



**UNIVERSIDAD DEL AZUAY**

**Law Faculty**

**International Studies School**

**"Export operational plan for amaranth seed snacks, applied to Zangur Azuay Company, to the US market"**

**Work submitted prior to obtaining the degree of:**

**Bachelor in International Studies, Bilingual mention in Foreign Trade**

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**Cuenca, Ecuador**

**2017**

## **Dedication**

The present work is dedicated to all the entrepreneurs, especially to Ecuadorians entrepreneurs because in spite of the barriers they have found in the way to reach their objectives, the majority of them has not surrendered and have continued working for what they want. They are a clear example for many other people who have the desire to start new projects to contribute to the Ecuadorian society, and to show the world what an Ecuadorian is capable of.

## **Acknowledgment**

I am grateful to Carlos Durazno, who took the time to work on my project with me. To all my teachers that taught me about life and not only the theories and concepts. I am especially thankful with my family, my friends, and every person who has contributed in my life with advice and guidance that have made me a better human being.

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### **Purpose and importance of the research**

"Exportation plans are documents that are used to project in detail a specific business" (Olson, 2015). These may change in extent or content, depending on the type of product that the plan is going to focus or the target market to which it is intended. However, whatever its content is, the export plan document always reflects the most important aspects that have to be taken into account in order to export a product to a specific or several markets and to determine the viability of the process, avoiding losses to the business, due to the mismanagement of the information.

According to Thomas Olson (2015), to develop exportations, the export plan is one of the most important phases, as well as the implementation and growth of the activity in a company, no matter what its size is. The main objective of an export plan is to collect all the necessary information to establish in a detailed way how the company's purposes can become a reality. Based on the collected information, once the target market is selected, and the company has a clear vision of the product it wants to export, it is easier to determine the different exporting routes to the target market in order to ensure the success of the business, and avoid wasting time and resources.

In the same way, another of the main purposes of an export plan is to define what the business activity is, how its production is developed, the capacity and size of the company and what the business activity pretends to be over time considering aims of growth in the national and international markets (Olson, 2015). On the other hand, it is important to know that being clear with the purpose and the direction of the business activity, allows understanding what the company has to do to grow in order to occupy a more important place in the international community.

At first instance, the research could be a simple description of the company and its product; nevertheless, this research is deeper, and it specifies exactly how the enterprise works in the administrative and productive areas to encourage producing people to be more ambitious and understand that when the information is more detailed, it will be easier to define the way a company should function always in favor of better circumstances.

When talking about better circumstances, the context is clear; people always look for the development of any activity in order to contribute in a positive way to a country's growth. For this reason, researching about the necessary guidelines for a better development of exporting activities is very useful and important because it contributes in such a way that producers, no matter what the size of their company is, save time when they are looking for information, save resources, and help the enterprise by making safer and more efficient decisions for the organization, avoiding unnecessary setbacks and procedures. In this specific case, Zangur Azuay, the participating company, does not have any experience about exportations to an international market; for this reason, the elaboration of an exporting plan will be useful in order to determine if the American market is appropriate or not to import its product, or, if the contrary, and based on the collected information, see if the company could venture in different markets. Although, every State and market is different from each other in terms of consumption habits, requirements and regulations, this exportation plan will identify the basic requirements that a product should meet in the national market in order to be exported to an international market.

## **Chapter I**

### **General information about the company “Zangur Azuay” and its product “Snacks of amaranth seeds”**

#### **Introduction**

The present chapter has as main objective to detail the most important features of Zangur Azuay Company, considering its origin, as well as the description of each area that shapes the enterprise. Furthermore, the chapter describes in a general way the product, showing its beginnings and how nowadays people interested in this product have discovered its nutritional benefits; reason why in the last years, many producers have paid attention and have begun to plant these seeds in larger quantities. In addition, the chapter points out the productive and industrialization processes of the amaranth seeds, as well as the commercialization plans that the company has made by its own, in order to introduce the product in the national market.

#### **1.1 Amaranth: Origin and History**

Amaranth, which has its origin in America, is one of the oldest species in the whole world. It was cultivated by the Aztecs in 6700 before Christ. Amaranth is a specie that represented for the Aztecs civilizations more than food; it played a very important role related with their cult. Aztecs used to build statues of their gods using amaranth seeds and as glue honey. These statues were worshiped, and later broken and distributed among the families that formed the Aztec community. When the Spaniards arrived to America, they burned all the amaranth crops they found, and punished the croppers adducing that this community had to learn Catholicism, so the Spanish could not allow the devotion to any different god.

Being amaranth a grain that originated in many different places of the American continent, the Spanish could not destroy the specie completely. The effort of getting these seeds back increased significantly until many regions in Latin America considered and still consider the amaranth as an endemic specie.

The genus amaranth consists in approximately 60 species. Many of these are cultivated as grains, vegetables, ornamental plants, and even many are considered weed. The species of amaranth

have been very important in different parts of the world for thousands of years. Currently, the amaranth is tilled and growth in an extensive way as a vegetable in regions where the temperature is mild and tropical (Departamento de Agricultura , Bosques y Pesca, 2012).

Although it is true the amaranth has been spread around the world and has been established as a product for human consumption, particularly its leaves and seeds. The specie is tilled and growth in a larger percentage in countries like Colombia, Ecuador, Peru, and Bolivia, and in less percentage in the north of Argentina. However, in the last two centuries the amaranth grain has been growing in more regions of Latin America not only as crops that will be destined directly to exportations. Its benefits have been found, and for this reason producers started to develop different products in order to consume these seeds in many different ways. One of the most common uses of the amaranth is as an herb to prepare water infusions. For this reason, the specie is considered as an easy plant to till and domesticate.

## **1.2 Snacks of amaranth seeds**

### **1.2.1 Product description**

The amaranth is a beautiful crop with bright and colorful leaves, tall stems, and purple, orange, red and even gold flowers that can grow up to 50 centimeters long. In the case of the amaranth, not only the seeds can be consumed by humans, but also its leaves, which are considered a better nutriment than spinach, for example.

“Zangur, The candy that nourishes”

Amaranth was designated by the United States National Academy of Science and ratified by the Food and Agriculture Organization of the United Nations (FAO) and World Health Organization (WHO) as “the best nutriment of vegetable origin for human consumption.” The nutritional foundation of this Andean grain plus the industrial added value, gives as a result the elaboration of a product with the faculty to satisfy the need of nourishment of a person at any time of the day, specially replacing junk food that contributes with nothing to a good nutrition, particularly in children’s population that are in a state of malnutrition, or those who due to poor eating habits are overweight. All these situations transform the proposal in one with potential within the change of the productive matrix that Ecuador is going through, obeying the constitutional mandate of food sovereignty and promoting an equal distribution of wealth.

The production and industrialization of amaranth is focused on school age children and older adults. Furthermore, it is focused on covering niches that group people facing diabetes, chronic malnutrition, and overweight. In addition, it focuses on general consumers in order to satisfy the physiologic need of nourishment that every person has.

More than providing a great nutritional added value, the idea is to develop a delicious and fun product similar to a chocolate bar. It basically consists of amaranth seeds, in its majority, mixed with other additives, giving it a presentation of quality, obeying the regulations that are settled, and taking into account the good manufacturing practices. Below, according to the FAO, the document shows all the benefits of this Andean grain.

The amaranth plant has a spike with many little flowers that house small seeds, which represent the main product of the amaranth plant. From these small seeds, it is possible to prepare flour, sweets, cereals, and other products. Together with corn, beans, and chia, the amaranth had been one of the main nutrient and source of proteins for American cultures (Asociación Mexicana de Amaranto, 2013). Amaranth is an important nourishing product that is consumed mainly as cereal from which “alegrías”, a typical Mexican sweet, granola, bread, cookies, pancakes, water infusions and chocolate beverages can be elaborated. It is also possible to prepare oil and dye that are used mostly in the cosmetology, chemistry or pharmaceutical industry (Correo, El Diario de Todos, 2016).

#### **1.2.1.1 Zangur Nutritional Characteristics**

Talking about amaranth, the first ideas that come to mind are its high nutrition level, reason why, thanks to the world biomedical research has named it a fabulous product. For this reason, the specie has been used as a complementary nutriment, helping in the recovery of people with high levels of malnutrition because of their high content of protein that reaches an 18%. The amaranth seeds are produced in an extensive way due to its small size. These seeds can be compared with some of the most common cereals; like, rice, wheat, and corn.

**Table 1: Analysis between amaranth seeds and the most common cereals**

<b>Analysis</b>	<b>Amaranth</b>	<b>Corn</b>	<b>Rice</b>	<b>Wheat</b>
<b>Humidity</b>	11.1	13.8	11.7	12.5
<b>Raw protein</b>	17.9	10.3	8.5	14.0
<b>Carbohydrates</b>	57	67.7	75.4	66.9
<b>Fats</b>	7.7	4.5	2.1	2.1
<b>Fiber</b>	2.2	2.3	0.9	2.6
<b>Ashes</b>	4.1	1.4	1.4	1.9

**Source:** (San Miguel es Amaranto, 2008)

As it is shown in table 1, many of the characteristics of the amaranth seeds surpass in a favorable way the products that are essential for an adequate diet. It is one of the most important sources of proteins because its seeds are better than any other cereal. It is necessary to mention that less humidity amaranth seeds have, the better the benefits they offer. For this reason, having the 11.1% of humidity and a 4.1% of ashes (residues of inorganic material that are left after the seeds are submitted to a warm process), it is possible to get around the 18% of the nutrients that the seeds provide (Porr, 2012) achieving an optimum percentage for these kinds of products. While the fats represent a higher quantity than other common cereals, the carbohydrates are found in a less quantity, which is an important fact, considering that these are important to the organism in a balanced diet.

It is important to mention that amaranth seeds have many high-quality proteins, since these are a product that has the entire essential amino acids that the body needs in order to stay healthy, concluding that amaranth is a suitable nutritional complement for a balanced diet. Additionally, according to the Food and Agriculture Organization of the United Nations, this is a product that provides most of the vitamins (A, B, C, B1, B2, B3) and minerals that the organism needs to maintain itself healthy.

In the same way, the quality of the fatty acids contained in the seeds, when compared to other cereals, contributes much more to the synthesis of the organism's steroids. Furthermore, the vitamins and minerals contained in amaranth seeds subsidize levels of calcium, zinc, phosphorus, and iron considered as the most important components that the body needs.

Once relevant information about the great properties of the amaranth has been presented, it is important to mention that according to a study conducted by a group of experts in nutrition at the Salud Carlos III Institute, under the direction of Miguel Ángel Royo, this product is cataloged as one of the most complete ones, comparing it to breast milk, which as people know, is the fundamental sustenance for children's growth.

It is true that amaranth is an essential product for children's growth and development because it provides the necessary quantity of nutrients. However, it is also considered as a supplement to people's health because it treats many effects that are related with medical conditions, such as:

- Diarrhea control.
- Colon cancer prevention.
- Prevention and assistance in the control of osteoporosis, diabetes, obesity, hypertension, kidney failure, liver failure, and it is also recommended in a diet for autistic people.
- It is recommended for elder patients, and patients with malnutrition and cancer problems.
- Because of its energetic content, it is also beneficial for patients with high caloric requirements (Amaranto, el Alimento del Futuro, 2007).

### **1.2.2 Sowing, harvest, and post-harvest.**

Ecuador is a diverse country in terms of weather, soil, flora, and fauna. For this reason, there are advantages for the amaranth cultivation in the country. In the case of Zangur, the kind of seeds that they sow are the "Amaranthus Caudatus" or "Amaranto Alegría", which requires a temperature of around 15 degrees Celsius, that is, temperatures that tend to be mild, taking into account that the valleys should be free from frost. On the other hand, this type of amaranth can be adapted to different kinds of rainy weather, but it will be more suitable in places where precipitations go from 300 to 600 mm during the entire cycle (Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias, 2013).



**Figure 1: Alegría Amaranth**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

#### **1.2.2.1 Sowing**

Once the established conditions are met, it is possible to have the certainty that the seeds that are going to be cultivated will reach the expected results. In order to get good harvest, many processes are needed before and after the growing of the crop. First, farmers or producers should prepare the land where the seeds will be planted. The land must have certain characteristics; for example, be free of obstacles, have a good sewer system, and have a high content of inorganic material. As it is known, the land might be prepared by hand or with the help of specialized machinery; however, in the case of Amaranth, because the size of the seeds is too small farmers always prepare the land by hand. Farmers usually make sure the land is free of any weed, and that it is completely flat. Sometimes, the machine does not clean the whole area as the hand does.

**Figure 2: Plow**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

Before the harvest, the grooves must be defined in the land; these grooves should have a separation of approximately 60 centimeters in order to avoid contact between the plants when they grow and to protect the new seeds from getting damaged.

Gualaceo, place where currently the amaranth is being growth, is located in a zone with mild weather and almost free of frost. The amaranth cultivation might be done in many periods of time during a year, but it is recommended to do it in May and at the end of June when there is an increase in the amount of precipitations.

The process to prepare the seeds involves preparing a homogenous mixture of amaranth seeds and manure that is obtained from cows or sheep; this mixture has to stand for two days before it is spread around the land previously well prepared. This process allows the seeds to grow faster and stronger.

There are many techniques that farmers or producers use to crop seeds on the soil; however, Zangur Azuay uses the technique of “mateado”. Using this technique means speeding the seeds and manure mixture every 60 centimeters, where the grooves have been made before, taking into account that the seeds do not have to be covered with the soil or buried more than one centimeter deep. Following these guidelines will produce successful germination

During the cultivation cycle that takes around 150 days, it is necessary to make several controls for plagues or illnesses in the crops. It is required to pull all weeds that are growing around the crops, or use chemicals to fumigate the plants if they plagues. Zangur is characterized for offering a natural product that is free of chemicals, and therefore the process of plague control is meticulous and regular. (Ríos, 2016)

#### **1.2.2.2 Harvest**

Once the cultivation cycle is finished, it is time to harvest. It is necessary to take into consideration many different aspects in order to start cutting the plants. These aspects include: checking if the seeds have turned its color from pink to yellow, and if they instantly fall down when the plant is moved, Farmers prove that the plant is ready to be harvested when it starts to get dry or when feeling the seeds very hard by biting them. When these steps have been

completed, it is safe to proceed and cut the plants. After this activity, the plants have to be spread out on a canvas for four or five days until they dry. Later, the farmers have to separate the seeds from the whole plant; this process can be done by hand or using specialized machinery.

**Figure 3: Seeds control**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

**Figure 4: Drying seeds on a canvas**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

**Figure 5: Threshing**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

### **1.2.2.3 Post-Harvest**

Finally, the seeds are cleaned by a filtration process with the help of a sifter in order to keep the waste of leaves, sand or little sticks apart from the amaranth seeds. Once the seeds are separated from the rest of the plant, these have to be spread out once again for three or four days until they are totally dried, avoiding the appearance of a bad smell or that they become rotten. Once the process of drying is finished, the seeds are put in new and clean sacks which are sent to a dry place to avoid seeds from absorbing humidity until they are used to produce the final product.

**Figure 6: Amaranth seeds cleaning**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

**Figure 7: Drying process**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

**Figure 8: Seeds storage**



**Source:** (Instituto Nacional de Desarrollo Social, 2011)

### **1.2.3 Strengths, Weaknesses, Opportunities and Threats Analysis (SWOT)**

Like in a company, it is possible to take the products apart and analyze them to determine the positive and the negative aspects that these products have while being part of the company. The main objective of this process is to know the reality of the company in order to take better decisions and have significant improvements. For this reason, it is fundamental to determine the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the product in order to know what makes the company great, and maintains it strong, or, in the contrary, to evidence the negative to act quickly and fix the problem as fast as the company can. The following table shows this SWOT analysis.

**Table 2: Strengths, Weaknesses, Opportunities and Threats Analysis**

<b>Strengths</b>	<ul style="list-style-type: none"><li>• Product with a high nutritional level of content, capable of replacing many vegetables and some fruits.</li><li>• The processes of cultivation and harvest do not require complex steps.</li><li>• There is participation of the owner of the company in production and packaging activities.</li></ul>
<b>Opportunities</b>	<ul style="list-style-type: none"><li>• The height at which the plants are cultivated is optimal, so it is possible to take all the nutritional benefits of the seeds.</li><li>• The mild weather in Gualaceo guarantees that the crops do not get dry or rotten, but stay in good conditions.</li><li>• They are snacks of amaranth seeds sweetened with cane honey which will be provided by several producing neighbors.</li><li>• The demand of high nutritional products is increasing in the market.</li></ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"><li>• Zangur Azuay does not have its own farmland; it depends on the neighboring farms.</li><li>• Many peasants who are able to cultivate amaranth do not want to do it because they feel better with the well fare payment that is given by the government than earning money by</li></ul>

	<p>working.</p> <ul style="list-style-type: none"> <li>• The growing of the crops is slower than other type of crops because the company does not use any chemical to accelerate the process.</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• Being the amaranth a common product in the region, it is possible that other entrepreneurs start to produce similar products of amaranth seeds.</li> <li>• The signing of treaties or commercial agreements with countries like Peru, Bolivia, or Mexico (countries that produce amaranth seeds) could allow the access of this product with a lower price.</li> <li>• Not using insecticides or fungicides makes these products more likely to become contaminated.</li> </ul>

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#### **1.2.4 Statement of the product's Tariff heading**

Zangur Azuay is almost a new company in the national market, reason why it is not exporting its snacks of amaranth seeds yet. However, when analyzing the exporting tariffs, this kind of product might be classified under the heading number 10089099, with the statement "other cereals." The amaranth is considered a new product in the market which has not being exported, for many years, as a product itself, but as an ingredient of products like quinoa, chia and barley in order to provide the orders made by international markets (Andrade, 2014).

### **1.2.5 Zangur Azuay Company Analysis**

#### **1.2.5.1 Zangur Azuay Company: Origin**

Zangur Azuay is a family-owned microenterprise that has been operating in the market in a sustained way since 2015. However, the project initiative took place ten years ago.

Martín Ríos, owner and president of the company, begun with the project when he was studying out of the country. At that time, many of the students who were studying at the university had the opportunity to travel abroad to take extra courses for their training. Thanks to this opportunity, Rios chose computer courses and learned everything about the internet, which at that time was not fully developed, nor did contain the information that currently can be obtained on any web site. At the same time, people were talking about “amaranth”, but Martín did not know it was; he started looking for information and reading many articles about amaranth on the internet, but he had one doubt; was the amaranth the same thing as “Zangurache” or “Ataco” as it is known in Ecuador? When he returned to Ecuador, and already with the idea of doing something with this product, he began to interact with new people among them an agronomist who lived in Quito, who told him that in Quito they have those seeds and that they are planting and growing them. Zangur’s president travelled to Quito and learned that amaranth seeds were the same seeds that the “ataco”, he decided to return to his native city, Gualaceo, to start the cultivation of amaranth by himself. However, consolidating and selling the product in the national market has been a long process, which has taken 10 years. It has been long because people did not know about the product nor dedicated to its cultivation. Currently, the amaranth crops for Zangur Azuay are bought from families with whom the company has already a deal. Each family sows the hectares required by the company, and according to the quintals t collected from the harvest, a specific amount of money is paid (Ríos, 2016).

#### **1.2.5.2 Zangur Azuay Company Description**

Zangur Azuay is a family-owned microenterprise, which is dedicated to the cultivation and production of amaranth products. The company is located in Azuay Province, in Gualaceo city, at a height of 2370 meters above sea level; this height is considered optimal for the cultivation of these seeds, because under these conditions it is possible to have all the nutritional benefits of the amaranth. In addition, being in an area with a temperature of 18 degrees, the possibility to maintain all products’ nutrients increases even after the seeds come in contact with the heat.



In regard to the philosophical dimension of the company, Zangur Azuay has as its mission “to elaborate amaranth products with a high nutritional value, contributing to the well-being and health of the consumers in order to satisfy beyond their needs in a responsible and committed way with the environment.”(Rios, 2016) Moreover, the company’s vision is “to be the leading company that commercializes Zangur products all over the country, through a quality service” (Ríos, 2016).

## **1.2.6 Corporate Structure**

### **1.2.6.1 Management Area**

The management area is headed by Martin Rios, who besides of being the pioneer and entrepreneur of the company is the president of the organization. Martín Ríos is in charge of coordinating the activities that must be carried in the process of amaranth cultivation and in the production process in order to obtain the final product.

In addition, it is important to mention that the president has had professional training as craftsman; he has attended all the necessary training courses to be able to carry out the activities of the company through the acquired knowledge. Furthermore, he has experience in sales and marketing, reason why it has been easier for him to expand the product in several regions inside the national market. The company, however, has the advice of experts in marketing and sales. The management area has a capitalist partner, Rosendo Moreno, the president's right-hand man, who is responsible for several coordinating, planning and distribution activities.

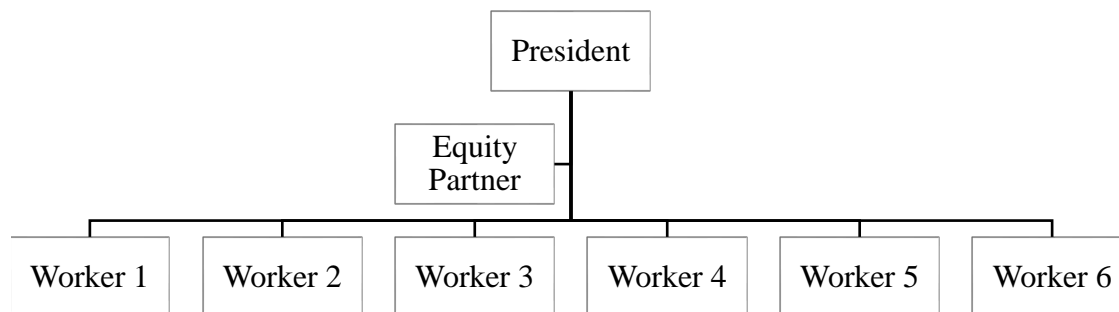
### **1.2.6.2 Operating Area**

Zangur Azuay has a limited number of workers; all the activities that have to be done inside the company are carried out by the eight people who make the company, so it would be difficult to establish the specific role that each worker has. Nevertheless, two of the eight people are not family members and they work specifically in production area, performing activities such as packaging and labeling the different products of amaranth seeds., It is necessary to mention that those, who form the company, are able to do all types of activities, ranging from planting supervision to the distribution of the product to the different points of sale. The salaries vary from person to person, because although at some point everyone will be needed in any activity,

there are higher positions in which the workers do not participate all the time. The salaries follow national work regulations. .

The graph below shows the organization chart.

**Figure 9:** Organization Chart



**Source:** Zangur Azuay.

**Author:** Fajardo, C.

Figure 1 clearly shows that the company's organization is quite simple and, as it was mentioned before, the activities are not designated in an exclusive way, but each member gets involved in all kinds of activities at any time.

### **1.2.6.3 Production Area**

#### **1.2.6.3.1 Production Process**

The production area is conformed of several work teams that do not belong to the company; although, all of them are recognized by Zangur because they provide the raw material. As a first step, there is the acquisition of the raw material that is provided by the neighboring farmers, who are responsible not only to plant the crops, but together with the president of the company Zangur Azuay, to monitor each planted hectare. Once the sowing has reached the required

height, and once the amaranth seeds are white, it is possible to harvest as it was above mentioned. After the selection of the seeds, those that are not suitable for production are rejected; that is, the ones that have not reached the necessary shape, color and size. Then a drying process is started only if most of the seeds during the popping tests do not exploit, otherwise the amaranth grains will be cleaned by removing the soil, stones or leaves remaining. After that, the seeds will be directed to the production area.

In the production area there are machines used for the popping of the amaranth seeds. The machines are at an average and stable temperature, so once the seeds are placed in the machine, they will come out already popped in about a minute. The time in the machines, which are similar to ovens, is minimal because the seeds are so small that they do not need more time to be popped. At the same time, the natural flavoring is prepared; in this case, it is the cane honey that is used to sweeten the amaranth seeds that are already exploded.

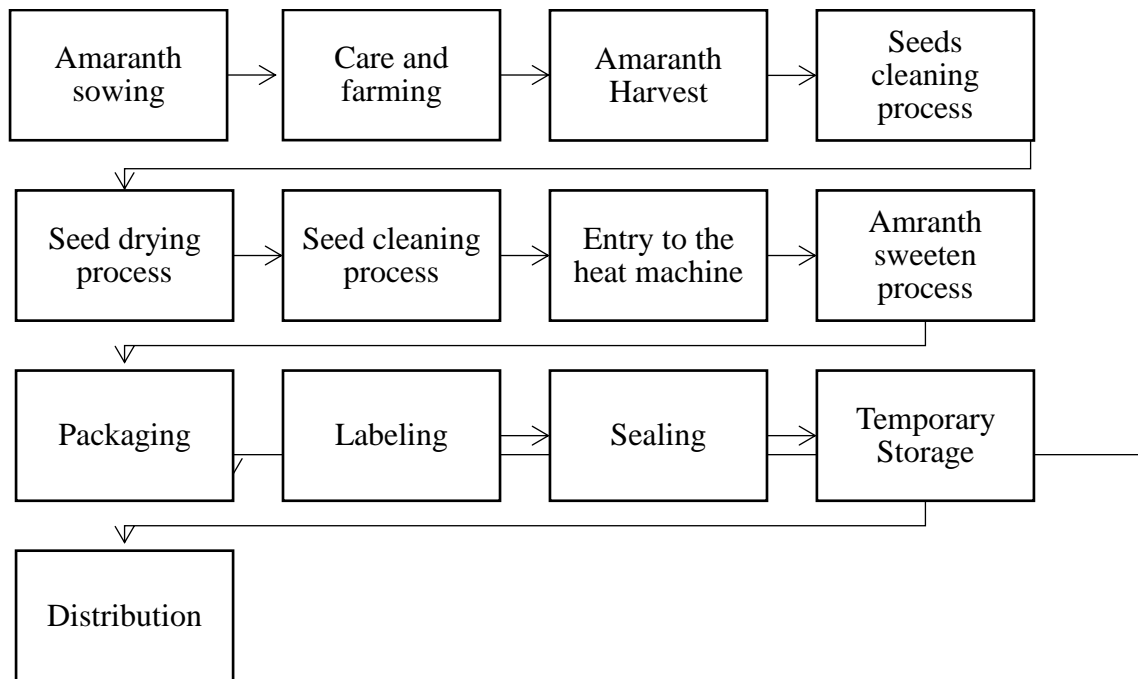
The cane honey is pure; that is, made without any other type of ingredient, making its process simple. The first step to obtain cane honey is to get the juice of the cane, which is known by many people as “guarapo”. After that, the “guarapo” has to be put in a special pot to cook for about six or seven hours. In this time, it is possible to observe how the cane juice changes its liquid texture to a thicker one, which is similar to glue. As a last step, the honey that is obtained must stand in the same pot until it gets cold in order to be poured on the amaranth seeds. Then, with the mixture of ingredients, the workers proceed to mold them into bars, which at the beginning will be sticky and unmanageable. Once the bars are dried, they will have a different appearance, since they will not be longer gluey. Each seed will be separate from the others with an appearance similar to sprinkles.

The wrapping and packaging area has two people in charge of these activities, but, if more people are needed, those who are working in other areas will be part of the production team to pack the entire final product.

Currently, Zangur Azuay has a production capacity of 1500 packages per week, including packets of 150 grams, 15 grams and others of 7 grams. While it is true that for being a family-type company, the weekly production can be considered high, , as the product is spread in more regions of the country the company should consider a larger production Nevertheless, the production depends on the harvest of the neighboring peasants, and currently it is not feasible to

increase it. For this reason, the company has considered the possibility to cultivate the product on its own land.

**Figure 10:** Flow Chart



**Author:** Fajardo, C.

Nowadays, thanks to a detailed and careful process and due to a good sales plan, the company Zangur Azuay is in the capacity to produce up to 1500 packages of amaranth seeds 70, 25 and 7 grams. The smaller packages are mostly sold as snacks in different schools, while the 70 gram ones are mostly found in supermarkets, health food stores, and neighborhood shops.

#### **1.2.6.3.2 Production Costs**

**Table 3:** Monthly Production Costs

Detail	Amount
Promotion, accompaniment and farmers training.	\$500
Raw Material (25 quintals per month)	\$2.500
Labor in the elaboration of the product.	\$2.000
Indirect Materials	\$850
<b>Total</b>	<b>\$5.350</b>

**Author:** Fajardo, C.

**Source:** Empresa Zangur Azuay.

Table 3 shows the costs that are included when to obtain the final the product, being the most expensive the raw material, because each quintal of amaranth seeds has value of \$ 100. For that reason, the selling price for the 70-gram package is \$ 2.00 each, the 25-gram package is 0.50 cents each and the 7-gram bar is 0.25 cents each. These prices will be paid by the consumers in the different points of sale where the distribution takes place.

#### **1.2.6.3.3 Product Differentiation**

Zangur, the candy that nourishes, is a new product on the market. While it is true, amaranth products, whenever they are grown, provide the above-mentioned nutrients, the conditions under amaranth is grown in countries different from Ecuador are not the best; as a result, the nutrients of the seeds are not being maximized. It is thus that amaranth seeds beyond of being exclusive in terms of their presentation, they offer all the conditions to be chosen in the national market. It is imperative to highlight that the raw material is 100% agro ecological, the product is 100% national, and it has high nutritional values; for these reasons, and unlike other products, it is a sweet that nourishes.

#### **1.2.6.4 Sales Area**

In terms of sales, the company Zangur Azuay, besides distributing the product in a direct way, has the support of several distributors, who due to the success of the product in the Azuay market have requested the distribution of the product in areas such as Loja, Machala and Quito. Likewise, the company has planned to include as distribution channels the following.

1. Companies engaged in commercialization at the wholesale level
2. Medium traders
3. Neighborhood stores.

Once the great benefits of amaranth seeds are known, the need for the product to be introduced in many more institutions was determined. For this reason Zangur Azuay has as potential customers the following sectors:

1. Public sector: The Ministry of Health, the Ministry of, prisons, shelters, etc.
2. Snack bars in public and private institutions.
3. Hotels, restaurants, inns, and other lodging facilities.

It would be great to cover each and every one of the sectors where people with food needs are found. However, Zangur is suitable for general human consumption, not particularly for individuals with specific needs. For this reason, the company must enter in many more regions of the country; so that, the expectations of international expansion can be much real.

#### **1.2.6.5 Financial Area**

Zangur Azuay is financed mostly by its own capital, but in the last months, the company started selling shares for \$ 4000 each, which has helped its financing. The company keeps a simple record in terms of income and expenses. Its monthly sales range from \$3,000 to \$3,500, while supplies and labor costs are around \$1800.

#### **Conclusion**

Chapter one briefly describes the operation of the company Zangur Azuay, which despite of being a familiar company and working with a reduced staff to carry out the various activities, it is stabilizing in the Ecuadorian market. Its product has been accepted for being different and

delicious, but specially for offering the essential nutrients for an adequate diet., From the information presented, it can be concluded that it is very important to support microenterprises inside the country by granting them all the needed opportunities and facilities for positioning and selling the products they elaborate not only in the national but also in the international market. Foreign consumers might welcome the product in the same good way as in the Ecuadorian market, perceiving the added value of being a non-traditional product which could generate greater benefits for the company and Ecuador's participation in the world.

## **Chapter II**

### **Market research and target market analysis (United States)**

#### **Introduction**

The present chapter analyzes in first place Ecuador and the total of its exports in order to disaggregate the different groups of products in which it has more participation in the world. The chapter also describes in detail cereals production in the country, as well as the amaranth sowing and cultivation.

For the target market analysis, a political, economic, social, and technological analysis (PEST) is carried out, which details the most important aspects that help to determine why the United States is the appropriate market for exporting Zangur.

Likewise, an analysis of the competition inside the United States is shown, detailing the companies and the amaranth products they offer, as well as the price those products are commercialized. Moreover, the possible substitute products of amaranth snacks are mentioned by making an analysis of the properties and prices of each one of them.

Finally, an analysis of the Marketing Mix is shown, where the product, price, place, and promotion are mentioned in a specific way to be able to determine the handling of Zangur products in the United States.

#### **2.1 Target market selection**

In order to determine the reasons why the United States is the right market for Zangur Azuay company to start exporting "Zangur, amaranth seeds snacks", a detailed study has been carried out, which shows an analysis in the political, economic, social and technological scope. In addition, since the United States is Ecuador's main trading partner, with a large share of both imports and exports of Ecuadorian products real data figures from the last years, which help to select the United States as the best option.

##### **2.1.2 Ecuadorian exportations analysis**

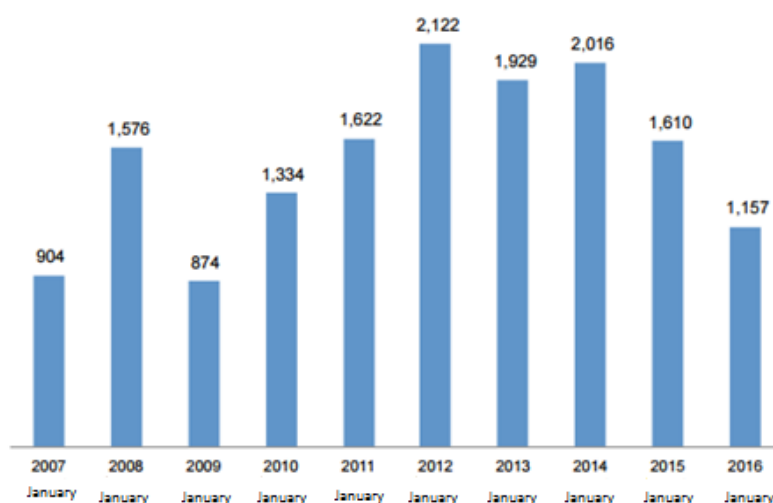
Since immemorial time, Ecuador has remained stable, in a certain way, thanks to oil exports, which represent the highest percentage for the country's income, which is necessary for the



fulfillment of the State's goals. However, as time passes and needs continue to be unlimited, many agricultural activities have been developed, strengthening and becoming a representative part of the country's income. This has given as a result, a larger farmer participation, and space for new entrepreneurship.

Although the country's imports have been higher than exports, in the last years, exports have increased significantly, which shows progress achieved by the government in turn. It is important, however, to mention that due to many of the measures implemented by the government in the country, there has been instability for some sectors in the country.

**Figure 11:** Exportations evolution



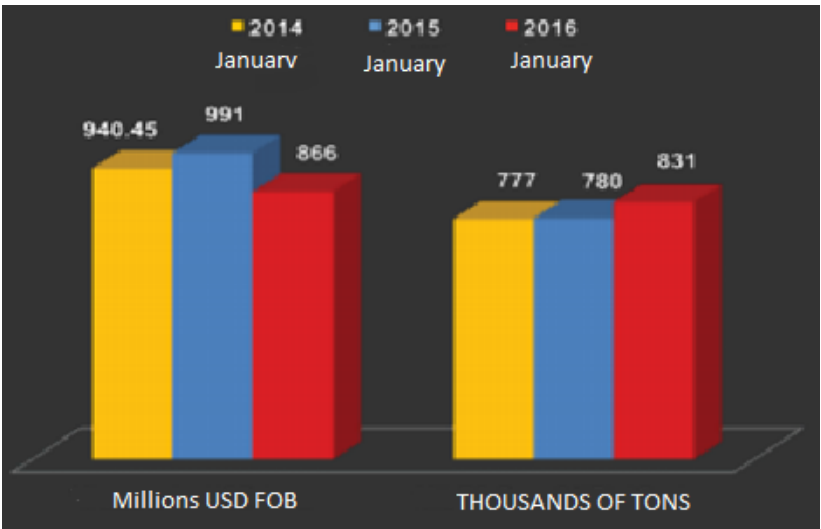
**Translation:** Fajardo, C.

**Source:** PRO ECUADOR Boletín Mensual de Comercio Exterior. Dirección de Inteligencia Comercial e Inversiones (Marzo-Abril, 2016)

The figure shows in a general way how, since 2007, the trend has been an increase for the country's exports, taking into account that in the last year, Ecuadorian exports decreased by approximately 31%, due to the measures implemented by the Government to protect the domestic industry, as already mentioned.

The figure below shows the impact of Ecuadorian non-oil exports, which are important to consider for the analysis.

**Figure 12:** Ecuadorian non-oil exports evolution

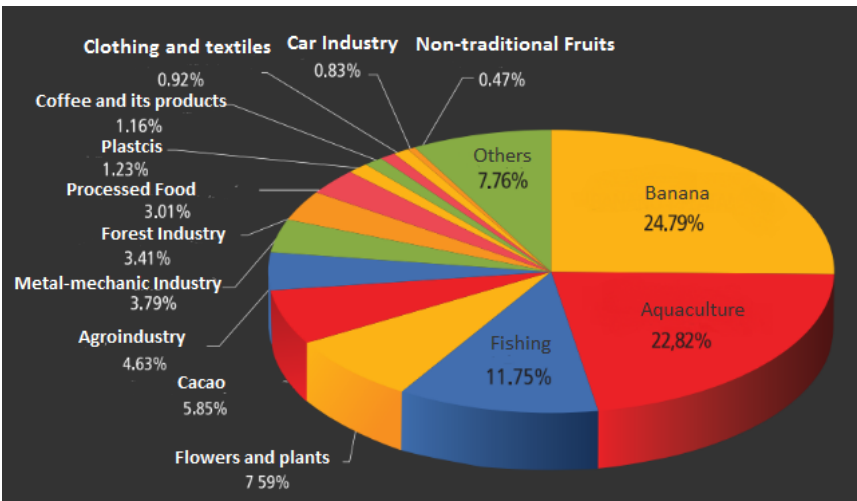


**Translation:** Fajardo, C.

**Source:** PRO ECUADOR Boletín Mensual de Comercio Exterior. Dirección de Inteligencia Comercial e Inversiones (Marzo-Abril, 2016)

In the last three years, the non-oil exports have increased 54 tons, which in 2016 represents 866 million of dollars (USD) for the country.

**Figure 13:** Non-oil main exports: Product groups.



**Translation:** Fajardo, C.

**Source:** PRO ECUADOR Boletín Mensual de Comercio Exterior. Dirección de Inteligencia Comercial e Inversiones (Jan-Aug, 2016)

The figure shows that bananas represent most of the country's exports with 24.79% of the total, followed by aquaculture with 22.82%. Likewise, in third place with 11.75% products obtained from fishing, and finally there is the flowers and plants group with a 7.59%. Thus, it can be determined that in 2016, the agricultural sector has represented the largest sector, which has been profitable to generate income for the country.

In the previous figure, cereals, in which amaranth seeds are included, are not shown in any group. This is because amaranth is practically a new product in terms of its uses and nutritional characteristics. Although, amaranth has existed for many years, only in the last years it has been included in industry and commercialization. For this reason, now and in the future the product will have a lot of potential.

### **2.1.3 Ecuador main export destinations**

According to PRO ECUADOR, the main destination for Ecuador's exports (2015) was the United States with a 26.16% of participation, followed by Vietnam with 8.22% of participation and in third place Colombia with 7.68% of participation. On the other hand, Latin American participants include countries such as Chile, Peru, Argentina, Mexico, and Venezuela, which represent a 14.11%. In addition, European countries and few Asian countries represent 43.83% of the destinations of Ecuadorian exports; although, these do not comprise 50% of the total, in group they represent a lot for the country.

**Figure 14:** Ecuador's non-oil exportations main destinations

Ecuador's non-oil exportations main destinations		
Country	Thousands USD FOB	Participation %
UNITED STATES	1,717,617	23.26%
VIETNAM	707,491	9.58%
COLOMBIA	514,784	6.97%
RUSSIA	496,668	6.73%
ALEMANIA	370,212	5.01%
SPAIN	366,634	4.97%
CHINA	294,655	3.99%
ITALY	290,346	3.93%
THE NETHERLANDS	273,426	3.70%
FRANCE	186,307	2.52%
PERU	177,369	2.40%
CHILE	157,569	2.13%
JAPAN	139,170	1.88%
ARGENTINA	130,736	1.77%
BELGIUM	121,058	1.64%
MEXICO	111,517	1.51%
VENEZUELA	95,911	1.30%
UNITED KINGDOM	94,390	1.28%
TURKEY	91,457	1.24%
BRAZIL	83,787	1.13%
OTHER COUNTRIES	962,642	13.04%
<b>TOTAL</b>	<b>7,383,744</b>	<b>100.00%</b>

**Translation:** Fajardo, C.

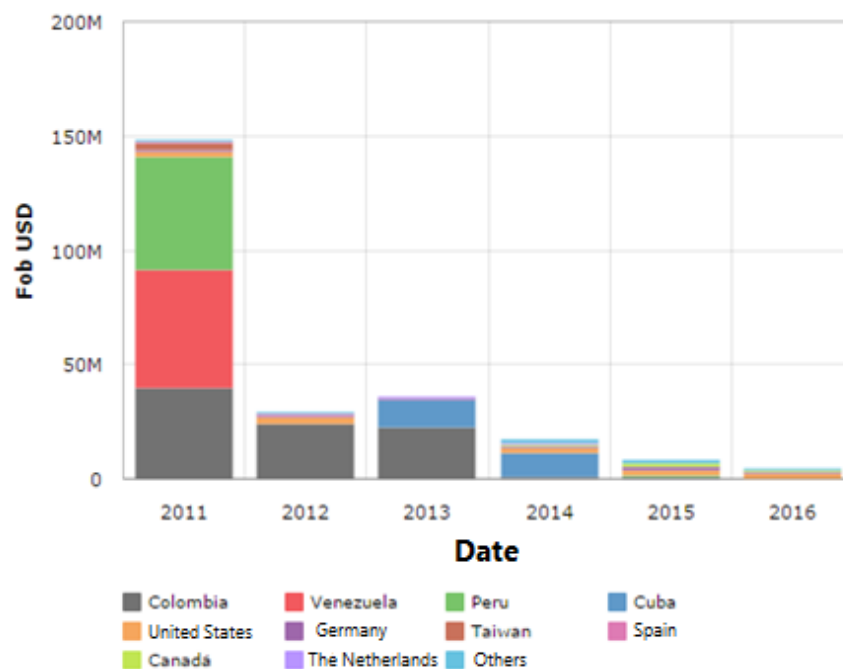
**Source:** PRO ECUADOR Boletín Mensual de Comercio Exterior. Dirección de Inteligencia Comercial e Inversiones (Marzo-Abril, 2016)

#### 2.1.4 Cereals as exportations

Currently, cereals have increased their export data, because over time they have been found as great products with many nutritional characteristics, making them a perfect complement to a balanced diet. According to the Coordinating Ministry of Production, Employment and Competitiveness, cereals with the highest opportunity to be exported are chia, amaranth and quinoa, considering the last one as a leading product, because several processed and value-added products have been elaborated from the raw material.

According to PRO ECUADOR in 2014, the main importers of Ecuadorian cereals were American and European countries, Colombia, the United States, Canada, Venezuela, Germany, the Netherlands, and Peru depending on the case. The figure below shows the detail of exports by country.

**Figure 15:** Ecuador exportations evolution: cereals.



**Translation:** Fajardo, C.

**Source:** (Comercio Exterior del Ecuador de NCE, 2016)

The following table shows the countries that have imported Ecuadorian cereals in the first two quarters of 2016.

**Table 4:** Ecuadorian cereal: Importing countries.

Importing Country / Date	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
United States	120,800	294,738	751,618	494,205	491,982	105,356
Canada	95,700	319,700	286,000		112,000	
Peru	13,086		14,147	7,965	215,778	23,266
Israel	43,500		43,500		86,900	87,000
France		112,500	67,500			78,750
Germany	29,000		55,000	55,000		96,000

<b>United Kingdom</b>		58,000				
<b>Italy</b>	5,400	3,750	37,800	10,352		
<b>Colombia</b>					22,770	
<b>Spain</b>	1		8,000	8,837	3,240	7
<b>Others</b>	1	423	9,385			
<b>TOTAL</b>	307,488	789,111	1,272,950	576,359	932,670	390,379

**Source:** (Comercio Exterior del Ecuador de NCE, 2016)

**Author:** Fajardo, C.

As it is shown in table 1, the commercialization of cereals in foreign markets is broad, although the national production of cereals is scarce. Nevertheless, being open to important markets, as the North American and European are, it is very important that sowing and production of cereals increases because the current production is not enough to fulfill others countries' expectations, and that would represent several losses of opportunities for the country. Furthermore, as it is known, Ecuador is a country that depends heavily on oil, so by increasing agricultural activities, especially focusing on products with high marketing potential, the competitive advantage would develop, while the country takes the opportunity to open to new foreign markets.

### **2.1.5 Amaranth commercialization.**

Amaranth seeds are grains that have their origin in the Andean region, and these are considered as a valuable product in foreign markets, especially in North American and European countries, because of its fabulous nutritional characteristics which help to keep the body healthy. Although the product is highly valued, the production inside the country is reduced; this is why covering large orders is extremely complicated.

Amaranth production in Ecuador per year, considering "alegría" types (white amaranth seeds) and black amaranth, which is popularly known as "sangorache", is 200 tons that are equivalent to 2,000 quintals of amaranth seeds. However, "alegría" amaranth only represents 30 tons (300 quintals) of the country's annual production, which is insufficient to cover the existing demand of foreign countries that require around 1000 tons of white amaranth seeds annually to satisfy its market and consumers. Furthermore, it is important to mention that within the country the main provinces that are dedicated to amaranth sowing are those located in the mountain region:

Chimborazo, Imbabura, Pichincha, Bolivar, Cañar, Azuay, Carchi, and Cotopaxi. (Peralta, Estado del arte del amaranto, 2013)

The following table shows the number of amaranth crops harvested in 2012 by the provinces mentioned above.

**Table 5:** Amaranth seeds collection of by province.

Province	Number of collected quintals
Chimborazo	6
Imbabura	11
Pichincha	37
Bolívar	1
Cañar	20
Azuay	14
Carchi	5
Cotopaxi	6
Total:	100

**Source:** (Peralta, Estado del arte del amaranto, 2013)

**Author:** Fajardo, C.

The total harvests of amaranth seeds in the different provinces is 100. Each collection yields approximately 20 quintals of seeds that can be directly consumed or used as raw material to produce value-added products.

In recent years, amaranth has become relevant due to the benefits it offers. In Ecuador entrepreneurship has started, consisting on the elaboration of amaranth food products. Many of these products are already taking consumer's attention in the Ecuadorian market, even when they are not dispersed in all the geographical regions of the country. For this reason, many public institutions that support this type of projects are worrying to promote amaranth cultivation in order to avoid natural products to remain solely in Ecuador.

### 2.1.6 Tariff heading for amaranth in Ecuador.

<b>Section II</b>	Vegetable Products
<b>Chapter 10</b>	Cereals
<b>Subheading Harmonized System 1008</b>	Buckwheat, millet, and canary seed; Other cereals.
<b>Subheading Harmonized System 100890</b>	Other cereals.

**Source:** (Servicio Nacional de Aduana del Ecuador, 2013)

**Author:** Fajardo, C.

Once the product's tariff heading is determined, the table below shows the number of cereal's exportations, including amaranth.

**Table 6:** Ecuadorian cereal exports

<b>Year</b>	<b>Ecuadorian exports (Thousands USD)</b>
<b>2011</b>	1,827,053.00
<b>2012</b>	3,206,213.00
<b>2013</b>	519,001.00
<b>2014</b>	2,378,875.00
<b>2015</b>	2,564,212.00

**Source:** (Comercio Exterior del Ecuador de NCE, 2016)

**Author:** Fajardo, C.

In recent years, the trend of exports has been increasing, which has represented a large amount of income for the country. However, in 2013, cereal exports dropped significantly, which meant a considerable decrease in the income for Ecuador. According to a study carried out by Paola Andrade, in Ecuador, besides exporting amaranth, together with chia and quinoa, black amaranth is also exported, which can be classified in the tariff heading that says: "Kiwicha (amaranthus caudatus), except for sowing ". The only countries that have imported this product are Germany and the United States. For this reason, Ecuador has not exceeded the export of more than 21 quintals of kiwicha seeds to these markets.



## **2.2 American market analysis**

### **2.2.1 United States Profile**

The following information has been obtained from the Información Diplomática office web site, which contains information of every country.

**Official country name:** United States of America.

**Current President:** Donald Trump.

**Surface:** Including territories and water 9,826,675 Km².

**Extension:** Geographic boundaries: Most of the country is located in the center of North America where its 48 contiguous states and Washington D.C. are, between the Pacific and Atlantic oceans, bordering Canada to the north and Mexico to the south. The State of Alaska is in the northwest of the continent, bordering Canada to the east and separated from Russia to the west by the Bering Strait. The state of Hawaii is a Polynesian archipelago in the middle of the Pacific Ocean and it is the only American state that is not located in America. The country also has several territories in the Caribbean Sea and in the Pacific Ocean. (Oficina de Información Diplomática, 2016).

**Population:** 321, 773,000 inhabitants until 2015.

**Capital:** Washington, D.C.

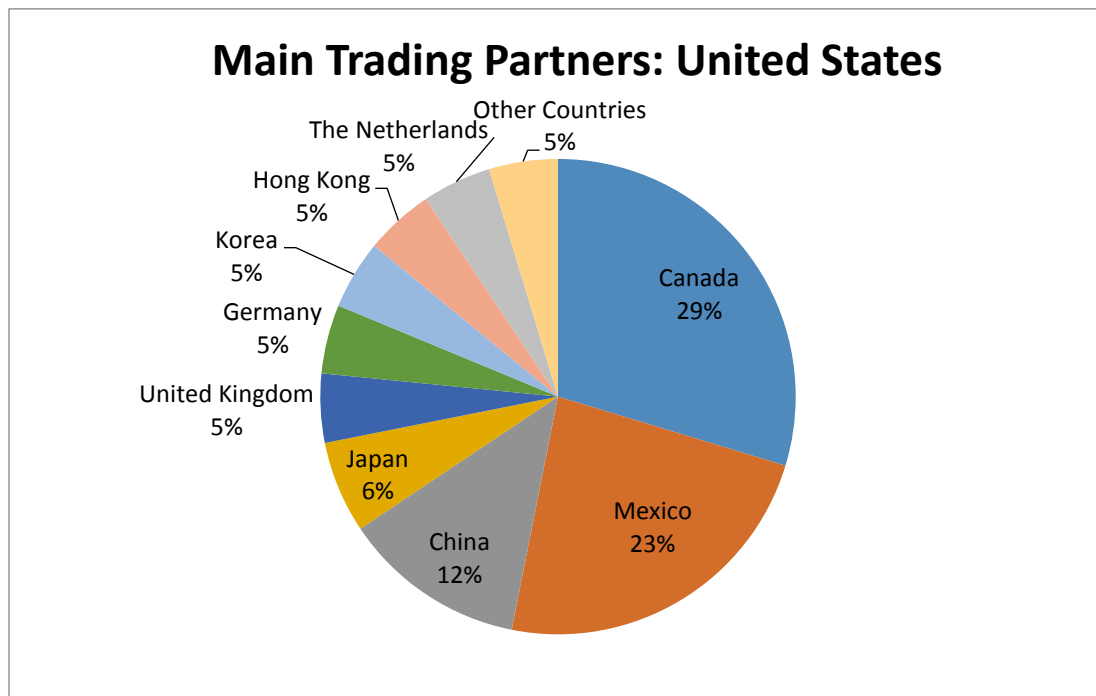
**Most inhabited areas:** New York, Los Angeles, Chicago, Houston, and Miami.

**Official Language:** English.

**Currency:** US Dollar since 1792.

**Main trading partners:** Canada, Mexico, China, Japan, United Kingdom, Germany, Korea, Hong Kong, and The Netherlands.

**Figure 16:** Main trading partners: United States.



**Source:** (PRO ECUADOR, 2016)

**Author:** Fajardo, C.

**Main Ports:** The United States has a port infrastructure composed of more than 400 ports and sub-ports, of which 50 handle 90% of total cargo tons. They are strategically located in the Pacific and Atlantic Oceans. Some of the US ports are classified as the biggest, and with the largest cargo movement in the world. In the East coast, because of the influx of shipping companies with direct and regular service, the most important ports are: Houston, New York, Baltimore, Savannah, Jacksonville, Port Everglades, Miami, New Orleans, and Charleston. On the other hand, in the West Coast the most important ports are Los Angeles and Long Beach port. (Precolombia, 2015).

**Main Airports:** The United States has 14,947 airports; several are the largest and most moving in the world. The direct services offered are concentrated in t John F. Kennedy International Airport (New York), Los Angeles International Airport, George Bush International Airport (Houston), Memphis International Airport, Hartsfield-Jackson Atlanta International Airport, and Miami International Airport (Precolombia, 2015).

### **2.2.2 Political, Economic, Social, and Technological Analysis (PEST)**

The PEST analysis allows determining the macro factors of the place where a company operates or intends to operate. This analysis is very important since it helps to determine what the suitable and negative aspects are for a corporation, avoiding the risks that can arise for the company.

#### ***2.2.2.1 Political Analysis***

The political analysis includes several aspects such as foreign policy, payment of taxes, political stability, among others. However, when conducting a market study that will help to determine the feasibility of selling a product in the United States, the analysis should focus only on the aspects that reflect the situation of the country in terms of trade opening.

##### **2.2.2.1.1 United States foreign policy**

Over the years, US foreign policy has taken strength and has become more influential at the international community. In many contemporary situations, it can be seen that it is a state that watches over its interests, which can be political, economic, or social. Being a State that participates in the international community, it has assumed several responsibilities, including the respect for international law and the territorial integrity of other States, cooperation, and solidarity with other States, and above all respect for human rights.

The United States has several principles that are handled and presented to the international community; among them are mentioned the promotion of democracy, the defense of state interests, the democracy inside the country, the fight for climate change, the fight against corruption problems, the provision of health to its citizens, among others. (Gobierno de los Estados Unidos, 2016).

Likewise, the country is characterized by diplomatic and commercial relations with most of the States that are part of the international community. This has led it to be a country with a lot of power, on which others depend to maintain its stability.

##### **2.2.2.1.2 Trade Agreements**

According to Pro Ecuador (2015) "The United States has been linked to many countries through the signing of trade agreements and free trade agreements. In addition, it is one of the countries with one of the most open trade regimes in the world with a tariff average of 3.4% on a legally

consolidated basis in the World Trade Organization (WTO). Also, the US service markets are open to foreign suppliers, and regulatory processes are transparent and accessible to the public".

Among the trade agreements that the country has with the rest of the world are:

- Free Trade Agreement with North America, (NAFTA): United States, Canada, and Mexico.
- Dominican Republic - Central America - United States Free Trade Agreement (CAFTA-DR): Costa Rica - El Salvador - United States - Guatemala - Honduras - Nicaragua - Dominican Republic
- Free Trade and Investment Agreement, United States - Association of Southeast Asian Nations (ASEAN): United States, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.
- Free Trade Agreement TPP (Trans-Pacific Association Agreement): It was signed in 2015 and it is expected to take effect during 2016. Australia, Brunei Darussalam, Canada, Chile, United States, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam form it.

The United States also maintains economic integration agreements and free trade agreements with countries such as Australia, Bahrain, Chile, Colombia, Morocco, Oman, Panama, Peru, Singapore, and Jordan.

As it is shown above, Ecuador does not maintain any type of trade agreement or economic integration agreement with the United States. Even though many of the negotiations have been opened and have had the opportunity to do so, the Ecuadorian Government in charge has preferred to keep the country's trade relations away from the US interests, since it has always been argued that a commercial agreement must bring the same benefits for both States, but in this case the benefits will not be the same for Ecuador. This fact is based on the idea that Ecuador being a poorly industrialized country, which depends mainly on raw material and oil, will be disadvantaged because thousands of products with added value would enter the country without any tariff, which will consequently affect the country's domestic industries. First, because many of the Ecuadorians have opted for foreign products saying that they are better in terms of quality, and second because the prices that foreign products would have would be cheaper than the domestic ones. However, the fact that a country opens itself to new trade

relations makes it a more competitive and productive state because the country does not conform to what it has, but it takes advantage of its natural benefit to expand its horizons and to interfere in new international markets. By eliminating trade barriers, the opportunities to promote domestic products are much broader; although the situation of the country is risked, but once the country starts to work for international market, and the demand increases, there is nothing left but to start being proactive, which in the long term, will be positive because the economy grows, the access to products and services is broader, employment sources increase significantly, and even technology is updated due to the need of being more efficient.

In the target market, this would be a great promotion for Ecuadorian products worldwide, since many people from different nationalities live in the United States.

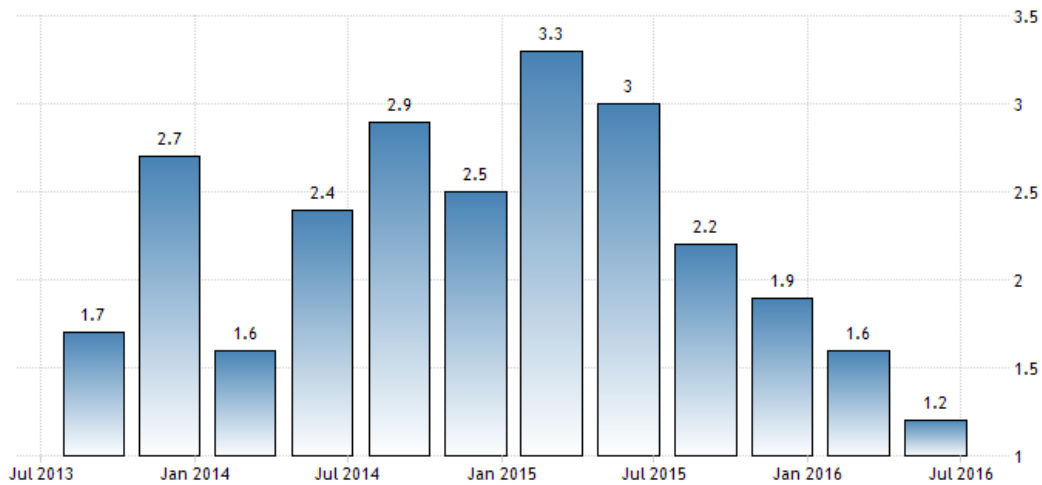
#### ***2.2.2.2 Economic Analysis***

The United States has a great commercial opening with the world and has consolidated itself as an economic world power. Therefore, directing Ecuadorian products to this market would be beneficial for the country because it is one of its main trading partners and it is also one of the most attractive markets in the world. The following pages show the most important indicators which will help to determine how feasible it is for Zangur Azuay to start selling its products in the United States.

##### **2.2.2.2.1 Gross Domestic Product (GDP)**

GDP refers to the set of goods and services offered by the United States in a specific period of time in order to determine the size of the country's economy. The following figure shows the evolution of GDP in the last years.

**Figure 17:** GDP Evolution from 2013 to 2016



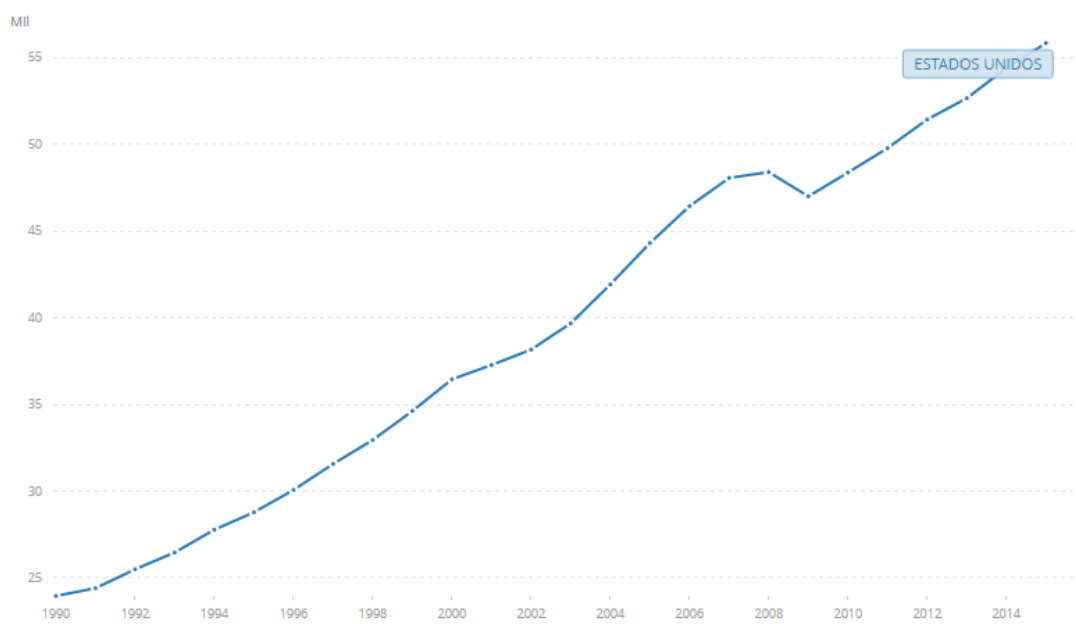
**Source:** (Trading Economics, 2016)

As it can be seen in figure 7, the GDP of the United States since 2013 has not remained totally stable; on the contrary, there have been rises and falls quite marked, which does not guarantee a totally stable economy. In addition, until the second quarter of 2016, the GDP has decreased by 0.07% when according to the department of economics; it was expected to increase by at least 1.9%. The Government attributes to this situation the fall of inventories within the country, which represents the first fall to appear in the last five years. However, there are expectations that by the end of 2016, GDP will increase considerably, as a recovery in consumer spending (EFE, 2016).

#### **2.2.2.2.2 GDP to Purchasing Power Parity (PPP)**

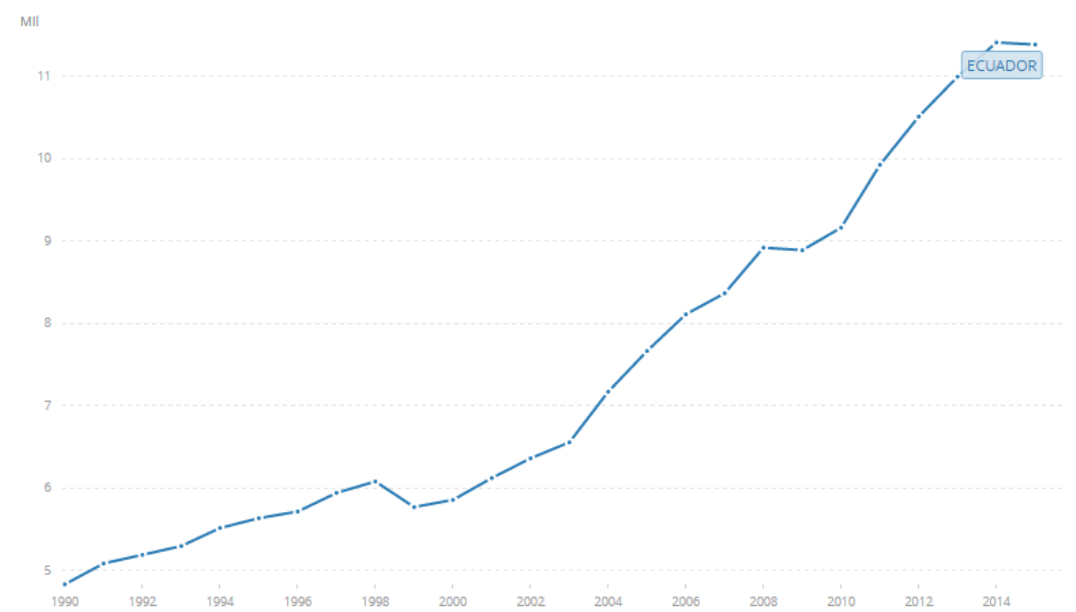
According to Octavio Déniz (2012), GDP to PPP is an indicator that is responsible for comparing the quality of life between two or more countries in a real way. It is, the GDP will be taken into account in the same way as it was analyzed before, but in the case, taking into account the international prices. For this purpose, the prices of the United States are always taken into account since they are used as a reference for the whole world.

**Figure 18:** GDP to PPP: United States.



**Source:** (World Bank, 2015)

**Figure 19:** GDP to PPP: Ecuador.



**Source:** (World Bank, 2015)

As it can be seen in the figures above, Ecuador maintains an increasing trend as the United States does, but, the US country grows at a much higher rate than Ecuador in terms of international money, having a higher GDP and a more constant growth than Ecuador.

#### 2.2.2.2.3 Salary

The minimum wage in the United States is 7 dollars and 25 cents per hour, working for eight hours a day, and consequently 40 hours a week. However, according to the US Department of Labor, there are states that have a higher wage than the federal one, and others that are below the federal wage. For instance, the highest-paid state is the District of Columbia, which pays \$ 11.75 an hour, while the State of Wyoming pays for an hour of work \$ 5.15 (United States Department of Labor, 2016).

#### 2.2.2.2.4 Inflation

According to a publication made by De Gregorio (2012), inflation is a process that occurs due to the steady rise of prices in the market, which is caused by an imbalance between the supply and the demand of products. The figure below shows the evolution of inflation in the United States the last four years.

**Figure 20:** Inflation from 2012 to 2016.

2012	2.9	2.9	2.7	2.3	1.7	1.7	1.4	1.7	2.0	2.2	1.8	1.7	2.1
2013	1.6	2.0	1.5	1.1	1.4	1.8	2.0	1.5	1.2	1.0	1.2	1.5	1.5
2014	1.6	1.1	1.5	2.0	2.1	2.1	2.0	1.7	1.7	1.7	1.3	0.8	1.6
2015	-0.1	0.0	-0.1	-0.2	0.0	0.1	0.2	0.2	0.0	0.2	0.5	0.7	0.1
2016	1.4	1.0	0.9	1.1	1.0	1.0	0.8	1.1					

**Source:** (US Inflation Calculator, 2016)

As it is seen in figure 10, in 2012 the country's inflation was higher than in the following years. The lowest recorded inflation occurred in 2015, which indicates that there was stability in the prices of the basic products and services, reflecting the stability between supply and demand. On the other hand, in 2016 inflation has increased. Although the rise is not significant, there is an increase in the prices of the basic products of the market.



#### 2.2.2.2.5 Trade Balance

The trade balance establishes the relationship between imports and exports of a country. Thus, if the exports are much more than the imports, a positive balance will result; while if imports are much more than exports, the country's trade balance will be negative.

**Figure 21:** Trade Balance: United States.

Foreign Trade Indicators	2011	2012	2013	2014	2015
Imports of Goods (million USD)	2,266,024	2,336,524	2,329,060	2,412,547	2,307,946
Exports of Goods (million USD)	1,482,508	1,545,703	1,579,593	1,620,532	1,504,914
Imports of Services (million USD)	404,468	424,152	438,366	453,265	469,110
Exports of Services (million USD)	605,590	633,576	664,948	690,127	690,061
Imports of Goods and Services (Annual % Change)	5.5	2.2	1.1	3.8	4.9
Exports of Goods and Services (Annual % Change)	6.9	3.4	2.8	3.4	1.1
Imports of Goods and Services (in % of GDP)	17.3	17.1	16.6	16.6	15.5
Exports of Goods and Services (in % of GDP)	13.6	13.6	13.6	13.5	12.6
Trade Balance (million USD)	-740,644	-741,172	-702,243	-752,169	-762,565
Foreign Trade (in % of GDP)	30.9	30.7	30.2	30.1	28.1

**Source:** World Trade Organization, 2015.

Figure 21 shows that in the last five years, the total trade balance has been negative, which means that the country's imports have been higher than exports. However, it should be distinguished that in terms of services, the United States has maintained a positive balance, demonstrating that it is an economy based on the provision of services. On the other hand, although exports have been lower in terms of goods, it should be taken into account that the data for 2015 decreased according to previous years as imports declined, and exports remained more or less stable. Although there have attempts to overcome the imports, a significant difference has not been evidenced. For this reason, the country must worry about its exports in order to avoid an economic fall.

#### 2.2.2.2.6 Doing Business

According to the World Bank Group, Doing Business is a website where the rankings of 189 economies are found in order to determine the feasibility of doing business with a specific

country, through the analysis of several categories (Doing Business, 2016). The following table shows the different categories that are considered in the evaluation.

**Table 7:** United States Ranking.

Overall	8
Starting a Business	51
Dealing with Construction Permits	39
Getting Electricity	36
Registering Property	36
Getting Credit	2
Protecting Minority Investors	41
Paying Taxes	36
Trading across Borders	35
Enforcing Contracts	20
Resolving Insolvency	5

**Source:** (Doing Bussines, 2016)

According to Doing Business (2016), from 189 analyzed economies, the United States is in the seventh position, which means that the facilities the country provides are relatively fast and feasible. Therefore, the country is interested in doing business with the rest of the world, because being connected with more than one country its economy will be more dynamic. Also, as it can be seen in table 4, the rankings for each category occupy a quite acceptable position, which means that the country does not interfere with the processes of businessmen to set up their companies. Instead, by establishing more practical and simple policies, the country is calling for more merchants to start commercial activities inside their country.

### **2.2.2.3 Social Analysis**

For the social analysis, important aspects such as the Americans standard of living, health, education, well-being, and the demography of the country have been taken into account.

#### **2.2.2.3.1 United States Demography.**

**Table 8:** United States Demography

Indicator	People
Population	321,773,000.00
Male Population	160,037,021.00
Female Population	161,735,979.00
Births	3,015,852.00
Deaths	1,972,272.00
Net Migration	758,750.00
Population Growth	1,802,331.00

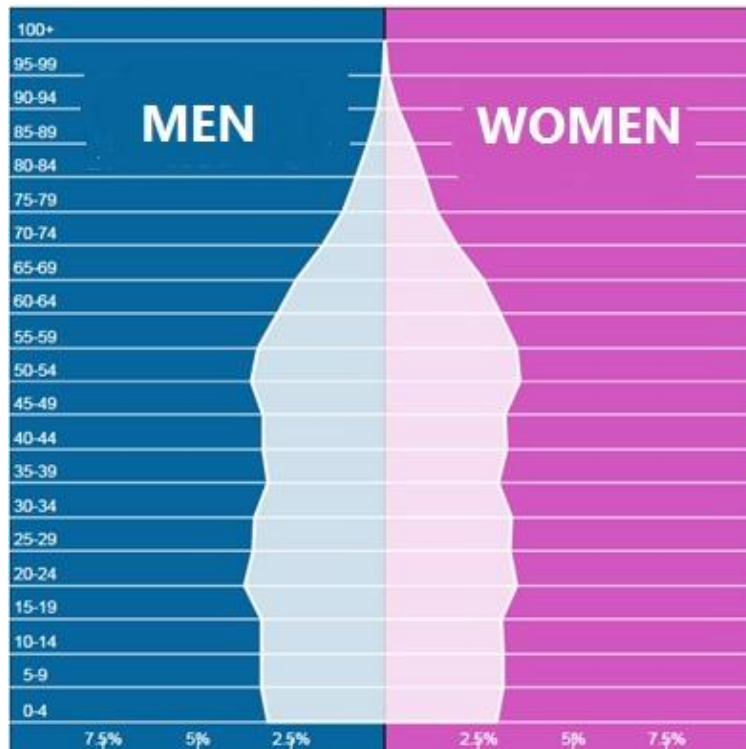
**Source:** (Country Meters, 2016)

**Author:** Fajardo, C.

Until 2015, the population of the United States was 321, 773,000.00 inhabitants, being the majority women. Also, births were much more than deaths during that year, so the population is increasing by approximately 56.01% according to the estimated total population of 2015.

In addition, it is important to know that most of the population is between 20 and 24 years old, which mean that it is a young population. On the other hand, people between 50 and 54 years old are the second largest group of the population. Additionally, it can be appreciated that the estimated life expectancy is approximately 80 years old.

**Figure 22:** Population Pyramid.



**Translation:** Fajardo, C.

**Source:** (Population Pyramid, 2015)

#### 2.2.2.3.2 Human Development Index (HDI)

The HDI is an index that measures the quality of life of the population according to a given time, without taking into consideration the economic situation of the country; but on the contrary, aspects such as health, education, life expectancy, sources of employment, among others. Thus, the United States occupied the eighth position until 2015, which indicates that the quality of life for its inhabitants, in a general level, is among the best lifestyles in the world. Below, table 9 details the aspects that the Human Development Index considers.

**Table 9:** United States HDI

Indicator	Fact
Health	Life expectancy: 79.1 years
Education	Expected years of schooling: 16.5 years
Inequality	0.76

Work, employment and vulnerability	Employment rate in relation to population (% of 15 years or more): 57.8
Human Security	Of every 100,000 inhabitants, there are 4.7 homicides.
Mobility and communication	For every 100 people 98.4 have access.

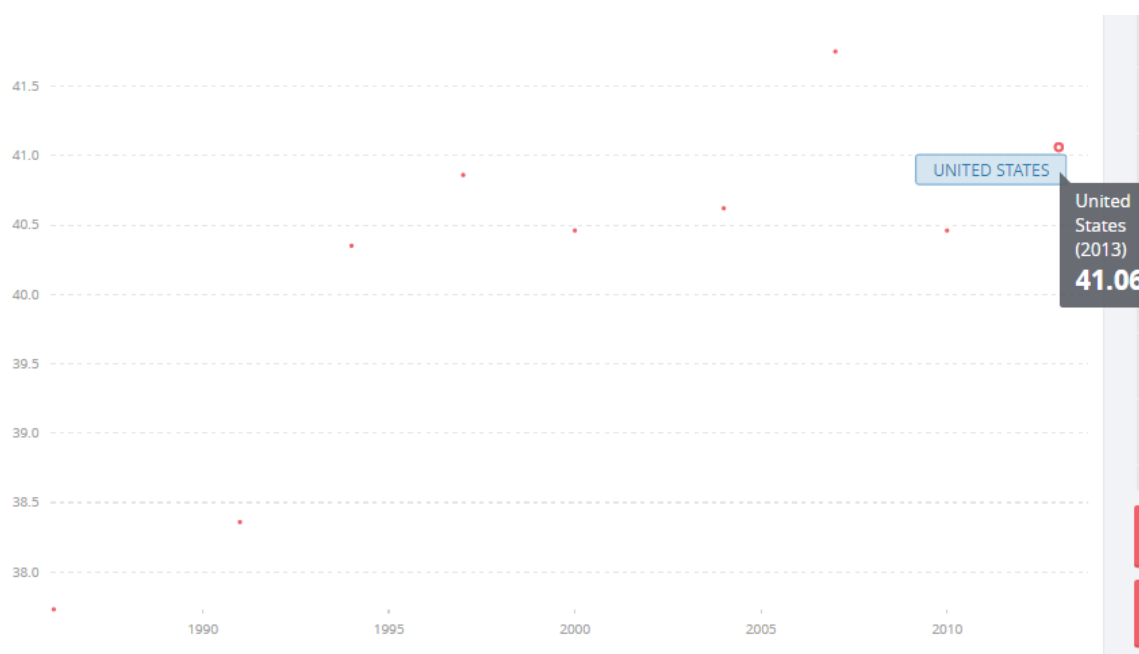
**Source:** (Naciones Unidas, 2015)

**Author:** Fajardo, C.

### 2.2.2.3.3 Gini Index

The Gini index is a measure of income concentration among individuals in a region, over a given period. It takes values between 0 and 1, where 0 indicates that all individuals have the same income and 1 indicates that only one person has all the income. It measures the degree of inequality in the distribution of income or the inequality of wealth in a region, but it does not measure the welfare of a society, nor does it indicate the conditions of life in one country or another (ICESI Educación).

**Figure 23:** Gini Index 2013: United States.



**Source:** (World Bank, 2015)

According to the data obtained in the World Bank official web site, until 2013 the Gini index was equivalent to 0.41, which means that the distribution of the wealth's country is not perfect, but rather is far from it. However, between the American countries, it is the second State after Canada to maintain a more stable income distribution than other countries in the same region.

#### **2.2.2.4 Technological Analysis**

The fact of living in a globalized and interdependent world forces the different regions to be updated, since the more efficient and effective the exchange of information is, the more fluid and fast communications between countries can be guaranteed. In this way, the business processes are solved in short periods of time, facilitating orders and shipping of all type of products, and developing even more the international commercial relations.

According to the Networked Readiness Index (NRI), the United States is one of the countries, which has the best technology in the world, occupying the fifth position after Singapore, Finland, Sweden, and Norway.

The technology of the country not only has one of the best communication networks, which allows the marketing processes to be agile and timely, but in addition, it has the best machinery available that allows countries' industrialization to become more efficient. It is important to mention that as the United States is highly technological, the entry of new foreign projects would not be a problem, but on the contrary, it is a country that maintains a great openness to new investments and international business since most of them do not represent any type of risk for the country. This has also allowed not having technological barriers.

### **2.3 Highlights of the US Market**

The US market is one of the most dynamic in the world, where most of its inhabitants, qualified as consumers, have a purchasing power higher than the established average in Ecuador. Likewise, it is a highly touristic country, which according to the World Tourism Organization (UNWTO) receives around 74.8 million travelers per year.

On the other hand, the agricultural sector of the United States is one of the largest in the world, which is characterized by high productivity, as well as the use of the best technologies available. The North American country is one of the largest manufacturers of products such as corn, soybeans, beef and cotton. California is the state that generates more than 12% of agricultural

production at the state level, but agriculture accounts for only 1.4% of the country's GDP and it generates employment sources for about 1.6% of the active population.

The United States is a developed country in terms of industries. Thus, this sector represents 21% of the national GDP and includes multiple activities. Among the most important actions are the manufacture of electrical and electronic machinery, the manufacture of chemical products and the manufacture of industrial machinery. It is also productive in the agro-food and automobile sector, and the leader in aerospace and pharmaceutical industry. Furthermore, the great amount of natural resources of the country has turned it into the head production of many minerals, allowing it to maintain a differentiated production. It is also the largest producer of liquid natural gas, aluminum, electricity and nuclear energy, and the third largest international oil producer (Banco Mundial, 2015).

## **2.4 Consumer Analysis**

There are several characteristics why United States qualifies as a large market; however, the base of its profits is its consumers. For this reason, it must be taken into consideration what Americans see in products when they are going to buy one in order to couple the goods to the needs of consumers, and satisfy beyond their expectations.

### **2.4.1 American Consumers**

When talking about the United States and its inhabitants, the first thing that comes to many people's mind is the idea of "consumerism" and "waste". Traditionally, US citizens have been seen as individuals who tend to discard all kinds of things that they believe would not have possibility to get fixed, or things that they think cannot be used ever again. This is because the American society has developed as a comfortable and uncomplicated one; that is, people would not waste time in accommodating or fixing something if it takes less time to buy something new and discard the broken or damaged one.

On the other hand, and for the same "time" reason, when it is time to eat, US citizens buy any type of products that are easy to cook, time-saving, and preferably products that do not even need a stove. This is one of the reasons why most of the population goes to eat fast food, which is mostly unhealthy. The prices of these meals are relatively inexpensive and affordable, because the larger the amount of food, the lower the price. This fact causes two negative aspects, the first

is that many people ingest all the food they have bought, which in the short or long term will be reflected in their health, and the second aspect, is that having too much food, at least half of it will be discarded, returning to the fact that this society wastes.

However, because of unlimited access to information that shows the effects of a poor diet and the consequences of waste, the American society has begun to see itself as a community that is more committed to its health. They are also much more conscious and worried about the environment, because they understand that the environment is what sustains their life and daily activities.

According to a market study conducted by Globofran (2013), a private consulting firm that helps investments, American consumers are people with a great openness to the acquisition of products from several countries, thus there is a great variety of products in terms of brands, quality and presentation, among others. This is because US consumers are very diverse when talking about their likes and interests, but they always prefer valued comfort, saving time, quality products, and good prices.

About alimentation habits, the American consumer has started to ensure a healthy diet, and for this reason they give a lot of value to products that do not have transgenic and chemicals. Also, most consumers have started by taking into account innovative products that are organic, green, and environmentally friendly. If the product has these characteristics, they will be evaluated for their quality, and not so much for the price as it usually is.

Likewise, this consumer society likes to try and buy products that come from different places, because they appreciate the variety in food, and recognize that many of those products contribute more to their nutritional well-being. In addition, Americans are people who are interested in knowing the origin and history of the different gastronomy that comes to their country, and appreciate those uncommon products, but especially those that are not produced in their own country, which shows a curious and interested society in singular goods. On the other hand, the American person has not ignored the idea of saving time, this is why the person will always need fast and efficient ways to buy in order to continue daily activities while at the same time acquiring what he/she needs.

While it is true that many American consumers buy a lot, and money was not their main concern before, the crisis of 2008, currently this society has begun to change seeing money and debts as



their major concern, which is why Americans will focus much more on prices in order to keep their personal economy stable.

## 2.5 National Competition

### 2.5.1 Ecuadorian amaranth seeds producers

Previously, this document showed data from the provinces with the highest production of amaranth seeds, taking into account that the provinces of Chimborazo, Imbabura, Pichincha, Bolívar, Cañar and Azuay are the most significant. These provinces are characterized by the production of the raw seeds; that is to say, they have not given the seeds any type of process nor have they elaborated products with added value from this raw material. However, from the six mentioned provinces in two of them, Pichincha and Azuay, the opportunity to elaborate amaranth products has started. In the city of Quito, the company INTI Amaranto is dedicated to the production of amaranth seeds snacks, and in the city of Gualaceo, the company Zangur Azuay is the one that produces the same snacks.

The following images show INTI Amaranto's products that have origin in Quito, Ecuador.

**Figure 24:** INTI Amaranto Products.



**Author:** Fajardo, C.

The images show the two types of products that the company INTI Amaranto offers, which are sold under the brand "Amaranto Pop". These amaranth seeds snacks have two presentations; the first are natural snacks, meaning that they do not have any flavor added, and the second product consists of sweet amaranth snacks which, like Zangur, are sweetened with cane honey.

It is essential to keep in mind that neither company exports their products. These companies only sell their products within the national market. For this reason, Zangur Azuay has the opportunity to be the first company in the US market to sell amaranth seed snacks.

### 2.5.2 Market Segmentation

In order to determine the companies that would buy the product or the possible substitute products for amaranth seeds, it is important to know the most frequent areas or regions in the United States, in order to reach a wider group of consumers. Table 7 shows the five most populous cities in the country.

**Table 10:** Most populous cities in the United States

City (State)	Population
New York (New York)	8,550,405
Los Angeles (California)	3,884,000
Chicago (Illinois)	2,719,000
Houston (Texas)	2,196,000
Philadelphia (Pennsylvania)	1,553,000

**Source:** (United States Census Bureau, 2015)

**Author:** Fajardo, C.

### 2.5.3 Geographical Location of the demand.

As it can be seen in table 7, the cities with the largest number of inhabitants, and therefore with the largest number of active consumers, are New York, Los Angeles, Chicago, Houston, and Philadelphia, which represent approximately 56% of the total of the American population. For this reason, these are the States to which the company Zangur should focus on directing its product, because in these geographical regions the amaranth seeds snack will have more opportunities to be sold.

#### **2.5.4 Amaranth American Sellers**

Although amaranth is not a very popular product in the world market, in many countries it has gained momentum as in the case of the United States that has shown interest in this product. Currently, there are few companies within the country that are engaged with the commercialization of amaranth seeds.

The following companies sell unexploded amaranth seeds in several parts of the country. For this reason, the following products cannot be considered as direct competition, since they do not have the same characteristics as Zangur. However, they result an interest of matter because, like amaranth seeds snack, unexploded grains have the same nutritional characteristics.

##### **2.5.4.1 Living Now**

Living Now is an American company which has its origins in Chicago in the 60's. It is a food industry that has grown to become one of the most recognized brands within the country. The company focuses on the development of natural products, and so it offers a wide variety. The enterprise is always focusing on consumer's health, and on offering affordable prices and the best quality (Living Now, 2016).

**Figure 25:** Living Now Logo



**Source:** (Living Now, 2016)

The American company has an amaranth product which consists of a half-kilo bag of white organic amaranth seeds. They are not processed in the form of rosettes; they only contain sweetener and nut flavor as part of the product. Each pouch yields 500 grams and the recommended portion to ingest per day is 50 grams, so the pouch yields about 10 servings. The price at which the product is sold within the country is \$ 7.98 (Living Now, 2016).

**Figure 26:** Organic Amaranth Seeds Presentation



**Source:** (Living Now, 2016)

#### **2.5.4.2 Bob's Red Mill Organic**

It is an American company that is originated in Oregon in 1978. It distributes its products throughout the country, but also in several cities in Canada and the Caribbean. The food industry is especially dedicated to the production of gluten-free products with organic certification. It offers around 400 different products, including raw grains, flours, as well as seeds, herbs, and nuts. The company's fundamental idea is based on a healthy life and adequate nourishment (Bob's Red Mill, 2016).

**Figure 27:** Bob's Red Mill Logo



**Source:** (Bob's Red Mill, 2016)

Bob's Red Mill among its varied product line has white amaranth grains which are not popped, so they are not sold as rosettes. The amaranth seeds of this company are totally natural; they do not have any type of sweetener, and they are sold as raw material for the production of homemade granola or baked products. Each pack contains 380 grams, and the bags of 500 kilograms have a value of \$ 10.46 (Bob Red Mill, 2016).

**Figure 28:** Bob's Red Mill Amaranth Seeds Presentation



**Source:** (Bob's Red Mill, 2016)

#### ***2.5.4.3 Arrowhead Mills Organic***

It is an American company with origin in Texas in the year of 1960, which has already 56 years. Arrowhead Mills Organic grew up with the idea that pesticides and chemicals were a threat to products and that they can affect consumer's health. For this reason, the company is dedicated to the production of organic products like seeds, beans, flour, baking mixes, grains, and others. (Arrowhead Mills, 2016).

**Figure 29:** Arrowhead Mills Logo



**Source:** (Arrowhead Mills, 2016)

This company offers amaranth seeds in a single presentation, which consists of pure grains of white amaranth without any extra process. Each package of this brand is sold in presentations of 198 grams, so 500 grams of the product has a retail value of \$ 7.06 (Arrowhead Mill, 2016).

**Figure 30:** Arrowhead Mills Seeds Amaranth Presentation



**Source:** (Arrowhead Mills, 2016)

#### ***2.5.4.4 Anna and Sarah Organic Products***

It is an American company which was originated in Pennsylvania. It is dedicated to the elaboration and sale of natural and organic products in order to satisfy the nutrition needs of the consumers. The company is also concerned about being environmentally friendly. Among its main products there are seeds, dehydrated fruits, snacks, and nuts (Anna and Sarah Organic, 2016).

**Figure 31:** Anna and Sarah Organic Products Logo



**Source:** (Anna and Sarah Organic, 2016)

Amaranth seeds marketed by this company have India as their country of origin, but they are packaged and labeled in the United States under this brand. The seeds sold do not have rosette appearance. Each package yields 500 grams, and each unit is sold for \$ 13.00 (Anna and Sarah Organic, 2016).

**Figure 32:** Anna and Sarah Organic Products Presentation



**Source:** (Anna and Sarah Organic, 2016)

### **2.5.5 Substitute Products of Amaranth Seeds**

Because amaranth seeds are a product that has become relevant only in recent years, its direct competition does not exist. The first reason is due to the low production in the Andean countries, such is the case of Ecuador, since it does not supply demands of big international markets. The second reason has to do with the rest of cereals, which due to a longer production time and knowledge, have been positioned in the market as unique, reason why the commercialization of

them is massive in many different countries of the world, and of course they are in the United States, according to the data provided by PRO Ecuador.

Among the best-known and most widely sold cereals in the United States are quinoa, barley, oats and wheat, from which a larger chain of products such as flours, energy bars, sweets, beverages, and others are obtained. To continue, the characteristics of the possible substitutes are shown.

**Wheat:** it consists of gold long spikes from where the seeds are obtained for the elaboration of different products like flour. It also contains antioxidant minerals, iron, phosphorus, and vitamins B3, B5 and B6 (Nutrición y Alimentación, 2013). According to Mundi Prices, until May 2016 wheat, in the US market, is sold for \$ 3.60 the kilo.

**Barley:** it is a cereal much more recommended for consumption than wheat as it is attributed therapeutic and nutritional characteristics. It also contains many more proteins than wheat and less gluten (Plmetti, 2014). In the US market, the kilo of barley is sold for \$ 7.98.

**Oats:** according to Pérez (2011), this is one of the cereals that are consumed the most because it gives to the body energy, and it has nutritional characteristics such as proteins, vitamins and carbohydrates. Despite of its good contributions, it is a product with high gluten content. The price at which the kilo of oats is sold in the United States is \$ 5.79.

These products are desirable in the target market due to their nutritional content, but in the case of the amaranth seeds, they have an advantage since unlike wheat, barley, and oats, they are free from gluten, which is a favorable fact because consumers are now trying to carry a gluten-free diet.

On the other hand, quinoa is also a gluten-free cereal, and therefore represents in the market a greater competition than the aforementioned. Although the characteristics of this cereal are very good and it is also recommended for good nutrition, they do not contain all the amino acids and vitamins that amaranth seeds content.

**Quinoa:** quinoa is worldwide valued as a good food of vegetable origin, which has the essential amino acids, trace elements, and vitamins, and it does not contain gluten. This product is a great source of calcium, iron, and vitamin B. It is important to mention that 43.22% of the Ecuadorian



production of quinoa in the provinces of Carchi, Imbabura, Chimborazo, Cotopaxi and Pichincha is destined to the US market (PRO ECUADOR, 2015).

For all the information described above, it can be stated that the main substitute product for amaranth seeds is quinoa, which, in addition of having similar nutritional characteristics, it is better known in the foreign market. Its production is much larger than amaranth seeds, covering the demand of some foreign markets. In the US market, quinoa is sold for \$ 4.48 each kilo.

## **2.6 Marketing Mix**

In 1950s, Neil Bourden from Harvard Business School developed the "Marketing Mix" as an essential tactic in order to specify certain objectives and increase customer relationships. The Marketing mix is a set of elements with which a company or product can influence consumer's decision. The variables include the product, price, place, and promotion (Prettel, 2011).

### **2.6.1 Product**

Zangur Azuay is a company established in Gualaceo that has as a main activity the elaboration of amaranth products. The company is part of the process from the very beginning to the end; that is to say, it takes care about sowing crops, labeling and distributing the product at the different points of sale of some of the regions of Ecuador.

Although Zangur Azuay offers two products (amaranth flour and amaranth seeds snacks), the company's star product is amaranth seeds snacks. The product has several features that make it innovative and eye-catching for consumers in general.

#### **2.6.1.1 Product's Definition**

Zangur is an edible product, which consists of white amaranth seeds, which have the appearance of corn rosettes, sweetened with natural cane honey made by the same company. Amaranth seed bites are sold in three types of presentations; below the detail.

**Figure 33: Seven Gram Packing**



**Author:** Fajardo, C.

**Figure 34: Fifteen Gram Packing**



**Author:** Fajardo, C.

**Figure 35:** Seventy Gram Packing



**Author:** Fajardo, C.

### **2.6.1.2 Extended definition of the product**

Zangur, having an additional production process, has added value. This process consists on placing the seeds in heat machine that makes them explode like popcorn. Also, being sweetened has relevance; while most of the seeds that are marketed are only harvested and cleaned to be used as an additive in other foods, Zangur is suitable for direct consumption as a snack. In addition, it is guaranteed that it is a completely natural product that is classified within the green line.

Regarding the packaging, it consists of plastic laminated aluminum bags, which despite of not having the recycling stamp, are much friendlier than other packaging such as glass or cans, taking into consideration its life cycle. This is explained in an easy way, the energy used in the production process of these plastic bags is very little, and in addition the packaging is very light; thus, it reduces transportation costs. All these features, plus the fact that it protects the content from light and air, make it an interesting choice for manufacturers, especially those of edible products (Campos, 2014).

### **2.6.1.3 Benefits per product feature**

Amaranth seed bites are a fairly simple product in terms of composition, but their properties, besides the way of processing them, give them extra points when compared to similar products. Firstly, the seeds that are grown are treated in an ecological way, so no insecticide is used for the prevention of pests or plant's diseases, nor are chemicals that could alter the seed's composition or accelerate their growth. For these reasons, the product can be classified as a green product, and consumers of Zangur can be sure that it is totally natural and good for the organism. In addition, the company maintains the crops, ensuring friendly practices with the environment. This fact gives a bonus to the product because citizens are concerned not only about their health, but also about what happens to the environment. Secondly, a very important feature is the fact that the seeds are treated in a certain way in order to keep all the nutritional characteristics. Producers ensure that the seeds have the proper humidity in order to have them well popped, and not to lose their nutritional components. This is why the consumer can be sure that each seed provides the necessary and guaranteed nutrients that are written in the label.

Also, the color of the seeds is an important characteristic as it indicates the amaranth specie that is used in the production process. In this case, white amaranth is used since it is the most delicate and suitable one to make this kind of product. Besides, it is the one with more nutrients because growing at a certain height the humidity is lower than other amaranth species. Another characteristic to take into account is the cane honey which is used to sweeten the seeds before being packaged. Additional sweeteners are not added to the product which implies a positive aspect because the product keeps its natural characteristic since the cane is processed in a natural way too. In addition, the care of the cane crops is carried out just like those of amaranth crops; that is, free of chemicals and insecticides. The latter is a strong reason to assure the consumer that the product to be acquired is a hundred percent natural.

### **2.6.1.4 Consumer's needs satisfactions**

Zangur, being a green and natural product does not only satisfy the customer, but also the environment due to its friendly practices. It can be said that Zangur satisfies in a direct way the nutritional needs of the consumers due to the good sources of nutrients that amaranth seeds provide. The product can be used like a complement in people's daily diet, avoiding the consumption of other products that offer some or none of the nutritional characteristics of

amaranth. So, more than helping with a healthy diet, it increases the possibility of nullifying the purchase of other artificial supplements that claim to provide the essential elements that the body needs. Also, in a way it contributes to the consumer's economy because the offered product is more complete than many others, so people will focus on a single product, and their expenses will be less.

On the other hand, the need "time" is satisfied since it is a product that people can consume as soon as it is opened, avoiding activities that are considered by many consumers, specially US consumers, as annoying activities. At the same time, being contained in a practical and proper sized package, it is easy to carry, giving comfort to the consumer.

### **2.6.2 Price**

In order to determine the exact cost at which the product can be sold in the US market, the costs of freight, distribution and other administrative expenses must be taken into account. For this reason, chapter three will detail these amounts to know the appropriate price to sell the product to the public.

### **2.6.3 Distribution**

The US market is very open to the incorporation of new businesses, especially small ones which are the ones that operate within the country majorly. The State has several companies that are made up by small stores such as food, clothing, decoration products, gardening, beauty products stores. The most popular companies are the big chains like Wal-Mart, Target, Best Buy, Whole Foods, etc.

#### **2.6.3.1 Product's Arrival**

Because the United States is a large country in terms of area and number of inhabitants, the most appropriate way to market Zangur products in the country is through distributors or importers. The reason for this decision is simple; the distributors or importers that handle this market for much more time have acquired the necessary experience to know strategic places of sale. In addition, this process entails time saving for the company, and it also implies that the company could generate sales almost immediately because the products will be located in suitable places near the target consumers. For all these reasons, the distribution of the product will be wholesale, so once the intermediaries acquire the product, they will be in charge of selling the product to

interested merchants, taking into account strategic points of sale to reach a greater number of customers.

### **2.6.3.2 Product's Sale**

Zangur will be sold in local businesses whether they are located in independent stores or those located in shopping centers that offer other product lines. The idea of home delivering of the products is good and comfortable, but first it is necessary that the product reaches a level of popularity, so in this way, consumers will begin to assimilate a new image inside the market. Once it reaches the expected popularity, home services will be a success because customers will be sure about what they order and expect to receive. In the first months of the product's introduction, the online service would not result because although the product catches people's attention, consumers are hesitant to acquire something new when they do not see it physically.

#### **2.6.3.2.1 Commercial Premises' Characteristics**

The business premises where the Zangur product will be distributed are places mostly located in the same physical space; that is to say, they share the space where not only food products are offered, but also other varied product lines. This is because most of the consumers go to malls where they can buy all kinds of goods, avoiding moving from one place to another and wasting time. In the United States, most commercial premises function as department stores from the largest to the smallest. Generally, they are located in large cities or small towns where there is a larger conglomerate of inhabitants. It is important to mention that in the United States, most cities have a large number of inhabitants. The location of the commercial premises for the sale of the product is not a problem because being a commercial country, there are many different points of sale in different sites, and also because intermediaries are the ones that will determine the best location to have more sales.

### **2.6.4 Promotion**

#### **2.6.4.1 Product's promotion**

Amaranth seed snacks are a new product in the United States, so promoting the product is very important because the most relevant benefits and characteristics will be announced, which should be the reasons for the consumer to purchase the product. Currently, the easiest way to promote a

product is through digital media, although for many places, traditional fairs and tastings can be used.

#### **2.6.4.1.1 Media**

According to Santander Trade (2012), television is one of the most important media because ads about services or products reach the consumer in a massive way. Although it is the most expensive media, it is often used for the scope it has. The main stations of the country are News Corporation, Disney, Time Warner, and Viacom. In addition, radio is also an effective way of communication when promoting a product; although it is expensive as well, it is cheaper than television. The most tuned radio stations in the country are: ABC Radio Networks, CBS Radio Stations, Radio Disney, Public Radio International, National Public Radio, Sirius Satellite Radio, and XM Satellite Radio.

Another good alternative to reach the American consumer are the ads published in means of transportation, which go through different cities and states. As the country is so crowded, many people use public transportation, which is positive because consumers would be closer to the product when seeing images and information, not only when an advertisement runs on a train or a bus, but on the billboards or walls at the stations. Finally, and not least, there is social media, which includes the most managed networks by a US citizen, Twitter and Facebook.

#### **2.6.4.1.2 Fairs and promotion campaigns**

Although the new advertising trends lead to great technological discoveries, the physical demonstrations of a product are very effective when dealing with food because people will be more satisfied about the product if they try it first. For this reason, a way of promoting the product could be campaigns and fairs. For example, hold a fair inside schools, so the children will try Zangur, and they would accept it as a nutritious snack. Also, tastings can be arranged inside supermarkets.

### **Conclusion**

According to the information detailed in this chapter, it can be determined that the United States is a suitable country for the sale of amaranth seed bites because a great percentage of Ecuador's cereal production is exported to the United States, so consumers, already know the benefits of other Ecuadorian cereals and would be interested in consuming a cereal that is not quinoa, barley

or oats. The United States is a country with many technical requirements for the entry of the product, but if the product meets all the requirements in an appropriate way and according to the established rules, the company will have a great opportunity to enter this market, because as it was mentioned, the consumers in the United States are always open to new habits and to the idea of experiencing new lifestyles when they know the value of a product.



## **Chapter III**

### **Elaboration of the plan for Zangur export and import**

#### **Introduction**

This chapter, on the one hand, details the mandatory requirements to obtain the necessary permits to be a producer in order to establish a company and to qualify as an exporter. In addition, it sets forth the rules that an entrepreneur must consider to market his or her products. On the other hand, the chapter shows a reference to the technical and tariff rules that must be followed, in order to commercialize domestic products in the US market.

In addition to these topics, an exercise is performed by using real data to obtain the total value of the export, which includes freight, insurance, transportation, and costs handling. These data and the cost of the product are important because they help to determine the value at which the product could be sold.

Finally, through an economic and financial analysis, it is determined whether with the current production of the company, there is the possibility of exporting and obtaining profits for the company.

#### **3.1 Exportation Procedure**

To be able to carry out exports from Ecuador, it is necessary to comply with certain requirements, which guarantee that whoever brings the products to international markets is qualified by a competent authority, under the established conditions in an appropriate manner, and with current regulations in order to be more competitive. According to Pro Ecuador, the exporters guide details that the sale of products outside of Ecuador can be done by an Ecuadorian or a foreign person residing in the country, as well as natural or legal persons.

The necessary requirements to be registered as an exporter are simple, and they can be met through websites or physically in different qualified institutions. The process to be licensed as an exporter, according to the guide, is detailed below.

1. Anyone who aspires to export any type of product must acquire the RUC (an identification number for every legal or natural person that starts an economic activity in the country) in the Internal Revenue Service (SRI for its name in Spanish), by presenting the necessary documents such as the copy of the identity card or passport, copy of the last voting certificate and a document certifying the name of who wants to obtain the RUC, the address of the person, and the type of commercial activity to which the person is dedicated.
2. An electronic signature or TOKEN, which can be obtained at the Banco Central or Security Data, must be acquired. For both entities, some documents must be presented as requirements. In the case of being a natural person, a copy of the identity card, a copy of the voting certificate from the last elections, and a copy of one of the utilities' bill from the last month are required. As a legal entity, additional requirements must be presented such as the company's RUC, a labor certificate stating the position of the representative, and an authorization signed by the company. Once the documents have been presented for each case, the user will receive an e-mail that will inform the person that there is a cost that has to be canceled (\$49), plus the corresponding taxes, in order to get the TOKEN and its certificate.
3. The user must be registered in Ecuapass, a web portal provided by the National Customs Service of Ecuador, to facilitate foreign trade processes. In this portal, the information of the natural or legal person will be registered, and a user name and a password will be created to access the account. Likewise, use policies must be accepted and the electronic signature already acquired must be registered.

### **3.2 Necessary documentation to export**

Within an exporting process, goods must have a Customs Export Declaration (EAD) to leave the country which is presented either physically or electronically. The EAD will be made through the Ecuapass portal by a qualified custom agent, or by the exporter him/herself that was previously registered. This declaration should specify all the details of the merchandise such as weight, quantity, commercial and physical units, price, among others that are clearly described within the Ecuapass templates. It is also necessary to detail the basic information of the exporter or his declarant, the data of the consignee of the merchandise, and the final destination of the goods. In addition, along with the EAD, supporting and accompanying documents must be

presented in order to expedite the merchandise review process (gauging) at the ports of departure and in the country of destination.

### **3.2.1 Accompanying documents**

According to the Organic Code of Production, Trade and Investments (COPCI for its name in Spanish), the accompanying documents are those that must be processed and approved before the goods are shipped, regardless of their means of transportation. For this reason, these documents are also referred to as pre-control documents. These documents must be presented physically or electronically in conjunction with the DAE, as long as they are required. If they are not presented when required, or, when needed for the removal of the goods, a penalty will be assigned. Among the accompanying documents are the sanitary registration, phytosanitary register, and the ministerial agreement to determine the origin of the goods.

### **3.2.2 Supporting documents**

The supporting documents are those that are considered the basis of the EAD information, because through them it can be verified that the information that is detailed in the Customs Export Declaration is declared correctly. These documents must be original and must be under the protection of the declarant or their customs agent; they have to be presented either physically or electronically at the time of submitting the EAD, and the agent will be the responsible to show those documents. (Código Orgánico de la Producción, Comercio e Inversiones, 2011)

The supporting documents constitute the transport document, commercial invoice, certificate of origin, and others that are considered necessary to confirm that the current norms and processes are being complied.

#### **3.2.2.1 Transport documents**

For the Ecuadorian Customs, this document is the one that accredits the goods ownership, which can be endorsed before the moment the Customs Declaration is presented. The transport documents will be different, as they will be prepared depending on the means of transport used; the most common transportations will be by air, land, sea or multimodal transportation.

- **Seaway:** in this case, the document that must be presented as proof of being the ownership of the goods is the "Bill of Lading (BL)."
- **Land route:** for this type of transportation the document "International Charter" will be presented.
- **Airway:** To transport goods by air, the "Airway Bill (AB)" must be presented using the pattern approved by the International Air Transport Association (IATA).
- **Multimodal transport:** if the goods have to be transported to the place of destination in different means of transport, the operator must detail in the load manifest the transports to be used and the trip stretches each one will take. The carrier must have every transportation document under its responsibility.

### **3.2.2.2 Commercial invoice**

The commercial invoice is the support that establishes the value of the commercial transaction. Therefore, it must be an original document, even if it is digital, issued by the seller of the exported goods, and it must contain the necessary information in order to be checked by the customs administration. Failure to submit this document will not prevent the removal of the goods; however, the application of the first valuation method will be ruled out as per established in the current international regulations (Código Orgánico de la Producción, Comercio e Inversiones, 2011).

### **3.2.2.3 Certificate of origin**

The certificate of origin is the document that shows that the product is from a specific country, as it is detailed in the label of the product. In addition, it allows the release of taxes to some foreign products, under the protection of international conventions or treaties and supranational norms. The information contained in this certificate shall be foreseen in accordance with the regulations of authorized and recognized entities in the respective agreements (Código Orgánico de la Producción, Comercio e Inversiones, 2011).

### **3.2.2.4 Other Documents**

According to the Organic Code of Production, Trade and Investment, these documents will be presented by the operator to Customs or to a qualified foreign trade operator, when these are required, and of course if they are not accompanying documents, in order to verify that the processes are being carried out in accordance with current regulations. These documents include

the insurance policy, the cost declared for transportation insurance, and the verification of the insurance policy. Once the Customs Declaration of Exportation has been presented and accepted together with the documents already mentioned above, the merchandise, before being exported to the destination country, is stored to carry out the respective revision, which will be notified through Ecuapass to the declarant.

### **3.3 Requirements to export food products in Ecuador**

In Ecuador, as in any other country, before starting to sell and distribute a product in an official way, it is necessary to acquire the sanitary registry which allows the elaboration of the product so it can be consumed in the national or foreign market.

The process to obtain the sanitary registration in Ecuador for food products according to the Institute of Promotion of Exports and Investments is detailed below:

1. Before requesting the sanitary registration, an operating license must be available for the company that wants to start producing and distributing a product. This license must meet the requirements of the National Agency for Regulation, Control, and Sanitary Surveillance (ARCSA for its name in Spanish), and it will be requested through its website "[controlsanitario.gob.ec](http://controlsanitario.gob.ec)".
2. The user must be logged at Ecuapass portal through the VUE (Ventanilla Única Ecuatoriana) to complete the required application. In addition, the registration of the legal agent or the owner of the product, as well as the registration of the technical agent of the product, will be done. The technical agent must comply with certain requirements given by the National Agency of Regulation, Control, and Sanitary Surveillance to qualify as technician.
3. Additional documents must be attached to the application. The first one to state that the product complies with the respective National Technical Standard, under which the product was produced. If there is no such technical standard for the product, the specifications of the producer will be accepted, who must also attach his/her justification, whether technical or scientific. The second document to be attached has to detail the manufacturing process of the product, and if necessary the document has to explain additional stages of the process, such as cooling, washing, among others, and the document must be signed by the responsible technician. In a third document, the

description and interpretation of the batch code and labels according to the specifications of the Ecuadorian Standardization Service (INEN) will be declared. The physical and chemical characteristics of the containers must be provided too. Also, the nutritional table of the product must be attached, which must be authorized and approved by the Ecuadorian Accreditation Service (SAE). In the last document attached to the application, the durability of the product must be specified. In addition, the considerations that the consumer must take into account in order to keep the product fresh and in a more favorable condition for a longer period of time have to be detailed.

All documents that have to be attached to the application, must comply with a specific format, which is available, in the annexes "Requirement guide for the Sanitary Registry by product" on the website of the National Agency for Regulation, Control and Health Surveillance (Agencia Nacional de Regulación, Control y Vigilancia Sanitaria, 2016).

4. Once the application is completed and the necessary documents are attached digitally, the portal will issue a payment order, which must be paid within a maximum of five working days, or the application will be canceled definitively from the notification system.
5. At the same time, when the user is paying the value issued by the system, ARCSA (for its name in Spanish), the process to review the application and the documents along with requestor profile starts.
6. Once the respective payment has been made, the agency will issue the pertinent observations of the application if they exist. These errors should be corrected within a maximum of 15 business days. These corrections can only be made twice; otherwise the process will be canceled.

It is important to know that a company that has been recognized for good practices in the manufacture of its products will not need the sanitary notification, only if the company has ratified its GMP (Good Manufacturing Practices) certificate with ARCSA.

For exports to international markets, more than a sanitary registry is required by most of them. On the contrary, there are many requirements and rules for products to enter the country of destination, taking into account that each country will defend its national production through various measures, including technical requirements, in order to ensure the well-being of its citizens.

### **3.4 Technical requirements in the target market**

In the United States, food intake from anywhere in the world is regulated by the Food and Drug Administration (FDA). For this reason, anyone who aims to export processed foods to the United States must first register with the FDA to provide the pertinent information, as well as clearly understand the regulations for those kinds of products.

#### **3.4.1 General requirements: Non-tariff regulations**

##### **3.4.1.1 Law against bioterrorism**

According to the Ministry of Foreign Trade and Tourism, bioterrorism is the misuse and malicious use of several harmful microorganisms and other builders added to food; as well as the introduction into the State, of biological material with phytopathogenic agents, quarantine diseases, chemical materials or any other type of elements that endanger the health and life of people. Based on this concept, the United States, through the Food and Drug Administration, has established a specific procedure for the entry of agricultural or agro-industrial products.

1. Before beginning the product commercialization inside the country, the producing, packaging or storing companies must be registered with the FDA. This free process must be carried out through the internet by the person in charge of an installation of the factory, or by an authorized person, taking into account that each installation of the company must have its own registry because the FDA does not see the company as a whole while making the registration. It is important to note that "private residences of individuals, non-bottled water collecting and distribution establishments, transport vehicles that carry only food, farms, restaurants, retail food establishments, non-profit food institutions, fishing vessels that collect and transport fish and services regulated exclusively and entirely by the US Department of Agriculture are exempt of any registration" (Sistema de Información de Inversiones y Comercio Exterior Perú, 2015)
2. The Bioterrorism Act requires companies that are intending to export their food products to give a notice with detailed product information to the US Customs and to the FDA, which must be sent by a person who knows the details that are required in order to make an evaluation of the information before the food arrives to the final destination. The notification shall be received and ratified no later than 15 days before the arrival of the goods either in less than the time determined by the transport in which the goods are

shipped (by land two hours, by sea eight hours, by air four hours and railway four hours). This early notification shall be binding only for those products that are going to be commercialized and distributed in the country.

3. Persons who manufacture, package or distribute food must create and maintain the necessary records, which are established by the FDA to identify the origin and direct consignee of the food.
4. The FDA further states that it is authorized to immediately stop the entry of those foods that are considered a threat to the health or life of humans or animals.

#### **3.4.1.2 Phytosanitary requirements**

The United States requires certificates, which will show that plants and crops in the country of origin have been inspected, and that the report of a qualified laboratory says that they are free of pests and other diseases that may cause harm to the health of humans and animals in the country.

This certificate will be issued in the country of origin of the product; in this case by the Ecuadorian Agency of Quality Assurance of Agro (AGROCALIDAD), for which the user must make an application for inspection of the crops. Once this inspection has been made, for the issuance of the certificate, necessary documents must be presented; documents such as, the inspection report, the commercial invoice of the product, the payment of the inspection, and the final report made by a qualified laboratory. If the analysis carried out by the laboratory is favorable, the products will have the authorization to be exported from any port. Nevertheless, the documents already mentioned have to be shown again in the different points (Agencia Ecuatoriana de Aseguramiento de la Calidad Agro, 2015).

In the event that goods arriving at their final destination do not have the phytosanitary certificate, they may be re-shipped to the point of origin or destroyed. The costs of any process will be paid by the exporter.

#### **3.4.1.3 Maximum residue limits**

Another requirement for entering food products into the United States is the proper use of pesticides and insecticides. In this case, the Federal Law on Insecticides, Fungicides and Rodenticides must be considered. The Law states that all pesticides used within the United States



must be registered. It also establishes the tolerance measures for those chemical residues that may be contained in domestic and imported foods.

The FDA controls and verifies compliance with the tolerances established on imported products in the United States. If there is a case of non-compliance, the goods can be stopped, and the agency can also prohibit their buying and selling. For this reason, it is essential that agricultural operators, know the respective tolerances, and they also have to be aware of the use of different pesticides for their crops, taking into account good agricultural practices (Sistema de Información de Inversiones y Comercio Exterior Perú, 2015).

#### **3.4.1.4 Good agricultural practices**

The American National Standards Institute (ANSI) establishes as another requirement for the access of food products, the obtaining of a certificate of Good Agricultural Practices (GAP), which will be delivered by the country of origin of the products, through a qualified and authorized institution in charge of carrying out the process of analysis of the activities of the company and its products. In Ecuador, this certificate is obtained whenever the user requests it, otherwise the sanitary registration is enough. However, to export products BPA is required to ensure the quality of the products when entering the United States.

#### **3.4.2 Packaging and labeling standards**

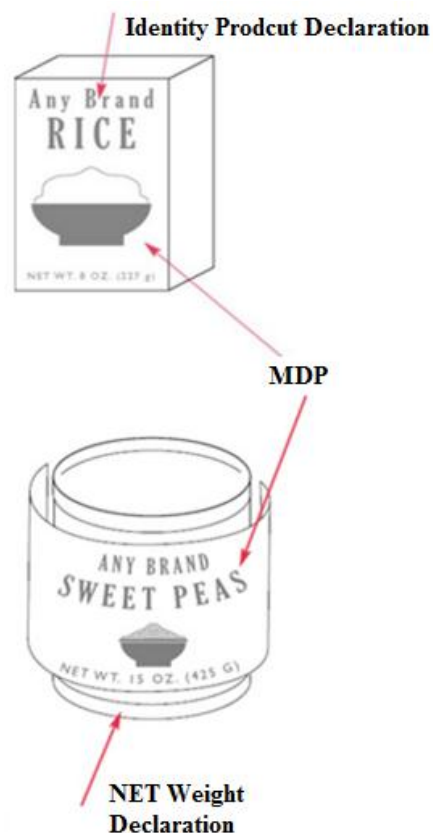
The origin, production and maintenance of the products are the fundamental basis to guarantee to the consumers that the product is adequate and without any type of risk for their health. However, the requirements are not only directed to the origin and content of the product, but also to how it should be seen physically. These requirements, although they may seem exaggerated details, aims to provide the customer information about the product, through parameters that facilitate their reading. All packaging and labeling specifications apply to domestic and imported products.

##### **3.4.2.1 Labeling**

According to and in conjunction with the FDA, the Fair Packaging and Labeling Act are the state standards that administer all types of food products. The following standards according to the Food and Drug Administration are the ones to be taken into account when labeling the product.

- 3.4.2.1.1 General requirements** 1. There are two ways to label the containers or packages that hold the product. The first is to put all required label details on the front of the label (the main display panel or MDP), or instead place the specific label details on the MDP, and other additional labels in the information panel, which is located on the right side of the front panel that is seen first by the customer.
2. The product identity or name of the food and the net quantity of the product must be placed on the front panel.

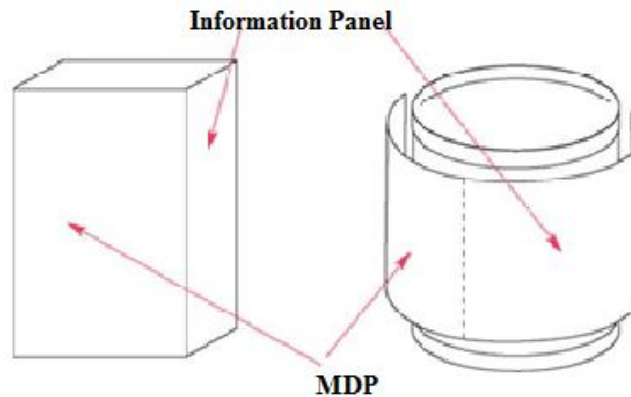
**Figure 36:** Identity Product Declaration



**Source:** (U.S Food and Drug, 2010).

3. About the information panel, the labels should be placed contiguously without any intermediary, and they should be placed on the right side of the front panel. This label should include information about the manufacturer (name and address), who packs or distributes the product, ingredients, nutritional information, and any other label about allergies.

**Figure 37: Information Panel**

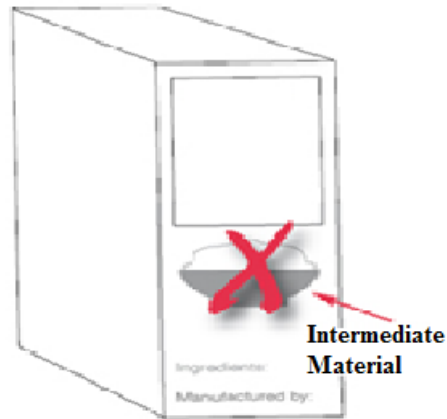


**Source:** (U.S Food and Drug, 2010).

4. About the size and type of font to print the labels, the FDA stipulates that it must be a legible and clear one that facilitates reading; it must be at least one-sixteenth of an inch (1/16) in height according to the lowercase letter "o". The height of the letters should not be more than three times their width and should contrast sufficiently with the background so that they can be read easily. It is also prohibit occupying too much space on the label with illustrations or labeling not required. Also, the smaller font sizes can be used in the information panel labeling for very small food packages.

5. Intermediate material should be taken into account, which is considered as intermediate because it refers to information that is not required by the FDA, and at the same time is prohibited on labels.

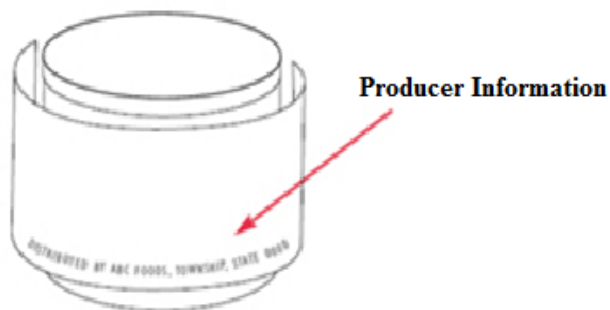
**Figure 38: Intermediate Material**



**Source:** (U.S Food and Drug, 2010).

6. In addition to the data above, the information of the producer, distributor or packer should be included in the information label, detailing the name and address, the town or city of origin, and if the product comes outside the United States, the country of its origin. This information will be presented in a single line beginning with the text "distributed / manufactured / packaged by ..."

**Figure 39:** Producer Information



**Source:** (U.S Food and Drug, 2010).

#### 3.4.2.1.2 Foods Product's Name

The following specifications are set by the FDA:

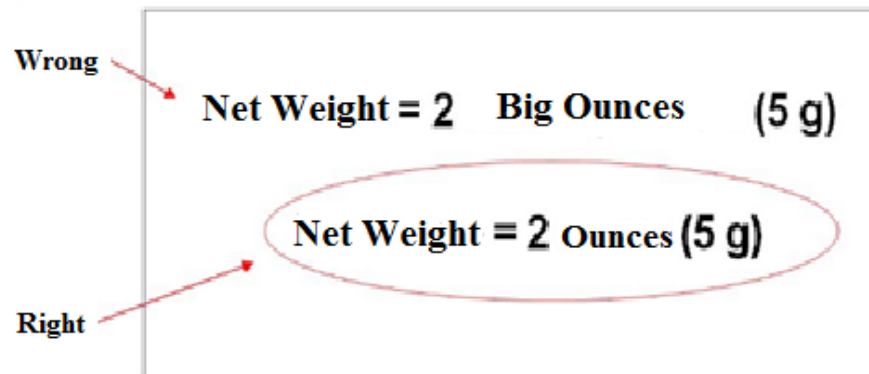
1. The identity of the product must be on the front panel of the package, where it must also be specified if the product comes in whole, in parts or other forms of presentation.
2. The font should be printed, bold and large so that the reading is easy.

3. The name that must be on the label must be the one that has been established according to the regulations and the law. In the event that there are no such regulations, the name of the product must be one of common use. Likewise, if a common name is not found, the producer will use one that describes the product properly and does not create confusion for the consumer.
4. In the case that the product whose origin and nature is obvious, it will be possible to opt for a fancy name as identity of the product. Further, it should be taken into consideration that if the product has already a name that is used frequently, this is the name that should be used in order to avoid confusion.
5. The drawings on the labels are not prohibited as long as they do not cover the identity of the product.
6. The country of origin of the product must be completely noticeable on the label, and it must be next to the name and address of the manufacturer, packer or distributor.
7. Foreign language tags are totally acceptable as long as they appear in English too.

#### **3.4.2.1.3 Net Weight Declaration**

1. The net quantity refers to the exact quantity of the product inside a package or container, without taking into account the weight of the package. This amount should be reflected on the bottom of the label on the front panel of the container, and it should occupy 30% of the size of the label. The font for this text should not be larger than the width of the word, and it must be chosen to be readable, as well as avoiding the use of opaque colors that make text recognition difficult.
2. The quantity of food must be shown in the units of measurement used by the United States, thus, ounces, pounds and liquid ounces must be used. Moreover, the decimal metric system such as grams, kilograms, liters and milliliters is the one used.
3. In order to express the net quantity of the product, it is necessary to avoid wordplay, that is, terms that exaggerate the quantity of the product.

**Figure 40: Net Weight**



**Source:** (U.S Food and Drug, 2010)

#### **3.4.2.1.4 Ingredient's List**

According to FDA:

1. In the list of ingredients, all components of the product must be detailed in descending order, that is, the ingredient that is in the highest proportion will be named first, and the lowest proportion at the end. The label should detail those ingredients that represent a considerable amount and provoke an effect on the product.
2. Information about ingredients should be displayed on the same panel where information about the manufacturer, packer or distributor is set. This information can be placed before or after the label where details about the nutritional content of the product are found. The text must be at least one-sixteenth of an inch tall so it is easy to read.
3. To list the names of the ingredients, common or usual terms of the ingredients must be used.
4. In the case of using authorized chemical additives, these should also be included in the list of ingredients using its common or usual name. On the other hand, the natural or artificial flavorings or condiments should also be mentioned under their common name "natural flavoring or artificial flavoring."

#### **3.4.2.1.5 Nutritional Facts**

Regarding nutritional information, this must be framed and necessarily placed on the label next to the ingredients list. It should be located to the right of the front panel, and if there is no space,

once again to the right, being careful not to cause confusion when reading the information. In the nutritional information, it will be detailed those nutritional components that the product could contain, expressing the amounts of each one. To list these components, a specific order is not needed. In addition to the nutrients, it should be mentioned those elements such as fats, carbohydrates, calories, among others, that contribute in the intake of the product. (U.S Food and Drug Administration, 2009)

#### **3.4.2.2 Packing**

According to the FDA, food products can be packaged in various materials as long as they are new and clean, and the packaging is made under hygienic conditions in order to ensure that the product cannot be contaminated. Likewise, containers must be strong and resistant so that they can withstand handling during loading and unloading of goods; they must also withstand the pressure, shocks and vibrations that may arise due to the weight of other goods placed above them.

In order to transport goods, it will be accepted that the products are packed in cartons, boxes and wooden trays, which, like the individual containers, will withstand the pressures and movement caused by transportation. All the boxes will have on the outside the Universal Product Encoder (UPE), which gives the exact information of the packer or shipper, as well as the product for a quick inventory control.

Once the product has been packed, the merchandise must be transported in strong containers that can absorb moisture. The weight of the goods must be distributed on pallets that allow the easy handling of the merchandise. In addition, an anchor must be used inside the container to prevent the container from wobbling.

### **3.5 Tariff Regulations**

According to Pro Ecuador, tariff regulations refer to the values or taxes that certain goods must pay when entering their final destination. The main objective of these extra payments is to protect the domestic industry. Ecuador does not have commercial agreements with the United States; therefore, some of the established taxes must be paid by the importers so that the products that arrive in the country can be nationalized.

The chart below shows in a concrete way the taxes that Zangur product must pay.

**Table 11:** Taxes in the United States

<b>Tax</b>	<b>Valor</b>
<b>Ad Valorem</b>	1.10%
<b>Specific Taxes</b>	0%
<b>Preferences</b>	0%
<b>Anti-dumping</b>	0%
<b>Tax on Special Consumptions</b>	0%
<b>VAT</b>	Varies depending on the state.

**Sorce:** (Market Access Map, 2016)

**Author:** Fajardo, C.

### **3.6 Logistical Processing**

To move from one place to another, goods need efficient transportation; it is, an easy and fast vehicle in order to generate less setbacks or paperwork. For this reason, it is important to know the most appropriate destinations to transport the goods, as well as the most appropriate means of transportation.

#### **3.6.1 Ports**

The United States is characterized because its openness to international trade, since it is one of the countries with the highest commercial movement worldwide. It is a country that is seen in a good way since the services that this country provides are known for their timeliness, security, and timely delivery. Although the United States has air and land ports, most importers opt for seaports.

For the company Zangur Azuay, it is much more efficient to transport its products by sea. Firstly, because there is no risk that the product will break down, because they are packaged properly for a specific time of consumption. Secondly, transport costs are much lower than air freight costs. Although the arrival time of the goods will be longer, it is not significant to pay for faster transportation at very high costs.

##### **3.6.1.1 Main Seaports**



According to the World Shipping Council, five seaports are the most important ports inside the country; these are listed below in order of importance.

1. **Long Beach:** it is one of the most important ports besides being founder in the movement of goods and environmental responsibility. In Long Beach, commercial operations are carried out more than 180 billion dollars, making it one of the most active seaports in the United States. This port receives and ships all kinds of goods for the consumer. Specialized terminals also move oil, automobiles, cement, wood, iron, and other products (Port of Long Beach, 2015).
2. **Los Angeles Port:** According to Froman (2014), this port moves about 80% of the world trade along with the Port of Long Beach, so each year the port moves about 8,100,000 containers with goods valued in more than 400 million dollars. The port receives all kinds of products, and it has specialized areas that move dry, liquid, and refrigerated cargo and other products that need special treatment. Thus handling large volumes of cargo that have represented a record in comparison to the other ports of the country (Sea Rates, 2013).
3. **New York Port:** This port is the largest in the eastern part of the United States and the third largest in the country. It has a very large commercial movement; in addition to receiving all type of goods that come from different parts of the world, the port has tourist boats, although at the moment they are few. It also has six container terminals located with more than 1,600 square kilometers on the coast. (Araujo, 2014)
4. **Savannah Port:** It is located in Georgia, and it is considered one of the most important ports due to its large facilities for ocean vessels. Annually, this port mobilizes approximately 1.5 million containers with all kinds of goods (Gerogia Ports Authority, 2016).
5. **Miami Port:** It is a port that has a great economic contribution for both the state and the country. Since about nine million tons of merchandise transits through this port, it economically produces about 12 million dollars for Miami. The port receives approximately 250 types of different boats and 15 different shipping companies (Miami Port, 2016).

### 3.6.2 Means of Transportation

In order to move goods from one country to another, it is possible to use maritime transport, land transport, air transport and multimodal transport (a combination of several means of transport). The transport to be used will always be chosen taking into account the nature of the product, the arrival time of the goods, the costs of the service, and the safety for the goods.

In the case of Zangur Azuay, as mentioned above, the most convenient mean of transporting its products is by sea. The following prices are the prices that would be paid for a container in each trip from Guayaquil Port.

#### 3.6.2.1 Transportation Costs

The shipping costs shown in the following tables have been obtained through the online web site service iContainers.

##### 1. Long Beach Port

**Table 12:** From Guayaquil to Long Beach

Container	Cost	Arrival Time
20'	\$2,150	30 days
40'	\$2,460	20 days
40 HC	\$2,460	20 days

**Source:** (iContainers, 2016).

**Author:** Fajardo, C.

##### 2. Los Angeles Port

**Table 13:** From Guayaquil to Los Angeles

Container	Cost	Arrival Time
20'	\$2.231	17 days
40'	\$2.611	17 days
40 HC	\$2.611	17 days

**Source:** (iContainers, 2016)

**Author:** Fajardo, C.

### 3. New York Port

**Table 14:** From Guayaquil to New York

Container	Cost	Arrival Time
20'	\$2.150	20 days
40'	\$2.460	20 days
40 HC	\$2.460	20 days

**Source:** (iContainers, 2016)

**Author:** Fajardo, Carolina.

### 4. Savannah Port

**Table 15:** From Guayaquil to Savannah Port

Container	Cost	Arrival Time
20'	\$2.150	21 Days
40'	\$2.460	21 Days
40 HC	\$2.460	21 Days

**Source:** (iContainers, 2016)

**Author:** Fajardo, C.

### 5. Miami Port

**Table 16:** From Guayaquil to Miami

Container	Cost	Arrival Time
20'	\$2.202,50	16 days
40'	\$2.512,50	16 days
40 HC	\$2.512,50	16 days

**Source:** (iContainers, 2016)

**Author:** Fajardo, C.

From the obtained information, it can be said that the most convenient port for the shipment of Zangur products is the Port of Miami, since the goods arrive in 16 days which is enough time to transport this product, and also a lower the cost in comparison to shipping the same number of

products to other ports. Although the amounts presented help to have a clear idea of how the company has to operate, it is necessary to analyze the exact quantities of product in order to be able to state that the most suitable container.

### 3.6.2.2 Container Selection

The information below shows the shipments that the company Zangur Azuay should do every three months, thus sending 3,600 units (packages of 500 grams) of amaranth seed bites to the US market. The boxes in which the product will be contained are 30cm wide by 30cm long by 30cm high, and each box will contain 25 units.

**Number of boxes to send:** 144 boxes.

**Box Volume:** 0.027m<sup>3</sup>.

**Weight in kilograms:** 0.5 kg.

**Table 17:** Container selection

	<b>Weight (boxes)</b>	<b>Volume (boxes)</b>	<b>Tolerance by weight</b>	<b>Tolerance by volume</b>
<b>20'</b>	45.168	1.223	22584 kg	33m <sup>3</sup>
<b>40'</b>	42.720	2.482	21360 kg	67m <sup>3</sup>
<b>40HC</b>	42.336	2.815	21168 kg	76m <sup>3</sup>

**Author:** Fajardo, C.

To make a decision about the container, restrictions must be considered; in this case, any container would be filled first by volume than by weight. Also, because the weight of each package that contains the product is very low, it is possible to choose any type of container per volume, since all can carry in a single shipment the 144 boxes that are proposed to send every three months.

As it can be seen in table 17, the 20-foot container seemed the most appropriate, since it has the lowest cost per shipment. With the information obtained, it can be stated that the 20-foot container is the one chosen for the shipment of the product to the United States because of its price, but it is also possible to choose a 40-foot container or a 40 High Cube container at a higher cost if the number of units increase.

### **3.7 Nationalization Process**

In order to avoid problems in the different customs when nationalizing the products, it is important to take into account the requirements that the importer needs to know, as well as the procedures that are carried out inside customs before the goods can be commercialized.

According to the United States Border Protection and Adherence Institution (CBO), before the goods arrive in the country, the importer must follow certain requirements. First, the user must have updated and authorized his/her registration as an importer. It is also necessary that the importer has all the documents of the goods well prepared; that is, that the commercial invoices have everything in detailed in order to avoid wasting time during the review. In addition, it is required that all documents are legible, with a space between lines for any type of observation. Furthermore, all the necessary certificates are required for foodstuffs; that is, those where it is demonstrated that the requested standards are met. It is also required that the FDA registration is updated and authorized.

In the manual issued by the CBP, it is stated that when the goods have arrived at the port of destination, it does not mean that these are already legal within the country, but they will be when the importer shows all the required documents, the inspection of the goods has been made, and when all the corresponding taxes have been paid. After this, the CPB will authorize the departure of the products outside customs to fulfill the purpose with which they have arrived to the country. In the case that the goods arrive at the port that they have as final destination, they will be submitted to the process of customs clearance in the same place, but if this is not the case, the goods must be transported or moved under customs control to another port. The merchandise may be nationalized by its owner, importer or an authorized customs agent. In the case of Zangur, the customs regime to be considered is the "import to final consumption" regime, which is why two processes must be considered within customs. The first process consists in the presentation of the necessary documents to determine if the merchandise can be released from customs, and the second process refers to the presentation of documents that detail the taxes to be paid. In both cases, these processes can be performed electronically through the Automated Commercial System (ACS). In addition, the importer is requested to deliver the documents of the merchandise within 15 working days that are counted from the moment of the arrival of the goods. These documents include the cargo manifest, the commercial invoice, the packing list, the

customs declaration, as well as other necessary documents that the authorized operator may require. In the event that the goods must be released on the day of their arrival, a customs declaration must be filed, stating that they have arrived for consumption. Additionally, a deposit of the taxes must be made in the port where the goods arrive, during a period of ten business days since their arrival.

The merchandise, besides the requisites, must have proof of payment of a bond that will serve as guarantee to cover the cost of the taxes and duties that the goods may have. In the case that a customs agent oversees the entry of the goods, the bond or guarantee must be paid under his/her name (U.S. Customs and Border Protection, 2010).

Once the documentation has been submitted, the merchandise is analyzed to determine whether there is a failure to comply with legal regulations, such as adequate labeling, that there are no more items than the declared, illegal products found, and others. The analysis can be physical, electronic or documentary as established by the United States Border Protection and Adherence Institution:

- Documentary: the documentary inspection consists of the revision of the goods that arrive to the port, through documents or electronic data that are under the protection of the declarant and that are available to foreign trade operators. Once the inspection is completed, knowing that everything is in accordance with what has been declared, and if there is no news, the goods can be removed. If there is any scoop, a notification will be sent via email so that the declarant can make the necessary corrections.
- Physical inspection: it consists of the revision of the goods in a documentary way and in an intrusive. The goods will be subject to an individual inspection if applicable, or to recognition of some items of the entire cargo that has arrived. This process will be carried out corroborating with the necessary documents presented previously to customs.
- Electronic inspection: it consists on the review of the goods through an X-ray machine, which will determine if there are goods that have not been declared or that have not been listed in the declaration. This type of process is fast, so that the owner of the goods will be able to have the merchandise as immediately as he pays the taxes.

If there something weird found on the cargo, other processes will be carried. For example, if there were more articles than those stated on the invoice, it would be presumed that there was

negligence or fraud, which would penalize the importer with a monetary fine, in addition to the payment for the undeclared goods. Also, if not all products that are declared on the invoice appear, there will be an inspection to find out the reason for the absence of items. Also, in the case that the products do not have the weight or quantity declared, the payment of the difference will be done.

In the case of deterioration or damage of some of the goods, leaving these without any commercial value, the Customs of the United States will treat them as "non-imported" goods; that is, the taxes of the damaged products will not be charged. . If the damage or deterioration is for a big part of the cargo, Customs will not demand the payment of taxes. Nevertheless, if the imported goods are separated under the supervision of a customs operator, taxes will be charged to the sound part of the cargo.

If everything with the cargo is in order, it will be notified to the importer to make the required payments within a period of 10 business days, so that the goods can be subsequently released by the competent authority at the corresponding customs office.

### **3.8 Nationalization Costs**

In order to calculate the import costs of the goods, the costs of origin and the costs of destination must be taken into consideration, in addition to the payments of the respective taxes, and the incoterms in order to know the terms of the negotiation.

The following table shows each value when exporting and importing goods. For the specific case of amaranth seed bites, a container could be exported every three months with 3,600 units of 500 grams each, contained in a total of 144 boxes. The costs would be paid every three months too.

**Table 18:** Costs in origin

<b>Detail</b>	<b>Cost</b>
Customs Formalities	\$90
Stowage	\$70
Internal Freight	\$150
THC (Handling)	\$30
Warehouse	\$80

Charge Agency	\$80
Unforeseen	\$90
Verifier	\$20
Internal Insurance	0.05% EXW

**Source:** (Arízaga, 2016)

**Author:** Fajardo, C.

**Table 19:** Costs at destination

Detail	Cost
<b>International Insurance</b>	0.45% del CFR
<b>Customs Formalities</b>	\$200
<b>TCH (Handling)</b>	\$100
<b>Internal Transportation (per container)</b>	\$400
<b>Freight (per container)</b>	\$2.202,50

**Source:** (Arízaga, 2016)

**Author:** Fajardo, C.

Once the costs to be paid for the export and the importation of products have been determined, the total costs of these processes must be calculated, until obtaining the retail price at the final destination. As a first step, the total value at origin must be calculated.

**Table 20:** Costs at Origin

Detail	Cost
EXW (ex works)	\$14.29 (per unit)
Internal Insurance (per container)	\$25.72
<b>Total</b>	<b>\$635.72</b>

**Author:** Fajardo, C.

The total to be paid at origin for the shipping of a container is \$ 635.72. The value of the invoice at origin is \$51,444 for sending 3,600 units at a cost of \$ 14.29 each.

**Table 21:** Incoterms Costs



<b>Detail</b>	<b>Cost</b>
<b>FOB</b> (invoice + total costs in origin)	\$52,079.72
<b>CFR</b> (FOB + freight)	\$54,282.22
<b>Seguro Internacional</b> (CFR * 0.45%)	\$244.27
<b>CIF</b> (international insurance + CFR)	\$54,526.49

**Author:** Fajardo, C.

Using the values obtained above, the taxes that have to be paid in the country of destination (United States) can be calculated.

**Table 22:** Taxes

<b>CIF</b>	<b>\$54,526.49</b>
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<b>Detail</b>	<b>Cost</b>
Ad Valorem (1.10%)	\$599.79
Specific Duties	\$0
<b>Total Duties</b>	\$599.79
Preferences (0%)	\$0
<b>Total balance to be charged</b>	\$599.79
Tax on Special Consumptions (0%)	\$0
VAT (7.25%)	\$4,134.47
<b>Total Taxes</b>	<b>\$7,354.57</b>

<b>Customs Value</b> (total taxes+ CIF)	<b>\$61,881.06</b>
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**Author:** Fajardo, C.

Finally, in order to determine the retail price in the United States, the costs at destination must be taken into account, as well as the ex-customs value of all merchandise.

**Table 23:** Retail Price

<b>Cost at Destination</b>	<b>\$700 (per container)</b>
----------------------------	------------------------------

<b>Detail</b>	<b>Cost</b>
<b>DDP</b> (Cost at Destination + customs value)	\$62,581.06
<b>PVP</b> (total DDP / number of units)	<b>\$17.38</b>

**Author:** Fajardo, C.

According to the data obtained, once the goods are nationalized, each unit of 500 grams may be sold at \$ 17.38.

The justification for the price of the product (\$ 17.38 per 500 grams), is that these snacks are products with added value, because there is a process of bursting, and a process where natural cane flavors are added. In addition, compared to the other products, Zangur has more elaborate and expensive packaging, which helps to maintain the product fresh longer. It must be considered that this price will be paid by the importer, which means that once the product has been distributed, it should be sold to the direct consumers at a higher cost to obtain profits

### **3.9 Financial Structuring of the Export Plan**

For the financial structuring, Zangur Azuay gave the necessary data of the company to determine if there is a profitability and possibility to export the product. The values that have been used to generate some of the data shown below have been obtained according to a sales projection analysis for five years.

Every business, to consolidate, starts in most cases by borrowing money. In this case, the microenterprise should be financed by a percentage of its own capital, assumed by the partners of the company, while the other part will be obtained by a bank loan, analyzing the best alternative for the company.

**Table 24:** Fund Finance Percentage

<b>Description</b>	<b>Percentage</b>
Own resources	15%
Fund financed through bank credit	85%
<b>Total</b>	<b>100%</b>

**Author:** Fajardo, C.

**Table 25:** Legalization Expenses

<b>Expenses</b>	<b>Cost (dollars)</b>
Registration fees at the Superintendence of Companies	700
Trademark Registration	350
SENAE registration	100
Patent Spending	100
Fire Department Permission	20
Other Expenses	400
<b>Total</b>	<b>\$1,670.00</b>

**Author:** Fajardo, C.

According to research, to constitute a company, the value of \$1,670 is needed. Likewise, the credit with the financial institution will be paid quarterly, and for this reason, administrative expenses will be also calculated quarterly to know how much the company needs to pay during this period.

**Table 26:** Quarterly Administrative Expenses

<b>Ranks</b>	<b>People</b>	<b>Fee</b>	<b>Months</b>	<b>Total Required</b>
President	1	\$1,500.00	3	\$4,500.00
General Manager	1	\$1,000.00	3	\$3,000.00
Accountant	1	\$700	3	\$2,100.00
Sales	1	\$500	3	\$1,500.00
Purchases	1	\$500	3	\$1,500.00
Secretary	1	\$450	3	\$1,350.00
Operators	2	\$732	3	\$2,196.00
<b>Quarterly</b>				<b>\$16,146.00</b>
<b>Monthly</b>				<b>\$5,382.00</b>
<b>Annual</b>				<b>\$64,584.00</b>

**Author:** Fajardo, C.

At the end of the year, Zangur Azuay will have spent on its employees \$64,584. Every three months, the company will spend \$ 16,146, while the monthly value will be \$5,382, which will help determine the level of sales.

### **3.9.1 Analysis of the Plan for the policy collections, average payment and inventories**

Lack of control can cause setbacks, such as loss of credibility of customers. The lack of punctuality in the payments diminishes the trust of the suppliers; likewise, the bad management in the activities of collections and payments would imply financial expenses.

To avoid risk in the collections with US customers, 80% of the total payment will be cash, while the remaining 20% of the total invoice value will be paid within 30 days.

On the other hand, payments to suppliers are 50% cash purchases, and 50% on credit.

About inventories, Zangur Azuay will not keep stock, because the orders will be made according to what the client requests, reason why these will be delivered immediately according to the presale. This will generate more liquidity for the company, since it will not worry about having merchandise in the warehouse which produces financial expenses, causing inconveniences for the company.

The company will have a website through which it will offer its products. For the commercialization of the product, PayPal will be used, because it is considered one of the safest payment methods.

### 3.9.2 Purchasing and Sales Budget

To continue with the analysis of this process of implementation, different alternatives have been established to determine the point at which Zangur Azuay could be profitable. An economic financial analysis will be carried out in the future, taking as reference the first five years after the consolidation of the company. Next, the projection is detailed, which is in relation to the units that the company can currently produce.

**Table 27:** Purchase budget of 5% per year with 50% cash and 50% credit

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Units</b>	14,400	15,120	15,876	16,670	17,503
<b>Purchase Price</b>	\$7.15	\$7.51	\$7.88	\$8.28	\$8.69
<b>Total</b>	\$102,960.00	\$113,513.40	\$125,148.52	\$137,976.25	\$152,118.81

**Author:** Fajardo, C.

**Table 28:** Sales Budget of 5% per year with 50% cash and 50% credit

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Units</b>	14,400	15,120	15,876	16,670	17,503
<b>Sale Price</b>	\$14.29	\$15.00	\$15.75	\$16.54	\$17.37
<b>Total</b>	\$205,776.00	\$226,868.04	\$250,122.01	\$275,759.52	\$304,024.87

**Autor:** Fajardo, C.

The previous tables show a projection of sales with the increase of 5% each year. The 5% has been established because the management of the company Zangur says that according to their operating activities, they believe they have the capacity to increase their production in that amount during this period of time. The projections reflect large amounts of money, but to know the utility they would generate, it is necessary to define all the expenses that the business has.

### 3.9.3 Costs and Expenses Summary

**Table 29: Costs and Expenses Summary**

<b>Costs</b>	<b>Quarterly</b>	<b>Monthly</b>
Administrative Expenses	\$16,164.00	\$5,388.00
Basic Services	\$1,200.00	\$400
Legalization (paid once)	\$1,670.00	\$1,670.00
Exportation	\$54,526.49	\$18,175.497
Unexpected events	\$3,000.00	\$1,000.00
<b>Total</b>	<b>\$76,560.49</b>	<b>\$24,963.50</b>

**Author:** Fajardo, C.

#### 3.9.3.1 Labour Capital

**Table 30: Labour Capital**

<b>Categories</b>	<b>Quarterly Cost</b>
Office Furniture	\$664.00
Administrative Expenses	\$1,616.00
Basic Services	\$1,200.00
Legalization	\$1,670.00
Exportation	\$54,526.49
Unexpected events	\$3,000.00
<b>Total</b>	<b>\$62,676.49</b>

**Author** Fajardo, C.

The table above shows that the company requires the amount of \$ 62,676.49 quarterly. For this reason, this item is the one that will cover all the costs and expenses that the company requires in order to make the export viable.

As it was indicated above, the financing for the implementation of this plan will be carried out with 85% of other funds, so according to the analysis, table number 30 indicates that the amount to be requested in a financial institution is \$53,275.01 at an interest rate of 11.34% in BanEcuador which, according to the study, is the lowest rate in the market, over a period of 20 quarters. The following chart shows the debt repayment in detail.

**Table 31:** Debt repayment

<b>Debt</b>	53,275.01				
<b>Interest Rate</b>	11.34%				
<b>Periods</b>	20				
<b>Payment</b>	\$6,839.37				
<b>n</b>	<b>Opening Blance</b>	<b>Payment</b>	<b>Interest Payment</b>	<b>Capital</b>	<b>Final Balance</b>
1	53,275.01	\$6,839.37	6,041.39	\$797.98	52,477.03
2	52,477.03	\$6,839.37	5,950.90	\$888.47	51,588.56
3	51,588.56	\$6,839.37	5,850.14	\$989.22	50,599.34
4	50,599.34	\$6,839.37	5,737.97	\$1,101.40	49,497.94
5	49,497.94	\$6,839.37	5,613.07	\$1,226.30	48,271.64
6	48,271.64	\$6,839.37	5,474.00	\$1,365.36	46,906.28
7	46,906.28	\$6,839.37	5,319.17	\$1,520.19	45,386.09
8	45,386.09	\$6,839.37	5,146.78	\$1,692.58	43,693.50
9	43,693.50	\$6,839.37	4,954.84	\$1,884.52	41,808.98
10	41,808.98	\$6,839.37	4,741.14	\$2,098.23	39,710.75
11	39,710.75	\$6,839.37	4,503.20	\$2,336.17	37,374.59
12	37,374.59	\$6,839.37	4,238.28	\$2,601.09	34,773.50
13	34,773.50	\$6,839.37	3,943.32	\$2,896.05	31,877.45
14	31,877.45	\$6,839.37	3,614.90	\$3,224.46	28,652.99
15	28,652.99	\$6,839.37	3,249.25	\$3,590.12	25,062.87
16	25,062.87	\$6,839.37	2,842.13	\$3,997.24	21,065.64
17	21,065.64	\$6,839.37	2,388.84	\$4,450.52	16,615.12
18	16,615.12	\$6,839.37	1,884.15	\$4,955.21	11,659.91
19	11,659.91	\$6,839.37	1,322.23	\$5,517.13	6,142.77
20	6,142.77	\$6,839.37	696.59	\$6,142.77	-

**Author:** Fajardo, C.

### 3.9.4 Income Statement

**Table 32:** Income Statement

<b>Zangur Azuay</b>					
<b>Income Statement</b>					
<b>Dollars</b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Sales	205,776.00	226,868.04	250,122.01	275,759.52	304,024.87
Costs of Sales	102,960.00	113,513.40	125,148.52	137,976.25	152,118.10
Gross Income	102,816.00	113,354.64	124,973.49	137,783.27	151,906.06
Administrative Expenses	64,584.00	67,813.20	71,203.86	74,764.05	78,502.26
Sales Expenses	108,105.28	113,510.54	119,186.07	125,145.37	131,402.64
Depreciation	1,998.00	1,998.00	1,998.00	1,998.00	1,998.00
Operating Profit	(71,871.28)	(69,967.10)	(67,414.44)	(64,124.15)	(59,996.84)
Financial Expenses	5,737.97	5,146.78	4,238.28	2,842.13	696.59
Pre Tax Earnings	(77,609.25)	(75,113.89)	(71,652.72)	(66,966.28)	(60,693.43)
Income Tax	(17,074.03)	(16,525.05)	(15,763.60)	(14,732.58)	(13,352.55)
<b>Net Income</b>	<b>(60,535.21)</b>	<b>(58,588.83)</b>	<b>(55,889.12)</b>	<b>(52,233.70)</b>	<b>(47,340.88)</b>

**Author:** Fajardo, C.

Table (32) shows that net income projects losses for the company, which is due to its small production. A new proposal will be detailed below, reflecting positive values for the business.

### 3.9.5 Economic Financial Summary

According to the data provided and the market research, the capital that the company needs from third parties will be 85% while 15% will constitute own funds., Through a loan with BanEcuador, 85% will be obtained at the lowest rate (11.34%) in comparison to other financial institutions that offer as the most convenient a 15.90%. The amount to be accessed by Zangur Azuay is \$ 53,275.01 which that will be paid quarterly.

In terms of international sales, these will be made through an online site, which will offer customer convenience. For the same purpose, the PayPal system will be used for the different transactions. In addition, in regard to labor capital, the company must have at least \$ 62,676.49 to meet its legalization expenses, salaries, office furniture, among other indispensable equipment. This amount has been calculated on a quarterly basis, since the credit at the bank will be paid under the same conditions.



### 3.9.6 Financial Ratios

The use of these financial indicators will help determine whether the implementation of the plan is favorable or not. According to the tables presented, if the project is started up with the current production of the company, it will generate large losses.

When the results of an analysis involve losses, it does not make sense to calculate financial ratios, because the analysis of the data results in excessive values, which are impossible to cover by the company. On the other hand, the balance point cannot be left out, since this indicator shows the exact number of units that the company has to produce, so the company will not lose or gain. From this calculation, a new projection can be made.

#### 3.9.6.1 Balance Point

It is necessary to obtain the balance point to determine under what conditions Zangur Azuay could generate profits for its business.

**Table 33:** Balance Point Calculation

Units		
	Quarterly	Monthly
Retail Price	17.38	17.38
Sold Units	3600	1200
Total Income	62568	20856
Fixed Cost	90925.05	30,308.35
Variable Cost	12189.99	4063.33
Unitary Variable Cost	3.3861083	3.3861083
Balance	<b>6497.48</b>	<b>2165.83</b>

**Author:** Fajardo, C.

In order to obtain neither losses nor gains during the monthly period, Zangur Azuay must maintain a volume of sales of 2,165.83 units.

According to the economic and financial analysis, it is shown that Zangur Azuay is unable to export its product to the US market, because even when the selling price is attractive for the company, the income by the number of units sold is not enough to cover all the expenses that the company has, nor in the fifth year, much less in the first. On the other hand, according to the costs generated through the balance point, it is established that the company must produce at least 2,166 units of amaranth snacks per month to cover that expenses.

Once the impossibility of the company to sell its product to this foreign market due to the small production is determined, it has been appropriate to suggest a new sales proposal to determine the number of units that the company must produce to obtain profits and cover its expenses, so in this way, the objective of exporting the product will be positive.

### **3.10 New proposal while earning income**

The following proposal will consider the same details to determine the expenses that the company has, and, if necessary, certain costs will increase due to the growth in the production of units.

#### **3.10.1 Purchase and Sales Budget**

From a series of calculations and tests of several alternatives, the next proposal is the one that would be the more convenient to implement, so the company can generate profits as the result of the export of its product to the United States. While it is true that the more the production increases, the higher the profit some of the costs will increase. In the case of Zangur Azuay, it has been determined from the balance point that the company should increase its production at least 20%, because in this proportion, in addition to having enough money to cover its expenses, the company will start generating a profit.

**Table 34:** Purchase budget at 20% per year with 50% cash and 50% credit

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Units</b>	31,190	37,428	44,914	53,897	64,676
<b>Sale Price</b>	7.15	8.58	10.30	12.36	14.83
<b>Total</b>	\$223,011.36	\$321,136.36	\$462,436.36	\$665,908.35	\$958,908.03

**Author:** Fajardo, C.

**Table 35:** Sales budget at 20% per year with 50% cash and 50% credit

	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Units</b>	31,190	37,428	44,914	53,897	64,676
<b>Sale Price</b>	\$14.29	\$17.15	\$20.58	\$24.69	\$29.63
<b>Total</b>	\$445,710.82	\$641,823.58	\$924,225.95	\$1,330,885.37	\$1,916,474.93

**Author:** Fajardo, C.

### 3.10.2 Costs and Expenses Summary

**Table 36:** Costs and Expenses Summary

<b>Costs</b>	<b>Quarterly</b>	<b>Monthly</b>
Administrative Expenses	\$17,944.00	\$5,748.00
Basic Services	\$1,200.00	\$400
Legalization (once)	\$1,670.00	\$1,670.00
Exportation	\$54,526.49	\$18,175.497
Unexpected activities	\$3,000.00	\$1,000.00
<b>Total</b>	<b>\$78,340.49</b>	<b>\$25,323.50</b>

**Author:** Fajardo, Carolina.

According to the table, the administrative costs vary, because a bigger production needs more force labor. Likewise, the value of the export will remain constant until the third year, since the number of units, which should be sent in that period, fit in the same container of 20 feet which was needed to carry the 3,600 units quarterly. In the fourth and fifth years, it will be necessary to use a 40-feet container, which has a cost of \$ 2,512.50 per trip, giving as a result a total exportation cost of \$54,967.49.

### 3.10.3 Labor Capital

**Table 37:** Labor Capital

Categories	Quarterly Cost
Office Furniture	\$664.00
Administrative Expenses	\$17,944.00
Basic Services	\$1,200.00
Legalization	\$1,670.00
Exportation	\$54,526.49
Unexpected events	\$3,000.00
<b>Total</b>	<b>\$79,004.49</b>

**Author:** Fajardo, C.

Table (37) shows that the company Zangur Azuay requires the amount of \$79,004.49 quarterly. For this reason, this item is the one that will cover all the costs and expenses that the company requires, giving as a result a viable exportation.

For this case, the amount that BanEcuador will provide is \$67,153.82 at an interest of 11.34% over a term of 20 quarters. The following chart below shows the debt repayment in detail.

**Table 38:** Debt Repayment

<b>Debt</b>	67,153.82				
<b>Interest Rate</b>	11.34%				
<b>Period</b>	20				
<b>Payment</b>	\$8,621.11				
<b>n</b>	<b>Opening Balance</b>	<b>Payment</b>	<b>Interest Payment</b>	<b>Capital</b>	<b>Final Balance</b>
1	67,153.82	\$8,621.11	7,615.24	\$1,005.86	66,147.96
2	66,147.96	\$8,621.11	7,501.18	\$1,119.93	65,028.03
3	65,028.03	\$8,621.11	7,374.18	\$1,246.93	63,781.10
4	63,781.10	\$8,621.11	7,232.78	\$1,388.33	62,392.77
5	62,392.77	\$8,621.11	7,075.34	\$1,545.77	60,847.01
6	60,847.01	\$8,621.11	6,900.05	\$1,721.05	59,125.95
7	59,125.95	\$8,621.11	6,704.88	\$1,916.22	57,209.73
8	57,209.73	\$8,621.11	6,487.58	\$2,133.52	55,076.21
9	55,076.21	\$8,621.11	6,245.64	\$2,375.46	52,700.75
10	52,700.75	\$8,621.11	5,976.26	\$2,644.84	50,055.91
11	50,055.91	\$8,621.11	5,676.34	\$2,944.77	47,111.14
12	47,111.14	\$8,621.11	5,342.40	\$3,278.70	43,832.44
13	43,832.44	\$8,621.11	4,970.60	\$3,650.51	40,181.93
14	40,181.93	\$8,621.11	4,556.63	\$4,064.47	36,117.45
15	36,117.45	\$8,621.11	4,095.72	\$4,525.39	31,592.07
16	31,592.07	\$8,621.11	3,582.54	\$5,038.57	26,553.50
17	26,553.50	\$8,621.11	3,011.17	\$5,609.94	20,943.56
18	20,943.56	\$8,621.11	2,375.00	\$6,246.11	14,697.46
19	14,697.46	\$8,621.11	1,666.69	\$6,954.41	7,743.04
20	7,743.04	\$8,621.11	878.06	\$7,743.04	(0.00)

**Author:** Fajardo, C.

### 3.10.4 Total Results

**Table 39:** Integral situation

<b>Zangur Azuay</b>					
<b>Income Statement</b>					
<b>Dollars</b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Sales	\$445,710.82	\$641,823.58	\$924,225.95	\$1,330,885.37	\$1,916,474.93
Costs of Sales	\$223,011.36	\$321,136.36	\$462,436.36	\$665,908.35	\$958,908.03
Gross Income	222,699.46	320,687.22	461,789.59	664,977.01	957,566.90
Administrative Expenses	\$64,584.00	80,730.00	84,766.50	89,004.83	93,455.07
Sales Expenses	218,105.96	218,105.96	218,105.96	229,011.26	229,011.26
Depreciation	1,998.00	1,998.00	1,998.00	1,998.00	1,998.00
Operating Profit	(61,988.50)	19,853.26	156,919.13	344,962.93	633,102.57
Financial Expenses	5,737.97	5,146.78	4,238.28	2,842.13	696.59
Pre Tax Earnings	(67,726.47)	14,706.47	152,680.85	342,120.80	632,405.98
Income Tax	(14,899.82)	3,235.42	33,589.79	75,266.58	139,129.32
<b>Net Income</b>	<b>(52,826.65)</b>	<b>11,471.05</b>	<b>119,091.07</b>	<b>266,854.22</b>	<b>493,276.67</b>

**Author:** Fajardo, C.

According table number 39, it can be seen that there are losses in the first year. It is because the company will start with the minimum production as determined at the balance point, but since the production will be larger, the hire of more people is needed as well as a greater number of material, which raises expenses. For this reason, the number of sales the first year still will not cover all expenses.

### 3.11 Economic Financial Summary of the New Proposal

According to the projected data and the research carried out in the market, the capital that Zangur Azuay needs will be obtained in the same way as the first, 85% from third parties, while 15% will be own funds. The amount to which Zangur Azuay must access is \$67,153.82 which will be paid on a quarterly basis.

In addition, regarding the labor capital, the company must have at least \$79,004.49 to meet its legalization expenses, salaries, office furniture, among other indispensable equipment for the company. This amount has been calculated on a quarterly basis, since the credit at the bank will be paid under the same conditions.

### 3.12 Financial Ratios

The use of these financial indicators aims to present the details of the performance of the new sales projection to determine how favorable it is.

#### 3.12.1 Net Present Value (NPV)

**Table 40:** NPV Calculation

Initial Investment	\$65,115.52
Interest Rate	11.35%
Periods	5
Cash Flow	
<b>Year 1</b>	(52,826.65)
<b>Year 2</b>	11,471.05
<b>Year 3</b>	119,091.07
<b>Year 4</b>	266,854.22
<b>Year 5</b>	493,276.67
<b>NPV</b>	
\$444,703.27	

**Author:** Fajardo, C.

The net present value calculation gives a result of \$444,703.27, being a value greater than zero. For this reason, it is considered that in the five-year period, the investment will yield more than the expected rate.

#### 3.12.2 Internal Rate of Return (IRR)

**Table 41:** IRR Calculation

Initial Investment	\$65,115.52
Periods	5
Cash Flow	
<b>Year 1</b>	(52,826.65)
<b>Year 2</b>	11,471.05
<b>Year 3</b>	119,091.07
<b>Year 4</b>	266,854.22
<b>Year 5</b>	493,276.67
<b>IRR</b>	
69.38%	

**Author:** Fajardo, C

The IRR has a percentage of 69.38%, which means that the business will be profitable if sales volumes increase by 20% each year.

### 3.12.3 Return of Investment (RI)

**Table 42:** RI Calculation

Year	Earnings	Investment	RI
1	(52,826.65)	\$99,670.00	-0.53
2	11,471.05	\$99,670.00	0.12
3	119,091.07	\$99,670.00	1.19
4	266,854.22	\$99,670.00	2.68
5	493,276.67	\$99,670.00	4.95

**Author:** Fajardo, C.

According to the analysis done between net income and investment, it can be seen that in the first year there is no profit for the company due to the fact that production is the minimum, and some administrative expenses and indirect materials have been increased; however, from the second year, Zangur Azuay begins to obtain profits.

### Conclusion

This chapter analyzed in detail the requirements that need to be met in the domestic market and in the US market to start commercial activities. According to the analysis of the US market, it can be determined that it is a quite demanding market in terms of technical standards, but in terms of taxes, in the case of amaranth products, it is an accessible market since the taxes that have to be paid are not many. Also, it is important to emphasize that the company is not able to export its product due to the low production, so that it should first grow as a business nationwide or associate with companies that dedicate themselves to the same activity to increase its productivity.



## **Conclusions and Recommendations**

According to the study and with the help of the analysis of the information provided by the company, and the one found in digital and physical media, it can be stated, first of all, that amaranth seeds are a kind of cereal suitable for human consumption with an extraordinary content of different nutrients that help the body to stay healthy, being the perfect complement to be included in a healthy diet. In addition, it is an innovative product within Ecuador; because the company has been able to exploit the natural advantages of the country to produce a healthy and different product without resorting to unusual materials. While it is true, amaranth has existed since immemorial time; its benefits have been discovered only in recent years. For this reason, Zangur has an advantage over other companies; despite having only eight employees and a small production, it begins to take force in the domestic market because it already sells its products in various regions of the country. It is important to mention that even when this company is only a microenterprise, it has known how to get stable in the market, and get its product forward. This fact is positive because the future plans of the company can be handled with more professionalism, and the intentions of business growth will be much more real.

On the other hand, it is necessary that Zangur Azuay works within the company, to develop each area that composes the entity, in a more detailed and professional way. It is true that having all the team work available for any type of activity is a positive factor, people should be specialized in each area to direct the activities in a more efficient way, making the company more effective.

According to the market study, it can be determined that the US market is an appropriate market for the export of amaranth seed bites, because being commercial and open, the States welcome thousands of businesses within its country as long as these businesses meet the technical and tariff requirements, as it is done in any country. Also, it is a positive aspect that the US citizens appreciate non-traditional products, because besides good for amaranth, it is good for many other species that grow in Ecuador. In the same way, the United States would be an adequate market since at a general level purchasing power within the region is one of the highest, so selling the products in another country at the estimated price would be very costly for the population, but above all, because most of the production is directed to this country, which give as a result a certain type of reliability for the product.

The opening for the commercialization of the product is available in the US market as long as the requirements are met. However, it is the company that is not currently in a position to export its product because of the small production that it has.

Firstly, the quantities demanded by the United States cannot be satisfied by the company because with its production they do not even reach a quarter of it. Second, because it is a microenterprise, it does not have large-scale crops, so the company to direct a quantity of its product to the United States should completely cancel the sale of its product in the national market. Also, there is a disadvantage in terms of the price of the product, because although it would be an expensive and attractive price for the company, it is insufficient to cover the expenses that the company has, since the number of units that the company is able to produce are not enough.

Finally, it is concluded that the company should increase its production volumes by at least 20%, as this will be the only way in which Zangur can generate profits. This fact is negative because the company is not yet within these possibilities, limiting it to participate in a foreign market.

In regard to recommendations, the company must take into account that the export of its product, currently, would be a hurried decision; for this reason, it should focus on the domestic market, which means that it should devote all its efforts to spread within the Ecuadorian market in order to gain popularity, more income, and the support of other institutions that can help the company to direct its products to international markets in the future. In addition, it is of utmost importance that the company ceases to depend on the neighboring farms, since by having its own farmland, production costs would be much cheaper. Although it is true that to maintain a degree of production that meets the national and international demand many crops are needed, the company should try not to depend totally on third parties.

On the other hand, it would be interesting if the company, in order to export to a big market as large as the United States, joins the company INTI Amaranto, which is located in Quito and is dedicated to the production of the same products. Although the main objective of a company is to grow alone, in many cases to form teams is more feasible than to develop business independently, because the opportunities are doubled. Although the risk is much greater, the possibility of being a more profitable business is possible too. Likewise, it is important that the company, in addition to financing with its own capital and the sale of shares, begins to establish

relations with banks in order to acquire loans as this would be a way to start with the extension project and production of the company.

It is also recommended for the company, the implementation of machinery in order to accelerate the processes of packaging and labeling of the product, as well as increasing the volume of busted seeds. In addition, the company must take into account technological advances and new forms of production to become a more competitive company in the domestic market, and according to that, could adapt more easily to international markets.

Finally, it would be recommended that the company carry out studies of new markets, other than those already made, because it could be possible that in emerging markets the company has better opportunities to sell its product and through less complicated procedures.

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