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FEASIBILITY STUDY ON THE IMPORT PROCESS OF RAW MATERIALS FOR THE CRAFT BREWERS' INDUSTRY WITH THE ASSISTANCE OF THE ECUADORIAN BREWERS ASSOCIATION.

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DEDICATION

I want to dedicate this achievement to the person who taught me that -when you climb a mountain- the vista pays off for all the struggle along the journey. That person is my mother, Cathy Amoroso: Mother, Father and Best Friend.

¨Time won't waste, and we just learn to take it slow and wait our turn… Not even the sky is the limit¨

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I wish to express my infinite thanks to the Lord for giving me a life-time opportunity to develop a professional career and for having provided me with all the necessary tools in order to do so.

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To my refuge, indonational support and source of love Sebas.

Vibrations filled with life and laughter, always bringing out the best of me: my friends.

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RESUMEN

Este proyecto de investigación tuvo como objetivo principal analizar el proceso de importación de materias primas para la producción de cerveza artesanal para los miembros de la Asociación de Cerveceros (ASOCERV) para ver la posibilidad del aumento de participación en el mercado de los cerveceros artesanales en vista de que la competencia de precios entre cervezas artesanales, industriales e incluso las importadas, constituye el mayor obstáculo para el consumo de cerveza artesanal de calidad hecha en Ecuador ya que el costo de materias primas es muy elevado por lo tanto encarece el precio de venta al público.

En vista de ello, se analizó la situación actual de la ASOCERV, se identificaron las necesidades de materias primas de cada miembro, buscando proveedores de las distintas materias primas que mantengan una buena relación entre calidad y costo, para de esta manera poder volver competitiva a la cerveza artesanal ecuatoriana.

Una vez que se identificaron los proveedores y su origen, se pudo cuantificar costos a través de una cadena de valor tomando en cuenta las responsabilidades y obligaciones a cumplir por el importador, se determinó el costo en bodega en destino de las materias primas y a su vez el precio de venta al productor considerando factores administrativos necesarios para el funcionamiento de este proyecto. Y a su vez, se estableció una matriz logística internacional y local de como se va a llevar el proceso de importación.

Lo que nos llevó a sacar conclusiones sobre la factibilidad de funcionamiento del proyecto.

ABSTRACT

The main goal of this investigation project is to analyze the import process of raw materials for craft beer production for the members of the Craft Brewers' Association of Ecuador (ASOCERV). This is also an opportunity for achieving market shares increases, given that the biggest obstacle, both for the production and consumption of good quality craft beer in Ecuador, is the high cost of raw materials; given that a big competition in the market occurs between craft, industrial and imported beers.

Thus, the current situation of the Association was analyzed; different raw materials needs for each member were identified, and suppliers of the different raw materials that had a good balance between price and quality were sought. In this way, Ecuadorian craft beer could be competitive in the market as long as production costs are reduced.

Once the suppliers and their origin were identified, costs could be quantified through a value chain, taking into account the responsibilities and obligations to fulfill on the part of the importers. The raw materials warehouse destination cost was determined and also the sale price for the brewers, besides considering necessary administrative factors for the functioning of this project. Also, an international and national supply chains were developed to make clear how the import process could be done. Upon the completion of this analysis, conclusions were drawn regarding the feasibility of the project operation.

TABLE OF CONTENTS

Table of Contents

Index of Figures

Index of Tables

Index ofAnnexes

1. CHAPTER 1: THE ECUADORIAN CRAFT BREWERS ASSOCIATION

Introductory note

This chapter addresses the history of craft beer, both at international and national levels, and its evolution in time. Parallel to this, a detailed description of the Ecuadorian Craft Brewers Association (*ASOCERV*) will be provided, along with a description of its current situation, partners, objectives, benefits, and its legal status in accordance to the regulatory body of Ecuador.

1.1 History of beer

Beer is considered one of the oldest drinks in the history of humankind. Its existence can be traced back to 10.000 B.C. in the regions of Mesopotamia and Sumeria (Barberon, 2012). The brewing process was made with the use of saliva, and its results were very similar to the product which nowadays is manufactured with the help of yeast and specialized machinery. Petrogliphs found in Babylon depict -over the surface of carved stones- a drink made of barley, the latter being a main ingredient in the manufacturing process of beer. Barley was better grown in low temperature climates, such as those of Germany, England and Belgium; these countries favored, early in history, the production of beer, to the extent that the current beer types and styles derive from these three major producers.

Since the year 1.400 beer has been considered as a nutritious drink made of proteins and carbohydrates, since its original formula contained malted barley, water and hop, and it did not have a significant amount of alcoholic fermentation. Both the peasants and the noble people considered beer a nutritious drink (Barberon, 2012).

On April 23, 1.516, William the IV of Baviera enacted a law called ¨*Reinheitsgebot*¨, whereby the purity of beer was defined. This law established that the only ingredients allowed for the crafting of beer were beer- barley, hop and water.

In the XIX century the use of yeast was introduced in the manufacturing of beer. Yeast is a eukaryotic organism; a unicellular fungi discovered by Luis Pasteur in 1.880. Since then it has been used as the fourth ingredient used for making beer (Toscano, 2016).

In what is now Ecuadorian territory, in the year 1566, Quito became the birthplace of beer in the new continent, as asserted by Franciscan monks. The San Francisco brewery was founded by Fray Jodoco Rique, a priest native to Flanders, who set up a small factory and began to produce beer for himself. The other priests were all Spaniards who only drank wine, while he was accostumed to drinking beer, for he came from a prime beer-producing region (Moreno, 2002).

However, the first attempts to produce beer at large scale date back to 1.887 when *Cervecería Nacional* was born in the city of Guayaquil. It was first a small beer factory created for domestic use. Twenty six years later, in 1913, the first product was launched into the market along with the *Pilsener* brand, which would soon become the best selling beer of all times in Ecuador. In 1966 *Club Premium*, a second beer with great market potential, was lauched. In 1.974 *Cervecería Nacional* and *Cervecería Andina* agreed to merge and created the second manufacturing facility in the city of Quito, becoming the largest beer company in Ecuador. The merge increased the sales and *Cervecería Nacional* soon became an attractive industry to invest on; so much so that international investors sought to establish commercial partnerships and, in the 80's, a business alliance was consolidated with *Grupo Empresarial Bavaria de Colombia*.

By 2.005 *SABMiller* became the largest shareholder of the company, under the same name of *Cervecería Nacional*. This partnership brought about the implementation of international standards in the production processes and helped *Cervecería Nacional* strengthen its leadership in the beer industry. Its pioneering role led to new alliances in 2016, when *Anheuser – Busch InBev* introduced an ample portfolio of industrial beers, representing international brands such as *Corona, Budweiser and Stella Artois*, to be produced along with the local, Ecuadorian brands, *Club* and *Pilsener*. This business Alliance turned *Cervecería Nacional* into the largest beer monopoly in Ecuador. (Cervecería Nacional, 2017).

1.2 History of craft beer in Ecuador

It was the year 2.012 when the craft beer boom began in Ecuador. A more demmanding market related then to the requirements for higher production standards. Small producers such as *Sabai, Bandidos, Páramo* and *Tres monjes*, craft home-made beer and, at the same time, faced great difficulty at trying to introduce their products in a market monopolized by industrial types of beer. These micro-breweries gained impulse when, in 2015, the Eljuri Business Group created *Cervecería La Paz*, the first craft

brewer that could reach large, competitive and high quality production volumes. From then on, and represented by its brand *Latitud Cero*, the craft beer market experienced a rise and the supermarkets opened new spaces for selling this innovative product while, at the same time, introducing Ecuador in the new world-trend of craft beer consumption. At that time, over 50 new different brands were relased in the Ecuadorian market (Pinos, 2019).

1.3 Creation of *ASOCERV*

When *Asociación de Cerveceros del Ecuador* or Ecuadorian Craft Brewers Association -known as *ASOCERV*- was created, it gathered 5 different craft brewers and represented a new industry which required the establishment of a framework under the regulatory body of Ecuadorian laws.

Besides this, craft beer needed a great deal of promotion and information campaigns to let the average Ecuadorian understand its value. For this reason, it was very important for the first craft breweries to seek recognition from the general public, in order for them to grow their business in spite of adversities.

ASOCERV is the only Craft Brewers Association legally recognized in Ecuador. It is registered in the Ministry of Industry and Productivity (*Ministerio de Industrias y Productividad)* and it currently counts 42 members who represent the most successful industries of the craft beer business in Ecuador. *ASOCERV's* current president is José Pinos; its headquarters are located in a co-working space in Quito, on 6 *de diciembre* Avenue.

1.4 Objectives of *ASOCERV*

ASOCERV's objectives are key for its short and long term growth, and are stated as follows:

- Representativeness: Within the Ecuadorian market and with regard to authorities.
- Teamwork.
- To provide services and benefits for all craft brewers

1.4.1 *ASOCERV's* representativeness within the Ecuadorian market and with regard to national authorities

Several positive achievements have taken place with benefits for producers within the associative framework so far established, e.g., the reduction of *ICE* from 7,24% to 2% for the taxable income; the "craft beer" (*cerveza artesanal*) denomination by the

Production Development Law (*Ley de Fomento Productivo)* in 2018; the regulatory supervision of AB Inbev and *Cervecería Nacional*'s merge in relation to their payments of tax due, among other (Pinos, 2019). In this way the Association of Craft Brewers has strengthened its presence at the regulatory body, as well as before the authorities of different institutional instances around the country.

However, it is still necessary to define the category named as *¨cervecería artesanal¨* as that which represents those indeopendent breweries which do not own shares of industrial breweries. In the same way, *ASOCERV* seeks to establish by law that imported beer cannot be publicized as craft beer unless they comply with the definition established by the law; this implies that craft beer comes from brewers that cannot exceed an anual production of 240.000 hectolitres.

In a near future *ASOCERV* intends that craft beer be eliminated from the list of *Sistema de Identificación, Marcación, Autentificación, Rastreo y Trazabilidad Fiscal de Bebidas Alcohólicas y Cigarrillos de Producción Nacional (SIMAR),* since its inclusion in this group of products creates barriers through taxable income that hinders the growth of the beer industry which, in turn, ends up having to raise its prices.

Another goal is to be able to socialize and solve the unequal competition in relation to the imported beer, which is under a tariff preference system established upon agreement with the European Union since 2017. Micro breweries do pay certain taxes and, for this reason, their representatives believe that a strengthened lobbying could help them achieve great changes in regard to laws and incentives to protect the local craft brewers.

1.4.2 Teamwork

The second objective is aimed at strengthening links among the country brewers by creating a network of producers, from the smallest to the biggest ones in each category. In this way they seek to establish improved distribution channels and, most important, to eliminate the existing monopoly of providers of raw materials. The second objective is being dealt with at the moment, by gathering all craft brewers, small ones and large ones, into a guild and by developing a network which would allow them to rely on a more efficient system of distribution channels. Most important of all, these measures will focus too on the elimination of the existing monopoly held by the providers of raw materials, throughout the creation of a joint purchase system. In this way it will be possible to face the existing comercial barriers and other kinds of limitations related to

the creation of craft breweries. This can be done through vertical integration, by linking the craft brewers' guild to one and the same supply chain (Porter,1999). An economy of scale can be achieved through this measure, which means decreasing costs in order to reach an optimal peak production at the lowest possible costs (Wallerstein, 1974).

1.4.3 Services

Belonging to *ASOCERV* offers its member a series of benefits. This association helps the craft brewers by publicizing the concept of craft beer through mass media and social network, and by holding beer tasting events. It also promotes training seminars which offer international certifications for trainees to become either master brewers or judges of constests held at large beer festivals. In this regard *ASOCERV*'s goal is to turn the national beer contest *¨Mitad del Mundo¨* into an event of international standards, similar to other contests held around the world.

1.5 Breweries belonging to *ASOCERV*

Table 1. ASOCERV list of Ecuadorian craft beers

	BREWERY	CITY
1	Abysmo	Quito
2	AMARU	Quito
3	Ancestral Cervecería	Quito
4	Andes Brewing	Quito
5	Animal Brewery	Quito
6	Ballesta	Quito
7	Bandido Brewing	Quito
8	Brothermann	Quito
9	Camino del Sol	Quito
10	Cherusker	Quito
11	Django Cervecería	Quito
12	La Morena Brewing Co	Quito
13	Loop Brewing	Quito
14	Los Tres Monjes	Quito
15	Mamut Brewery Co	Quito
16	MUT Lager	Quito
17	PAGANO	Quito
18	Pana 46	Quito
19	Paramo	Quito
20	Quinta Esencia	Quito
21	Sabai Beer	Quito
22	Saint Roots	Quito
23	San Blas	Quito
24	Santa Rosa	Quito
25	Santana Brewing	Quito
26	Triana Brewery	Quito
27	Una más	Quito
28	Zambo Creek	Quito
29	Bajamar	Guayaquil
30	Cerveza Morisca	Guayaquil
31	Odisea	Guayaquil
32	The Beer Cathedral	Guayaquil
33	Cervecería La Paz	Cuenca
34	Derijcke	Cuenca
35	Golden Prague	Cuenca
36	Athena Homebrew	Ibarra
37	Caran	Ibarra
38	Nativa Brewing	Ibarra
39	Sudbier	Loja
40	WILCO	Loja
41	Bonanza	Portoviejo
42	Cervecería Artesanal Amarun	Tena

Source: (Pinos, 2019)

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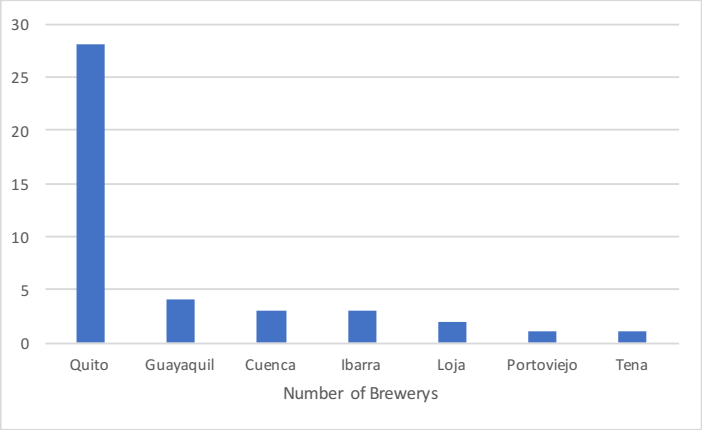
Figure 1. Number of breweries by city in Ecuador



Source: (Pinos, 2019)

Autor: Ordoñez Amanda

This graph shows the existing number of breweries in Ecuador: 28 in Quito, 3 in Cuenca, 4 in Guayaquil, 3 in Ibarra, 2 in Loja, 1 in Tena and 1 in Portoviejo.

1.6 Explanation of the legal normative for the creation of an Association

Craft brewers are categorized as either small or medium-sized enterprises (SMEs) in Ecuador. According to COPCI Ordinance, Book III, Article 106, the definition for micro, small and medium-sized enterprises is based upon the number of workers employed. A small enterprise is that which employs from 10 to 49 workers and has a level of sales or gross yearly revenue between one hundred thousand (American) dollars and one million dollars. A medium-sized enterprise is that which employs from 50 to 199 workers and has a level of sales or gross yearly revenue between one million (American) dollars and two million dollars (Asamblea Nacional del Ecuador, 2010).

Since the year 2000, SMEs in Ecuador faced a series of difficulties at the moment of operating their businesses. For this reason, the idea of associating among craft brewers arised as a solution to achieve better results in their respective managing activities.

Associativity is considered as a right established by law in Ecuador. Both through developing collective and willful strategies, SMEs can achieve increased market competition, with similar and sometimes even higher results that those of larger enterprises. In fact, several initiatives of productive and comercial articulation have taken place in Latin America, giving as a result a high degree of cooperation among

entrepeneurs and, at the same time, increasing their competitiveness by allowing the transfer of knowledge, a greater participation in the market of goods and services, and the achievement of economies of scale (Arango, 2013). At the same time, the companies which participate have managing independence and juridical autonomy.

The cluster is one of the most utilized models in associativity. Michael Porter, a teacher at Harvard University, stated in 1999, that clusters are "geographic concentration of interconnected businesses, suppliers, and associated institutions in a particular field". Following this reasoning, Porter points out that there are vertically and horizontally integrated clusters. Industries which form vertical clusters integrate through the supply chain, whereas those with horizontal clusters share knwoledge, technology, objective market, and similar human and/or natural resources (Porter, 1999).

Associativity in Ecuador is a citizens' right. The Ecuadorian Constitution establishes, recognizes and guarantees in its Article 66, numeral 13, the right of citizens to associate, gather and manifest freely and voluntarily (Asamblea Nacional del Ecuador, 2008).

Similarly, the Ecuadorian Civil Code in its Book IV, Title II ¨On deeds and statements of intent¨ in the Article 1461 establishes that for a person to establish a statement of intention towards another person it is first necessary:

- To be legally capable;

- To willingly consent to such an act or declaration, and that his/her consent does not suffer from errors;

- That it does not rest upon an ilegal object; and,

- That it is based upon a licit reason.

A person's legal competence consists of being able to acquire compromises without relying on someone else's will or authorization (Asamblea Nacional del Ecuador, 2019). Consequently, the citizen who complies with all the legal requirements established in the above mentioned Article, is subject of associative rights.

It is important to point out that *ASOCERV* is a voluntary association among guild members for common purposes. The Ecuadorian Civil Code, on its Book IV, Title XXVI, Article 1957, "On society"establishes that a "Society" or "Company" is a contract by

which two or more people agree to set up something in common, with the purpose of entitling themselves to the benefits deriving from their agreement. The society thus constituted becomes a legal entity, different in nature from its individual members (Asamblea Nacional del Ecuador, 2019).

Also, Article 1959 of the Ecuadorian Civil Code, on its Book IV, Title XXVI ¨On Society¨, manifiests that: There's no posible society if each of the members do not possess something in common; being that either money or goods, either related to an industry, a service, or labor valued in currency. Nor does a society exist if there's no participation from its benefits. Benefits, in this case, are understood as not only the moral ones, but those of a tangible nature (Asamblea Nacional del Ecuador, 2019).

In turn, the Ecuadorian Civil Code, on its Book IV, Title XXVI, ¨On Society¨ paragraph 2 ¨On the different types of Societies¨, in Article 1963 establishes that a Society could either be civil or commercial. Commercial Societies are those whose main purpose is making business, consideredby law as comercial acts. Other types of associations are considered as Civil Societies. Also, in Article 1964 it is stated that the normative established for commercial Societies applies to all kinds of associations (Asamblea Nacional del Ecuador, 2019).

The difference betwen a Civil Society and a Commercial Society is one of jurisdiction. The Civil Society is under the laws of civil jurisdiction and therefore ruled by the Civil Code; the corporate purpose of this Society lies in the field of civil activities. On the other hand, the corporate purpose of Commercial Societies is to carry on commercial activities and are ruled by the law of the Ecuadorian Commercial Code and Companies Act (*Ley de Compañías)* (Moscoso, 2008).

1.7 *ASOCERV's* legal status, operation and membership

The current legal status of *ASOCERV* is that of a Civil Society, due to the fact that it represents the voluntary agreement of forty two different craft brewers who participate of a society where no commercial activities are directed to third parties. The Association has proceeded to legalize its status, to formally constitute the society before the *Registro Mercantil del Ecuador* with the name of *Asociación de Cerveceros del Ecuador (ASOCERV)*. The Association has a legal representative or administrator. It also has a Statute which regulates and specifies its correspondent competencies. The decision -

making process takes place through a general assembly, and a written act reports about all the topics dealt within it. Finally, the Association requires to have an active *RUC* which is the general procedure to comply with all the tax obligations established by the Ecuadorian Government.

The incomes and expenditures of *ASOCERV* are very limited since the Association has no lucrative purpose, and its objectives are focussed on obtaining benefits for all the micro breweries which belong to it.

The Association derives its income from the anual membership fee paid by each of its members, which is $190+*IVA*. Another source of income are the events held throughout the year by *ASOCERV*, which add up to an average of $3.000. The variable anual income of *ASOCERV* is $11.937,6 (Pinos, 2019).

1.8 Benefits of *ASOCERV* membership

ASOCERV membership entitles several benefits, e.g.:

-The rights to participate and to vote during the General Assemblies (1 vote per Craft Brewer Enterprise)

- The right to participate as a candidate for the Board of Directors (2019).
- Access to all types of information saved on the *ASOCERV*'s files: history, status, legal documents.
- Access to *ASOCERV*'s communication channels along with brand presence in social media and web pages.
- 25% discount at the craft beer fair.
- Preferential rates for associated members of *Copa Cervecera Mitad del Mundo.*
- Special disccounts at conferences and training seminars held by the Association.
- Discounts from selected suppliers.

Conclusions

In this chapter it is possible to observe that beer exists since pre-historian times, evolving to the point of becoming a high quality product as a result of automated processes. Beer is available nowadays all over the world; its presence has transcended in the history of industrial development, as it is the case of Ecuador where it is one of the products of massive consumption within the drinks industry. The craft brewer production of Ecuador counts with a variety of beer styles; especially with regard to *lager* and *ale* varieties, it has been possible to develop products of great quality which are very competitive at international levels.

Competence among craft brewers is considered as an opportunity for shared growth. Under the framework of Ecuador's Constitution, associativity is a civil right; in this way SMEs can voluntarily develop collective strategies which allow them to reach similar levels of competitiveness to those of larger industries.

. The Association of Craft Brewers of Ecuador *(Asociación de Cerveceros del Ecuador - ASOCERV)* was created in view of the positive reception of craft beer by the market, and the need to set strategies and new goals for its members. It is the only one legally constituted as a Civil Association, and therefore able to exercise its legal competences. It gathers 42 members represented by an elected president.

Several positive aspects have been achieved so far for the craft brewers since their legal association, such as the reduction of *ICE* from 7,24% to 2% for the taxable income; the "craft beer" (*cerveza artesanal*) denomination by the Production Development Law (*Ley de Fomento Productivo)* in 2018; the regulatory supervision of *AB Inbev* and *Cervecería Nacional*'s merge in relation to their payments of tax due, among other (Pinos, 2019). However, the development of the craft brewers' guild still faces obstacles; a very important factor could be the creation of a purchase joint in order to lower the costs of raw materials used in the production processes.

ASOCERV needs to strengthen through the inclusion of new members from the craft brewers' guild. This will ensure greater representativeness in their political lobbying and would help them achieve better regulations for cost reduction in their operation processes. In turn, their market presence would increase, creating better sale opportunities for each of the micro breweries.

2. CHAPTER 2: RAW MATERIAL REQUIREMENTS

Introductory note

This chapter will focus on determining the quantitative information obtained from the survey applied to the members of *ASOCERV*. The data gathered shows information such as the types of beer with higher production rates by the members of the Association, or the quantity in liters produced by each of the different breweries during the year 2018, as well as by type of beer. Raw materials will also be addressed so as to know the existing demmand for the ingredients required for beer production. All this information will help us have a clear vision of the raw materials required, besides identifying their country of origin.

2.1 Description of the survey results

It is important to mention that, according to the *Real Academia Española (RAE),* a survey is a set of typified questions, addressed to a representative group, in order to find out different opinions or facts (Real Academia Española, 2001).

Within this context, in order to develop the present chapter, a pilot survey was designed to interview the manager of *Cervecería La Paz*, José David Moscoso. The results can be found on Annex 1. The only change Moscoso suggested was to widen the selection of different types of beer.

The final survey was conducted with the help of *ASOCERV*. From a total of 42 associated members, 26 were willing to participate in the poll. This number represents more than 50% of the active members of the Association. According to Pinos, President of *ASOCERV*, the breweries involved in the survey were mostly those with larger production volumes; through their participation it will be possible to determine their needs. The survey took place between April 6 and May 6, 2019. The whole process was made online since the breweries are located in different cities across the country. The final results of the survey can be found on Annex 2.

The results obtained by means of the survey are presented next:

1. Name of the brewery

This question was used to identify the members of the Association who showed interest in being part of this study.

Table 2. List of breweries participating in the survey

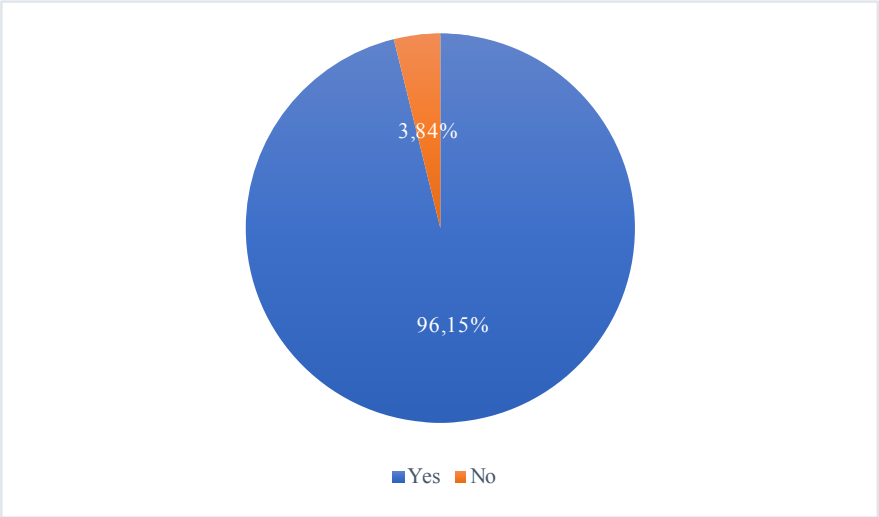
	Brewery
1	Abysmo
2	AMARU
3	Animal Brewery
4	Athena Homebrew
5	Bandido Brewing
6	Brothermann
7	Camino del Sol
8	Cerveceria Artesanal Amarun
9	Cerveceria caranqui libre
10	Cervecería La Paz
11	Cerveceria una mas
12	Cerveza Morisca
13	Cherusker
14	Derijcke
15	Django Cervecería
16	Loop Brewing
17	MUT Lager
18	Odisea
19	Pana 46
20	Sabai Beer
21	Santana Brewing
22	Sinners
23	Sudbier
24	The Beer Cathedral
25	Wilco
26	Zambo Creek

Author: Ordoñez Amanda

2. Do you think the price of raw materials increases production costs for your brewery?

As shown on Figure 2, 96,15% of the brewers think the price of raw materials increases production costs. Only 4,84% -that is, one member- thinks production costs are not affected by the price of commodities. This information is important since the objective of this research is to find out the possible interest of the members in creating a joint purchase in order to lower production costs.

Figure 2. Brewers' opinion about the effect of the rise in raw materials' price on production costs



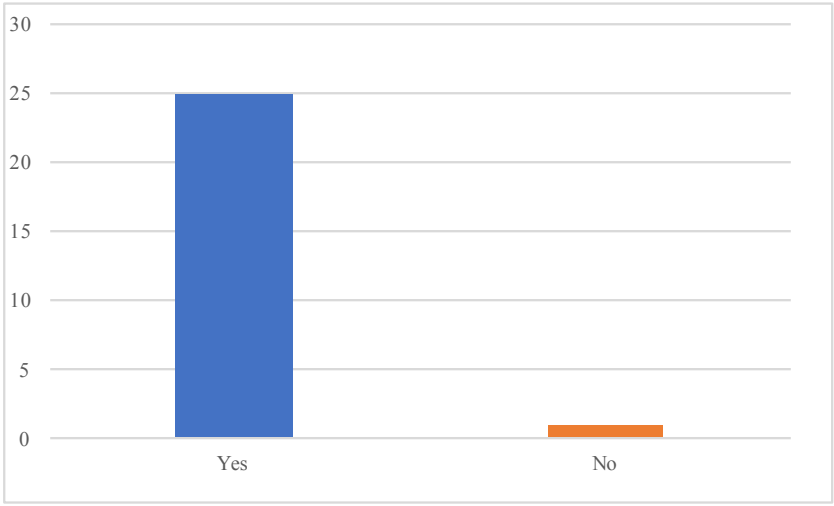
Source: Survey

Author: Ordoñez Amanda

3. Would you like to participate in *ASOCERV's* joint purchase so as to be able to buy raw materials at lower prices?

Figure 3 shows the results in which, out of 26 breweries, 25 state their will to become part of *ASOCERV*'s joint purchase. The only member who does not want to participate is *Camino del Sol*; this enterprise is the current distributor of raw materials for breweries in Ecuador.

Figure 3. Willingness to belong to the ASOCERV joint purchase



Source: Survey

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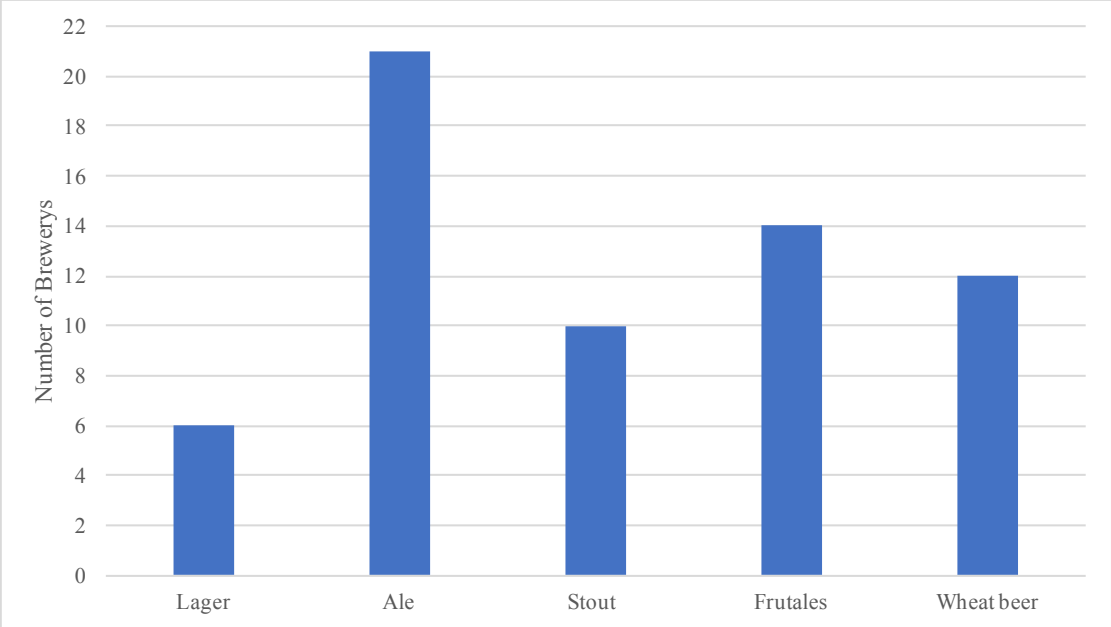
4. Annual volume (in liters) produced in the year 2018

The outcomes of the survey show that the types of beer which are produced in largest quantities are the ones belonging to the more popular in the beer family: low fermentation beer, known as lager, and high fermentation beer or ale (Kunze, 2014). Ecuador´s largest production is based on the pilsen style of the lager family and Indian Pale Ale (IPA), stout, fruit beer and wheat beer. The ale family leads the production in Ecuador, where the preferred styles are the IPA, fruit beer, wheat beer and stouts.

Figure 4 shows the types of beer produced per number of factories: 6 breweries produce lager-type, 21 breweries produce ale-type, 10 breweries produce stout, 14 breweries produce fruit beer, and 12 breweries produce wheat beer.

Figure 4. Types of beer per number of beer factories

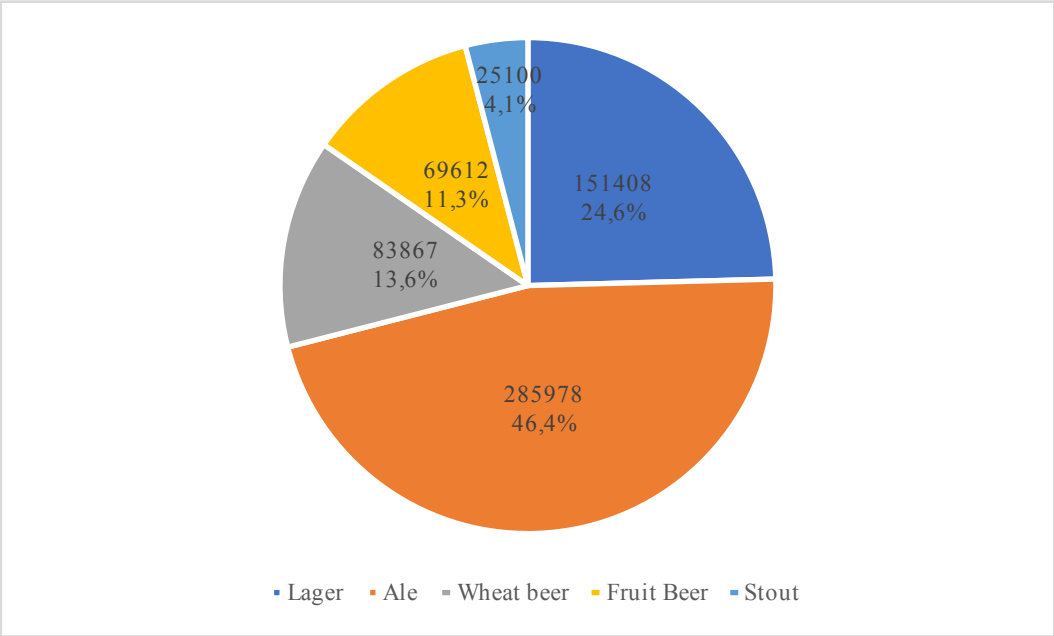


Source: Survey

Author: Ordoñez Amanda

The beer with the largest production is the ale family; it amounts to 46,6% of the total production of the surveyed breweries. Lager is next with 24,7% of the total production, followed by wheat beer with 13,7%, fruit beer with 11,3%, and stout with 4,1%. It is therefore important to take into account the relationship existing between the number of breweries producing different types of beer, together with the amount of liters produced and their respective percentages.

Figure 5. Types of craft beer by liters and percentages



Source: Survey

Author: Ordoñez Amanda

The central tendency measure represents the average amount of liters produced, whereas dispersion is an indicator which shows how data differ from the central tendency (Walpole, Myers, Myers, & Ye, 2007). These two measurements were calculated in relation to the amount of liters per type of beer.

Table 3. Media and Dispersion

	Lager	Ale	Wheat Beer	Fruit Beer	Stout
Central Tendency	21.629,71	11.439,12	6.988,92	4.640,80	2.788,89
Dispersion	43.535,83	15.347,26	13.031,88	7.895,98	3.618,16

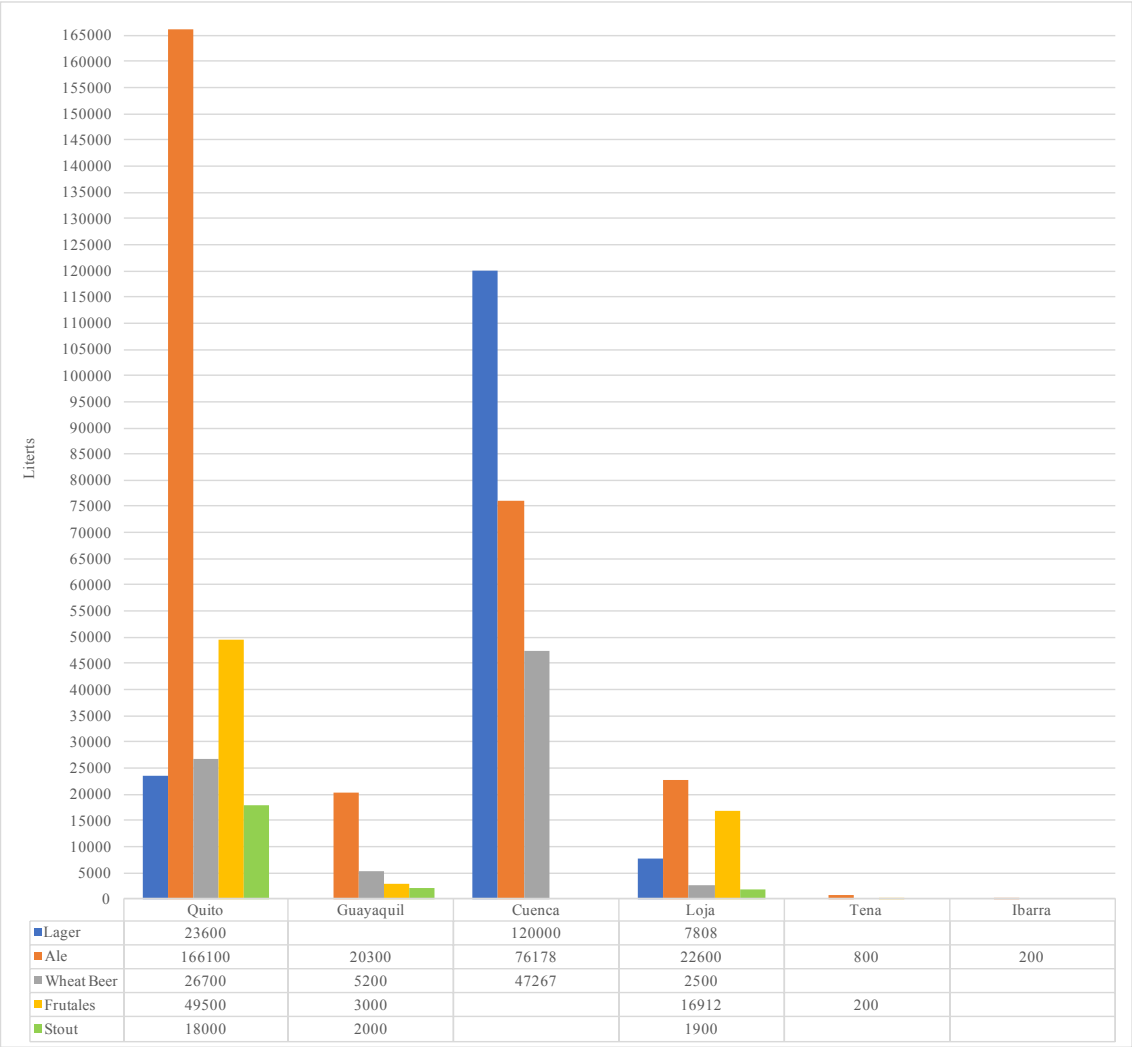
Author: Ordoñez Amanda

As it can be noticed, lager beer shows a larger dispersion. This can be explained due to the fact that there are few breweries which produce this type of beer. However, among these breweries is *Cervecería La Paz*, which produces a large volume of lager for its renowned brand *Concordia*. Other breweries which produce lager reach less significant volumes. These circumstances explain the high median found -in comparison with other types of beer- accompanied by an ample dispersion.

The ale-type of beer is the most widely craft at national level, both by volume and by the number of breweries that produce it. For this reason it presents a smaller dispersion given the fact that it shows a high production rate together with a large volume of production. Not having a considerable demmand, the other types of beer show a lower average and less dispersion.

On the other hand, it is important to consider the types of beer produced locally, in each city. Quito produces mostly ale and fruit beer; besides, it is the city with the highest craft beer production as can be seen in the results of the survey. Cuenca is the leader in the production of lager and wheat beer, and it ranks second at national level. Loja ranks third, mostly by producing ale-type and fruit beer. Guayaquil follows the trend on ale production; surprisingly its craft beer production is very scant. Tena and Ibarra rank the very last posititions; their production is basically aimed at satisfying a small, local demmand which includes their friends, according to the information provided to *ASOCERV* throughout the survey.

Figure 6. Types of beer produced per city



	Quito	Guayaquil	Cuenca	Loja	Tena	Ibarra
Lager	23600		120000	7808		
Ale	166100	20300	76178	22600	800	200
Wheat Beer	26700	5200	47267	2500		
Frutales	49500	3000		16912	200	
Stout	18000	2000		1900		

Source: Survey

Author: Ordoñez Amanda

5. How often is a new batch prepared?

From the 26 brewers interviewed, a 100% of them declared that they lack a production schedule and therefore cannot establish a frequency over a given period of time. All of them stated that production decisions are based upon demmand.

6. What styles of beer do you produce? (It could be more than one.)

The types of beer produced can be divided into three major categories, based on their popularity. The first category considered is the ale–type, which is the most popular, and is currently produced in 21 breweries. The second category englobes those relatively popular styles such as the fruit beer, produced in 14 breweries, wheat beer produced in 12 breweries, and stout in 10. The least popular category corresponds to lager, which is produced only in 6 breweries in the country.

Table 4. Types of beer produced per brewery

Brewery	Beer Type				
	Lager	Ale / IPA	Stout	Fruit Beer	Wheat Beer
Abysmo		X	X		
AMARU		X		X	X
Animal Brewery		X	X	X	
Athena Homebrew		X			X
Bandido Brewing	X	X			
Brothermann		X		X	X
Camino del Sol					
Cerveceria Artesanal Amarun		X		X	
Cerveceria caranqui libre	X	X	X	X	
Cervecería La Paz	X	X			X
Cerveceria una mas		X		X	X
Cerveza Morisca		X		X	
Cherusker		X			X
Derijcke		X			
Django Cervecería		X		X	
Loop Brewing		X		X	
MUT Lager	X			X	X
Odisea			X		X
Pana 46			X	X	X
Sabai Beer	X	X			X
Santana Brewing		X	X		
Sinners		X		X	
Sudbier	X		X		
The Beer Cathedral		X	X		X
Wilco		X	X	X	X
Zambo Creek		X	X	X	

Source: Survey

Author: Ordoñez Amanda

2.2 Raw materials used in craft beer production

The origins of beer can be traced back to ancient times. The formula used nowadays for its preparation is based on four ingredients: water, malting barley, hop and yeast.

2.2.1 Water

Beer is made mostly from water; this ingredient can add up to 90% of its composition; therefore water quality is of outmost importance. Most craft breweries follow a routine procedure of water purification in order to reach the desired organoleptic characteristics. Luckily, most places in Ecuador count with great quality water; this fact allows micro breweries to follow simpler water treatment procedures, as compared to those performed elsewhere in accordance to international guidelines.

2.2.2 Barley malt

This is the most important ingredient of beer. Even though beer can be made of different types of malt, artisan beer will always have a greater percentage of malted

barley.The German style wheat beer, which are the leaders in this category, take a mínimum of 60% barley malt in their composition, complemented by 40% wheat malt.

Artisan beer, in contrast with mainstream or industrial beer, do not take additional ingredients such as rice malt, *arrocillo*, malt extracts, etc., since their producers seek to achieve a premium quality rather than being one more among the cheap beers in the market (Kadatz, 2019).

It is important to mention that the malting process consists of the germination of the barley seeds. This is achieved by soaking the grains in water, at an ideal temperature that will promote the growth of a new root. Along this process, sugars are created inside the grain. The process is interrupted in the precise moment when a spike is about to sprout, by exposing the grain to hot air in order to dry it. This procedure aims at obtaining a grain filled with enzimes, to then ferment it and obtain alcohol (Kunze, 2014).

During the cooking procedure, two different kinds of malts are used: the base malts and the special malts. The base malts which are most widely used are the Pilsen malts, which are clear or pale; the Viena malts which have a medium color tone; and the Munich, which are the darkest. These three types have their origin in Germany. Additionally, there are English and Belgian malts of the pale ale type, mostly used for producing beer which are more bitter in taste. All of these complement at least 85% of the malt composition. The difference is achieved by using special malts; this allows to define the characteristics of the type of beer the brewer wants to produce. The special malts are measured by color units; the most common are the caramelized malts which are used to produce red beer; the roasted ones are used for darker tones, and Roasted Valley is used for crafting black beer with higher density and full body. In Ecuador, the requirement for the first two amounts to 70%, whereas Roasted Valley only reaches 30%, due to the types of beer which have more demand in the country (Kadatz, 2019).

The calculation formula for malt is, generally, 17 kg per hectoliter for mainstream beer, and up to 19 kg for artisan beer (Kunze, 2014)

$$19\ kg \times 1\ hL$$

2.2.3 Hop

Hop is a plant of the Humulus family, native to Europe, Western Asia and North America. Hop gives beer its floral aroma and the bitterness which makes it most characteristic. Its antiseptic properties protect the drink from harmful micro organisms. The parts of the plant that can be used are the cones or feminine flowers which are sold

in the form of extract and pellets. The extract is less used due to its elevated price. Another relevant factor in the decision-making process for the formulation of beer is that the extract contains less CO2 in comparison with the pellets; thus providing less aroma to the formula. Pellets are sold at a reasonable price and contribute with a high contentration of aromatic compounds, favoring the final outcome in the production of beer. Similarly to malts, there exist different varieties of hop; each variety is used according to the type of beer the crafter wants to produce. These are: Cascade, Yellow and Centeniel (Kadatz, 2019).

The calculation formula for hop is 0,1mg per liter, taking into account that hop has a 30% yield (Kunze, 2014).

$$0{,}1\ mg \times 1\ L$$

2.2.4 Yeast

Yeast is a unicellular fungus whose function is to promote the fermentation required in order to elaborate certain drinks, such as beer. Yeast can be found in different commercial presentations: dry and moist.The first variety is more widely used than the second one, since it allows for longer using times. During the beer production process, yeast can usually be used for just one time. In order to use it more than once, brewers need special equipment that allows for its re utilization; in this case yeast can be used up to a maximum of six times. The main purpose of using yeast is to transform the sugars present in malt into alcohol and carbon dioxide. This process is known as fermentation. Besides, it contributes with flavor and fruit aroma very typical of the Belgian styles (Kadatz, 2019).

The calculation formula for the use of yeast will depend on the type of beer that will be crafted, and the alcoholic content desired. However, a standard formula can be applied by adding 1 gr of yeast per liter of *must,* which is how the mix of water, malt and hop is called (Kunze, 2014).

$$1\ g \times 1\ L$$

2.3 Tariff headings of raw materials

Tariff headings are established in order to codify goods for their proper identification in customs procedures. Tariff headings in Ecuador belong to *NANDINA*, which is the customs nomenclature for the Community of Andean Countries (*Comunidad Andina)*

and is based upon the Harmonized Commodity Description and Coding System (*Sistema Armonizado de Designación y Codificación de Mercancías)* (Morales, 2013).

The following tariff headings are found in the Resolution 020 of the *Comité de Comercio Exterior* (COMEX) under the heading "Structure of the Tariff Headings of Ecuador", in section II, which refers to the goods derived from the plant kingdom:

- Malt: 1107100000

- Yeast: 2102100000 (live yeasts)

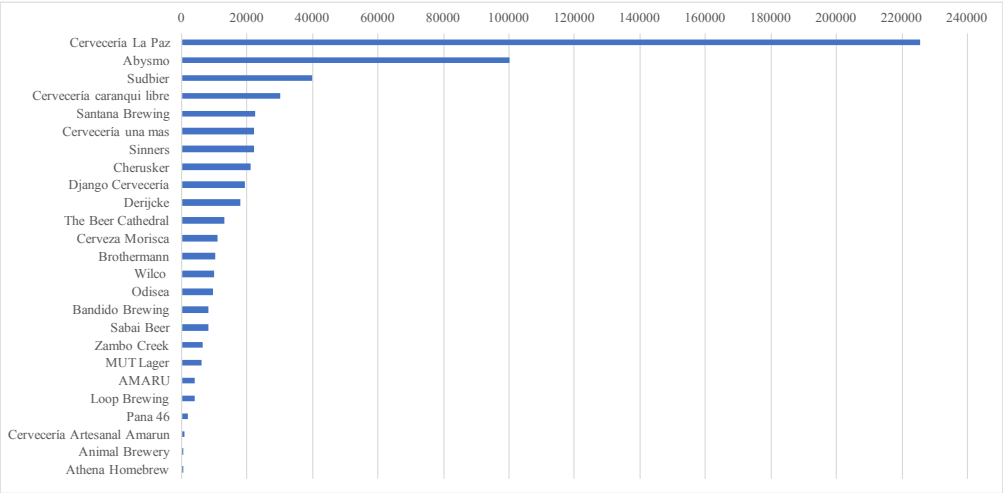
- Hop: 1210100000 (Neither crushed not in pellets) This is usually the code used for hop extract.

- Hop: 1210200000 (Crushed or in pellets) (Ministerio de Comercio Exterior, 2017).

2.4 Beer production volumes (*ASOCERV)*

The production volume of the total number of surveyed breweries associated through *ASOCERV* is about 614.065 liters per year. *Cervecería La Paz* is on the leading position followed by *Abysmo, Sudbier, Cervecería Caranqui Libre* and *Santana Brewing;* these are the first five positions held by beer crafting enterprises in Ecuador. *Cervecería Una Más, Sinners, Cherusker, Django Cervecería,* and *Derjicke* are the next, from the surveyed enterprises, of which they represent 85,21% of the total sum produced in liters. The other breweries represent just 14,79% of the total production volume.

Figure 7. Total annual production in liters per brewery



Source: Survey

Author: Ordoñez Amanda

As can be observed in the graph above, the breweries that produce the most are *Cervecería La Paz*, which more than doubles the production of *Abysmo*, company which ranks second, followed by *Sudbie*r. As it was previously mentioned, the first ten breweries represent the largest volumen of anual production with 520.045 liters.

Consequently, the amount of raw material required by the breweries of *ASOCERV* can be calculated based on the volume of production corresponding to the year 2018. Approximate results were obtained based on the standard calculation formulas for each of the ingredients required: malt: 19 kg per each hl; hop: 0,1 mg per liter, taking into account a yield of 30% (for this reason, in order to obtain an average measure for hop it is necessary to multiply the result by 30; in this way both aroma and flavor will be obtained). Yeast: 1 gr per liter. However, it is important to stress that most Ecuadorian master brewers do not use the calculation formulas but rather make their own decisions at the moment of cooking the ingredients.

In order to obtain standard results after the calculations, measurements were registered in kilograms and liters were transformed into hectoliters.

Table 5. Calculation of the amount of raw materials used, based on 2018 production

	Lager	Ale	Stout	TOTAL
Bearly Malt (Kg)	28.767,52	83.496,83	4.769,00	117.033,35
Hope (Kg)	0,15	0,44	0,03	0,62
Yeast (Kg)	151,41	439,46	25,10	615,97
TOTAL	28.919,08	83.936,73	4.794,13	117.649,93

Source: Ordoñez Amanda

It is suggested that the import process of goods should take place twice per year, previous to the two largest demand seasons. For most craft brewers, except for *Cervecería La Paz*, the main focus on consumption is the *On Trade* channel, which means open-bottle sales at bars and restaurants. This big- selling seasons are February and March, and between September and December. So, according to this pattern of consumption and production, 40% of raw materials should be imported in December, focussed on the first season; and 60% should be imported in July for the second season.

2.5 Choice of suppliers according to raw materials requirements

The ten brands of brewers' supplies according to the *Beer Judge Certification Program* (BJCP) - recognized as the world's most important institution on beer- are the following:

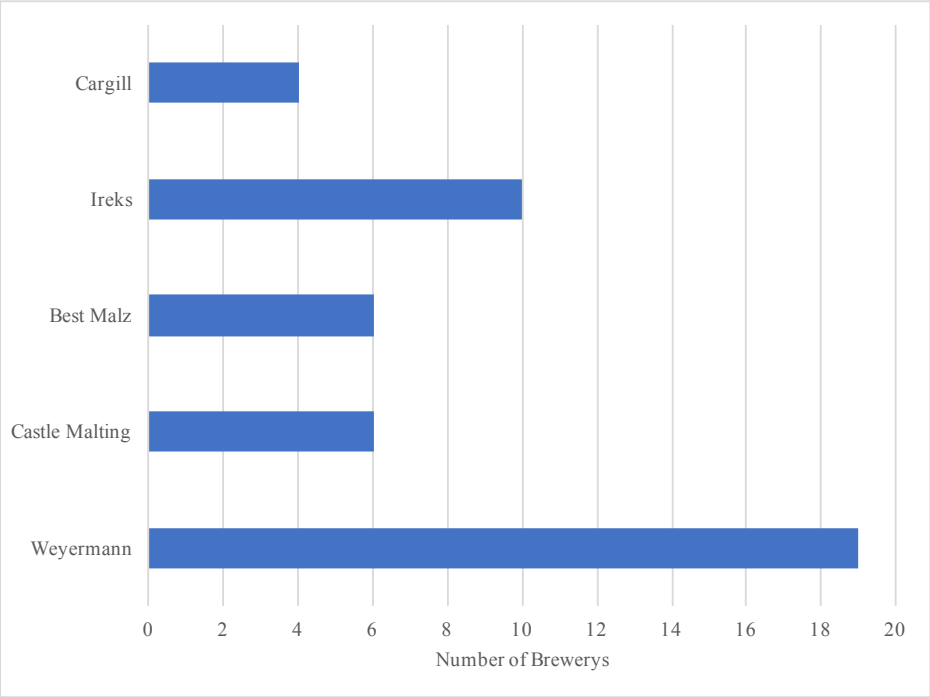
- Weyermann (Germany)
- Castle malting (Belgium)
- Best malz (Germany)
- Cargill. (Argentina)
- Ireks (Germany)
- Eficrea (Spain)
- Zybrew (Czech Republic)
- The Homebrew Company (Great Britain)
- Palma Rosa (Dominican Republic)
- Brewmasters. (Mexico)

However, the BJCP has established that the supplies originating in Germany and Belgium have a better quality and better performance than those coming from other countries, allowing brewers to develop the different beer styles with high quality standards (Beer Judgment Certification Program, 2017).

Most brewers in Ecuador get their raw materials from one and the same local provider: *Camino del Sol*, an enterprise which, at the moment, is the only importer of brewers supplies. For this reason, since there is just one provider, it is *Camino del Sol* who determines de margin profit, causing a rise in production costs. This is the main reason taken into account for the creation of a joint purchase on the part of *ASOCERV*.

A large majority of the surveyed brewers use Weyermann for malts of German origin, bought from this sole provider. However, according to the data obtained, it is important to prove that there exists a small supply of other brands of malt. Besides Weyermann, which is the most widely used, there is also Ireks as a second option, and as other alternatives there are Best Malz, Castle Malting and Cargill, according to the survey.

Figure 8. Most commonly used malt brands by Ecuadorian craft brewers



Source: Survey

Author: Ordoñez Amanda

On the other hand, with regard to hop and yeast, brewers use just two brands, one for each of these ingredients. Hop is supplied by Castle Malting from Belgium, and the yeast used is Bio-Crop, from Colombia.

At the moment of making a decision with regard to the providers, it is important to take into account the existing Commercial Agreements which remain active in Ecuador. On January 1st, 2017, entered into force a Commercial Agreement with the European Union (EU); this agreement adds up to the agreement signed in 1969 with the Community of Andean Countries (*Comunidad Andina - CAN*). For this reason, any Ecuadorian importer has benefits at the moment of acquiring goods from the European Union, as well as in the case of buying yeast from Colombia, in which case the supplies become tax free at entering Ecuadorian territory.

2.6 Quotes from suppliers

Former quotes from previous import processes -done by the only importer in Ecuador- have been used as references in order to get real prices on part of the suppliers. By doing so, it is expected that there won´t be any alterations in the commercial price.

Tax exemptions can also be taken advantage of at the moment of acquiring malts from Weyermann and Ireks (the German brands with the highest recognition), by the application of the Commercial Agreement with the European Union.

Due to its great quality, all brewers use the Belgian brand Castle Malting for their hop requirements. Besides, as with other goods of European origin, these imports also get the benefits of the Commercial Agreement with the European Union. Besides, it is possible to verify in the available quote that hop has a 10% discount on part of the supplier.

Something similar happens with yeast: just one brand is used by all of the brewers in Ecuador. The yeast's name is Bio-Crop and it is produced in Colombia. Tax exemption applies to the import process of this product thanks to the *Pacto Comercial de la Comunidad Andina* (*CAN*), besides the transportation ease arising from the vicinity of Ecuador and Colombia.

The suppliers' quotes can be found on the various Annexes: Brand #1: Weyermann, Annex3; Brand #2: Ireks, Annex 4; Brand #3: Castle Malting, Annex 5.

Conclusions

As a conclusion to this chapter it is important to mention that three fundamental variables have been determined in order to define the amount of import goods for the joint purchase:

1. Most widely produced beer styles in Ecuador. The ale variety is the beer with the largest production and it is present in most breweries, followed by fruit beer, wheat beer and stout. Altough lager's presence is uncommon in most breweries, its large production places it in the second place.

2. *ASOCERV's* production: the volume of production reached in 2018 by *ASOCERV* is similar to the monthly volume produced by a brewery that produces industrial brands. This points out at the fact that craft breweries still have a long way to go and much to attain in relation to production and the sales of their products.

3. Better suppliers. It has been possible to determine which the best suppliers are for craft brewers, based on their quality requirements. Similarly, these are considered as premium raw materials by the BJCP. In order to get the benefits of tax exemption, the countries oforigin were taken into consideration. In this way it has also been possible to validate the costs for the accomplishment of the present Project.

With the use of these variables it is possible to build a great part of the supply chain and value chain from origin to destiny; these will be determined in the next chapter.

3. CHAPTER 3: COSTS AND LOGISTICS

Introductory note

This chapter addresses the logistics operation from origin to destination, together with the corresponding expenditures in order to determine the merchandise final costs. A review of both, qualitative and quantitative information regarding incoterms and customs regimes will be done, so as to be able to determine the shippers' freight costs. These agents are experts in Customs export and import services, and are also knowledgeable of the legislation regulating trade at origin and destination countries (Llamazares, 2018). On the other hand, the corresponding tax costs will be established throughout the calculation of a value chain. In this way it will be possible to quantify the costs at origin and at destination and, similarly, to identify distribution costs at destination. The information thus obtained will allow for a clear perspective on whether the creation of a joint purchase can represent an advantage for *ASOCERV*.

3.1 Foreign Trade theory

When doing an import process, it is important to take into account three different aspects in order to know the logistics and the related costs. The first thing to consider is which inconterm is going to be a agreed upon with the providers; the second thing is the Customs regime to be applied for the entry of the goods; and the third thing, the means of payment and how this is going to take place.

3.1.1 *Incoterms*

Incoterms are a series of commercial terms related to international commercial transactions intended to define the respective obligations related to the logistic chain and its costs (Ministerio de Comercio Exterior e Inversiones, 2019). The former incoterms came into effect in 2010; however, some changes were introduced and implemented by January 1st, 2020. *Incoterms* have been designed by the International Chamber of Commerce; however, each country has its own regulatory agency since those are used for every international business trade. The corresponding regulatory agency in Ecuador is the Ministry of Productivity and Foreign Trade.

There exist eleven terms for this purpose:

Table 6. Incoterms

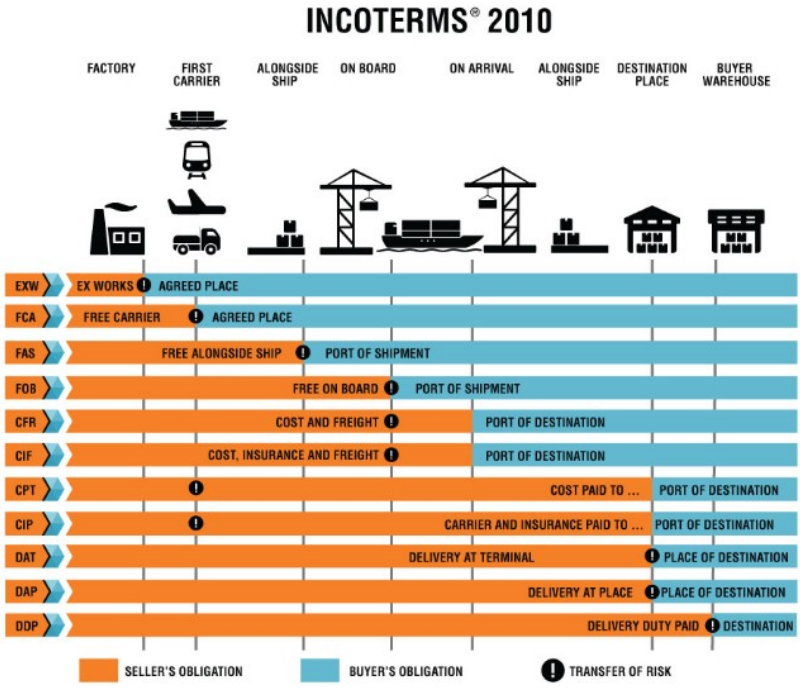
INCOTERM	DESCRIPTION IN INGLISH	DESCRIPTION IN SPANISH
EXW	Ex works	En fábrica
FCA	Free Carrier	Franco transportista / lugar convenido
FAS	Free alongside ship	Franco al costado del buque / puerto de carga convenido
FOB	Free on board	Franco a bordo / puerto de carga convenido
CFR	Cost and freight	Costo y Flete
CPT	Carriage paid to	transporte pagado hasta / puerto de destino convenido
CIF	Costo, insurance and freight	Costo, seguro y flete
CIP	Carriage and insurance paid to	Transportey seguro pagado hasta / puerto de destino convenido
DAT	Delivered at terminal	Entregado en terminal / puerto de destino convenido
DAP	Delivered at place	Entregado en punto / lugar dedestino convenido
DDP	Delivered duty paid	Entregado derechos pagados / lugar de destino convenido

Source: International Chamber of Commerce

Author: Ordoñez Amanda

The following graph depicts the corresponding responsibilities for each of the parts. The importer duties are those highlighted in blue, while the exporters' correspond to the orange ones. This is a visual way of understanding the procedures explained on Table 6.

Figure 1. Incoterms 2010



Source: International Chamber of Commerce

Our providers have established certain specific incoterms:

- Weyermann: Malt provider, FCA Bamberg.
- Ireks: Malt provider, FOB Hamburg.
- Castle Malting: Hop provider, CIF Guayaquil.
- Bio Crop: Yeast provider, CIP Tulcán.

FCA Bamberg: When a negotiation is made by using the *incoterm* FCA, this means that the exporter fulfils the requisites established once the merchandise has been delivered in the agreed place, by handing over the goods into the charge of a designated carrier. That is, the exporter's obligation is to deliver the goods while assuming the risks and cost of their handling and stowage.

In this case, Weyermann will asume the costs of handling and delivery in Bamberg, Germany; the city where the barley malt factory is located. From then on, the freight and handling costs are on account of *ASOCERV,* including freights, handling and stowage costs, plus international insurance costs and taxes, all the way from Bamberg to Hamburg, and then to the storage place of *ASOCERV* in Guayaquil (International Chamber of Commerce, 2019). The costs of the value chain will be detailed later in this chapter.

FOB Hamburgo: This is one of the most common *incoterms* used for international trade, together with CIF. By establishing the *incoterm* FOB in an import process, the exporter agrees to deliver the merchandise on board at the port of shipment. In this case, it would be the port of Hamburg, Germany. Right after that, all responsibilities and risks will be on account of the importer. In turn, the exporter hires international shipping services through a consignee, although the costs are on account of the importer. This means that in this case, Ireks, the barley malt provider, would be in charge of the packaging, stowage, inland freight and delivery of the merchandise in the port of Hamburg. *ASOCERV,* on the other hand, must pay the international freight and insurance all the way to the destination port of Guayaquil, along with Custom's taxes, inland freight and stowage costs at destination (International Chamber of Commerce, 2019).

CIF Guayaquil: As it was previously mentioned, CIF and FOB are some of the most common *incoterms* used for international trade. The agreement on CIF implies that the exporter covers the merchandise freight and insurance costs in the host country. In this case, the goods will be delivered on board at the port of Rotterdam, in Holland, and sent to the agreed destination. In order for all the the customs formalities to be complied with, the Customs value should be declared as CIF. In this case, Castle Malting, the provider of hop, must get in charge of all the logistics and expenditures all the way to the

port of Guayaquil. On the other hand, *ASOCERV* should cover the costs once the merchandise has arrived in Ecuador; this includes Customs costs and taxes, inland freight and stowage (International Chamber of Commerce, 2019). The details of the corresponding chain value can be found further on this chapter.

It is worth mentioning that the maritime traffic time, either from the ports of Hamburg or Rotterdam to the port of Guayaquil, is of twenty seven days; this information was obtained from the quoted shipment companies Pluscargo and Munditransport.

CIP Tulcán: This *incoterm* is frequently used when multimodal transportation is available; that is, either maritime, inland or air transport. In this case, the exporter covers all the expenses of international transportation while the insurance cost is covered by the importer; but in the event of risk the exporter himself would pay the insurance. CIP *incoterm* is usually agreed at when very little or no risks are foreseen.

Besides, the exporter is in charge of appropriately submitting the corresponding documentation on the scheduled times; all the logistics and the expenditures are thus on his account and he gets in charge of all the expenses until the merchandise arrives at the agreed destination. In this case, Bio-Crop, the yeast provider, is based in Palmira, Colombia; this company uses inland transport which delivers the products at an address previously agreed with *ASOCERV*. The provider has established a two-day delivery time.

It is of the outmost importance to consider that the provider's quotes include the expenses which correspond to the *incoterm* agreed upon.

3.1.2. Customs procedures

SENAE defines Customs procedures as the treatment which is applicable to goods, at the request of the declarant, according to the Customs Legislation in force (Asamblea Nacional del Ecuador, 2010). These are divided into Import Regimes, Export Regimes, Other Customs Regimes and Exemptions Regimes. It is important to explain all the regimes for a better understanding on part of the reader. The applicable regimes are stated in the following list:

Non-processing Regimes (*Regímenes de No-transformación*):

- Consumption Imports Regime (*Importación a Consumo*) (Regime 10): It is the definitive entry of goods into the country for their immediate use (Asamblea Nacional del Ecuador, 2010)

- Temporary Admission for Re-exporting in the same conditions (Regime 20): This is a special regime which allows the temporary introduction of goods for specific

uses, with partial or total suspensión of rights ad taxes (Asamblea Nacional del Ecuador, 2010).

- Re-importation in the same conditions (*Reimportación en el mismo estado*) (Regime 32): This allows for the introduction of consumption goods with tax exemptions, for the export of fully finished products, without the incoming merchandise having to undergo any kind of transformation (Asamblea Nacional del Ecuador, 2010).

- Duty-free Replenishment (*Reposición con Franquicia Arancelaria*) (Regime 11): It is permitted to import with tax and rights exemptions applied to merchandise identical or similar in kind, quality or technical characteristics to those nationalized goods which have been used to definitively obtain the previously exported goods (Asamblea Nacional del Ecuador, 2010).

- Customs Warehouses (*Depósitos Aduaneros*) (Regime 70): This is a special regime by which the mechandise can be storaged for a period of time without the need for payment of rights or taxes; this can be public or private (Asamblea Nacional del Ecuador, 2010).

Processing Arrangements (*Regímenes de Transformación*):

- Temporary Admission for Inward-processing *(Admisión Temporal para Perfeccionamiento Activo)* (Regime 21): This is a regime that allows the introduction of goods to Ecuadorian territory, in order for these to be subjected to an inward-processing, always that the transformation purpose is accomplished by the manufacturing of new products, or by repairing or accomplishing authorized maquila processes (Asamblea Nacional del Ecuador, 2010).

-Processing under Customs Control (*Transformación bajo Control Aduanero*) (Regime 72): It is allowed to import goods with suspended duties exemptions for working or subject them to modifications or operations to change their nature or condition. This regime permits the import of any kind of goods, even those banned for import, always that they are modified so that their composition is no longer prohibited (Asamblea Nacional del Ecuador, 2010).

- Special Storage (*Almacén Especial*) (Regime 75): This regime allows to store merchandise destined to the procurement, repairing and maintenance of vessels, aircraft and loading units destined to offering public service, passenger transport and free freight (Asamblea Nacional del Ecuador, 2010).

The customs regimes that can be used for the present case are: Regime 10, Consumption Imports Regime, and Regime 70, Customs Warehouses. However, Regime

10 has been considered as a better option for the Association's non-profit joint purchase. In this way it is possible for the Association to work on a buying agreement where each of the brewers establishes the exact quantities required of each product and thus a general order can be worked out based on the existing demand. In this way there won't be added expenditures on Customs deposits and the merchandise can be immediatly nationalized as soon as it enters Ecuadorian territory. By doing this it will be possible to reduce extra expenses.

3.1.3 Payment methods

The importer needs to take into account certain variables at the moment of choosing a payment method that guarantees the least possible risks in the commercial transaction to be held with the exporter. The main methods are: Commercial Risk, Country Risk, Exchange Risk, and Extraordinary Risks.

Commercial Risk: It refers to the unilateral cancellation of a contract, non-payment, bankruptcy, fraud, etc.

Country Risk: This kind of risk is beyond the importer's control; it refers to the risk of default caused by the State or the corresponding political organization of the country.

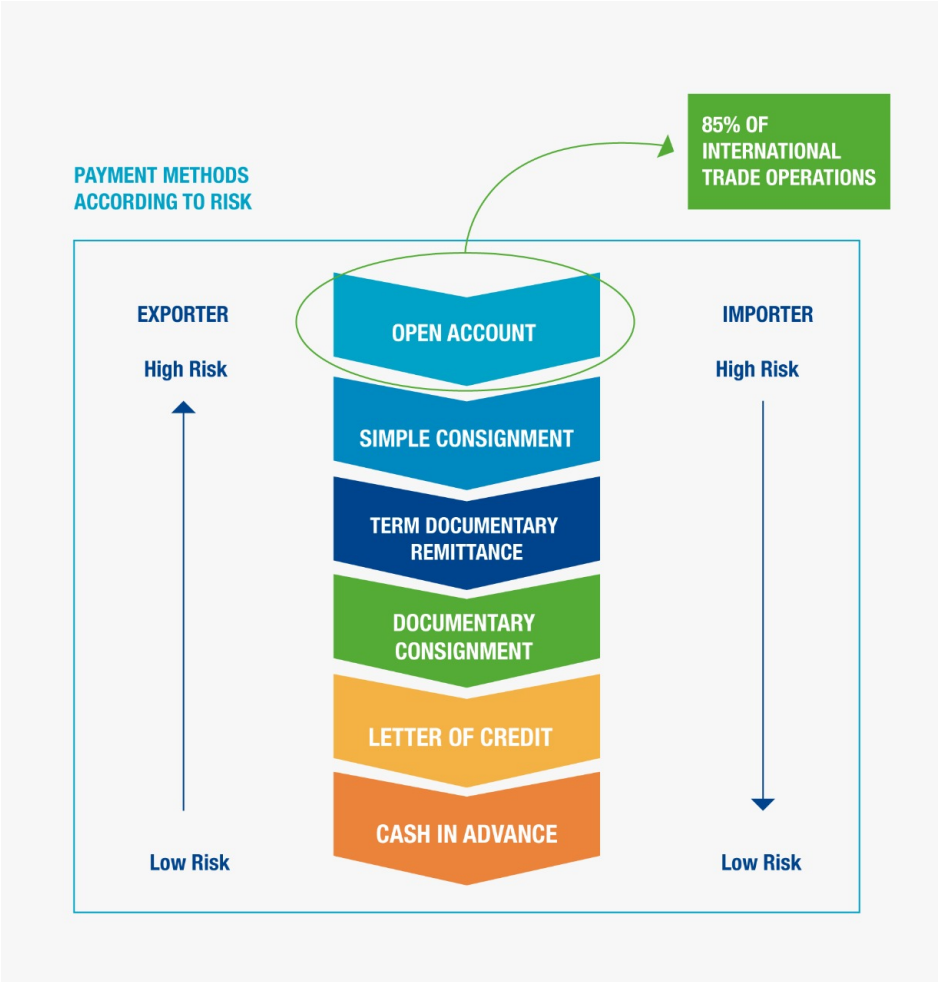
Exchange Risk: It refers to the possibility of different exchange rates taking place at the moment of the contract negotiation or at the moment when the payment/charging takes place.

Extraordinary Risks: Similar to Country Risk, the liability of the importer differs when events of extraordinary nature such as natural catastrophes, demonstrations, war conflicts, etc., take place (Estrada, 2016).

It is important to mention that the payment method is an instrument by which a financial transaction is materialised, either at the buying and selling of merchandise, or through the provision of services among physical or juridical persons, resident and non-resident in the country (Estrada, 2016).

The payment options which can be used for foreign trade are: Open Account, Simple Remittance, Documentary Remittance (sight and time letter of credit), Documentary Credit and Cash In Advance. However, it is important to be aware of the risks involved in each of the different payment options, as can be evaluated on the following graph.

Ilustración 2. Level of risk according to payment method



Author : Ordoñez Amanda

Open Account method: It is very favorable for the importer, although very risky for the exporter since an open account is set for the delivery of goods without previous charge. By this method, a credit is generated for over a ninety-day period during which the exporter does not get any kind of income from the transaction; this situation might cause financial instability. In spite of its disadvantages, 85% of all the foreign trade transactions are made through this method; especially when the importer has already made three importing processes from the same exporter. These decisions are very much based on trust between the buyer and the seller (Estrada, 2016).

Simple Remittance: The exporter entrusts a bank of his choice the handling of a commercial instrument (such as a bill of exchange, a promissory note, or a receipt) to a bank chosen by the importer; this bank will, in turn, present the document to the importer for his corresponding payment or acceptance.

- Documentary Remittance (sight and time letter of credit): It is a collection instrument through which the exporter handles his bank financial documents, such as a bill of exchange or a promissory note, together with certain commercial documents accrediting the merchandise ownership (bill of lading, transport documents, commercial invoice, etc.) along with precise instructions for their delivery once the payment is made.

- Documentary Credit (letter of credit): It is a collection instrument through which an irrevocable payment is made on part of a bank, always that the beneficiarycomplies with the presentation of the stipulated documents.

- Cash in advance: In this case, the exporter is paid prior to shipping the merchandise. Payments can be made through checks or bank transfers. The latter is one of the most common payment methods, due to its ease and time-efficient procedures (Estrada, 2016).

The payment method chosen by *ASOCERV*-to begin with- is Documentary Credit. In this way, the importer promotes the provider's trust by guaranteeing the payment through an irrevocable document issued by a bank. The bank, in turn, will make a transfer once the merchandise arrives in Ecuadorian territory.

3.2 Providers' costs

A chain value will help determine the costs of the different raw materials from origin to destination. This will be done by taking into account the *incoterms* proposed by the providers, the shipment costs including all the expenditures on part of the importer such as fees and taxes, plus other various costs based on the specific origin of each of the products.

Se veral quotes were requested from different providers in order to define the import process:

- Shipping companies: Pluscargo Ecuador and Munditransport. The corresponding quotes are on Annexes 7 and 8.
- Customs agent: The corresponding quote can be found on Annex 9.
- Inland transportation: Fercab. The company's quote can be found on Annex 10.
- Custody and Satelital Lock: Vicustodia. The company's quote can be found on Annex 11.

It is important to explain how the value chain and its different segments were developed. First of all, kilogram (kg) is the standard weight unit to be used for the whole of this study. Then the CIF value is determined in order for it to be declared at the Customs office, along with the shipment quotes, in case this may not be the established *inconterm*

for international shipping. Pluscargo Ecuador and Munditransport state that international insurance is calculated as 80% of the merchandise cost, plus the international freight charges; unless a special policy is chosen –such as those used for fragile products–, but this is not the case. Next, taxation tariffs are added up; but, in this case, there is a 100% exemption since Ecuador, Germany, Belgium and Colombia maintain taxation agreements with mutual benefits, as it's been previously explained on Chapter 2. *SENAE* automatically establishes tax exemption for the goods imported from these countries at the moment of doing the cargo declaration at the port.

In turn, these products are charged with a tax of 0.5% destined to the Fund for Child Development *FODINFA* (*Fondo de Desarrollo para la Infancia*); this taxation is applied to all imports made from Ecuador (Servicio Nacional de Aduana, 2019). It is also important to take into account as part of the chain value the Capital outflow tax or *ISD (Impuesto a Salida de Divisas),* which represents 5% of FOB.

Finally, other expenditures added to the former list are the Terminal Handling Charge, plus inland transport from Guayaquil to Quito, since most of the brewers are located there, besides Quito being the city where the largest volumes of craft beer are produced. Similarly, other items of expenditure are the services of a Customs agent for the entry of goods by Regime 10, and their custody between the port facilities and *ASOCERV*'s warehouse, including the costs of the Satelital Lock which provides extra security for the cargo.

Value chains corresponding to the raw materials that *ASOCERV* is willing to import based on the needs of the craft brewers are detailed next:

3.2.1 Malt

The import process of malts will take place twice per year; each time the same amount will be imported, considering that each bundle contains 25 kg, a sufficient amount to satisfy the requirements of the craft brewers.

In the case of importing from Ireks and Weyermann:

- One 20 ft. container: 575 bundles of pilsener malt, 330 bundles of pale ale malt, and 95 bundles of Munich malt.

- One 20 ft. container: 1000 bundles of pale ale malt.

The shipment will be made in 20 ft. containers since those have a maximum capacity of 26 tons. A 40 ft. container has a maximum capacity of 32, 5 tons. *ASOCERV* will import raw materials which add up to a total of 50 tons; for this reason it will be

necessary to use 2 containers of 20 ft. capacity each. Using 40 ft. containers would leave unused space since the amount of merchandise would be inferior. The amounts of merchandise loaded in each container cannot exceed the regulated weights. According to this, the cargo complies with the law. Only when the import process involves break-bulk, the shipment companies make the corresponding calculations according to volume. In this case the expenses are divided among the importers, but this is not the case of *ASOCERV*.

Table 7. Costs of malt at origin

Provider	Product		
	Bearly Malt Pilsener 25 Kg	Bearly Malt Pale Ale 25	Bearly Malt Munich 25 Kg
IERKS	$ 5,11	$ 6,06	$ 1,15
WAYERMANN	$ 5,17	$ 9,24	$ 1,35

Author: Ordoñez Amanda

Value chain development in this case will use kilogram as the standard unit. The provider ships bundles of 25 kg each. Depending on the agreed *incoterm*, the shipment cost plus the insurance are calculated in order to obtain the CIF cost, previously having calculated the currency exchange from euros to dollars. As a second step, all the expenses are added up, including taxes and importing outlays such as the Terminal Handling Charge, Customs Agent, Custody, Satelital Lock and others; these costs are proportionally assessed depending on the number of items.

Finally, a total cost is obtained by considering the dollar factor. This is made by dividing the total cost by the total FOB. And, in order to obtain a unit cost, the total cost is divided by the number of bundles. The same process is followed for the two different malt providers. In the case of pale ale malt it is important to consider that, by placing 330 bundles in the first container and 1000 bundles in the second one, the cost varies in each case; for this reason, an average cost is calculated from the sum of container's #1 cost and container's #2 cost, divided by two, in order to obtain the final cost.

Table 8. Ireks value chain

PROVIDER	IREKS (FOB Hamburg)											
		PILSENER		**PALE ALE**		**MUNICH**		**Total**		**Exchange rate**	
Drive Unit (KG)			25,00		25,00		25,00			€	1,11
Packages			585		330		95	1.010,00			
FOB Package		€	2,14	€	2,66	€	0,48				
Total FOB		€	1.251,90	€	877,80	€	45,60	€	2.175,30		
Freight		€	476,53	€	334,13	€	17,36	€	828,02		
Insurance	80%	€	9,78	€	6,86	€	0,36	€	17,00		
CIF ($)		**$**	**1.929,42**	**$**	**1.352,86**	**$**	**70,28**	**$**	**3.352,56**		
Advalorem Tariff 1%	0%	$	-	$	-	$	-	$	-		
Especific Tariff	$ -							$	-		
Safeguard	0%	$	-	$	-	$	-	$	-		
FODINFA tax	0,5%	$	9,65	$	6,76	$	0,35	$	16,76		
Currency exit tax	5%	$	62,60	$	43,89	$	2,28	$	108,77		
Local Shipping Costs		$	171,71	$	120,40	$	6,25	$	298,37		
Internal Transport		$	402,85	$	282,47	$	14,67	$	700,00		
Costums Broker		$	136,05	$	95,39	$	4,96	$	236,40		
Safekeeping		$	247,47	$	173,52	$	9,01	$	430,00		
Satellite Lock		$	28,78	$	20,18	$	1,05	$	50,00		
Other											
Total Cost		**$**	**2.988,52**	**$**	**2.095,47**	**$**	**108,86**	**$**	**5.192,85**		
Dollar Factor			2,3872		2,3872		2,3872				
Cost		**$**	**5,11**	**$**	**6,35**	**$**	**1,15**				

PROVIDER	IREKS (FOB Hamburg)					
		PALE ALE		**Total**	**Exchange rate**	
Drive Unit (KG)			25,00		€	1,11
Packages			1.000	1.000,00		
FOB Package		€	2,66			
Total FOB		€	2.660,00	€ 2.660,00		
Freight		€	828,02	€ 828,02		
Insurance	80%	€	17,00	€ 17,00		
CIF ($)		**$**	**3.890,57**	**$ 3.890,57**		
Advalorem Tariff 1%	0%	$	-	$ -		
Especific Tariff	$ -			$ -		
Safeguard	0%	$	-	$ -		
FODINFA tax	0,5%	$	19,45	$ 19,45		
Currency exit tax	5%	$	133,00	$ 133,00		
Local Shipping Costs		$	298,37	$ 298,37		
Internal Transport		$	700,00	$ 700,00		
Costums Broker		$	236,40	$ 236,40		
Safekeeping		$	430,00	$ 430,00		
Satellite Lock		$	50,00	$ 50,00		
Other						
Total Cost		**$**	**5.757,80**	**$ 5.757,80**		
Dollar Factor			2,1646			
Cost		**$**	**5,76**			

Author: Ordoñez Amanda

Table 9. Weyermann value chain

PROVIDER	WAYERMANN (FCA Bamberg)											
			PILSENER		PALE ALE		MUNICH TYPE 1		Total		Exchange rate	
Drive Unit (KG)			25,00		25,00		25,00				€	1,17
Packages			575		330		95		1.000,00			
FCA Package			€ 2,14		€ 4,20		€ 0,56					
Total FCA			€ 1.230,50		€ 1.386,00		€ 53,20		€ 2.669,70			
Destination Internal Tranport			€ 184,37		€ 207,66		€ 7,97		€ 400,00			
Freight			€ 381,65		€ 429,87		€ 16,50		€ 828,02			
Insurance		80%	€ 7,84		€ 8,83		€ 0,34		€ 17,00			
CIF ($)			**$ 2.111,09**		**$ 2.377,87**		**$ 91,27**		**$ 4.580,22**			
Advalorem Tariff 1%		0%	$ -		$ -		$ -		$ -			
Especific Tariff	$ -								$ -			
Safeguard		0%	$ -		$ -		$ -		$ -			
FODINFA tax		0,5%	$ 10,56		$ 11,89		$ 0,46		$ 22,90			
Currency exit tax		5%	$ 61,53		$ 69,30		$ 2,66		$ 133,49			
Local Shipping Costs			$ 137,52		$ 154,90		$ 5,95		$ 298,37			
Internal Transport			$ 322,64		$ 363,41		$ 13,95		$ 700,00			
Costums Broker			$ 108,96		$ 122,73		$ 4,71		$ 236,40			
Safekeeping			$ 198,19		$ 223,24		$ 8,57		$ 430,00			
Satellite Lock			$ 23,05		$ 25,96		$ 1,00		$ 50,00			
Other												
Total Cost			**$ 2.973,53**		**$ 3.349,29**		**$ 128,56**		**$ 6.451,38**			
Dollar Factor			2,4165		2,4165		2,4165					
Cost			**$ 5,17**		**$ 10,15**		**$ 1,35**					

PROVIDER	WAYERMANN (FCA Bamberg)						
			PALE ALE		Total	Exchange rate	
Drive Unit (KG)			25,00			€	1,17
Packages			1.000		1.000,00		
FCA Package			€ 4,20				
Total FCA			€ 4.200,00		€ 4.200,00		
Destination Internal Tranport			€ 400,00		€ 400,00		
Freight			€ 828,02		€ 828,02		
Insurance		80%	€ 17,00		€ 17,00		
CIF ($)			**$ 6.370,67**		**$ 6.370,67**		
Advalorem Tariff 1%		0%	$ -		$ -		
Especific Tariff	$ -				$ -		
Safeguard		0%	$ -		$ -		
FODINFA tax		0,5%	$ 31,85		$ 31,85		
Currency exit tax		5%	$ 210,00		$ 210,00		
Local Shipping Costs			$ 298,37		$ 298,37		
Internal Transport			$ 700,00		$ 700,00		
Costums Broker			$ 236,40		$ 236,40		
Safekeeping			$ 430,00		$ 430,00		
Satellite Lock			$ 50,00		$ 50,00		
Other							
Total Cost			**$ 8.327,30**		**$ 8.327,30**		
Dollar Factor			1,9827				
Cost			**$ 8,33**				

Author: Ordoñez Amanda

3.2.2 Hop

There is an annual need for 18,48 kilograms of pellets. This represents the equivalent of 3 bundles, 6 kg each. Since the required amounts are too small to fill a 20

ft. container's capacity, the product would have to be imported as break-bulk. This situation involves high costs for a rather small consignment and makes it difficult to obtain real costs from a value chain calculation. Break-bulk imports require a shared container and the corresponding volume calculations in order to determine the shipment cost, which tends to be high. Another difficulty found in relation to hop pellets is that their shelf life is of 6 months; for this reason it would not be possible to make only one import process per year.

Table 10. Cost of hop at origin

Provider	Product
	Hop Cascade 1 KG
CASTLE MALTING	$ 588,14

Author: Ordoñez Amanda

In order to calculate this value chain the CIF cost is considered, previously having calculated the currency exchange from euros to dollars. The standard kilogram unit is used, since each bundle wighs 6 kg. As a second step, all the expenses are added up, including taxes and importing outlays such as the Terminal Handling Charge, Customs agent, Custody, Satelital Lock and others; these costs are proportionally assessed depending on the number of items. Finally, a total cost is obtained by considering the dollar factor. This is made by dividing the total cost by the total FOB. And, in order to obtain a unit cost, the total cost is divided by the number of bundles.

Table 11. Castle Malting Value chain

PROVIDER	CASTLE MALTING (CIF Guayaquil)					
		HOPE CASCADE		**Total**	**Exchange Rate**	
Drive Unit (KG)			6,00		€	1,17
Packages			3			
CIF Package		€	13,50			
Total CIF		€	40,50	€ 40,50		
Freight		€	-	€ -		
Insurance	80%	€	-	€ -		
CIF (€)		**$**	**47,39**	**$ 47,39**		
Advalorem Tariff 1%	0%	$	-	$ -		
Especific Tariff	$ -			$ -		
Safeguard	0%	$	-	$ -		
FODINFA tax	0,5%	$	0,24	$ 0,24		
Currency exit tax	5%	$	2,03	$ 2,03		
Local Shipping Costs		$	298,37	$ 298,37		
Internal Transport		$	700,00	$ 700,00		
Costums Broker		$	236,40	$ 236,40		
Safekeeping		$	430,00	$ 430,00		
Satellite Lock		$	50,00	$ 50,00		
Other						
Total Cost		**$**	**1.764,42**	**$ 1.764,42**		
Dollar Factor			43,5659			
Cost		**$**	**588,14**			

Author: Ordoñez Amanda

3.2.3 Yeast

Yeast is imported from Colombia and, similarly to hop, the required amount is too small to fill up a container. A break-bulk import process would need to be considered and a co-importing process would be advisable in order to share and reduce costs. This situation doesn't allow us to get a clear idea on the final costs of the product. However, unlike hop, its shelf life can extend up to 18 months once it is packed; so, in this case, the import process can take place on an annual basis.

Table 12. Cost of yeast at origin

Provider	Product	
	Yeast powder 4 0,50KG	
BIOCROP	$	31,94

Author: Ordoñez Amanda

Value chain development will use kilogram value as the standard unit for calculations and its CIP value, since the provider sends bundles of 0,50 kg each. The cost includes Insurance, Freight and Customs agent. Other outlays to consider are

FODINFA and *ISD* taxes, plus inland transport, Custody and Satelital Lock. Finally, a total cost is obtained by considering the dollar factor. This is made by dividing the total cost by the total CIP. In order to obtain a unit cost, the total cost is divided by the number of bundles.

Table 13. BIOCROP value chain

PROVIDER	BIOCROP (CIP Tulcán)			
		YEAST POWDER 4		**Total**
Drive Unit (KG)		0,50		
Quantity per box		24,00		
Boxes		51		
CIP		$ 8,34		
Total CIP		$ 425,34	$	425,34
Freight		$ -	$	-
Insurance	80%	$ -	$	-
Local Shipping Costs				
Costums Broker				
CIP		**$ 425,34**	**$**	**425,34**
Advalorem Tariff 1%	0%	$ -	$	-
Especific Tariff	$ -		$	-
Safeguard	0%	$ -	$	-
FODINFA tax	0,5%	$ 2,13	$	2,13
Currency exit tax	5%	$ 21,27	$	21,27
Internal Transport		$ 700,00	$	700,00
Safekeeping		$ 430,00	$	430,00
Satellite Lock		$ 50,00	$	50,00
Other				
Total Cost		**$ 1.628,73**	**$**	**1.628,73**
Dollar Factor		3,8293		
Cost		**$ 31,94**		

Author: Ordoñez Amanda

3.3 Logistics

3.3.1 Warehouse infraestructure

This is the area designed for storaging the malt bundles which are ready for their distribution. It is essential to know the characteristics the warehouse must have in order to assure the proper conditions for the storage of these and other products. An area of at least 30 square meters and 6 meters in height is required. It should have cement flooring, while an aluminum infrastructure can be built for the walls and the ceiling. Ventilation grids should be built on the upper part of the walls to avoid an excess of heat; using fine mesh in their construction will prevent birds from entering the warehouse. If necessary, an industrial ventilation system should be set up. This type of design is known as an industrial shed and, as such, it also requires a space for the unloading of the raw materials

from the containers and, on the other hand, for loading these same materials on trucks for their distribution around the country.

The monthy rental fee in Quito ranges according to the zone where the sheds are located. According to the consultations made to real state agents, the approximate cost in the northern zone of Quito is of $1.700, whereas in the central zone can reach up to $2.300, and in the southern zone, where most industries are located, can average $1.300. The inland transportation fees for raw materials do not vary in relation to the warehouse's location; it is therefore possible to choose the most convenient option in terms of prices, so as to be able to reduce costs.

It is a priority to count with a physical infrastructure, both for the proper storage and the distribution of the merchandise. Not having a space to do so, distribution would be impossible since the Association doesn't own the containers. Besides, the merchandise requires adequate handling to avoid spoiling and the consequent risks of raw materials becoming useless for the crafting of beer.

3.3.2 Fittings

The proper storage and handling of the raw materials requires the set up of adequate fittings and implements, both for the storage room and for the administration office which are both parts of the industrial shed.

An industrial fridge is required for the storage of hop and yeast; both items require to be kept at low temperatures for their qualities to be kept intact, even if they come in dry form. The approximate cost of a fridge is $800. Also, a forklift is required for the unloading and loading of the goods. A used one could cost up to $3.000.

The requirements for the administrative area consist of 2 desks, at a cost of $250 each, plus 2 chairs, at a cost of $70 each; additionally 2 laptops at a cost of $300 each, a printer at a cost of $500, and office supplies at a cost of $50 per month.

3.3.3 Staff

The Association needs to hire two workers for the buying and the distribution of raw materials. The first worker's profile is solely administrative. This person will be in charge of the accounting, the Customs' logistics, general documentation, plus collections and payments. The second profile is that of a person in charge of storage logistics who can load and unload the merchandise, take orders and coordinates transportation issues.

Both employees would work on a half-time basis and their salary, according to Ecuadorian law, would be of $394 each.

3.4 Raw materials prices for brewers

Once the costs of raw materials have been established from their origin to their destination in Ecuador; and –additionally– by taking into account the administrative expenses such as the rental of the warehouse, the fittings and the salaries, then an average sales price can be calculated. This can be done by adding all the annual costs and then proceeding to prorate those into the total number of bundles to be imported. In this way, the sales price can be obtained without any kind of annual variations. According to this operation, the sales price at which the different raw materials will be sold to the beer producers are listed below:

Table 14. Raw materials prices for brewers

	PRODUCT								TOTAL
	B. Malt Pilsener 25 Kg IRE.	B. Malt Pale Ale 25 Kg IRE.	B. Malt Munich 25 Kg IRE.	B. Malt Pilsener 25 Kg WAYE.	B. Malt Pale Ale 25 Kg WAYE.	B. Malt Munich 25 Kg WAYE.	Hop Cascade 6KG CM.	Yeast 4 0,50Kg BC.	
COST IN DESTINATION WAREHOUSE	$ 5,11	$ 6,06	$ 1,15	$ 5,17	$ 9,24	$ 1,35	$ 588,14	$ 36,06	
PACKAGES QUANTITYS	575	1330	95	575	1330	95	3	51	
ANUAL COST	$ 2.938,25	$ 8.059,80	$ 109,25	$ 2.972,75	$ 12.289,20	$ 128,25	$ 1.764,42	$ 1.839,06	$ 30.100,98
WAREHOUSE RENTAL	$ 1.522,76	$ 4.177,04	$ 56,62	$ 1.540,64	6.368,95	$ 66,47	$ 914,42	$ 953,10	$ 15.600,00
FURNITURE	$ 540,78	$ 1.483,38	$ 20,11	$ 547,13	$ 2.261,79	$ 23,60	$ 324,74	$ 338,47	$ 5.540,00
OFFICE SUPPLIES	$ 58,57	$ 160,66	$ 2,18	$ 59,26	$ 244,96	$ 2,56	$ 35,17	$ 36,66	$ 600,00
2 BASIC SALARY	$ 923,03	$ 2.531,93	$ 34,32	$ 933,87	$ 3.860,56	$ 40,29	$ 554,28	$ 577,73	$ 9.456,00
TOTAL COST	$ 5.983,39	$ 16.412,80	$ 222,47	$ 6.053,64	$ 25.025,46	$ 261,17	$ 3.593,03	$ 3.745,02	
PACKAGE PRICE	$ 10,41	$ 12,34	$ 2,34	$ 10,53	$ 18,82	$ 2,75	$ 1.197,68	$ 73,43	
PRICE 1 KG	$ 0,42	$ 0,49	$ 0,09	$ 0,42	$ 0,75	$ 0,11	$ 199,61	$ 146,86	

Author: Ordoñez Amanda

It is important to compare what would *ASOCERV's* sales prices be with those of the only importer currently working in Ecuador. From this analysis it can be pointed out that *ASOCERV*'s sales prices for malts are more competitive; but with regard to hop and yeast *ASOCERV*'s sales prices are too high. This particular situation would not encourage the craft brewers; this is due to the fact that the amounts to be imported are too low and, in turn, the value chains cannot be quoted as break bulk since *ASOCERV* cannot share freight space as a co-importer. For that reason, the quoted shipping companies state that the calculations for the value chain must be made for the total cost of each item.

Table 15. Price comparison

Product	ASOCERV		ONLY DISTRIBUTOR	
	PACKAGE PRICE	PRICE 1 KG	PACKAGE PRICE	PRICE 1 KG
B. Malt Pilsener 25 Kg IRE.	$ 10,41	$ 0,42	12,15	0,49
B. Malt Pale Ale 25 Kg IRE.	$ 12,34	$ 0,49	13,2	0,53
B. Malt Munich 25 Kg IRE.	$ 2,34	$ 0,09	4,5	0,18
B. Malt Pilsener 25 Kg WAYE.	$ 10,53	$ 0,42	10,8	0,43
B. Malt Pale Ale 25 Kg WAYE.	$ 18,82	$ 0,75	22,48	0,90
B. Malt Munich 25 Kg WAYE.	$ 2,75	$ 0,11	6,7	0,27
Hop Cascade 6KG CM.	$ 1.197,68	$ 199,61	43,35	7,23
Yeast 4 0,50Kg BC.	$ 73,43	$ 146,86	51,05	102,10

Source: Quote from only importer in Ecuador

Author: Ordoñez Amanda

Conclusion

As a conclusion of this chapter it can be noted that hop and yeast prices are too high in relation to what craft brewers would expect. It is evident that a larger demand for these products could eventually help reduce costs. Current costs were estimated based on the demand of 23 craft brewers. An eventual rise in the demand might create better opportunities to improve costs.

In turn, the value chain for these products cannot be calculated since there's no-one to share with the container's space; for this reason, the costs of both, hop and yeast, are increased since the logistic costs are prorated for relatively small loads.

It could still be possible to consider the import process of the three main types of malt for which the value chains have been calculated. But, regarding hop and yeast, it is a better option for craft brewers to acquire these from the current national provider.

CONCLUSIONS

As an initial conclusion to this project, it can be stated that the craft brewers belonging to ASOCERV still have a lot of growing to do in terms of increasing their production volumes, besides gaining presence in the market.

It has also been possible to arrive at the conclusion that Quito is the craft beer capital of Ecuador, based on the production volumes achieved, with 239.900 liters per year, and with ale-type beer on top of the production. It is important to notice that Quito's high production can be explained because most of the craft brewers are based on this city; however, Cuenca hosts the company with the largest craft beer production volumes, namely *Cervecería La Paz*, which produces as much as 225.445 liters per year, led by lager-type beer. All these are interesting data, relevant to this project.

During this feasibility study it was possible to arrive at the conclusion that it is of the utmost importance that each one of the members can establish their needs for raw materials and the corresponding orders, so as for *ASOCERV* to be able to define not only more precise amounts, but also to be able to import larger volumes of raw materials. This was not possible during the current study since only 26 craft brewers were willing to participate in the survey. Not having a sufficient demand for raw materials has a direct incidence in their costs. This is the case of hop and yeast prices, which are above those of the only distributor of raw materials for craft brewers in Ecuador.

As a final conclusion, it's been determined that, in order to establish a joint purchase on the part of *ASOCERV,* only barley malts should be imported given that a good price can be obtained for those. Other raw materials such as hop, yeast and other types of special malts should be obtained directly from the current national provider. Due to the fact that the amounts of those products are too small, their import processes and consequent prices do not represent an advantage for brewers but rather would further increase production costs.

RECOMMENDATIONS

It is recommended at first that *ASOCERV* cultivates loyalty among the craft brewers guild. This can be done by seeking further common benefits for its members and it also arises from the understanding that the competitive landscape is not the one of the craft brewers themselves, but the existing monopoly of *Cervecería Nacional*. The low price of industrially manufactured beer affects all craft brewers given the difficulty of competing against it, especially when the price of most craft beer far exceed the purchasing power of a vast majority of Ecuadorians.

Secondly, this project could initiate with a smaller import process based on exact amounts corresponding to the specific requirements of malt from each of the brewers, since malts are the products in highest demand. The *ASOCERV* joint purchase can be gradually strengthened while, at the same time, new import processes could take place by increasing the varieties of raw materials to be acquired in further purchases, such as hop, yeast, and special malts; although for now those can be obtained from the national provider.

The final suggestion would be for *ASOCERV* to gather the total demand of the brewers along with a request to become the official dealer in Ecuador of those brands corresponding to the different raw materials required by craft brewers. In this way, *ASOCERV* would be the only authorized distributor, and all craft brewers would necessarily have to purchase directly from this Association.

BIBLIOGRAPHY

Arango, S. (2013). Fortalecimiento de procesos asociativos para micros, pequeñas y mediana empresas. *Pymes, innovación y desarrollo, 1*(1).

Asamablea Nacional del Ecuador. (2010). *Código Orgánico de la Producción, Comercio e Inversiónes, Libro V, Capítulo VIII, Sección I.* Quito.

Asamblea Nacional del Ecuador. (2008). *Constitución.* Quito: Registro Oficial de la República del Ecuador.

Asamblea Nacional del Ecuador. (2010). *Reglamento a la Estructura e Institucionalidad de Desarrollo Productivo de la Inversión y de los Mecanismos e Instrumentosde Fomento Productivo, establecido en el Libro III del COPCI.* Quito.

Asamblea Nacional del Ecuador. (2019). *Código Civil.* Quito.

Barberon, L. (2012). *Les religieuses et le culte de Marduk dans le royaume de Babylone.* Paris .

Beer Judgment Certification Program. (2017). Estados Unidos.

Cervecería Nacional. (2017). *Cerveceria Nacional*. Obtenido de https://cervecerianacional.ec/historia-cerveceria-nacional

Diario la hora. (2019). *Diario la hora*.

Estrada, P. (2016). *Comercio Exterior y Negocios Internacionales.* Quito: Cognitio Ecuador.

International Chamber of Commerce. (2019). *ICC*. Obtenido de www.iccwbo.org

Kadatz, D. (28 de Abril de 2019). Bier Herr Professor. (A. Ordoñez, Entrevistador)

Kunze, W. (2014). *Technology Brewing and Malting* (4ta ed.). Berlín.

Llamazares, O. (2018). *Diccionario de comercio internacional* . Madrid.

Ministerio de Comercio Exterior e Inversiones. (2019). Obtenido de www.comercioexterior.gob.ec

Ministerio de Comercio Exterior. (2017). *Resolución 020 Estructura del Arancel del Ecuador.* Quito.

Morales, L. (2013). *Emisión Electrónica de Permisos CITES en los Países Miembros de la Organización del Tratado de Cooperación Amazónica (OTCA).*

Moreno, F. A. (2002). *Comisión nacional permanente de conmemoraciones cívicas.* Quito: Pedro Jorge Vera.

Moscoso, D. L. (30 de Noviembre de 2008). *Análisis jurídico del contrato de sociedad civil.* Cuenca. Obtenido de Derecho Ecuador: https://www.derechoecuador.com/contratos-de-sociedad-civil-y-compania-mercantil-en-el-ecuador

Pinos, J. (Marzo de 2019). Presidente de ASOCERV. Cuenca.

Porter, M. (1999). Los Clusters y la Competencia. *1*(2).

Porter, M. (1999). Los clusters y la competencia. *Trend managment Harvard business review, 1*(2).

Real Academia Española. (2001). *Diccionario de la Lengua.* España.

Servicio de Rentas Internas del Ecuador. (2015). *Servicio de Rentas Internas del Ecuador*. Obtenido de SRI: www.sri.gob.ec

Servicio Nacional de Aduana. (2019). *SENAE*. Obtenido de www.aduana.gob.ec

Torres, A. (9 de Octubre de 2019). Magister. (A. Ordoñez, Entrevistador)

Toscano, J. A. (2016). *Pioneros de la microbiología*.

Wallerstein, I. (1974). *El sistema mundial moderno* . México.

Walpole, R., Myers, R., Myers, S., & Ye, K. (2007). *Probabilidad y estadística para ingeniería y ciencias.* Texas, Usa.

ANNEXES

Annex 1. Pilot survey

Survey to determine the raw materials forecast previous to the import process

1. Name of your brewery: ……
2. Do you think the prices of raw materials further increase the production costs for your brewery?
   Yes…… No…….
3. Would you like to participate of *ASOCERV*'s joint purchase so as to be able to buy raw materials at lower prices?
   Yes…… No…….
   Why?
   ……
   ……
4. Total annual volume production (2018)

Type of beer	Amount of beer produced (in liters)

5. How often do you cook?
   a) Every day
   b) Every week
   c) Every month
   d) Every 3 months
   e) Every 6 months
   f) Once a year
   g) Other (specify): ……
6. What styles of beer do you produce the most? (Could be more than one.)
   a) Lager
   b) Ale
   c) IPA
   d) Wheat beer
   e) Stout
   f) Fruit beer

Source: Ordoñez Amanda

Annex 2. Final survey

Survey to determine the raw materials forecast previous to the import process

1. Name of your brewery: ……
2. Do you think the prices of raw materials further increase the production costs for your brewery?
   Yes…… No…….
3. Would you like to participate of *ASOCERV*'s joint purchase so as to be able to buy raw materials at lower prices?
   Yes…… No…….
   Why?
   ……
   ……
4. Total annual volume production (2018)

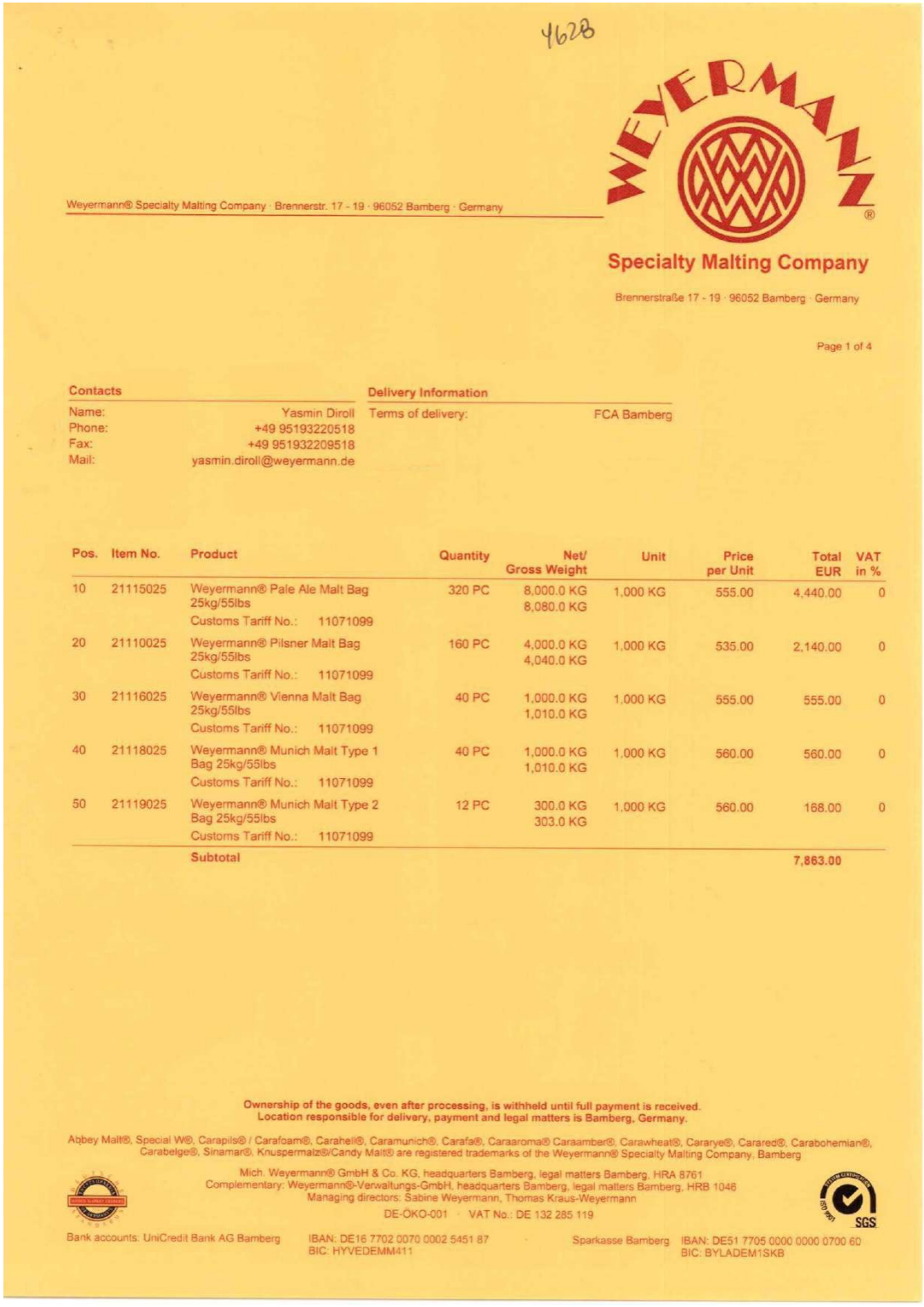
Type of beer	Amount of beer produced (in liters)

5. How often do you cook?
   a) Every day
   b) Every week
   c) Every month
   d) Every 3 months
   e) Every 6 months
   f) Once a year
   g) Other (specify): ……
6. What styles of beer do you produce the most? (Could be more than one.)
   a) Lager
   b) Ale
   c) IPA
   d) Wheat beer
   e) Stout
   f) Fruit beer
   g) Other
   Specify in case it is another kind of beer:
   ……
7. Where do you acquire your raw materials from?
   a) I do import those directly
   b) I get those from the national provider
8. Which brand of raw materials do you use the most?

MALT	HOP	YEAST

Source: Ordoñez Amanda

Annex 3. Weyermann quote



4628

Weyermann® Specialty Malting Company · Brennerstr. 17 - 19 · 96052 Bamberg · Germany

WEYERMANN®

Specialty Malting Company

Brennerstraße 17 - 19 · 96052 Bamberg · Germany

Page 1 of 4

Contacts

Name: Yasmin Diroll
Phone: +49 95193220518
Fax: +49 951932209518
Mail: yasmin.diroll@weyermann.de

Delivery Information

Terms of delivery: FCA Bamberg

Pos.	Item No.	Product	Quantity	Net/ Gross Weight	Unit	Price per Unit	Total EUR	VAT in %
10	21115025	Weyermann® Pale Ale Malt Bag 25kg/55lbs Customs Tariff No.: 11071099	320 PC	8,000.0 KG 8,080.0 KG	1.000 KG	555.00	4,440.00	0
20	21110025	Weyermann® Pilsner Malt Bag 25kg/55lbs Customs Tariff No.: 11071099	160 PC	4,000.0 KG 4,040.0 KG	1.000 KG	535.00	2,140.00	0
30	21116025	Weyermann® Vienna Malt Bag 25kg/55lbs Customs Tariff No.: 11071099	40 PC	1,000.0 KG 1,010.0 KG	1.000 KG	555.00	555.00	0
40	21118025	Weyermann® Munich Malt Type 1 Bag 25kg/55lbs Customs Tariff No.: 11071099	40 PC	1,000.0 KG 1,010.0 KG	1.000 KG	560.00	560.00	0
50	21119025	Weyermann® Munich Malt Type 2 Bag 25kg/55lbs Customs Tariff No.: 11071099	12 PC	300.0 KG 303.0 KG	1.000 KG	560.00	168.00	0
		Subtotal					**7,863.00**	

Ownership of the goods, even after processing, is withheld until full payment is received.
Location responsible for delivery, payment and legal matters is Bamberg, Germany.

Abbey Malt®, Special W®, Carapils® / Carafoam®, Carahell®, Caramunich®, Carafa®, Caraaroma® Caraamber®, Carawheat®, Cararye®, Carared®, Carabohemian®, Carabelge®, Sinamar®, Knuspermalz®/Candy Malt® are registered trademarks of the Weyermann® Specialty Malting Company, Bamberg

Mich. Weyermann® GmbH & Co. KG, headquarters Bamberg, legal matters Bamberg, HRA 8761
Complementary: Weyermann®-Verwaltungs-GmbH, headquarters Bamberg, legal matters Bamberg, HRB 1046
Managing directors: Sabine Weyermann, Thomas Kraus-Weyermann
DE-ÖKO-001 · VAT No.: DE 132 285 119

Bank accounts: UniCredit Bank AG Bamberg IBAN: DE16 7702 0070 0002 5451 87 BIC: HYVEDEMM411 · Sparkasse Bamberg IBAN: DE51 7705 0000 0000 0700 60 BIC: BYLADEM1SKB

Source: Annex Provider Weyermann

Annex 4. Ireks quote

IREKS

IREKS GmbH | Postfach 15 29 | 95306 Kulmbach | REPúBLICA FEDERAL DE AL

Persona de contacto: *Thomas Hauke
Teléfono: +49 9221 706-102
E-mail: thomas.hauke@ireks.com

Condiciones de entrega: franco a bordo
Hamburg (FOB)
Edición INCOTERMS 2010 (ICC)
Forma de envío: barco
a partir del almacén: 001 IREKS GmbH Kulmbach

Pos.	Número de del	Tamaño del paquete	Nombre del artículo	Cantidad Bulto	Peso kg	Precio	Unidad	Importe EUR
001	110P01	25,000	PILSNER MALT	204	5.100,000	420,00	EUR/1000 kg	2.142,00
002	111P01	25,000	PALE ALE MALT	248	6.200,000	430,00	EUR/1000 kg	2.666,00
003	112U01	25,000	MUNICH MALT	44	1.100,000	435,00	EUR/1000 kg	478,50
004	130W01	25,000	WHEAT MALT LIGHT	310	7.750,000	420,00	EUR/1000 kg	3.255,00
005	142M01	25,000	CRYSTAL MAHOGANY	71	1.775,000	670,00	EUR/1000 kg	1.189,25
006	142O01	25,000	CRYSTAL OAK	75	1.875,000	660,00	EUR/1000 kg	1.237,50
007	142Y01	25,000	CRYSTAL EBONY	56	1.400,000	790,00	EUR/1000 kg	1.106,00
008	249720		Container-Palette, hitzebeha	(28)				
			Cantidad de bultos:	1008				
					en total			
			Peso neto kg:		25.200,000			
			Peso bruto sin palé (masa bruta) kg:		25.502,400			
			Peso bruto con palé kg:		26.006,400			
			Valor de la mercancía:					12.074,25
			+ freight costs (FOB)					1.300,00
			Importe de la factura:					**13.374,25 EUR**

código de la mercancía
1107 10 99 Pos. 001 / 002 / 003
1107 10 19 Pos. 004
1107 20 00 Pos. 005 / 006 / 007

HypoVereinsbank
Código bancaria 771 200 73
N° de cuenta 3 314 200
IBAN: DE54 7712 0073 0003 3142 00
S.W.I.F.T.: HYVE DE MM 289

Commerzbank
Código bancaria 773 400 76
N° de cuenta 1 313 733
IBAN: DE57 7734 0076 0131 3733 00
S.W.I.F.T.: COBA DE FF 773

Deutsche Bank
Código bancaria 760 700 12
N° de cuenta 7 908 544
IBAN: DE92 7607 0012 0790 8544 00
S.W.I.F.T.: DEUT DE MM 760

Sparkasse Kulmbach-Kronach
Código bancaria 771 500 00
N° de cuenta 101 204
IBAN: DE05 7715 0000 0000 1012 04
S.W.I.F.T.: BYLA DE M1 KUB

IREKS GmbH, Lichtenfelser Str. 20, 95326 Kulmbach, REPúBLICA FEDERAL DE ALEMANIA, Tel.: +49 9221 706-0, Fax: +49 9221 706-306, ireks@ireks.com, www.ireks.com
Presidente del Consejo: Dr. Rainer Grimme
Gerente: Jürgen Brinkmann, Lutz Hager, Hans Albert Ruckdeschel, Stefan Soiné
Sede: Kulmbach, Tribunal de registro: Bayreuth HR B 86 | NIF DE 132360421

06.14 | 100.000 | 6230855

Source: Annex Provider Ireks

Annex 5. Castle Malting quote

***

Castle Malting®

Belgian Malts that Make Your Beer So Special

#	Code	Product	Qty.	Unit	Price €	Discount /Unit	Value €
Incoterms CIF Guayaquil Payment Prépayement							
1	MPA7S2V	Malt Château Pale Ale 7-10 EBC in 25 kg bags Intrastat code:11071099	5750	KG	0.4540€		2610.50
2	MP2S2V	Malt Château Pilsen 2RS in 25 kg bags Intrastat code:11071099	3975	KG	0.4370€		1737.08
3	MM25S2V	Malt Château Munich 25 EBC in 25kg bags Intrastat code:11071099	625	KG	0.4610€		288.13
4	MC50S2V	Malt Château Cara Ruby 50 EBC in 25 kg bags Intrastat code:11072000	525	KG	0.5920€		310.80
5	MFS2V	Malt Château Wheat Blanc in 25kg bags Intrastat code:11071019	500	KG	0.4430€		221.50
6	MPVIENNAS2V	Malt Château Vienna 4-7 EBC in 25kg bags Intrastat code:11071099	400	KG	0.4380€		175.20
7	MC300S2V	Malt Château Special Belgium® 300 EBC in 25kg bags Intrastat code:11072000	250	KG	0.6860€		171.50
8	MT900S2V	Malt Château Chocolat 900 EBC in 25kg bags Intrastat code:11072000	225	KG	0.6600€		148.50
9	MC20S2V	Malt Château Cara Blond 20 EBC in 25 kg bags Intrastat code:11072000	100	KG	0.5880€		58.80
10	MMEL80S2V	Malt Château Melano 80 EBC in 25kg bags Intrastat code:11071099	200	KG	0.5210€		104.20
11	MA45S2V	Malt Château Abbey 45 EBC in 25 kg bags Intrastat code:11071099	75	KG	0.5070€		38.03
12	MC120S2V	Malt Château Cara Gold 120 EBC in 25 kg bags Intrastat code:11072000	175	KG	0.5930€		103.78
13	MA100S2V	Malt Château Arome 100 EBC in 25 kg bags Intrastat code:11071099	50	KG	0.5260€		26.30
14	MFMUN25S25	Malt Château Wheat Munich 25EBC in 25kg bags Intrastat code:11071019	50	KG	0.5630€		28.15
15	MM15S2V	Malt Château Munich Light 15 EBC in 25kg bags Intrastat code:11071099	50	KG	0.4580€		22.90
16	MTRB35S2	Malt Château Whisky 35ppm in 25kg bags Intrastat code:11071099	50	KG	0.5710€		28.55

17	MACIDS2V	Malt Château Acid 6-12 EBC in 25 kg bags Intrastat code:11071099	25	KG	0.8800€		22.00
18	MBISS2V	Malt Château Biscuit 50 EBC in 25 kg bags Intrastat code:11072000	25	KG	0.6280€		15.70
19	MCAFES2V	Malt Château Cafe 500 EBC in 25 kg bags Intrastat code:11072000	25	KG	0.6530€		16.33
20	MCPILS25	Malt Château Cara Clair in 25 kg bags Intrastat code:11072000	25	KG	0.5830€		14.58

Malterie du Château S.A. (Castle Malting S.A.)
Headquarters: Chemin du Couloury 1, 4800 Lambermont, Belgium; Malting Plant: Rue de Mons 94, 7970 Beloeil, Belgium
Tel.: + 32 (0) 87 662095; Fax: +32 (0) 87 352234; info@castlemalting.com; www.castlemalting.com
Registered Tournai 79754; VAT: BE0455013439; IBAN: BE11 3700 9054 5648; BIC. BBRUBEBB

Castle Malting®

Belgian Malts that Make Your Beer Se Special

#	Code	Product	Qty.	Unit	Price €	Discount /Unit	Value €
21	MSARRASS25	Malt Château Buckwheat in 25 kg bags Intrastat code:11071099	25	KG	2.0600€		51.50
22	MT140S2V	Malt Château Black 1300 EBC in 25 kg bags Intrastat code:11072000	125	KG	0.6630€		82.88
23	MTRBS2V	Malt Château Peated 5ppm in 25kg bags Intrastat code:11071099	25	KG	0.5290€		13.23
24	ORGTORS25	Château Roasted Barley in 25kg bags Intrastat code:11072000	125	KG	0.6510€		81.38
25	HOUBHERKP5	Hop Herkules (DE) in pellets T90 in 5 kg bags Intrastat code:12102010	10	KG	15.0000€	10.0%	135.00
26	PLHT110/110	Thermally treated export pallet 110x110 cm Intrastat code:44152020	10	PC	7.3000€		73.00
27	HOUBCASCDE5P	Hop Cascade (DE) in Pellets T90 in 5kg bags Intrastat code:12102010	5	KG	15.0000€	10.0%	67.50
28	HOUBESDP5	Hop Extra Styrian Dana (SI) in pellets T90 in 5 kg bags Intrastat code:12102010	5	KG	10.9500€	10.0%	49.28
29	HOUBHALBLANC	Hop Hallertau Blanc in Pellets T90 in 5 kg bags Intrastat code:12102010	5	KG	15.0000€	10.0%	67.50
30	HOUBLON0003	Hop Tettnang (DE) in pellets T90 in 5 kg bags Intrastat code:12102010	5	KG	22.2000€	10.0%	99.90
31	HOUBLON0004	Hop Saaz (CZ) in pellets T90 in 5 kg bags Intrastat code:12102010	5	KG	21.5000€	10.0%	96.75
32	HOUBLON11	Hop Perle (DE) in pellets T90 in 5 kg bags Intrastat code:12102010	5	KG	13.6000€	10.0%	61.20
33	HOUBLON654	Hop Fuggle (UK) in Pellets T90 in 5 kg bags Intrastat code:12102010	5	KG	21.9000€	10.0%	98.55
34	HOUBMANDARP5	Hop Mandarina Bavaria (DE) in pellets T90 in 5 kg bags Intrastat code:12102010	5	KG	15.0000€	10.0%	67.50
35	SURCOUTCERT	CERTIFICATES COST	1	U	146.0000€		146.00
36	MA150S2V	Malt Château Crystal 150 EBC in 25 kg bags Intrastat code:11071099	100	KG	0.5740€		57.40
37	SCOUTPLTMIX	Mixed Malt Pallet Surcharge (as from 2 malt types / pallet)	3	U	18.0000€		54.00
38	SCOUTINSUR	Insurance cost	1	U	110.0000€		110.00
39	SCOUTRANSP	TRANSPORT COST MALT	1	U	1607.0000€		1607.00
						TOTAL FOR PAYMENT:	9162.10

The exporter of the products covered by this document (customs authorization Nr BE 1233) declares that, except where otherwise clearly indicated, these products are of Belgium preferential origin.
We confirm that we are authorized exporters of our products.
We are importers authorized by the customs authority to issue invoice declaration.

Available on the Android Market

Available on the App Store

Source: Annex Provider Castle Malting

Annex 6. Bio-Crop quote

BIO-CROP S.A.S
IDENTIFICACION TRIBUTARIA : 815.004.620-1
CIUDAD PALMIRA-VALLE. COLOMBIA
TEL: +57 3117134696 - +57 2 2864646
pedidos y despachos@bio-crop.com
financiera@bio-crop.com

INCOTERM CIP TULCAN

DESDE: PALMIRA- VALLE DEL CAUCA- COLOMBIA

HASTA: TULCÁN-CARCHI-ECUADOR

VIA: TERRESTRE

ITEM	DESCRIPCIÓN	CANTIDAD	UNIDAD DE DESPACHO	VR. UNITARIO	VR TOTAL
	Levadura de Cultivo estéril liquida 3	240	Caja x 12 uds. de litro	USD 12.94	USD 3,105.60
	Levadura de Cultivo estéril en polvo 1	96	Caja x 24 uds de 500 g	USD 14.46	USD 1,388.16
	Levadura de Cultivo estéril en polvo 3	72	Caja x 24 uds. de 500 g	USD 13.61	USD 979.92
	Levadura de Cultivo estéril liquida 6	24	Caja x 12 uds. de litro	USD 25.679	USD 616.30
	Levadura de Cultivo estéril en polvo 4	192	Caja x 24 uds. de 500 g	USD 8.34	USD 1,601.28
	Levadura de Cultivo estéril en polvo 5	24	Caja x 24 uds. de 500 g	USD 13.597	USD 326.33
	POSICIÓN ARANCELARIA LEVADURA DE CULTIVO ESTÉRIL LÍQUIDO: 21 02 10 10 00 POSICIÓN ARANCELARIA LEVADURA DE CULTIVO ESTÉRIL POLVO: 21 02 10 10 00				
	NÚMERO DE PIEZAS: 38 PESO BRUTO: 520 KG PESO VOLUMEN: 466.2 KG/V MONEDA: USD				
				VR MCIA FOB	USD 8,017.59
				FLETES	USD 206.46
				SEGURO	USD 94.11
				GASTOS DE ADUANA	
				OTROS GASTOS	
				TOTAL CIP	USD 8,318.16

NOTA: 1.La presente factura se asimila en todos sus efectos a la letra de cambio. 2. En caso de mora se causará el interés autorizado por la ley. 3. Se hace constar que la firma de una persona diferente delcomprador implica que dicha persona está autorizada expresamente por el comprador para firmar, confesar la deuda y obligar al comprador. 4. Recibí de conformidad la mercancía de que trata esta factura y acepto el valor estipulado en la misma. 5. El cliente acepta que la(s) persona(s) que firma(n) la presente factura de venta tiene(n) autorización para ello y por tanto en este acto son representantes del cliente el cual se hace responsable de su cancelación. Doy mi consentimiento expreso e irrevocable a Bio-Crop S.A.S para consultar y reportar en cualquier tiempo en centrales de información de riesgo toda la información relevante para conocoer mi desempeño como deudor, mi capacidad de pago o para valorar el riesgo futuro de concederme un crédito o servicio.

FORMA DE PAGO: T/T 100% ANTICIPADO

INSTRUCCIONES BANCARIAS:
CÓDIGO SWIFT: COLOCOBM
BANCO: Bancolombia S.A
TIPO DE CUENTA: Cuenta de Ahorros

Source: Annex Provider Castle Malting

Annex 7. Shipping company Pluscargo Ecuador quote

PLUSCARGOECUADOR

A member of GRUPO RAS

FCB BAMBERG VIA HAMBURGO/GYE
20´ST EUR 840.00

FCA COSTS:
INLAND: EUR 730.00 (HASTA 16.5 TONS, LUEGO DE ESTE PROCESO RECARGO EUR 120 POR OWS)
BL COSTS: EUR 65.00/HBL
THCO: EUR 235.00*CONT
ISPS: EUR 30.00/CONT
EUR 1: EUR 75.00/SET (no incluye Courrier)

COSTOS LOCALES:
POR CNTR: USD 250.00 + IVA
POR BL: USD 140.00 + IVA
THCD: USD 190.00

SALIDAS SEMANALES
T. TRANSITO 26-28
DIAS LIBRES 21
NAVIERA HSUD
ARRIBO: GYE
VIGENCIA: AGOSTO 31/2019

TOTALIZADO FCA 1X20ST: USD 2917.80

Quedo atento a sus gentiles comentarios.
Slds.

Source: Annex Provider Naviera Pluscargo

Annex 8. Naviera Munditransport quote

pls find our rates below EUR1 need tob e issued by shipper

POL	FOB Hamburgurg	
POD	Guayaquil	per Shipment
Export Handling	55,00 EUR	per Container
Carrier Security fee	17,00 USD	per 20´DC
Oceanfreight	725,00 EUR	725,00 EUR
BAF	Included	per TEU
Low sulphur	25,00 EUR	per TEU
THCD	190,00 USD	per Container

Transittime	26	DIAS
Rates are valid until	AUG/31/2019	
FT AT dest	14	
Routing	Via CTG	
Carrier	CMA	

Tipo de Cambio: Aplica a la fecha del arribo a carga.
- excl. Low water Aditional
- 2 hours free loading
- subject to empty Equipment
- Subject to space availability

GASTOS LOCAL +12% IVA:
- Gastos por contenedor USD 300,00
- Gastos por BL USD 100,00
- Manejo del 5% sobre gastos de Origen & Flete

Source: Annex Provider Naviera Munditransport

Annex 9. Customs agent COMAR quote

CONSORCIO MALO ARIZAGA CIA. LTDA.
AGENTE DE ADUANAS

Cuenca, 21 de Septiembre del 2019

Estiamada,
A continuación el detalle solicitado del servicio de **Régimen 10** y **Régimen 70**:

Servicio Agente Aduana Reg. 10	$236,40
Servicio Agente Aduana Reg. 70	$274,60

Atentamente
Carolina Fajardo

CONSORCIO MALO ARIZAGA CIA. LTDA.
AGENTE DE ADUANAS

Remigio Crespo y Lorenzo Piedra
Cuenca - Ecuador

Source: Annex Provider Consorcio Malo Arizaga

Annex 10. Inland transport Fercab quote

Fercab

Cotización #001-2879

Estimada Srta.
Amanda Ordoñez

De nuestras concideraciones.

En cuanto concierne a nuestros servicios, aquí adjunto el detalle:

Descripción	Precio
Gastos locales naviera / Transporte destino (c/u 20 pies)	$ 298,37
No incluye IVA	

Quedamos atentos.
Saludos cordiales.

Av. 25 de Julio - Vía Puerto Marítimo / Guayaquil - Ecuador
Teléfono: 593 985 856 256

Source: Annex Provider Fercab

Annex 11. Custody and Satelital Lock Vicustodia quote

VIGILANCIA Y CUSTODIA VICUSTODIA C. LTDA.
Vernaza Norte, Mz. 15, solar 28 sl 28
Guayaquil - Ecuador
(04) 239-5199

COTIZACIÓN

CANT.	DESCRIPCIÓN	COSTO
1	Custodia Gye - Uio	$ 430,00
1	Candado de seguridad Satelital	$ 50,00

Atentamente
VIGILANCIA Y CUSTODIA VICUSTODIA C. LTDA.

Source: Annex Provider Vicustodia