A Brazilian Dairy Cooperative: Transaction Cost Approach in a Supply Chain

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PEARSON CASES IN SUPPLY CHAIN MANAGEMENT AND ANALYTICS

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Supply chain studies are important because a good management system and governance between its members can generate systematic earnings and competitive advantages for an entire supply chain. Therefore, understanding the way that a supply chain is structured and determining the main relations and transactions between its members are essential to making a critical analysis for systemic optimizations.

A cooperative supply chain has some extra peculiarity, based on its values of self-help, self-responsibility, democracy and equality, equity, and solidarity. In the Cooperativa Agropecuária Petrópolis Ltda. (COAPEL), a cooperative company (co-op) that operates in the Brazilian dairy industry, the managers have some doubts regarding the actions that need to be taken to achieve a better transaction efficiency to support the main activities of COAPEL’s supply chain and also to minimize risks within the supply chain.

This approach in this case includes a mapping of the co-op’s supply chain, the identification of its primary members, and a structural analysis of the chain. The findings presented here are based on

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transaction costs approach attributes and ways in which the management and the cooperative business model can influence them.

**Background for the Cooperative and the Industry**

COAPEL, commercially known as Piá (trademark of products), was founded in October 29, 1967, in the district of Vila Olinda in Nova Petrópolis in the state of Rio Grande do Sul, in the South region of Brazil. The co-op’s history started with a partnership between the German government and a group of 213 farmers in the region, with the goal of developing milk production in that area and seeking more price competitiveness for their dairy products. Another target of this project was to transform farmers into agricultural businessmen through professionalization, increasing their competitive edge with a better production environment and more efficient processes.

The co-op has grown, expanding its product mix and geographic reach. It currently operates in more than 80 cities in Rio Grande do Sul state, supported by the performance of its 15,000 members and revenues of 414 million Reais. The co-op represents 8.5% of dairy sales in the South Region of Brazil (Latin Panel data). The main focus of COAPEL is the Rio Grande do Sul market, representing 65%. In addition, Santa Catarina represents 20% and Paraná 15%. COAPEL usually buys milk from its members, but sometimes it will buy milk in the “spot market” when demand is higher than the supply that its members can provide. The supplier network includes both large and small farmers from the region.

Brazil is the fifth largest milk producer in the world, behind the USA, India, China, and Russia. The recent production levels represent a huge cycle of growth based on the introduction of UHT in the 1990s, changing the way of production and also manners of consumption. Investments flowed into this area, introducing technology and modernizing production with new techniques, machinery, and equipment. Milk consumption in Brazil remains low (15 kilos compared to 37 in Holland) but with better prospects due to the growth of population income and changes in diet.
The International Cooperative Alliance (ICA) provides the following definition: “A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.” A cooperative is also defined as a voluntary association of people, joining their production force, expenditures and, savings capacity to develop an economic and social business, generating to all members systematic gains (OCERGS, 2010). A co-op in this business model has its own values and principles. ICA has established seven principles for a co-op: voluntary and open membership; democratic member control; members’ economic participation; autonomy and independence; education, training and information; cooperation among different co-ops; and concern for community.

Cooperative relationships are based on co-op’s principles, giving emphasis to a long-term philosophy where everybody wins (Chistopherson and Coath, 2002). As a final point, some cooperatives’ doctrines, such as democracy, are useful for understanding the relationships between its members. For example, this relates to the manner in which a cooperative should be structured (administrative and management); the degree of free membership as well as free leaving; and the return of surplus capital, after deductions.

**Transaction Costs Approach**

The transaction costs approach, first studied by Ronald Coase in 1937 and further developed by Oliver Williamson in 1985, is the study of economic organizations, focusing on transactions and economic efforts to accomplish their activities. These transactions, according to Williamson (1985), occur when goods or services are transferred between different interfaces, having inherent process characteristics that determine the way that outputs are generated and how they are delivered to a customer. Costs are incurred for involved members to effect transactions, and internal costs accrue for each member. These relations and transactions are influenced by several factors, categorized by Williamson (1985) as behavioral and dimensional assumptions.