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Desarrollo productivo apícola como fuente de mejoramiento socioeconómico vereda corralejas Sotará Cauca

Apiculture productive development as a source socio-sconomic improvement vereda corralejas – Sotará Cauca

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Resumen

La presente investigación tuvo como objetivo general determinar el impacto del desarrollo productivo apícola en el mejoramiento socioeconómico de los apicultores, y así mismo, diseñar estrategias y plan de acción que logren incentivar la asociatividad y la participación en circuitos cortos de comercialización. Se presenta el diagnóstico abordado desde una metodología de enfoque mixto, aplicando análisis cuantitativo y cualitativo y un enfoque tipo explorativo, descriptivo y de observación. La metodología utilizada incluyó consulta a los habitantes y apicultores de la vereda Corralejas. Los instrumentos empleados fueron encuesta y entrevista. La población fue de 374 habitantes, una muestra de 190 personas a quienes se aplicó la encuesta y posteriormente, se aplicó entrevista a los apicultores, realizando notas de campo y registro fotográfico. De acuerdo con la información analizada, se evidencia incidencia e impacto de la apicultura en el sector económico, social y ambiental, teniendo en cuenta que aporta al mejoramiento de la calidad de vida de quienes trabajan en este subsector. Por otra parte, se ratifican beneficios de la apicultura y se determina como una actividad económica que genera ingresos adicionales, fortaleciendo la economía campesina, familiar y comunitaria, las sinergias entre actores del territorio, y la dinamización de la diversificación productiva.

Palabras claves: Apicultura, Calidad de vida (3622), Desarrollo económico y social (594), Producción agrícola (1744).

Abstract

The general objective of this research was to determine the impact of beekeeping production development on the socioeconomic improvement of beekeepers, and to design strategies and action plans to encourage associativity and participation in short marketing circuits. The diagnosis is presented using a mixed approach methodology, applying quantitative and qualitative analysis and an exploratory, descriptive and observational approach. The methodology used included consultation with the inhabitants and beekeepers of Corralejas. The instruments used were survey and interview. The population consisted of 374 inhabitants, a sample of 190 people to whom the survey was applied and



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later, the beekeepers were interviewed, and field notes and photographic records were taken. According to the information analyzed, the incidence and impact of beekeeping in the economic, social and environmental sector is evident, considering that it contributes to improving the quality of life of those who work in this subsector. On the other hand, the benefits of beekeeping are ratified and it is determined as an economic activity that generates additional income, strengthening the peasant, family and community economy, the synergies between actors in the territory, and the dynamization of productive diversification.

Keywords: Apiculture, Quality of life (3622), Economic and social development (594), Agricultural production (1744).

1. Introduction

The concept of development of local economies has had to change in recent decades based on more efficient models consistent with the demands of these times.

According to these considerations, the region known as La Vereda Corralejas is analyzed, it belongs to the township of La Paz. Located west of the municipality of Sotará in the department of Cauca (Fundación Proess, 2018). The municipality bases its sustainability on the production of coffee, livestock, and "pancoger" crops, that is, crops of different kinds of plants that satisfy part of the nutritional needs of a specific population carried out in orchards or informal plantations (Gaona, Muñoz, & Adame, 2016). These activities are not representative and generate low levels of employability, income, and development for the region. However, they see activities such as beekeeping as a sustainable alternative for economic and social development. (Vila Seoane & Marín, 2017).

This research identifies the main aspects derived from the diagnosis of beekeeping production in the Corralejas village, taking into account aspects such as employment, income, extension of the farms where beekeeping takes place, consumption, preferences of honey and derivatives, intentions of associativity of beekeepers, difficulties presented in beekeeping

production and their impact on the economy of the region.

2. Theoretical Framework

2.1 Apiculture

It is a productive agricultural activity that was considered secondary to peasant production, but today it is an alternative for the small producer; it can be developed with a small capital, requires little space, and can be carried out alternately with other agricultural activities. (Barragán, 2014). The profitability of the production and the innumerable ecological benefits of the activity become a successful production alternative for the producers of the area (Sánchez, 2014).

This research seeks to answer the question: How is the productive development of beekeeping a source of socio-economic growth for the Municipality of Sotará, Vereda Corralejas in the Municipality there is no identification of the apicultural productive development. In this regard, Forero (2003) points out that socioeconomic improvement is linked to the generation of monetary income or goods for the development of the family or social group.

The beekeeping production system helps to create sustainable livelihoods that are related to various types of assets such as natural, human, physical, social, and economic capital (Bradbear, 2005). The objective of this research is to determine the

impact of the productive development of beekeeping in the socioeconomic improvement, based on the diagnosis of beekeeping production in the Vereda Corralejas in the Municipality of Sotará, Department of Cauca.

2.2 Production and / or commercialization of bee products

It is possible that a greater knowledge of beekeeping will result in socioeconomic development and entrepreneurship in the region. In this sense, according to Vargas (2014), from the beekeeping activity, the following products can be obtained: honey; properties. product with health (Andrade, 2009); pollen: natural product derived from floral pollen; propolis: a resinous substance with medicinal properties. (Muñoz, 2011); wax: bee fat with industrial and cosmetic uses. ASEMIEL (2014), (Quintero and Felizola, 2019); royal jelly: beekeeping substance used in dietetic and cosmetic industries. AGA (2013); apitoxin: beekeeping substance with therapeutic use. Bucio & Martínez (2019) and beekeeping tourism: thematic tour focused on natural beekeeping.

In agreement, Castro et al (2017) affirm that beekeeping production in Colombia develops rural regions since it is the only industry that improves the environment as it grows and that it has great productive potential in all the thermal floors of the country. Quintero and Felizola, (2019)

2.3 Associativity

Following Zabala (2016), the rural association based on the cooperative scheme was born in Europe during the second half of the 19th century, especially to solve common problems that manifested themselves in poor

living conditions of the peasant population. Several authors define cooperatives as companies formed by persons (natural or legal) who come together voluntarily to satisfy common economic, social, and cultural needs and aspirations through a jointly-owned and democratically managed company. Wheels (2016); also as an alternative of employability and income according to the Ministry of Social Protection (2012), cited by Barreto et al, (2015) and productive and profitable, based on agroindustrial models with a market vocation according to the Society of Farmers of Colombia (2019).

The associativity structure and its benefits were presented to the peasants of La Vereda Corralejas. It is highlighted that once they are socialized, they make the decision to associate as beekeepers in the month of December 2019, convinced that it is a production option based on the solidarity economy that according to Archila (2015), is inclined towards a direct marketing process and autonomous, supervised by the peasant association that allows direct contact with the final consumer, seeking to strengthen the rural solidarity economy. As a successful experience of these projects, there is the undertaking of Grupo Salinas in Guayaquil, an evidence of the solution of the social problems of the community according to Pico (2017). Similarly, in Nechí, Department of Antioquia an experience of solidarity economy based on beekeeping is recorded; Porras (2019) states that this experience of solidarity has become an undertaking that development, generates economic diversification and commitment to environment. Another example is Cooperativa Campesina Apícola Valdivia (Apicoop), promoter of Fair Trade in Chile, which has managed to become part of new

markets and improve their quality of life as mentioned by Apicoop (2019).

According to the results of the research and supported by Archila (2015), the beekeeping production of the Vereda Corralejas would originate a differential value and benefit characterized by: access to technology and qualification for productive improvement of beekeeping; negotiation with customers and suppliers reducing intermediation; economic growth of the region with the commercialization of products derived from honey of high quality and agro-ecological origin; improvement of the living conditions of the associates, generating rural development and minimizing the displacement of the territory and increasing the productive, commercial and business formalization and the promotion of self-management according to Baquero (cited by González, 2018).

Associativity generates advantages such as improvement of organizational and commercial capacity, improves infrastructure and facilitates technical production assistance: increases access to various sources of financing, improves opportunities and, as Ostos (2018) refers to, encourages research and promotes the sustainable development of rural productions and communities, which has found a positive impact on rural microenterprises in the living conditions of the population Muñoz (2008), Parra (2000). For the rural microenterprise of Vereda Corralejas, pollination and the organization of beekeeping also benefits their coffee production activity, a source of employability and economic income in the region, recognized in the Department of Cauca according to the results of the 5th specialty coffee contest 'The Best coffee in Cauca 2018.

3. Methodology

The research is framed in a methodology with a mixed approach and exploratory, descriptive and observational type, using quantitative analysis regarding application of the survey and qualitative, in order to identify the impact of the productive development of Beekeeping socioeconomic growth of the Vereda Corralejas, Municipality of Sotará. The information was collected through the process of surveys of current and potential producers, field notes, and photographic records with peasant owners of the properties where the beehives are located. Subsequently, interviews were applied only to the identified bee producers.

3.1 Population and Sample

In the Vereda de Corralejas there is a population of 374 inhabitants, where there are indigenous people (belonging to the Inzá reservation) and peasants. With application of the sampling technique, a sample of 190 people was detected to whom the survey instrument was applied, making a visit to each of the identified properties. After applying the survey, it was found that in the Corralejas region there are 5 properties in which beekeeping is worked in an artisanal way, with its own resources, and by its own means for a couple of years. We proceed to work with the 5 beekeepers in the region, who provide the information required for the investigation.

4. Results

4.1 Respondent Profile

The results show that the majority of the respondents are male (62%) with ages between 50 and 70 years old in their majority

(60%) and with ages between 25 and 40 years old (30%), with mostly primary schooling (61 %) and secondary (21%); with families made up mostly (89%) by 2 to 5 members such as parents and children, most of whom (92%) made up one family per household and the majority (100%) owned a property (53%)) of half a hectare and one hectare (42%), in which 1 to 3 family members work in their entirety (100%) in coffee crops commercialization and corn, peas, beans, cassava, banana, and spices minors for household consumption (56%) and where the household is mostly (89%) it is made with adobe, clay tile, cement floor, kitchen with a wood burner and gray water (kitchen and sink) connected to the grease trap system; with income coming mostly (56%) from coffee marketing, state subsidy (24%), and wages earned (20%). This profile is quite interesting since it presents families that have the basics, which are owners (100%) and have, according to Sevilla and Pérez (1976), the best workforce that is the family, with a mainly adult population, which requires inherit your mode of production.

4.2 Survey carried out on the inhabitants

4.2.1. Perception of consumption and / or purchase of bee products. The majority of the surveyed population (98%) consume honey as a beekeeping product, in an amount of 1 to 3 bottles per month and obtain it directly from the beekeeper (75%) and in another Municipality, Timbío - Cauca (21%) , 98% of those surveyed by the bottle at a price ranging between ten thousand (\$ 10,000) and fifteen thousand (\$ 15,000) pesos. The minority (2%) consumes another product that is pollen, at a price of twenty-one thousand pesos (\$21,000) per pound (500 gr). Although the majority of those surveyed are satisfied (94%) with the honey product in aspects such as quality, presentation and price, 6% present dissatisfaction due to residues found in the product that are unpleasant to look at. At the time of purchase, 90% consider that the most important aspect of honey is quality and they buy it mostly (91%) for its healing properties.

Surveys confirm the permanent consumption of honey and possible support for a beekeeping venture.

4.2.2. Perception of production and / or sale of bee products. To undertake beekeeping on their farms, 92% state that they are not interested, considering bees as a risk factor and because they are unaware of the management and benefits of the crop, so it is urgent to socialize, educate and train in the beekeeping.

4.3 Interview with beekeepers

4.3.1. Process of production and / or commercialization of bee products. The reasons why they carry out beekeeping, is due in 80% to the fact that they observed beekeeping as an alternative to improve their coffee crops and their economic income at the same time, the remaining 20% do so by family tradition; due to the smallness of its properties and minimum security specifications; 100% of those surveyed have a maximum of 1 to 3 hives and the only product they harvest is honey, which is 100% traditionally used and they only have a centrifuge to carry out the extraction process. 60% of beekeepers harvest each year while the remaining 40% do it every six months, where 100% harvest between 60 and 120 bottles per year. The greatest difficulty that bee producers have faced is 50% chemical fumigations and 20% climate change and the presence of diseases, but 100% of beekeepers have not received technical training so they are not considered suitable for the optimal

management of your hives. Their sales rise by 50% from 45 to 60 bottles per semester and the other 50% from 30 to 40 bottles per semester, these are sold mostly (40%) door to door, followed by 20% in their own home, 20% in another Vereda and 20% in another Municipality, at a standard price of between \$10,000 and \$15,000. Satizabal et al (1986) has as production elements: economic, human and technical, and the beekeepers that exist in the Vereda until now do not envision beekeeping as an enterprise.

4.3.2. **Associativity** perception. Regarding their willingness to form an association that allows them to join efforts, production, training, and government support, 100% of the producers expressed their intention to belong. According to Sevilla and Pérez (1976), peasant agriculture is characterized by a low level of capital, which allow this factor, together with associativity, to lead to the construction of a local alternative that supplies a global market.

4.3.2. Percepción de asociatividad. Respecto a la disposición que tienen para conformar una asociación que les permita unir esfuerzos, producción, capacitación y apoyo gubernamental, el 100% de los productores manifestaron su intención de pertenecer. Según manifiestan Sevilla y Pérez (1976), la agricultura campesina está caracterizada por un bajo nivel de capital lo que permitirá que este factor unido a la asociatividad, desemboque en la construcción de una alternativa local que surta un mercado global.

5. Conclusions

The inhabitants of the region have a positive perception of the consumption and / or purchase of beekeeping products since they recognize their high quality, curative

properties, presentation and affordable price, which makes it possible to support a beekeeping enterprise that is associated with the build.

Regarding the perception of production and / or sale of beekeeping products, the inhabitants of the region showed interest in the undertaking of beekeeping activities; however, a suspicion could be observed towards the danger that insects could represent and ignorance of the advantages and productive, economic, environmental and social benefits that this activity entails.

Due to the process of production and / or commercialization of bee products, the producers ventured to improve other productive activities, such as coffee crops and their economic income and a small group did so out of family tradition.

The producers obtain honey and beekeeping derivatives on a small scale and in an artisanal way and have not received technical training, because of the little use of the beekeeping activity, both individually and collectively.

Beekeepers in the region positively perceive the concept of associativity, as the entity that allows them to join efforts, production, training and government support.

Awareness of the population is required in associativity and joint projects, in pursuit of socioeconomic well-being in the region.

With such high potential of the Vereda Corralejas Municipality of Sotará, government intervention and the academic community are urgently needed to design strategies and an action plan for the productive development of beekeeping.

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