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TITLE:

***INTERNATIONALIZATION PLAN FOR AGAVE LIQUOR PRODUCERS
FROM THE CANTON OF NABÓN “DON CAPELO” & “DON ISAAC”.***

**GRADUATION WORK PRIOR TO OBTAINING BACHELOR’S DEGREE
IN INTERNATIONAL STUDIES WITH BILINGUAL MENTION IN
FOREIGN TRADE.**

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DEDICATIONS

“For those who represented an obstacle, but especially for those who were a support during this university journey”

It is dedicated to every challenge that has allowed me to learn, define myself, persevere and appreciate those around me. A great emphasis to my family that has been the most important component during these 5 years. To life itself, to all those moments of happiness, love and laughter.

Andrés Viteri Viteri

“Satisfaction lies in the effort, not in the attainment, full effort is full victory”
Mahatma Gandhi.

I dedicate this full victory to God and my parents. God has always given me the strength to fight and not give up until I achieve each of the goals that I have set for myself; I firmly believe that He takes my life beyond my dreams. My parents have taught me what perseverance, dedication and strength mean, besides teaching me the values that define my life today. Finally, I dedicate this graduation work to each person who was part of my university life with whom I was able to share great experiences that gave meaning to it.

Belén Proaño Ugalde

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ABSTRACT

The village of Nabón located in the province of Azuay, keeps an ancestral knowledge that has been maintained for decades thanks to the artisans of the community who have known how to practice and transmit their knowledge to future generations. That ancestral process consists of the extraction of pulque from the *penco*, which is used to make agave liquor or known colloquially as “*chaguarmishqui*”. Currently, the producers from Nabón “Don Capelo” and “Don Isaac” have the objective of crossing borders in order for their product to be consumed in other markets, specifically in the US market. For this, based on theoretical, descriptive and field research, it was possible to analyze the macro and micro environment of the producers and the market, in order to execute possible strategies for the export and internationalization of the product.

Keywords: Nabón, liquor, agave, *penco*, internationalization, marketing.

RESUMEN

El cantón Nabón ubicado en la provincia del Azuay, guarda un conocimiento ancestral que se ha mantenido durante décadas gracias a los artesanos de la comunidad que han sabido practicar y transmitir sus conocimientos hacia futuras generaciones, dicho proceso ancestral consiste en la extracción de pulque del *penco*, mismo que se utiliza para la elaboración de licor de agave o conocido coloquialmente como *chaguarmishqui*. Actualmente los productores de Nabón, “Don Capelo” y “Don Isaac” tienen como objetivo traspasar fronteras con el fin de que su producto sea consumido en otros mercados, específicamente en el mercado estadounidense. Para ello, en base a investigaciones teóricas, descriptivas y de campo, se analizó el macro y micro entorno de los productores y del mercado, con el fin de ejecutar posibles estrategias para la exportación e internacionalización del producto.

Palabras claves: Nabón, licor, agave, *penco*, internacionalización, marketing.

INTRODUCTION

Ecuador, despite having native agaves in its territory, lacks information, studies and research on this plant and the alcoholic beverages that can be produced from it. Therefore, in Ecuador the production of agave liquor is carried out in an artisanal way following production processes that have been transmitted from generation to generation. However, the sector has been in decline for a long time, due to a lack of interest, investment, modernization and professional support, which has resulted in a neglected sector despite having a very high potential for exploitation.

However, it is a reality that in the last five years a great interest in the culture of the Ecuadorian agave has been awakened. There are already companies that are exclusively dedicated to exporting Ecuadorian agave distillates to foreign markets, besides public and private initiatives that together they seek to turn agave liquor into one of the national symbol drinks. In this way, our thesis aims to deepen, root and highlight the artisanal production of agave liquor in the Nabón canton, in addition to recognizing the value of the activity carried out by artisan producers in the elaboration of these alcoholic beverages derived from agave. Hence, we want to encourage and recognize the potential of a sector that, even without being exploited, already generates high expectations due to the unique characteristics that allow a wide differentiation with beverages from the same origin such as tequila, mezcal, among others.

Despite having a clear vision of what they want to do with their products, the agave liquor producers of Nabón, “Don Capelo” and “Don Isaac”, have found it difficult to execute some business ideas, including that of achieve an internationalization of their beverages. In this way, once we knew their situation, our main motivation was to design an internationalization plan that can serve as a guide for an eventual export. The plan is based on the theories of international trade, as well as those about the internationalization of small and medium-sized companies; it also takes into account both national and international legal aspects for the sale of alcohol in the United States, and additionally deepens and examines the agave culture in Ecuador by exposing clear differences with the Mexican agave.

CHAPTER 1.- THEORETICAL SUPPORT OF THE INTERNATIONALIZATION OF ECUADORIAN AGAVE LIQUOR.

1.1 Theories of foreign trade and competitiveness

Foreign trade in any nation must be oriented towards domestic supply, consolidation and diversification of export and import markets, in order to obtain fair and equitable terms of trade (Perón, 2019). The historical importance of international trade lies for more than four centuries of study as well as international finance, which began the study of the economy. Globalization has been a factor for countries to be related to each other; the industrialization processes of countries and the development of technology and communications have positioned international trade much more globally. Nowadays, it is very difficult to think of a country closed to international trade, since it would not have a sufficient supply of goods and services because economic development is strongly linked to international trade (Central Bank of Ecuador, 2016).

There have been several efforts by the States to maintain an equilibrium in the trade balance in which there is a large percentage of exports and imports. Over the years, the trade process has evolved in such a way that it has benefited the trade balance of the States, therefore, this research seeks to present a compilation of different theories of international trade in order to understand how countries trade with each other, besides the link that can be established between these theories and the Ecuadorian reality.

Before explaining these theories, it is necessary to understand what the causes of their emergence were, for which there are two questions that are closely linked. Why do countries trade? What are the effects of international trade on national production and consumption? For this, we distinguish two commercial currents related to economic and commercial doctrine: traditional theory and modern theory. The first one focuses on explaining the causes of trade by relating the differences that exist between countries, such as technology, knowledge, factor endowments, etc. The second one seeks to analyze a market of imperfect competition where fair and well-balanced

competition arises in order to guarantee a wide variety of goods and services (González Blanco, 2011).

When speaking about classical theory, we refer to Adam Smith, who in his work “An Inquiry into the Nature and Causes of the Wealth of Nations” of 1776, talks about how countries should act in the face of international trade. At the end of the 18th century Adam Smith investigated the causes of international trade trying to demonstrate the benefits of free trade. Smith argues that absolute advantage comes from one of the most important events in history, the industrial revolution, where the division of labor in international trade arose; this is, the specialization of a certain country in the manufacture of a product, compared to another country that could produce it less efficiently (Central Bank of Ecuador, 2016). In addition, Smith contended that the advantage of a country could be natural such as climate, geography, resource endowment; or acquired such as improvement of capacities, skills, knowledge, etc.

Although this theory was based on the self-regulation of the market, this did not comprise the idea of what would happen if a nation did not have enough factors for specialization or if it did not have an absolute advantage in any product, thus causing its isolation from international trade (González Blanco, 2011). Given this context, David Ricardo arises, who takes Adam Smith's assumptions as a basis to execute new postulates. Thus, at the beginning of the 19th century, he presented the theory of comparative advantage, which proposed a different panorama for international trade.

Ricardo's law of comparative advantage can be summarized in that the least efficient nation should specialize in the production and export of the good in which its absolute disadvantage is lower, that is, countries will specialize in the production and export of those goods that are manufactured at relatively low costs. Thus, each country will specialize in what it is most efficient in and, in turn, import the rest of the products in which it is less efficient in terms of production (Central Bank of Ecuador, 2016). Ricardo's intention was to show that, even if a country does not have an absolute advantage when producing a good, it can specialize in those goods in which it finds a greater comparative advantage, so that it can participate in international trade.

Unfortunately, Ricardo's theory received several criticisms from various doctrinaires¹. A current example that runs counter to Ricardo's idea of comparative advantage is that of China as an export power in some industries. In general, the productivity of labor in manufacturing in China remains very low compared to the American or European average. However, in some industries the Chinese productivity disadvantage is not so significant and in these industries China has become one of the major producing and exporting powers in the world (Ibid.). It is worth mentioning that the law of comparative advantage was criticized because it could be explained based on the theory of opportunity cost, that is, the amount of production of a good that must be sacrificed to produce an additional unit of another good.

In the early 20th century Heckscher and Ohlin, two Swedish economists, expanded Ricardian theory by explaining the role of resource differences in trade; this theorem tries to explain the origin of comparative advantages considering two fundamental aspects: the abundance of production factors and the intensity in the use of production factors, based on the 2x2x2 model (two countries, two goods, two production factors). These authors analyzed two countries which have a certain abundance of production factors, realizing that the production of goods was not identical, therefore, in the production a certain intensity is required within these factors, that is to say, there are goods that require more capital than labor and there are other goods that require more labor than capital. Heckscher and Ohlin observed that there are countries with an abundance of capital, so they will export goods that intensively use the capital factor and, on the other hand, those countries with an abundance of labor will export goods that use the labor factor intensively (Leandro, 2017).

Alternatively, John Stuart Mill developed the theory of international values which comprised trade in terms of production and international trade facilities. Mill assumed that all countries should benefit from free trade and explained the need to maintain a balance between exports and imports and that the gains from trade would depend on the reciprocal demand for exports and imports; it means, the more exports a country has, in relation to its demand for imports, the higher profits that country would obtain from free trade (Fxtrader, 2010).

¹ A person who specializes in doctrine rather than its practical application. In this case, the doctrinaires that are taken into account are those specialists in economic and/or trade theories.

At the end of the 20th century, the theory of competitiveness began to be introduced, which arises as a necessity today since we find ourselves with endless competitors against whom we must act quickly and effectively (Ortiz & Valencia, 2014). Through competitiveness theory, it was observed that the success of a nation was accompanied by comparative advantages and different factor endowments among trading partners. This is why the economic theory of international competitiveness is based on two fundamental pillars: traditional economic theory (from the mercantilist era², Adam Smith to Krugman) and modern economic theory (such as Porter) (Ibid.).

Among the most important representatives of competitiveness postulates we find Michael Porter, who proposed a model to determine the consequences of the profitability of a market in the long term, by evaluating its objectives and resources against 5 forces that govern competitiveness: threat of new entrants, bargaining power of buyers, threat of substitute products or services, bargaining power of suppliers, rivalry among existing competitors (Ramírez, 2007). In addition, he developed the diamond model in which it is mentioned that for countries to be competitive it will depend on the ability of their industries to innovate. In turn, Porter asserts that a nation can be successful in industries or industrial segments where the items considered in the diamond are the most favorable (Patlán Pérez & Delgado, 2007).

Porter's national advantage model is made up of four interrelated components: factor conditions (which refers to the factors of production necessary to compete in an industry); demand conditions (refers to the nature of demand in the national market in terms of market size and sophistication of demand); related and supporting industries (in a nation, industries that have a presence of suppliers obtain a competitive advantage at an international level due to benefits generated through innovation, information flow, technology, etc.); firm strategy, structure, and rivalry (conditions of a nation based on how companies are created, organized and managed) (Ibid.).

Porter mentions that there are two additional factors to form this national diamond, these are: chance and government. He considers these factors essential, since his theory is now based on six groups created for an adequate modification of the national

² Economic system referring primarily to the development of trade, mainly export, and that considers the possession of precious metals as a characteristic sign of wealth.

environment in which companies operate; in other words, Porter establishes the context for industries to learn how to be competitive at the international level. Likewise, he notes that there are several attributes in his diamond model that shape the environment in which companies compete; these attributes encompass human, physical, knowledge, capital and infrastructure resources (Ortiz & Valencia, 2014). His main idea is that nations can trade in a balanced but competitive way.

To finish with the theories of international trade, it is appropriate to address Krugman's theory, which is based on the premise that many products and services can be produced cheaper in large series, something typical of economies of scale, regardless of whether consumers tend to demand an increasing variety of goods and services. Thus, small-scale production in local economies is being progressively replaced by large-scale production in the world economy, which is dominated by companies that make similar products and compete with each other (Merchand Rojas, 2010).

Krugman gives an explanation of why international trade is dominated by countries characterized not only by having similar economic conditions, as argued by the classics, but also by trading similar products. An example would be Sweden, a country that both imports and exports cars. According to this American economist, this type of trade facilitates the specialization of large-scale production, which in turn leads to lower prices and increases a great diversity of consumer items (Ibid.)

Krugman states that economies of scale combined with low transportation prices, also help explain why people tend to concentrate in cities performing economic tasks and in similar geographic locations. In this way, Krugman's theory has shown that the growth of regions, such as Silicon Valley, in California, which is an area dominated by high technology, responds to the location of similar industries that as a whole take advantage of this specialization to be more productive and profitable (Ibid.)

1.2 Theories of Internationalization of SMEs

At international level, the liquor industry is one of the most competitive and important that remains in constant growth, due to the fact that artisan businesses improve their production and sales capacities in order to reach foreign markets. According to

Beverage Industry, the world's largest spirits company Anheuser-Busch InBev had sales of US \$56,444 million in 2019 alone. In addition, consecutively the United States of America was established as the most important market for this sector due to the high commercialization to and from this market (Orús, 2020). According to consumption statistics, the States that consume the most agave-based liquors in the United States of America are California, Texas and Florida (Jan, 2020).

Regardless of whether the economic phenomena studied over time are large or small, the internationalization of a company is one of the areas that researchers are looking at, not only because this issue can be approached from various perspectives, but because it is an area in constant growth (Sandoval Delgado, 2017). Thus, at the end of the seventies the theory of internationalization was established as a new line of research to understand the operation of a multinational company (Cardoso Castro & Chavarro, 2007). For some authors, internationalization is defined as a set of operations that facilitate the establishment of links between a company and international markets, through a series of steps of increasing participation and international projection (Lawrence & Luostarinen, 1988).

Now, to analyze the current concept of internationalization, it is important to know the evolution of this term over the years. The first perspective is from Franklin R. Root who in his 1994 work "Entry strategies for international markets", talks about internationalization as the entry of companies into international markets for various reasons such as: the accelerated growth of foreign markets, the stagnation of companies in local markets, the entry of international competitors to the local market, plus the search for economic benefits and cost reduction (Root, 1994).

According to Johnson and Vahlue, we can also understand internationalization as a company with "a strategy for growth through international geographic diversification, experiencing a long-term evolutionary and dynamic process that gradually affects the different activities and the structure of a company" (Sandoval Delgado, 2017). Therefore, the internationalization of a company is developed as a consequence of a process of adjustments due to the increase in the conditions to which that company is exposed in a foreign market. However, the most accurate definition is the one proposed by Villarreal Larringa, which understands internationalization as the presence of

“companies with their own resources in more than one country in which, generally through direct investment, they locate people and/or assets that they manage to carry out their activities” (Ibid.).

To start the internationalization process of a SME, it is necessary to determine the advantages and disadvantages that may arise from it; to know them will help determine what probability of internationalization small and medium-sized enterprises may have and how they can be successful at international level (Marizalde & Aguilar, 2018). To analyze whether a company should be part of an internationalization process, the following considerations are presented below (Lerma & Márquez, 2010):

Advantages:

- Taking advantage of the total productive capacity, which sometimes exceeds the need and demand of the local market.
- Easier and faster access to new technologies that allow modernizing the production plant.
- Balancing the level of sales when there are critical situations in the domestic market or local demand is reduced.
- Elimination of cultural conditioning factor in the target country, since consumers tend to purchase local products due to nationalism.
- Access to international credit with preferential interest rates, therefore, companies would have access to better sources of financing.

Disadvantages:

- Increased vulnerability of the company due to the existence of greater competition.
- Lower unit profit margin when there are more suppliers in the market.
- Need for constant updating and adaptation to product design and technology acquisition.
- Difficulties in facing the tariff and non-tariff barriers imposed by countries, including quotas, sanitary, technical and safety standards, among others.
- Increased dependence on the productive, commercial, technical, administrative and financial environment that occurs internationally.

In this way, any company that wishes to enter a foreign market must inevitably avoid the risks mentioned above; nevertheless, all risks can be minimized by adopting a long-term strategy or model. This is why it will be clearly explained what the process consists of, dispelling doubts and clarifying the global movement of goods and services to foreign markets.

Internationalization theories can be classified into three perspectives: economic, processes, and oriented to the internationalization of SMEs. First, from an economic perspective, this phenomenon has its origins in classical and contemporary theories of international trade. Second, from the perspective of processes, some theories have been developed which understand internationalization as a progressive learning mechanism that is the result of the accumulation of experience and the increase in resources invested in a foreign market. Finally, within the theories oriented to the internationalization of SMEs, the one that stands out the most is the Born Global theory, characterized as a non-linear nor unidirectional process (Cardoso Castro & Chavarro, 2007).

Within the economic perspective, specifically referring to the issue of internationalization, we find Kindleberger and Hymer who developed their theories in 1969 and 1976 respectively. These authors suggest that companies which wish entering a foreign market must as a condition possess some type of competitive advantage that gives them exclusivity, thus it is called “Monopolistic advantage theory” or “Theory of industrial organization”. These refer to the fact that this competitiveness can have different origins in production, technology, form of organization, management style, commercialization, access to credit, or in the diversification of products. Thus, this exclusivity taken abroad could force local companies in a foreign market to assume the cost of developing this advantage, therefore, they would be unable to compete with the incoming companies (Ibid.).

Furthermore, for such advantages to lead to a positive perception in a foreign market, they should be specific to the company, as well as easily transferable across national borders, or imposing and durable enough to face the competitive action of rival local companies (Rialp, 1999).

Alternatively, the “Theory of Internationalization” by Buckley and Casson, studies the internal processes of information transfer in companies, becoming a dominant focus in the study of the multinational company. This theory tries to explain why transactions of tangible or intangible products (know-how) between countries are organized by hierarchies instead of being determined by market forces. Its central approach affirms that companies are an alternative mechanism in the market to manage activities of value across national borders. However, for this transaction to take place, two conditions must be met; first, the existence of advantages when locating activities abroad, and second, organizing these activities within the company so that they are more efficient than selling or transferring them to companies in a foreign country (Cardoso Castro & Chavarro, 2007).

A third position on this topic is the “Dunning Eclectic Paradigm”, which states that the decision to enter international markets is made based on an analysis of the costs and advantages of producing abroad. Dunning establishes four conditions that must be met for a company to choose to exploit its advantages. First, the company must have its own advantages, whether they are established or associated with the company itself or with the product to participate in external markets, this in comparison with local companies. Second, by having these advantages it is more convenient for the company to exploit them by itself than selling or renting them to other companies in other countries; third, it must be profitable for the company to locate some of its production plants abroad based on its factors such as endowments and resources; fourth, for a company to make a direct investment abroad, it must be in accordance with a long-term strategy (Ibid.).

Within the second perspective, that of processes, the model of the Nordic school known as Uppsala (experience-experimentation) stands out, in this way the company will gradually increase the resources committed in a country as it improves the activities carried out in that market. This activity abroad will take place through a series of stages that successively would lead to a better and greater degree of international operations (Rialp, 1999)

According to different authors, the phases that make up the establishment chain can be summarized in four stages. First, sporadic or non-regular export activities; second,

exports through independent representatives; third, establishment of a branch office in a foreign country; fourth, establishment of productive units abroad (Trujillo & Rodríguez, 2006).

The Uppsala model comprises the progressive international commitment of a company, as a process of gradual and sequential expansion directed by the interaction between the commitment of the market and its knowledge. Another concept introduced by the authors of the Uppsala model is that of “psychic distance” understood as the set of factors that impede or hinder information flows between a company and a foreign market, as well as linguistic, cultural, political and educational differences, or the level of technological development (Sandoval Delgado, 2017).

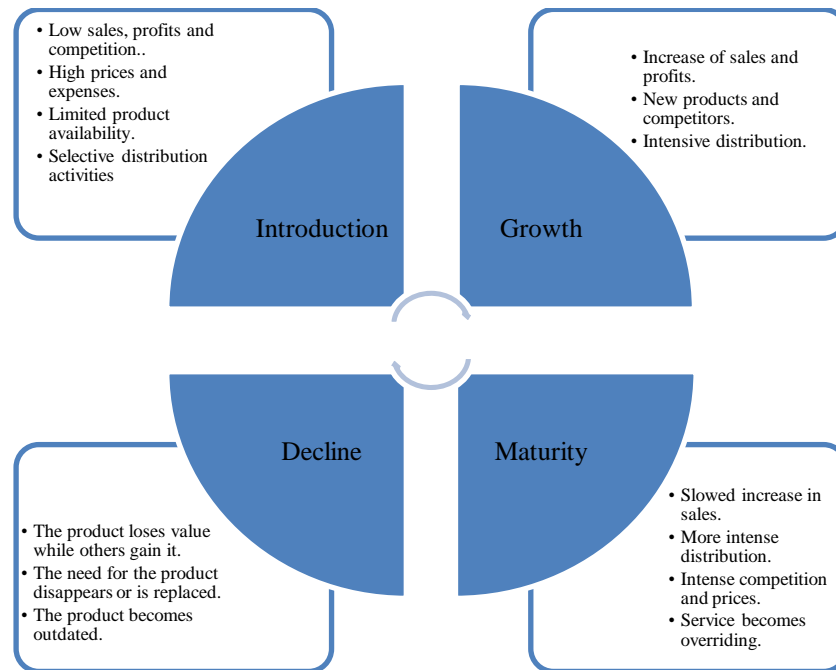
The innovation model also belongs to the processes category. It maintains a parallel approach to the Scandinavian model, its authors (from the United States) state that internationalization is a process of business innovation, which is basic for the growth of small and medium-sized companies. In this way, innovation and internationalization are developed within the limits imposed on the market and the internal capacity of the company to function in conditions of uncertainty (Cardoso Castro & Chavarro, 2007). In general terms, the model proposes the following stages for the development of an international activity of a company: 1) domestic market; 2) pre-exporter; 3) experimental exporter; 4) active exporter; 5) committed exporter.

Additionally, within this processes perspective, Vernon's 1996 “Product life cycle model” is the one that combines the classical notions of international trade theory with a perspective based on the individual behavior of each company, in such a way, new aspects are introduced such as product innovation, the effects of economies of scale and the uncertainty that affect international business (Ibid.).

According to Vernon, companies face four stages in international activity, namely: introduction, during this phase the product is manufactured and marketed in the country where it was developed with the aim of achieving economies of scale to justify the export of the product to other markets; growth, this stage aims to increase export activity and make investments in manufacturing plants in countries with growing demand; maturity, the main markets for the product are saturated and the product has

been standardized, so that manufacturing is diverted to countries with cheaper labor; decline: demand for the product in the country of origin is almost non-existent and manufacturing leaves the country of origin (Ibid.).

Figure 1 Product life cycle stages



Adapted from: Valera, 2014.

Finally, within the last perspective that directly addresses the internationalization of SMEs, we find two theories; the first one is known as the “network theory” and the second one is the "born global". The network theory groups and explains the internationalization process as a logical development of organizational and social networks of any company. Based on this theory, it is explained that entry of enterprises into foreign markets is the result of continuous inter-organizational interactions between local companies and their international networks, that is, opportunities in foreign markets reach the local company through the members from its international network of contacts (Johanson & Mattsson, 1998).

In other words, the social relations that the decision-makers³ have with other individuals in their network will influence the search for information on particular markets in which they can operate, for example, trips abroad and migratory movements stimulate perception opportunities in foreign markets (Ellis, 2000). Additionally, Johanson and Mattson establish that this phenomenon that revolves around the existence of a network evolves in the following way; first, relationships are formed with partners in countries that are new to business, which they call international outreach; second, the commitment in the already established networks is increased (penetration); and third, they integrate the positions held in the networks between different countries (Johanson & Mattsson, 1998).

To conclude, within the perspective of internationalization of SMEs, Born Global refer to the creation of companies with a global focus or those internationalized before their two years of creation. According to Madsen and Servais, Born Global companies can be related to three important characteristics: 1) new market conditions; 2) technological developments in the areas of production, transport and communication; 3) development of different capacities that people within the company possess, including the entrepreneur who founded the Born Global Company (1997).

The aforementioned characteristics translate into a decrease in communication and transportation costs, as well as in easier and greater integration access to the different regional economies. In this way, those circumstances allow a company to carry out international activities in a more favorable way.

Following this same context, Rialp points out that Born Global "are entrepreneurial firms whose management seems to perceive the entire world as its market since its birth" (2005). A common point between traditionally oriented companies and Born Global is that due to their young age they have limited financial, human and equipment resources. Therefore, they have limitations to collect or interpret the information they receive or have a small variety of products; however, having a simple and flexible organizational structure becomes an advantage, since they handle a lower volume of operations (Brenes & Darder, 2008).

³ People who make the purchase decision because of their authority.

Through this model it can be observed that this group of companies break the traditional paradigm by ignoring or "skipping" some phases that are usually followed by traditionally oriented companies. Consequently, the time required for the internationalization of activities is reduced or eliminated, which means greater speed and ease of conducting business (Ibid).

Briefly, within the different foreign markets, companies can be classified into micro, small and medium, which together exceed 95% of formal businesses in some countries. In much of Latin America a microenterprise is characterized by having from 1 to 10 employees according to the CAN. Likewise, in the European Union a microenterprise is made up of less than 10 employees, a small company less than 50 employees and a medium-sized company less than 250 employees. In short, when talking about SMEs at the international level, it can be observed that there is no general rule and that basically the number of employees is the measure to classify companies rather than their profits (Polo, 2018).

1.3 Legal framework for SMEs in Ecuador

For the development of this project it is essential to know the legal aspects to which it is subject, since it is necessary to know how companies operate in an economic-legal environment. For this purpose, we have considered several legal norms in which the rights and obligations of artisan activities are established. In this way, it is made visible how companies should act against State regulations. In addition, it is possible to know the responsibilities and measures that the State has to promote a successful business sector.

According to the constitution in force in Ecuador, the Internal Revenue Service (*SRI*, by its acronym in Spanish) is the technical and autonomous entity, with legal status, under public law, that will carry out tax control over the main taxes that generate resources to the country. The payment obligations will depend on the type of taxpayer that is registered in the Single Taxpayers Registry (*RUC*, by its acronym in Spanish) (Ron Amores & Sacoto Castillo, 2017).

Now, it is worth mentioning that the companies that we previously referred to as SMEs at the international level, in Ecuador are known as *MIPYMES*. Although the base for classifying a company as small or micro is the same, then it will depend on the level of development of each nation to classify them in one of these categories; for example, a small company in Switzerland can be a large one in Ecuador (Cardoso Castro & Chavarro, 2007).

For the *SRI*, *MIPYMES* are known as “the set of micro, small and medium-sized enterprises which present their own characteristics as economic entities according to their volume of sales, capital, number of workers, and their level of production or assets” (Internal Revenue Service, n.d.). *MIPYMES* can be classified according to their economic activity as follows: wholesale and retail; community, social and personal services; various manufacturing industries; construction; transportation, storage and communications; real estate and services provided to companies; fishing, agriculture and forestry; others.

According to the Organic Code of Production, Trade and Investments (*COPCI*, by its acronym in Spanish), *MIPYMES* are classified by their size based on their income over their number of workers (2011).

Table 1 Classification of MIPYMES according to their size by the COPCI

Micro-sized enterprise:	
Income less than \$100,000	Workers: between 1 to 9 people
Small-sized enterprise:	
Income between \$100,001 and \$1,000,000	Workers: between 10 to 49 people
Medium- sized enterprise:	
Income between \$1,000,00 and \$5,000,000	Workers: between 50 to 199 people
Large enterprise:	
Income over \$ 5,000,001	Workers: more than 200 people

Adapted from: *COPCI*, 2011.

In the national economy, the strengths of SMEs are focused in two important points detailed below (Jácome & King, 2013). For 2017, their contribution to the economy was 90% of the productive units, they generate 60% of employment, participate in 50% of the total national production, and create almost 100% of the services that an Ecuadorian uses in a day. For example: shops, restaurants, etc. Its capacity for adaptation and redistribution can also be highlighted, since, as SMEs do not have many workers, they have organizational structures that adapt more quickly to changes in the economy and to the positioning of socioeconomic strata.

There are two critical points in which small and medium-sized enterprises in Ecuador have not made progress: the purchase of high-tech machinery and that their financial and sales areas do not operate with software that optimizes their working times, thereby minimizing costs to maximize profits.

It is worth mentioning that this classification fully complies with the regulations issued by the Andean Community (*CAN*, by its acronym in Spanish) in Article 3 of Decision 702 that establishes the classification parameters for companies. The Superintendence of Companies, Securities and Insurance in Ecuador, accepted the classification of small and medium-sized companies implemented by the Andean Community in its Resolution 1260. The current internal legislation was established according to the following table:

Table 2 Classification of SMEs according to the Andean Community

Variables	Class I	Class II	Class III	Class IV
Hired staff	1 – 9	10 – 49	50 – 99	100 - 199
Gross value of annual sales (US \$)	Less than or equal to 100,000	100,000 - 1,000,000	1,000,001 - 2,000,000	2,000,001 - 5,000,000

Adapted from: Quito Chamber of Commerce, 2019

To carry out any economic activity, people have to register with the Internal Revenue Service in order to enjoy tax benefits and therefore comply with the payment of the obligations related to the profit produced by the economic activity they perform. In this way, the *RUC* allows the formal development of any legal economic activity in

Ecuador; this is a personal and non-transferable document, in short, the *RUC* is a taxpayer identification record granted by the Tax Authority, which in Ecuador is the *SRI* (Internal Revenue Service, n.d.)

Although there is only one tax contribution regime, the General Regime and the Ecuadorian Simplified Tax Regime (*RISE*, by its acronym in Spanish) can be distinguished. In the first one, the taxpayer can issue and deliver sales receipts authorized by the *SRI*, file tax returns (*IVA*⁴, and Income Tax) and pay them according to his or her economic activity. Within this regime, sales can exceed \$60,000 a year and it is the one in which taxpayers have to register in order to make their first tax payment within the country. The second one, the *RISE*, is a voluntary incorporation regime that replaces the payment of *IVA* and Income Tax through monthly installments, that is, the way in which taxpayers make their tax contribution is not annual like the *RUC*. To enter *RISE* regime, certain conditions described below must be met (Vieira, 2018).

First, the company must sell to final customers, its income must not exceed \$60,000 per year, and it must not have more than ten employees. Second, to be a natural person who develops jobs in a dependency relationship that generates income of less than \$9,210 and, in addition, develops independent activities; it is important to emphasize that it should not exceed annual gross income to more than \$60,000. Third, when economic activity begins, it should be expected that sales will not exceed \$60,000 per year (Ibid.).

Only fishermen, farmers, ranchers, poultry farmers, miners, transporters, micro industrials, restaurants, hotels, construction services, self-employed workers, retail traders can register for *RISE*; economic areas that are not mentioned cannot benefit from this special regime. Here is a list of *RISE* benefits (Ibid.):

1. Taxpayers do not need to file tax returns.

⁴ Value added tax

2. It is not necessary to issue invoices to customers. Instead, simplified sales receipts authorized by the *SRI* (sales notes or cash register ticket) are issued; these receipts only need to mention the amount of the purchase and the date.
3. Since no invoices are issued, no *IVA* and Income Tax withholdings must be made.
4. Taxpayers are not required to keep accounting records.
5. For each new employee who joins the payroll and who is affiliated with the *IESS*⁵, 5% of the fee is deducted up to a maximum of 50% discount.
6. Payment of taxes. A fixed fee is calculated that is paid monthly at any financial institution that has an agreement with the *SRI*.

It is also important to know the differences between the *RUC* and the *RISE* (Ibid.):

1. They are not two different tax regimes, since the *RUC* is equal to the Single Taxpayers Registry, but not synonymous with the General Regime.
2. The *RUC*, it could be said that it is the identity card only before the Tax Authority; on the other hand, the *RISE* is a tax regime derived from the General Regime.
3. All the people who contribute to both the *RISE* and the General Regime are registered in the *RUC*, that is, these two make up the *RUC*.

1.3.1 Constitution of Ecuador

Taking into account the Kelsen pyramid, the Constitution is the supreme law of any State; thus the Ecuadorian Constitution in its Title VI on the Development Regime that under Art. 275 comprises economic, political, socio-cultural and environmental factors as the result of an organized set of systems that guarantee good living for citizens (*Sumak Kawsay*). The State will be in charge of planning the development of the country and the execution of the development objectives that together will promote social and territorial equity (Constitution of the Republic of Ecuador, 2008).

Good living will require that people, communities, and nationalities effectively make use of their rights, and that they exercise cross-cultural responsibilities within the framework of respect for their diversity, and harmonious coexistence with nature. As

⁵ Ecuadorian Institute of Social Security

part of Art. 276 about development objectives, it is mentioned that a fair, productive, democratic and sustainable system must be established based on the equal distribution of the benefits that arise with development, means of production and the creation of decent and stable jobs. Therefore, within the framework of economic policy, a primary objective is to encourage productivity and national competitiveness, increase scientific and technological knowledge, as well as the entry of Ecuador into the world economy (Ibid.).

Additionally, in Art. 33 it is stated that work is a right and a social duty, a source of personal fulfillment and the basis of the economy. In this way, the State will guarantee workers full respect for their dignity, a decent life, fair wages and salaries, and the performance of healthy and freely chosen or accepted work (Ibid.).

Based on this law, the production of agave liquor in Nabón is part of the productive socio-cultural system, essential to promote the economic development of this region. Likewise, the production of agave has been maintained generation after generation, becoming part of Andean history, in addition to maintaining recognition as a traditional spiritual drink of this region. Therefore, “Don Isaac” and “Don Capelo” are companies formally established and recognized by the State, which in collaboration with *ANAGAVEC* (National Association of Productive Chains of Penco and Cabuya of Ecuador) develop a decent job in benefit to society.

1.3.2. Law for the Defense of Artisans

Starting by the fact that in Ecuador the artisan union actively contributes to the country's economy, it is necessary to know the definition of “artisan” according to the Law for the Defense of Artisans. In article 2 literal b, artisan is a manual worker, who is qualified by the National Board for the Defense of Artisans and registered with the Ministry of Labor; this person develops an activity or work for the production of goods and services, with or without the help of machines, equipment or tools; either through the investment of his own workshop or as a craftsman without investments in work implements or operators (Law for the Defense of Artisans, 2008).

However, for people to be considered as artisans, they must meet some parameters established in the Handicraft Promotion Law, that is, in the development of their activities, it must predominate manual practice for the transformation of the raw material destined for the production of goods and services. They also must comply with additional requirements such as not exceeding the number of collaborators (15 people), apprentices (5 people) or that the artisan association has a single workshop (Ibid.).

Through Art. 4 of the Law for the Defense of Artisans, the National Board for the Defense of Artisans was created, which seeks to promote this sector, its training, and is in charge of qualifying artisans to have tax benefits. The National Disciplinary Court was also created, as a decision-making body for administrative appeals and conflicts between artisans. In this way, an artisan who has been qualified by the Board enjoys different labor, tax and banking benefits, such as (Fabara, 2018):

- Exemption from the payment of profits to operators and apprentices and exemption from the payment of two salaries that in Ecuador are known as the thirteenth, fourteenth. However, artisans must be obligatorily affiliated with Social Security, but they do not accumulate reserve funds.
- Access to care by the Ecuadorian Institute of Social Security, as well as compensation for work accidents and other labor rights.
- Exemption from the payment of the value added tax (*IVA*, by its acronym in Spanish), since a 0% *IVA* rate is recorded in invoicing for the commercialization of handicraft products and services.
- They are not required to keep accounts.
- State agencies should prefer the purchase of artisan products and services.

1.3.4. Environmental legislation

Any activity that uses renewable or non-renewable natural resources within Ecuador is regulated by the Environmental Legislation, which in its articles 31 and 32, establishes that the decentralized system of environmental management of Ecuador will be in charge of the dissemination of guidelines and orientations on the management and protection of the environment and natural resources, through the

means of dissemination available to the State. This in order that micro, small and medium-sized enterprises are able to comply with the guidelines of the *Sumak Kawsay* (Environmental Management Law, 2004).

Title III of the Organic Code of the Environment, refers about the Environmental Responsibility Regime; in Art. 10 it is mentioned that the State, and both natural and legal persons, as well as communes, communities, peoples and nationalities, will have legal obligation to respond for the environmental damages or impacts that they have caused, as well as taking responsibility for a poor waste management and misuse of the soil, or any other natural resource (Organic Code of the Environment, 2017).

During the development of this chapter, it was observed that there are several theories related to trade, competitiveness, business and internationalization, concepts that are necessary to understand the current world commercial dynamics. In addition, it is also important to take into account the constant changes in the needs of markets and companies, along with new purchasing trends, quality and service strategies.

It is clear that as the world has globalized and developed, trade theories have had to evolve over the years. Thus, no single theory is capable of explaining how the international market really works and how companies develop in this environment. Instead, all theories together are capable of generating a clearer vision of the commercial world today. On the other hand, the current legal regulations in Ecuador help agave liquor artisans to enjoy different benefits and be able to produce in favor of the Ecuadorian economy.

There is a great difference between artisanal and industrial, however, they both have a common purpose, which is to generate a final product for consumption. However, when referring to artisan work, emphasis is placed on traditional processes, that is, those that have been developed from generation to generation and in which sophisticated technology is rarely used, since almost all of their production is manual; in this way, artisan products require more elaboration time. On the other hand, industrial products are a set of processes and activities that aim to produce massively with the help of new technologies (machinery), allowing the production of their items to be easier and faster as it is less laborious.

Industrial production is an important source of wealth for any country because its capabilities make it easier to export competitive products internationally. However, this thesis aims to deepen and highlight the artisan production of the Nabón canton. We consider it necessary to know where these artisans come from and how thanks to their current location they have been able to take advantage of their natural environment, always being aware for the care of the environment, in order to make their traditional production recognized internationally through the sale of their products (Artisanal and Industrial Production, 2013).

CHAPTER 2.- HISTORY, BACKGROUND AND PRODUCTION OF ECUADORIAN AGAVE LIQUOR BY THE PRODUCERS “DON CAPELO” AND “DON ISAAC” IN THE NABÓN CANTON.

2.1 Agave history

For centuries the agave has maintained an important trajectory in the Western Hemisphere, especially in Latin America and specifically in the Mesoamerican⁶ area because of religious, nutritional, ornamental, artisanal reasons, etc. In this way, as it has relevance in different parts of the American continent, there are different terms to describe it such as, *penco*, *pita*, *chaguar*, *maguey*, *chaguarmishky*, *guarango* and *miske*. Therefore, when we hear these terms, we refer to the same family of plants from which Tequila comes; however, its generic or scientific name is “agave”. Its origin dates back to 9,000 to 10,000 B.C. in Mexico, where it began its relationship with human liked to agriculture and human settlements (Mishkyhuarmy, 2018).

Since the time of the Spanish conquest, there has been great confusion between agave and aloes because they seem to belong to the same family of plants, which is due to a common ancestor. The difference lies in the evolutionary process that has occurred possibly since the Pangea⁷. Once the process of fragmentation of the continent took place, the plants acquired different characteristics according to their environment; then it was possible to differentiate between the aloes from Africa and the agaves in America. In summary, one of the main differences between these two genera of plants is that aloe does not die when it produces its flower, while agave blooms and dies (Ibid.).

In Mexico, indigenous cultures considered the agave as a sacred plant, since it was believed that it represented their gods, in addition to providing materials for the preparation of food and instruments to the communities. The most important part of the agave plant is extracted from what is called “*piña*” o “*tambor*”, which is known as

⁶ Territorial space from southern Mexico to Costa Rica.

⁷ A supercontinent comprising all the continental crust of earth, postulated to have existed in late Paleozoic era.

penco sap; it is used to sweeten food, in addition to obtaining stimulating or fermented drinks such as pulque, similar to *chicha*. On the other hand, it can be used for distillates or spirits with a high alcohol content such as mezcal, tequila, and *miske* (Ayora León & Quito Tapia, 2013).

It is estimated that there are about 300 species of agaves, from which about 200 have been botanically described. They are located throughout the entire American continent, where around 70% are found in Mexico, the country which is their center of origin. In pre-colonial times, the Aztec word “*metl*” was used to describe the agave plant, but today the term of Haitian origin “*maguey*” is used to refer to the agave species that are most useful for obtaining fiber or juice (Ibid.).

Figure 2 Tequila agave or angustifolia



Source: Mishkyhuarmy, 2018.

The agave was introduced to Europe by the Spanish in the 16th century, where it spread rapidly throughout the Mediterranean area, but today the agave is considered a pest or invasive plant in that region (Ayora León & Quito Tapia, 2013). Nonetheless, the agave has been used as a decorative plant because of its elegance and striking shape.

2.2 History of the agave in Ecuador

Historians mostly argue that the *penco* arrived in Ecuador and the rest of South America with the conquest of the Spanish from Mesoamerica, however, in one of the first chronicles of South America, made by the priest Blas Valera and published in a book by the Inca Garcilaso de la Vega, he exposes Inca stories in which it is mentioned the properties of the *penco*, which shows somehow the plant was already in this region, but not in abundance. The *penco* was considered a sacred tree for the Incas, since it provided them with material for food, clothing, medicine, etc. (Mishkyhuarmy, 2018).

Agave juice was a very important drink for our ancestors, who extracted approximately 8 liters of this juice per day. The Incas used this liquid for the production of alcoholic beverages, that is, they let it to ferment in order to obtain agave liquor also known as *miske* (Mishkyhuarmy, 2018).

The agave americana, better known in Ecuador as black pita or black *penco*, is mainly found within the inter-Andean area of the Sierra region. At first the objective of the *penco* was to delimit the boundaries of lands, estates or farms; they were also used as protection fences due to their sharp-edged leaves and hard spike at their tips. (Ayora León & Quito Tapia, 2013).

Figure 3 Use of pencos for the delimitation of boundaries



Source: ANAGAVEC, 2020.

2.3 Benefits, cultural practices and medicinal uses

From ancient times to the present day, the *penco* has been characterized by its good properties, which has generated great value in the communities of the Andean region. Thus, the tips of the agave can be used to make pens, nails and needles; additionally, the upper layer can be extracted from the leaves to obtain fibers and make *cabuyas*⁸. At the same time, its dry leaves can be used as firewood, since they are quickly flammable. Similarly, the rest of the plant can be used for the production of slippers or espadrilles, belts and pants (Ibid.).

Figure 4 Pita fiber extraction



Source: Abarca Macías & Quezada Abad, 2017.

On the other hand, the inhabitants of the rural area used the *penco* as medicine; for example the leaves of the *penco* were seared⁹ for healing recent injuries, such as skin burns and superficial wounds. In the case of wounds, the liquid from the leaf was used as an antibiotic, in addition to serving as an abortifacient for women. This *penco* juice cured inflamed sores, as well as it helped to fight dandruff, scabies or worms from sores. The agave or *penco* juice was also used as an energy drink to support the work of peasants, thanks to the amount of minerals and nutrients it has (Abarca Macías & Quezada Abad, 2017).

⁸ Thin threads that are made with agave fiber, and are used to tie or make artisanal or industrial fabrics, such as ropes, sacks, rugs, hammocks, among others.

⁹ Roasted only until lightly browned or toasted.

Finally, agave honey serves as a natural sweetener for beverages. This is low in calories, so it can be consumed by diabetics and people with celiac¹⁰ disease, since this honey is gluten free, it can be consumed by people intolerant to derivatives of wheat, barley and rye¹¹. Additionally, agave honey improves the absorption of calcium and magnesium, thus helping to prevent osteoporosis¹²; it stimulates the growth of the intestinal flora and helps reduce the effects of diarrhea, gastritis and constipation, which prevents colon diseases, among others (Unión Jalisco, 2017).

2.4 Differences between thin-leaf and broad-leaf agaves

2.4.1 Thin-leaf agaves

Thin-leaf agaves are native to Mesoamerica, in this species of plant it is necessary to remove all its leaves to obtain the alcoholic derivative; to do this the heart or “*piña*” must be cooked in ovens at high temperatures to grind their sugars, which will be used for fermentation and distillation. The characteristic agave of this group is the *angustifolia* or *weber tequilana*, from which drinks such as tequila, mezcal, etc. are obtained. The time to mature of this species varies according to the conditions of its environment, however, the average time is 6 to 8 years (Mishkyhuarmy, 2018).

Figure 5 Thin-leaf agave, weber tequilana species



Source: Mishkyhuarmy, 2018.

¹⁰ A disease in which the small intestine is hypersensitive to gluten, leading to difficulty in digesting food.

¹¹ A cereal plant similar to wheat.

¹² A medical condition in which the bones become brittle and fragile.

2.4.2 Broad-leaf agaves

Broad-leaf agaves are characteristic from South America, especially the Andes Mountains. The Ecuadorian *penco* belongs to the broad-leaf agaves, either the white or the black, which will be discussed later. Most of these agaves produce a sweet sap, which in Ecuador is known as “*Chaguarmishky*” and in Mexico as “*Aguamiel*” (maguey juice). This variety is called the Andean American agave. Additionally, the extraction procedure consists of removing between 3 to 4 leaves from one side of the plant to create an entrance towards the heart of the plant and thus be able to collect the *chaguarmishky*; the production time varies according to the size of the agave heart, but on average it takes 40 to 90 days (Mishkyhuarmy, 2018).

Figure 6 Broad-leaf agave



Source: Mishkyhuarmy, 2018.

In this way, we can differentiate that the agave in the Mesoamerican area has to go through a process to obtain its juice, the derivative of the fermentation process after obtaining the agave juice is known as “pulque” as opposed to the Ecuadorian agave which is known as “*guarango*” or “*guajango*”, where the extraction of the sap occurs directly with a cut to the plant without additional processes. It should be noted that this drink in both cases is not yet tequila or the agave liquor known as *miske*, since a final distillation process is required (Mishkyhuarmy, 2018).

2.5 Difference between black and white *penco*

2.5.1 Black *penco*

This species is characterized by its fleshy, rigid and lanceolate¹³ leaves that mostly have spines at the end of the leaf. The black *penco* is distinguished from others by its slow growth, however, it maintains a similarity with the white *penco* in terms of its flowering, because it blooms only once before dying (Abarca Macías & Quezada Abad, 2017).

According to the Ministry of Culture and Heritage, this species of *penco* has been classified as food heritage. Additionally, in times of the Spanish colony it was called the plant of a thousand wonders, due to the benefits it provides despite thriving in arid soils at the inter-Andean region. Finally, the black *penco* is recognized for its dark bluish green color, for having a much softer fiber than that of the white agave and a trunk that reaches 10 to 12 meters in height called *chaguarquero* (Muñoz & Guamán Gualoto, 2017).

Figure 7 Andean agave americana



Source: Alemán Torres, 2014.

¹³ Shaped like the head of a lance.

2.5.2 White *penco*

The biggest difference between white and black agave lies in their color. In the case of white agave, it has a bright green tone and in certain sub-species it can be combined with yellow or other color stripes. Its leaves, in addition to being lanceolate, have spines and dentate¹⁴ that go from their base to their tips, which are more pronounced than those of the black *penco*. However, their leaves are less rigid so they are easily malleable because they are not fleshy. In adulthood, the plant can reach 1.50 meters high and 25 cm wide, the flowering of this variety is the same as that of the black *penco*. A historical peculiarity of this species is that in 1562, the Spanish decided to increase the tax rate due to the high demand for the threads made from this *penco* (Abarca Macías & Quezada Abad, 2017).

Figure 8 White agave



Source: Abarca Macías & Quezada Abad, 2017.

2.6 History of agave cultivation in Ecuador

The *penco* can be found in the medium-high and semi-desert regions of the country, since it has a great capacity to resist cold and arid lands, which makes it a xerophytic¹⁵ plant. In addition, the *penco* has an incredible ability to thrive in different types of dry, calcareous¹⁶, and stony¹⁷ soils (Ayora León & Quito Tapia, 2013). This is why the

¹⁴ Having a toothlike or serrated edge.

¹⁵ Plants that are adapted to a very dry habitat, or to conditions where moisture is scarce.

¹⁶ Containing calcium carbonate; chalky.

¹⁷ Covered with or full of pieces of rock.

penco can be found on slopes of hills or on limestone soils. In this way, by maintaining a great capacity for adaptation, the sap of the *penco* tends to have different shades according to its environment, for example if the land where it is found is dry and the soil is uneven, the syrup of the plant may be more sugary and liquid, and on the contrary, if the plant is on a flat, sandy or plateau soil, it will produce a sticky and less sugary sap (Ayora León & Quito Tapia, 2013).

Thus, the propagation of the *penco* begins the growth of its young around the plant, so to have an optimal and massive production of the *penco* it is necessary to intervene in its reproduction process, which implies waiting about two years or until the plant grows half a meter to proceed to its extraction; then, the *penco* will be moved to a place where it will grow definitely. The excavation to extract the young of the *penco* varies from 30 to 40 centimeters deep; once the young agave has been reseeded, it should be filled around the roots with organic fertilizer, which usually is cow, guinea pig¹⁸ and sheep manure¹⁹ (Jurado López & Sarzosa Pazmiño, 2009).

Over the years, it is essential to remove the weeds that grow around the plant so that it does not end up killing the *penco*, in addition, it is necessary to loosen the soil with a hoe²⁰ every year and see if it needs more fertilizer or not. After some time, the plant will take on a dark bluish green or grayish bluish green color which means a healthy growth. It should be noted that this intervention is recommended to accelerate the growth and production volume of the *penco*, since normally the plant has an average life of 13 years or until the plant blooms (Mishkyhuarmy, 2018).

¹⁸ A rodent mammal native to the Andes Mountains.

¹⁹ Animal dung used for fertilizing land.

²⁰ A tool similar to a shovel, but curved, longer and wider, used to break up soil, cut thin roots, etc.

Figure 9 Andean agave americana flowering



Source: Duque Sánchez, 2013.

When reproduction season arrives, the *penco* is distinguished by the growth of a tall and woody stem that grows in the center of the plant and can reach between 10 to 12 meters in height; in *Quichua*²¹ this trunk is known as *chaguarquero*. In addition, the flowers that grow in the clusters of the *penco*, once their germination process has been completed, end up developing a black and flattened seed, which can be used as an alternative method to grow new plants of the *penco* (Bonifáz, 2018).

Figure 10 Flowering and stem of the Andean agave Americana



Source: Duque Sánchez, 2013.

²¹ Inca origin language of the Andes region.

Figure 11 Collection of the young pencos



Source: Duque Sánchez, 2013.

Figure 12 Seeds collected from the penco



Source: Duque Sánchez, 2013.

In Ecuador the black *penco* is the most common one; it is located mainly in the provinces with cold climate such as: Carchi, Imbabura, Pichincha, Tungurahua, Cotopaxi, Chimborazo, Bolívar, Azuay, Cañar, Loja, and to a lesser extent in Guayas and Manabí. The way it is used is different depending on the province, but it is usually used as a fence, ornamental plant, or is incorporated in agroforestry systems for the conservation of the environment (Ayora León & Quito Tapia, 2013).

However, it must be taken into account that in the last decade there has been a decrease in yields per hectare and therefore in production volumes. This is due to the lack of assistance from the authorities, since there are no genetic improvement programs, crop management, etc. Therefore, the inhabitants of each province seek constant support from the *GADS*²², public and private institutions with the aim of promoting the production, dissemination of knowledge and care of this plant (Jurado López & Sarzosa Pazmiño, 2009).

2.7 Crop production

According to Ayora León and Quito Tapia, in their gastronomic thesis on the process of extraction and elaboration of *Miske* in the province of Azuay, they mention technical conditions and relevant information that must be taken into account to obtain an optimal production of the cultivation of agave (2014):

Altitude: This plant adapts very well to a minimum height of 220 mamsl, up to a maximum of 2700 mamsl²³.

Temperature: It can grow between 10°C to 25°C.

Humidity: The plant needs 70 - 90% humidity.

Propagation systems: For sowing, the distance that must be maintained between plants is 1.5m, filling a density of 2000 - 3000 per hectare.

In turn, the plant must be taken care of from pests such as: cutworm²⁴, mealybug²⁵ and the stemborer²⁶. In the same way, diseases such as: leaf spot²⁷, dry neck production or neck rot.

²² Decentralized Autonomous Governments

²³ Meters above mean sea level.

²⁴ Pest that devours the leaves and branches of a plant.

²⁵ A small, sap-sucking scale insect that is coated with a white, powdery wax that resembles meal.

²⁶ Plague that affects the normal functioning of a plant by destroying its vascular sections.

²⁷ Any of a large number of fungal, bacterial, or viral plant diseases which cause leaves to develop discolored spots.

Figure 13 Mealybug on a penco leaf



Source: Capelo & Suconota, 2020.

2.8 The *penco* in gastronomy

According to Ayora León and Quito Tapia, the *penco* has been known for its multiple uses, including food. In the case of Ecuador, some of the best known preparations are the following (2014):

Agave juice: Its flavor is sweet, especially from the *pencos* of the Ecuadorian Sierra such as in Imbabura, Loja and Cuenca, it is used to sweeten the *mazamorra*²⁸ or coladas, it is also drunk as a fresh or fermented beverage; it is common that peasants use it to withstand the cold.

Syrup: This syrup is obtained by heating the agave juice and stirring it constantly so that the liquids of the juice evaporate, resulting in a consistency similar to that of honey.

Jam: There are several ways to make jam, one of them consists of the use of pulque, which is left to rest with the fruits that are going to be used.

²⁸ A dish with a thick consistency from Latin American countries, usually made of corn.

2.9 Nabón Canton

Nabón is a canton located to the southeast of Azuay province, approximately 70 km from the city of Cuenca, it is located at 2,680 meters above sea level, and it tends to have a cold weather with a temperature that goes between 8°C to 20°C. Nabón canton is characterized by its very irregular geographical area, that is, it has a high dispersion of mountains and slopes in a small territory, which makes access to communication and mobility between communities difficult due to its topography. According to the Municipal *GAD* of Nabón, there are 4 social groups within its canton, which correspond to indigenous communities such as the Shiña, Chunazana, Morasloma and Puca (Nabón town hall, n.d.)

According to popular belief, the name of the Nabón canton means “Big Turnip” (*Gran Nabo* in Spanish) due to the abundance of this plant in the Inca period and the Spanish colonization. In this way, according to different historians the population of this canton begins with the *Tuncahuanes* who were the first inhabitants of this canton as well as having been the first to develop the agrarian system with the cultivation of corn. After several years, the Cañaris arrived; they were a more technically developed culture that took the lands of the canton dominating the *Tuncahuanes*, thus establishing their cultural heritage and developing techniques, which helped to increase the production of work (Ayora León & Quito Tapia, 2013).

Later, the Inca conquest was hampered by the Cañaris led by the Cacique Duma who had understood that if Cañaris were part of the Inca Empire, they would win and seize the lands, so he agreed to sign a peace agreement offered by the Inca *Yupanqui* in *Tumipamba*. Therefore, the Inca domination was very poor, however, in Nabón there are vestiges of Inca and Cañaris constructions. Some of these archaeological sites are the “*Gran Pampa*” where the Cacique Duma entrenched himself and forced the Inca *Yupanqui* to retreat (Nabón town hall, n.d.).

The most important events in the Nabón canton are the following (EcuRed, 2018):

1824: After the Battle of Pichincha, Nabón reaches the category of canton, nevertheless, due to the new law of territorial division issued by the Colombian

Congress, the political organization of Azuay is modified, leaving it with four cantons: Cuenca, Cañar, Gualaceo and Girón, thus excluding Nabón.

1987: Nabón was proclaimed as the eighth canton of Azuay, under an executive resolution published in the Official Gazette on August 7 of the same year.

2005: Due to the self-identification of its population as indigenous, the canton received the title of "Cultural Heritage of Ecuador", because of the high coexistence of indigenous and mestizo population, which led it to obtain such title by the National Institute of Cultural Heritage of Ecuador (Ministry of Tourism, 2020).

2020: Nabón is considered the “Barn of Azuay” due to its high production of grains, in addition to its production of agave or *penco* liquor and coffee (Ministry of Tourism, 2020).

According to the 6th Population Census and 5th Housing Census of 2007, the Nabón canton had a population of 15,892 inhabitants distributed as follows: 6.9% located in the urban area and 93.1% in the rural area. Likewise, it is made up of 4 parishes, one urban and three rural: Nabón (urban), Cochapata, Las Nieves, El Progreso (rural). Nabón is characterized by its large *penco* plantations, which have been used for the production of different products. Thanks to the creativity, traditions and customs of the inhabitants of this area, these products have greatly contributed to the economy and progress of different communities from Nabón. The parish that preserves this tradition is Cochapata, specifically in the hamlet of Ñamarin, where agave derivatives such as *miske* are produced (Nabón town hall, n.d.).

By having agave derivatives production, this canton has managed to attract some associations to the Nabón parishes. The National Association of Productive Chains of *Penco* and *Cabuya* of Ecuador, better known as ANAGAVEC (by its acronym in Spanish) is one of the main associations which has helped the Ñamarin sector with its agave production. This is a legal entity registered in the Ministry of Agriculture of Ecuador, which seeks to integrate entrepreneurs, companies, academics and researchers, for the development and strengthening of the productive chain of *penco* and *cabuya* in Ecuador. They also seek to collaborate with the development of marginal communities and small producers in the country through the revaluation of ancestral knowledge and rescue of the *penco* (ANAGAVEC, 2020).

2.10 Interview with the National Association of Productive Chains of *Penco* and *Cabuya* of Ecuador (ANAGAVEC)

Edison Quishpe Landeta: The association was born through a symposium of agave producers, which was carried out thanks to different university studies on the agave of Ecuador, where producers were named from the North to the South. As a result of this symposium, a network of agave producers was created in Ecuador through networking, purchase of products, etc. Nonetheless, despite being organized, they have realized that there is little help from the government, since no long-term initiatives have been proposed to enhance the activities of these organizations, or if they are proposed, they do not receive continuity when there is a change of authorities in the government (Quishpe Landeta, 2020).

Figure 14 ANAGAVEC ministerial agreement



Source: Quishpe Landeta, 2020.

This organization has raised the possibility of obtaining a designation of origin for *Miske* “agave liquor”, this in order to avoid inappropriate practices in marketing, since,

when obtaining the designation of origin, a traceability of the entire production chain of agave in Ecuador is carried out; this is why greater protection is given to avoid smuggling or adulteration of this beverage. Basically, a protection of knowledge is achieved with the designation of origin, in addition, it provides to the consumers the security that they are purchasing a reliable and safe product (Ibid.).

This association has carried out researches to be able to export the product abroad and they state that there are short-term problems depending on certain regions where the *miske* is produced. For example, Mexico produces about 6 million liters of agave distillates, either mezcal, tequila or others. The approximate territory for the cultivation of agave in Mexico is about 100,000 km² which could be half of the Ecuadorian territory. This is why it is not feasible to compete by volume with Mexican types of agave liquor, since, in the inter-Andean area there are no large extensions of agave crops; on average the owners have about 4 to 5 hectares from which to obtain the product, so the idea of the association is to compete through the quality of the agave from Ecuador; in this way it is imperative to establish a good niche market that appreciate quality, tradition, among other characteristics that the Ecuadorian agave has (Ibid.).

ANAGAVEC has established as one of its pillars, to promote a sustainable development of agave in Ecuador, by planting more agaves than the producers can exploit, which will help to avoid the agave crisis that Mexico experienced and that happens approximately every 7 years. Another of the organization's goals is to promote *miske* as a national drink, thus turning it into a nation brand. The association recommends to all agave liquor producers to avoid collecting the agave juice during the first 3 days after having made the incision on the *penco*, because of its high level of troponin, which is an indicator of a subsequent attack on the heart (Ibid.).

This association points out that even within the country, a different terminology is used for the resources obtained from the agave. For example the maguey juice is called “*Chaguarmishky*” in the north, while in the south it is known as “*Pulcre*”. Likewise, the fermentation of this juice is called “*Guarango*” in the north and “*Guajango*” in the south; finally, the action of drinking the *miske* is called “*Tzawarmishki*” in the north of the country due to its historical link to the *Quichua* language, while in the south this

action is called “*Chaguarmishqui*”, a word that people in the north use to refer to the agave juice. However, a common point between the Ecuadorian and Mexican culture that ANAGAVEC has recognized is the belief that the origin of the *penco* is divine, and that both cultures consider it as a star; in fact in both cases there are autochthonous words to describe the agave on earth (Ibid.).

ANAGAVEC has the support of the University of UNAM and Guanajuato, both from Mexico City, since they do not see the Ecuadorian *Miske* as competition, but rather as a product that can be part of the Mexican market. In addition, they have received several visits from people of the best Mezcal and Tequila brands in Mexico, who have seen great potential in the Ecuadorian product, so they got suppliers of the heart of the Ecuadorian *penco* in order to take it to Mexico and produce a drink similar to tequila, mezcal, among others. In conversations with agave experts in Mexico, they have emphasized that despite the great demand for agave distillate worldwide, they constantly limit their production to maintain themselves in the long term, so they have specific annual production quotas (Ibid.).

Regarding the species of agave in Ecuador, Edison Quishpe, who is president of ANAGEVEC, mentions that researches on the phenotypes of the plant should be carried out, since there are some species that at first sight could look similar and others where a common characteristic between one and other is more difficult to find. This is why it is impossible to establish an exact number of agave species in Ecuador. However, in a publication made by Luis Cordero (who was a politician from the city of Cuenca) in his book “Botanical Enumeration” of the main plants, useful, harmful, indigenous or acclimatized in the provinces of Azuay and Cañar, he establishes that there are two *pencos*, black and white (Cordero, 1911).

ANAGAVEC confirms that Ecuador does not have any rule or law that regulates the alcohol of agave. There is not any *INEN*²⁹ standard nor tariff heading, therefore, when obtaining the sanitary registration for the sale of the product, the producers must rely on the sanitary registration of a similar product which does have a law that covers it; for example it is common to take as reference the law that Mexico has for its agave

²⁹ Ecuadorian Institute for Standardization (*INEN* by its acronym in Spanish).

products. For the representative of this association, it is a fundamental issue when trying to export, since they lose competitiveness, as the unique qualities of the product are not reflected in the procedures to enter a foreign market; for example, to export organic panela made of Ecuadorian agave to Europe, Ecuadorians have to take Colombian rules as reference (Quishpe Landeta, 2020).

This tariff penalty could be avoided if there were Ecuadorian standards that regulate the production of agave liquor; ANAGAVEC explains to its members that if they want to export they must be based on the Mexican standard, in which their alcoholic beverages have more ethanol, which implies that the Ecuadorian product loses competitiveness because according to the amount that the liquor has of this chemical, it is levied a special tariff to enter foreign markets. This means that the tariff for Ecuadorian agave liquor should be different, since it contains less ethanol than Mexican agave liquor. Thus, for example, due to this conflict in regulations, it is impossible to enter Japanese market because there is no international validation (Ibid.).

Finally, as part of its axis on sustainability, this association proposes the use of a pilot anaerobic digester³⁰, which would help to better manage the agave residues, thereby reducing the contaminating risks that may arise and at the same time obtaining derived from these wastes as fuel or power for running engines. Additionally, the association is already promoting projects to create new varieties of agave drinks, which can make this drink more attractive to the consumer. For example, we can find varieties such as *miske* with mealybug, *miske* smoked with firewood, blue *miske* rested with flowers and ripened *miskes*, where their flavors are more concentrated (Ibid.).

2.11 Situation of the producers of agave liquor “Don Capelo” & “Don Isaac” from the Nabón canton, in the province of Azuay

Don Capelo: Remigio Capelo, who is the owner of the brand of agave liquor “*Chaguarmishqui* Don Capelo”, has an experience in the extraction of agave liquor of more than 35 years, specifically since 1983. Based on his community and his family tradition, this agave liquor has been named “*miske*”; Mr. Capelo recognizes that there

³⁰ A sealed, oxygen-free tank designed for the anaerobic digestion of organic waste by microorganisms, typically used as a means of energy production.

are other names throughout the Sierra region to denominate the *miske*, however, he asserts that the name “*miske*” is the best known. Mr. Remigio argues that *penco* is a plant with several properties that not only serves as food, but its leaves also provide different benefits such as fiber, which is used to make ropes for livestock and the remaining residues are used as fertilizer for agriculture. Currently, Don Capelo is legally registered with *SENAD*³¹, which is in constant renewal, this has helped him to commercialize his products in a safe and fast way. Mr. Capelo pointed out that a lot of foreign people buy his product for \$15 and take it to their countries to sell it for \$120, this is why one of his main goals is to reach foreign markets (Capelo, 2020).

Figure 15 Miske producer of the brand “Don Capelo”



Proprietary photo.

Don Isaac: Mr. José Suconota told us that this entrepreneurship started in 1983 with his father, who had the raw material to produce agave liquor. After several years the business had a pause and in 2008 Mr. José began to produce agave liquor with the help of Mr. Isaac Sanmartín, since he was who taught him all the necessary processes for the production of agave; in fact, this is why Mr. José named his brand “Licor de Agave Don Isaac”. Currently, this brand is registered with *SENADI* and he has been presenting his product with great success at fairs in Cuenca, Macas, Zamora, Ambato, etc.; this is how Mr. Suconota realized that his entrepreneurship was working. One of his dreams is that his product is present in the market of the United States and Europe with the help of his children. Mr. José is sure that his product could be successful

³¹ National Service for Intellectual Rights.

internationally, since several foreign people buy his product in large quantities to take to their countries sell it there (Suconota, 2020).

Figure 16 Miske producer of the brand "Don Isaac"



Proprietary photo.

2.12 Production process of Don Capelo and Don Isaac

The production process begins when the *penco* has matured, this will depend on where it is grown; in the best case it will take about 10 years to be ready, since in other regions it will take between 12 to 15 years for a complete maturation. This time reduction occurs in Nabón because there are other nearby crops that have favored its growth, such as corn, *capulí*, lemon, etc. The *penco* will be ready to be used when it has three apexes together, that is, it must have three leaves with thorns next to its heart, which must be wide and shiny to be able to start juice extraction (Capelo & Suconota, Producers of agave liquor from Nabón, 2020).

To begin the process of extraction of the agave juice, the plant must be pierced in order to take out a leaf near its heart, then a hole must be made, and it must be left to rest for 3 days. After this time, a circular cut till reaching the heart of the *penco* is made with a scraper that is known as "*cuchillo de partir or de capar*". This tool measures about 40 cm, has a semi-curved, double-edged shape and a sharp semi-round tip. Once it reaches the heart of the *penco*, it will begin to distill its juice, so it will be necessary a container to collect the extracted liquid (Ibid.).

Figure 17 Agave juice extraction process



Source: Abarca Macías & Quezada Abad, 2017 and Alemán Torres, 2014.

Regarding the fermentation process, it begins once the liquid from the *penco* has been collected, the juice has the capability to ferment itself because it has enzymes that facilitate this process, so there is no need to add yeasts that may change its taste. The fermentation process of the *penco* juice can be generated in about 3 hours, for example if it is obtained at 6 in the morning, at 10 a.m. the fermentation has begun, the important thing is to maintain a constant temperature, that is, neither higher than 30°C degrees nor lower than 15 °C because otherwise the juice may be damaged or take longer to ferment (Ibid.).

It is imperative to extract the juice from the *penco* when it has fully matured, otherwise, the juice may be tasteless or less sugary, in addition, it is essential to write down the date on which the plant was pierced, since the agave juice must rest for exactly 6 months in storage tanks in order to allow its fermentation process to end; according to the fermentation time, the flavor of the liquor will vary (Bonifáz, 2018).

2.13 Obtaining the raw material

Most of the producers in Nabón obtain the *penco* from the rows or paths where it has been planted for the division of land lots. They acknowledge that there are no massive cultivations of this plant, even though there is planning by the communities to do so. In this way, when a plant is about 8 years old, it can have a viable production, although reduced in essence and quantity. It is advisable to wait about 10 years and the common practice of the community is to plant a *penco* in the same place where one of this plants

was previously planted, since the conditions in that space have been favorable. Nevertheless, a large quantity of *penco* comes from the Cochapata parish, where there is an abundance of this plant. However, time is not a factor in which Ecuadorian agave can compete because the maturation process for Andean agaves requires more time, while in Mexico the maturation has an advantage of approximately 5 years (Capelo & Suconota, Producers of agave liquor from Nabón, 2020).

For example, Remigio Capelo worked in 2019 with 35 people who were the ones who provided him with the raw material, he provides his workers the tanks to fill the liquid so that they can collect the juice from the plant. In 2019 “Don Capelo” made a collection of about 250 gallons, approximately 945 liters, that is, the exploitation of about 37 plants, which are about 100 bottles of *miske* and when the syrup is of better quality it can produce about 120 bottles. Currently, he has the capacity to produce 15,000 liters per year (Capelo, *Chaguarmishqui* liquor, 2020).




On the other hand, Mr. José buys the agave juice from his neighbors and in the same way as milk is collected, he collects the agave syrup. In its beginnings, he used to produce 200 liters per year, currently his brand has the capacity to produce approximately 1,500 liters per month, which means that “Don Capelo” produces an average of 15,000 liters per year. Mr. José considers his business to be a family one, so his workers are his relatives. These liquor producers state that there are several types of *penco*, which are located in different areas of Ecuador; for example the flavor of the *penco* from Cayambe is very different from the flavor of the *penco* from Oña. Even the flavor will change only due to its environment; for example, if the *penco* is located next to citrus plants such as lemon and orange, then the liquor of that agave will have a flavor from those plants (Suconota, 2020).

Producers mentioned that some agave tasters have tried their liquors. These tasters said that the agave liquors from Nabón have fruity flavors like *capulí* and blackberry. Both producers work with the black *penco*, specifically with the broadleaf one, which does not need any special treatment since it is a wild plant. One of their objectives is to avoid modifying the flavor of the agave, so they prefer that nature itself guide the way of the crops, where the *penco* receives one to two rains a year, which makes its syrup

sweeter, because if they would be constantly watering the plant, then its sugar would be less (Capelo & Suconota, Producers of agave liquor from Nabón, 2020).


2.14 Agave liquors from Nabón


Table 3 “Don Isaac” products

<p style="text-align: center;">Don Isaac “Blanco Tradicional”</p> <ul style="list-style-type: none"> - It was the first distillate of this micro-company. - This brand got its Health Notification with this drink. - It has 40% alcohol by volume. - Bottle of 750 ml. - \$15 retail price. 	
<p style="text-align: center;">Don Isaac “Agave Oro”</p> <ul style="list-style-type: none"> - It gets its color due to the fibers of the <i>penco</i>, which have been smoked next to its heart. - Slightly smoky flavor. - It has 35% alcohol by volume. - Bottle of 750 ml. - \$15 retail price. 	
<p style="text-align: center;">Don Isaac “Cacique Duma”</p> <ul style="list-style-type: none"> - This drink pays tribute to Cacique Duma, who was settled in the Nabón canton. According to a local legend, it is said that Duma used to distill <i>chicha</i> from corn and <i>penco</i>. - It has 45% alcohol by volume. - Bottle of 750 ml. - \$35 retail price. 	

Adapted from: Suconota, 2020.

Table 4 “Don Capelo” products

<p align="center">Don Capelo “Blanco Tradicional”</p>	
<ul style="list-style-type: none"> - It is a translucent distillate, which requires more time because apart from the fermentation and distillation it has an additional process. - It has 39% alcohol by volume. - Bottle of 750 ml. - \$12 retail price. 	
<p align="center">Don Capelo “Reposado en Roble”</p>	
<ul style="list-style-type: none"> - Distillate aged in oak barrels, where it obtains a toasted wood flavor. - Once the barrel is made, it is toasted inside, that is, the barrel is slightly burned and the <i>miske</i> is left to rest there for 15 days. - It has 39% alcohol by volume. - Bottle of 750 ml. - \$20 retail price. 	
<p align="center">Don Capelo “Gran Varón Cochinilla”</p>	
<ul style="list-style-type: none"> - It is a macerated drink. - This distillate includes the “cochineal or carmine” that gives the liquor a red color. - The cochineal comes from Peru; cochineal seeds had to be sown to have them in Ecuador. After going through a dehydration process, they are macerated with liquor and then go through a filtration and bottling process. - It has 39% alcohol by volume. - Bottle of 750 ml. - \$17 retail price. 	

Don Capelo “Warmi”	
<ul style="list-style-type: none"> - It is a distillate with a sweet flavor, macerated with the same shavings of the <i>penco</i>. - It has 39% alcohol by volume. - Bottle of 750 ml. - \$14 retail price. 	

Adapted from: Capelo, 2020

2.15 The agave today

The relevance of the Andean agave is so great that even from several national fronts it is pointing to a single direction, which is to ensure that the *miske* has its own Designation of Origin, in order to protect this drink as an exclusive product from Ecuador. This is due to its quality, reputation and characteristics essentially linked to the geographical environment, which in this case is the Andean area of Ecuador, so its natural and human factors allow the production of a unique product (National Service of Intellectual Rights, n.d.).

According to statistics from the Tequila Regulatory Council (*CRT*, by its acronym in Spanish), in 2019, the countries that most imported agave distillates were made up as follows (Curiel, 2020):

1. United States 83.18%
2. Germany 2.06%
3. Spain 1.52%

In 2018, the *CRT* managed to recognize the Designation of Origin of Tequila in 51 countries, that is, countries of the European Union along with Brazil and Hong Kong, so the Mexican national drink is protected. Additionally, the *CRT* released the last non-tariff barrier for tequila in China, thereby allowing the entry of all categories and classes of tequila into that nation without any restriction (Ibid.).

On the other hand, Andean Spirits is one of the few companies that has successfully managed to be present abroad and sell Andean agave distillate or *miske* in the US market. This company buys the agave from the Cayambe Mishkita Women's Association, who are currently the agave suppliers for Andean Spirits; they have decided to name their product as *Chawar* in the American market. The agave liquor they sell is white, rested and with special editions. The main markets for Andean Spirits are Texas and California, which together are the States that more agave liquor consume in the United States. In fact, this company already works with frequent distributors, and has managed to obtain certifications and awards in the United States as it is the SIP Award, which is an award that recognizes the quality of spirits (Enríquez, 2020).

Cristóbal Cobo, one of the producers of agave liquor in Ecuador, explains that *miske* is an autochthonous spirit drink that has nothing to envy to Mexican mezcal or tequila. He explains that, being on the equator, implies that the sun affects the photosynthesis of the agave and this results in a greater amount of sugars in the Ecuadorian plant, which means a greater quantity and better alcohol when distilling. The high-end *miskes* exceed USD 50, since they handle a fair trade with the women who harvest, select and store the agave (Terán, 2017).

Having all these in mind, it is necessary to emphasize that the *penco* has been in the lives of Ecuadorians since ever, especially those who inhabit the Andean region and even so the *penco* has gone unnoticed. As a society we tend to value foreign products more than national ones, because we think that, when products come from abroad, they are of better quality, and this occurs because we do not value what is ours, rather, we do not know the products and raw material that our country has. Often we tend to look down on indigenous work and traditions, even when this is what connects us directly with our past, which many do not want to acknowledge and are ashamed of.

The *penco* is a plant with many benefits, which is why it is known as “the plant of a thousand wonders”, since a series of products can be obtained from it that can boost the economy of any community. On the other hand, it is necessary to rethink, focus and maintain a record of the efforts that the government authorities can give to the

producers and communities where the *penco* is found. A mere motivation is not enough to develop an integral economy of the producers and peasants who are part of the agave liquor production chain; they just want to keep a tradition alive, which in the case of Mexico makes the country proud.

In addition, it is necessary to emphasize that just as foreign products are imported to Ecuador, in the same way, we should promote exports, specially of those unique products in the market such as agave liquor, not only with the intention to help these producers, but rather to make the world know that in Ecuador you can find really good products, with high quality standards. Clearly, Ecuador must be constantly recognized for the variety of products and services that it can provide, likewise, by promoting such exports, international trade agreements could be improved, since Ecuador would be seen as an important export market.

CAPÍTULO 3.- PROPOSAL FOR THE EXPORT OF AGAVE LIQUOR FROM THE PRODUCERS “DON CAPELO AND DON ISAAC” TO THE UNITED STATES OF AMERICA.

3.1 The United States as a potential export market

Undoubtedly, the United States market is one of the most attractive and important countries to export any type of products or services, this occurs not only because of its demographic diversity, but also because of its purchasing power, level of consumerism, economic and legal stability. Thus, the United States has an industrialized, diversified economy, with a great weight in the service industry, which accounts for more than two-thirds of GDP, excluding the public sector. However, the industrial sector has been losing importance in recent years, despite being made up of large sectors such as telecommunications, electronics, chemicals, automobiles, etc. On the other hand, the agricultural sector is considered highly productive and internally competitive (Economic and Commercial Office of Spain in D.C., 2020).

Thus, the United States of America is classified as the first economy in the world, with a Gross Domestic Product or GDP of 20,932.8 million dollars for 2020 (Datosmacro, 2020). Nonetheless, it is also the most indebted country in the world with a committed GDP of approximately 108.68%, which can be expressed in a per capita debt of \$70,917 per inhabitant, that is, by more than the 330 million inhabitants this country has (Ibid.).

An important indicator to mention is the Consumer Price Index (CPI) which exposes the variation in the prices of goods and services in a specific place during a certain period of time, which means an increase or decrease in the cost of living (Pedrosa, 2019). In this case, the US has a CPI of 1.4% which translates into an increase in the cost of living, since prices in food and medicine rose because of the COVID-19 pandemic; while the prices for leisure, entertainment, footwear and clothing decreased (Datosmacro, 2021).

Additionally, according to the Human Development Index (HDI), this indicator expresses the progress of a country in relation to the quality of life of its inhabitants;

the HDI is carried out by the United Nations, organization which places the United States at a level of good quality of life. On the other hand, the United States maintains a low level of perception of corruption, of 71 points which is not considered a bad level, however, it has declined in the last 5 years, which refers to the period of Trump administration (Datosmacro, 2018). Finally, as an economic indicator, we can highlight that the American economy is in position number 8 out of 190 countries in the Doing Business ranking, which means this country has great ease of doing business (Datosmacro, 2019).

3.2 Analysis of the economic sectors of the United States

The 3 key sectors within the US economy are agriculture made up of products such as corn, soybeans, beef, and cotton; then the manufacturing sector, specifically that of machinery made up of chemical products, foodstuffs, automobiles; as a third key sector is the so-called tertiary market focused on finance, insurance, real estate, leases and mortgages. In fact, the agricultural sector is undoubtedly one of the largest in the world, California alone produces more than a third of the country's vegetables and two-thirds of its fruits and nuts. However, only the agricultural sector is of vital importance for the domestic market, since the industrial sector is the true protagonist of its economy with a contribution of 18.2% of GDP, which employs 19.2% of the labor force (Santander Trade, 2021).

On the other hand, the US economy is essentially service-based. Where the tertiary sector contributes with more than three quarters of the GDP, an approximate of 77%, which employs more than 79.40% of the country's labor force. The financial area that we mentioned above has a weight of 18.2% of its GDP, the educational services sector, health and social assistance 8.2% and the government sector at the federal, state and local level contributes around 11% of GDP (Santander Trade, 2021).

Finally, according to the US Bureau of Labor Statistics, the remaining 5.7% of the labor force is classified as “independent non-farm”. In summary, the “services” sector contributed 79.01% to GDP, the “industry” sector 19.7% and the “agriculture” sector 1.3%, thus reaching 100% of the GDP of this North American country (Ibid.).

3.3 Trade analysis of the United States

There are many reasons why companies want to open their businesses or expand to the United States. This country offers a large consumer base, as well as legal protections and an innovative labor force. In addition, it has historically maintained a stable and easy jurisdiction to do business (TMF Group, 2019).

Figure 18 The most important trading partners of the United States.

In trade terms, the trade balance of the United States is structurally negative and the deficit has worsened even more in recent years; the United States had a trade deficit of 922.781 billion dollars in 2019. Until the Trump administration, the United States had Mexico, China and Canada as its main trading partners (Ibid.).



Source: Mena Roa, 2021.

According to data from the United States Census Bureau, between January and September 2020, the international trade of the United States with Mexico was higher than with any other country, with a volume of exports and imports of 386 billion dollars; followed by China with a commercial invoicing of 385 billion dollars, from which 303.9 billion correspond to imports; Canada as the third trading partner with \$383.1 billion. The volume of commercial invoicing of these three countries amounts to 42.2% of the total international transactions of the United States (Mena Roa, 2021).

It can be determined that Trump had a positive effect on the trade balance during his presidential term, especially with China, since, he managed to limit the supply of Chinese products to the US market with the application of tariffs in January 2020. By the end of 2019, the trade deficit had improved, because there was a decrease in the deficit by -15% with China alone (Santander Trade, 2021).

3.4 Bilateral relationship between Ecuador and the United States

Until 2020, the United States continued to be Ecuador's largest trading partner, as it received 30% of the country's total exports; Ecuador's trade balance with the United States has been positive from 2000 to the present. In addition, the United States is the fourth country to contribute with Foreign Direct Investment (FDI), which, according to data from the Central Bank, contributed \$74.37 million of FDI in 2019, almost 8% of total FDI. Therefore, it has been tried to achieve agreements to facilitate bilateral trade with the United States in order to manage a better flow in trade. In this way, it was possible to sign an agreement with the United States on December 8, 2020 for the first phase to expand relationships and get strategic partners (Lucero, 2020).

Trade relations were not always good under Rafael Correa's government, which shows a significant decline in trade openness with the United States, only from 2014 to 2015 imports and exports decreased by approximately 35% (Ibid.). However, commercial relations improved during the government of Lenin Moreno, as they tried to regain alliances with the United States. Since then, the exchange of goods and services has improved; imports grew by 11% and exports by 5.7% for 2017.

At the level of the non-oil trade balance, the United States was the country that gave the most favorable results for the national accounts. From January to September 2020, the result of the trade balance with the US was \$626.2 million, which allowed the country to bring liquidity to the economy through these commercial exchanges (Ibid.). There are two situations that still make it difficult to reach a final agreement: first, the change of president in the US and then the uncertainty about the political position of the next Ecuadorian president.

Regarding the Ecuadorian trade balance, the productive matrix has not generated negative impacts on its profits, since its main export products are commodities³², which has benefited Ecuador within the context of the pandemic, since primary goods are those with the highest consumption. For 2019, Ecuador's total exports reached 22.32 billion dollars, 30% of this figure corresponds only to trade with the United States. According to the Central Bank, 79% of the most exported products to the United States were: Oil and its derivatives, shrimp, bananas, natural flowers. According to the Federation of Exporters of Ecuador (Fedexpor), Ecuador is the first Latin American supplier of shrimp in the United States, the second of flowers and cocoa and the third of bananas (Coba, 2020).

On the other hand, petroleum derivatives, chemicals, pharmaceuticals, industrial machinery and food products are the five most requested US goods in imports by Ecuador. Although the United States has been one of Ecuador's main trading partners, in 2019 China proved to be a strong competitor, becoming the third destination for Ecuadorian exports (Ibid.).

3.5 Structure of the liquor market in the United States

For centuries, the United States has had a steady growth in alcohol consumption; today, the numbers have risen considerably to 8.7 liters (2.3 gallons), which represents about 500 drinks a year or nine a week. Several historians point out that the years in which alcohol was consumed the most was from 1800 to 1830, when the American adult used to drink about 26.5 liters, that is, 7 gallons a year. According to the Centers for Disease Control and Prevention, each year more than 88,000 Americans die as a result of heavy drinking (Infobae, 2020).

Currently, the demand for liquors especially in the wine and spirits segments has increased considerably. In the United States, the largest alcoholic beverages consumed are spirits, beers and wines that achieve a consumption of about 186 billion dollars annually. According to the United States Distillate Council, sales of these products to

³² Raw materials or primary agricultural products.

distributors increased 4%, that is, 26.2 billion dollars in 2017, achieving an increase of about one billion compared to 2016 (Gestión Magazine, 2018).

In this way, companies seeing such an increase are promoting the entry and consumption of new products, with new technologies to interact with current liquor consumers. The US market has great interest in exotic spirits, so they are constantly looking for new and novel liquors with the help of importers; some examples are mezcal and pisco, which are highly requested drinks in liquor stores due to their great versatility in making mixtures (Ibid.).

3.6 Agave consumption trend in the United States

Currently, the United States is considered the country with the most consumers of spirits derived from agave. This is why it is the segment of alcoholic beverages, which has grown the most in the United States in 2019, being 32% higher than the previous year (Arana, 2019). In addition, it is expected that by 2022, the compound annual growth rate of beverages derived from agave will be 4%, approaching rum (the most consumed beverage in the US). The niche of opportunity that tequila has generated in that country has caused several global companies to acquire tequila brands to introduce them in the United States, the most recent acquisition is that of the Patrón brand, by Bacardi, for 500 billion dollars in 2018 (Ibid.).

Despite the isolation measures and the global economic crisis caused by the COVID-19 pandemic, agave production was not affected. At the end of 2020, there was an increase in its production, export, and consumption. In addition, based on the Tequila Regulatory Council, in 2020 tequila exports broke their own record once again, exporting 234.2 million liters to the United States, which represents an annual growth of 22.5% (El Economista, 2020).

Finally, one of the biggest worries of the producers in the agave industry was the possible lack of raw material or blue agave due to its increased demand. However, the Tequila Regulatory Council mentioned that there are around 172,000 hectares with 5,221 million agaves of different ages. In the industry there are 8,000 farmers from 14 agricultural associations of which 5% of the arable land is used. The Council had also

stressed the importance of the continuous cultivation of agaves in order to avoid shortage of them (Sánchez S., 2019).

3.7 Information on the most attractive states to export agave liquor

For centuries, the United States has been present in practically all international organizations of a multilateral nature. The country has been characterized by the breadth of commercial relations with others and has been defending the liberation of world trade. In recent decades there has been a displacement of the weight of the North American economy from the East Coast and the Great Lakes area, towards the South of the country and the West Coast, forming a strong economic bloc around the United States (Economic and Commercial Office of Spain in DC, 2020).

Regarding its population, the United States has more than 330 million inhabitants, of which approximately 59 million are of Latino origin, that is, 18% of the population. Mexico is the most represented country with about 60% of all Latin American people living in the US. The cities with the largest Latino population are: California, Texas, Florida, New York, among others. Texas, being a border state with Mexico, has almost 40% Latino population. However, moving away from the US-Mexico border, Latino populations are more diversified (Ibid.).

3.8 Data sheets of the possible potential States to export within the US

Table 5 Texas Data Sheet

Location:	Texas is located in the southern region of the country. It borders Oklahoma to the north; Arkansas to the northeast; Sabina river to the east with the Sabina River; and the Gulf of Mexico to the southeast.
Capital:	Austin.
Geography:	It is the second largest state, representing 7% of the total US territory.
Population:	More than 29 million inhabitants <ul style="list-style-type: none"> - Population under 18 years: 25.8% - Population over 65 years: 12.6% - Female population: 50.3%
Demographics:	Spanish-speaking or Latino: 40%
Economy <ul style="list-style-type: none"> ● GDP ● GDP per capita ● Per capita expenditure ● Unemployment rate ● Risk of poverty 	<p>1,886,956 million dollars</p> <p>52,504 dollars</p> <p>40,552 dollars</p> <p>7.2%</p> <p>13.7%</p>
Major cities by number of inhabitants	<p>Houston: 2,320,268 inhabitants</p> <p>San Antonio: 1,547,253 inhabitants</p> <p>Dallas: 1,343,573 inhabitants</p> <p>Austin: 978,908 inhabitants</p>
Interesting data:	The Dallas-Fort Worth-Houston triangle concentrates most of the North American oil and petrochemical industry, and is already seeking to become the new hub for automobile and electronics manufacturing.

Adapted from: García, 2019 and Datosmacro, 2021.

Table 6 California Data Sheet

Location:	California is located in the western region of the country. It borders Oregon to the north; Nevada to the east; Colorado River to the southeast; Baja California to the south.
Capital:	Sacramento
Geography:	It is a region with high and low temperatures, of extremely irregular relief, has alpine mountains, cloudy coasts, deserts and a fertile central valley.
Population:	39,512,223 inhabitants
Demographics:	Spanish-speaking or Latino: 39% of the population
Economy <ul style="list-style-type: none"> ● GDP ● GDP per capita ● Per capita expenditure ● Unemployment rate ● Risk of poverty 	<p>3,132,801 million dollars</p> <p>79,287 dollars</p> <p>49,291 dollars</p> <p>9%</p> <p>11.9%</p>
Major cities by number of inhabitants	<p>Los Angeles: 7,713,391 inhabitants</p> <p>San Francisco: 2,311,192 inhabitants</p> <p>San Diego: 1,450,594 inhabitants</p>
Interesting data:	This State is a pioneer in the audiovisual and film sector. It is also specialized in scientific and technological research, with outstanding university centers, in addition to the largest winemaking area in the United States and an important area of agricultural activity.

Adapted from: Datosmacro, 2021.

Table 7 New York Data Sheet

Location:	New York State is located in the northeastern United States. It borders New Jersey to the west; Connecticut to the Northwest; Long Island to the Southeast.
Capital:	Albany.
Geography:	The most important urban centers of the State are New York, Buffalo, Rochester, Yonkers, Syracuse and Albany.
Population:	19.45 million inhabitants
Demographics:	19.3% of the State's population is of Latino origin, a percentage that rises to 29.1% in New York City alone.
Economy <ul style="list-style-type: none"> ● GDP ● GDP per capita ● Per capita expenditure ● Unemployment rate ● Risk of poverty 	<p>1.28 trillion dollars</p> <p>75,131 dollars</p> <p>54,890 dollars</p> <p>8.2%</p> <p>11.1%</p>
Major cities by number of inhabitants	<p>New York: 8,336,817 inhabitants</p> <p>Buffalo: 255,284 inhabitants</p> <p>Rochester: 205,695 inhabitants</p>
Interesting data:	<p>- If New York were an independent country, it would be the 12th or 13th largest economy in the world, equivalent to South Korea or Russia.</p> <p>- It is the second state with the largest population of foreign origin, only behind California.</p>

Adapted from: Datosmacro, 2021 and Arguello, 2020.

3.9 International marketing

3.9.1 Market research

From a commercial point of view, the market is understood as the set of buyers and sellers of a product or service (Sánchez J., 2015). Thus, to carry out this market research for the companies “Don Capelo and Don Isaac”, it is necessary to determine from the 3 States previously analyzed, which one is the most optimal market for the internationalization of this type of product. The analysis process will be explained in the following sections.

3.9.1.2 Matrix for the selection of the target market in the US

Now, to systematize and choose the target market, we proceed to collect and weight the economic data that each State has. Through this evaluation matrix with general and specific criteria, it is possible to identify and objectively assess which State has the most favorable conditions that allow the entry of this type of product with the lowest possible risks at the time of internationalization (E-COMEX, 2018).

In this way, to proceed with the weighting, a series of coefficients from 0 to 3 are applied; this aims to give a value or importance to each criterion, the importance of the weighting is in relation to the company and the States that are being analyzed (Monferrer, 2013).

Thus, the coefficient 0 means that the criterion is completely irrelevant, for example analyzing tariff barriers from one country of the European Union to another in the same bloc, the coefficient 1 means that the criterion is not that much important because the commercial risks are similar from one country to another. Coefficient 2 means that the criterion has special relevance for choosing the target country, since there are perceptible differences in the analysis. Finally coefficient 3 means that the criterion is decisive when choosing the target country because it reflects divergences (Ibid.).

Now, once the coefficients for each criterion have been established, a scoring system is established that allows a comparison between the selected States. This system is

based on a rating scale from 1 to 5, in which 1 indicates very unfavorable conditions; 2 unfavorable conditions; 3 neutral conditions; 4 favorable conditions; 5 very favorable conditions (Ibid.).

Table 8 Matrix for the selection of the target market

MARKET POTENTIAL							
Coefficient	Criterion	Score	California	Score	New York	Score	Texas
2	Population	5	10	4	8	4	8
3	Demographics (Latinos / Hispanics)	4	12	4	12	5	15
2	State GDP	5	10	5	10	4	8
1	State GDP Per Capita	4	4	5	5	5	5
2	Unemployment rate	2	4	3	6	4	8
1	Poverty Risk	1	1	3	3	2	2
3	Per capita expenditure	3	9	3	9	4	12
		TOTAL	41	TOTAL	44	TOTAL	46

Adapted from: Monferrer, 2013

According to the final weighting of the matrix, the most suitable State to export the products of “Don Capelo and Don Isaac” is Texas. Among the factors that played an important role, we found that demographics was vital for the selection of this State, where despite the fact that California has a larger population than the rest of the States, it was evident that Texas has a higher percentage of Latin American (40%); while California only 39% and New York close to 20%. Additionally, per capita expenditure played another important role in selecting the State of Texas as a target market. Despite the fact that California and New York have a high economic income, this is counteracted by having a high cost in the lifestyle of its inhabitants. Conversely, Texas has a low cost of living and high income, so its greater purchasing power is noticeable compared to California or New York.

3.9.1.3 Market segmentation

Taking into account that the market is not homogeneous and that it is made up of millions of clients, companies and institutions with very different demands and expectations to satisfy; it is necessary to identify the most attractive market segments that give value, in this case, to artisan products (Ibid.).

According to the qualities of our product and the capacity of “Don Capelo” and “Don Isaac” producers, it is considered appropriate to market 4 out of the 8 products they produce in order to enter foreign market, thus using segmented marketing, where the preferences of each group would be homogeneous. In our case, it would be offered different flavors for the tastes of different individuals, in such a way efforts will focus on a maximum of two groups such as Latino migrants and native consumers who are located in the cities or neighborhoods of the State of Texas (Ibid.).

Based on the segmentation criteria of Diego Monferrer (2013), our segmentation in Texas would be the following:

Table 9 Segmentation based on geographic criteria Houston – Texas

City of Houston, in Texas with its metropolitan area, The Woodlands and Sugarland	
Total Houston Population:	6,892,427 inhabitants
Latino Population in Houston:	The target market is in the urban area, which includes only the city of Houston, where the Latino/Hispanic population represents 44% of its total, that is, 2,569,769 inhabitants.
Purchasing power:	<ul style="list-style-type: none"> - According to federal laws in the State of Texas, therefore in Houston, the salary must be greater than \$7.25 per hour. - Additionally, in 2014, per capita GDP in Houston was estimated to be more than \$ 75,000. - The average annual salary per person in the city of Houston is \$ 36,337.
Language	51.07% of Houston residents only speak English, while 48.93% speak other languages, within this group Spanish represents 38.94% of the population.

Adapted from: Rodríguez, 2019; Datosmacro, 2021; BBC Mundo, 2019; World Population Review, 2021.

3.9.1.3.1 Target audience

The target audience is a much more specific demographic cut based on segmentation, in which the buyer persona is analyzed, that is, the fictitious character that is built from the qualities and behaviors seen in a market segment (Schuler, 2020).

Table 10 Segmentation based on behavioral criteria in Houston – Texas

Purchase places	Liquor stores, bars and restaurants in neighborhoods or sectors of Houston where there is a presence of Latinos, such as: - Denver Harbor, Houston Heights, Magnolia Park and Northside.
Lifestyles	- The cost of living in Houston is low in relation to other areas such as New York or San Francisco. - Average salaries are high and there are few State income taxes. - The labor market in Houston is booming due to industries such as oil, gas, among others.
Consumer personality:	The preferences of the Latino consumer for 2017, were located mainly in supermarkets, Latin grocery stores and organic stores.

Adapted from: Williams & McClelland, 2020 and Statista, 2017.

In this way, to complement the consumer profile, the segmentation criteria used to specify the buyer persona are detailed below:

Table 11 Segmentation based on demographic criteria in Houston – Texas

Gender	Male/Female
Age:	25 to 35 years, which represents 599.3 million inhabitants
Race:	Latinos, Hispanic and White people
Social class:	Middle and upper middle
Marital status:	Single or married

Adapted from: World Population Review, 2021.

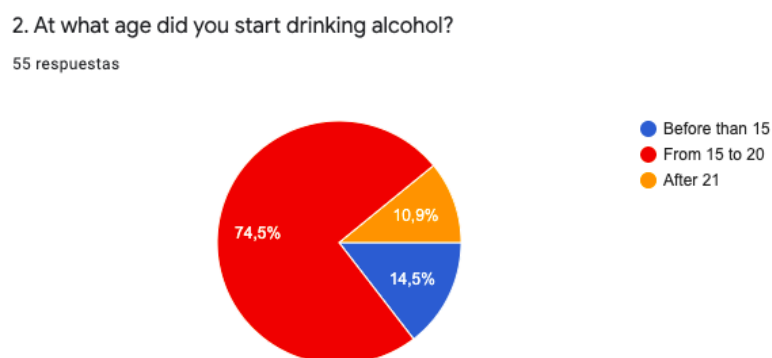
Therefore, the market niche that has been determined for agave liquor corresponds to men and women between 25 and 35 years old, from the city of Houston, since this age range represents the highest active proportion within of the social pyramid. In addition, this group is the most significant in State alcohol consumption, so the product will be aimed at Latinos, who already have a knowledge and appreciation of alcoholic beverages derived from agave, such as Tequila, Mezcal and in our case *Miske*, being a reflection of the culture and lifestyle from South America.

Finally, we consider that Houston has the best possible market niche because only individuals from Mexico represent 73.5% of Latinos (BBC News Mundo, 2019), it should be remembered that Mexico has a strong cultural roots with Tequila, so the sale of our product will be announced easily. It is expected that the product can be purchased mainly at bars, restaurants and liquor stores established in neighborhoods of Latin composition in Houston, such as Magnolia Park, Denver Harbor, etc.

3.9.2 Survey on alcohol consumption in the United States

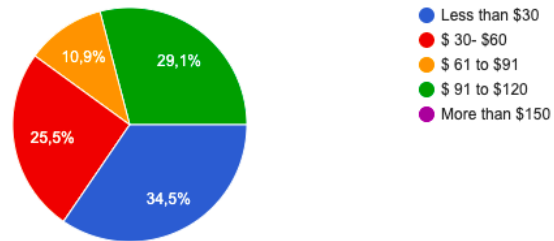
A survey was carried out in which 55 inhabitants of the State of Texas between 21 to 50 years old participated. They let us know their tastes and preferences when choosing a liquor.

Figure 19 Survey results on alcohol consumption in the United States



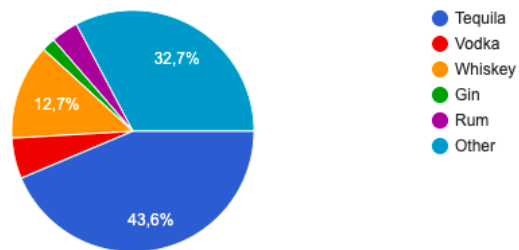
3. How much money would you pay for an alcohol bottle?

55 respuestas



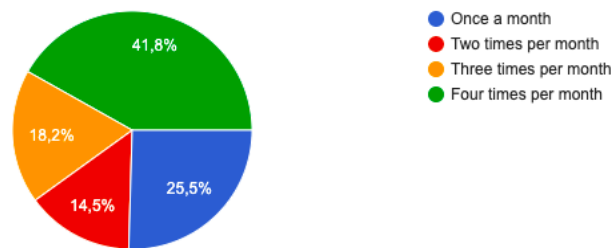
4. What type of alcohol do you prefer?

55 respuestas



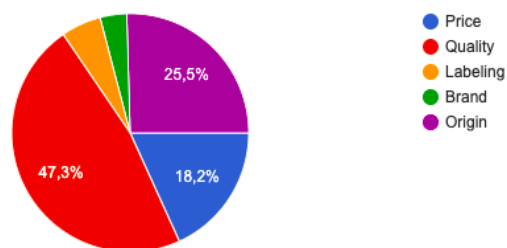
5. How often do you drink alcohol per month?

55 respuestas



6. When buying an alcohol bottle, what is what strikes you the most?

55 respuestas



Authors: Proaño & Viteri.

Based on the survey carried out, it was observed that most of the surveyed began to drink alcoholic beverages between the ages of 15 and 20, from which we can understand that they were minors when they began to drink alcoholic beverages. In the

following question it can be observed that 34.5% of respondents would pay less than \$30 for a bottle of liquor, nevertheless, 29.1% of respondents would pay from \$91 to \$120; we consider that the reason why these figures are so distant may be the big age difference. Nowadays, many of the adolescents choose to look for better prices than quality; conversely, adult people look for better quality, which implies a higher price of the product. Of the 55 surveyed, 43.6% told us that their preferred liquor is Tequila, which in a certain way benefits our producers, since they produce a derivative of the same plant as Tequila.

It was also observed that 41.8% of the respondents drink alcoholic beverages 4 times a month, which we can interpret as a consumption habit, that is, an activity that is part of the lifestyle of the people surveyed. Finally, it could be observed that when buying a bottle of liquor, 47.3% of those surveyed pay a great deal of attention to the quality of the product and 25.5% of those surveyed pay attention to its origin, which is a direct benefit to our product because people will decide to buy our product, either because of its origin or quality. It should be noted that this survey is of great importance to know the acceptance that our product will have in the future.

3.9.3 Interview with the vice president of ANAGAVEC about the United States as a favorite market to export Agave derivatives

Juan Calle, vice president of ANAGAVEC, has had a long history with the manipulation of agave liquor and a high knowledge of the most efficient processes to commercialize Ecuadorian agave distillates abroad. One of the main recommendations he gave us was to choose a very specific niche in the United States market, since our product cannot be aimed at all people. Likewise, he mentioned that there is a small deficiency in the labeling and packing of our products, since, in his opinion, they should be targeted towards the market they are going to enter; he also mentions that, when exporting abroad, these products should clearly improve (Calle, 2020).

Juan let us know that there is already a company that exports to the United States specifically Texas, San Francisco and now New York, in very specific niches in which other types of exotic agave distillates are found. This company is known as Andean Spirits from of the Cayambe canton. On the other hand, Juan Calle told us that there

is a worldwide boom in agaves, however, Mexico and Ecuador share an aboriginal culture and bond with the plant, which is a competitive advantage. In the world agave market there are thousands of distillates, so entering to compete with them would be very difficult. Therefore, he considers that what should be sold is the quality of the product and all the ancestral cultural image that they have, that is, to show abroad that it is a product produced in the Andes of Ecuador, that it is an exotic product, a spiritual drink harvested by indigenous women, of artisanal distillation with wild agaves, etc. (Ibid.).

Juan considers that the fact that other brands of agave distillate have already entered the US market (specifically Texas) is an advantage; for example, Andean Spirits is one of the companies that opened the market for this product, so Texans already know the Ecuadorian *Miske*.

In addition, he considers that the best way to enter the US liquor market is by winning contests that certify quality or at least beginning to participate in them, such as the San Francisco World Spirits Competition; SIP Awards Competition; World Tequila Awards, etc. These contests have a registration cost that varies between 300 to 400 dollars. Andean Spirits has already won some international awards which has helped it have an easier entry to the US market. The vice president of ANAGAVEC affirmed that he knows all the agave liquor products that exist. He also mentioned that he has tried all the *Miskes* of Ecuadorian producers; according his personal tastes, he told us that some liquors of Nabón producers are better than those of Andean Spirits in terms of quality and flavor (Ibid.).

Finally, he explained that the dynamics used to participate in the contests is very easy. If a gold, silver or bronze medal is won, buyers contact the producers to take their products to different markets; even without winning a medal it is enough to have a good participation in the contest for distributors and buyers to contact producers in order to agree a possible distribution of the product. Juan considers that the liquor market in the United States works particularly through distributors, and they are the ones who are attentive to such competitions (Ibid.).

3.10 Ways to enter the US market

Once the target market has been selected, which in our case is the State of Texas in the United States, a strategy must be proposed for the product to enter this market. Nevertheless, it must be taken into account that entering an international market is much more complex and difficult than national market, not only due to geographical distance, but also due to cultural differences, legal barriers, risks, etc. (Llamazares, 2016).

Thus, it is advisable to consider two ways to reach our target market. The first one is direct export, in which the company sells directly from its market of origin to customers in the destination markets. The second one is indirect export, it involves collaborating with some type of intermediary that resells the product to the final customer; for example, brokers, distributors or others (Ibid.).

There are several implications that must be taken into account when choosing a way of entry in an international market. First, the distance must be considered, which directly affects the retail price of the product; due to the commissions of the different intermediaries. It must also be considered the level of demand of the client, so our product must have that differentiating quality that makes the product unique in the market. Finally, it must be considered that the United States operates a strict legal system, so it is necessary to hire a legal advisor to avoid being at a disadvantage in the face of local competition (Economic and Commercial Office of Spain in D.C., 2020).

3.10.1 Direct export, entry with direct sale to the final customer

This way of entry is considered the most useful one to generate a first internationalization process. Direct export is based on the fact that the company itself develops the exporting activity, without delegating it to others; therefore, our producers will have to do their own market research, contact customers, guarantee the quality of the service, negotiate the sale, logistics, document processing, etc. (Llamazares, 2016).

In case of an eventual direct export of the agave liquor “Don Capelo” and “Don Isaac” to Texas, they must negotiate directly with the owners of bars, restaurants and liquor stores located in the Latin neighborhoods of the city of Houston in order to publicize their product, they must also take care of the entire process that involves delivering their product to the consumer. Therefore, for this type of export, producers must assume expenses such as hiring foreign trade agents that facilitate and help them with all the logistics and customs processes necessary for the shipment and entry of the merchandise.

This way of entry is not feasible to carry out in the US market due to the 3-layer system that is applied in the State of Texas, which will be deepened later. In the States that apply this system, it is forbidden to contact the final customers to sell them alcoholic beverages.

3.10.2 Indirect export, entry through a broker or distributor

Indirect export consists of hiring the services of an intermediary who is in charge of managing sales operations and internal distribution, therefore, the person hired must identify and select the clients who are more interested in our product. Additionally, the intermediary will be in charge of the negotiation, storage, promotion, pre-sale and post-sale services; most of these brokers have experience or an organization with sales networks, means of transport, etc. (Llamazares, 2016).

- Broker

When hiring brokers, they will become representatives of “Don Capelo” and “Don Isaac” in Texas, who will be able to offer our products to their network in the destination country. Since brokers are independent and external professionals, they do not get a salary from the producers, however, they acquire a commission based on the results they can reach, and occasionally, they will get financial compensation either for the expenses they have had or as a reward. Most of the brokers work with a minimal structure, since their business works outside an office, however, their success lies in having up-to-date commercial, technical and legal information on the markets and products they handle (Ibid.).

Finally, there is a diversification of risks, since the broker is knowledgeable about its market, in addition to serving as a means of feedback to learn about trends, competing products, legal regulations, sales expectations in our target market.

- **Distributor**

A distributor is someone who imports products to later resell them in his/her market of influence; thus, not only the consumer will find our product in a single point of sale, but in all the stores that are owned by a distributor. In addition, it is essential to analyze 3 fundamental aspects when a company intends to enter a foreign market. First, if you want a profitability by exclusivity or by volume; second, the distributor will offer a mixed, open or selective distribution, which will be analyzed based on the producer's needs; it implies making the decision about if the product will be available only at specialized stores and small businesses or if the distributor will be able to deliver our product to a large number of points of sale. Third, if the distribution is selective, the points of sale will correspond to a specific geographical area (Ibid.).

After having seen the functions of a broker and a distributor, for our producers it is considered necessary to hire a broker, who is an intermediary for operations involving international trade. It is convenient that he or she gets in touch with the possible clients for the sale, storage and distribution of the agave liquor. In addition, for our producers it will be more feasible to pay commissions based on the work performed, rather than paying a fixed remuneration. Likewise, based on the interview with the vice president of ANAGAVEC, Juan Calle, our criteria is supported, since he mentioned that one of the best ways to enter agave liquor into the United States is through brokers who contact the participants of competitions or events of alcoholic beverages to later begin a future distribution in the United States.

3.10.3 INCOTERMS

Incoterms are a series of accepted and internationally recognized standards that establish the rights and obligations of the buyer and seller in commercial exchanges that indicate only the conditions of sale (TIBA, 2020).

Figure 20 Incoterms

EXW En fábrica	•El vendedor pone a disposición del comprador la mercancía en sus instalaciones. Todos los gastos corren a cuenta del comprador.
FCA Franco transportista	•Término versátil, se puede usar FCA Fábrica (local vendedor) o FCA Terminal (lugar designado por el comprador).
FAS Libre al costado del buque	•La entrega se realiza en el país de origen cuando el vendedor entrega la carga en el muelle del puerto. A partir de ahí el comprador asume los riesgos.
FOB Libre a bordo	•El vendedor entrega la mercancía en la bodega del buque contratado por el comprador, incluye carga, estiba y despacho de exportación.
CFR Costo y Flete	•El transporte corre a cuenta del vendedor, pero los riesgos los asume el comprador. La entrega se produce cuando la mercancía es puesta en el buque.
CIF Costo, Seguro y Flete	• El transporte y seguro lo paga el vendedor. La entrega se efectúa cuando la mercancía es puesta a bordo del buque.
CPT Transporte pagado hasta	• Transporte es pagado por el vendedor, pero es el comprador quien asume los riesgos. La entrega se produce cuando se da al primer transportista.
CIP Transporte, seguro pagado hasta	•El vendedor contrata el transporte y seguro con cobertura máxima a favor del comprador, pero es éste quien asume los riesgos en el trayecto.
DAP Entrega en lugar	•La entrega se realiza en cualquier punto del país de destino pero siempre en el vehículo y sin incluir el despacho de importación. Responsabilidad corre a cuenta del vendedor.
DPU Entrega en el lugar descargado	•La entrega se realiza en destino en el lugar convenido pero obliga al vendedor a correr con los gastos de descarga.
DDP Entrega con derechos pagados	•La entrega se produce en cualquier lugar del país de destino, en este incoterm se incluyen los aranceles e impuestos del país del comprador.

Source: TIBA, 2020.

We consider that Incoterms are essential to carry out a fair commercial transaction for both the seller and the buyer, which is why it was necessary to implement one of them to negotiate with distributors, who will be in charge of introducing our products into the foreign market.

It was determined that the most suitable Incoterm for this commercial transaction is Ex Works (EXW), which implies that our producers will only have to make the merchandise available to the buyer in their own warehouses, offices or factories. Then,

the buyer will only have to pick up the products to continue with the export process. It should be noted that our producers do not have any responsibility to load the merchandise to the means of transport hired by the buyer, nonetheless, they are responsible for providing the buyer with any relevant information, such as security requirements (Internacionalmente, 2020).

The seller must provide the merchandise and the commercial invoice, in accordance with what is established in the contract. Additionally, the seller will be obliged to present any additional evidence such as health or origin certificates. On the other hand, in the case of this Incoterm, there are no specific rules regarding the presentation of documents, therefore, the documents can be delivered in electronic format, either a PDF file or a document on blockchain³³. The payment methods can be the following: prepayment, payment once the merchandise has been picked up, letter of credit from a bank, etc. (Ibid.).

Finally, when referring to the action of delivery, it is worth mentioning that it is not a physical delivery, but an appropriate notification from the seller to the buyer, therefore, if the contract establishes the delivery date within 90 days after the date in which the contract was agreed, it means that the merchandise will be available at the seller's premises; then, by this act it is understood that the merchandise has been delivered to the buyer (Ibid.).

It is important to mention that when using the EXW Incoterm, the buyer is the one who assumes the costs for the entire export process. Therefore, it is necessary for our producers to offer a considerable benefit to the seller, such as a discount on the final price of the product; or a special deal in which for the purchase of 12 boxes, they will be given an additional box for free; of course, this will be decided by each producer.

³³ Certification and verification of documents on the network.

3.11 Legal framework for a possible export of liquors to Texas

3.11.1 Trade agreement

Since details of the agreement that was signed in the first instance between the United States and Ecuador have not been publicly disclosed, it will not be taken into account in this thesis. Both governments are still in pending negotiations to lead to a bilateral trade agreement. However, there are other sources of information that will be taken into account as a reference to generate a guide in the export process in which alcoholic beverages are involved.

3.11.2 Texas State rules on the consumption and sale of liquor

Texas alcohol laws apply to both residents and visitors, however these regulations change in each of the 50 counties that make up Texas. Therefore, it is complicated to know the alcohol laws in Texas exactly; for example, in grocery stores in some counties it is legal to sell beer while in others it is not. On the other hand, in several counties there is also the possibility of consuming beer in restaurants; finally in cities that are between two counties, it may be legal to sell alcohol in certain blocks, while not in others (Hanson, 2020).

In the State of Texas, the general rule is that a person must be at least 21 years old to publicly possess, buy and drink an alcoholic beverage, conversely, if a person is under 21 years of age, either of these acts are considered illegal. Additionally, in the State of Texas you cannot use coupons to buy or have a discount on alcoholic beverages. Lastly, being drunk in public is illegal in many jurisdictions, so a person can be arrested regardless of age (Ibid.).

Our market segmentation takes into account this criterion for the definition of the target. Texas is one of the 10 States that only allows the consumption of alcohol in minors in the presence of a relative who has given consent and who is supervising this act. Therefore, any person under 18 years old who is consuming alcohol on someone else's property is already tied to the care, custody and control of the property owner. In addition, it is completely prohibited to provide alcohol to a person under 21 years

old who is not a member of the family, even with parental permission, or in their own residence (Ibid.).

Now, regarding the rules for the sale of liquor, which do not include wine and beer, within the entire State of Texas the general rule is that the sale of liquor is prohibited on Sundays, Thanksgiving, Christmas and New Year and in case that Christmas and New Year are celebrated on a Sunday, the prohibition is moved to the next Monday. In addition, liquors can only be sold in “package stores”, that is, liquor stores and taverns, which must close at the beginning of the prohibition hours for the sale of alcoholic beverages. These package stores must be physically separated from any other business, which is not dedicated to the sale of alcohol (Ibid.).

Finally, no person can own more than five stores that are exclusively dedicated to the sale of liquor; in addition, companies listed on the stock market are prohibited from owning such a store (Hanson, 2020). In the case of Houston, the sale of bottled liquor is prohibited on Sundays, but it is allowed from Monday to Saturday between 10:00 a.m. and 9:00 p.m. (Local Alcohol Laws, 2021).

3.11.3 Texas liquor distribution chain

The State of Texas has a distribution system called the 3 levels, which issue licenses and regulate the 3 levels of consumption or sales through their respective agencies. This system is intended to avoid retailers from undesirable practices, such as covering an entire market with any alcoholic beverage. At the first level are producers and importers, who sell their products only to distributors and wholesalers, who in turn sell to the third layer of this system, which is made up of retailers (bars and restaurants) (Lama & Martínez, 2018).

It should be noted that both the wholesale and the retailer must have the necessary licenses to be involved in the alcoholic beverages market. In this case, the importer must obtain the federal license; the distributor and wholesaler must obtain the state license and the retailer must obtain the local license. Although the system is applied to all the United States, each State may implement special procedures for the acquisition of these licenses (Ibid.).

Thus, any person or company that wants to import or market alcoholic beverages in the United States must obtain the respective authorizations from three agencies: the Food & Drug Administration (FDA), which regulates sanitary standards and food safety measures; the Alcohol and Tobacco Tax and Trade Bureau (TTB), which grants federal licenses for the importation and regulation of product labeling; and the State Liquor Control Board (SLCB), a State body that issue licenses where the products will be distributed (Ibid.).

The Association for Interdisciplinary Professional Development of Peru (*ADEPRIN*, by its acronym in Spanish) let us know in a general way the operation and role of the agents involved in this distribution system (2018):

Table 12 Three Layer System

1. The importer, located at the first level, is the person who has knowledge of the market, federal and state regulations, and who is also in charge of requesting the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF) for approval and registration of the product that is intended to be imported. In addition, the importer may pick up the merchandise from customs once the State tax has been paid; he or she must ensure compliance with the legislation related to packaging, labeling, customs procedures, etc. (Ibid.).

Layer #1: Manufacturers
Producers of alcoholic beverages such as winemakers and distillers
Layer #2: Wholesalers
Companies that sell alcoholic beverages outside of the US, such as breweries
Layer #3: Retailers
Places where alcoholic beverages can be consumed or purchased, such as restaurants, clubs, airlines, trains, warehouses, supermarkets, liquor stores, and bars
Consumer
People of legal age (21 years or older), in areas in which the sale and consumption of alcohol is not prohibited.

Adapted from: ADEPRIN, 2018.

2. The wholesaler or distributor, located at the second level, are in charge of paying the state tax levied on the products sold; consolidate orders for manufacturers and importers; commercialize alcoholic beverages among retailers to meet the demand of the consumers; ensure that alcohol is sold only in allowed areas. In addition,

according to Texas law, distributors must follow the procedures established by the Texas Alcoholic Beverage Commission (TABC) (Ibid.).

3. Retailers, located at the third level, are in charge of selling alcoholic beverages to the final customer at a high price. However, in the State of Texas one of the restrictions towards the retail channel is that the sale of spirits in warehouses and supermarkets is prohibited due to their high alcohol content, these can only be sold in liquor stores, bars, restaurants and clubs (Ibid.).

3.11.4 Taxes

According to the Office of the Texas Comptroller of Public Accounts, in August 2020 alone, alcoholic beverages called “spirits”, a category to which *Miske* belongs, collected about 8 million dollars in state tax alone, which is equivalent to 3,280,388 gallons. This collection is due to a tax of \$2.40 per gallon, a value set for any liquor that enters the State of Texas with the exception of wine and beer which are levied by another percentage of tax (Data Texas Gov, 2020). In this way, this is a state tax, which is an additional tax, different from the federal or country tax which refer to the ad valorem or specific tax.

Until 2013, the Texas state tax for distilled spirits ranged from \$1.50 to \$14.25 depending on the percentage of alcohol by volume that the drink had; this mechanism has been implemented to discourage the consumption of beverages with a high percentage of alcohol (Centers for Disease Control and Prevention, 2013). Therefore, to export alcoholic beverages to Texas, three taxes must be paid to enter the market: federal, state, and local (this last tax is established in restaurants or bars).

Thus, the federal tax or “Federal Alcohol Excise Tax” is applied by the Federal Government of the United States to all alcohol or tobacco that enters the country. Even when their rates are specific, they vary depending on the type of drink and the percentage of alcohol by volume that it contains (Lama & Martínez, 2018). In the case of spirits, this tax is \$13.50 per gallon that contains 50% alcohol by volume. Ecuadorian *miske* can be related to Peruvian pisco in order to know how much tax it would pay. Thus, a 750 ml bottle of Ecuadorian *miske*, produced by “Don Capelo” and

“Don Isaac”, with an alcoholic strength of 39%, would pay a federal tax of \$2.07; if the fixed state tax of \$2.40 per gallon is added to this, we would get a value of \$ 0.47, which would give us a total of \$ 2.54 of taxes to export *miske* to Texas.

Formulas are the following:

Federal Tax:

Each bottle = (US\$13.50 per gallon / 3.8 liters x 0.75 liters per bottle) x 39% alcoholic strength / 50% alcoholic strength = US\$ 2.07

State tax:

Each bottle = (US\$ 2.40 / 3.8 liters) x 0.75 liters per bottle = US\$ 0.47

3.11.5 Tariff classification

According to MarketAccess, which identifies customs duties, tariff quotas, regulatory requirements and preferential regimes for a specific product based on its tariff heading, our product could enter under heading 2208.90 within HS6, which is the international nomenclature system that refers to international merchandise according six digits; in our product the endings 70 or 90 are those that cover agave distillates (2020).

Figure 21 HS6 Tariff Heading

PRODUCTO

HS6 CÓDIGO DE LÍNEA ARANCELARIA NACIONAL

2208|

220850 - Alcohol etílico sin desnaturalizar con grado alcohólico volumétrico inferior al 80% vol; aguardientes, licores y otras bebidas espirituosas: Ginebra y Ginebra

220860 - Alcohol etílico sin desnaturalizar con grado alcohólico volumétrico inferior al 80% vol; aguardientes, licores y demás bebidas espirituosas: Vodka

220870 - Alcohol etílico sin desnaturalizar con grado alcohólico volumétrico inferior al 80% vol; aguardientes, licores y demás bebidas espirituosas: licores y cordiales

220890 - Alcohol etílico sin desnaturalizar con grado alcohólico volumétrico inferior al 80% vol; aguardientes, licores y demás bebidas espirituosas: Las demás

Source: Market Access Map, 2020.

When consulting on the MarketAccess website, the aforementioned heading does not have a customs duty between Ecuador and the United States, but it has more than 50 measures such as labeling, indications for transport, storage, etc., in order to be imported; and six additional measures that apply to all types of merchandise that enter the American market (Ibid.).

3.12 SWOT analysis of the Ecuadorian Miske to export it to the United States

Table 13 SWOT

Strengths	Weaknesses
1. Artisanal product.	1. It does not have a Designation of Origin.
2. Raw material harvested by indigenous women.	2. It does not have international certificates.
3. Unique conditions for the cultivation of Andean agave.	3. High costs to export the product.
4. Excellent quality of the final product.	4. Lack of experience in foreign markets for the introduction of spirits.
5. Healthy alternative as it is a product free of artificial sweeteners and color additives.	5. Problems for the implementation of an image and proper labeling for export.
6. Own machinery and equipment for the collection and production of agave liquor.	6. As it is a new product, there may be some doubt on the part of the consumer when buying it.
7. Low cost of production.	7. Lack of knowledge about export processes, which leads to the hiring of third parties.
Opportunities	Threats
1. Low local demand, surplus of product to export.	1. Large number of regulations for the consumption and sale of spirits.
2. Prior knowledge of agave liquor in the foreign market.	2. Possible competition with other Ecuadorian brands already positioned in the foreign market (Andean Spirits).
3. There are no tariff restrictions to export to the United States.	3. Possible confusion in the market among <i>miske</i> , tequila, mezcal or other agave derivatives.
4. There is still a market available for distilled spirits.	4. There is no a long-term project for the conservation and sustainable management of agave species.
5. Purely Ecuadorian product, which does not require import of raw materials.	5. High alcoholic strength in spirits, which can affect the senses of the consumer.
6. Few Ecuadorian distillates experiencing an export process.	6. Limited decision-making power when selling the product to distributors, who may resell it at excessive prices.
7. High capacity to obtain credits.	

Authors: Proaño & Viteri.

3.13 Marketing Mix

The marketing mix is used to encompass its four basic components: product, price, place and promotion. These four elements must be worked together, for which there must be coherence, that is, they will have to complement each other. The importance of the marketing mix lies in the fact that currently the consumer is the one who dictates the standards that a product should have, so it is necessary to analyze the customers' needs and develop the product for them (Espinosa, 2014).

3.13.1 Product

According to the international marketing strategies mentioned by Llamazares, to internationalize a product you can choose two methods. First, standardizing it, either the brand, packaging, price, distribution channel, promotion, etc. Second, applying a multi-domestic strategy where each part of the marketing mix is adapted to specific markets. In our case, taking into account the capacities of our producers, it is feasible to plan a standardization for the United States in general. Thus, since the product catalog from “Don Capelo” and “Don Isaac” has several products, it can be homologated, which will allow a reduction in costs and simplification of time, thus consolidating a standardization for sale in the American market (Llamazares, 2016).

Miske, being a rare product on the market, can be classified as a premium product, not only because of its scarcity but also because of all the characteristics that make it unique. Thus, being a 100% agave liquor, it obtains a high natural alcoholic strength, that is, of about 40% alcohol by volume, which due to its strong alcohol concentration cannot be sold in places such as supermarkets, wineries, etc.; our product must be found specifically in liquor stores, bars and restaurants.

Figure 22 Labeling, bottling and box design recommended for the export market



Authors: Proaño & Viteri.

According to the regulations established by the Alcohol and Tobacco Tax and Trade Bureau of the United States government, the labeling of distilled spirits such as tequila, mezcal and agave liquor must comply with these requirements (2007):

- Brand
- Name and address of the importer (producer in the case the drink is made in the United States)
- Alcohol content
- Health warning statements
- Country of origin
- Net content
- Classification or type of alcohol

Thus, the recommended labeling is based on the criteria mentioned above and on certain spirits bottles analyzed.

3.13.1.2 Front labeling

1. *ABV/Proof: 40% ALC / VOL. (80 PROOF)*
2. *Bottle Size: 750 ML*
3. *Made in: Nabón, Ecuador*
4. *Producer name: Licor 100 % Agave*
5. *Ingredients: Blue Agave*
6. *Subcategory: Silver – Reposado*
7. *Description: Handcrafted by the community of Nabón in Ecuador.*

3.13.1.3 Rear labeling

1. *ABV/Proof: 40% ALC / VOL. (80 PROOF)*
2. *Bottle Size: 750ML*
3. *Importer: XXX*
4. *Registro de Salud Ecuatoriano: XXX*
5. *Drink Responsibility / Beba responsablemente*

6. GOVERNMENT WARNING: (1) According to the Surgeon General, women should not drink alcoholic beverages during pregnancy because of the risk of birth defects. (2) Consumption of alcoholic beverages impairs your ability to drive a car or operate machinery, and may cause health problems.

In this case, numeral 6 is mandatory for all beverages that contain more than 0.5 alcohol in their content.

3.13.1.4 Box information

Every bottle of (producer's name) (type) begins with wildly grown up blue agave specially harvested under the unique sun in the Ecuadorian Andes, at the middle of the world. Once fully mature, the agave is hand-selected and masterfully handcrafted at the Nabón community distillery according to the same methods used by ancestral communities of the Andes.

Aged for (time) months in (American white oak) barrels, (producer's name) (type) begins with subtle aromas of (essences) that lead to a smooth yet complex flavor.

3.13.2 Price

In order for our product to compete in the US market, the two alternatives for setting an international price include differentiation and cost setting. In our case, we opted for the differentiation strategy to execute the premium product, since its price will be based on the image, design, quality and unique attributes that will differentiate it in the Texas market. The setting of the price will be explained in the financial area, since, it will go in relation to other expenses that the company may have, nonetheless, the profit margin will be 35%, the recommended price can be doubled, since the product is relatively inexpensive to produce and the US market is characterized by high purchasing power.

3.13.3 Place

Taking into account that there are two ways of entry to the foreign market, that were already mentioned above, it is necessary to implement an indirect export and in turn hiring a broker, since this person will be essential to choose the most appropriate market within Texas . However, after conducting market segmentation, it was found that our target market in Texas is specifically in Houston County, in the neighborhoods and sectors where the most Spanish-speaking or Latino inhabitants reside.

3.13.4 Promotion

Advertising and promotion are two of the ways in which we can capture the attention of the market so that people decide to buy our product. One of the recommendations for our producers is that, when the product enters the market for the first time, it must be accompanied by massive advertising, such as information brochures about the unique attributes of this product. It must also enter with a promotional price to connect with potential customers who want to try the product, for example, in liquor stores, small tastings could be offered to motivate consumers to buy our product.

It is important to mention that a 2x1 promotion could not be applied, since the essence of the product would be disadvantaged, that is, being a premium product. We also consider that one of the ways to make our product more known is to participate in Latin fairs and exhibitions, with promotions and discounts.

3.13.5 Positioning

It is important to mention that our product will not be exported by quantity but rather by quality, that is, what we want to sell abroad is that the liquor of our producers has a completely artisan production with history and ancestral tradition, in which its main protagonist is the indigenous woman of Nabón. Regarding its quality, it could be said that all the liquors of our producers go through a first and second distillation, thus generating a purer and more concentrated essence of its flavor. On the other hand, the content of the bottle is 100% agave, without artificial colors or sweeteners, which allows our product to have high quality standards.

3.14 Finance

As in any project, the finance area must be included for wise decision-making. In this case we have focused on taking into account an investment or initial capital budget, costs of raw materials, bottling, packaging, maintenance, depreciation, etc. In this way, with this projection of a hypothetical scenario, it is possible to have an idea of what an export plan would involve and the necessary strategies to obtain profits.

Table 14 Raw material costs for production

COSTOS DE MATERIA PRIMA					
DESCRIPCION	PORCENTAJE	CANTIDAD /ANUAL	UNIDAD DE MEDIDA	COSTO UNITARIO	COSTO TOTAL ANUAL
Savia de agave	100%	40000	L	\$0,21	\$ 8.454,43
TOTAL MATERIA PRIMA					\$ 8.454,43
Rendimiento					7,50%
Numero de litros anuales		3000	Trimestralmente		
Numero de botellas anuales		4000	1000		

Authors: Proaño & Viteri.

We started with the data provided by the producers, who have their suppliers of agave sap, in this case we were told that for each gallon they maintain an average yield of 7.5%. Then, from approximately 40,000 liters would be able to obtain around 4,000 750ml bottles; it would be about 10,000 liters which did not reach the final production destination, this due to the delay in fermentation and distillation. With this calculation, it can be started a quarterly export process of 1,000 bottles, this is, 4 shipments a year and it is worth mentioning that the production capacity is greater, so that the national market would not be out of supply.

Table 15 Bottling and packaging costs

COSTOS DE ENVASE Y EMBALAJE				
Descripción	CANTIDAD /ANUAL	UNIDAD DE MEDIDA	COSTO UNITARIO	COSTO TOTAL ANUAL
Envase primario				
Botellas de vidrio	4000	c/u (0,750lt)	\$0,75	\$ 3.000,00
Tapas	4000		\$0,15	\$ 600,00
Etiqueta	4000		\$0,09	\$ 360,00
Total envase primario				\$ 3.960,00
Envase secundario				
Cajas de cartón	333		\$0,65	\$ 216,45
Total envase secundario				\$ 216,45
TOTAL ENVASES Y EMBALAJES				\$ 4.176,45

Authors: Proaño & Viteri.

Assuming that about 4,000 bottles would be sent to the US market, about 333 cardboard boxes would be required for the load of 12 units per box. National suppliers were consulted in advance and the quantities requested can be purchased without complications.

Table 16 Total production costs

COSTO TOTALES DE PRODUCCIÓN	
CONCEPTO	COSTO TOTAL ANUAL
Materia prima	\$ 8.454,43
Envases y Embalajes	\$ 4.176,45
Suministros	\$ 80,86
Otros materiales	\$ 70,50
Mantenimiento	\$ 4.100,00
Control de calidad	\$ 150,00
Mano de Obra	\$ 5.856,00
Depreciaciones	\$ 638,00
Total	\$ 23.526,24

Authors: Proaño & Viteri.

Taking into account the previous data, plus other variables not exposed as expenses in cleaning supplies, the annual cost is more than 23,000 dollars, which are widely covered by the sale of the 4,000 bottles.

Table 17 Additional costs

Consumo de mantenimiento		
Descripción	Costo	Unidad
Costo anual	\$ 900,00	\$/año
Personal	\$ 3,200,00	\$/año
Costo total anual	\$ 4,100,00	\$/año

COSTO DE EQUIPOS Y DEPRECIACIÓN								
EQUIPOS	ESPECIFICACIONES	CANTIDAD	RENDIMIENTO ENERGERICO	COSTO UNITARIO	COSTO TOTAL	ACTIVIDAD UTIL AÑOS	% DEPRECIACIÓN	DEPRECIACION /ANUAL
Alambique		1	-	\$ 6.000,00	\$ 6.000,00	10	10,00%	\$ 600,00
Tanque de fermentacion	Capacidad de de 1000 litros	7	-	\$ 95,00	\$ 665,00	5	2,86%	\$ 19,00
Tanque de embotellamiento	Capacidad de de 1000 litros	4	-	\$ 95,00	\$ 380,00	5	5,00%	\$ 19,00
Costo Total de Equipos					\$ 7.045,00	TOTAL DEPRECIACION		\$ 638,00

Authors: Proaño & Viteri.

A factor that is often neglected is the training of the workers; this has been taken into account within this pilot financial plan, as well as the depreciation that the equipment has, so they must be replaced or repaired in order they can continue working properly.

Table 18 Assets

ACTIVO FIJO	
Concepto	Costo
Equipo de producción	\$ 7.045,00
Equipo de oficina y ventas	\$ 803,91
Terreno y obra civil	\$ 2.500,00
Subtotal	\$ 10.348,91
5% de imprevistos	\$ 517,45
TOTAL	\$ 10.866,35

ACTIVO DIFERIDO	
CONCEPTO	COSTO
Supervision	\$ 1.500,00
Patente de marca	\$ 104,00
Notificacion sanitaria del producto	\$ 204,00
ANALISIS FISICO-QUIMICO	\$ 150,00
Patente municipal	\$ 22,00
Pago de los bomberos	\$ 10,00
Total	\$ 1.990,00

Authors: Proaño & Viteri.

Regarding assets, since the first one refers to tangible or intangible goods of the company, it will not be deepened because they are assets that cannot be converted into short-term liquidity and are not intended for sale. Therefore, now it will be address the

deferred assets, which are expenses that are paid in advance, such as the physical-chemical analysis that must be carried out annually to maintain the health notification and trademark patent.

Table 19 Initial capital budget

INVERSIÓN TOTAL		FINANCIAMIENTO	
COSTOS ACTIVOS	Valor	BANCARIO	\$30.000,00
ACTIVO DIFERIDO	\$ 1.990,00		
ACTIVO FIJO	\$ 10.866,35		
CAPITAL DE TRABAJO	\$ 6.503,36		
SUBTOTAL	\$ 19.359,71	PRESTAMO	\$30.000,00
5% DE IMPREVISTOS	\$ 967,99	INTERES	15% Anual
TOTAL	\$20.327,70	CUOTA	\$ 8.949,47

Authors: Proaño & Viteri.

The financing of the project was carried out in such a way as to avoid the stoppage of production to be exported and to have insurance for contingencies. However, the first thing that was considered as part of the financing was investment to buy more equipment, adaptation of facilities, new labels and others.

Table 20 Total operating cost, unit price, and retail price

COSTO TOTAL DE OPERACION	
CONCEPTO	COSTO DE OPERACION/ANUAL
COSTO DE PRODUCCION	\$ 23.526,24
COSTO DE ADMINISTRACION	\$ 391,71
COSTO DE VENTAS	\$ 6.816,00
TOTAL ANUAL	\$ 30.733,95
COSTO UNITARIO/BOTELLA	\$ 7,68
IMPUESTO ICE	\$ 2,26
SUBTOTAL 1	\$ 9,94
Impuesto 12%	\$ 1,19
Riesgo país 5,14%	\$ 0,51
SUBTOTAL2	\$ 11,65
MARGEN DE UTILIDAD (35%)	\$ 4,08
PVU(Precio de venta por unidad)	\$ 15,72
Comercialización 20%	\$ 3,84
PVP NACIONAL(Precio de venta al publico)	\$ 19,57
GASTOS DE EXPORTACION 75%	\$ 11,79
PVP EXPORTACION(Precio de venta al publico)	\$ 27,52

Authors: Proaño & Viteri.

Taking into account the different costs that may arise, we proceed to obtain the cost of each bottle, that is, before the sale or exit from the factory; this cost is around \$8. In addition, a country risk (Ecuador) is included to cover the monetary changes. A 20% is added to the sale price per unit (*PVU*, by its acronym in Spanish) in order to cover mobilizations to the commercialization points, and the Export retail price (*PVP* by its acronym in Spanish) or to deliver in EXWORKS covers 75% for expenses not foreseen within this analysis or to maintain a negotiation margin since, somehow, it would be avoided the entire production process.

Table 21 Financial Projection

ESTADO DE RESULTADOS					
Años	1	2	3	4	5
Ventas Unidades Físicas	4000	4400	4840	5324	5962,88
Ventas Unidades Monetarias	\$ 82.560,00	\$ 90.816,00	\$ 99.897,60	\$ 109.887,36	\$ 123.073,84
(-) Costo de Producción	\$ 34.950,00	\$ 38.445,00	\$ 42.289,50	\$ 46.518,45	\$ 52.100,66
(=) Margen de Contribución	\$ 47.610,00	\$ 52.371,00	\$ 57.608,10	\$ 63.368,91	\$ 70.973,18
		0	0	0	0
(-) Gastos Operacionales	\$ 13.785,00	\$ 15.163,50	\$ 16.679,85	\$ 18.347,84	\$ 20.549,58
Publicidad	\$ 1.320,00	\$ 1.452,00	\$ 1.597,20	\$ 1.756,92	\$ 1.967,75
Depreciaciones	\$ 12.465,00	\$ 13.711,50	\$ 15.082,65	\$ 16.590,92	\$ 18.581,82
(=) Utilidad del Periodo	\$ 33.825,00	\$ 37.207,50	\$ 40.928,25	\$ 45.021,08	\$ 50.423,60
(+) Depreciaciones	\$ 12.465,00	\$ 13.711,50	\$ 15.082,65	\$ 16.590,92	\$ 18.581,82
Totales	\$ 46.290,00	\$ 50.919,00	\$ 56.010,90	\$ 61.611,99	\$ 69.005,43

Authors: Proaño & Viteri.

Finally, within the 5-year projection, it was established the profits that would be obtained, since there is an annual increase of 400 bottles for export, as well as an increase in expenses that would be proportional to the increase in production. This is closely related to the breakeven point, where there will be no profit or loss in the production and marketing process.

Table 22 Profitability indicators

Calculo del punto de equilibrio		
Clasificación de costos		
Concepto	Año	Unidad
Ingresos	\$ 82.560,00	\$ 20,64
Costos totales	\$ 34.950,00	\$ 8,74
Costos variables	\$ 12.630,88	\$ 3,16
Costos fijos	\$ 22.319,12	\$ 5,58
Precio de venta unitario		\$ 15,72
Punto de equilibrio anual	\$ 1.776,04	

VALOR VAN	\$ 121.921,96
VALOR TIR	263%

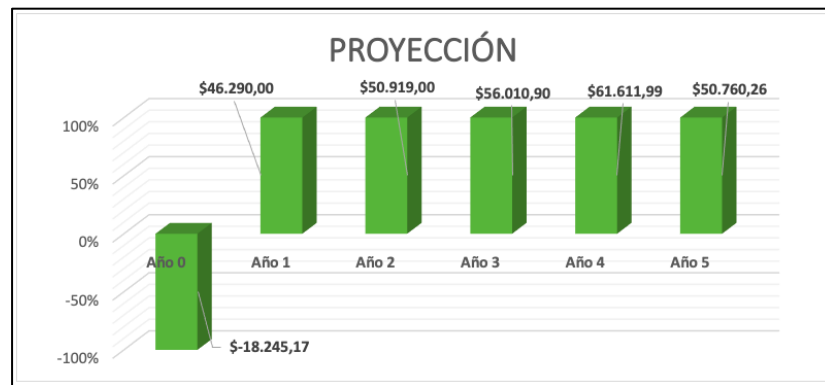
Cálculo TMAR			
		Interes	Capital
Participación Propia	100%	0,25	\$ 18.245,17

TMAR	0,25	25
TMAR %	25%	

Authors: Proaño & Viteri.

To conclude, it can be seen that the project is profitable because it exceeds 25% of the internal rate of return. Nevertheless, it should be noted that since it is a pilot financial plan, there are things that were not accounted, which could have an impact on the project. Below is a projection of the internationalization plan from year zero, which in this case begins with a negative value of - \$18,245.17.

Figure 23 Five-year financial projection



Authors: Proaño & Viteri.

Undoubtedly, after compiling the information presented above, the US market is the ideal candidate to start an agave liquor export process. This market has a high purchasing power, legal and economic stability. The consumption of spirits within the State of Texas maintains one of the highest levels in the country, in this way, publicizing the products of “Don Capelo” and “Don Isaac” represent less complications, since Texas has a broad agave culture, not only because of its proximity to Mexico, but also because of its demographics, where the Latino population stands out. Since we are aware that carrying out an export process is not easy, we believe that agave liquor has a high possibility to put the name of Ecuador at a high level, and to highlight the work of our producers.

CONCLUSIONS

Finally, we can conclude that despite the fact that the *penco* has been in the lives of Ecuadorians for a long time, it has gone unnoticed. Although it is true that the *penco* has an important role within indigenous communities, its leading role is yet to be introduced to the rest of the country, as its properties make it a true beneficial plant. Currently, it is only the peasants who work the plant, nevertheless, it is generating greater expectations of its purposes, especially the agave liquor, this not only at the national level but also internationally.

In such a way, during the development of this project it could be inferred that due to many theories that exist about international trade and internationalization of companies, there is not a single one which can cover everything; only by linking different fundamentals we can reach a clear image of how international trade works, what strategies should be applied and how to develop in a non-national market. Although an internationalization process represents several challenges, it is completely worth it, because foreign consumers do appreciate those characteristics that in a national market are ignored or not well paid.

Even though “Don Capelo” and “Don Isaac” have spent many years perfecting their production techniques, it is true that government support is needed in initiatives that allow artisan producers to specialize in making their products more competitive. We believe that Ecuador should promote the exports of artisan products, even more so when these products are unique with high quality standards.

Through our investigation it was determined that our producers should export their liquor to the Texas market, to determine the reception it may have in the first instance. Within the market analysis it was possible to explore the necessary parameters for an adequate export to the US market; it was not only considered what is the best way of entry but also the price and positioning that should be applied to the product. Undoubtedly, it has been proven that Texas has a high consumption of tequila in the sector, and a good agave culture where the products of “Don Capelo” and “Don Isaac” would have a good acceptance.

In relation to the above, it was possible to point out that the best way to enter the US market in the liquor sector is through distributors. In addition, an active participation in international liquor competitions is necessary, especially those that take place in the United States, since it is the country where most of the contact with distributors takes place.

It should be noted that the products of “Don Capelo” and “Don Isaac” cannot enter the US market competing for volume; this means their liquors cannot be exported by quantity but rather by quality, which makes it imperative for our brands to obtain certifications of quality, awards and recognitions that increase and support the value and quality of the liquor. Thus, what should be sold abroad are the attributes that make the product even more unique, concentrating on the artisan production, history and ancestral tradition that the drink represents, where its main protagonist is the indigenous woman of Nabón.

RECOMMENDATIONS

- Producers should plan long-term planting of *penco* in the Nabón area in order to guarantee sustainable production and not deplete the wild *pencos* in this area. Otherwise a scarcity of resources could be experienced in a 5-year period according to the sales volume.
- It is advisable to apply to the Ecuadorian Simplified Tax Regime (*RISE*, by its acronym in Spanish) to enjoy legal benefits such as the payment of monthly installments in replacement of the payment of *IVA* and Income Tax. This would indirectly help the company to keep a monthly accounting, which would facilitate control of production, sales, and expenses.
- To comply with the financial projection made, at least three people should be hired for the entire production process, namely, raw material collection, fermentation, distillation, bottling, labeling, storage, among others.
- Standardize the production processes used for the production of agave liquor. This will help to reduce risks and increase competitive capacity when entering the US market, since this market demands quality in the product components, which includes labeled, bottled, etc.
- For the first approach to the US market, a maximum of 1,000 750ml bottles should be entered every three months. These bottles should be the rested white agave liquor, which allude to the same characteristics of tequila, which will provide a greater opportunity for consumption and use of resources. This recommendation arises because “Don Capelo” and “Don Isaac” handle some presentations of liquors, not only in size but also in flavors.
- Taking into account the information provided above, it is recommended that the market niche for producers be the city of Houston, in the State of Texas. Specifically, they will be able to find reception in the neighborhoods of Denver Harbor, Houston Heights, Magnolia Park and Northside, where there is a presence of Latinos who meet the segmentation criteria analyzed.

- Because an export process requires commitment, it is advisable to request a bank loan in order to meet the sales projection, in this way, there would be no financial liquidity problems where the export process is impaired.
- It is imperative to participate in international competitions to gain acceptance and recognition in the US market. These competitions will help to corroborate the quality of the agave liquor, and will also be a unique space where producers can make contacts with buyers and distributors for the sale of their products in the United States.
- To be successful with this internationalization plan, it is recommended to hire a commercial agent, who will not only be the representative of the producers in the US market, but will also collaborate with his or her network of contacts for the sale of their products. This agent will manage sales, negotiation, storage, promotion, etc., with potential clients. In addition, it turns out to be the best option for producers of agave liquor, since they would only have to pay commissions based on the work carried out by the commercial agent.
- It is advisable that the product is aligned with premium characteristics to be able to compete for quality rather than quantity; this is extremely important, since the product must be approved for both the origin market and the foreign market, otherwise, national bottles that are not premium could be easily bought and rebottled, harming producers. Ultimately, an inferior version of the product could be available in the domestic market, in order to have a premium version only for the United States, nevertheless, it would involve more expenses.
- In order to facilitate the export process for producers, it is recommended to start the export process with the EXWORKS Incoterm, since, it separates them from any responsibility within the export process. In this way, producers must make available the merchandise in its own warehouses, offices or factories.
- Finally, we recommend that producers learn from professionals in the field, such as customs agents, exporters, freight agents, among others, who can inform, recommend, and strengthen the decisions that an export involves. In

this way, we want to highlight the importance of following all the necessary steps to achieve a successful export to the US market.

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