

# **The Importance of Implementing Regional Development for Small Producers of Agave**

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*Competitiveness has increased in all market sectors, and agave producers have not been the exception. The purpose of this research is to identify and analyze the marketing of maguey in the municipalities of Tula, Tetepango Atotonilco de Tula, and Tetepango, Hidalgo. The main motivation behind it is to help producers to use agave to contribute to regional economic development and an increased standard of living. To that end, mixed methodology comprising qualitative and quantitative approaches is adopted; questionnaires are used to collect data and those data are combined with direct observation. Through this methodology, the optimal strategies and the best tools to publicize the proposals that adapt to the needs of the producers taking advantage of all their properties are identified.*

*Keywords: maguey, commercialization, culture, product, production process, customs*

## **INTRODUCTION**

Market competitiveness has been increasing in all sectors, and maguey (also commonly known as agave) producers have not been unaffected. This has inspired the present research study, which is part of a collaborative project from a group from the Autonomous University of the State of Hidalgo that seeks to boost regional development through improvements to the maguey industry.

The project seeks to identify and analyze areas of opportunity for the commercialization of the maguey and its derivatives in the municipalities of Atotonilco de Tula and Tetepango Hidalgo. To that end, the objective is to identify and propose systems to facilitate the increased distribution, sale and recognition of products extracted from the maguey. The main motivation is to educate producers about the uses and competitive advantages of the maguey, thereby enabling them to further contribute to regional economic development and to increase their standard of living.

The methodology used in the research is mixed, incorporating both qualitative and quantitative approaches. According to Hernandez Sanmpieri & Fernandez Collado (2006), mixed methods research is a process that collects, analyzes and links quantitative and qualitative data in the same study or a series of studies as an approach to a problem. This approach offers greater breadth, depth, diversity, interpretative richness and sense of entertainment to the investigation. The instruments to be used in this investigation are questionnaires and direct observation.

## **Background**

Ramírez Rodríguez (2007) published "The popular representation of the maguey and the pulque in the arts", in which he explains the importance of seeing the subject through a modern lens, and that its image must be updated. He argues that cultural representations are important for integration in the popular imagination, which depends on the ability to give a new meaning to the past that has been lost. In light of Ramírez Rodríguez's work, as well as commercial changes in the industry within the last few years, it is clear that the marketing tools and strategies of the maguey industry should be examined. There is a great amount and variety of maguey in the municipalities of Atotonilco de Tula and Tetepango, Hidalgo, so research on its use and marketing offers the potential to unleash a valuable source of economic growth for the inhabitants of these municipalities.

Astudillo (2006) stated that "marketing strategies [should be evaluated] in the market, through a marketing mix." The viability and profitability of any marketing project must be evaluated before it is undertaken. Thus, it is necessary to consider how a product should be introduced and positioned within the marketplace to maximize its profitable lifetime and attractiveness to customers.

The absence of information on current strategies (which would allow a comparison with other potential styles and structures) in SAGARPA's "Agave Master Plan" (2012) was the inspiration for this work—the development of a strategy to collect the information needed to achieve their long-term goals. This was achieved within the framework of popular education certified by the Mexican Institute of Community Development, based in Guadalajara, and covering all of Latin America.

Barbosa Cruz (2002) sought to characterize the forms of control for the consumption of pulque in Mexico. During the period of that investigation, the regulations on urban life were increasing, while at the same time, pulque production was in its "golden age". Barbosa Cruz's work is based on testimonies from primary sources. It highlights the need to analyze regulatory policies, as well as the actions to be carried out by inspectors, collectors and regulators; the findings indicate that acceptance of pulque was so strong that cultural resistance was stronger than all attempts to control consumption and thus those efforts were unsuccessful. While that work is closely related to this topic, we can find no precedent for research on the commercialization of maguey products.

## **Approach to the Problem**

Marketing is the act of selling through the use of various techniques. Some of the factors involved in commercialization through marketing are advertising, distribution channels, and culture. Production and marketing are important parts of any commercial system designed to supply consumers with the goods and services that meet their needs. By combining production and commercialization, four basic economic profits are obtained from, time, place and possession.

This research will investigate micro-marketing in the municipalities of Atotonilco de Tula and Tetepango. These municipalities have faced major technological changes that have minimized the participation and presence of the primary sector. In the 1950s, the driving force of regional development. Therefore, the need to highlight the comparative and competitive advantages of this sector and that will allow a great opportunity to improve production conditions and especially marketing of products derived from maguey.

## **Justification**

Hidalgo is a state rich in culture, traditions, and natural resources. Two of its municipalities, Atotonilco de Tula and Tetepango, are traditional sites of maguey cultivation, though their inhabitants have not realized that maguey cultivation and preparation of its derivatives may offer a source of economic growth.

In order for any type of business activity to be competitive, appropriate business strategies, marketing knowledge, and planning are necessary. We seek to develop tools and strategies for commercialization of the production of maguey derivatives. This is a sector that has not previously gained momentum through either state or national support programs. A mixture of technical knowledge for both producers and consumers will be necessary to meet the objectives of the present investigation.

## **RESEARCH OBJECTIVES**

### **General**

Identify marketing factors that allow the recognition of maguey products in the municipalities of Atotonilco de Tula and Tetepango, Hidalgo, and establish strategies for their development.

### **Specific**

Define the impact of consumer culture on the use of products derived from maguey in the municipalities of Atotonilco de Tula and Tetepango. Identify distribution channels to expedite the transfer of maguey products in the municipalities of Atotonilco de Tula and Tetepango. Propose marketing strategies that increase the consumption of maguey products.

### **Hypothesis**

If maguey producers in this area exploit their comparative and competitive advantages, maguey-derived products will have a positive effect on regional growth in the municipalities of Atotonilco de Tula and Tetepango.

## **THEORETICAL FRAMEWORK**

### **Maguey**

Mexico is the area with the greatest maguey diversity in the world. Out of a total of 210 species, Mexico has 159 (75%), with 119 common species. The ash type grows in the region of Tetepango and Atotonilco de Tula. All Mexicans are familiar with maguey; we see these plants near houses, along the roads, bordering farmland, and as ornamental plants. The usefulness of the maguey goes beyond the production of pulque, an alcoholic drink; in the pre-Hispanic era the dry leaves were used as firewood, in fences, and as fertilizer for crops; the fibers as threads for sewing and weaving dresses, capes, blankets, cordage or ropes; the paper of the leaves used as canvases for art; the spines as needles, nails and punches (Turística Hidalgo).

According to article 2, section II of the Official Newspaper of the (Government of the State of Mexico, 2016) agaves or magueyes are succulent plants belonging to an extensive botanical family named: AGAVACEAE. The name agave is very suitable to describe plants whose drinks can induce intoxication (Frisby Morales, Córdova Yáñez, & Medina Ortiz, 2018).

The quality and identity of each type of maguey is defined by raw materials, transformation processes and cultural contexts of consumption. Each type of maguey, be it sweet, sour or aromatic, offers various possibilities due to the diverse conditions of altitude, climate and soil, present in the complex topography of Mexico. Careful selection and harvesting of plants, together with the diversity of local knowledge and techniques for the preparation of drinks derived from the maguey plant, renders each unique and delicious (García, s.f.).

## Culture

The acquired knowledge that people use to interpret and generate behavior comes from and is part of their culture. Culture should not be considered only as a form of expression, but as a source of resources. An appreciation of its importance allows a product to be seen from a cultural point of view to avoid losing valuable traditions. In the same way, it is important for us to realize that society must take care of our flora and fauna that, in addition to benefiting us, provides the beauty of nature.

Consumer behavior focuses on the way in which individuals make decisions to spend their available resources and the factors that influence those decisions. These include:

- **Cultural factors:** The set of values, perceptions, desires and behaviors learned from the family and other important institutions by members of a society.
- **Social factors:** The social class to which an individual belongs makes a vital contribution to their behaviors—these are affected by the family or groups to which they belong.
- **Personal factors:** The personal characteristics of each individual as a consumer; these include aspects such as age, lifestyle, profession, or economic situation that are essential when making a purchase decision.
- **Psychological factors:** Motivation, perception, learning, beliefs and attitudes are all of great importance in influencing consumer behavior.

### *Consumer Behavior (Culture and Subculture)*

Culture surrounds us, sometimes without us realizing it. Different scholars have defined it in different ways, including what they say is that "part of the environment made by man" (Ramírez Gallego, 2013). Culture is dynamic because it is changing constantly. Culture is an acquired behavior—we observe the people around us and from that observation learn what is acceptable and unacceptable behavior. Thus, to a large extent, our eating habits and our behavioral norms are defined by our parents, siblings, friends and teachers. In this context, knowing what consumers think and what features they prefer in the products they acquire is vital.

Three important bases of consumer behavior are addressed in the questionnaire below:

1. What was the reason for forming the "Tlachiqueros organization" (OTLA)?
2. What municipalities are members of the organization?
3. How old is this organization?
4. What means did you use to attract more members to this organization?
5. Are these people only engaged in the preparation and sale of pulque?
6. What dishes are typically made with the maguey derivatives?
7. What is the process of making natural pulque?
8. How is "cured pulque" made?
9. Which do you think consumers prefer?
10. Do you carry grow the maguey or do you buy it?
11. Approximately how many liters of pulque do you get from a maguey plant?
12. What types of maguey grow in this region?
13. Which is the best?
14. What care is given to the maguey?
15. From whom did you learn this "trade"?
16. Why were you were interested in maguey cultivation?
17. What are the other uses of maguey (besides pulque extraction)?
18. What fairs have you attended so far this year and how do you decide to attend these events?
19. Do they receive support from a dependency?
20. How are the events they hold in the community publicized?
21. Have you received any recognition from a competent authority or agency for participating in this festival?
22. Do most of the members of this group attend to these courses and/or workshops?

23. What are these courses about?
24. Would the organization be willing to receive support from the students and teachers of the “Escuela Superior de Tlahuelilpan” at Universidad Autónoma del estado de Hidalgo (UAEH)? If so, what form of support would they like to receive?

## CONCLUSION

The first stage of the research has been completed. Based on the results of the study, it is affirmed that the maguey plant and most of its parts can be used to create products of greater commercial value with minimal use of technology (Narváez Suárez, Martínez Saldaña, & Jiménez Velázquez, 2016).

The instruments used are questionnaires and observation in order to obtain data, analyze them and issue a result. The research team came to the conclusion that it is vital to study and identify optimal strategies and tools to prepare and disseminate proposals that are adapted to the needs of producers of maguey derivatives in the municipalities of Atotonilco de Tula and Tetepango Hidalgo.

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