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Full Length Research Paper

# Educational value of managerial and productive support of a cooperative of small-scale livestock producers

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The objective of this paper was to study the productive situation of a producers' cooperative of small animals. This paper is based on the experience of partaking in the management of a cooperative of small-scale livestock producers that created an opportunity for scientific learning for the students of zootechnics at the Alagoas State University-UNEAL. The results of this study revealed that through exposure to the production culture of every business unit in the cooperative, the students confronted a range of economic and administrative aspects, a valuable addition to the educational process for the students involved. They faced the challenge of giving concrete answers to the needs of the community under their management, both individuals and as a collective, in this way cooperating with small-scale livestock producers. Furthermore, the process of performing diagnostics during university extension courses in collaboration with the members of the cooperative led to an understanding of the real information technology needs of the producers and the knowledge of the real challenges of managing and planning. It is concluded that instating programmes of collaboration in the areas of management and planning between Universities and Cooperatives can significantly promote the goal of regional development.

Key words: Cooperation, education, management, production diagnostics.

#### INTRODUCTION

Few cooperatives have been successful in the state of Alagoas, and those that have were managed nondemocratically in an authoritarian style, thus exhibiting characteristics more typical of a private business. The cooperative under study was one of the latter, governed primarily by its president. The main development project of the cooperative was the construction of a dairy plant built for bottling goat milk for direct sales, taking advantage of food distribution programmes of the Federal Government of Brazil. This project was one of the main

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Author(s) agree that this article remain permanently open access under the terms of the <u>Creative Commons Attribution</u> <u>License 4.0 International License</u> reasons for the discontent of the members of the cooperative. Neither sales, nor production had commenced at the time of study, despite the construction of the building itself having been completed. Alleged errors in the logistics of the construction led to a lack of authorization from the supervisory bodies of the state of Alagoas (ADEAL, 2015).

Carney and Watts (1990) stresses the importance of considering the implications of elaboration of autonomous strategies on behalf of the family farmers. A complex learning process of the conjunct of activities new to family farmers is at work. In addition to the exploration of new technologies and new forms of collective organisations, it includes development management, knowledge and capacity to work under market conditions, encounter and negotiate with financial organisations, manage the relationships with intermediary organisations, such as NGOs. Pereira et al. (2006) reported that this combination results in new learning patterns that need to be implemented and institutional forms of facilitating the process that need to be established. The series of initiatives arising throughout the country need to be synthesised and analysed to facilitate progress in the area. Findings by Ying Xiong et al. (2013) showed that the new requirements of markets can promote gains to consumers with the production of a safer food, but also can make it difficult for some producers are able to sell in many markets. Thus, the cooperative production allows even small farmers can adopt standards production required by the markets and especially with a technical guidance that is offered by the professionals of cooperatives, since the state in many situations demonstrates little producers in technical assistance and rural extension.

Deficiencies of the cooperative caused by the spread of punitive levels of bureaucracy enacted by the state agencies seeking to control the liberation of the industry functions within the confines of the policies established by the animal control agency restricts the possibility of assistance and development of the cooperative which would have benefited a variety of producers in the region (Pereira et al., 2006; Ying Xiong et al., 2013).

This paper aims to bring to light a discussion about the learning process afforded by the practice of participating students. The interaction of the faculty and students could be instrumental in transforming the social realities and could generate collective knowledge, leaving as the main legacy the experience accumulated by the students in their practice area, which in turn empirically positively reflects on their quality of work post-graduation. The inside knowledge of the challenges of a fragile cooperative society combined with the possibility of participating in an empowering capacity promotes effective learning, undoubtedly resulting in newfound understanding of the practice of management and of overcoming the daily challenges, thereby generating scientific knowledge.

#### METHODOLOGICAL PROCEDURES

This paper is based on a study of a Cooperative of Small Livestock Producers in the city of Santana do Ipanema in the region of Alagoas in north-eastern Brazil. The main produce of the cooperative is comprised of goats and sheep. However, it also includes poultry, cattle and some members are beekeepers, majority of them employing agro-ecologic production methods. Participants of this study were teachers and students of the State University of Alagoas, Brazil.

Data were collected between January and April 2014 from individual interviews. The study involved a total of 64 members in the cooperative; all of them small-scale family farmers in the municipalities of Maravilha, Agua Branca and Santana do Ipanema. While the headquarters were based in the latter, every rural property formed a production unit, a nexus of the cooperative society. Santana do Ipanema, where the study took place, is located in the semiarid climate of northeastern Brazil, a region that unites nine states with diverse cultures, marked local expressions and knowledge, thereby resulting in a more individualistic tradition of management of rural properties.

Initially, the study aimed to promote the education of students undertaking formal courses in the State University of Alagoas, supplementing the curriculum of the disciplines of Rural Extension, Rural Sociology, Rural Economy, Technologies of Intervention in Nutrition, and Nutrition of Animals and Humans, Environmental and Applied Sciences.

This was achieved through the informal education of students as participants in the cooperative. They became researchers of the everyday life of the common men, learning to be a citizen of the world, placing oneself into the willingness to participate in a collective process of construction of local reality, of intervention in adversities and from there deriving lessons of citizenship and other collective and personal objectives, learning to be an administrator, manager, student and teacher. The data presented in the results was collected in interviews and participatory research, intervention in activities of rural extension, together with members of the cooperative in the city of Santana do Ipanema. Of the set of 60 members, 20 were interviewed, constituting a sample of 33.33%. The research also involved posterior intervention, employing formal knowledge of the university to respond to the necessities of the members of the cooperative, not merely with the intent to educate the students to enter into workforce, but also to create professionals knowledgeable of reality capable of being a transformational social actor.

#### **RESULTS AND DISCUSSION**

The results showed that the main difficulty of the cooperative of small producers of livestock in the city of Santana do Ipanema was mainly associated with the "lack of cooperation" and this was cited as a response by 85% of the sampled respondents while 75% showed that "lack of water" as the major problem. Similarly, 75% claimed that "lack of help from the government" was another obstacle while 20% showed that "lack of labour" 5% as "other reasons" of the producers. The absolute frequency (the absolute number of the interviewed that responded in the specified way) and the relative frequency of the responses (relevant percentage) are presented in Table 1.

These results are similar to those reported by Pike et al. (2015) that attributes both economic and social

Answer	Absolute frequency	Relative frequency, %
Lack of cooperation	17	85
Lack of water	15	75
Lack of government support	15	75
Lack of labour	4	20
Others	1	5

**Table 1.** Responses to the question: What is the main difficulty of the Cooperative? Research conducted with members in general, n = 20.

Source: Producers of small livestock of the Cooperative – The sum is greater than 100% to reflect multiple responses given by the same producers.

success of cooperatives to the democratic culture propagated within, arguing that it promotes a high-trust culture, do lowering transaction costs. Recognition of lack of cooperation as a major difficulty by the greatest proportion of cooperative members, in light of the dominant role of the president in the cooperative under study provides supports this view, providing empirical evidence, and indicates the significant potential positive impact of improved forms of management that could be instilled through collaboration with the University.

In this study, the idea that the semiarid condition was directly correlated with low productivity of small livestock was not vividly surface, and there was no shortage of examples to demonstrate this in Santana do Ipanema. In the process of undertaking research for this paper, the producers seemed to mitigate or cope successfully with the dry conditions in the region. The technologies applicable to dry climates have been developed and often effectively applied. Similar results have been reported by Silva (2003), in his study states that agricultural yields for all major crop categories are lower in the tropics.

Formation of a cooperative had been instrumental in defying the dry conditions and other problems encountered in everyday life by the producers, whereby together they were able to instate better forms of planning, administer their collective knowledge and seek more qualified labour. However, this is not reflected in the reality encountered by those who were surveyed, many complained of the lack of support from the government, incentives, unions and the commitment of the producers to the cooperative. Silva et al. (2014) indicated that the most effective way to overcome the drought in northeastern Brazil and lack of resources, is undoubtedly the cooperative. The union of small farmers can break through major barriers in production.

#### **Technical assistance support**

The question of existence of technical assistance was also posed to the producers, referring to the forms offered by the management of the cooperative or supplied by the producer support agencies of the government of the State of Alagoas, Brazil. It was noted that 75% of the respondents that were not in agreement with the whole idea of existence of technical assistance to the cooperation among the producers, indicating the apparent shortcomings in the development of the cooperative, which in turn hinder production and stall internal communication along the lines of production and commercialisation of the various products in the cooperative.

Similar findings were reported by Neto (2007), who showed that organizations offering help to the cooperatives were inefficient, large and costly structures, centralized in their decision-making processes and slow in attending to the immediate needs of the members of the cooperatives.

Although it is recommended in Brazil that technical assistance for small producers is obligation of the Brazilian state, the technical assistance offered to the cooperative was the University, through its extension project.

The response 'Yes' was given by 20% of the members, demonstrating that there is a small number of members who receive this service. However, it was not specified whether this be provided by the cooperative itself or by governmental organs, university or others. It also demonstrates that the search for technical assistance was more successfully implemented by the limited number of the most knowledgeable members, or those with better connections in the management of the cooperative or with organs of technical assistance of the regions in the proximity.

Finally, the answer 'Yes', but with limitations was given by 5% of those interviewed. Similar results obtained by Pina (2007) in Cape Verde, said that despite the discontent of members, the study universe was unanimous on continued membership perspective in the organization and thus recognize its important role in community development in various sectors. Therefore, 80% of the members are discontent with the technical assistance provided, disturbing results for the management of the cooperative. This data is represented in Figure 1. There clearly exists the need for direct intervention on part of the university as a governmental organ

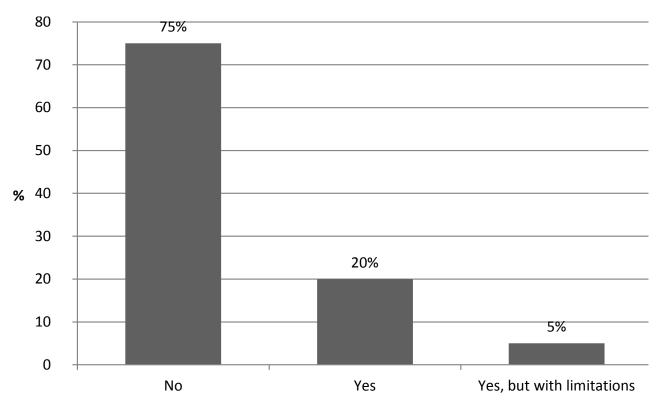


Figure 1. Response to the question: Does help with technical assistance exist? As a percentage of interviewed. Source: producers of small livestock in the Cooperative.

organ responsible for the accumulation of acquired knowledge in the region. This could change the situation, depending on the particular programmes of professor and student assistance to the society implemented, while being an aspect informal education, but at the same time concrete and necessary. However, lack of financial resources leads to considerable limitations of the universities in Brazil, with their functions currently restricted to limited research and repetitive teaching of old theories without aspects of creativity that could transform the reality.

The producers of small livestock under study view themselves as confronting various limitations in terms of management and adequate technology for its operations. At this point, it is imperative to create a presence of qualified technicians who would make periodic visits to the property, exchanging knowledge and enabling the producer to work more productively.

For Peixoto (2008), technical assistance and rural extention are of fundamental importance in the process of implementation of new technologies generated through research, essential for the rural development in the broad sense of the word and, specifically, for the development of agricultural, forestry and fishing activities.

In general, these producers encountered various difficulties in keeping their business viable, the limitations confronted by them can be observed in diverse stages of

the production process, due to the great shortage of responsible technicians.

The model of production most often employed is described as antigenic and of low quality. At the moment, the fight for qualifications in this production chain is won by the large businesses competing with the cooperatives. However, this is not inevitable and depends upon the form in which the mobilizations and negotiations take place. The agro industrial appropriation is facilitated through miniaturization of the technologies- as is the case for mini pasteurizers of milk, and through differentiation by quality, which permits the segmentation of the market (Galerani, 2003).

According to Scopinho and Martins (2003), it has to be taken into account that the rural brazilian producer is not prepared, formally or otherwise, for self-managed cooperation, due to the organization and management of rural work historically having been undertaken in the form of either large agricultural businesses or small subsistence farms.

## The collaboration between University and Cooperatives

The members of the cooperative were asked "in what ways could the university collaborate with the cooperative?"

The most common responses were the following: organization of internships in the cooperative to provide assistance; help with insemination and calculation of feed; facilitation of governmental assistance to the producers; continuation with the covenant between the producers and the university; periodic visits to the property, exchange of technical knowledge; sending interns to assist the management; collaboration with the interns; improvement of production processes; orientation of the producers in management of the feed during the period of weaning.

In addition to exchanging professional experiences with the producers, the university provides them with the possibility to improve their life expectancy and work conditions through the development of projects taking into the account the dry conditions in the region, utilizing relevant technologies, knowledge of their proper use in farming activity. This forms an effective collaboration with the economy of the city and those who know the reality and the society that surrounds them, together participating in interlocutions and collective changes. Boost the management, directly or indirectly, of new jobs created and of the income of the small producers, promoting their (re)inclusion both socially and economically (Prezotto, 2002).

#### Conclusions

It can be concluded that, the assistance provided by Universities to cooperatives of producers could be instrumental in positive learning, could be used to align formal and informal education, bringing benefits to the productive sector, the academia and to the students. Also, there was a large gap found to exist among the cooperatives, that can be filled through extension courses, with the University bringing benefits to all those involved.

It is further recommended that the university gives greater attention to small producers, collaborating with their appropriate technology development needs of local conditions, organization of internships in the cooperative to provide assistance; help with insemination and calculation of feed; facilitation of governmental assistance to the producers; continuation with the covenant between the producers and the university; periodic visits to the property, exchange of technical knowledge; sending interns to assist the management; collaboration with the interns; improvement of production processes; orientation of the producers in management of the feed during the period of weaning.

The conclusions reached from the analysis of the results of the interviews with the members conducted are presented and discussed, resulting in a conjuncture of cooperative performance and of the experience for educational purposes through a more thorough study of local reality, through education of the collective economy and solidarity with cooperativist principles.

#### **Conflict of Interests**

The authors have not declared any conflict of interests.

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