

Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

**Abstract Number: 007-0105**

**João Amato Neto, PhD**

University of São Paulo, Polytechnic School

Address: Avenida professor Almeida Prado, 531 – travessa 2

05508900 – Cidade Universitária, São Paulo-SP, Brazil.

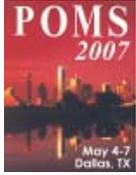
[amato@usp.br](mailto:amato@usp.br)

Phone: 55 11 3091.5363 – ext. 409

*POMS 18th Annual Conference*

*Dallas, Texas, U.S.A.*

*May 4 to May 7, 2007*



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

## **Cooperative complexes and local development: a study of Brazilian cases**

João Amato Neto<sup>1</sup>, [amato@usp.br](mailto:amato@usp.br)

<sup>1</sup> Universidade de São Paulo, Escola Politécnica, Departamento de Engenharia de Produção, São Paulo, SP, Brasil

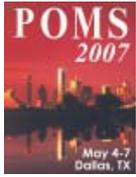
### **ABSTRACT**

*The aim of this article is to present a study carried through in 12 Brazilian cooperative complexes belonging to the following sectors: agribusiness, fishing/mariculture, handicraft, textile and metallurgist. The present research is characterized as an exploratory study, supported by the multiple case study method, being composed of: documentary research, analysis of the main characteristics of the cooperative complexes belonging to different productive chains, comparative analysis of such enterprises. The study is based on the concepts such as externalities, joint actions and inter-organizational cooperation level.*

*Key words: Cooperative complexes. Governance. Inter-organizational cooperation. Local development.*

### **1. INTRODUCTION**

The present article aims to present and to discuss the concept of complex cooperative, congregating a group of self-managing enterprises under the perspective of solidary economy. This study focuses on an analysis of 12 Brazilian cooperative complexes, involving many economic sectors: agriculture, craft, industry, mariculture, recycling and clothes and tries to



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

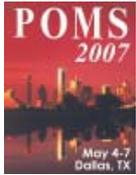
detect their main characteristics related to the operating system, trade, commercialization and financial aspects. Besides this, the study seeks to identify the strategic positioning of the enterprises in belonging to the different productive chains, also seeking to identify the different governance structures of such chains. In fact, what is intended in this article it is to identify the main gaps and opportunities of the enterprises and the possible joint actions through productive cooperation networks among them in order to achieve collective efficiency.

## **2. CONCEPTUAL REVISION**

### **2.1. THE COOPERATIVISM MOVEMENT UNDER THE PERSPECTIVE OF SOLIDARY ECONOMY**

According to Singer (2002), solidary economy constitutes one of main ways of reorganization of the population in order to get work and income, and it is configured as an alternative way of production and distribution, generated by individuals that look for a slot in the labor market. According to that author, solidary economy consists of the combination of unit principles with socialization , beginning between ownership and the use of production means and distribution. Under this perspective, it meets the value of the solidarity among the workers in the search in democratic ways of making possible the survival and of the production of goods and services in the society.

One of the main characteristics of solidary economy is the multiplicity of entities, the objectives and actions of which play the role of income re-distributor at a macro-social level, more than

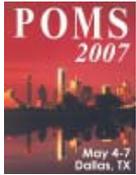


Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

simply the income and wealth generator. This is a workers' strategy to fight poverty situations and unemployment, which, with solidarity, seek to overcome social exclusion and to regain citizenship. In other words, in this kind of economic system the workers interfere in a group of organizations and institutions with a self-management base, such as the self-management companies, cooperatives and workers' associations.

Historically, cooperatives emerged more than a century ago, from the pioneering experience of Rochdale in England of 1844, as a reaction and opposition of the workers of the textile industry to the traditional forms of production. Currently, the different forms of cooperatives are considered very important, both in developed countries and, mainly, in developing countries. The original principles of cooperativism suffered a reformulation as from the International Congress of the International Co-operative Alliance (ICA) in Vienna (1966), where some principles were established: voluntary adhesion, a man a vote/ a vote per person, interest limited to the capital, distribution of surplus according to work, promotion of education among partners and cooperation among cooperatives (RUFINO, 2000).

More recently, in the declaration approved in 1995 by ICA, in Manchester - United Kingdom, some modifications were proposed that can be summarized in seven principles: voluntary and opened adhesion; democratic management on the part of the partners; economic participation, autonomy and independence; education, formation and information; cooperation between cooperatives; interest for the community. There is, therefore, in this declaration of Manchester, a clear reference to values. The values of cooperation are presented in the following way: cooperatives are based on the values of mutual aid, responsibility, democracy, equality, equity



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

and solidarity. In the tradition of its founders, the cooperative partners respect ethical values such as honesty, transparency, responsibility and social vocation (RUFINO, 2000).

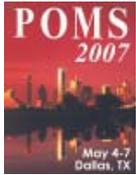
The peculiarity of the cooperative company is the end of the capital hegemony, is a company based on work, on an activity carried through in common, on the person who carries through the activity. Thus approached, the cooperative can be understood as a human company, as opposed to the traditional company.

The ethical values explanation consists in an excellent point in the declaration of Manchester, an opportune time to refer to values such as transparency, of vital importance in the relations between partners and social responsibility, tied with the new cooperative principle of interest for the community.

## **2.2. THE COOPERATIVES MODELS**

There are basically three cooperativism models: cooperatives specialized in meeting specific economic needs; mixed cooperatives, that combine two or more types of cooperatives, and integral cooperatives, different devoted to meeting its participants different needs and those of their families, as the case of Kibutzim in Israel. The models are basically the following:

- Consumption model, basically devoted to supplying the associated-users the nutritious goods and personal and domestic goods at more advantageous prices than other companies;



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

- Production model, also known as production workers cooperatives or workers' cooperatives. In this case, the production cooperatives are destined, logically, to the workers' autonomous organization in the production certain goods;

- And, finally, Credit model, that, in function of the particularities of each area, presents different specific subtypes, especially in Germany and in Italy. It is worth noticing that, due to their great success, they have been the organization of the so-called popular strata.

### **2.1.2. THE INTERNATIONAL EXPERIENCE**

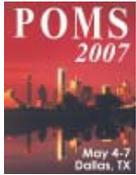
There currently is, specially in some European countries, a great number of successful experiences from the cooperativism movement.

Just to mention some of the most significant examples, the case of the Mondragón cooperative complex, in the Basque country (Spain), the Kibutzim in Israel, and of the production, services, consumption and credit cooperatives of the different areas composing the so-called Third Italy can be pointed out. Together, such groups of cooperatives involve hundreds of thousands of associates.

### **2.3. THE BRAZILIAN COOPERATIVE EXPERIENCE**

In the Brazilian context, the first cooperatives emerged at the end of the XIX Century. Despite the traditional associativist laws in the Brazilian agricultural field, it was in the urban consumption sector centers that the first cooperatives emerged in Brazil.

The pioneering experiences were: the Cooperative Association of the Telephone Company Employees in the city of Limeira, in the State of São Paulo in 1891; the Military Cooperative of



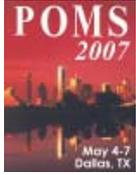
Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

Consumption in Rio de Janeiro - at that time the Federal District - in 1894; the Camaragibe Cooperative of Consumption, in Pernambuco, in 1895, and the Cooperative of Consumption of the Cia. Paulista Employees in the City of Campinas, in the, State of São Paulo, in 1887.

It was only later that the cooperativist movement reached the agricultural area, with the first agricultural cooperatives of Caxias do Sul, in the State of Rio Grande do Sul, in 1902, and the coffee, cotton, cassava, rice and maize growers, and of dairy producers cooperatives in the State of Minas Gerais, in 1907 (PINHO, 1982).

The expansion of the cooperativist experience led to the establishment of some entities that started to congregate the different cooperatives; amongst them, it is interesting to notice the Organization of Brazilian Cooperatives (OCB), as an official representative of the national cooperative system, established in 1971, and also ANTEAG (National Association of Workers of Self-management and Shareholding Participation Companies), formed in 1994; Unisol Cooperative (Congregation and Solidarity of the Cooperatives of the State of São Paulo) formed in 1999; ITCP (Technological Incubators of Popular Cooperatives), of university scope, being the first Incubator formed in 1995, at UFRJ (Federal University of Rio de Janeiro), and in 1999 at USP (University of São Paulo); ADS (Agency of Solidary Development), organism established by CUT (Unique Workers' Central), where the first agency was established in 1999.

However, it can be observed that there is a great atomization of independent cooperatives (cooperatives not bound to any entity or federation). Even in the South and Southeast regions



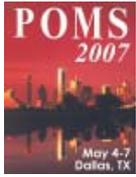
Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

where the performance of the cooperatives is more significant (corresponding to 65% of the country total) the confederate movement of cooperatives is still inexpressive.

Despite pioneering in the urban area, it was in the agricultural sector, through farming cooperatives, that the cooperativist movement was more widely spread throughout the XX century, reaching approximately 75% of the total number of cooperatives in Brazil by the 1980s, followed by the housing cooperatives linked to the now extinct National Bank of Habitation (BNH), with about 15% of the total, and the cooperatives of credit, registered in the Central Bank, representing the remaining ones. Another important modality concerns the work cooperatives, which have been growing and taking shape in the last years (although there is not yet an explicit legislation to support this type of organization), in all sectors of the Brazilian economy (metallurgical, textile, agroindustry, civil construction, etc). In this perspective, there was an increase in the number of work cooperatives of 24.5% in 1999, and 62% in the last three years (OCB, 2000). This vertiginous growth in the last years is explained by the current conjuncture of the country, in which the austere policy of the federal government and the globalization process in the economy has magnified the unemployment rate in general (RUFINO, 2000).

Finally, a fact to be noticed is that the highest death tolls of cooperatives in Brazil historically occur in the consumption and credit cooperatives sectors, basically due to three orders of factors:

1. the suppression of the tributary benefits (basically of the ICM);



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

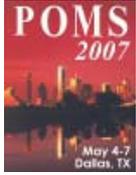
2. the growing decapitalization process of the cooperatives caused by the high inflation rates, in the periods of 1963/64 and of the whole 1980 decade; and
3. the strong competition of the great supermarket networks , supported by modern managerial, financial and commercial techniques.

### **2.3.1. LEGISLATION GOVERNING THE COOPERATIVES**

The first legal instrument providing about the cooperative activities in Brazil is from January 6, 1903 - I Decree n. 979 - which regulates the activities of the agriculture professionals unions and of the rural activities and of the production and consumption cooperatives, without greater details. Later on, on January 05, 1907, Decree n. 1637 was promulgated, acknowledging the usefulness of the cooperatives, but it still does not recognize their juridical status, different from other entities. But the cooperativism decree considered the landmark of the legal formalization of the activity in Brazil was Decree n. 22239, of December 19, 1932.

It separated the cooperatives from the trade-unions, consecrated the doctrinary postulations of the cooperative systems. That decree was revoked in 1934, being reestablished in 1938. In 1943, it was revoked again, re-emerging in 1945, by Executive Law n. 8401. In spite of all the disruption, it was a phase with a lot of freedom for forming and operating cooperatives, with fiscal benefits.

After two decades, the legal evolution went on, with detachment to Law n. 4.380, of August 21, 1964, providing on housing cooperatives; Law n. 4.504, of November 30, 1964, the Statute of the Earth, instituting the Integral Agrarian Reform Cooperative - (CIRA) and Law n. 4.595, of



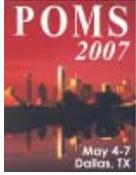
Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

December 31, 1964, providing about credit cooperatives. The establishment and operation of CIRAQ were regulated by Executive Law 58.197, of April 15, 1965.

In 1966, with Executive Law n. 59, of November 21, and regulated by the Decree n. 60.597, of April 19, 1967, cooperativism was submitted to the state centralism, losing many fiscal incentives and the freedom already conquered.

Later on, on December 16, 1971, Law n. 5764 was enacted, and is still in force, defining the cooperatives legal regime , their constitution and operation, representation system and support organisms. It was elaborated by a cooperativist commission, appointed by the government. Finally, it contains all the requirements for the Brazilian Cooperativism System feasibility.

Art. 174 of the Federal Constitution of 1988, in its paragraph 2, provide that the government will stimulate the establishment and the development of cooperatives and other forms of associations. For the moment, however, cooperativism in Brazil fills a legal gap due to absence of a clear and modern legislation viewing to improve the old legislation, with the modifications made during the 1988 constituent process, with deregulation provisions. Finally, in 2003, Law, n. 10406 (10/01/2002) of the Civil Code in its cap. VII (on cooperative society) was enforced; it does not establish more than a minimum number of partners, because it provides that one of the characteristics of the cooperative society is the "partners' competition, in the necessary minimum numbers to compose the board of the society, with no limits for the maximum number ". There are still other changes in the new law, but they are still waiting for a consolidation process, because some of these changes have not yet been regulated satisfactorily.



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

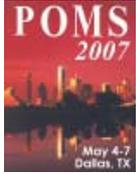
### 3. METHODOLOGY

The main goals of this study characterize it as an exploratory investigation, based on a case study methodology. The adoption of this method is justified mainly due to the following aspects (GIL, 1995; YIN, 1998):

- For (the formation of the cooperative complexes) being a contemporary phenomenon;
- The boundaries between the research object and its context are not well defined;
- There is a great heterogeneity of organizations in the universe researched.

The research plan contemplated the following points:

- A documental research on many regional offices of the Solidary Development Agency (SDA); the Brazilian Service for Supporting Micro and Small Companies (SEBRAE), universities, research centers, etc.;
- An empirical and field research – enterprises, other institutions and local agents - involving different productive chains (agricultural, agri-industrial, industrial, fishing / mariculture, crafts), analyzing their main characteristics and seeking to identify the main agents of these productive chains and their different governance structures;
- Analysis of the Cooperative Complexes (externalities; joint actions and cooperation degree among companies and other actors; etc.);

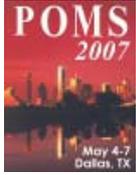


Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

The research on the cooperative complexes basically aimed to answer the following questions:

- 1o.) Does this groups of enterprises actually characterize a cooperative complex?
- 2o.) What is the relationship degree among the enterprises (frequency and intensity of joint actions)?
- 3o.) Which are the different configurations in terms of power relationships within the complexes, their local and regional implications and those with other (global) areas?
- 4o.) Do the possible asymmetries within the complexes directly affect the enterprises (their productive organization, the relationships with the other local and regional agents)?
- 5o.) What kind of governance is exercised by the products commercialization agents ?
- 6o.) What are the market niches in which the enterprises are more competitive?
- 7o.) In which segments do they face larger obstacles for the enterprises to increase their potential for higher insertion power in the production and distribution chain?
- 9o.) Which kind of short, medium and long-term actions should be developed by the companies and goverment in the perspective of a real sustainable development of the cooperative complexes?

Thus, the research was based on empiric studies of the complex mentioned, and, on the other hand, on literature revision, basically concerned with the following theoretical-conceptual aspects: solidary economy and cooperativism; transaction costs economy; productive chains and



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

governance structures; productive cooperation networks; regional clusters / local production systems ; complex cooperative.

The cooperative complexes analyzed are shown below:

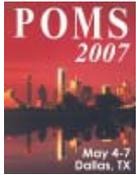
**Chart 2 – Cooperative complexes studied**

<b>Cooperative complexes</b>	<b>Productive chain</b>	<b>Place</b>
1. Serra Geral	Agriculture	Bahia
2. Maricultura	Fishing/ mariculture	Palhoça e Celso Ramos/ SC
3.Artesanato do Sertão	Handicraft	Bahia (Região do Sisal)
4. Setor Têxtil /SP	Textile	Nova Odessa e Santo André / SP
5.Metalurgia – B. H.	Metalurgic	Belo Horizonte, Vespasiano e Contagem/MG
6. Vestuário	Industry	Porto Alegre e Erechim / RS
7. Fruticultura	Agro-industry	Petrolina/PE; Benevides/PA

Source: the author.

#### **4. ANALYSIS OF THE SELECTED COOPERATIVE COMPLEXES**

##### **4.1. AGRICULTURE, FRUITICULTURE AND MARICULTURE:**



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

Mostly constituted by family agricultural activities, such cooperative complexes and solidary enterprises generally present a series of training technical-professional and managerial gaps that cause low productivity as compared to the commercial agricultural similar groups.

In general, a low degree of cooperation inter-enterprises is observed and with the different support entities; there is only an exception that refers to fruit-growing in the state of Pará (Novamafrutas - Coopaexpa - Camp), where a highly developed and integrated cooperative complex already exists, based on a very well established governance, with strong performance of foreign entities, such as Interchurch Organisation for Development Co-operation (ICCO) and Deutsche Gewerkschaftsbund (DGB), besides Brazilian institutions, such as the Federal University of Pará (UFPA), the Executive Commission of Lavoura Cacaueira's Plan (CEPLAC) and the Bank of Amazônia (BASA), as shown in the illustration below.

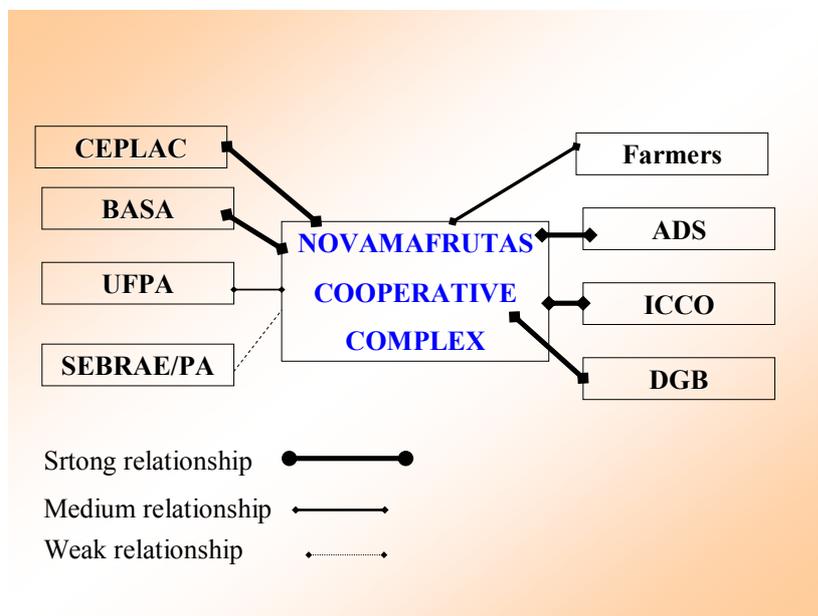
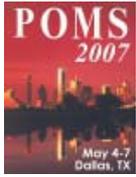


Figure 1: Complex New Amafrutas - intensity of the inter-organizational relationships



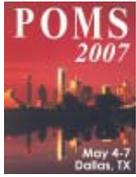
Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

With the construction of a new industrial plant, this complex cooperative New Amafrutas recently began (2004/2005) processing new fruits, such as: pineapple, orange, etc., besides the passion-fruit juice, traditionally already produced by the complex.

It was also identified, from the accomplished diagnosis, that the whole fruit-juice productive chain should strongly be influenced in the next years by the growing demands of product tracking, maintainable production processes and steady decrease in the use of pesticides.

There is the fruit-growing case of the Cooperative of Producing Agroindustriais of the Maria Tereza region (COPAINT), in the mid São Francisco-Petrolina area /PE. it is a producers cooperative (17 women and 3 men) of candies produced with the fruits of the area (mango, grape, guava, banana and coconut), which started with incentives from the Federal Government, through Codevasf (São Francisco Valley Development Company), that already sells plots of land with the whole irrigation infrastructure installed for the farmers of the area. They are not formally constituted as cooperatives and they present many problems in terms of lack of physical space, facilities and work instruments to adapt the production to the quality patterns demanded by the inspection organisms.

Another interesting case is the cooperative mariculture complex in Santa Catarina State, for being an activity that is developed with characteristics similar to those of family agriculture, as in many aspects they have common problems, mainly concerning storage problems and commercialization of the products. This complex involves products from the towns of Palhoças

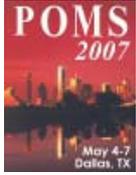


Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

and Governador Celso Ramos. In this area, there is strong performance by the following agents: EPAGRI (Agroindustrial Research and Rural Extension Company of the State of Santa Catarina - a government organism, responsible for the articulation and development of Mariculture in the state); IBAMA (federal organism that grants licenses for the cultivated areas); Co. Police of Environmental Protection (effective action in controlling abuses); Ministry of the Navy (controls marine traffic aspects), as well as the ADS/SC office. The development perspectives for this activity in the region as a whole are very promising, and, according to the statements obtained during the field research, mariculture control shall be transferred to the Special Aquiculture and Fishing Office.

Although this research has a preliminary diagnosis character, it can contemplate some suggestions that should be deeply analyzed in a more detailed study:

- The need of a detailed analysis in order to subsidize investment plans for improving the infrastructure (storage and transport);
- It is also noticed the technological and managerial gap, mainly in terms of a larger access to information from universities, research centers, technical schools, government organisms (EMBRAPA, for example) and other support institutions (SEBRAE, NGOs etc.);
- Last but not least, the intention is to intensify and expand the interaction among the actors (producers, associations, universities, research entities, local and regional government, etc.) seeking an invigoration process for this complex and for long-term sustainable development.



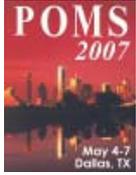
Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

#### **4.2. RECYCLING:**

The solid wastes recycling is one of the activities receiving great attention on the part of the government in the recent years. This case presents some common characteristics: Although this activity has had increasing economic and environmental importance, constituting a promising private business area, both from the private and public interest point of view (about 230,000 t/day of urban garbage are collected, according to IBGE data).

the solid wastes recycling is still, , as an economic activity of smaller added value, in most of the researched places, involving, precarious work conditions. This situation can be explained by a number of factors:

- On the one hand, the recycling productive chain is basically composed by the following phases: collection (activity accomplished mainly by individual collectors), storage (wholesalers) and processing (recycling industry). The economic activities accomplished by most of the companies just concentrate on the collection phase. The exception is for some few cases, where there is already the processing of the collected material (for example, Cooperinvicta in the area of Belo Horizonte, that produces brooms and pieces of furniture from PET processing ). On the other hand, it can be verified that the material collected (plastic film, rigid plastic, aluminum, paper, cardboard, rubber, paint, glass, lamps, fabric, wood etc.) is very heterogeneous and the collection activities are geographically very dispersed. Therefore, the conveyance of this material in its grosser form makes a more sustainable economic process unfeasible. There is, nevertheless, a group of different and many times conflicting interests among the different agents (companies,



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

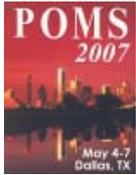
cooperatives, governmental organisms, support entities, unions, etc.) that compose such cooperative complexes. Such scenario causes a series of difficulties under the point of view of a more effective coordination of the activities, generating a low degree of inter-organizational integration.

From the point of view of work organization and of the profile of the people involved in such activities (informality and collectors poverty) what stands out is an evident lack of proper technical-professional training.

#### **4.3. HANDCRAFT:**

This complex basically involves a group of three solidary enterprises of the sisal craft , encompassing thirteen municipal districts located in the northeast area of the State of Bahia (regional COOPERAFIS -Regional Cooperative of the Interland Fiber Artisans; CUASD – São Domingos Association Centraland COOPERJOVENS - Production Cooperative of the Sisal Region Youth). From the accomplished diagnosis, some more important subjects could be inferred:

- The need to improve the production scale and to invigorate the cooperatives, in order to elevate the families income was observed, as well as the need of valuing the specific character of the craft and solidary production. On the other hand, it is also noticed, that there are still many relative hindrances to a larger growth, given the low scale of existing production and commercialization difficulties (lack of means of transportation, lack of identification of efficient channels of popularization and distribution of its products).



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

-Also to be mentioned is the suggestion of a detailed analysis of opportunity of new business that can increase the added value of the products (possible approach with similar companies, as for example: craft of the paper and graphic companies).

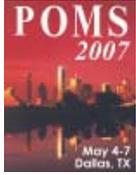
- The invigoration of such activities should also include technical-professional training concrete actions (in the appropriate use of work tools and equipment and protection against work accidents, for example), besides initiatives of managerial training of the enterprises.

- They are trying to intensify a lot of joint actions so as to strengthen the bonds of inter-organizational cooperation.

#### **4.4. INDUSTRIAL COMPLEXES: METALLURGY (PORTO ALEGRE/RS) METALLURGY AND CLOTHING (SANTO ANDRÉ/SP); TEXTILE/ CLOTHING (NOVA ODESSA/SP); AND METALLURGY (BELO HORIZONTE/MG).**

The metallurgist cooperative complex in Porto Alegre involves the following companies: Cooperative of Metallurgy Workers of Guaíba Ltda - GERALCOOP (production and commercialization of firewood stoves and water heaters ); Cooperative of Metallurgy Workers of Porto Alegre - COOPERZAGO (production, maintenance, repairs and commercialization of radiators for diesel motors) and COOMESPAR (production and commercialization of metals accessories for bathrooms).

With strong inter-institutional support from entities such as the Union of the Metallurgists from Porto Alegre and region, Municipal City hall of Porto Alegre and Guaíba, Government of the

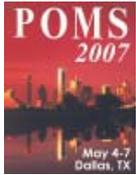


Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

State of Rio Grande do Sul, Ministry of the Work, Federal University of Rio Grande do Sul (UFRGS), non-governmental organizations, this cooperative complex presents good development perspectives, since its markets are very favorable (demanding). On the other hand, there is not yet a more consistent economic-financial data base for proposing long-term investments. The productive systems of the industrial plants generally lack better managerial training (mainly quality management systems, including normalization/certification requirements) and technological updating of their respective machinery and facilities.

There is a great expectation for joint action among the companies and entities in the near future, mainly in terms of purchasing raw materials (copper and copper-brass leagues), in the recruiting of some specialized services, shared by the industrial plants (specially in the cases of COOMESPAR and of GERALCOOP), as well as in some activities related to the dissemination and commercialization of their respective products.

The industrial cooperative complex of Belo Horizonte area involves the following cooperatives: CooperExata (engine overhauling) and Comaic (wood chassis maker), both located in Belo Horizonte; CooperMambrini (maker of trucks chassis, dumpers, metallic tilting carts, brusques and cranes), located in Vespasiano, and Retífica São Bento (engine overhauling). In general, these cooperatives have their history marked by a series of financial order difficulties (debts and customers' default), administrative (lack of management) and legal (work processes inherited from the bankrupted company). The joint actions are still very punctual and discontinuous and the partnerships are very fragile.

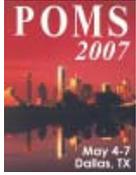


Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

The clothes cooperative complex of Porto Alegre and Erechim are composed by the following enterprises: Sociedade Grife Morro Azul, VictorYes and Univens (Porto Alegre) and Coopeli (Erechim). They are generally dressmakers, whose productive process involves cutting; sewing, finishing and silk-screening operations.

Formed by community initiatives for income generation , such enterprises are confronted with a series of problems, among which: lack of working capital and for new investments (in many cases the equipment is more than 10 years old.); inadequate facilities (some in dangerous places and with inadequate work conditions - poor illumination, poor ventilation, etc.); lack of standardization of the products, lowering the finishing quality of the products; lack of management for programming and controlling the production, the stocks and the accounting-financial administration.

The textile and clothes cooperative complex of Santo André and New Odessa cities are formed by the Industrial Cooperative of Workers in Spinning, Weaving and Clothing - TEXTILCOOPER (manufacturer of blankets, acrylic blankets and cotton quilts) - (maker of 100% cotton threads, either raw or colored, and dyeing services for third parties), located in the city of Nova Odessa in the state of São Paulo. Both were established from bankrupted companies processes and/or from companies in great economic-financial difficulties, which already configures a high risk situation for the complex in question. Some joint actions could already be accomplished by both cooperatives, as in the case of the dye purchase used in the dyeing operation, common to both. Another cooperation relationship that it is shimmered, based on the diagnosis, refers to the possible supply of cotton "in natura" or manufactured by CONES for

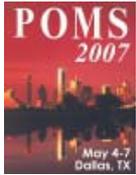


Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

TEXTILCOOPER. Both present a very obsolete park of common machines , which directly interferes in the low productivity of their respective productive processes. In the case of TEXTILCOOPER the largest added difficulty refers to the seasonality of its markets, mainly in the case of the blankets, the sales of which are much below the drifted different for many years (short periods of low temperature in the states where there are adult sales). Besides, problems with work conditions were detected due to the presence of environmental factors (as for example, in the case of the spinning, where raw materials fibers are expelled, and, suspended in the air, they are inhaled by the operators, causing serious breathing problems), and also due to the fact of inheriting an essentially taylorist-fordist organization of the operational work from the old companies. In both cases, a profile prevails of operators with low professional qualification before the current demands of the labor market. In commercial terms, it is verified that CONES can be consolidated and grow, depending on the possibility of investments in the productive base and in the professional re-qualification, from an operational and/or managerial point of view. In the case of TEXTILCOOPER, in turn, the situation is much more delicate, given the scenario indicated by the partial report.

## **6. FINAL CONSIDERATIONS AND FUTURE SCENARIOS**

The different complexes analyzed also reveal that there are great heterogeneity and diversity among them, be it from the economic, or social, regional and cultural point of view. They are, in fact, very different realities. There is, for example, a complex with a high level of economic activity, as it is the case of the fruiticulture complex of Pará and of the metallurgist sector from the Great Porto Alegre cooperative industry complex, and others that do not even present a stable

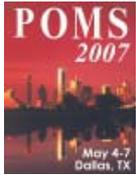


Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

configuration of the enterprises, as it is the case of the recycling complexes of São Paulo (they are actually a group of survival activities, with high rate of people turnover and, therefore, not even sustainable enterprises can be considered). Such differences are also very evident from the point of view of the profile of the cooperated (different socioeconomic origins, education levels and very different qualification, and professional and personal expectations).

There are also significant differences among the complexes in function of the branches of economic activity to which they are linked. There are agricultural sector cooperative complexes and mariculture sector ones, where distribution, storage and logistics problems, in general, are outstanding in relation to other operational aspects. On the other hand, there are the industrial sector complexes, where the issue of technological and managerial modernization (including financial, marketing, supplies and human resources management) get larger relevance. The complexes related to the craft present other aspects, such as the need of development of popularization channels and of more efficient distribution.

In general, the complexes present a group of agents, organizations and institutions, that act in favor of the cooperative development enterprises. However, the practice of joint actions among the different agents still limits a few cases, as the one of the mariculture cooperative complex (SC) with the participation of AMARIS, FAMASC, AAGOCER, besides the very Agency of Solidary Development (ADS-south). The most frequent configurations are the formation of cooperation nets in a very incipient, however very promising stage, due to the very solidary nature of the enterprises. The establishment of a marketing information coordinating agent



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

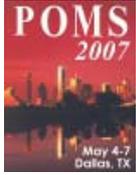
(strategic intelligence), having as main performance focus the search for new market opportunities for the whole complex, can be an idea to be considered.

A great lack of resources is noticed in most of the cases researched, , be it for financing the working capital, be it for investments (in new machines, equipments, facilities). A detailed analysis of the capital structure, of the lack of credit and of the market potential, based on business plans , elaborated from a wide and well structured base of data (operational, accounting-financial and marketing), should offer more consistent elements for the elaboration of a policy to finance the different cooperative complexes.

The elaboration of a detailed business plan should prioly the following aspects:

- market segments (niches) of more promising opportunities for the cooperative complexes and the already existing enterprises;
- enterprises that need different levels of investments (working capital, investments in fixed capital - machines, equipments, facilities, technical-professional and managerial training, etc.)
- enterprises that should be discontinued.
- establishment of new solidary enterprises.

In synthesis, it can be said that the perspectives of invigoration of the cooperative complexes, as well as of the solidary enterprises, are very promising. On the other hand, however, it is important to analyze, in greater depth, the limits imposed by the very competition, (inherent to the so-called market forces) to the self-sustained development of these complexes and



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

enterprises, mainly concerning the threats of competitive companies in the respective markets of the cooperative enterprises.

## 7. REFERENCES

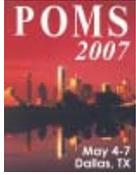
AMATO NETO, J.; MORAES, L. E. O. Acordos cooperativos e cooperativismo: uma discussão conceitual sobre suas diferenças e convergências. In: ENCONTRO NACIONAL DE ENGENHARIA DE PRODUÇÃO (ENEGEP), 23., 2003, Ouro Preto. **Anais...** Ouro Preto: ABEPRO/ UFOP, 2003.

GIL, A. C. **Métodos e técnicas de pesquisa social**. São Paulo: Atlas, 1995.

GEREFFI, G. The organization of buyer – driven global commodity chains: How U.S. retailers shape overseas productions networks. In: GEREFFI, G.; KORZENIEWICZ, M. (Orgs.). **Commodity chains and global capitalism**. Westport: Praeger, 1994.

MORAES, L. E. O. **A cooperação na cadeia produtiva da maricultura do estado de São Paulo**. 2005. Tese (Doutorado em Engenharia [Engenharia de Produção]) – Escola Politécnica, Universidade de São Paulo, São Paulo.

MORALES GUTIÉRREZ, A. C. La esencia de las organizaciones cooperativas: valores y principios. **Revista Fomento Social**, n. 51, 1984.



Amato Neto, J., "Cooperative complexes and local economic development: a study of Brazilian cases", *Proceedings of the 18<sup>th</sup>. Annual Production and Operations Management Society (POMS) Conference*. POMS, Dallas, Texas, USA.

HUMPRHEY, J.; SCHMITZ, H. Governance and upgrading: linking industrial cluster and global value chain research. **IDS Discussion Paper**, n. 120, 2000.

PINHO BENEVIDES, D. **Pensamento cooperativo e o cooperativismo brasileiro**. São Paulo: FEA-USP, 1982. Relatório de pesquisa CNPq.

PORTER, M. **Competitive advantage: creating and sustaining superior performance**. Londres: Collier Macmillan, 1995.

RUFINO, S. **The management in democratic and solidary bases: dilemmas and challenges**, Production and Operations Management Conference, San Francisco/EUA, 2000.

SINGER, P. **Economia Solidária**. São Paulo: Contexto, 2002.

SOUZA, R. C. **Uma investigação sobre o segmento produtor de manga e uva *in natura* em sua inserção na cadeia de valor global**. 2005. Tese (Doutorado em Engenharia [Engenharia de Produção]) – Escola Politécnica, Universidade de São Paulo, São Paulo.

YIN, R. K. **Case study research: design and methods**. California: Sage, 1998.

ZYLBERSTAIN, D. Organização de cooperativas: desafios e tendências. **Revista de Administração da Universidade de São Paulo (RAUSP)**, São Paulo, v. 29, n. 3, p. 23-32, 1994