

Colombian Livestock: Reflections on Entrepreneurship

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ABSTRACT

The purpose of this article is to interpret the managerial action and characteristics of cattle ranchers in Colombia in their primary phase. The research was qualitative, analytical and documentary design, with secondary sources. A hacienda of origin in the seventeenth century was the Caribabare hacienda. In the nineteenth and twentieth centuries, recognized haciendas were Marta Magdalena, Santa Bárbara de las Cabezas and Jesús del Río. Outstanding businessmen for their contributions to livestock in the twentieth century were: the Ospina Vásquez family, Diego Martínez Camargo and Adolfo Held. Pepe Sierra owned farms from Antioquia to Valle del Cauca. The cattle entrepreneurs have had a traditionalist and absentee managerial tendency, a rentier vision of the business; some entrepreneurs have overcome failures; important associations have been created, but in general the level of associativity has been low; Innovation has been low.

KEYWORDS: Businessmen, administrators, stewards, characteristics, Colombian livestock.

1. Introduction

The objective of this article is to interpret the managerial action of the entrepreneurs of the cattle activity, in its primary phase, in the Colombian territory, according to the historiography of the different sciences that are related to the sector, registered in the twentieth and twenty-first centuries. It deals with the origin of cattle entrepreneurs, the type of education received, their attitude towards failure, their associative dynamics, and the practice of management, but it also includes a characterization of the managers – foremen and the labor force present in the cattle ranch.

The Frenchman Cantillon is considered in the mid-eighteenth century as the first expert, from the economic point of view, to address a characterization of the activity carried out by entrepreneurs; In the author's concept, the entrepreneur is linked to risk and uncertainty. Previously, Belidor had considered the businessman as the person who contracts with the government. At the beginning of the nineteenth century, Say stated that the entrepreneur is the main "agent of production", since he sets the process in motion. He considered him a mediator between the different agents who deliver contributions, the entrepreneur combines them and produces a

good. Much later, the economists Schumpeter and Knight were the ones who delivered the two most influential conceptions of the entrepreneur in the twentieth century. (Torres, 2002)

Schumpeter (1963) states that the company is the implementation of new combinations and defines the entrepreneur as the people who are going to direct these combinations. For the author, a person who works with his own means is an entrepreneur if he makes the new combinations, in the same way the employees of a company can become one if they make these new combinations. This implies that entrepreneurs or managers who carry out routine actions in the company, only for the exploitation of it, lose this connotation. Torres (2002) states that, for Schumpeter, the entrepreneur is the dynamizer of economic development and can generate innovations. For Knight (1947), the fundamental thing about the company is the specialization of the function of the "responsible management" of economic action, which has two inseparable characteristics: "responsibility and control". The "businessmen" are the ones who guide the economic activity, in addition, the entrepreneurs give a fixed remuneration to those who provide services. Difference between the entrepreneur and the administrator: the work of a hired person is not the same as that of the person who carries out his business on his own, he must also contribute part of the capital for the operation of the company. Uncertainty is a special element of business life.

Kirzner states that the entrepreneur is a vital factor in the "market process, his function is not incompatible with that of the price system, since the information they provide is not offered at no cost, but must be discovered" (Torres, 2002, p.13), which implies that the entrepreneur acts in accordance with changes in the data in the market. taking advantage of opportunities that are not noticed and from which benefits can emerge (Brunet & Alarcón, 2004). Kirzner (n.d.) makes the difference between producer and entrepreneur, the producer is the one who only transforms the factors in production into goods and services; The entrepreneur, on the other hand, not only produces the goods and services, but also identifies profit opportunities in the market.

On the other hand, Leibenstein (as cited in Torres, 2002) says that the function of the entrepreneur is related to the failures that occur in the market, imperfect markets and incomplete information. The role of the entrepreneur, who is motivated by the benefit he derives from a better allocation of resources, is to reduce these inefficiencies. Peñalosa, Calderón, and Rodríguez (2019) state that, for the author, the entrepreneur is a "resource coordinator" who increases his efficiency thanks to his innovative and routine action.

The entrepreneur has a series of characteristics that can be grouped as follows: motivational characteristics, such as the need to receive monetary benefits, need for independence, approval, among others; behavioral characteristics, such as being optimistic, decision-making capacity, the ability to relate and network, the demand for efficiency and quality, taking risks, among others; intellectual characteristics, such as innovation, realism, ability to solve problems, intelligence, among others. (Varela, 2008)

2. Methodology

The research was qualitative, since the entrepreneur was characterized in some specific aspects of his managerial performance. The type of research was analytical, starting from a previous description, a contrast was made that concluded with a judgment and no cause-effect relationships were studied. The method was deductive-inductive, since according to Delgado (2010) in historical research the method must be given from the general to the particular, but it also requires from the particular to the general. The research design was documentary and the sources were secondary, which corresponded to research reports, articles in recognized journals and in scopus database, essays, undergraduate and postgraduate projects, physical and virtual books that address the subject of Colombian livestock. Clocking was used as a data collection technique. As a technique for documentary research of recovery, "hermeneutic interpretation" was used.

3. Results

Data on Colombian livestock

Cattle ranching is a productive activity of great relevance in the economic life of the Colombian countryside. It has a structure that includes different areas, which are: the area of the Caribbean or northern coast (departments of Atlántico, Bolívar, Cesar, Córdoba, Sucre, La Guajira, Magdalena), which is especially dedicated to beef cattle ranching and dual purpose; that of the Magdalena Valley and the Andean Region (departments of Boyacá, Caldas, Cundinamarca, Huila, Norte de Santander, Tolima and southern Antioquia), which are mainly used for dairy and dual-purpose cattle raising; the Cauca River Valley area (departments of Valle, Valle del Cauca, Quindío and Risaralda); the southern area (departments of Vaupés, Putumayo, Caquetá and Nariño), with dairy farming alternatives in some subregions; the area of the Eastern Plains (departments of Cundinamarca, Meta, Casanare, Arauca, and Vichada), dedicated to meat production. (Viloria, 2003)

The dairy and meat production chain has its differences. In the country, the dairy production chain of the department of Córdoba, several links in its production chain are identified, these being: suppliers of goods and services, productive units, collection centers, processing industry, marketers and consumers (Simanca-Sotelo, et al., 2021). For its part in Colombia, the beef production chain includes: cattle; beneficiation, refueling and refrigeration, which involves edible by-products and non-edible by-products; meat; industrialization and meat procedure. (López & García, 2020)

Recent data indicate that there are 401,723 farms with a number of 1 to 50 cattle; 47,464 farms with 51 to 100 cattle; 39,982 farms with 101 to 500 cattle; 5,233 farms with more than 501 cattle. (Bustamante & Rojas, 2018)

The cattle population in 1915 was 3,034,504 and by 1925 it was 6,175,000 head of cattle. In 1948 it was 14,538,400 and in 1950 it was approximately 15,511,677 animals (Kalmanovitz, 1999). In 1979 the stocks were 19,379,740 (Rivas y Valdez, n.d.). By 2002, the departments with an inventory of more than 2,000,000 head of

cattle were Córdoba, Antioquia, Meta, followed by the departments of César, Magdalena and Casanare (Viloria, 2003). By 2005, the number of heads was 25,245,176 and by 2007 the figure was 23,507,000 animals, ranking fifth in the Americas, after Brazil, the United States, Argentina and Mexico (Sourdis, 2008). According to ICA databases, the cattle herd in 2020 was 28,245,262 head of cattle, with offspring under one year of age accounting for 20.7%; 54.2% corresponded to females; and 25.2% to males (Bravo, 2020). For the year 2011, meat production contemplated a slaughter of 4.1 million head and a total milk production of 6,360 million liters/year (FEDEGAN, 2012). In 2021, milk production was 7,821 liters/year. In the meat market, 3,302 were liquidated. 083 animals (FEDEGAN, 2022). The cattle inventory corresponding to the dairy sector was 429,050 breeding males and 3,530,355 milking cows. In terms of milk production, Colombia exceeded 19 million liters per day. (Rueda, et al., 2023)

By 2017, the sector participated in 48.7% of the Gross Domestic Product of livestock, 21.8% of the agricultural GDP and 1.4% of the country's GDP (FEDEGAN, as cited in Morato, 2019), with its productivity being quite low in both meat and dairy. This low productivity is due to the type of extensive exploitation and with a productive completion of the animals that exceeds the production time of other countries.

Some companies and cattle ranches

Among the significant haciendas, which even emerged in the eighteenth century, is the Santa Barbara de Las Cabezas hacienda, located in the Colombian Caribbean. This hacienda dates from 1742 and was located in the department of Cesar, recognized by virtue of its extension and number of head of cattle; it was impacted by events such as Colombia's independence and social events in the 1970s and 1980s (Meisel, 2023). On the plains of Casanare and Meta were the Jesuit haciendas Tocaría and Bravo, the former formed in 1679 and the latter later (Vega, 2021). But, possibly the largest property of the Jesuits in America was in the Llanos, with the Caribabare hacienda with more than 400,000 hectares in the eighteenth century. (Rueda, 1989)

At the beginning of the twentieth century, in the area of the valleys of the Sinú and Atrato rivers, in the current department of Córdoba, there were the Marta Magdalena haciendas, located next to the Sinú River, owned by the Ospina Vásquez family, natives of the city of Medellín, and also owners of the Corinto hacienda, located in Ayapel and the Cuba hacienda. located in Montelibano, on the banks of the St. George River. In the city of Montería, between the Sinú River and the Betencí hacienda, the Mundo Nuevo hacienda was located, owned by the Echeverría Misas family, also from Medellín. (Sibaja, 2023)

In the 1920s, on the banks of the Sinú River in the department of Córdoba, important haciendas such as Campanito, owned by Horace C. Coleman, were located in the district of San Carlos. In the district of Lorica, there were the Carbonero haciendas, owned by Tatis Hermanos; Soledad, by Marcelo Hermanos; Arroyo, Arena, Santa Felisa, Santa Cruz, Santa María, Dos Hermanas, Cubinca and San Blas, owned by the company Diego Martínez y Cía. In the district of Purísima, the most important were, among others, San Jacinto, Atollado, Santa Barbara, Vista de París, Marotas,

El Corozo, Florida, Bohío, Níspero, Palo de Flor; among its richest landowners were José Francisco Nieves, Aníbal Herrera, Daniel Nieves, Miguel López, José Joaquín Caraballo, Andrés Mendoza, among others. In the district of Chimá were Termopila and Pensilvania by Cleto Ibáñez; No te veo, No te Ahures, Lechería, La perdices and Rosa Vieja, by Eustaquio González; Popó, Sabanacosta, Buenaventura and Islandia, by Teófilo López, among others. In the district of Montería, there were the companies and businessmen, Pineda Hermanos; Antonino Lacharme; Lili Méndez; Prisciliano Cabrales, owner of the El Naranja hacienda; Fernando del Río; Giraldo Hermanos. In the district of Cereté, cattle ranchers Celedonio Piñeres, owner of the El Higal ranch; Manuel Burgos & Cía, among others. In Ciénaga de Oro, the Berástegui hacienda, owned by Manuel Burgos & Cía.; other landowners being Manuel Romero, José Durango, Daniel Gomescasseres (Quintero, 1922). The Diego Martínez Camargo company, founded in 1887, was directed by the businessman Diego Martínez Camargo. (Olave, 2012)

In the municipality of Zambrano, Bolívar, the German Adolfo Held, owner of the Jesús del Río hacienda, stood out, whose cattle were marketed in more than 70 towns between 1915 and 1938 (Meisel and Viloría 1999). In the current department of Sucre, in the city of Sincelejo, Arturo García Hernández, of the Arturo García e Hijo company, owner of the Santo Domingo hacienda, settled, who like other cattle ranchers exported live cattle in 1920 to other countries. (Pertuz, 2006; Viloría, 2001)

In Antioquia, later Bogotá and Valle del Cauca, there was the millionaire businessman, José María Sierra, who died in 1921, recognized in the cattle business for excelling in the selection of cattle breeds for both cold and hot climates (Jaramillo, 1947). His company La Cuarta Compañía was dedicated to cattle breeding and other businesses (Molina, 2022).

Livestock entrepreneurs

The cattle entrepreneurs have the characteristics shown in Figure 1:

Origen	<ul style="list-style-type: none"> ✓ Nacionales. ✓ Inmigrantes
Educación	<ul style="list-style-type: none"> ✓ Empresarios de la élite educados fuera del país. ✓ Existencia de ganaderos profesionales y campesinos.
Aptitud frente al fracaso	<ul style="list-style-type: none"> ✓ El fracaso del Packing House de Coveñas influyó en los ganaderos. ✓ La división de la hacienda Marta Magdalena tuvo un impacto negativo en el ánimo de los empresarios. ✓ Empresarios optimistas a pesar de los fracasos en el sector. ✓ Pensamiento estrecho de los ganaderos del Sinú respecto a la actividad ganadera.
Asociatividad	<ul style="list-style-type: none"> ✓ Creación de sociedades. ✓ Existencia de federaciones. ✓ Asociaciones de criaderos de razas de ganado. ✓ Asociaciones de productores de distintas razas. ✓ Asociaciones para la distribución o comercio. ✓ Baja asociatividad en el sector.
Gerencia	<ul style="list-style-type: none"> ✓ Estilo de administración ausente. ✓ Escasa gestión del cambio. ✓ Uso del poder en el proceso de negociación. ✓ Amplia experiencia en la ganadería. ✓ Capacidad de innovación baja. ✓ Visión rentista. ✓ Toma de decisiones unida al ciclo ganadero.

Figure 1 Characterization of the cattle entrepreneur

Note: Authors' elaboration based on the authors, Posada (2003); Botero (2010);

Viloria (2001); Támara (1961); Bossa, 1981, cited in Ripoll (1997); Posada (2003); Burgos (2000); Negrete (2006); Berrocal (1980); Gallini (2008); Betancur (2015); Berdugo (1998), National Dairy Council (2010).

Livestock activity in Colombia has been carried out by national and some foreign entrepreneurs, in which not all, necessarily, owned the land, thus, for example, Meisel (2023) points out that the pioneers of the Hacienda Santa Barbara de las Cabezas located in Cesar were natives of Mompo. Extensive livestock farming did not occur in its entirety since the mid-nineteenth century, but it was an industry that allowed certain people to become emerging wealthy. Fals (1986) characterized them as "corronchos" who used wrinkled, frugal sandals and hats and with the belief that having cattle was always profiting. Of course, the profits were not the same for everyone in the production chain. They were also men who ventured into other rather risky businesses such as the Vélez Daníes and Diego Martínez at the beginning of the twentieth century. Posada (2003) shows that the cattle ranching developed in the country did not present similar connotations to the Argentine industry due to market factors and land condition, likewise, the salting and slaughterhouses were not comparable either.

In the 1970s, one of the characteristics of the businessman dedicated to meat production was the absenteeism of the owners of the haciendas, this was due to the fact that the businessman did not have the land with production interests but with investment interests, another reason for this absenteeism was the insecurity in the Colombian countryside. In addition to this absenteeism, empiricism was evident in most of the owners and managers of the livestock company (Álvarez, et al., 1977). In the 1990s, in the Pacific region, settlers were replaced by large ranchers who were generally absenteeism. (Santoyo et al., 1995)

Traditional livestock entrepreneurs assume the motto that if something worked before, it should continue to be used; likewise, they think that to make new pastures it is necessary to cut down all the vegetation by cutting or burning and the process is repeated; everything that is different from grass, is weeds, therefore it must be eliminated; they practically do not know how long each pasture is inside the property, but they consider that the pastures should be wide of about 5 hectares, they also refuse to divide the pastures and few have updated maps of the area; they do not worry about how much the pasture produces since they compensate it with the extension of the farm; they have no knowledge of the concept of pasture rotation; they specify very low animal loads per unit area; empiricism is shown in that the animal load is calculated "by eye percent"; the rancher gives all the power to the butler, who usually did not complete his studies and only has the experience of years in the cattle activity, the salary is not good for the butler, his hiring is verbal and they are not affiliated to health or pension, and they do not receive social benefits (Ruiz and GZ-Janica, 2012).

In the twenty-first century, and in the face of the challenges of this new century, livestock entrepreneurs continue to carry out a traditional exploitation, carrying out a very fragmented work in the sector, they do not concentrate on a particular, focused and specialized production, which does not make them competitive with international treaties that involve the sector. The "micro-farmers" have not grown

and do not meet two requirements to be able to compete: an efficient environment and they are not anchored to networks with other farmers. These entrepreneurs currently need to obtain "sustainable skills," but they have not "gained experience in competition," which puts them at a disadvantage in the face of the entry of agricultural products with relatively lower prices. (Morato, 2019, p.91)

A classification of the cattle rancher entrepreneur is made by Botero (2010), who establishes three categories for cattle ranchers in the Momposina Depression: large, medium and small cattle ranchers. The first is a professional and may not have received the hacienda as an inheritance, he is from the coast - seen by the community as "traditional" - or from the interior. He lives outside the hacienda and educates his children away from cattle ranching. Hire staff seasonally. The second is a professional or a farmer and the farm is the product of an inheritance or he previously developed other activities or was a management or trusted worker who managed to gather 50 and 100 cattle thanks to his skill in business. They own several farms of a few hectares. He lives in the municipal capital, educates his children in the same city and later educates them at a regional university. The payment he makes to the workers is lower than that of the large cattle rancher. He has many relationships with the large cattle rancher. He uses the dual-purpose system and in transhumance he joins other medium-sized farmers for the journey. The third is called "peasant cattle rancher". Has an "imperfect tenure" of the land or has been a beneficiary of a State program. Its maximum number of animals is 50. His residence is in the village, his children do not reach university and his wife shares the work on the farm.

Although the cattle rancher has been traditionalist, Vilorio (2002) states that cattle ranchers were an elite who were able to educate themselves, as well as travel, have knowledge of other business experiences and be innovative. As Fals (1986) notes, members of the Martelo family were educated abroad. The businessman Pedro Nel Ospina, from Medellín, traveled abroad for various reasons and the family expected his children to study typing, stenography and surveying (Ocampo, 1988). Diego Martínez, from the town of Lorica, studied at a school in Cartagena at the end of the nineteenth century (Ripoll, 1999). José Joaquín García, son of Arturo García Hernández, from Sincelejo, studied in the United States (Vilorio, 2001). Julián Patrón, from Tolviejo, was cultured due to his trips abroad and his contact with people from other regions, but his children did not continue the legacy and were not studious. (Moré, 2003)

Regarding the attitude towards failure, entrepreneurs had several failures, due to external and internal factors. The failure of the Packing House project was held by the Colombia Products Company, the project's director, and the Colombian government, although the environment was not favorable, due to the economy of the countries that could be buyers of refrigerated meat, who also received products from countries with meat products of superior quality and competitive prices (Díaz, 2021). The business failure of the Packing House of Coveñas made the cattle ranchers of the savannah region not want to take a risk in the frozen meat business, but after 1940 they made an attempt with the company Abastecedora de Carnes, but it was not profitable due to the purchase motives of customers who liked fresh meat and transportation problems. The Packing experience taught them the importance of analyzing the global environment (Posada, 2006). In the case of the Berástegui

hacienda, despite the multiple setbacks, both internal and external, its owners did not become pessimistic. (Burgos, 2000)

In the Sinú area, cattle ranchers accumulated capital that allowed them to carry out important projects, but the failure of a business and the division of the Marta Magdalena farm caused large and medium-sized producers to have uncertainty about the future of the industry. This is how interest in improving livestock and pasture decreased, extensive livestock farming spread and new generations moved towards other types of activities or professions. Over the years, some haciendas ceased or passed to other owners. (Negrete, 2006)

Some wealthy ranchers in Sinú got rid of their lands and gradually became impoverished due to "ignorance and total disorientation in life." Unlike many Antioquians, the Sinuans did not travel, they did not like to read, they did not understand the importance of agriculture and livestock, it was more significant to be a civil servant, that is, to work with the State, than to be a "farmer" (Berrocal, 1980). In addition, of the vices that had become a habit for them. In the region, many sold their land and went to the cities, wasting their money. (Parsons, as cited in Berrocal, 1980)

In the thirties of the twentieth century, cattle ranchers faced failures related to crossbreeding in cattle production since it was practiced with a foreign breed that was not adapted to the natural conditions of the country. The failures with foreign breeds, especially those from hot lands, were innumerable, which made the rancher have doubts about whether or not he should bring foreign breeds to the country; If they had been surveyed, the answers would have been negative. (Velázquez, 1938)

From the associative point of view, there is much evidence of the creation of societies since the nineteenth century, as well as the constitution of departmental and national federations of livestock farmers, livestock funds, producer associations and breeders' associations. (Gómez, 1976; Negrete, 2006; Posada, 2006; Pertuz, 2006; Gallini, 2008)

The performance of the National Federation of Cattle Ranchers – FEDEGÁN – has been well recognized, but from time to time its associates enter into conflicts due to political issues that fragment the sector, and where large and powerful ranchers who have contacts with the elites that govern the country benefit, and on the other hand, there are small producers who do not have resources, technical assistance or contacts with the political class to be able to improve their situation (Betancur, 2015). Luis Robledo, manager in the seventies, said that the Federation should motivate the rancher to assume his role as an entrepreneur and understand what a business is a company, regardless of its size. (Gómez, 1976)

When the livestock industry began to modernize, it was necessary to exercise control over the phenotypic and genotypic characteristics of the different breeds of livestock. In 1954, the National Union of Colombian Livestock Associations, UNAGA, was created, made up of associations of breeders of the Holstein, Santa Gertrudis, Normando Zebu and Blanco Orejinegro breeds. His first challenge was to participate in the annual exhibition of 1955. UNAGA organized the cattle exhibitions that were held in the city of Bogotá from 1955 to 1967. (FEDEGÁN, 2007)

In the 21st century Caribbean, in the department of Córdoba, the dairy chain has the presence of associations corresponding to the primary sector, such as Ganacor, Ganabas, Ganaltos, Asogan and Cogasa. (Simanca-Sotelo, et al., 2021). The data indicate that the associativity of the Colombian Caribbean is lower than the national one, which has a value of 16% while in the Caribbean it is 12%; Likewise, there is disparity between the different departments of the region. In the department of Atlántico, cooperatives are of great significance, while in the departments of Córdoba, Cesar and La Guajira, community organizations predominate. (Rueda, et al., 2023)

In the department of Atlántico, there are 10 producer associations with 289 participants and in Córdoba there are 6 producer associations with a total of 84 members. The associations of the Atlantic present a greater clarity of leadership than the associations of Cordoba, it should be noted that the clarity of leadership is vital since if the associates do not have clarity of where the association is headed, it will be more difficult to direct actions towards the objectives. The Atlantic associations show that there are family ties among co-workers that transcend the work and organizational environment. (Ramos, et al., 2023)

In the country, 60% of the associated producers reached a primary grade, 10% finished secondary school, and 17% did not receive formal education. The technical, technological and university level corresponded to 4% of the associated agricultural producers. (Rueda, et al., 2023)

As for the management of change, by 1916, in the Sinú region on the Caribbean coast, the cattle ranchers were apathetic to the introduction of African grasses, barbed wire and the introduction of European breeds, but there were already some ranchers who were arguing about which breeds would be the best for the Sinú (Nascimiento, 1916). Regarding artificial grasses, it should be noted that the "para" grass was imported from Brazil in 1875, in that same year the "guinea" species was imported and in 1906 the "yraguá" grass began to be explored (Giraldo, 2019). At the beginning of the second decade of the 21st century, the cattle ranchers of Montería who were associated were resistant to develop changes with respect to a process of productive reconversion, which is how many of them resisted abandoning traditional practices, which had worked for them for many years, despite the environmental costs. which could be due to a lack of information to guide them in this decision-making. (Ruiz and JZ- Canica, 2012)

The capacity for innovation does not show a high trend or generality, however, there have been successful experiences with entrepreneurs in different periods of the twentieth and twenty-first centuries. This is how Adolfo Held successfully marketed zebu cattle in Colombia for the first time, which he imported around 1914, although other ranchers had already imported this breed before. (Meisel and Viloría 1999)

The innovation capacity of meat farming in its primary phase in the department of Córdoba is mostly deficient in companies. With regard to research and innovation, they are also mostly deficient, and it is evident that livestock farmers or primary producers allocate none or very little of their resources to the development of innovation actions. The infrastructure tends to be deficient, an aspect that is related to the programs of replacement, maintenance and purchase of new equipment. In

terms of technology, most farmers rarely adopt new technologies such as drones, mobile applications for intelligent management of production processes, software or electronic instruments. (Ruiz, 2022)

With the aim of transforming livestock farming into more competitive systems and having the presence of entrepreneurs with a long-term business vision and a customer-focused company, certification was established in the country to guarantee the quality and safety of the final product, known as Good Livestock Practices, GMP. By 2020, 1,043 farms were certified with GMP in the country, within which the department of Antioquia had the largest number of certified farms with a total of 367 farms (ICA, as cited in Sierra, 2020). In the department of Arauca, from six farms certified in 2017, there were four farms in 2020. Given that there is a correlation between the application of GMP and the quality of the bovine carcass, it is not valid that the lack of interest of farmers in GMP and safety in the production of the primary phase is due to the fact that they do not see additional income with such implementation. (Sierra, 2020)

On the other hand, Colombia, as in other Latin American countries, there is evidence of livestock production cycles and these cycles are directly related to decision-making. Rivas (1981) states that these cycles are due to economic and technical reasons. The economic ones have to do with the movements of the real price of livestock. The techniques refer to production in livestock farming that is more or less long, with a waiting time between the moment the decision to produce is made and the moment when said decision is made. When prices increase, the response of supply is not immediate, but as soon as production increases, prices fall and a new phase of the cycle enters. In the eighties, the cycle of females was much more marked than that of males, the main reason for the cyclical oscillations of livestock production in Colombia.

According to Pérez (2004) a farmer makes the decision to breed an animal by virtue of the current prices of weaned animals with the aspiration that the future sale price of the animal is equal to or higher than the prices that are at that time, in this sense, he will dedicate a greater number of females to breeding which implies that in the future the supply of fattened cattle will increase. which will put downward pressure on prices, which reduces incentives for breeding. The process continues, because the low level of prices reduces the profits of the farmer who has to take the option, on many occasions, of selling the fattened females for slaughter.

Managers, administrators, and stewards

Hierarchy in a company refers to the organization and distribution of employees, the division of authority within the company, and the definition of employee responsibilities. In the cattle ranch, the hierarchy will depend on the size of the ranch and its structure. Ocampo (2007) points out that in the Marta Magdalena hacienda, located in the Sinú-Córdoba region, the organizational hierarchy kept the owners of the company at the top, who were from Antioquia and were settled in their region; On the hacienda itself, the first position concerned the manager, also of Antioquian origin, who answered to the owners. The following levels corresponded in their order, to the administrator and then, in the hierarchical scale, followed the accountant and the administrative assistant, who were also from Antioquia; Descending the

ladder were the storekeeper and the camp leaders; at the next level, foremen and crew leaders; and at the base of the hierarchy, the waiters. (Ocampo, 2007)

With respect to managers and administrators, companies such as the Antioquia firm Sociedad Agrícola del Sinú, S.A.S., had managers such as Luis Escobar, who managed from Medellín (Ocampo, 1988), and General Ospina's nephew, Bernardo Villa, who civilized the hacienda (Berrocal, 1980). In 1914 the Berástegui Livestock Society had managers Diego Martínez Recuero and Marcos Salazar, accompanied by their alternates, and as administrator of the hacienda Roberto Salazar selected by Pedro Nel Ospina due to his experience and his relationships in the area. (Ripoll, 1999)

In the 20th century, before the 1980s, in the region of Magangué and Mompox, the managers of the large cattle ranches were peasants, but in the 21st century they are professionals and also peasants. Administrators take the place of the children of farmers who study different professions. The administrators live near the hacienda and their children are sent to distant universities. Some exchange their legal benefits for resources that allow them to have livestock. Farm managers are not educated, but they are skilled in their craft, and they tend to be people who have stood out among the group of workers. (Botero, 2010).

At the operational level, in the first two decades of the twentieth century, the butler was the boss of the workers, he was empirical, had no technical or administrative training, and was illiterate in making calculations (López, 1927). In the middle of the twentieth century, cattle ranchers, who were characterized by their absenteeism, left their farms in the hands of a butler who had no professional education (Department of Research of the Agrarian Credit Fund, 1961).

As noted by the member of the Food and Agriculture Organization of the United Nations, FAO, Staffe (1961), after the fifties, the butler carried out his work following what he learned by custom in relation to mating, breeding, feeding, milking, milk management, etc.

One of the operations that was practiced in the haciendas of the Sinú and San Jorge valleys, in the department of Córdoba, at the beginning and middle of the twentieth century, corresponded to the burning of the fallen forest and the pastures that needed to be renewed in the pastures for animal feed. This work was very important for the owners of the haciendas and the orders were given to the workers. At the Marta Magdalena hacienda, the order was accompanied by the list of pastures scheduled for burning, an activity that had to be carried out before April due to the rains. The workers had to comply to the letter with the orders given. As a means of control, workers in this region built watchtowers by order of businessman Guillermo Echeverría Misas, owner of the Mundo Nuevo farm, due to incidents caused by carelessness by the workers. (Sibaja, 2023)

Farm workers in the 1970s had a fairly low level of education, as well as farm managers and owners of small and medium-sized farms, which meant that they were not receptive to the introduction of technological advances. (Álvarez, et al., 1977). For Lombana, et al., (2012) in the twenty-first century, the workforce has low levels of education and technical preparation.

4. Discussion

Schumpeter's concept is observed in the livestock entrepreneur, since farmers have made new combinations, as was the case with the implementation of innovations, but, according to the author, the loss of this condition is observed when repetitive actions are implemented. The cattle ranchers have implemented an absentee style, where the close administration has been left in the hands of managers, or butlers, the latter being the most common, which does not imply for the company, the loss of responsibility and control of the ranch, in addition the ranchers grant remuneration to the workers of the hacienda, as stipulated by Knight.

The cattle rancher is evidence of Kirzner's statement, given that, in the course of the history of Colombian livestock, the use of opportunities that others did not detect has been observed, in addition to this, the rancher has produced goods and services and has identified opportunities, such as the existence of an internal and external demand for meat. In the historiography, it can be observed that innovative experiences were presented, such as the incorporation of barbed wire, the crossing of cattle breeds and recently the implementation of GMP, being consistent with what Leibenstein established.

The characterization of the livestock entrepreneur shows some elements exposed by Varela, such as the purpose of obtaining economic benefits; decisions on production and marketing have been interrelated with the livestock cycle; they have established networks, expressed in livestock associations such as FEDEGAN and UNAGA, to make the sector competitive; they have taken risks such as crossbreeding, and cattle exports; they have succumbed to failure and frustration, but they have also overcome crisis situations. However, change management and innovation have been scarce, as exemplified by the extensive system, but innovations have been presented as noted above, and associativity, in general terms, has been of a low level.

5. Conclusions

The cattle ranchers have been natives of the country or from abroad, but to a lesser extent. In some cases, they have developed their activity in a region other than that of their place of residence due to the absenteeism style of management. Great cattle ranchers received education abroad, others sent their children to study outside the country, but there have also been empirical entrepreneurs. In the face of failures, some farmers resented, but others undertook new projects. The level of association has been low, although the action of FEDEGAN is highlighted. Changes have been slow, therefore, entrepreneurs have been traditionalists, but they have extensive experience in the sector which has allowed them to make the required decisions. Innovation has been low, but there have been significant experiences.

In large haciendas, the action of administrators and stewards is relevant. The administrators of some haciendas in the twentieth century were peasants, but already in the twenty-first century there are professionals and peasants. Basic, technical and specialized education for foremen and workers of haciendas and estates has been very low, which makes them reluctant to technological advances.

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