederation of Dairy Cooperatives (CBCL) in 2003, cooperatives located in southern and southeastern Brazil collected 4.85 billion liters, which is equivalent to 92% of all the milk volume collected by dairy cooperatives in the country (MARTINS et. alli, 2004).
4. The Life Cycle of Dairy Cooperatives in Brazil

Our secondary, case study and interview evidence suggests that the evolution of farmer-owned cooperatives in the Brazilian dairy sector can be analyzed with Cook’s (1995) five stages life cycle model, including: economic justification, organizational design, growth and consequences, crisis and conflict recognition, and restructuring.

Phase 1: Economic Justification

During the first phase of cooperative development, between the early 1900s and the mid 1960s, tier-one, local dairy cooperatives were formed in the emerging milk sheds in southern and southeastern Brazil. At that early stage of development, Brazilian milk producers faced market failures in input and output markets and, therefore, formed dairy cooperatives to supply inputs at affordable prices, provide missing services (such as credit and technical assistance) and to countervail market power of buyers or to facilitate access to urban markets. In other words, these tier-one, local cooperatives were formed for defensive purposes as they attempted to protect margins and wealth at the farm level.

As these local cooperatives developed and the Brazilian population became increasingly urban, tier-two, central cooperatives were formed to process and add value to producers’ milk. Central dairy cooperatives were thus formed in several states, including Rio Grande do Sul (CCGL), Paraná (CCLP), São Paulo (CCL), and Minas Gerais (CCPR). These dairy processing cooperatives competed with private companies in large urban centers such as Belo Horizonte, Rio de Janeiro, and São Paulo. Downstream vertical integration by these central cooperatives can be thought of as an offensive strategy with the objective to add value to dairy producers’ incomes and wealth.

Phase 2: Organizational Design

Up until 1966, dairy cooperative leaders had considerable flexibility to form and organize cooperative associations. The first law mentioning cooperatives in Brazil dates back to federal decree 979 of January 6, 1903, which recognized and allowed the organization of rural credit, consumer and agricultural cooperatives. However, this decree did not include specific rules or regulations governing the organization and functioning of member-owned organizations in the country.

It was not until January 5, 1907 that the federal government issued decree 1637 recognizing the economic role of cooperatives but without specifying their legal organizational form. Consequently, cooperatives were formed using the legal framework provided for other organizational forms.

It was only with decree 22239 in 1932 that the federal government set rules concerning the organizational characteristics of a cooperative and postulated the doctrines of the country’s cooperative system. These rules and doctrines closely followed the Rochdale principles of cooperation, including open and voluntary membership, democratic control, service at cost and limited return on capital. In addition, cooperatives were granted special tax treatment relative to for-profit business enterprises. This initial phase of cooperative development in Brazil was liberal regarding the formation and functioning of cooperatives.

The subsequent development of dairy cooperatives in Brazil was significantly affected by the increased centralism and public sector interference of the federal government – in both the monitoring and control of cooperatives, and regulation of dairy
markets from the mid 1960s to the late 1980s. This period is characterized by “massive” federal government intervention in agricultural commodity markets primarily by means of agricultural credit and price support programs. At that time, agricultural policy had the objective of promoting food self-sufficiency while compensating the agricultural sector for the anti-export bias of the import substitution model (CHADDAD & JANK, 2006).

Decree-law 59 of 1966 instituted a phase of increased federal intervention and centralism in cooperatives that lasted until 1988. This phase also saw the enactment of law 5764 on December 16, 1971 which established the institutional framework within which the Brazilian cooperative system operates until today. With articles 92 through 94 of the 1971 cooperative law, the Brazilian cooperative system lost its independence as the federal government reserved the right to oversee the organization and functioning of all types of cooperatives in the country. Between 1966 and 1988, a state agency known as INCRA (Instituto Nacional de Colonização e Reforma Agrária) regulated and controlled agricultural cooperatives.

The 1971 law defined the legal status of cooperatives, rules for their formation and functioning, their representation system and support agencies. More specifically, the 1971 cooperative law included the following:

- The cooperative organization is defined as a society of people and not of capital, distinguishing it from for-profit organizations. Net earnings from cooperative operations with members that are defined by law as a “cooperative act” are thus not taxed.
- Cooperative societies are member owned and controlled organizations. Capital may only be provided by members and cooperatives are not allowed to issue any form of equity and debt security.
- Equity capital provided by members – known as “social capital” – is non-transferable and non-appreciable. Net earnings from member business are returned to members in proportion to business volume. The law sets limited return on capital at 12% per year.
- Control resides with cooperative society members in the form of the Rochdale-based one-member, one-vote democratic system in tier-one, local cooperatives. Tier-two, central cooperatives, federations and confederations may adopt a proportional system based on members’ business volumes, but not capital.
- At least 10 percent of net earnings generated from member-related business must be retained in a Reserve Fund with the objective of providing the cooperative with a safety net in the case of negative operating results. An additional 5 percent of net earnings originated from member business must also be retained in a specific reserve account known as FATES (Fundo de Assistência Técnica, Educacional e Social). Both the Reserve Fund and FATES are unallocated equity accounts not linked to specific member accounts.

In addition to increased federal control and centralism, the functioning of dairy markets was significantly affected as a result of public sector intervention. Quality standards for milk and dairy products were introduced in the mid-1960s. Perhaps more importantly, the federal government established guaranteed minimum prices for milk producers but also fixed maximum consumer prices at the retail level for fluid milk. As a result, commercialization and processing margins were indirectly set by government officials (MEIRELES, 1996; MARTINS, 2004). Until the late 1980s, milk producers and dairy cooperatives received large volumes of subsidized short- and long-term credit from the federal rural credit system.
Phase 3: Growth

This period thus provided a positive environment for dairy cooperative development in Brazil, which achieved 60% market share in milk procurement by the end of the 1980s. With price floors at the farm gate and high import barriers, milk production expanded in the country. Tier-one, local cooperatives benefited from output growth due their proximity to members and capillarity of their milk collection systems. In addition, tier-two, central cooperatives invested in dairy processing facilities and developed distribution channels for branded dairy products. During this growth period, the central cooperatives became dominant players in the major dairy regions. Cooperative brand names – such as Elegê in Rio Grande do Sul, Paulista in São Paulo, Batavo in Paraná, and Itambé in Minas Gerais – were very prominent in both regional and national markets. Of the top fifteen dairy companies at that time, six were cooperatives (JANK, FARINA & GALAN, 1999).

Phase 4: Crisis and Recognition of Conflicts

The debt crisis of the 1980s, however, forced the Brazilian government to decrease support to farmers and to review agricultural policy goals. Beginning in the late 1980s, Brazil started to adopt liberal, market-oriented policies, which significantly impacted the performance of its agrifood system including the dairy sector (CHADDAD & JANK, 2006). Dairy markets were completely deregulated in the 1990s, as the government discontinued its price control programs. Since then, producer and consumer milk prices have been set by the market forces of supply and demand. The federal rural credit system suffered significant cuts in the volume of available credit and interest rates were set at market levels.

In addition to industry deregulation, the 1988 constitution introduced the principle known as “self-regulation,” as the federal government waved its constitutional rights to interfere in the formation, organization and functioning of cooperatives. As a result of these institutional and policy changes, dairy cooperatives started to face an increasingly liberal, unprotected market environment.

Following these radical institutional and policy changes, the Brazilian agrifood system – including the dairy sector – experienced the transition from a commercial to a global model (REARDON & BARRETT, 2000). Fostered by rising incomes and urbanization, multinational food processors and retailers entered or increased their investments in Brazil during the 1990s. Increased foreign direct investment (FDI) by large, private agribusinesses in Brazil displaced domestic competitors, increased industry concentration, and eliminated many medium and small companies. As a result, the market share of multinational corporations (MNCs) in the domestic food market has increased. Given the total value of food industry shipments in Brazil of USD 58 billion, the aggregate market share of foreign companies reached 30% in 2000 (AZEVEDO, CHADDAD & FARINA, 2004).

Rivalry in the dairy industry was particularly affected by the entry of Parmalat in the early 1990s by means of acquisitions of domestic companies and cooperatives and increased new product introductions. By the early 2000s, Parmalat was second only to Nestlé in milk procurement and processing with more than one billion liters. Incumbent companies such as Nestlé, Danone and Unilever – which operate on a global basis and have sufficient risk capital – counter-attacked to protect their market shares. As they were...
exposed to radical changes in their institutional and competitive environment, financially constrained cooperatives struggled.

Currently only five cooperatives are among the top-14 dairy processors in the country, compared to six multinational corporations and three domestic private processors (MARTINS et. alli, 2004). These five cooperatives are all tier-two, central cooperatives operating in south and southeastern Brazil with the exception of Centroleite which procures and markets milk in the Midwestern state of Goiás. It is important to notice that the top-14 processors procured 5.58 billion liters in 2004, equivalent to 38% of total “formal” (i.e., organized) milk production in Brazil. Among the largest dairy companies, only Nestlé currently procures more than one billion liters per year. In other words, the dairy industry in Brazil is still significantly fragmented and regionalized.

In addition to FDI, the globalization of the Brazilian agrifood system also occurred due to increased trade liberalization and economic integration with neighboring countries. In the early 1990s, the Brazilian government decided unilaterally to reduce trade barriers. Tariffs were significantly reduced thereby exposing domestic producers to increased competition from imports. For the Brazilian dairy sector, this meant increased exposure to imports of milk powder and other dairy products primarily from the European Union and New Zealand (MARTINS, 2004).

Also in the early 1990s, Brazil formed a regional trade block with Argentina, Paraguay and Uruguay known as Mercosur. As part of the Mercosur agreement, domestic import tariffs were substituted for a common external tariff set between 12% and 16% for dairy products. Regional integration exposed Brazilian milk producers and dairy processors to imports from the very competitive Argentinean and Uruguayan dairy sectors. As a result of openness to trade and regional economic integration, Brazil became one of the largest importers of dairy products in the world by the mid-1990s, when imports reached a peak of USD 610 million. During the 1995-1999 period, dairy imports into Brazil averaged USD 505 million and were equivalent to 13.5% of total domestic production in milk equivalent (MARTINS et. alli, 2004).

Another important development in the competitive landscape facing dairy cooperatives during the 1990s was the growth of non-traditional, multi-store supermarket chains displacing traditional “mom-and-pop” grocery stores and independent supermarkets with consequent industry consolidation. Supermarkets are now the leading distribution channel for in-home food consumption in Brazil with 50% market share (REARDON, TIMMER & BERDEGUE, 2004). The three leading supermarket chains in Brazil currently control 39% of the food retail market.

As the country urbanized and consumers started to put an increasing premium on quality, safety and convenience of food products, UHT milk experienced significant growth in Brazil. UHT milk consumption soared from 187 million liters (equivalent to 4% of total fluid milk consumption) in 1990 to 4.8 billion liters (or 74% of total fluid milk consumption) in 2005. The growth of UHT milk consumption in Brazil is also explained by the competitive strategy of supermarkets which price UHT milk very competitively, sometimes with negative margins, to attract consumers to their stores.

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2 Total milk production in Brazil was estimated at 23.5 billion liters in 2004 by the Brazilian statistics office (IBGE), which includes production consumed at the farm for subsistence and other purposes, and production destined to “informal” markets, which are local markets operating without quality controls by the government. The “formal” market, which includes all production inspected by government authorities, was estimated at 14.5 billion liters in 2004 or 62% of total production (MARTINS et. alli, 2004).
Lastly, the dairy industry was also significantly affected with the introduction of “Normative Instruction” 51 (IN 51) in the late 1990s, which required that milk be collected from refrigerated tanks (or coolers) in farms. IN 51 had the objective of increasing milk quality and safety but it also impacted milk producers and dairy cooperatives. Even though the federal government financed farmers’ capital expenditures required acquiring coolers with a specific credit line from the Brazilian Social and Economic Development Bank (BNDES), many producers opted out of the formal, organized market and started to commercialize their milk in local, informal markets. As a result, a consolidation occurred in the dairy production sector. Between 1997 and 2005, the number of producers delivering milk to the top-14 processors decreased from about 170,000 to 80,000 (MARTINS et alii, 2004).

IN 51 also required dairy processors to collect milk from producers with refrigerated trucks, which had scale effects and undermined the competitive advantage of tier-one, local cooperatives. With the advent of refrigerated milk collection, dairy processors can now collect milk from more distant milk sheds and bypass local cooperatives’ traditional procurement systems.

As a result of increased competition from imports and multinational companies, industry consolidation, technological change, and increased bargaining power of retailers, the market share of dairy cooperatives in Brazil fell from 60% in the early 1990s to 40% of total milk procurement in 2002. The share of cooperatives in dairy processing also decreased during this period because many cooperative processing plants and brand names were acquired by multinational corporations.

According to survey data collected by the Brazilian Confederation of Dairy Cooperatives (CBCL) in 2003, there are 288 dairy cooperatives collecting milk from 151 thousand producers in all regions of the country. In aggregate, total milk procurement by dairy cooperatives totaled 5.2 billion liters or the equivalent to 40% of the formal market. Cooperative market share of milk procurement reaches 60% in the southern region and 45% in the southeast, but drops dramatically in less traditional dairy regions. According to the CBCL survey data, 70% of the milk collected by cooperatives is processed, while the remainder is sold in natura in spot markets (MARTINS et alii, 2004).

A study sponsored by the Brazilian Confederation of Dairy Cooperatives (CBCL) asked the intriguing question, “why are the Brazilian cooperatives losing market share to the rival proprietary forms?” (MARTINS et alii, 2004, p. 29). In addition to external pressures emanating from the changing business environment, cooperative leaders in Brazil recognized some internal constraints affecting the competitiveness of dairy cooperatives. These internal constraints include: (i) lack of economies of scale; (ii) lack of collective action with consequent competition between cooperatives; (iii) lack of focus on export markets; (iv) lack of financial resources to invest in processing facilities; (v) vaguely defined property rights constraints emanating from the traditional cooperative ownership structure; (vi) lack of clear performance indicators; and (vii) high transaction costs and inefficiencies associated with the local-central structure.

**Phase 5: Initial Restructuring in the Early 2000s**

Despite the radical institutional, public policy, and competitive environment changes that affected all dairy industry participants since the early 1990s, it was not until the later part of the decade and, particularly in the early 2000s, that dairy cooperatives in Brazil started to adapt to their changing business environment. Facing an increasingly
In the competitive landscape, dairy cooperatives adopted the following strategies to cope with the challenges posed by an increasingly global and industrialized agrifood system.

Tier-one, local cooperatives suffered heavily from the profound changes that affected the dairy industry in the 1990s. In particular, technological change with the upgrading of milk collection systems to refrigerated coolers on-farm and refrigerated trucks for milk transport to dairy processors undermined their main source of competitive advantage. Many of these cooperatives suffered operating losses and exited the industry to focus either on input supply, service provision or marketing of other commodities.

Alternatively, many tier-one cooperatives decided to add value to their producers’ milk and invested their limited financial resources in UHT milk processing plants. The result was a pulverized industry with very little bargaining power relative to retailers and razor-thin margins. To make things worse, local cooperatives started competing between themselves further depressing margins. Even though consolidation through mergers and acquisitions might be their only survival alternative, politics and membership apathy prevent industry rationalization from occurring.

When consolidation was not politically possible or desirable, some local cooperatives formed bargaining associations to collectively market the excess milk in spot markets. Such “pooling” arrangements became very popular. Successful examples include Centroleite in the emerging milk shed of Goiás and pool-ABC in the traditional dairy state of Paraná.

Some successful local cooperatives developed regional brand names for processed dairy products. Notwithstanding the lack of economies of scale and scope, these regional cooperative brands tend to be popular in their home markets thereby commanding price premiums which generate profitable margins. CALU, based in Uberlândia (MG), is an example of a local cooperative that decided to exit from the central cooperative and add value to its producers’ milk by processing and marketing dairy products with its brand name in the regional market.

During the crisis period of the 1990s, the once-strong and cohesive central cooperatives loss market shares in both dairy product retail and milk collection markets. As a result, many central cooperatives faced financial distress and were forced to either exit, sell processing plants and, in some cases, to sell brand names. For instance, the central cooperative in the state of Rio Grande do Sul (CCGL) sold its Elegê brand name and processing plants to multinational group Avipal in 1996. The central cooperative in the state of Paraná (CCLP) lost control of its processing plant and praised Batavo brand to Parmalat. The central cooperative in the state of São Paulo (CCL) also was forced to sell its popular brand name Paulista to Danone, but kept control of two processing plants. Other central cooperative failures also occurred in other states such as Rio de Janeiro, Santa Catarina, and Bahia.

The only central cooperative that remained strong in the 1990s, and is currently the second largest dairy processor in the country, is CCPR also known by its brand name Itambé. Itambé is based in the largest milk producing state in the country, Minas Gerais, but the brand is marketed in several states. Itambé is a tier-two, central cooperative formed by 32 tier-one, local cooperatives and procures milk from more than six thousand milk producers (down from twenty thousand in the early 1990s). More recently, Itambé invested BRL 160 million (about USD 65 million) in milk powder and condensed milk processing plants both in its home state and also in the state of Goiás.

As a response to its changing business environment during the 1990s, Itambé decided to collect milk directly from the producer-members thereby bypassing the...
traditional and high-cost milk collection systems of its tier-one member cooperatives. In doing so, the tier-one cooperatives focused on selling farm inputs and providing services to producer-members. According to a recent poll by the industry website known as Milkpoint, Itambé is the “most admired” dairy organization in the country (www.milkpoint.com.br).

In addition to Itambé, other central cooperatives are currently investing in dairy processing plants, including Confepar in the state of Paraná and Aurora in Santa Catarina. The local cooperatives in the state of Rio Grande do Sul are currently reorganizing CCGL to invest in a new processing facility.

In addition to investments in new processing facilities, dairy cooperatives also started to participate in profit-seeking and export-oriented joint ventures. Serlac Trading S.A. is a trading company specialized in dairy products. Serlac is a joint venture involving Sertrading S.A. and five dairy processors, including two private processors (Ilpisa and Embaré) and three tier-two, central cooperatives (Itambé, CCL and Confepar). Serlac was created to provide a professional emphasis to the export efforts of these five dairy processors. The joint venture has two brands dedicated to export markets – Brazilian Dairy Board for dairy commodities and Daylac for consumer products.

In addition to the strategic movements by individual cooperatives discussed above, the Confederation of Brazilian Dairy Cooperatives (CBCL) together with the Brazilian Cooperative Organization (OCB) developed a strategic development plan in 2002 with three long-term goals:

- To regain cooperative market shares in dairy procurement and processing by building competitive advantage relative to private and multinational dairy companies operating in the country;
- To increase dairy product exports by cooperatives;
- To add value to milk delivered by members by means of new investments in processing plants so as to become the best option for producers in terms of milk prices and services.

Specific actions that evolved from this collective action strategic effort include the organization of a conference attended by all major dairy industry leaders in the country to discuss the future of cooperatives in 2003; the Census of dairy cooperatives carried out in 2003; and the organization of a dairy market information system (called SimLeite) in conjunction with CEPEA (a research center affiliated to the University of São Paulo) and Embrapa (Brazilian Agricultural Research Organization). Following the launch of the strategic development plan in 2002, dairy cooperative leaders have been meeting on a regular basis to execute the plan.

Another important initiative of CBCL was to take leadership – in conjunction with the National Agriculture Confederation (CNA) – in the preparation of a technical petition calling for anti-dumping measures against subsidized dairy products entering the country. The initiative was successful and the Brazilian competition authority decided to implement anti-dumping measures in 2000. These anti-dumping measures included a minimum price for imports from Argentina and Uruguay; and over-tariff taxes on imports originating in the EU and New Zealand. As a result, milk powder imports were controlled thereby providing an additional incentive for new investments in dairy processing capacity in the country.

According to CBCL estimates, the total milk volume collected by cooperatives increased to 6.8 billion liters or the equivalent to 42% of the formal market in 2005. As cooperatives are present in all milk sheds in the country, they were in a suitable position to capture markets left by Parmalat as a result of its financial crisis. The CBCL also believes...
that the percentage of milk processed by cooperatives also increased, as cooperative processing capacity increased as a result of new physical capital investments. Most of these investments were made in milk powder, condensed and UHT milk processing facilities.

Another important development of the early 2000s is that Brazil started to export dairy products and, for the first time in history, became a net dairy exporter in 2004 and 2005. Dairy product exports increased from 41.4 million liters in 2000 to 492.2 million liters (equivalent to USD 130 million) in 2005 despite an over-valued currency. The CBCL estimates that dairy cooperatives participate with 40% of the total export volume.

5. Summary and Conclusions

This article analyzed the evolution of farmer owned cooperatives in the Brazilian dairy sector with a life-cycle approach. Based on secondary sources, interviews, and multiple case study evidence, the evolution of dairy cooperatives in Brazil followed Cook’s (1995) five stages model, including economic justification, organizational design, growth, crisis and restructuring.

The experience of dairy cooperatives in Brazil suggests that it is important for cooperative leaders to recognize and quickly adapt their organizations to the changing business environment. Resistance to change and failure to adapt have significant costs to the economic sustainability of cooperatives and the well-being of their producer-members. Given the recent market share gains by dairy cooperatives in milk procurement, processing and exporting, the general observation is that the initiatives pursued by cooperative leaders in Brazil are starting to bear fruits. Farmer-owned cooperatives might regain the lost market shares and play an increasingly important role in the domestic dairy sector if they find organizational solutions to their internal constraints and continue to develop strategies aligned with a changing and increasingly complex business environment.

6. References


