

SCOPE AND LIMITATIONS OF THE PROTECTED DESIGNATION OF ORIGIN FOR MEZCAL IN MEXICO

Esteban Salinas-García*, Jorge Víctor Alcaraz-Vera, Edith Sarai Durán-Tovar, Ruben Chávez-Rivera

Universidad Michoacana de San Nicolás de Hidalgo. Morelia, Michoacán, México. 58030.

*Corresponding author: 0732565b@umich.mx

ABSTRACT

To the extent that mezcal is commercialized, the micro, small, and medium businesses (MIPYMES for initials in Spanish) that produce this artisanal product, linked to diverse and heterogeneous practices that are more sustainable, are systematically and legitimately excluded from the management of plantations and agaves and the knowledge to elaborate the product under the Designation of Origin for Mezcal (DOM). It favors industrial production focused on capital accumulation and which responds to the demand, particularly of the international market. This designation of origin reflects the political and legal schemes that the Mexican State uses to legitimize the exclusion and transition from artisanal production to an industrialized production process. The objective of this essay, is to contribute to the discussion about the scope and limitations of the distinction-protected designation of Origin (PDO), whether it is a benefit or a detriment since although some states and regions belong to the designation, they do not show growth and much less local development. In any case, the benefits are obtained by brokers and promoters of the designation, with which they acquire the product at a low price and trade it in the international market at a higher price, transferring the economic benefits to other regions of the country.

Keywords: distinction, primary sector, producer.

INTRODUCTION

The PDO is a distinction used in Mexico to recognize a product initially from a specific region whose quality and characteristics are solely because of the environment where it is developed. Since it is a geographic indication with a close link to the place of origin, PDOs have generated a growing interest since they favor economic development and growth, particularly in marginalized localities that develop a specific activity. However, the question remains: Do PDOs benefit all producers? This study reviews the scope and limitations of the PDO of the mezcal industry sector in Mexico (Vega and Pérez, 2017). The PDOs are identified by natural and human factors of the environment (Foro Jurídico, 2022). This term also describes a regulatory mechanism of intellectual protection that connects a product with a historical and cultural tradition in a limited geographic space. In essence, the PDO is a form of economic, political, social, and environmental protection for social groups with the elaboration of the product in the protected region and its surroundings (Sekine, 2019). Other aims of PDOs, are to drive the economy of the regions, the stakeholders, the industries, the traders, and the consumers, although this stimulation can be unequal and, sometimes, conflicting (Domínguez, 2020).

Citation: Salinas-García E, Alcaraz-Vera JV, Durán-Tovar ES, Chávez-Rivera R. 2024. Scope and limitations of the protected designation of origin for mezcal in Mexico.

Agricultura, Sociedad y Desarrollo
<https://doi.org/10.22231/asyd.v21i1.1583>

ASyD 21(1): 51-63

Editor in Chief:
Dr. Benito Ramírez Valverde

Received: March 29, 2023.
Approved: June 1, 2023.

Estimated publication date:
December 14, 2023.

This work is licensed
under a Creative Commons
Attribution-Non-Commercial
4.0 International license.



According to Castellanos (2023), Mexico has 18 different products that have PDO, which are the following and are listed in function of the year when they obtained the designation: Tequila 1974, Mezcal 1994, Bacanora 2000, Charanda 2003, Sotol 2001, Raicilla 2019, Habanero chili pepper from the Yucatan Peninsula 2010, Amber from Chiapas 2003, Olinalá 1991, Coffee from Veracruz 1994, Coffee from Chiapas 2003, Mango Ataulfo from the Soconusco region in Chiapas 2003, Rice from the state of Morelos 2011, Talavera pottery 1997, Vanilla from Papantla 2009, Cacao from Grijalva 2016, Yahualica 2016, and Pluma coffee 2020.

The Mexican Institute for Industrial Property (Instituto Mexicano de la Propiedad Industrial, IMPI), states that the products with PDO are certified regarding their quality and can be traded better than similar products. In addition, the PDO fosters the conservation of local resources, drives the development of viable technologies for sustainable production, and generates training in elaborating qualified products that will transmit these techniques to the new generations. However, this essay focuses only on mezcal that has this international distinction, which is only given to products whose qualities and particularities are derived from a traditional and ancestral process of elaboration of this beverage in Mexico in a specific geographic region (Secretaría de Economía-SE, 2018). The formalization of aspects related to the protection of the DOM was carried out in November 1994, and a declaration was published in the Federation's Official Paper (Diario Oficial de la Federación, DOF) that included the states of Oaxaca, Durango, Guerrero, Zacatecas, and San Luis Potosí. Then, this protection was extended to the municipality of San Felipe in Estado de México, and by March 2003, it was granted to 11 municipalities in the state of Tamaulipas. In November 2012, it was extended to 29 municipalities of the state of Michoacán and San Luis de la Paz in Guanajuato. In October 2015, it was granted to Guanajuato and the state of Puebla (Plascencia and Peralta, 2018). Compared to most of the categories of liquors, small liquors have a better performance in terms of sales. Although the volume in 2020 decreased by 7.2% due to the pandemic, data from the International Wines and Spirits Record's (IWSR) Drinks Market Analysis showed an increase of 2.2% in value (Malczewski, 2021). This same organization predicts a compound annual growth rate (CAGR) of 8.8% in volume and 12% in value for 2021-2025. The United States (USA) is the primary market for mezcal exports, and the best year has been 2020, with an increase of 14.5% in volume and 19.1% in value. Jon Darby, founder of Sin Gusano, mentions that if you consider that an increase in sales is something positive, then the mezcal category is functioning quite well (IWSR, 2022).

Thus, in this essay, we suggest as objective the scope and limitations of the PDO, considering that as a result of managing and belonging to an area with PDO, there are improvements and benefits for the producers and development of the region and that this distinction implies having technical, administrative and legal knowledge; however, if these are lacking, far from being an advantage the PDO could be the opposite (Hernández, 2018).

Generalities of the mezcal product

This alcoholic beverage, originally from Mexico, is experiencing fast growth and becoming increasingly exclusive as it advances (Pérez *et al.*, 2016). A greater interest has been awakened, and the education around this category is improving. However, together with this success, a series of challenges have emerged. In the first place, practical considerations must be addressed due to the growing demand, which can generate sustainability problems. The leading global stakeholders of the alcoholic beverages industry are becoming increasingly involved, and there have been advantages such as increased production, greater efficiency in the productive process, higher quality control, access to new markets, and the generation of more jobs. There are also disadvantages such as the loss of quality and authenticity of the product, less variety of flavors, negative impact on the economy in local communities, higher environmental impact, and loss of the cultural connection, which implies at the same time, the disappearance of ancestral knowledge (Camacho *et al.*, 2021). In addition, many policies must be considered, together with changes in the certification processes of the beverages (Álvarez and Mercado, 2022). Lastly, although not less important, there is the impact of a global pandemic on the industry.

According to experts, the main strength of mezcal that drives this growth is the liquid in itself. Tanya Clarke, executive director of The Lost Explorer Mezcal Company, mentions that the depth and variety of flavors among mezcals contribute significantly to their growing popularity. People are starting to understand the category's complexity and realize that mezcal is much more than simply the smoked cousin of tequila (Kiely, 2021). These innate qualities imply that, unlike other categories, there is not the same drive to create new styles and expressions.

Small-scale producers, have gradually perfected their ability over generations by using only ingredients and technologies available in the locality. According to David Shepherd, founder of Corte Vetusto, there has been an increase in interest in wild agaves and mixtures or combinations. For him, these are the most exciting and sustainable options for mezcal since they allow for honoring traditional production practices where any available mature agave at the time was used and also to incorporate the flavors of wild agave reflexively (Inka, 2021). The interest in wild agaves is generating a growing approach to sustainability. For Carlos Moreno, founder of Koch El Mezcal, it is crucial to consider ecological aspects, and he has implemented various practices in his company to stop deforestation, conserve biodiversity, recycle byproducts, and use organic crops. However, it is also essential to consider the tradition and culture of mezcal. Koch is committed to preserving the mezcal culture and continues to learn from mezcal masters and producers (Koch El Mezcal, 2023). It is essential to highlight this within the context of the growing presence of multinational companies of spirit drinks in the category, representing more than 75% of the production and commercialization. Vera (2023), president of the Mezcal Oaxaca Cluster, a group of brands that work to promote and protect the category, also points out that there are many implications, one of which is that the minor players cannot compete against the large companies in the industry. He adds that a trend is emerging toward the concentration of a

few brands, similar to what has happened in the tequila industry. He mentions that there are possible benefits to investing in the category. However, he also warns that it is essential that the mezcal-producing community also benefit from this investment and growth, a vision that we share entirely.

2020, was a complicated period for the DOM due to internal and political changes. According to Vera, the monopoly of the Mezcal Regulating Council (Consejo Regulador del Mezcal, CRM), the agency in charge of certifying mezcal, no longer exists, which has provoked a process many have considered chaotic. However, things are settling down, and now five organizations can issue holograms and export certificates. Two have headquarters in Oaxaca, two in Michoacán, and one in Mexico City.

For a long time, mezcal producers have expressed dissatisfaction with the certification for mezcal by a single agency due to its processes and, in particular, the prices. The monopoly was unhealthy and harmed certain regions, smaller brands, and the category as a whole. The openness to other organizations should foster greater competition, reduce costs, and accelerate the procedures of signing and approval (Álvarez and Mercado, 2021; Foro Jurídico, 2022). Although some still have uncertainty regarding the restrictions that the designation of origin has in general, there is complexity due to Mexico's size and diversity, making it impossible to cover all types of agave alcohols produced in the country under the current PDO structure. However, the mezcal that can be certified for export does not represent all available varieties (Neri, 2018).

The PDO distinction for the mezcal and the relative advantages to its designation of origin

Creating a PDO, implies forming a regulating council in charge of supervising the quality of a product, in this case, mezcal. This council ensures that certain aspects are fulfilled, such as the geographic zone, the elements that verify the product's origin and properties, and the description of the elaboration process, among other aspects, which justify creating the regulations that protect the product. It is similar to Europe, where several PDOs could be created for wine as long as the requirements are fulfilled. However, in Mexico, all types of mezcal have been grouped into a single DOM, although the new version of the regulations recognizes that there are three different categories: artisanal, ancestral, and produced with machinery or more sophisticated techniques (Palma *et al.*, 2016).

The PDOs differentiate and give added value to the products, in addition to helping consumers since they provide guarantees regarding the quality of products to potential and frequent clients, both in the local, national, and international markets; they have comparative advantages by promoting alliances and associations of small and medium businesses, and the export of different specialties, all of which generates a multiplying effect in the production zones or regions (Viscarra, 2021; Hernández, 2018). Rodríguez (2007) points out that the PDO is a form of regulation, certification, and commercial protection, legal and symbolic, as well as the regulatory framework required to maintain its legitimate specificity, quality, and prestige to improve its position in the market.

The PDO has also acquired much importance in international trade due to its growing use as an instrument of promotion for exports of native products from specific countries or regions. Therefore, it can be stated that all PDOs are indications of origin, but not all indications of origin are PDOs, as it happens in the mezcal-producing regions of Mexico (Viscarra, 2021). At the national and international level, they constitute a means of defense for the consumer in the commercial sphere and become added value. The exclusivity to export and trade products with high-quality standards is obtained when obtaining the PDO. It helps the product become competitive in the international market and generates greater consumption, which translates into higher producer income (Camacho *et al.*, 2021; Ceballos and García, 2013).

Product of globalization and integration processes of countries through international trade, the PDO adds value to the product and makes it more attractive for the different markets; in addition, it allows the country to obtain higher productivity and competitiveness. Next, two reasons are presented to protect the product through the PDO (Mitelman, 2000):

- a) To protect the public against deceitful practices: If a designation is used for products not originally from the appropriate geographic zone, the consumers will be deceived into believing that the corresponding product is elaborated in the zone.
- b) To guide entrepreneurs who suffer the risk of the designation becoming the product's generic name. The set of makers located in the product's place of origin has the right to keep the sign from being used to designate a product that does not come from the designated geographic region and has not resulted from natural and human factors characteristic of the region.

The World Intellectual Property Organization (WIPO), aims to lead the creation of a global intellectual property system that effectively promotes innovation and creativity for the benefit of society. Established by the organization in 1967, the WIPO Agreement defines its mandate, directive agencies, and operative procedures (OMPI, 2020). Various international regulations protect the designations, among them the Lisbon Agreement (1958), that was originated from the Paris Agreement for the Protection of Industrial Property (1883), the Madrid Agreement (1891), the GATT/ADPIC Agreement (1995), and also the particular commercial agreements of each country (Ceballos and García, 2013).

The IMPI, is the principal administrative agency in charge of industrial property in Mexico. As such, it has the authority to issue declarations of copyright protection and authorize their use, as well as process and grant brand registries. These faculties are derived from Title V, Chapters I and II of the Industrial Property Law (Ley de la Propiedad Industrial, LPI), based on what Viscarra (2021) explained. In some zones of the country, mezcal is an article that has a protected DOM, and the CRM is responsible for protecting it. The CRM ensures that the rules related to the production or distillation, bottling, branding, and sale of mezcal are fulfilled, and the federal Mexican government approves it as an agency in charge of assessing compliance. Within the many services offered by the CRM, there are the following (CRM, 2023):

The certification of agave requires adequate traceability, which implies thoroughly examining the origin of raw materials, processes applied to the product, distribution, and location after the delivery, as well as the origin of all the agaves. At this point, the verification unit (person or group of people who perform verification acts of the Mexican Official Norms, NOMs) begins their activities. For a mezcal production to be certified, there must be a certificate issued by the certification unit (which is an organization that ensures the correct compliance of the norms to grant a certificate or pronouncement); this unit is responsible for activities that range from certifying the granel (liquid mezcal) to the certificates of exports. It is also necessary for each bottle to have a hologram issued by the certification unit. Reviewing the logs is a fundamental activity since the traceability of the entire process from cultivation to sale must be verified, and the hologram logs, finished product, and graneles, among others, must be reviewed. The CRM verifiers tend to conduct visits to the members' facilities to guarantee the traceability of each activity performed in the different companies. In addition, the CRM frequently offers training to members and external people interested in learning to certify their mezcal (Consejo Mexicano Regulador de la Calidad del Mezcal A.C. [COMERCAM], 2022).

The organizational needs around the PDOs

To guarantee the permanence of the distinction, the Mexican Regulating Council for Mezcal Quality (Consejo Mexicano Regulador de la Calidad del Mezcal, COMERCAM) was established as a civil association on December 12, 1997. The main objective of COMERCAM, is to be the organization in charge of certifying mezcal in Mexico based on specifications established by the NOM-70-SCFI-1994, Bebidas Alcohólicas-Mezcal Especificaciones. This document is the guiding foundation of the association and establishes, in general terms, that the beverage can be elaborated from any species of the Agavaceae genus. However, it is crucial to highlight places where agave alcohols are elaborated outside the states mentioned (Colunga *et al.*, 2006).

Years later, COMERCAM attained its accreditation as a certification organization through the Mexican Accreditation Entity (Entidad Mexicana de Acreditación, A.C.) and the approval of the General Regulations Direction (Dirección General de Reglas, DGN) and also formally began its activities for mezcal certification in October 2013 (García, 2020). Later, in 2017, the NOM-070-SCFI-2016 on Specifications for Alcoholic Beverages-Mezcal was published in the DOF (2017). This regulation, centered on mezcal, establishes its definition and classification in different categories. The norm is an updated version published in 1994 when the Mexican State declared the DOM and took control. The proposal of this regulation emphasizes the following related aspects, from the production of the input to the final stage of the product (Vera, 2023):

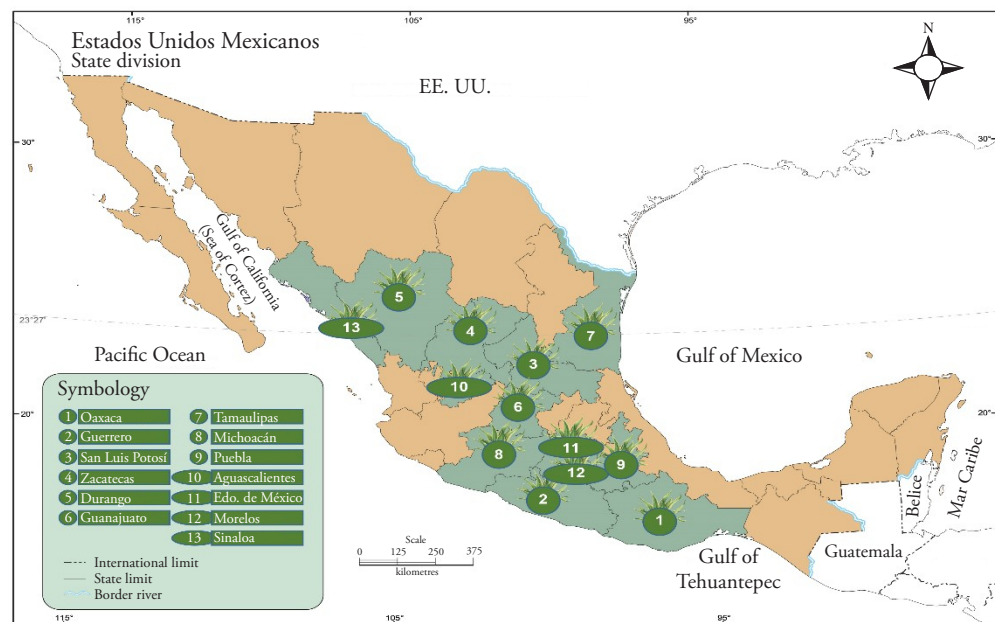
For the PDO: limiting the production or harvest of agaves in some municipalities of several states of the country.

For mezcal production, practically any type of agave, cultivated or harvested, can be used without losing sight of the place of origin.

Regarding the traditional or artisanal process, with the participation of the mezcal master in this process, the ones that stand out are magüey or agave cooking, grinding, fermentation, and distilling.

Bottling and labeling: where the most significant emphasis is placed on government control. Since the publication of the DOF in 1994, when measures for the protection of the DOM were established, various modifications have been performed to the territory covered by this geographic indication. Likewise, the distinction between mezcal at 100% and mixed mezcal has been considered, and the existence of three categories of mezcal has been recognized: Artisanal, Ancestral, and Industrialized mezcal. These changes have taken place since then and until today. Figure 1, shows the map of the Mexican Republic presenting the states that have the DOM.

When it comes to the phases of mezcal elaboration, such as cooking, maceration, fermentation, and distilling, regional differences influence the final result. Although the DOM currently includes municipalities from 13 states of the Republic, more than 13 regions can be identified with unique characteristics in producing mezcal (Hernández, 2018). Of the 13 states with the PDO, Oaxaca is the leading producer, followed by Michoacán, and together, they represent more than 90% of certified production. However, it is essential to consider that only the certified mezcal that complies with the regulations of the PDO is counted, and the mezcal that is not attached to the CRM does not appear in these figures. It means that even having been in production for years, there is a mezcal that could be classified otherwise.



Source: prepared by the authors based on INEGI (2023) and Castellanos (2023).
Figure 1. States in Mexico with DOM.

Disadvantages associated with the process of the Official Norm for PDOs

In 2015, the proposal of the NOM 199 would suggest that mezcal and tequila without certification could be legally classified as “komiles” and they would be forbidden from using the term “agave.” Since they are not standardized, they could threaten health because they are informal and clandestine products. It is paradoxical since the fact that producers could decide not to subscribe to the PDO or to participate in the CRM does not mean that their product is of lesser quality, much less that their production is clandestine (Núñez, 2018).

In August 2017, the IMPI decided against including certain municipalities from Aguascalientes in the Declaration; this decision increased the number of states to 13. It has led to Geographic Indications becoming generic protections, where the history, culture, and geography (the biocultural) are not so important anymore to distinguish the products, which goes against the essence of a Geographic Indication. If, for example, a tequila produced with agave from the coastal zone of Puerto Vallarta, Jalisco, and one from the Sierra zone are considered the same, then the geographic indication is not representative (Hernández, 2018).

It has led to situations where the PDOs fictionally distinguish the products, and the saturation in the market impedes the appraisal of the natural attributes and qualities. Many products that are promoted under this commercial strategy are relatively common. In contrast, others with notable characteristics go unnoticed because they must adjust to normative, administrative, and bureaucratic standards designed for large-scale industries and producers. It leaves small-scale producers at a disadvantage since they need economic resources or the necessary mechanisms to comply with all the requirements demanded. When they decide to acquire specific machinery and equipment to improve their productivity, they do it via loans to financial institutions that eventually become an expenditure for small-scale producers and not necessarily an economic benefit in the medium and long term. It should be pointed out that small-scale farmers are the basis of the industry (González *et al.*, 2020).

The problem of anonymity presents a difficulty in two aspects. On the one hand, the producers who decide not to sign up in the registry of producers with DOM are considered clandestine or informal by those who do sign up, and in some cases, they are labeled as illegal. The point is to comply with administrative procedures to satisfy the market's needs. However, in reality, this practice excludes many creative producers from the market who try to maintain the tradition and carry out sustainable production.

It could be said that the DOM is more similar in theory to a Geographic Production Indicator (GPI) than to a PDO in the strict sense since when it is analyzed at the local and regional level, such a broad PDO does not adequately represent the particularities and identity values of certified beverages, or of those that have not yet accepted that the State determines the quality of their products or makes them into quality products

simply because they have a PDO. Therefore, it is better to consider the expansion of a Generic Geographic Indication (GGI) for mezcal for the states of the Republic with a historical background of agave growing and production of this beverage. Once this has been achieved, work should be done on creating regional DOMs to highlight the particularities that define Mexican mezcal diversity (Neri, 2018).

Neri mentions that establishing mezcal categories according to the materials, instruments, or technologies used could disadvantage local knowledge and ecological practices, favoring the large industrial consortia of alcoholic beverages. While a rural productive unit integrated by family members could hardly acquire advanced technology to produce mezcal of high category, an industrial business can easily purchase the materials and establish its production in rural zones of Oaxaca, Guerrero, or elsewhere.

Although this could seem to be an opportunity from the entrepreneurial perspective, if we consider local development and the public policies to foster care for the environment and to strengthen the local identity and culture, this measure could provoke uprooting of the local population and move increasingly away from the elements that the DOM seeks to generate. Instead of strengthening the cultural practices and the society-nature relationship, a distinctly market logic would be favored without worrying the creators and the autochthonous value of the production region.

Implications and experiences with the DOMs–Designations of Origin for Mezcal

Based on those above, a less exclusive alternative is suggested instead of an extensive DOM centered in a ruling nucleus. In its place, they could opt for a more generic DOM that does not discriminate against any producer and allows all producers' participation in the country. In addition, the creation of local proposals to collaborate with producers to preserve their biological culture is proposed to improve their competitiveness in the market. It would be a transition towards small regional DOMs in the hands of producers instead of the State. However, a necessary relationship would be maintained with it to access international trade (Vanhaute, 2021).

In this sense, the DOM regions require their regulations and participatory certifications based on trust and mutual support of the entire sector to guarantee that they all benefit and that producers of different sizes (micro, small, medium, and large) have the same opportunities for participation. An example of this is the route that small-scale producers from Guerrero are following with participatory agroecological certifications. Although this alternative could become a generalized practice, it is essential to take advantage of the opportunity that the new regulations offer to broaden the definition of artisanal and ancestral beverages and to avoid them being considered second-category beverages (Arellano *et al.*, 2022).

Few producers decide to certify their production because the prices they receive are similar to those of the certified product. However, the protection mechanism could be exploited by large national and transnational companies, as seen in the case of tequila, which also

happens with mezcal, resulting in the exclusion of traditional producers from regions with a long mezcal history. In addition, producers with a long tradition and a rich culture could be segregated, excluded, and even legally prosecuted due to the existing regulations, which reproduce social power inequalities.

In the market of national beverages, the national bottling companies are the ones that dominate, with some connections with businesses and international circuits. In most areas with the DOM, bottling businesses have control over the volume and characteristics of the production, both the producers certified by the CRM and those unregulated. Since the beginning of the mezcal peak, the bottling businesses have consolidated their influence on the productive systems due to their direct connection with markets of higher purchasing power.

The normativity controlled by the CRM greatly favors the intermediaries, leaving aside the needs of the small and medium-sized mezcal-producing businesses, according to what was described by Camacho-Vera *et al.* in 2021. Therefore, the DOM can be seen as a tool that hinders rather than helps the market since, to request and belong to a DOM zone, the authorities demand compliance with specific requirements, procedures, and directives that producers do not entirely understand. An example of this, can be seen in the essential manual for registration and certification from COMERCAM, where initially a series of requirements were established to be registered in COMERCAM, as well as additional requirements for the certification process as nursery keepers, specific requirements to be recognized as mezcal producer, requirements to cover in order to be allowed to bottle the products, documents to present in order to become a trader, and the laboratories outsourced by COMERCAM to carry out laboratory tests and assessments for the compliance of the NOM are also specified. Ultimately, these requirements must be covered for the commercialization of mezcal. They must be conducted with the Federal Commission for the Protection against Sanitary Risks (Comisión Federal para la Protección contra Riesgos Sanitarios, COFEPRIS), in addition to the 32-D format, opinion of fiscal obligations from the Tax Administration Service (Sistema de Administración Tributaria, SAT), SAT alcoholic beverage registry, and an application for labels and the exporters' sectorial registry (COMERCAM, 2022).

It creates distrust, and producers prefer to continue working as they have been. An example is the mezcal producers from Oaxaca and Michoacán, who argue that the DOM does not benefit small-scale producers but favors large companies that can comply with the requirements and have greater decision power over the product. In addition, the intermediaries that purchase the product and have the economic capacity to label it can increase the price and greatly benefit (Salinas, 2021).

In addition, the producers argue that the DOM has been presented as a tool to improve the conditions of small-scale producers, but in reality, they are the last to learn about the certification. They consider this unjust and illogical, which is one reason they do not want to participate in the integration process. They feel they have been marginalized from the beginning and that the DOM has not brought them any benefits. Therefore, there is no

interest in joining a region with DOM since there is no development in their communities or direct benefits for the producers. Consequently, the producers believe that the DOM is an instrument that only benefits large-scale producers (Salinas, 2021).

CONCLUSIONS

The DOM's commercial strategy aims to increase the income of mezcal producers to sell their products in national and international markets. However, in agreement with Palma *et al.* (2016) and Salinas (2021), many mezcal producers in small communities of important producing states in the country, such as Oaxaca and Michoacán, do not have their factories but instead ask for it as a loan, which limits their capacity to carry out administrative or operative procedures. Other producers in these same states or others that attempt national trade face a large number of requirements from the Ministry of Finance (Secretaría de Hacienda y Crédito Público, SHCP), which implicates a large number of procedures to obtain a label or comply with the requirements to place their product in the market (*ibid.*).

Although the DOM standardizes the process in theory, producers must spend significant expenditures to comply with the regulations, which is difficult for those lacking more knowledge and financial resources. The effects of this strategy and the competition from the State have affected the mezcal industry since long-term production has focused on Oaxaca, which is controlled by a small group of large-scale producers that work in partnership.

Until now, the implementation of the DOM as a commercial strategy has not benefitted most of the mezcal producers in the country, especially micro-entrepreneurs (Salinas, 2021; Hernández, 2018). On the contrary, we agree with Camacho-Vera *et al.* (2021) in that more problems have been generated at the time of selling their product since adhering to the NOM-070-SCFI-1994 implies following more complicated and costly production processes, in addition to dealing with the high costs of the administrative management, the complex paperwork, and the lack of knowledge in accounting and administrative topics.

REFERENCIAS

- Álvarez DA, Mercado P. 2022. Contextualización teórica de la denominación de origen del mezcal en el Estado de México en el marco del control social de las organizaciones. *Región y sociedad*. 34. 1-26. <https://doi.org/10.22198/rys2022/34/1676>
- Arellano-Plaza, M Páez-Lerma JB, Soto-Cruz NO, Kir-chmayr M, Gschaedler A. 2022. Mezcal Production in Mexico: Between Tradition and Commercial Exploitation. *Frontiers in Sustainable Food Systems*. 6. 1-16. Doi: 10.3389/fsufs.2022.832532.
- Camacho-Vera JH, Durán-Ferman P, Vargas-Canales JM. 2021. Complejidad y trayectoria del sistema productivo mezcal en la sierra sur de Oaxaca, México. *Revista de Ciencias Sociales*. RCS. 27(4). 76-92. <https://doi.org/10.31876/rsc.v27i4.37235>.
- Castellanos JA. 2023. La denominación de origen del mezcal y crecimiento del sector. *Mezcal Cuanax*. <https://cuanaxmezcal.com.mx/denominacion-de-origen-del-mezcal/>.
- Ceballos R, García I. 2013. Protección legal de las denominaciones de origen y las marcas frente a los TLC suscritos por Colombia. *Prolegómenos*. *Derecho y Valores*. 16(32). 175-189. <http://www.scielo.org/co/>

- pdf/prole/v16n32/v16n32a11.pdf.
- Colunga-García-Marín SP. 2006. Base de datos de nombres técnicos o de uso común de los agaves en México. Base de datos. Centro de Investigación Científica de Yucatán A. C. México, D.F. México. <https://www.snib.mx/iptconabio/resource?r=SNIB-CS007#:~:text=Description-,El%20g%C3%A9nero%20Agave%2C%20al%20igual%20que%20toda%20la%20familia%20Agavaceae,por%20lo%20menos%209%2C000%20a%C3%B1os>.
- COMERCAM. 2022. Manual Básico para Inscripción y Certificación ante COMERCAM. <https://comercam-dom.org.mx/wp-content/uploads/2022/11/DC-02-R11-Manual-basico-para-inscripcion-y-certificacion-ante-COMERCAM.pdf>.
- Domínguez DR. 2020. Construcción de un signo de calidad: la lucha por la geografía de la Denominación de Origen Mezcal en México. *Veredas. Revista del Pensamiento Sociológico*. (41). 102-125. <https://veredasojs.xoc.uam.mx/index.php/veredas/article/view/633>.
- Foro Jurídico. 2022. Denominaciones de Origen y su legislación en México. Foro Jurídico. <https://forojuridico.mx/denominaciones-de-origen-y-su-legislacion-en-mexico/>.
- García D. 2020. La modernización de la tradición. Algunos apuntes sobre la producción de mezcal. *Estudios Sociales. Revista de Alimentación Contemporánea y Desarrollo Regional*. 31(57). 1-35. <https://www.ciad.mx/estudiosociales/index.php/es/article/view/1065/643>.
- González HO, Hernández JJ, Giersiepen JH. 2020. Metanol: tolerancias y exigencias en las normas para mezcal y bebidas de agave. *Revista Iberoamericana de Viticultura, Agroindustria y Ruralidad. RIVAR*. 7(19). 1-21. https://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0719-49942020000100001
- Hernández J de J. 2018. El mezcal como patrimonio so-cial: de indicaciones geográficas genéricas a denominaciones de origen regionales. *Em Questão*. 24(2). 404-433. <https://www.redalyc.org/journal/4656/465655178022/465655178022.pdf>.
- SE (Secretaría de Economía). 2018. México ya tiene 16 Denominaciones de Origen. Gobierno de México. <https://www.gob.mx/se/articulos/mexico-cuenta-con-16-denominaciones-de-origen#:~:text=En%20la%20actualidad%2C%20M%C3%A9xico%20posee,su%20sabor%2C%20prestigio%20y%20calidad>.
- INEGI (Instituto Nacional de Estadística y Geografía). 2023. Sistemas de Consulta. Mapas. <https://www.inegi.org.mx/app/mapas/>.
- Inka L. 2021. Mezcal Categories Explained: Ancestral Mezcal vs Artisanal Mezcal. *On the Sauce Again*. <https://onthesauceagain.com/2021/10/19/mezcal-categories-ancestral-mezcal-artisanal-mezcal/>.
- IWSR (International Wine and Spirits Research). 2022. No- and low-alcohol category value surpasses \$11bn in 2022. <https://www.theiwsr.com/no-and-low-alcohol-category-value-surpasses-11bn-in-2022/>.
- Kiely M. 2021. The Lost Explorer Mezcal finds its place in the world. *The Spirits Business*. <https://www.thespiritsbusiness.com/2021/09/the-lost-explorer-mezcal-finds-its-place-in-the-world/>.
- Koch El Mezcal. 2023. Somos el guardián que preserva y reúne. <https://mezcalkoch.com/>.
- Malczewski K. 2021. Mezcal value climbs in 2020. *The Spirits Business*. <https://www.thespiritsbusiness.com/2021/06/mezcal-value-climbs-in-2020/>.
- Mezcal.Top. 2023. Todo lo que tienes que saber sobre el Consejo Regulador del Mezcal en este 2023. <https://mezcal.top/consejo-regulador-del-mezcal/>.
- Mitelman CO. 2000. Denominaciones de Origen. Obligado and Cía. http://www.obligado.com.ar/pdfs/denominacion_de_origen.pdf.
- Neri F. 2018. Propuesta de mejora en la producción de mezcal en el zapote, Malinalco, Estado de México. Tesis de Maestría, Universidad Autónoma del Estado de México, Toluca, 11 de Diciembre de 2018. Repositorio Institucional de la Universidad Autónoma del Estado de México. <http://hdl.handle.net/20.500.11799/99277>.
- NOM (Norma Oficial Mexicana). 1994. Bebidas alcohólicas-Mezcal-Especificaciones, https://dof.gob.mx/nota_detalle.php?codigo=4729420&fecha=17/08/1994#gsc.tab=0.
- NOM (Norma Oficial Mexicana). 2017. Bebidas alcohólicas-Mezcal-Especificaciones, https://dof.gob.mx/nota_detalle.php?codigo=5472787&fecha=23/02/2017#gsc.tab=0.
- Núñez-Hernández A. 2018. La construcción de nichos alternos en el mercado de las bebidas espirituosas en México: los destilados de agave excluidos de las Denominaciones de Origen Mezcal y Tequila. *In: Saberes de origen: experiencias de México y Centroamérica*, 1a ed; Pérez P, González AA, Picado W (coords); Editor: Universidad Nacional Autónoma de México, Ciudad de México, México. https://www.researchgate.net/profile/Pablo-Perez-Akaki/publication/324543579_SABERES_DE_ORIGEN_Experiencias_de_Mexico_y_Centroamerica/links/5af113fbaca272bf425578f2/SABERES-DE-ORIGEN-

- Experiencias-de-Mexico-y-Centroamerica.pdf?origin=publicationDetail&_sg%5B0%5D=I5lb2e84pjJ_xpLc96GpkSY87xELwX31OiUFRuosJJf-ZiKk_GjLwMZ4qQ-a6CqY0pYZkGH86I2nQ2Ht5Tq_Q.T737F5NeV019D15eOSppyJpf_w-B_-6B6O6Pr3k7Uk0CSVlu-wddFmPdLSrGpgzmiotajTKfjnmE-Cwx_gFinmg&_sg%5B1%5D=YvfunZ-KUOj-Bvo8mpvZRQqel76ie07wji-dPub60lyDMwee8VfC4.pp: 305-322.
- OMPI (Organización Mundial de la Propiedad Industrial). 2020. Ética e Innovación Oficina de ética profesional de la OMPI: 10 años, OMPI: Ginebra, Suiza, 2020; https://www.wipo.int/edocs/pubdocs/es/wipo_pub_1072.pdf. pp: 72-74.
- Palma F, Pérez P, Meza V. 2016. Diagnóstico de la Cadena de Valor Mezcal en las Regiones de Oaxaca. <https://www.oaxaca.gob.mx/coplade/wp-content/uploads/sites/29/2017/04/Perfiles/AnexosPerfiles/6.%20CV%20MEZCAL.pdf>.
- Pérez E, Chávez M, González JC. 2016. Revisión del agave y el mezcal. *Revista Colombiana de Biotecnología*. Rev. Colomb. Biotecnol. 18(1). 148-164. <http://www.scielo.org.co/pdf/biote/v18n1/v18n1a16.pdf>.
- Plascencia de la Torre MF, Peralta LM. 2018. Análisis histórico de los mezcales y su situación actual desde una perspectiva ecomarxista. *EUTOPÍA Revista de Desarrollo Económico Territorial*. (14). 23-42. <https://revistas.flacsoandes.edu.ec/eutopia/article/view/3579/2545>.
- Rodríguez G. 2007. La denominación de origen del tequila: pugnas de poder y la construcción de la especificidad sociocultural del agave azul. *Nueva an-tropología*. 20(67). 141-171. https://www.scielo.org.mx/scielo.php?pid=S0185-06362007000100007&script=sci_abstract
- Salinas E. 2021. Análisis de la competitividad exportadora de las MIPyMES productoras de mezcal, ubicadas en los estados de Oaxaca y Michoacán, México, hacia el mercado de los Estados Unidos. Tesis de Maestría, Universidad Michoacana de San Nicolás de Hidalgo, Morelia, 28 de mayo de 2021. Repositorio Institucional de la Universidad Michoacana de San Nicolás de Hidalgo. http://bibliotecavirtual.dgb.umich.mx:8083/xmlui/handle/DGB_UMICH/6467SE (Secretaría de Economía). 2018. México ya tiene 16 Denominaciones de Origen. www.gob.mx: <https://www.gob.mx/imp/ articulos/mexico-ya-tiene-16-denominaciones-de-origen?idiom=es>
- Sekine K. 2019. The impact of geographical indications on the power relations between producers and agri-food corporations. *In: Geographical Indication and Global Agri-food*, 1st. Ed.; Bonanno A, Sekine K, Feuer HN (eds); Routledge: London, United Kingdom, 2019; <https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9780429470905-6/impact-geographical-indications-power-relations-producers-agri-food-corporations-kae-sekine>. pp: 54-69.
- Vanhaute E. 2021. *Peasants in World History*, 1st. Ed.; Routledge:New York, United States, 2021; <https://www.routledge.com/Peasants-in-World-History/Vanhaute/p/book/9780415740944#>. pp: 1-20.
- Vega, N. y Pérez, P. 2017. Oaxaca y sus regiones productoras de mezcal: Un análisis desde cadenas globales de valor. *Perspectivas Rurales Nueva Época*. 15(29). 103-132. <https://www.revistas.una.ac.cr/index.php/perspectivasrurales/article/view/9286>.
- Vera J. 2023. El mezcal oaxaqueño. *Convite mezcal premium*. <https://convitemezcal.com/dr-jorge-vera-el-mezcal-oaxaqueño/>.
- Viscarra, S. 2021. Valor agregado y protección legal de las bebidas alcohólicas mexicanas con denominación de origen en mercados internacionales. *Divulgación Económica*. 1(1). 38-60. <http://economistastam.org/wp-content/uploads/2021/04/Valor-agregado-y-proteccion-legal-de-las-bebidas-alcoholicas-mexicanas-con-denominacion-de-origen-en-mercados-internacionales%5E.pdf>.