



## Business models for sheep production in the Northeast and center of the State of Mexico



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### Abstract:

Sheep farming is important because of the growing demand and the benefits it generates. However, to boost its productivity, it is required to know its business characteristics. The objective of the research was to explain the environment in which production takes place and to define the main business models, to specify their development prospects. A semi-structured interview was applied to 32 companies. To analyze the profile of the producer and the production unit, descriptive statistics was used and to typify the companies depending on their business model, a cluster analysis was used. It was found that, due to the proximity to large urban centers, production is located in a peri-urban area with high demand for resources such as land and water, participates in a short-circuit commercial chain and producers carry out the activity in a complementary way. Under this context, three business models were identified: i) the traditional, which offers animals without differentiated attributes, without making productive and commercial improvements, which develops the activity in an inertial way and without prospects for improvement; ii) the intermediate, which shows greater willingness to apply technical, commercial and managerial knowledge, due to the schooling of its producers; and iii) the specialized, where a better productive management is carried

out, offering high-value products. It is concluded that, to boost productivity, it is necessary to take into account the business model and the environment, because only once the needs of the market are met, producers will improve their competitiveness.

**Key words:** Sheep farming, Sheep, Family companies, Environment.

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## Introduction

Livestock production systems are dynamic and are influenced by external and internal factors, which generate diversity, so to establish development strategies, it is necessary to differentiate them. In this sense, typifying has been one of the most used tools to have differentiated models<sup>(1)</sup>. This tool groups the study subjects in the most homogeneous way possible, by means of some variable or the use of multivariate statistical methods such as cluster, factorial or principal component analysis<sup>(2)</sup>.

Due to the importance of sheep production in Mexico, there are investigations that have generated typologies through the application of multivariate statistics, based on the profile of the producer<sup>(1,3)</sup>, productive management<sup>(4)</sup>, the structure of the production unit<sup>(2,5,6)</sup> or the level of family participation<sup>(7)</sup>; in order to characterize production systems and be a point of reference in the design of strategies. These characteristics are based on internal factors of the companies; however, there are external factors that affect their viability and existence, so it is necessary to analyze them together with the Business Model (BM).

The BM allows understanding how the choices that are made affect competitiveness, in addition to facilitating the planning of strategies to take advantage of the conditions of the environment, making efficient use of resources<sup>(8,9)</sup>. This analysis relates the resources and activities that they carry out with the purpose of satisfying the needs of customers, considering their value network to create, provide and capture value<sup>(10,11)</sup>, being useful for any company that offers its product to the market, as it allows it to understand customers and its relationship with them, the process, the resources and capabilities needed to satisfy them and make commercialization channels more efficient.

Osterwalder and Pigneur<sup>(12)</sup> present the BM composed of nine components: i) value proposition, as a central axis and that makes a client choose one company or another, through offering to meet their needs; ii) key partnerships, which comprises the actors that contribute

to the functioning of the BM (suppliers, institutions and organizations); iii) key activities, which must be carried out in order to offer the value proposition; iv) key resources, whether physical, economic, intellectual or human; v) customer relationships; vi) distribution channels; vii) market segment; viii) income; and ix) costs incurred.

This analysis describes the bases on which companies create, provide and capture value, reflecting the way in which they function and adapt to the environment<sup>(12)</sup>. Regardless of the scale of production, they all have an BM, since they make decisions about their offer and the organization of activities and resources to cover it<sup>(13)</sup>. Therefore, the analysis has been used in various fields, the agri-food sector is not the exception<sup>(14,15,16)</sup>, using it to understand the relationship with customers and the strategies implemented in a given environment.

Sheep production is concentrated in the center of the country, where it is an important activity for family livestock farming, due to their easy management and their ability to take advantage of fodder, in addition to being widely promoted by the government<sup>(17,18,19)</sup>, for valuing family labor<sup>(20)</sup>. However, due to the regions and resources available, there is a great diversity. The main producing state is the State of Mexico, which in 2019 contributed 15 % of the national supply with 17,992 t of live sheep<sup>(21)</sup>; this state has an advantage due to its proximity to the large *barbacoa* consumption centers<sup>(22)</sup>, the main form of consumption of sheep meat.

Despite the importance of the activity, there is little information on the business characteristics of sheep farmers who direct their production to the market, so the objective was to explain the business environment (partnerships, activities and resources), as well as the relationships with customers and distribution channels in which they operate and define the main BM, through the analysis of the structure of the companies, to specify their development prospects.

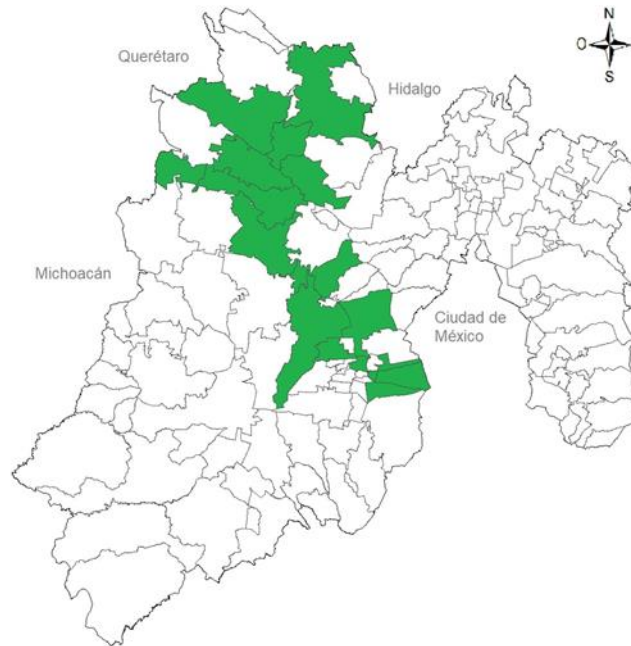
## Material and methods

The research was carried out in 14 municipalities in the northeast and center of the State of Mexico (Figure 1), which represented on average 28 % of the state supply in the period from 2010 to 2019: Temoaya, Acambay, Jocotitlán, Ixtlahuaca, Atlacomulco, Jilotepec, Morelos, El Oro, Toluca, Lerma, Metepec, Timilpan, Tianguistenco and Xalatlaco, reporting a production of 4,557 t of live sheep in 2019, with a value of more than 175 million pesos<sup>(21)</sup>.

The municipalities were selected based on the location of the production units of the members of the Local Livestock Association of Sheep Farmers of the Valley of Mexico (AGLOVM, for its acronym in Spanish), belonging to the state and producers registered in the good

livestock practice program of the Committee for the Promotion and Protection of Livestock of the State of Mexico (CFPPEM, for its acronym in Spanish).

**Figure 1:** Municipalities that make up the study region



### Identification of producers and collection of information

A semi-structured interview was applied to 32 sheep producers, selected by directed sampling, during June and July 2019. The selection was based on the orientation of their production towards the market and their productive objective (meat or breeding stock), with at least 15 heads in their flocks. These producers were members of the AGLOVM, or producers registered in the good livestock practice program of the CFPPEM. The questionnaire collected the following information, grouped into three groups:

- Producer profile: age, schooling, percentage of income from sheep farming, complementary activities and experience in the activity.
- Characteristics of the production unit: age, location, productive objective, facilities, form of financing, investments, purchase of inputs, inventory of the flock, breed, weight and price of the animals sold, mortality, age and weight at weaning, subsidies received, number of workers, family integration, business succession and problems.
- BM: customers and their relationship with them, key partnerships, commercialization channels, product promotion, activities and key resources to carry out their production.

## Statistical analysis

The variables related to the producer's profile and the unit of production were analyzed through descriptive statistics for the case of quantitative variables and proportion tables for the case of qualitative variables. Derived from this analysis, the variables by component of the BM were identified and the 10 with the greatest variation and that impact on the productive results were selected, which were used to perform a hierarchical cluster analysis. The answers were coded 0 for negative answers and 1 for affirmative answers (Table 1).

**Table 1:** Binomial variables used to build the hierarchical cluster

Component of the BM	Variable	Affirmative answers (%)
Key partnerships	You belong to a formal organization or association of sheep producers	28.1
	Age at weaning is less than 2 mo	31.2
	The percentage of mortality is less than 5 %	53.1
Key activities	You carry out some activity to attract customers (attend livestock fairs or events, social networks)	40.6
	You have made some investment in your production unit in the last year (expansion or maintenance)	46.9
	Most permanent workers are family members (children, wife, or siblings)	65.6
Key Resources	The facilities of your pen are suitable for production (they have concrete floor, roof, avoid inclement weather and predators)	53.1
	Your production unit has a brand or logo	34.38
	You have received a subsidy related to sheep farming	44.7
Channels	You deliver your animal in the pen	68.7

BM= business model.

It should be noted that, in the cluster analysis, only some variables related to four of the components of the BM were used, the rest were used for analysis and description. The hierarchical cluster used the Dice and Sorensen similarity measure, appropriate for binary variables and the weighted mean as an agglomeration method<sup>(23)</sup>. Once the dendrogram was obtained, the types of companies were classified, determining the cut-off point through a qualitative analysis. In addition, an analysis of variance was performed with the Scheffé test for the quantitative variables that describe the producer and the production unit. Once the types of companies were determined, their BM was analyzed based on the components of the canvas proposed by Osterwalder and Pigneur<sup>(12)</sup>.

## Results

### General characteristics of sheep companies

The companies are owned by producers with an average age of 50 yr, engaged in sheep farming by family tradition, since it was inherited by their parents or grandparents. However, despite this, only 9 % contemplate a business succession agreement that allows the following generations to continue, even though they consider the activity with a high potential to generate income. These producers derive on average a third of their income from sheep farming and the rest from agriculture, trade or the provision of services.

Fifty-three percent of the companies have adequate facilities, while the rest have rustic facilities to house the flock, which do not protect the animals from inclement weather or predators. However, whatever the type of facility, it was built with their own resources, without receiving any support, except for subsidies to equip it with machinery or acquire animals (56 % said they had received it).

Regarding the investments made in the company during the last year, 53 % have not incurred any expenses, 22 % have made some maintenance improvement and only 25 % have expanded. In addition, producers do not incur expenses to promote themselves and attract customers.

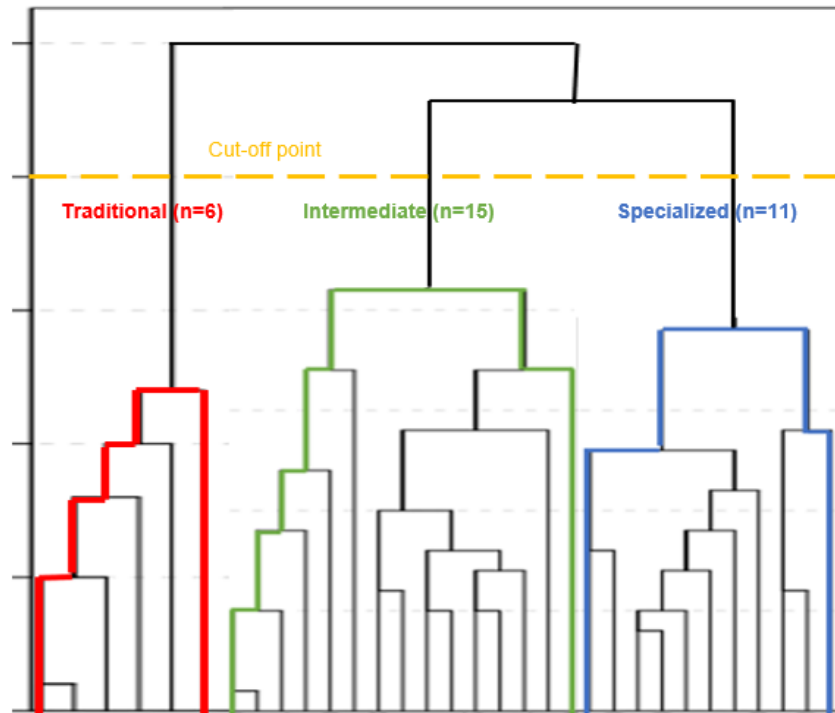
The main objective of these companies is the production of meat animals (75 %), which are marketed at the farm gate with an average weight of 53 kg. Fifty-three percent sell to occasional customers in their production unit, at a price of 46.6 pesos per kg; however, there is a minority that sells directly to the final consumer (6 %). There are also others that direct their production to the breeding of rams or purebred breeding stock, therefore 28 % belong to an organization of sheep producers, because, to sell them, a purity record that accredits the genealogical background of the animal is required.

The 32 companies manage on average 108 black-faced animals, such as Dorper, Suffolk and Hampshire, of which 66 are ewes. The production units are located on their own land, located next to the house, which facilitates the participation of the family both permanently and temporarily; for example, of the total number of permanent workers, 48 % are family members and 52 % do not belong to the family, and of the total number of temporary workers, 53 % are family members, who provide their labor in exchange for goods purchased for the family, mainly food, clothing and footwear.

## Characteristics of the groups and their denomination

Because the companies analyzed are not homogeneous with each other, it is necessary to consider aspects related to the structure of the company. In this sense, three types emerge (Figure 2), grouped according to their key partnerships, commercialization channels, key activities and resources. The groups were named as traditional, intermediate and specialized, based on the objectives of each company. The production units of the traditional ones are the ones with the oldest (34 yr), with an average flock of 117 heads and their owners have a basic level of schooling of 7 yr. Intermediate companies are owned by owners with a high-school level education (12 yr), have the lowest number of animals, 52 heads on average and their production units are not so old (10 years). While specialized companies have a larger flock, consisting of 179 heads, an average age of 18 yr and their owners have the highest level of schooling of the three groups (Table 2), with a higher level at least.

**Figure 2:** Groups resulting from hierarchical cluster analysis



Among the groups, the variables that differ are schooling, age of the company, the number of heads and the percentage of workers who are members of the family ( $P < 0.05$ ), with the traditional and intermediate ones having a greater family participation (Table 2).

**Table 2:** Profile of producers and structure of the production unit by business model

Variables	Traditional (n=6)	Intermediate (n=15)	Specialized (n=11)
Producer age, years	52.0 <sup>a</sup>	52.3 <sup>a</sup>	47.1 <sup>a</sup>
Experience, years	27.7 <sup>a</sup>	16.5 <sup>a</sup>	11.6 <sup>a</sup>
Schooling, years	7.0 <sup>a</sup>	11.9 <sup>b</sup>	16.7 <sup>c</sup>
Income obtained from the activity, %	45.0 <sup>a</sup>	25.0 <sup>a</sup>	37.7 <sup>a</sup>
Age of the company, years	34.0 <sup>b</sup>	10.5 <sup>a</sup>	18.3 <sup>a,b</sup>
Flock size, heads	117.2 <sup>a,b</sup>	51.7 <sup>a</sup>	179.2 <sup>b</sup>
Permanent workers who are family members, %	66.7 <sup>b</sup>	65.0 <sup>b</sup>	13.6 <sup>a</sup>

<sup>abc</sup> Values with different literal within the row are different ( $P<0.05$ ).

### Business models

According to the typology, the model that summarizes the main differences between the BMs was built, reflecting the way in which companies conduct their business.

**Table 3:** Business models

Component	Traditional (n=6)	Intermediate (n=15)	Specialized (n=11)
Key partnerships	CFPPEM SEDAGRO	CFPPEM SEDAGRO	CFPPEM AGLOVM
Key activities		Investment in nutrition of lambs and lactating ewes	Investment in facilities and nutrition according to the productive stage Product Promotion
Production parameters	Weaning at 3.5 mo with a weight of 28.5 kg Prolificacy of 1.0 Mortality of 10.7 %	Weaning at 3.2 mo with a weight of 23.6 kg Prolificacy of 1.2 Mortality of 11.0 %	Weaning at 2.2 mo with a weight of 23.8 kg Prolificacy of 1.2 Mortality of 7.3 %
Key Resources	Family Labor Arable area Experience	Family Labor Arable area	Brand or logo Arable area Infrastructure Pedigree animals Schooling
Market segment	Occasional buyers	Occasional buyers,	Occasional buyers,



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		Restaurants, <i>Barbacoyeros</i> , Regional collectors,	Restaurants, <i>Barbacoyeros</i> , Regional collectors, Government of the State of Mexico
Commercialization channel	They take the animal to the customer	They deliver at the farm gate	They deliver at the farm gate
Relationship with customers	Personal communication	Personal communication	Telephone communication
Annual revenue from the sale of animals for meat	102,520 MXP for 47 animals	101,058 MXP for 40 animals	192,270 MXP for 74 animals
Value proposition	Animals with an average weight that meet the local market standard	Animals with an average weight that meet the local market standard	Animals with a good meat yield, good size and genetics

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## Discussion

### The environment and its consequences for companies

It was found that sheep farming is a livestock activity that is inherited from generation to generation and that acquires importance due to the impact it has on the family economy and the proximity to the main centers of consumption, as indicated by a study carried out in the State of Mexico<sup>(22)</sup>. For this reason, it is one of the livestock activities that receives the most support from the State; in the case of respondents, 94 % said they had received some type of subsidy (machinery, animals or technical advice) in order to increase their productivity and improve family welfare. This is how, due to its easy management and low investment, it provides stability in homes. In this sense, it was found that the family plays an important role in development and profitability, so the percentage of workers of this type is considerable.

On the other hand, sheep farming is carried out in an environment of population growth and peculiar meat consumption habits, so the main objective is the production of meat, with black-faced animals due to their greater acceptance in the center of the country, which agrees with the study carried out on national carcasses, where the Suffolk, Hampshire and Dorset breeds prevail<sup>(24)</sup>. The first aspect benefits the growth in demand but threatens production due to the transformation of rural areas to peri-urban areas, a situation that they consider as

the second most important problem that limits their activity; where there is competition for resources such as land, water and labor, conflicting with other activities that provide greater benefit. The second aspect refers to the fact that the production is mainly destined to the making of *barbacoa*, which is traditionally consumed on weekends in stands and social events, reducing its consumption to special occasions, due to the high sale price.

Under this scenario, the competitiveness of a company not only depends on its internal aspects, but on factors of the environment, which, since they cannot be controlled directly, require to be analyzed to make the best decisions. In the case of the companies analyzed, these factors are: government support, urban growth, the tradition of production and consumption habits. Although they all take place in this environment, each BM takes advantage of it differently.

## **Identified business models and their prospects**

### **Traditional business model**

Sheep farming provides its producers with almost half of their income, they obtain the rest from agricultural or livestock activities, however, this flow of income is not continuous, as indicated by Hernández *et al*<sup>(4)</sup>, since they only sell their animals when they need money. Producers have a basic level of schooling, so it is normal the existence of deficiencies in the main productivity parameters, such as in the weight at weaning, similar data was reported by Vázquez *et al*<sup>(2)</sup> in the cluster of subsistence family production units, where the age at weaning is greater than three months, with a weight of 17.6 kg. Based on this characteristic, decisions are made in a simple way and are based on the experience of the producer, as pointed out by some authors in the northwestern Tlaxcala, where technical decisions are based on experience, and this can determine the level of technology adoption<sup>(25)</sup>.

These companies do not see the activity as a profitable business, but as a way to use their resources (family labor and arable area) in order to generate economic stability in the family. In this sense, the results are the reflection of the disinterest in incurring additional expenses, since they only maintain the production unit by uses and customs.

The flock is cared for by the family, women and children mainly, considering their labor as a key resource that is used while they get another activity that generates greater benefit or sell the land. Even though production generates profits, since they do not incur infrastructure,

labor, or food expenses, thus preserving the 102,520 pesos they obtain for the sale of finished animals.

These companies are engaged in the production of sheep for meat by tradition of the region and because they inherited the activity from their parents or grandparents; competing with other local producers regarding the price because they do not have another attribute that differentiates them. Their customers are occasional buyers, who arrive at the production unit without the need to establish a formal relationship beforehand, who use the animal for self-consumption.

Due to the type of customer and the value proposition offered, the price received is lower than that of the other models, 44 pesos per live kg, a figure equal to that reported in Mexico City<sup>(5)</sup>, because the customer is not loyal and seeks the best prices for negotiation; in addition, they do not show willingness to pay for characteristics related to animal welfare (which include the conditions under which the sheep lives and dies) or the breed, but they do lower the price for an age greater than a year or for discarded females. A study carried out in the south of the State of Mexico indicates that this price can be explained in part because the producer does not know the needs of the client, as well as the appropriate times to produce and market<sup>(19)</sup>.

In relation to government support, this BM receives advice from institutions, such as the CFPPEM and SEDAGRO; however, they are used to solve existing health problems, instead of being used for preventive management that maximizes productivity. The above due to the level of schooling and disinterest in incurring additional expenses.

This same disinterest is visualized in the fact that none of the companies has received support for the acquisition of animals that genetically improve their flock, which can be justified by the disinterest in incurring additional expenses, since, in the case of receiving them, they would be forced to make investments due to the feeding and the specific management they require.

Derived from these characteristics, the BM finds limitations for its continuity in the following generations, because, although the producers inherited this activity, they do not visualize it as a profitable business, but as a way to use their patrimony, while they sell the land or give it another use. Additionally, they present uncertainty in the business succession and the successor does not know the role they will play, this influences the low investment.

At the same time, due to population growth and the change from rural to peri-urban areas, producers face problems that reduce incentives to continue, either because of opportunity cost or insecurity.

### **Intermediate business model**

In this BM, producers obtain less than a third of their income from the activity and the rest is obtained from agriculture, livestock and trade, which differs from what was found in the municipality of Villa Victoria in the State of Mexico, where they indicate that they obtain 40 %<sup>(26)</sup>. They have unfinished high-school education, and despite being the group with the lowest flock, they show interest in intensifying their production, investing in the nutrition of their lactating ewes and lambs, differentiating the feed they supply, because they recognize that these are crucial stages.

It should be noted that this BM coincides with the traditional one, where the smaller the number of animals, the greater the participation of the family, and both women and children provide their labor. Of the total number of permanent workers, 65 % are members of the family, a situation that is favored by the easy management of animals and the valorization of labor; these results are consistent with what was published in the Mexican Sheep Production, where the producers registered in PROGAN in Mexico were analyzed, the authors conclude that the care of the flock is in charge of children, women and the elderly, especially in those units with smaller flock, because these family members are the ones who remain in rural areas<sup>(20)</sup>. This participation reduces the costs that would be generated by hiring labor, thus increasing the profit that is obtained.

Despite the family participation, these companies not only see sheep farming as an option to value their labor and make use of the arable area, but as a business, because they invest in improving their productive management, which is an indicator of competitiveness, through one of the activities that gives quick results, as indicated in the study of the problems and opportunities of sheep farmers in New Zealand<sup>(27)</sup>. These producers invest in the nutrition of lambs and lactating ewes to improve their weight. This is due to the educational level of their owners, which allows them to be more receptive and incorporate new practices. However, they still do not develop business strategies to improve their sales process or add value.

They are engaged in the production of sheep for meat because they inherited this activity. The sheep are marketed locally, delivered at the farm gate and their customers are occasional buyers, regional collectors, restaurateurs or *barbacoyeros*, who buy at 46.7 pesos per live kilo, on average, a price higher than that obtained by the traditional ones, since they relate to other actors.

Regarding government support, these companies receive advice from government agencies (CFPPEM and SEDAGRO) and have been beneficiaries of subsidies to improve the genetics and productivity of their flock, at least once in the last five years, through certified ewes and rams, thus accessing better profits.

However, even though this BM shows a better use of the environment, like the traditional BM, it presents the uncertainty generated by business succession, where only 27 % have plans for retirement and in 36 % of cases, the successor is aware of the role they will play in the future, inheriting the production unit; facts that limit investments. However, they show good development prospects, since most visualize their company growing in the next five years, so with proactive actions that improve their competitiveness, such as genetic improvement, nutrition according to the productive stage and the search for customers who offer better prices, existence and viability is possible. Although to achieve this, it is necessary to change the paradigm of the producer, as suggested by Michalk *et al*, for developing countries that want to improve their productivity; directing their company to meet the needs of the market<sup>(28)</sup>.

### **Specialized business model**

Producers obtain more than a third of their income from production and the rest is obtained from the tertiary sector of the economy, providing professional services, since they have an academic level higher than that of the other groups, which allows them to improve their productivity and impacts on the structure of their BM, facilitating the incorporation of good livestock practices.

According to Camacho Ronquillo *et al*<sup>(29)</sup>, these companies have now increased and show good prospects, as they adopt new technologies in order to contribute to the national supply and improve their profitability. This group is likely to follow the behavior of the main exporters of sheep meat, providing greater production through the efficient use of their resources and not through the increase of the flock, incorporating technical and managerial knowledge that allow to do the same with fewer resources. The above accompanied by technologies that increase prolificacy, combining genetic and nutritional factors in the gestation and growth of lambs, increasing weight and productivity<sup>(27,28,30,31)</sup>.

As in the study on the contribution of sheep farming in Mexico<sup>(18)</sup>, it was found that more and more producers stop seeing sheep farming as a backyard activity and visualize it as a business with high potential, this is how they have on average more than 100 ewes and carry out the activity taking advantage of the tradition of consumption and production.

These companies are not family-owned, but they own a brand that allows them to create a reputation. They offer two types of products, animals for meat and for reproduction, high-value products that differ within the market, taking advantage of their genetic value. However, competition for soil and a lack of promotion of meat consumption hinder their growth.

These companies recognize the importance of genetic improvement in their level of competitiveness and follow the global trend on the use of genetic technologies, which improve the growth and quality of the carcass, which aim to revolutionize production, which is threatened by the scarcity of resources, as indicated by some authors who investigated the preferences and trends of sheep production, in recent years, research has been carried out on sheep improvement, through genomic selection, in order to obtain better weights and quality in the carcass<sup>(32)</sup>.

On the demand side, there are two customers, those who seek animals for meat and those who request them for reproduction. The former buys the animal at 48 pesos per live kg, on average. These clients are collectors, *barbacoyeros* and restaurateurs, with whom they communicate by telephone, because they have dealt with them with before. However, they also sell to occasional customers, delivering at the pen. On the other hand, animals for reproduction are sold with purity records, directing their offer mainly to the State government.

The sheep are in adequate facilities, reducing some health problems that occur in rustic production units, which were built with their own resources. They incorporate productive, reproductive, genetic and nutritional techniques that improve their productivity. In order to make their activities efficient and not only receive technical advice from government agencies, but also hire advice that instructs them in the preventive management of the flock, at least three times a year. They have also been beneficiaries of subsidized animals in the last five years. These animals have been provided by the government of the State of Mexico.

The BM has allowed them to face the problems that afflict the value chain, as they have ventured into commercial, genetic and organizational aspects, since they are affiliated to an association of sheep farmers and carry out an intensive search for customers, through social networks and events. It should be noted that this group has incentives to improve its profitability, since they incur higher costs (labor, feeding, productive management, genetics, promotion and certification in some cases) and need to recover their investment.

It is expected that this BM will remain in the long term, incorporating productive, commercial and managerial techniques, addressed in a comprehensive manner, since this type of companies shows interest in knowing the factors that affect their activity, continuously seeking to take advantage of the opportunities offered by the environment and the growing demand for sheep meat.

## Conclusions and implications

The sheep producers analyzed face factors in their environment that affect their growth and affect their viability, such as the transformation of rural areas to peri-urban areas and consumption habits. Under this context, three types of BMs can be distinguished: traditional, intermediate and specialized (18.7 %, 46.9 % and 34.4 %, respectively), which differ significantly in schooling, the age of the production unit, the size of the flock and the percentage of workers who are members of the family and who perceive sheep farming differently. Distinguished mainly by commercial aspects, from the way of relating to customers, the sale price, to the way of delivering their product; resources, which allow them to reduce expenses, such as family labor and arable land; and key activities, which improve the weight of animals and reduce their mortality. Thus, the traditional ones are companies that use their available resources to generate economic stability in the family, but show a tendency to change their land use in the medium term for activities that generate a greater benefit; the intermediate ones, although they carry out some activities to improve the feeding of the flock, they can only be developed by carrying out proactive actions that improve their productivity and the specialized companies, with the largest number of heads, show good prospects, since their choices have allowed them to address a market segment that offers better prices, coordinating their partnerships, activities and resources to meet the needs of their customers. In all three types, an additional challenge to continuity is to achieve successful generational succession.

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