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Appellation of Origin Status and Economic Development: A Case Study of the Mezcal Industry

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Abstract

Mezcal is an alcoholic beverage produced only in selected regions of Mexico under appellation of origin status from the Word Intellectual Property Organization. While it has been produced in Mexico for many centuries, mezcal's appellation of origin was only granted in 1995. Therefore efforts to produce and market it as a premium product have a relatively short history. This case study examines developments in the production and marketing of this unique product, and the activities of the marketing cooperative El Tecuán in Guerrero State in this process.

Keywords: mezcal, Mexico, appellation, marketing, cooperative

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Introduction

In 2009, members of El Comité Nacional del Sistema-Producto Maguey-Mezcal in México (i.e., the National Committee of Mezcal) were satisfied with their achievements in the mezcal industry¹. The status of this industry looked very different in 2009 compared to 2005, when the National Committee of Mezcal first started to work for the mezcal industry (Figure 1, an excerpt of the 2005-2009 evaluation report by The National Committee of Mezcal). In 2006, only 23% of consumers in Mexico perceived mezcal to be a high quality alcoholic beverage. By 2008, this number rose to 41%, and in September 2009, mezcal was sold in "El Palacio de Hierro," one of the most exclusive stores in Mexico, for the first time. Promotional efforts targeting the international market were also beginning to show signs of success. Though the development of the mezcal market had come a long way, there were still many challenges the National Committee of Mezcal wanted to address in order to further help this industry.

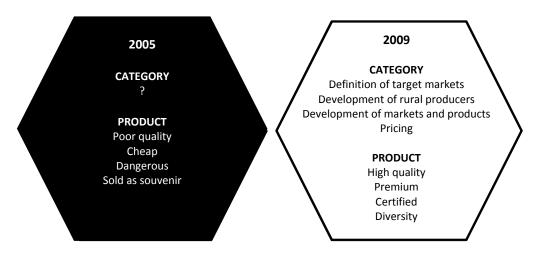


Figure 1. Selected Characteristics of the Mezcal Industry in Mexico, 2005 and 2009. **Source:** El Comité Nacional del Sistema-Producto Maguey-Mezcal, 2005-2009 Evaluation

This article documents the evolution of the mezcal industry from the mid 1990s to 2009. The objective is to analyze the reorganization of industries following appellation of origin protection. Using the case methodology we focus on the appellation mezcal, which was granted to some areas of Mexico by the World Intellectual Property Organization in 1995.

The next section describes the production process and product line of mezcal. This is followed by the process of appellation of origin and the knowledge base on product differentiation based on geographic indications, emphasizing the case of mezcal. The marketing cooperative El Tecuán, which is considered by the authors a representative of the mezcal enterprise is introduced. The successes and current challenges of El Tecuán are documented in the context of the appellation mezcal from 1995 to 2009. After analyzing the value chain and comparing mezcal and tequila, some concluding remarks follow.

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¹ Maguey is synonymous with agave, the plant from which mezcal is obtained.

The Liquor Mezcal

Production Process and Types of Mezcal

Mezcal is an authentic Mexican alcoholic beverage produced from the agave plant, commonly known as maguey in Mexico. The beverage is obtained by distilling cooked and fermented agave plants. Agave plants are harvested at maturity (seven to nine years) when the plants produce their single flower. The heads of the plants, with high concentrations of sugar, are slowly cooked in underground pits for three to five days. After this they are chilled and crumbled with mallets or mechanical mills. The remaining pulp is fermented in wooden vats with natural yeasts for ten to twelve days. The fermented pulp is then distilled (distillation involved the separation and concentration of the alcohol from the pulp) twice in copper stills. Mezcal production methods have been passed down from generation to generation for centuries.

After this process, the mezcal is ready for sale as white or young mezcal. Young mezcal can also be aged in wooden barrels, which allows the liquor to acquire a golden color and the flavor to be enhanced. Mezcal aged from four months to a year is known as rested, and mezcal aged for at least one year is known as aged. In addition to aging, mezcal producers can soften and smooth the flavor of mezcal by adding herbs or fruits, obtaining a semisweet mezcal. Thus, young, rested, aged, and semisweet mezcals are marketed.

According to the Mexican Official Standard for Production of Mezcal, administered by the Ministry of Economy, two types of mezcals can be produced: "Type I or 100% Agave Mezcal" (which is made only from the agave plant, meaning that only agave sugars were used for fermentation) and "Type II or Plain Mezcal" (which can contain up to 20% of fermenting sugars from sources other than agave) (DOF-IMPI (1994)).

Bottling

The Mexican Official Standard for the Production of Mezcal contains the specifications for raw materials and beverage production, bottling, and labeling. The establishment of bottling and marketing enterprises could increase sales opportunities by ensuring a consistent and high quality mezcal, providing traceability, and helping to ensure that the agave is harvested in a sustainable manner (Marshal, Schreckenberg and Newton (2006)). The establishment of bottling companies, however, was very challenging for several reasons. Mezcal is produced in areas with high levels of poverty, where most of the producers are organized as cooperatives. In addition, access to legal, financing, and market information was difficult for small farmers in the mezcal production areas. Technology was a constraint as well and available equipment for bottling in the market was designed for producing high volumes that could not be reached by individual mezcal enterprises in Mexico (UNEP World Conservation Monitoring Centre (2002)). For these reasons, leadership to organize the value chain was a key to success.

Geographical Indications and Product Differentiation

In 1995, some areas of Mexico were granted appellation of origin protection as exclusive areas to produce mezcal by the World Intellectual Property Organization under the Lisbon Agreement.²

² Lisbon Agreement for the Protection of Appellations of Origin and their International Registration.

Appellations of origin are based on geographical names or traditional designations used on products that have a specific quality and characteristic that are exclusively or essentially due to the geographical environment, including natural and human factors³. The term appellation of origin is a special kind of geographical indication⁴ that encompasses more than just the geographical location of production. To obtain the appellation of origin, the product must also have characteristics that are part of the product, beyond just the location of production. Thus, all appellations of origin are geographical indications, but some geographical indications are not appellations of origin. Obtaining appellations is a complex process (Exhibit 1). Under the Lisbon Agreement, mezcal can only be produced in certain regions of world, all located in Mexico (Figure 2).



Figure 2. Areas for Production of Mezcal in Mexico (1) State of Oaxaca, (2) Guerrero, (3) Guanajuato, (4) San Luis Potosi, (5) Zacatecas, (6) Durango, (7) Tamaulipas. **Source:** www.sientemezcal.com (accessed on December 20, 2009).

³ Lisbon Agreement: Article 2, Section 1. Available at:

http://www.wipo.int/lisbon/en/legal_texts/lisbon_agreement.htm#P22_1099 Accessed on December 29, 2009.

Geographical indications (GIs) are signs "... which identify a good as originating in the territory of a [World Trade Organization] Member, or a region or locality in that territory, where a given quality, reputation or other characteristics of the good is essentially attributable to its geographic origin." (The Word Trade Organization's Agreement of Trade-Related Aspects of Intellectual Property Rights (TRIPS), Part II, Section 22.1).

Exhibit 1. Appellation of Origin Protection

The Mexican Institute of Intellectual Property (IMPI, or Instituto Mexicano de la Propiedad Industrial) is the institution authorized in Mexico to declare protection of an appellation of origin ex officio or at the request of a party demonstrating legal interest (by individuals or firms devoted to the extraction, production, or preparation of the product for which coverage is provided by the appellation of origin; by chambers or association of producers; or by the government) [Adapted from The Mexican Industrial Property Law (Ley Industrial de la Propiedad [de México]), Articles 1 and 158].

After all requirements are satisfied, IMPI publishes an extract of the application in the Official Gazette of the Federation (Diario Oficial de la Federation) and a two month period is allowed for third parties to raise objections, if any. Once the appellation of origin is granted IMPI publishes a decree in the Official Gazette of the Federation.

In the case of mezcal, The National Chamber of the Industry of Mezcal applied for appellation protection. Appellation protection was granted and published in the Official Gazette of the Federation on November 28, 1994 (an amendment to extend the geographical area was published on 1998). The publication included definitions, reference to official standards for the control of mezcal production, types of mezcal, legal matters, and regions of production for mezcal (DOF-IMPI (1994)). The states of Oaxaca, Guerrero, Durango, San Luis Potosi, and Zacatecas were declared as the territories where mezcal could be produced and bottled (the states of Guanajuato and Tamaulipas were later included in an amendment).

International Registration of Appellation of Origin

After a country designates appellation protection, international registration is requested by the authorized office of the country of origin in the name of any natural persons or legal entities, public or private, having a right to use such appellations [Adapted from the Lisbon Agreement, Article 5(1)]. The International Bureau of Intellectual Property of the World Intellectual Property Organization, without delay, notifies the countries to which the Lisbon Agreement applies of such registrations, and publishes them [Adapted from the Lisbon Agreement, Article 5(5)]. In the case of mezcal, IMPI applied for international registration of appellation of origin, which was granted on March 3, 1995 [appellation of origin number 731, Lisbon Agreement data base].

Protection of appellation

Following registration under the Lisbon Agreement, all countries to which the Lisbon Agreement applies agree to protect in their territories the appellations of origin of products of the other countries recognized and protected as such in the country of origin and registered at the International Bureau of Intellectual Property [Adapted from the Lisbon Agreement, Article 1(2)]. Protection is granted against any usurpation or imitation of the appellation of origin, even if the true origin of the product is indicated or if the appellation is used in translated form or accompanied by terms such as "kind," "like," "imitation," or the like [Adapted from the Lisbon Agreement, Article 3]. For more information on the process of registering appellation of origin, see Rodriguez-Cisneros (2001).

Famous appellations of origin include Champagne, Prosciutto di Parma, Tequila, Roquefort Cheese, and cigars from Cuba among others. While these probably come to mind as high quality products, many appellations do not have such appreciation in terms of quality. Some research has documented price premiums associated with geographical indications (Carsten and Maskus (2006), Malorgio, Camanzi and Grazia (2007), and Teuber (2007)).

Like trademarks, appellations of origin and geographical indications, are forms of intellectual property. However, trademarks and geographical indications have important differences. A trademark is not limited by a territory and a geographical indication is linked to a geographical area. However, a trademark or certification mark can protect a product based on its origin or region of production. Secondly, while a trademark is a private right owned by a particular firm or by a trade association or group of producers in the case of certification marks (e.g., Indian River Citrus, owned by the Indian River Citrus League), geographical indications, and in particular appellations of origin are public rights, usually owned by a country (i.e., Mexico is the owner of the appellation mezcal).

These characteristics bring opportunities and problems for producers in an area with appellation of origin. The appellation functions as a barrier to entry for producers outside the geographical area protected. Because of this, an appellation of origin has been referred to as a collective monopoly right, which has the additional advantage of allowing the producers to differentiate their product in the market (Rangnekar (2004)). Thus, these advantages give producers an opportunity to capture the rents embedded in the appellation.

Rangnekar (2004) presents a mini case of mezcal as an example of strategies to penetrate external and distant markets through product differentiation. Apart from the two "types" of mezcal protected, there are other mezcal categories produced. Mezcal can be compared to whiskey in this regard (Table 1).

Table 1. Mezcal Portfolio of Products with Reference to Whiskey

Mezcal Product Differentiation	Description	Reference to Whiskey
100% Agave Mezcal	Type I (DOF-IMPI 1994)	Pure Malt Whiskey
Mexican Mezcal	Type II (DOF-IMPI 1994)	Scotch Whiskey
Blended Mezcal	From different agaves or semiweet mezcals	Blended Malts
Single Mezcal	From a single distillery or a single distillation batch	Single Malts
Mezcal Papalote de Guerrero	From <i>Agave cupreata</i> , variety grown in the State of Guerrero, also known locally as "Papalote", "Macho," or "Criollo (Wild)"	Speyside Single Malt

Source: Adapted from Rangnekar (2004)

Potential problems also arise by the shared nature of an appellation of origin. One concern is the existence of low-quality producers (free riders) taking advantage of the appellation and undermining the reputation of the generic product (Carsten and Maskus (2006)). While this concern is usually overcome by regulatory institutions, the transactional cost involved in

monitoring free riders is not trivial, and this might not be achieved. For mezcal, The Mexican Council for Quality Regulation of Mezcal (COMERCAM) was created in 1997⁵ with the purpose of protecting the reputation of mezcal.

Also, efforts to coordinate, enforce, and jointly market products under appellations of origin are challenging. As the products themselves pre-exist their appellation of origin registration and protection (i.e., mezcal has been produced for centuries), the process of registration entails some reorganization of the existing supply chain, thus generating new economic opportunities for some producers while creating problems for others (Rangnekar (2004)).

El Tecuán- A Representative Mezcal Enterprise⁶

The members of the cooperative of Mezcal of Guerrero El Tecuán (El Tecuán) were peasants, living in the State of Guerrero in Mexico (Figure 2)⁷. The States of Guerrero and Oaxaca are the poorest States in Mexico. Although many of the members of El Tecuán spoke Spanish, others only spoke Náhuatl, a dialect originating with the ancient Aztecs.

To make a living, the peasant families of the central zone and mountainous state of Guerrero diversified their activities between subsistence agriculture, small scale livestock production, production of handicrafts, and wage labor. With each generation, more persons had to look for work in other parts of the country to earn enough to support their families. Many sent one or more family members to the United States to earn money to send back to Mexico. The "fabriqueros" (from the Spanish word "fabrica" or factory), as owners of the mezcal distilleries were known, were the few fortunate ones who did not need to emigrate to support their families (Marshal, Schreckenberg and Newton (2006)).

El Tecuán was started as a cooperative in 1994 with around one hundred members from five communities of the central zone of Guerrero. Like other cooperatives, El Tecuán was focused on serving the needs of the member-users. According to the cooperative structure of business, each member of El Tecuán had an equal vote on strategic issues, meaning management would need to convince the majority of members that this path was the correct one to take. This made managing more challenging than in a corporation, where voting rights belonged to shareholders based on shares held. For regular management issues, the cooperative was led by an Administrative Council elected by the members of the cooperative, and by an operations manager. El Tecuán was formed as a marketing cooperative, which meant the business took the mezcal produced by the members, and with greater volume than an individual producer would have, the cooperative would then market the product more extensively and return the profits to the members based on how much mezcal they contributed.

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⁵ More on COMERCAM in section "The Value Chain of Mezcal"

⁶ This part of the case relies mainly on information from a master thesis co-directed by two of the authors, on interviews by the authors with employees from the cooperative, and on secondary sources.

⁷ The official name of the cooperative was *Union de Productores de Mezcal Xochicalehuatl SPR de RL*. Locally, the cooperative was known as El Tecuán.

The cooperative's first Administrative Council elected by the assembly consisted of Don Fili⁸, Don Adolfo, and Don Jesús, with Don Fili acting as President. This council began the challenging job of organizing and developing cohesion among mezcal producers, consolidating the organization, obtaining recognition and help from governmental authorities, developing and accrediting their products, and learning how to do business. A decade later, in 2005, acting as President of the Council of Agave-Mezcal of the State of Guerrero (El Consejo Estatal Maguey-Mezcal de Guerrero), Don Fili referred to the beginning of El Tecuán in a television program sponsored by INCA Rural, an institution promoting rural development in Mexico: "The government officers wanted us, the mezcal producers, to officially incorporate as a company and pay taxes, they encouraged and supported us to work together as producers and to establish a bottling firm, they wanted us to do many things we did not know how to do, we only knew how to produce mezcal" (INCA-Rural (2005), p.4).

In 1995, El Tecuán received help from the federal government to replant agave on land in their community because the plant retains water that can nourish streams and flowers and help the regeneration of the base organic material. The terrain where the agaves were replanted was not suitable for any other type of agriculture and in the majority of the cases, the land was deforested and erosion was becoming a large problem. The members of El Tecuán planted the agaves in a natural (wild) and organic manner without destroying the forest contributed to the rebuilding and protecting of the land.

By 1996 El Tecuán obtained their registration from the tax authorities (Secretaría de Salubridad y Asistencia and Secretaría de Hacienda y Crédito Público). A former Governor of the state of Guerrero, whose support was fundamental for the process, said this gave the cooperative the ability "to claim ancient cultural values and to dignify their honest work" (Leduc-García (2004)). The pioneers of El Tecuán achieved their goal that the producers of mezcal of Guerrero could work in the public light and enjoy the guarantees offered by the law through the hard work of many people.

Beginning in 1998, the operations of El Tecuán had three lines of business: producing and bottling mezcal (wholesale trade), a store (direct – retail sales), and a restaurant. Producing and bottling mezcal constituted the principal business for the cooperative, with wholesale trade representing 87% of total revenues by 2005.

Early in 2004, Mr. Adolfo Rojas, Don Adolfo, took over as President, replacing Don Fili, who continued as a member of El Tecuán Administrative Council but whose priority shifted to working on behalf of all of the mezcal producers in the state of Guerrero, who had already started to organize themselves as an industry. Don Adolfo's background was not very different from the rest of the members of the cooperative. He learned to make mezcal with his father after turning twelve. A fifth generation mezcalero, he inherited his father's factory and the commitment to preserve his family's tradition.

Brands of El Tecuán

In Náhuatl tecuán means jaguar. Traditionally, the tecuán has been the main character of the festivals of all the communities of central Guerrero. With the establishment of the cooperative,

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⁸ In Spanish, "Don" is a title of respect.

El Tecuán, the jaguar also became the emblem of the cooperative. Indeed, the first brand of mezcal bottled for the cooperative was named Tecuán in honor of this tradition (Figure 3). Tecuán was a young mezcal, 100% from the agave plant. The first boxes with the brand name Tecuán were sold at the end of 1997. Tecuán was sold by specialized merchants and restaurants in the main cities of central Guerrero and was the main source of revenues for the company.

In general, the quality of liquor produced from the agave variety cupreata, predominant in the State of Guerrero, was recognized by connoisseurs for its flavor and bouquet (Marshal, Schreckenberg and Newton (2006)). Also, the production process in underground pits gave mezcal a smoky and earthy fragrance and taste. The mezcal Tecuán began to be recognized as a high quality mezcal in 2003 when the Beverage Testing Institute, founded in 1981 in Chicago with the objective of producing fair and impartial reviews of wine, beer and spirits for consumers, rated mezcal Tecuán as "Highly Recommended".

The second brand for the cooperative was named Don Fili (Figure 3), named after the first President of the Cooperative. "Don Fili," a registered trademark for the company, was a rested mezcal 100% of agave produced under the supervision of Don Fili himself. Sales began in 1999, and the majority of the product was sold through one distributor in Mexico City, with a small portion distributed to Chicago mainly through networking of migrants from Guerrero living there.



Tecuán





Tecuán Damiana

Don Fili

Figure 3. Brands of El Tecuán

⁹ http://www.tasting.com/scout_spirits.lasso?id=169180, (accessed on October 13, 2007).

To complement their line of product, the firm introduced a semisweet mezcal mixed with Damiana, a wild plant used for health and digestive purposes in Guerrero. Damiana had not been used before for liquors. Every bottle of this product contained a portion of the Damiana plant in the bottom, mimicking the tradition of mezcal producers from the state of Oaxaca who included worms in the bottle of mezcal liquors.

Marketing and Sales of El Tecuán

Building the reputation of mezcal as a quality liquor had faced difficulties in the past. A black market for the sale of mezcal had existed, including adulteration of the product and forgery of bottles, labels and trademarks. The adulteration of mezcal had left the reputation of this product tremendously damaged. In the mid-1990s there had been a series of deaths and health problems attributed to the consumption of an adulterated mezcal. Since that time, the Mexican government began fighting the black market through the PROFECO, an institution in charge of protecting consumers from abuses by firms. However, past experience has shown that black markets can be very difficult to eliminate. Certification of mezcals by COMERCAM was expected to alleviate the problem as consumers would start to recognize and value products from certified firms. Much work was put into the branding and trademark protection for products from El Tecuán.

By 2005 El Tecuán distributed its products mainly in regional markets, though they were trying to expand their presence in the national market (Mexico City and cities along the border with the United States), and even in international markets. They already had some sales in Chicago, where their mezcals were distributed in small volumes primarily among emigrants from Guerrero. Members of El Tecuán participated in all the expos they could attend. The cooperative was helped by the Mexican Bank of International Trade, Bancomex, by funding participation in expositions and distribution of samples of their products outside Mexico. In particular, members of El Tecuán attended food exhibition shows like the Food Marketing Institute show in Chicago, the "Francia SIAL" show, and the International Food & Beverage Exhibition "Foodex" in Tokyo.

The international market was attractive to mezcal producers for two primary reasons: there were special tax exemptions (SAGARPA (2005a)), and the consumer perception of mezcal outside Mexico was good, mainly helped by the reputation gained by tequila (UNEP World Conservation Monitoring Centre (2002)). The management of El Tecuán analyzed the possibility of entering international markets, however, it seemed difficult given the infrastructure of the cooperative. They wondered if the effort would be more efficient if all firms of mezcal collectively promoted a generic mezcal for export. But, would El Tecuán fare well if buyers had to choose between brands? And were they prepared to go through the procedures necessary to obtain certifications to be able to export under the new requirements by COMERCAM?

The Value Chain of Mezcal

Until the late 1970s mezcal producers in Mexico were sometimes harassed and accused of practicing illegal activities such as production of alcohol without secure quality standards, and for not paying taxes (UNEP World Conservation Monitoring Centre (2002)). Over time, the

government's attitude towards mezcal producers changed, and during the 1990s, the government started to be very supportive, offering subsidies, technical assistance, and interest-free loans for organized mezcal producers.

In 1994, the National Chamber of Industry of Mezcal applied for appellation protection with the Mexican Institute for Intellectual Property (IMPI) ¹⁰. IMPI approved appellation protection and, as the authorized office in Mexico, applied for international registration of the appellation of origin for mezcal to the World Intellectual Property Organization under the Lisbon Agreement. International registration and protection of the appellation of origin mezcal was granted in 1995, with mezcal only being allowed to be produced and bottled in specific regions in Mexico (Figure 2). Appellations of origin most likely trigger a positive reaction in the mind of producers and participants of value chains as they realize that their efforts are linked in the production and marketing cycle of a product recognized for its unique quality. The mezcal appellation encouraged the reorganization of the value chain and the start up of bottling firms of mezcal. El Tecuán was one of the first formal organizations of mezcal producers in Guerrero. El Tecuán opened its bottling enterprise in 1997. This was the first bottling enterprise in the State of Guerrero. By 2005, six bottling firms were already established in the state of Guerrero. Figure 4 shows partially the value chain for mezcal in the State of Guerrero in 2005. Owners of both distilleries and maguey plantations were highly integrated, thus avoiding intermediaries in the value chain (SAGARPA (2005b)).

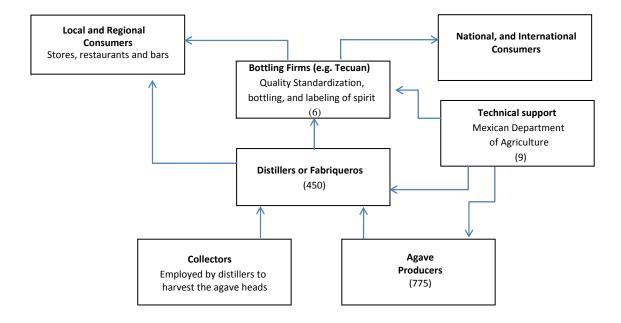


Figure 4. Partial Value Chain for Mezcal in the State of Guerrero, Mexico Number of producers, distillers, bottling firms, and technicians are indicated in parenthesis. Estimations by SAGARPA (2005a).

Source: Prepared by authors from Marshal, Schreckenberg and Newton (2006); and SAGARPA (2005a).

¹⁰ IMPI stands for Instituto Mexicano de la Propiedad Industrial

In terms of reorganization of the supply chain, the Mexican Official Standard was decreed by the Ministry of Economy in 1997. The Official Standard contained the specifications for raw materials and beverage production, bottling, and labeling, among others (DOF-SECOFI (1997)). As a consequence The Mexican Council for Quality Regulation of Mezcal (COMERCAM)¹¹, a private institution, was created to certify the quality and authenticity of mezcal, and to prevent any usurpation or imitation of the appellation of origin mezcal¹².

Management of El Tecuán was aware that it would take several years for this cooperative and for the other enterprises in Guerrero to be certified by COMERCAM. They recognized their internal systems and equipment needed to be improved in order to face the new regulatory challenges. In the late 1990s producers of mezcal in Guerrero started to meet regularly in order to create a network that they felt was necessary to address the opportunities and challenges for the industry of mezcal of Guerrero. The leadership of Don Fili, President of the Administrative Council of El Tecuán, was key in the cohesion of producers. In 2004, the producers created a not-for-profit organization, the Council for Agave-Mezcal of Guerrero (El Consejo Estatal de Maguey-Mezcal de Guerrero), which represented all producers of maguey and mezcal. Don Fili, President of El Tecuán, was elected President of the Council for Agave-Mezcal of Guerrero. Since 2003, Don Fili had also been an elected member of COMERCAM.

In Mexico, rural value chains have been integrated by what are called System-Products¹³ since 2001. The aim of these chains was to achieve competitiveness, promote conditions of equality and trust among participants in the value chain, and to satisfy market demand. For each System-Product a National Committee existed ([Mexican] Law of Sustainable Rural Development, December 7, 2001). The National Committee of The System-Product Maguey Mezcal (i.e., The National Committee of Mezcal) was created in November 2004 and was governed by The Mexican Department of Agriculture.

It was estimated that the value chain for mezcal (Figure 5) generated 29,000 jobs in Mexico. COMPROMMAC, an association integrated by both mezcal and agave producers, was considered the most important player of the System-Product Maguey-Mezcal. The National Committee of Mezcal worked very closely with COMPROMMAC in coordinating all efforts for the value chain for mezcal. For example, by using money from both the Mexican government Producers and COMPROMMAC, a marketing campaign was implemented in 2007 and 2008.

http://www.sagarpa.gob.mx/agricultura/Publicaciones/SistemaProducto/Paginas/default.aspx}, accessed on February 2010.

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¹¹ The Mexican Council for Quality Regulation of Mezcal (COMERCAM) is El Consejo Mexicano Regulador de la Calidad del Mezcal.

¹² In 2003 COMERCAM was officially recognized by the Mexican government as the institution in charge of implementing the Mexican Official Standard. Ministry of Economy, accessed on November 13, 2008: http://diariooficial.segob.gob.mx/index.php

¹³ A System-Product is an official organization (i.e., a committee for rural development) governed by the Mexican Department of Agriculture. This organization is integrated by government officials and by representatives of all the supply chain value of strategic products, as defined by the Mexican Department of Agriculture in their National Plan for Development. The objectives of system-products are: i) achieve consensus on national production programs, ii) establish plans for strategic expansion or reduction of level of production according to conditions in the market, iii) establish strategic alliances and negotiations for the integration of chain values, iv) define norms and procedures for commercial transactions and for derivatives products, v) participate in the definition of tariffs, quotas, and other imports modalities, and vi) generate mechanisms for consensus among producers, marketers, and the government. For additional information refer to the Mexican Department of Agriculture's web site,

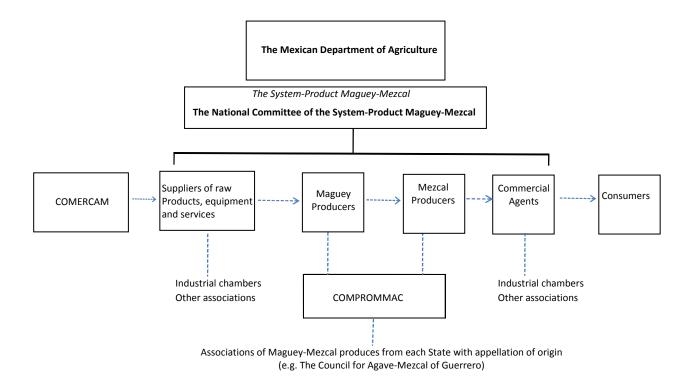


Figure 5. Selected Players in the Value Chain for Mezcal

Note: 1. COMPROMMAC stands for El Consejo Mexicano de Productores de Maguey-Mezcal A. C., the Mexican Council of Maguey-Mezcal Producers; 2. COMERCAM stands for Consejo Mexicano Regulador de la Calidad del Mezcal, the Mexican Council for Quality Regulation of Mezcal.

to promote mezcal in domestic and international markets. Details of the marketing campaigns can be found in COMPROMMAC (2008).

From 2005 to 2009, the National Committee of Mezcal and COMPROMMAC had worked together in diverse initiatives to help the System-Product Maguey Mezcal. Over the 2005 to 2008 time period, production had steadily increased, as had exports (Table 2). In addition, as of 2009, 131 distillers had received help for capital expenditures to improve their distilleries, 13 quality control laboratories had been established in the country, and more than 200 distilleries had been certified by COMERCAM. The National Committee of Mezcal and COMPROMMAC had also collectively promoted sales in international markets (Figure 6 shows some brands that were promoted through the efforts of the National Committee of Mezcal).

One of the main concerns of participants in the mezcal industry was to achieve better cohesion and trust among mezcal firms. For example, promoting products collectively might create result in savings for mezcal producers.

Table 2. Selected Statistics from the Mezcal Value Chain, 2005 to 2008 and Projections 2012

Year	Production	Exports	Number	Perception about quality		
	(liters)	(liters)	of brands	Bad	Good	None
2005	433,927	214,664	20			
2006	473,407	528,507	26	67%	23%	10%
2007	994,231	407,863	27	62%	29%	9%
2008	1,824,393	352,072	34	50%	41%	9%
Proj. 2012	7,500,000	4,500,000	NA	NA	NA	NA

Source: Assembled with data from The National Committee of The System-Product Maguey-Mezcal, 2005-2009 Evaluation. Original in Spanish, adapted by authors.

http://www.sientemezcal.com/2009/pdf/SPMMEvaluacion2005_2009.pdf. (accessed on December 21, 2009).

Note: 1. Perceptions about quality of mezcal based on surveys of 800 final consumers (COMPROMMAC (2008));

2. Projections by The National Committee of The System-Product Maguey-Mezcal.



Figure 6. Selected Certified Mezcals Promoted in International Markets by the National Committee of Mezcal and COMPROMMAC as of 2009. **Source:** Cruz-Barrera, A. (2009).

Mezcal and Tequila

From 2005 to 2009, the global market for spirits grew slowly, around 2% per year. During the same time, combined sales of tequila and mezcal had grown at slightly higher rates in international markets (Table 3). However, within Mexico, combined sales of tequila and mezcal grew at slower rates than the spirits segment, especially in 2008 and 2009 (bottom panel Table 3). A more thorough examination of the data, however, shows that sales of tequila decreased in

2008, while sales of mezcal increased (The IWSR 1995-2009 Report, in Cruz-Barrera (2009)). In fact, sales of mezcal has been increasing every year since 2005 (Table 2).

Table 3. Volume of Sales of Spirits Worldwide and Mexico (000s liters)

	2005	2006	2007	2008	2009
		Worldwide			
Spirits - total worldwide	13,201,082.0	13,306,356.7	13,637,101.2	13,942,314.1	14,212,539.9
Other Spirits	5,985,110.1	5,942,192.6	6,004,936.8	6,101,007.0	6,250,438.7
White Spirits	3,586,264.2	3,592,443.3	3,645,291.2	3,650,955.9	3,617,983.7
Whisky	1,377,133.3	1,448,297.6	1,539,453.6	1,647,927.6	1,744,983.3
Rum	810,457.0	835,420.8	892,008.6	937,311.2	974,050.7
Brandy and Cognac	757,552.7	784,965.8	829,281.0	869,047.9	883,484.4
Liqueurs	547,181.8	558,302.2	574,425.5	580,613.9	581,466.3
Tequila and Mezcal	137,383.0	144,734.4	151,704.4	155,450.6	160,132.8
Year to year growth total spir	Year to year growth total spirits worldwide		2.5%	2.2%	1.9%
Year to year growth total Teq	uila and Mezcal	5.4%	4.8%	2.5%	3.0%
		Mexico			
Spirits - Total Mexico	135,516.2	135,901.5	137,456.2	139,813.8	145,639.1
Tequila and Mezcal	61,866.1	62,591.7	64,012.5	63,620.3	65,500.5
Brandy and Cognac	33,137.6	31,126.2	28,740.2	29,703.7	31,460.2
Rum	23,286.2	23,727.4	25,815.8	24,290.6	22,836.1
Whisky	4,203.7	4,492.3	4,989.4	7,582.8	9,774.6
Liqueurs	3,384.4	3,408.6	3,130.3	3,178.5	3,558.9
Other Spirits	2,538.2	2,508.4	2,457.7	2,754.9	3,002.2
White Spirits	1,115.2	1,544.6	1,621.4	1,767.8	2,169.9
Year to year growth total spirits in Mexico		0.3%	1.1%	1.7%	4.2%
Year to year growth total Teq	uila & Mezcal				
in Mexico		1.2%	2.3%	-0.6%	3.0%

Source: Assembled with data from Euromonitor. Data obtained on January 1, 2010

Whiskey: The aggregation of single malt scotch whiskey, blended scotch whiskey, bourbon/other US whiskey, Canadian whiskey, Irish whiskey, Japanese whiskey and Other whiskey. **White Spirits:** This is the aggregation of gin and vodka. **Rum:** This is the aggregation of white and dark rum; **Liqueurs:** Aggregation of cream-based, bitters and all other types of liqueurs. **Other Spirits:** Examples include Korn, Grappa, Calvados, Slivovizla, Rakkija, Arrak, Ouzo, Pernod, Ricard, Pastis, Suchu, Shou Xi.

Mezcal could be seen as similar to tequila because both were Mexican liquors distilled from agave plants with protected appellations (the appellation tequila was granted in 1978). However, while tequila was well appreciated domestically and internationally, mezcal had not achieved the recognition that many local residents, producers, researchers (Marshal, Schreckenberg and Newton (2006)), and governmental authorities (SAGARPA (2005a); INCA-Rural (2005)) believed it deserved for the quality of the beverage, and its economic, social, cultural, and environmental importance.

Until recently, mezcal had been considered a low quality spirit in Mexico (i.e., the alcoholic beverage for the poorest groups of the population). This was similar to consumers' perception of tequila in Mexico about thirty years ago. In the late seventies, when the appellation of origin tequila was granted, the tequila industry started to have visibility in both national (before, like mezcal, tequila was largely a regional beverage) and international markets, particularly because

of a range of business alliances, joint ventures, and acquisitions (Casas (2006)) together with mass promotion. This gradually allowed the image of the product to change.

Consumers' perception regarding mezcal has started to change (UNEP World Conservation Monitoring Centre (2002), and surveys in Table 2). Not only is mezcal being sold in one of the most exclusive stores in Mexico, some brands of mezcal were priced slightly higher than well known tequila brands. For example, in one case rested mezcal semillero and one of the best known brands of tequila, José Cuervo Traditional, were advertised in December 2009 (Figure 7). The price of a 750 ml bottle of rested mezcal semillero was advertized at about \$18 USD, equivalent to approximately \$24 USD per liter, compared to below \$20 USD per liter for José Cuervo Traditional. In the US, retail prices of mezcal were reported to be between \$25 and \$30 USD (COMPROMMAC (2008)).

Finally, the tequila industry relied mostly on medium to highly technological processes (Cedeno-Cruz and Alvarez-Jacobs (1999); Casas (2006)). In contrast, most mezcal in Guerrero was produced in small distilleries (Illsley, Gomez, Edouard and Marshal (2006)); some of Guerrero's mezcal distilleries had a considerable level of deterioration, complicating the process of obtaining quality certification from COMERCAM (SAGARPA (2005a)).





Figure 7. Mezcal and Tequila as advertized online. El Palacio de Hierro, Mexico City. **Notes:** Rested mezcal "semillero" (750 ml) and rested tequila Jose Cuervo Traditional (950 ml). El Palacio de Hierro's web site, gourmet department. December 30, 2009.

Current Situation

In a 2008 interview, the manager of El Tecuán indicated that one of the main difficulties the cooperative was facing was cohesion among their members. In addition, El Tecuán was struggling to increase its sales mainly because they had not been able to obtain labeling certification for all of their products by COMERCAM. Its semisweet product had not received the acceptance among consumers that had been expected. While members of El Tecuán were positive about the efforts by the System-Product Maguey-Mezcal to internationally market generic mezcal products, they were not fully participating in those benefits, as their products had not completed the registration process. Instead, they were focusing on sales in local markets.

The managers and leaders of El Tecuán, however, were confident that their efforts to modernize their distilleries would allow them to obtain the appropriate certification in order to export their products in the near future. They already had contacts with prospective customers outside Mexico. Finally, financing for working capital requirements was reported as a necessity.

Conclusion

The reorganization of the industry mezcal following the appellation of origin protection granted to Mexico by the World Intellectual Property Organization is analyzed in this article. Although appellations of origin have been referred to as conveying collective monopoly rights, appellations are not guarantee of success. In fact, the total number of appellation of origin

protections granted by the WIPO is rather high compared to the successful appellations. The challenges to capture the rents embedded in an appellation are not trivial.

One of the main challenges mezcal firms faced in the last fifteen years is the reorganization of the supply chain. This has been led in part by the Mexican government through the establishment of mechanisms to protect the appellation and to coordinate the industry efforts through the National Committee of Mezcal. In addition, mezcal producers have found new ways of organization to achieve cohesion to succeed not as individual firms but as an industry. All this has come with some costs. Supply chain reorganization is accompanied by distress of firms, especially because mezcal production and bottling take place in one of the poorest areas of Mexico with rural mezcal producers lacking the best technology and management and marketing skills. Without the support by the Mexican government to the mezcal industry capturing the opportunities of the appellation would be very difficult.

As of the end of 2009 we find positive signals for the potential success of this industry. The comparisons between mezcal and tequila –a successful appellation, show that the appellation mezcal is having the visibility tequila started to have after its appellation was granted. For instance, consumers' perception of mezcal as a low quality spirit has started to change due mainly to the marketing efforts coordinated by the National Committee of Mezcal. While in 2003 23% of consumers in Mexico perceived mezcal to be a high quality alcoholic beverage, by 2008 this number rose to 41%. This has allowed better distribution, better pricing, and the increase of sales of mezcal in Mexico and internationally. In addition, the mezcal industry has implemented a successful marketing strategy through product differentiation. Apart of the two types of mezcal protected, other mezcal categories have been launched and accepted by the market.

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