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International Journal of Current Research Vol. 8, Issue, 09, pp.39134-39140, September, 2016 INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

COMPETITIVE GAINS IN A PRODUCTIVE ARRANGEMENT FRUITS LOCATION IN LUZIANIA IN THE STATE OF GOIÁS

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This work aims to analyze what features or activities developed by the Local Productive Arrangement

(LPA) of Fruticultura of Luziânia, Goiás, contributed positively or negatively to the competitiveness

of companies it participants. The work methodology consisted of a qualitative case study. The survey

results showed the following gains: increased market power, generation of collective solutions,

reduced costs and risks, capital accumulation, collective learning and collaborative innovation.

ARTICLE INFO

ABSTRACT

Article History: Received 17th June, 2016 Received in revised form 23rd July, 2016 Accepted 20th August, 2016 Published online 30th September, 2016

Key words:

Local Productive Arrangement, Management. Interorganizational Relationships, Competitive Gains

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Citation: Ernane Rosa Martins and Sabrina Kellen Dos Santos Vieira, 2016. "Competitive gains in a productive arrangement fruits location in luziania in the state of goiás", *International Journal of Current Research*, 8, (09), 39134-39140.

INTRODUCTION

Companies are joining with the common goal to transform the way to compete in the market, failing to compete with companies, and going to compete in global markets, in groups against groups (SILVA, 2015). Interorganizational cooperation agreements and business networking has become an important strategy for businesses face competitive disadvantages (WEGNER, ALIEVI, BEGNIS, 2015). Zonta and others (2015) emphasizes the importance of participation of companies in Interorganizational networks and confirms that participation can increase the competitiveness of enterprises through cooperation and organizational learning. By acting in networks, companies can increase their organizational reputation (Pesämaa, Hair, 2007), going to be perceived as reliable companies (Gulati, Sytch, 2008). The research question was: What are the results by business associates of Rural Producers Association of Central Luziânia (CAPRUL), through networked cooperative strategies? The objective of this study is to analyze what features or activities, developed by LPAFruticultura of Luziânia, Goiás, contributed positively or negatively to the competitiveness of companies it participants.

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Federal Institute of Education, Science and Technology Goias, Luziânia, Brazil Regarding research methodology, this work consisted of a case study of a qualitative nature. As for the media, the research was literature, because it was worth of information contained in books and technical publications and academic, documentary, in compliance with the use of internal material public agency, such as records, information, letters, memos and reports, not accessible to the public and semi-structured interview. Regarding purposes, the study was exploratory, since it is performed in an area where there is little accumulated and systematic knowledge. This article is divided into five sections. In this present section presents, in addition to the introduction, the definition of the research problem, the goal, the rationale and importance of the study and the structure of this research. Section 2 presents the theoretical framework, with the formation of a conceptual and theoretical basis, which provide support for the development of this study. Section 3 presents the method employed and the methodological techniques and procedures used. Section 4 are described the results obtained in the research. Finally, section 5 provides the objective of the article, as it was achieved, the study's limitations, suggestions for improvement and future research.

Literature Review

This section presents the literature review of the main themes used at work: Local Productive Arrangements and business cooperation gains.

Local Productive Arrangements (LPAs)

The phenomenon of interaction and cooperation in productive agglomerations throughout history received a variety of classifications, such as clusters, local clusters, industrial districts, scientific centers and parks, innovative milieux, consortia, forums and other variations (Dias, 2011). However, they observe, in the international literature three main categories: industrial district, innovative environment (inovateur milieu) and cluster (Amaral Filho and others, 2002). In Brazil, the interpretation of these concepts gave rise to the concept of Local Productive Arrangement (LPA), which is now widely used by public and private institutions. One of the most important and recognized analysis and empirical research efforts on "local production arrangements" was developed by the Economics Institute of the Federal University of Rio de Janeiro, under the Research Network program Productive and Innovative Local Systems (RedeSist) (Dias, 2011). LPAs are "territorial agglomerations of economic, political and social actors focused on a specific set of economic activities that have ties even incipient" (Lastres and Cassiolato, 2003, p. 3). They provide development Companies due to the possibility of obtaining benefits from the sectoral and territorial concentration and forms of relationship between actors such as: expertise, dynamism in the market, generating knowledge, interaction ties, cooperation and learning (VALE, 2007). In addition to these benefits, it can also generate the promotion of capacity building and training, creation of consortia and technological centers and increased innovation (Campos et al., 2009).

They are characterized in this study, based on the identification of four factors: a sectoral and geographical concentration, the existence of entities, relationships between actors (Lastres and Cassiolato, 2003) and obtaining benefits (Marshall, 1982; Schmitz, 1997). According Lastres and Cassiolato (2003), an LPA to be competitive can not be restricted to a single sector, but interact with the entire production chain, still need to include avanca-das management techniques in all aspects of production, quality control, as well as activities related to the generation, acquisition and dissemination of knowledge and technology. To Dallemole and Faria (2011) this development model has almost all the important features observed in the current competitive scenario solidified after globalization. a comprehensive and detailed study is necessary in order to identify at what stage the LPA is considering the main features of the model.

Business cooperation gains

Balestrin and Verschoore (2008) highlight six competitive gains that facilitate the understanding of the results of the cooperation networks, arising from the relationship that the members may have, such as larger scale and market power; generation of collective solutions; reducing costs and risks; accumulation of capital; collective learning and collaborative innovation through cooperation networks, as shown in Figure 1. The importance of the use of cooperative strategies with competitors and participants of supply chains can be seen not only as enemies, but as allies, since both can provide the

GANHOS COMPETITIVOS DAS REDES DE COOPERAÇÃO

Ganhos competitivos	Definição	Benefícios para os associados
Maior escala e poder de mercado	Benefícios obtidos em decorrência do crescimento do número de associados da rede. Quanto maior o número de empresas, maior a capacidade da rede de obter ganhos de escala e poder de mercado.	Poder de barganha, relações comerciais amplas, representatividade, credibilidade, legitimidade, força de mercado.
Geração de soluções coletivas	Os serviços, os produtos e a infra- estrutura disponibilizados pela rede para o desenvolvimento dos seus associados.	Capacitação, consultoria empresarial, <i>marketing</i> compartilhado, prospecção de oportunidades, garantia ao crédito, inclusão digital, estruturas de comercialização.
Redução de custos e riscos	A vantagem de dividir entre os associados os custos e riscos de determinadas ações e investimentos que são comuns aos participantes.	Atividades compartilhadas, confiança em novos investimentos, complementaridade, facilidade transacional, produtividade.
Acúmulo de capital social	Diz respeito ao aprofundamento das relações entre os indivíduos, ao crescimento da sensação de pertencer ao grupo, à evolução das relações sociais, além daquelas puramente econômicas.	Limitação do oportunismo, ampliação da confiança, laços familiares, reciprocidade, coesão interna.
Aprendizagem coletiva	A socialização de conhecimentos entre os associados e o acesso a conhecimentos externos fortalecem o processo de aprendizagem coletiva entre as empresas da rede.	Socialização de informações e experiências, acesso a novos conhecimentos externos, <i>benchmarking</i> interno e externo.
Inovação colaborativa	As ações de cunho inovador desenvolvidas em conjunto por empresas, centros de pesquisa e demais agentes, por meio de um modelo de inovação aberto, integrado e em rede.	Novos produtos e serviços, adoção de novas práticas organizacionais, acesso a novos mercados e desenvolvimento de novos modelos de negócios.

Source: Balestrin and Verschoore, 2008, p. 120

company with the range of other markets, new products and services jointly (Balestrin, Verschoore and Perucia, 2014).

MATERIALS AND METHODS

This study aims to analyze what features or activities, developed by LPA Fruticultura of Luziânia, Goiás, contributed positively or negatively to the competitiveness of companies it participants. For this we used a qualitative research, as this type of study is commonly used by researchers who seek to understand how individuals understand the reality where they live, away as little as possible the natural situation (Merriam, 1998). It was also used case study, which is a particular research that aims to take a representative sample of the unit to search for people, so that they can make generalizations from it (SEVERINO, 2007). Yin (2001, p.54) argues that the case study is "the most appropriate design for investigating a contemporary phenomenon within its real context where the boundaries between the phenomenon and context are not clearly perceived."

For Marconi and Lakatos (2011), the case study is a strategy used in order to obtain information and / or knowledge about a problem, for which seeks a response, which wants to confirm. It is noteworthy that the qualitative case study is not intended to perform statistical generalizations, but seeks a dense and rich description to be the real meaning of the event under study (Merriam, 1998). The sources more adequate evidence for case studies according to Yin (2001) are: bibliographical research, desk research and field research. The literature was identified through review of the topic related literature. In documentary research we used both primary sources and secondary sources. In the field research was used semi structured interview. The LPA respondents are shown in Table 1, and are identified with the letter E.

Table 1. Interviewees

Code	Function	
E1	President	
E2	Associate	
E3	Associate	
E4	Associate	
E5	Associate	
Source: Ownauthors		

The questionnaire used the interviews included sixteen questions. This instrument was adapted from a questionnaire prepared by UNISINOS of Porto Alegre, the Professional Master's Program in Management and Business, and authorized their use. It was used content analysis to analyze strategy of research data. According Triviños (1987), the content analysis has three phases: pre-analysis, material exploration and processing of results. In the pre-analysis, the material collected was organized and established a precise work plan with well-defined procedures. The exploration phase of the material involved procedures such as coding, classification and categorization of the collected material. The treatment phase of the results involved reflection and intuition with empirical soffits, establishing relationships and deepening the connections between the ideas noted.

DISCUSSION OF THE RESULTS

The LPA researched, called the Farmers Association of Central Luziânia (CAPRUL), is a Rural Producers Association of Luziânia municipality in the state of Goiás.

Presentation, history and context

After several meetings of integration between Farmers and partners such as the City Hall and EMATER-GO, came to the conclusion the importance of organizing a Farmers Association Center in the city of Luziânia, which was founded on 04 October 1994 entity this which is still responsible for the representation of rural communities in the municipality, with the signing of highly productive partnerships with the city Hall, in which associations are benefited with various partnerships, such as limestone transportation, soil preparation, seed, fertilizers, Community crops and silage. Agreements signed with the National Rural Education (SENAR), which are conducted training courses for farmers and rural workers, Brazilian Service to Support Micro and Small Enterprises (SEBRAE) and the Bank of Brazil Foundation in the implementation of irrigation kits PAIS project (Agroecology and Sustainable Integrated Production). The center enables the Farmers frame associated with all possible mechanisms that will promote sustainable rural development of rural farmers and other small farmers in the municipality of Luziânia. In 2007 the Central Associations of Rural Producers (CAPRUL), initiated actions to the expansion of fruit production in the municipality of Luziânia through LPA fruit of Luziânia, Ministry of the project of National Integration (RIDE) in which was the construction of a commercial platform of fruit, and the expansion of fruit production in the municipality. Figure 1 shows the trading platform of fruit production Luziânia.



Source: Own authors

Figure 2. Associations Central Business Platform of Rural Producers of Luziânia (CAPRUL)

By enabling the platform construction, and the good results achieved in the production of fruit from 15 hectares in 2007 to 130 hectares in 2009, farmers felt need to create a new entity that would market their products, once that in this regard they have always encountered great difficulties. So the CAPRUL mobilized its members and after several seminars, lectures and courses, established a joint cooperative of farmers of Luziânia and region, on June 5, 2009, based on Highway Braluz, 03 km, Luziânia GO. Its mission: to be the best market option to purchase agricultural products and providing sustainable community development through the adoption of technologies and processes to ensure the quality and the following objectives:

- To promote agricultural development and rural crafts and Luziânia Region;
- Strengthen family farming and small-scale production of the City and Region;
- To be a marketing channel for farmers;
- To act in the national and international market commercializing the products of Cooperated in various links in the production chain: agroindustrial, wholesaler, retailer or end consumer;
- Advise and encourage compliance with environmental legalization, labor and health;
- Ensure the health of the farmer and rural worker;
- Facilitate access to credit and financing lines for their members;
- Acquire and pass on to their members, supplies in general, equipment, goods and services for agricultural production;
- Provide technical assistance and rural extension to the fiscal framework;
- Establish agricultural industry to benefit and packaging products in order to add value to products sold;
- Carry out cooperative, technological and professional training to its membership;
- Develop environmental conservation and preservation activities, as well as the sustainable use of natural resources and the promotion of environmentally friendly projects;
- Facilitate new technologies and technological projects for enjoyment of membership;
- Provide other services related to social and economic activities of the cooperative.

In 1994 the association had only 39 (thirty nine) members. Currently LPA is promoting technical and technological advice on 91 (ninety one) Rural properties. On 20/05/2009 an agreement was signed in the City Council of Luziânia for transfer of funds amounting to R \$ 386,000 for the Local Productive Arrangement (LPA) of Fruticultura Municipality, supported by project of Integrated Region of the Federal District and Surrounding Areas (RIDE), linked to the Midwest Development Office (SCO), the Ministry of National Integration. We began the digital inclusion program for producers and their families, with the acquisition of 30,000 passion fruit seedlings for planting and assisted serving 130 children of farmers with basic computer course. Installation of Commercial Platform Fruticultura featured industrial plant full of removing device, built area of 675m² with two lines for processing fruit in natura, equipped with modern machines and a central business. Since 2010 it has been developed milk DRS Project in partnership with the CAPRUL the Bank of Brazil Foundation, Corumbá Concessions and the Municipality of Luziânia. Thus various fruit species are currently produced by the association, such as passion fruit, acerola, papaya, ponkan, lemon, banana, mango, avocado, pineapple, guava and strawberry. With production of more than 20 tons / month, with

planted area of 160 hectares. Turnover operationalized in 2011 reached 240 tons, totaling R \$ 1,200,000.00.

Respondents' answers

- Among the responses of the five respondents, the most indicative were chosen according to the objectives of this research, avoiding repetitions.
- Asked if participation in LPA provided learning for associated companies were reported by members interviewed:
 - "Yes, conducting courses, seminars and lectures in all the above segments" (E1).
 - "Certainly, especially for the supplier" (E2).
 - "It has provided various training courses in areas such as: management, production, marketing, processing of products" (E4).
- As the interviews it is observed that all members agree that participation in LPA provided learning for member companies, market, product, supplier, processes, tools and management.
- When asked if participation in LPA provided the expansion of trade relations to associated companies were reported by members interviewed:
 - "LPA of fruit production is focused on the family farmer, the producer acquired commercial experience, learned to look for other marketing options" (E1).
 - "Yes" (E3).
 - "Yes, the LPA provided new markets and to give more visibility to products" (E5).

As the answers it appears that participation in LPA provided better trading conditions for companies associated with dates, prices and conditions. Asked whether participation in LPA provided market innovation for associated companies were reported by members interviewed:

- "Provided innovation to farmers that today more value your product, getting better terms of trade and adding value to your product" (E1).
- "Yes, new product offering" (E2).
- "Yes, today we market the product processed, thus ensuring better selling prices" (E3).

As the interviews it is observed that all agree that participation in LPA provided market innovation for associated companies, such as offering new products, offer new services. Asked whether participation in LPA provided to reduce costs and risks associated companies were reported by members interviewed:

- "The LPA provided the producer, working with records from the production, as the amounts collected, better controlling costs and getting better results" (E1).
- "Yes, operating costs" (E3).
- "Yes, all production is sold without risk of loss" (E4).

As these interviews note that all agree that participation in LPA provided to reduce costs and risks associated companies, such as operating costs, transaction costs, investment risks. When asked if participation in LPA provided hiring infrastructure and specialized services to increase the competitiveness of associated companies were reported by members interviewed:

- "The central association, went to work with more partners and also with advice for specific activities. Producers individually started to be more competitive and produce more quality. "(E1).
- "Yes" (E2).
- "Yes, provided the producers partnership with institutions that brings training and knowledge" (E5).

All agreed that participation in LPA provided hiring infrastructure and specialized services to increase the competitiveness of member companies. Asked if participation in LPA narrowed relational ties between members, they were reported by members interviewed:

- "Yes, monthly meetings are held with associates, during which occur information of new termologias, exchanges of experiences and discussions on hortifruticultura issues" (E1).
- "Yeah, sure, now the producers have a meeting place where they can share experiences" (E2).
- "Yes, with meetings during training" (E3).

As the interviews there was an agreement on all the answers that participation in LPA narrowed relational ties among members. When asked if there was an increase of revenues from associated companies were reported by members interviewed:

- "There was an increase in sales of the producers involved in the project" (E1).
- "Yes, due to the increase of trading products" (E4).
- "Yes, there was an increase in the sales volume" (E5).

As the interviews we observed a concordance in all responses to the expansion of revenues from associated companies. When asked if there was an increase in profitability of associated companies were reported by members interviewed:

- "There was a greater profit of associated producers have more alternatives to increase productivity and purpose of the product" (E1).
- "Yes, cost benefit" (E3).
- "Yes, with the training of managers of institutions enabled better resource management thus increasing profitability" (E5).

As the interviews we observed a concordance in all responses to expanding the profitability of member companies. Asked if there was an increase in the number of employees of associated companies were reported by members interviewed:

- "The center now has more activities and increased marketing. Producers began to hire more manpower and mainly looking for family members who were out to participate in the project "(E1).
- "Yes, as the negotiations, there was hand increased need for work" (E2).
- "There was a greater family participation of members" (E4).

As the interviews there was an agreement on all responses to the increase in the number of employees of member companies, especially the larger family participation. Asked if there were improvements in the facilities of associated companies were reported by members interviewed:

- "Rural associations improved their facilities or even built their headquarters" (E1).
- "Yes, as sales increased, there was need for more space on the premises" (E2).
- "There were significant improvements" (E5).

As the interviews there was an agreement on all responses to the improvements in the facilities of member companies. When asked if there was improvement in the credibility of associated companies were reported by members interviewed:

- "Yes, with improved product quality, increased credibility with the consumer and the buyer" (E1).
- "Yes, there was a higher visibility and increased credibility" (E2).
- "Yes, more with the local community" (E3).
- "Yes, careful in choosing people trained in management and as to whether to maintain the company's documentation ever day" (E4).

As the interviews there was an agreement on all the answers regarding improvements in the credibility of member companies. When asked if there was increased confidence in their own business by associated companies were reported by members interviewed:

- "Yes, through knowledge, increased confidence and improved results" (E1).
- "Yes, the negotiations made also increased the production of each" (E3).
- "With the possibility of selling of production and a better value, increased the confidence of producers" (E5).

As the interviews there was an agreement on all responses to the increased confidence in their own business by associated companies. When asked if participation in LPA improved the quality of life of the members, they have been reported by members interviewed:

- "The LPA has improved the living conditions of the members, through the results of expansion of planted area and the consequent increase in production, providing higher income, better living, putting children in schools, getting your own car" (E1).
- "For the participating hard, yes" (E2).
- "Yes, more purchasing power, more ease in the realization of life projects" (E3).
- "There was a significant improvement" (E5).

As the interviews there was an agreement on all the responses that participation in LPA improved the quality of life of members. Asked what the strengths and weaknesses of the LPA, were reported by members interviewed:

• "Strengths: increased knowledge through courses, new

markets available, technical assistance, subsidies of products, marketing, better freight transport resources. Weaknesses: lack of continuity of projects, lack of resources, short allowance "(E1).

- "Strengths: technical support during production. Weaknesses: interruption of LPA "(E2).
- "Strengths: ability to ensure the production, better sales conditions, improved product quality. Weaknesses: processability "(E3).
- "Positively, the technical monitoring of production during the cluster development process. Negatively with the program interruption "(E5).

As the interviews was noted several strengths such as: courses, new markets available, technical assistance, subsidies of products, marketing, better freight transport resources. As highlighted weak point to the lack of continuity of projects and program interruption.

RESULTS

According to the authors cited by competitive gains Balestrin and Verschoore (2008), were identified in the case study, the following results, presented in Table 2.

Table 2. Results obtained in the case study

Increased market power	The increased market power has been identified in the market force achieved in
	bargaining power and legitimacy.
Generation of collective	The generation of collective solutions is
solutions	verified with training and with the
	guarantee to credit.
Reducingcostsandrisks	The reduction of cost and risk was
	observed with increased productivity and
	increased confidence in new investments.
Accumulation of capital	The capital accumulation factor evidenced
-	in the expansion of demostrada confidence.
Collective learning	Collective learning is clear in the training
C	courses and dissemination of information.
Collaborative innovation	Collaborative innovation was observed
	with the increase of the value added.

Source: Own authors

It was found that the discontinuity of public policies is the major problem faced by this LPA. If investment had continued, we would have an even greater number of members in even better conditions. Regarding the support of partners, it was found that the SEBRAE was the institution most supported and continues to support the association in various actions, such as courses, lectures, technical visits, among others. The gains of entrepreneurs, considering the work strategies in collaborative networking, the following benefits were observed: collective solutions; reducing costs and risks, collective learning; innovative nature of actions developed jointly by the companies; learning in companies; expansion of trade relations; better conditions for negotiations; market innovation; Hiring infrastructure and specialized services; facility improvements; credibility; increased confidence in the business itself; increase confidence of entrepreneurs and the quality of life of members.

Conclusion

This research aimed to analyze what features or activities developed by the Local Productive Arrangement (LPA) of

Fruticultura of Luziânia, Goiás, contributed positively or negatively to the competitiveness of companies it participants. The LPA has submitted the following co-operation gains: gains of scale and market power (market power, bargaining power and legitimacy); supplies solutions (shared marketing, training and guarantee credit); learning and innovation (Capability courses, information dissemination and expansion of value); reduction of costs and risks (shared activities, productivity, confidence in new investments); gain in social relations (enlargement of trust, expansion of family labor). This research has identified that the main weakness found in LPA was the discontinuity of public policies. Already the main strengths identified in LPA were the structure, associative and cooperative environment and constant training. The theoretical approaches that served as grounds for the development of this research, along with the empirical findings found brought contributions to both the academic context as to the business environment. This research has identified the following results in this network: increased market power, generation of collective solutions, capital accumulation, collective learning and collaborative innovation.

As proposed improvement, suggests the creation of specific credit lines for implementation of innovative actions in participants LPA companies, certification of its products, subsidies and tax incentives, macroeconomic improvement policies (interest, taxes, foreign exchange, growth rate), develop dynamic competitive advantages (learning and innovation) contained, in addition to government support for research projects of universities that focus on the development of products for farmers of LPAs. We conclude that to occur cooperation gains in its entirety, in LPA, it is necessary to support both the private agencies as well as public, to encourage innovation, learning and cooperation, encouraging even more the development of rural economies sites. Observations show that the formation of the LPA has changed the lives of rural workers, bringing quality of life, jobs and prosperity. To continue this research suggest the new studies in other LPAs.

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