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“Internationalization plan of mortiño to the market of South Korea”

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Acknowledgments

To God for being the light on my path and for giving me wisdom and strength in those
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Dedication

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"Heroes are strong. Heroes are lonely... and in the last scene, they always go alone. He's like that too. My hero was like that too."

- Your lie in April

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Resumen

El presente trabajo de investigación tiene como finalidad diseñar un plan de internacionalización del mortiño al mercado de Seúl, Corea del Sur. Por medio de esta investigación se desea aportar al desarrollo de las comunidades de la región Sierra pues es ahí donde los pequeños y medianos agricultores cosechan el fruto. De esta forma también contribuir con el avance del país y su diversificación en la oferta exportable, empleando una fruta nativa, pero poco conocida incluso internamente, con grandes beneficios y nutrientes como es el mortiño, la cual es atractiva y rentable para el mercado surcoreano.

El objetivo de la investigación es llevar a cabo un análisis de marketing acerca de la exportación de mortiño al mercado de Corea del Sur. La investigación es de gran importancia debido a que el mortiño es un producto abundante en la Sierra que no ha sido explorado o comercializado en masa. Los resultados de esta investigación serán obtenidos por medio de un cuestionario a un experto de ProEcuador, y a través de fuentes académicas para determinar los factores involucrados en el proceso de exportación de mortiño. Sin embargo, el riesgo al que se enfrenta es la dificultad de obtener información de fuentes primarias o la factibilidad de la venta del producto en sí.

Palabras clave: Andean berry, bayas, Corea del Sur, exportación, plan de internacionalización, mortiño

Abstract

The current investigation is intended to design an internalization plan for the mortiño for the Seoul market, South Korea. Through this research, it is desired to contribute to the development of the communities in the Sierra region since it is there where the small and medium farmers harvest the fruit. In this way, it will be possible to contribute to the progress of the country and its diversification in the exportable supply. It can be made using the mortiño, a native fruit, with great benefits and nutrients, which is attractive and profitable for the South Korean market, but little known internally.

The purpose of this investigation is to carry out a marketing analysis about the exportation of mortiño to the South Korean market. The investigation is important because the mortiño is an abundant product in the Sierra that has not been explored or commercialized in mass. The results of the investigation will be obtained through a questionnaire to an expert from ProEcuador, and from academic resources to determine the factors involved in the process of exportation of the mortiño. Nevertheless, the risk it faces is the difficulty to obtain information from primary sources or the feasibility of the product selling itself.

Keywords: Andean berry, berries, South Korea, exportation, internationalization plan, mortiño

CHAPTER 1

Characteristics and production of mortiño in the country, and justification on the target market

1.1. History of berries in Latin America

The Andean region is the scene of a diversity of wild plants, as well as settlement of civilizations that developed indigenous and traditional farming techniques using various native plant species within the area. The cultivation of these varieties was the food base of several Andean populations, such as the Incas, until the arrival of the Spaniards, when these native plants were replaced by foreign species. However, many of the native plants were not eradicated and are still present in the Andean moors.

Some of these fruits are berries that are part of the current diet of the human being and are highly desired. Peruvian cranberry is one of the most representative in this area and is known around the world as a 'super fruit' for the number of antioxidants it has as well as for its characteristic flavor between acid and sweet. In addition, blueberries are also grown in Peru, as in other countries including Ecuador, and in fact, their production and marketing have managed to overshadow Chilean competition.

Other countries such as Colombia have chosen to produce and market a different type of berry. This is the case of the mortiño, whose scientific name is *Vaccinium floribundum*, one of the three species of mountain berries that exist in Ecuador. Mortiño is a native Ecuadorian fruit, but there are other types of this berry in Colombia and Peru that, according to their location, have variations in their characteristics and nutritional values (La Granja, 2017). It belongs to the Ericaceae family and is a fruit native to the Ecuadorian moors where it has been used by its inhabitants since immemorial time, mainly on the 'Día de los difuntos' for the elaboration of the traditional laundry abode. However, during the Inca Empire, it was

frequently used as a source of energy and rejuvenation. There is even evidence of its use in the areas that are currently the provinces of Carchi and Imbabura (Loján, 2003).

1.2. Global Market of Berries

According to a study from Forbes, Mangas, and Pagano (2009), blueberry is a fruit highly appreciated by northern countries, mainly the United States and some European countries, such as the Netherlands, France, and England, where it is commonly consumed. The United States is considered a mature market because, since its establishment in 1990 it has been growing in demand. So, it is the place where are consumed the most quantity of blueberries in all their modalities, from fresh fruit to processed products. In this country, blueberry is replacing the consumption of other fruits as it is available all year round in supermarkets. According to Trade Map (nd), in 2020, the United States exported USD 248,554,000 in berries of different types, such as blueberries, blackberries, lingonberries, etc., that is, just 6% of the total in the world, and being the fifth exporter worldwide, as seen in Chart 1.

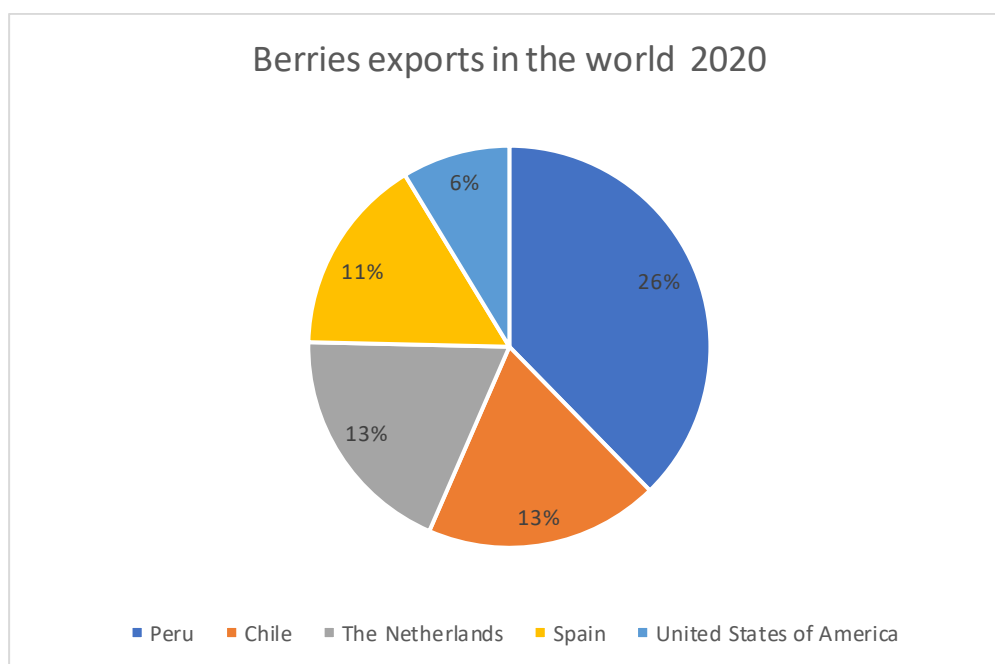
On the other hand, Europe is growing, ready to become a market similar in volume to North America, even though these are wild blueberries and not domesticated like in the United States. The Netherlands is the leading producer of blueberries on the old continent, followed by Germany, Spain, Poland, Belgium, and Italy. The Netherlands exported USD 500,674,000 in berries in 2020, 13%, and ranked as the third-largest exporter of this type of fruit (Trade Map, s. f.).

In Latin America, as FreshPlaza (2021) tells us, the largest producer of blueberries is Peru, followed by Chile, which has not yet managed to outshine its neighbor. Peru is currently increasing its share of blueberry exports to the United States to cover a greater percentage of the market, so that in 2020 it exported USD 1,002,975,000, which is 26% of

world exports, followed by far by Chile, whose export amount was USD 526,875,000, 13% (Trade Map, nd).

On the other hand, South Africa is increasing their export volumes of blueberries mainly to Europe. As estimations suggest that the European market still has room to grow, the blueberry sector is growing quickly in South Africa with intensive production. By 2020, South Africa exported USD 125,144,000, 3%, and being the tenth largest exporter of berries in the world (Trade Map, s. f.).

Chart 1: Berries exports in the world during 2020



Source: Self-made based on the information from Trade Map

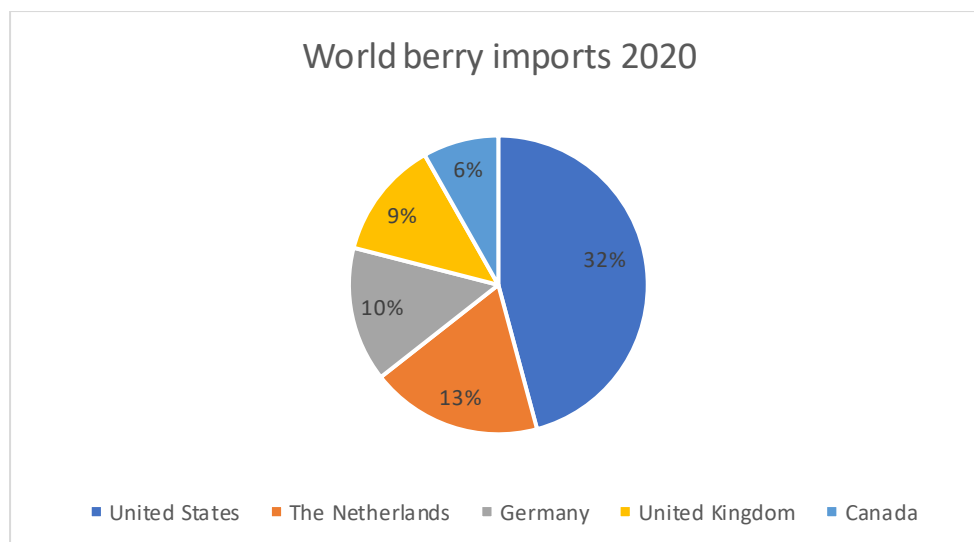
Regarding its consumption in the world, many of the countries that import berries, whether they are blueberries or blackberries, usually do so for the confectionery industry, to include them in chocolate bars, as glazed fruit or others, and usually export them again to the rest of the world. This happens with countries that are also producers of berries, such as the

United States or the Netherlands, where their domestic production is not enough to reach the demand. The blueberry production time in the United States covers 8 months, from April to November, because the production from September to November is extremely scarce, and therefore the rest of the year the fresh fruit sold comes from imports obtained from Europe and South America (Forbes, Sleeves, & Pagan, 2009).

As evidenced in Chart 2, and taking as a reference the data of Trade Map (s. f.), the imports of berries during 2020 were directed mainly to the United States acquiring USD 1 371 286 000, 36% of the world imports, to cover times where domestic production was inconsistent, also because over the years the berries have gained popularity in this country, especially during the summer months, and within the food services where they were considered one of the favorite ingredients of the different dishes (ProEcuador, 2018).

The second country that most imports these fruits is the Netherlands, whose import amount is around USD 556,119,000, 13%, mainly consuming the blueberry due to its antioxidant elements that gave it the name of 'super fruit'. Germany is the third-largest importer of berries in the world, having imported in 2020 an amount of USD 436,617,000, 10%, to be used in its chocolate industry or to be consumed as a natural fruit by the population. The United Kingdom is the fourth-largest importer of berries in 2020 with an amount of USD 382,900,000, i.e., 9% of total imports. Blueberries are the variety of berries that the British consume the most, where almost half of them consume about 32,000 tons of blueberries each year (Marroquin, 2016). The fifth-largest importer of blueberries is Canada with 6% of the total, around USD 245,508,000, whose consumption habits are similar to those of the United States, differing only in its preference for organic and natural products, among which berries like blueberries and blackberries are the favorites (Trade Map, nd)

Chart 2: World berry imports in 2020



Source: Self-made based on the information from Trade Map

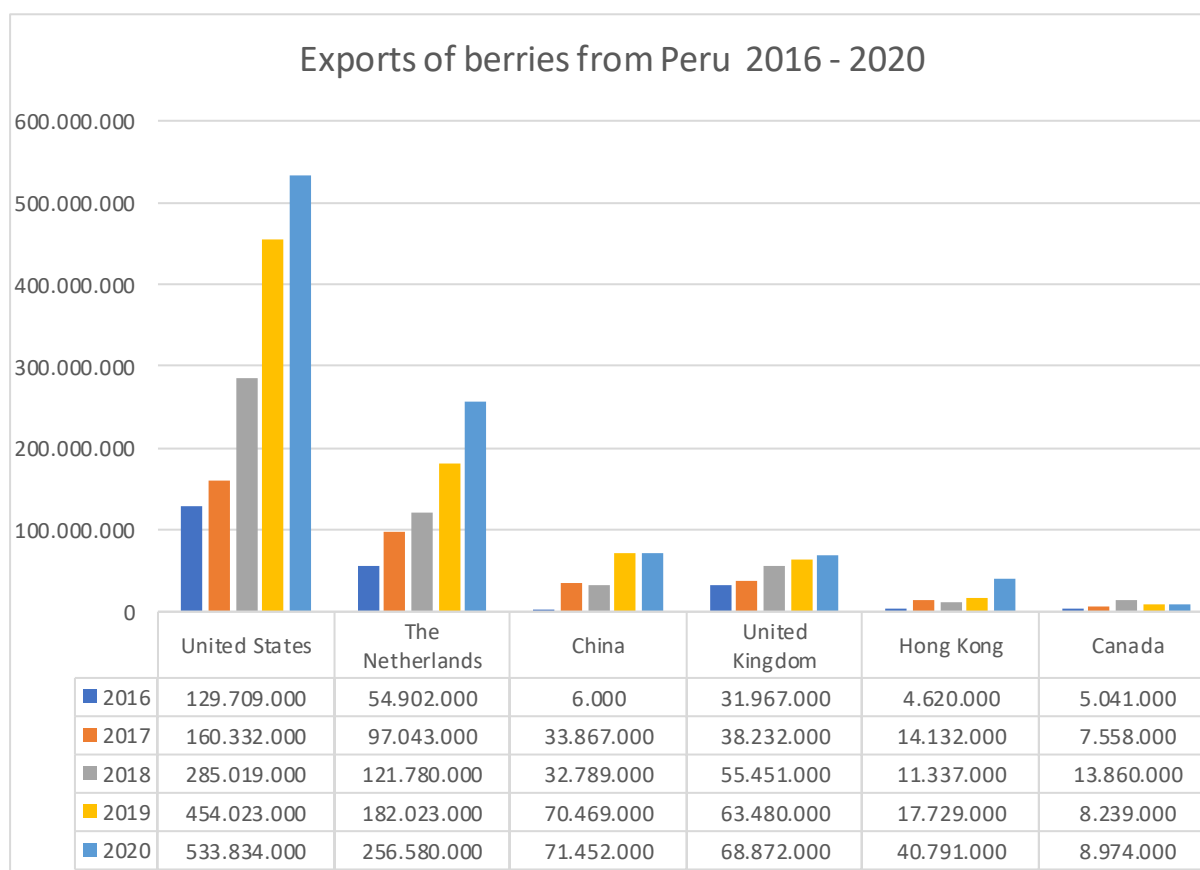
The possibilities are that this growth will continue in the coming years, as the recently planted areas have not yet reached full production. Likewise, the demand for this fruit is constantly growing, especially in those countries that do not have or have limited agriculture. This is the case in Asia, where countries such as China, Japan, South Korea, and Singapore have been the targets of European and American blueberry exports for several years (FreshPlaza, 2021).

1.3. Analysis of the international exports of berries in the period 2016 - 2020

As mentioned above, the berry market has Peru, Chile, the Netherlands, Spain, and the United States as export leaders. For a deeper look, we will analyze the exports of Peru, Chile, and the United States in the last five years since they are not only close to Ecuador in geography but also because of their direct influence as main competitors. In addition, Colombia will be included in the analysis, since it is a direct competitor of Ecuador and with whom it shares similar production characteristics, to have a deeper look at Latin American and world exports.

1.3.1. Peru

Chart 3: Exports of berries from Peru during 2016 - 2020



Source: Self-made based on the information obtained from Trade Map

According to the information obtained through Trade Map (n.d.), Chart 3 shows the growth of Peruvian exports of berries in the world, specifically to its six main trading partners.

During 2016, exports to the United States were quite significant and doubled the amount that was exported to the Netherlands. Meanwhile China had only a minimal percentage of those exports and this is because, during the time the berry market was just

born, Peru began testing the international market in 2008 when they sent small sample volumes to the United States and the European Union. However, it was only in 2014 that exports took off and reached USD 30 million. Since that year, the blueberry has had a sustained growth of over 50% on average each year with an expansion of various markets. It began with the United States, Canada, and the European Union, and once it was consolidated not only as of the largest producer of blueberries in the world but also as the largest exporter, Peru sought new markets where blueberries, within the group of berries, could be marketed. Regarding this particular fruit, in 2019, Peru exported a total of 121,712 net tons valuable in USD 810 million, an important item and one of the highest in the world. However, peculiarly, during this same year, Peru already exported considerable quantities to other places in Asia such as Hong Kong, Singapore, and Thailand (Trade Map, s. f.).

With the European Union, Peru has also benefited from the existing free trade agreement to penetrate the market of the Netherlands, which is the largest buyer in the region, followed by the United Kingdom, whose amounts, like Spain, are much lower. This low yield in European countries is because the region already produces blueberries and other berries, although they are not the same ones that Peru trades, there is a preference for these fruits as a local product. These types of events are also defined in the free trade agreement where preference is given to local European products before exports from Peru.

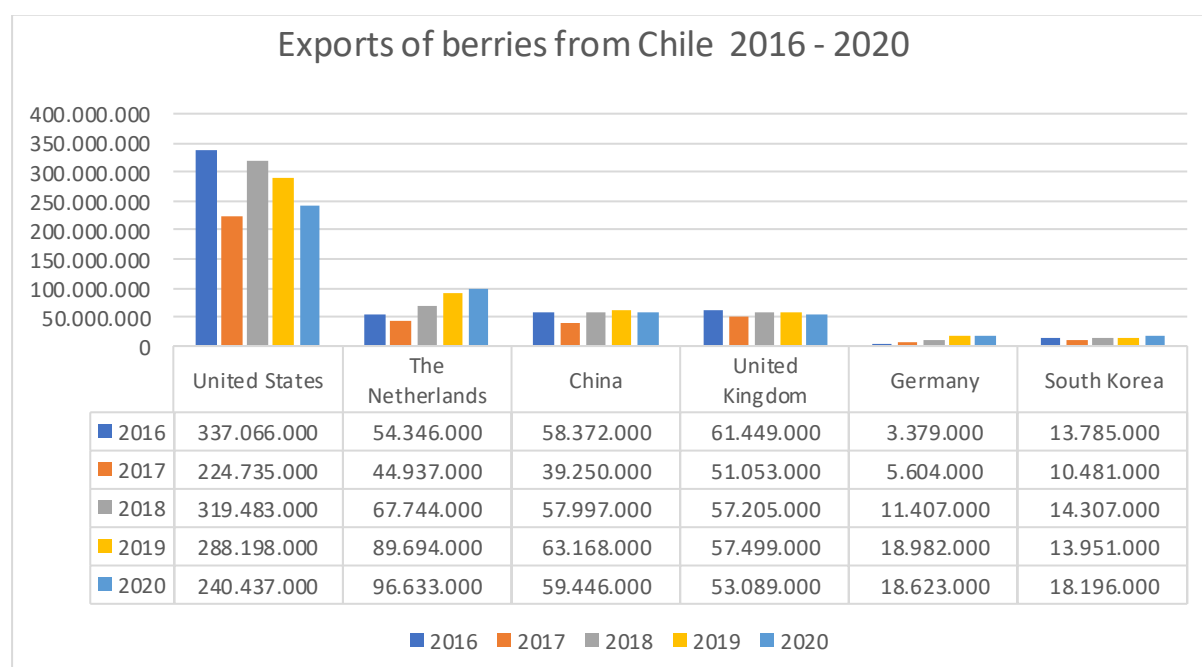
In 2017, Peruvian berry exports had low growth with almost all its trading partners, however, we see that with China is the opposite growth, going from exporting USD 6,000 to USD 33,867,000 based on solid strategies to penetrate the Asian market, taking advantage of the Peru-China Free Trade Agreement that entered into force in 2010. In the following two years, there is strong growth in its exports, especially to the United States and the Netherlands, while with China and Asia, it is still a slow-growth so that the market is just

being known. However, since 2019 was the beginning of the global Covid-19 pandemic, exports do not have great growth in those secondary markets and rather focus on large markets whose economic returns are more important. In markets such as the Chinese, the British, or the Thai, exports grow less than 1%, and in others, such as the Spanish, there is even a decrease by hundreds of thousands of dollars that determines Peru's trade balance.

Finally, for 2020, although exports did grow, they did so by less than 50%, which is evidence of the difficulties that Peru is still going through in the marketing of berries. But cases such as Belgium or Hong Kong, where exports of Peruvian berries exceeded expectations and grew by more than 50%, contrary to other markets where it was very difficult to market the fruits that year (Trade Map, s. f.).

1.3.2. *Chile*

Chart 4: Exports of berries from Chile during 2016 - 2020



Source: Self-made based on the information obtained from Trade Map

Chile's six main export destinations are the United States, the Netherlands, China, the United Kingdom, Germany, and South Korea. Chart 4 shows how important the North American market is for Chile, since its amounts double those of other commercial partners. In addition, it has stable growth, with few ups and downs, compared to the Peruvian case with the United States, and the reason is that Chile has better managed its trade relations with the north so that its berry exports already have a significant market share there.

However, we see that during 2016 the number of exports to the United States was the highest of the evaluated range, being that between the United States and the Netherlands there is a difference of USD 282,720,000, with China and the United Kingdom the amount is similar, while that with Germany and South Korea it is singularly low. However, given that during that year, Chile had just begun its foray into unusual markets such as the Asian ones, it is important to emphasize that exports to South Korea were even higher, in most years than those of Germany. And this is due to the fact that Chile turned its attention to this country after an exhaustive evaluation of the search for a market to commercialize the blueberry, its star product, so that it would be appreciated and that the economic returns would be significant.

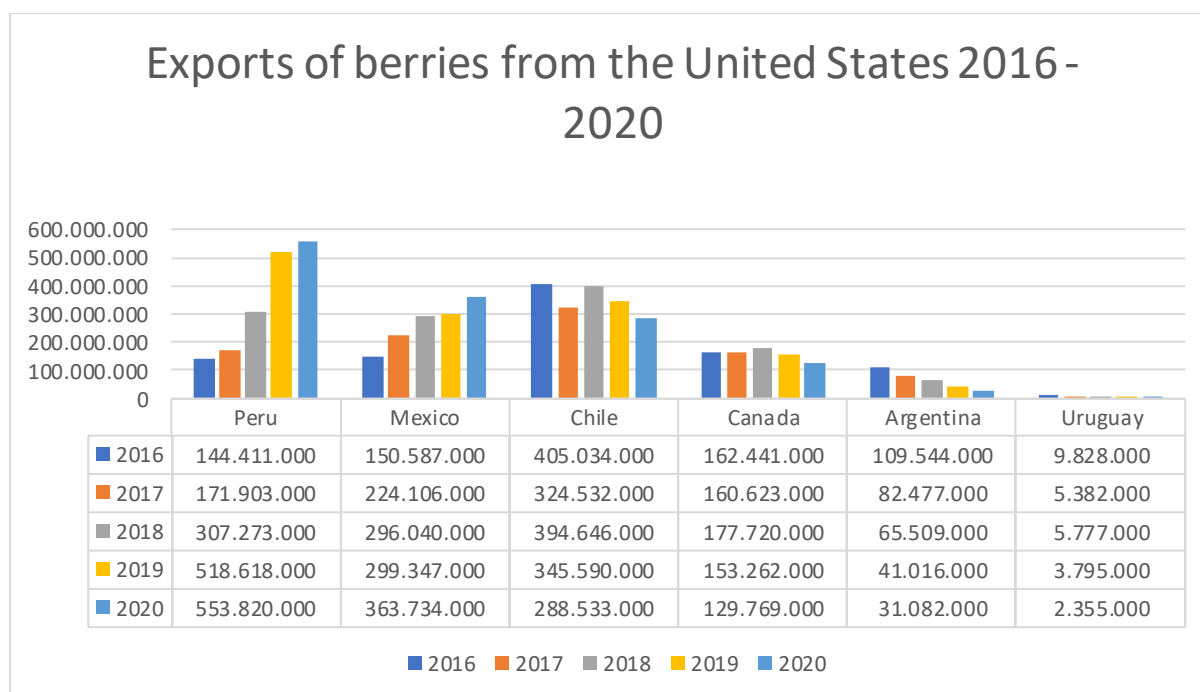
In 2017, however, there is a decrease in exports to all destinations due to the different environmental, political, and economic events that have seriously affected its production and economy. It started with forest fires in 560 thousand hectares in the O'Higgins Region, where large amounts of fruit, such as berries, among other products, are produced. Political conflicts, such as the division of the ruling party and internal disputes in the legislature, resulted in a strong feeling of fear among trading partners. Also, due to the constant political and civil conflicts, the Chilean economy was slightly affected, while its exports suffered a noticeable drop (BBC News Mundo, 2017).

In 2018, berry exports grew again, slightly exceeding the amounts of 2016, while once again focusing on the United States as their destination country; meanwhile, the Netherlands, the United Kingdom, and China had little growth where this market share was taken advantage of by suppliers such as Peru or the United States. In 2019 the situation was not much better, although exports to the United States decreased by USD 31,285,000, the main reason being the protests triggered by the rise in urban transport fares that paralyzed the country in every way for several days and that caused an unprecedented social crisis. However, despite this, Chile made it possible for its exports to the Netherlands, China, the United Kingdom, Germany, and South Korea to grow, albeit minimally and was able to explore these markets in greater depth when the trade situation with North America did not favor it at all. According to the Statistical Compendium of Foreign Trade 2019, Chile exported USD 693 million in blueberries, 10% less than in 2018 and 14% less than what was exported by Peru. One of the reasons is the pandemic and the difficulties in exporting that occurred at the end of that year and worsened the following year (National Customs Service, 2020).

The decrease with the United States continues during 2020, when exports do not reach USD 250 million, and for which Chile had to export a larger amount to the Netherlands and maintain stability in its exports to its other trading partners so as not to be entirely harmed. Nevertheless, since the United States is the country to which it exports the most, there is a weakness in its commercial strategy, since growth in said country is very low given the different suppliers it has.

1.3.3. *United States of America*

Chart 5: Exports of berries from the United States during 2016 - 2020



Fuente: Self-made based on the information from Trade Map

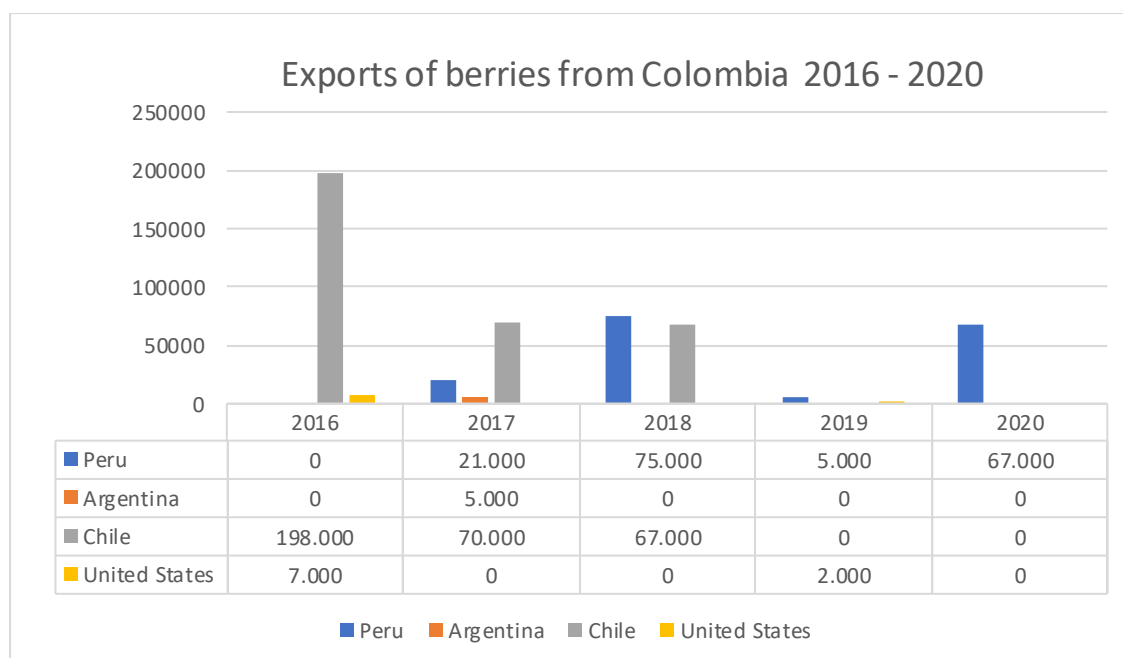
As the United States is a producer and exporter of berries, particularly North American blueberries, it is considered direct competition for producers such as Ecuador, Peru, and Chile. Chart 5 shows the growth of exports of blueberries and other berries to markets such as Peru, Mexico, and Chile. The curious thing about this data is that the United States partners in this business are those two countries, Peru and Chile, which in the world ranking are the main exporters of berries in the world. As mentioned above, this is due to a kind of export, in many cases, where the United States exports its blueberries, and those that it bought from Peru and Chile to these countries under slight modifications in the product, most sometimes it is not even about a transformation of the fruit, but about new packaging and names. Nonetheless, inside these exports of US berries, we are also talking about raspberries and blackberries, not just blueberries, which, not being produced in large quantities in Latin American countries, are highly desired in markets in Europe and Asia.

During 2016, berry exports were of very low amounts that grew over the years with Peru and Mexico, while with Chile, Argentina, Canada, and Uruguay, there was a decrease. This trend continued until 2017. As can be seen in the graph, growth in Peru is very low, barely USD 27,492,000, while growth with Mexico is USD 73,519,000. On the other hand, with the rest of the countries, there is a deficit of up to USD 80 million, as is the case of Chile. We see then that exports focused on growing in two markets and strengthening them, while others were neglected (Trade Map, s. f.).

In 2018 the growth with Peru was exponential of more than USD 100 million, and it was the highest growth of the year. With Mexico, the growth was only USD 70 million, as with Chile, while with the rest of the partners it was very little, as is the case in Canada; however, with other Latin countries, there was a decrease in exports due to the increase in the market share that Peru and Chile covered in Latin America. During 2019, exports had a trend to go down, and the only countries that were saved were Peru and Mexico with minimal growth of just USD 210 million and USD 3 million, respectively; the rest of the partners had a decrease of, in some cases, 5%.

1.3.4. Colombia

Chart 6: Exports of berries from Colombia during 2016 - 2020



Fuente: Self-made based on information obtained from Trade Map

Although Colombia's role as an exporter of berries is minimal, it is important to study its trade in recent years because it shares a product with Ecuador, the mortiño, although in various varieties, and which would be a direct competitor in the export of this product.

During 2016, as we can see in Chart 6, Colombia maintained active exports with Chile and the United States, whose amounts are barely USD 198,000 and USD 7,000, respectively, while with Argentina and Peru, there were no exports of berries. In 2017, Colombia took an important step and began to trade with Peru, Argentina, and Chile, the latter with an amount of approximately USD 70,000, the highest of the year.

In 2018, the only countries with which Colombia traded berries were Peru and Chile, while in 2019 exports were directed to Peru and the United States, but in small amounts and with a downward trend. Finally, in 2020, exports were made only to Peru, which shows a very strong reduction and which leaves as a consequence an intermittent and unbalanced trade-in berry that is extremely weak for the Colombian economy.

1.4. Mortiño Characteristics

1.4.1. *Morphology*

The mortiño is a branched shrub whose height can reach up to 2.5 m, it has very small leaves with serrated margins, pinnate venation, i.e., with a main median nerve and secondary lateral nerves; 1 cm flowers, solitary or grouped in clusters; calyx tube articulated or not with pedicel, 5 lobes lanceolate; corolla urceolate, white or pink, with 5 reflexed lobes, stamens, free filaments, anthers with short tubules, apical poricidal dehiscence; ovary inferior, 5 locular. It produces fruits of 5 to 10 millimeters in diameter, purple-red or almost black, with a smooth texture (Coba et al., 2012).

Chart 7: Mortiño plant



Source: *Sinchos impulsa producción de vino y dulce de mortiño* [Image], by El Telégrafo, 2014, El Telégrafo (<https://www.eltelegrafo.com.ec/noticias/regional-centro/2/sinchos-impulsa-produccion-de-vino-y-dulce-de-mortino>).

1.4.2. *Taxonomy of the mortiño*

Table 1: Taxonomy of the mortiño

Cientific name	Vaccinium Floribundum
Kingdom:	Plantae
Division:	Magnoliophyta
Order:	Ericales
Family:	Ericaceae
Subfamily:	Vaccinioideae
Tribe:	Vaccinieae
Genus:	Vaccinium
Species:	Vaccinium Floribundum
	Vaccinium Crenatum
	Vaccinium Distichum Luteyn
Habit:	Shrub with a height of 1.50 -2 meters
Grown habit:	Vertical
Reproduction:	Seeds, buds
Distribution:	Andean Moor ecosystem, Ecuador
Inflorescence:	Cluster of 6 to 8 flowers
Fruit:	Berry shape
Berry color:	Blue, blackish
Leaf shape:	Oval
Flowering months:	April, May. June, September, October, November, December

Source: Patrimonioalimentario.culturaypatrimonio.gob.ec (2013)

1.4.3. Varieties

There are around 800 varieties of Latin American blueberry, but only two of them have earned the name of 'superfruit' due to the extraordinary number of antioxidants they contain. These are the species: *cavendishia grandifolia* and *anthopterus wardii* that grow wild in the Ecuadorian moors and contain approximately two to four times more antioxidants than

the blueberry, which is usually considered the most powerful in terms of antioxidants. The fame of antioxidants is because they prevent oxidative stress in the body, this chemical reaction damages and kills cells, as well as prevents diseases (Recipes from Ecuador, 2017).

Although, some of the mortiño species are not suitable for human consumption. There is a high diversity of gender and species, including *Rhododendron* (more than a thousand species), *Vaccinium* (about 450 species), *Cavendishia* (about 130 species), and *Gaultheria* (about 115 species).

Data from the Herbarium of the Pontificia Universidad Católica del Ecuador reveal that three species of mortiño are registered in the country: *Vaccinium distichum*, *Vaccinium crenatum*, and *Vaccinium floribundum* (La Granja, 2017).

- *Vaccinium Floribundum*: It is a shrub that can measure from 0.2 to 2.5 m in height in vertical growth; its leaves are leathery, elliptic, oval, its base is cuneate or round; its apex is slightly rounded acuminate (which ends in a point), and its margin is serrated, it has clusters of 6 to 10 flowers; its fruit is round, bluish or black, sometimes sweet, with a diameter between 5 and 8 mm (Pérez S. &., 2007). It is native to the Andes, cultivated from 1000 - 4500 meters above sea level, it is found in the provinces of Azuay, Bolívar, Cañar, Carchi, Chimborazo, Cotopaxi, Loja, Morona Santiago, Napo, Pichincha, Sucumbíos, Imbabura, Tungurahua and Zamora (Gallardo, 2015).
- *Vaccinium Crenatum*: It presents a prostrate growth habit, it rarely grows vertically reaching a maximum height of 1 m, its leaves, when the plant is growing, present a purple color; they are coriaceous, glabrous, decurrent, lanceolate, their base is crenate, they have solitary flowers or clusters of three flowers at most; its fruit is round, has a bluish to black color, with a diameter of 9

mm (Pérez S. &, 2007). This shrub is native to the Andes and is located between 1,500 - 3,500 meters above sea level in the provinces of Azuay, El Oro, and Loja. (Gallardo, 2015).

- *Vaccinium Distichum Luteyn*: It is a small shrub, whose stems are hanging, it has thin and distichous leaves, giving the whole plant a thin and leathery appearance, its base is cuneate, the apex is acuminate, its flowers do not appear in a cluster, they are solitary; its fruits are round, 7.5 mm in diameter and with multiple seeds (Pérez S. &, 2007). It is an endemic plant of the Andes and is found between 2,000 and 2,500 meters above sea level only in the province of Pichincha, so it is currently in danger of extinction (Gallardo, 2015).

1.4.4. Health Benefits

The blueberry is considered a superfood due to the number of health benefits it has, including the fact that this berry contains natural antioxidants that promote metabolism and protect against free radicals which are dangerous to health because they are causing cell death, as well as:

- It helps restore blood sugar levels.
- It prevents from diabetes and rheumatism.
- The flowers of the fruit help treat nervous conditions.
- Prevents inflammation of the urinary tract.
- Reduces the risk of cancer due to the presence of antioxidants.
- Helps reduce the risk of heart disease.
- Fights digestive disorders.
- The presence of flavonoids decreases the risk of accumulating fats in the arteries that cause an obstruction.

- Helps to strengthen the collagen level in the body.
- Reduces problems or discomfort in the ligaments (Agencia Pública de Noticias de Quito, 2017).
- Improves memory and contributes to bone formation.
- It provides vitamin B1 that helps the nervous system and prevents diseases such as depression (Escuela Politécnica Nacional, s. f.).

1.4.5. *Nutritional Values*

Each 100-gram portion of fresh blueberry has the following nutritional values:

Table 2: Nutritional values of 100-gram portion of mortiño

Nutrients	Amount
Energy (Kcal)	75
Protein (g)	0,8
Total fat (g)	0,8
Cholesterol (mg)	0
Carbohydrate (g)	18,1
Fiber (g)	2,9
Calcium (mg)	26
Iron (mg)	0,9
Phosphorus (mg)	16
Vitamin A (mg)	1,67
Vitamin C (mg)	11
Vitamin B1 (µg)	0,56

Source: self-made table based on the data from Fundación Universitaria Iberoamericana

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Table 3: Mortiño Components

COMPONENT	UNITS	LEVEL	.+/-
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APPROXIMATE CONTENTS			
Humidity	(g/100g FW)	81	0,2
Fats	(g/100g FW)	1	0,04
Protein	(g/100g FW)	0,7	0,02
Ash	(g/100g FW)	0,4	0,03
Total carbohydrates	(g/100g FW)	16,9	0,1
Total fibers	(g/100g FW)	7.6	2,2
-Fibers soluble	(g/100g FW)	1,2	1
-Ins soluble	(g/100g FW)	6,5	2,5
SUGAR			
Fructuous	(g/100g FW)	4,4	0,4
Glucose	(g/100g FW)	2,6	0,3
CALORIES			
	(Kcal/100g FW)	84	0,4
Organic acids			
Citric acid	(g/100g FW)	3142	614
Malic acid	(g/100g FW)	1823	274
Minerals			
Iron	(g/100g FW)	0,64	0,2
Potassium	(g/100g FW)	607	73
Calcium	(g/100g FW)	17	23
Magnesium	(g/100g FW)	10,2	1.1
Copper	(g/100g FW)	0,12	0,02
Zinc	(g/100g FW)	0,13	0,02
ANTIOXIDANTS COMPOUNDS			
Ascorbic acid	(g/100g FW)	9	2
Beta Carotenes.	(g/100g FW)	36	6
Total phenolic compounds	(g/100g FW)	882	38
TEAC (Trolox Equivalent Antioxidant Capacity)	(g/100g FW)	1203	94

Source: self-made based on information from: Catalina Vasco, Phenolic Compounds in Ecuadorian Fruits (2009)

1.4.6. Applications

Before the Andean Region conquest, certain fruits associated with the mortiño were already consumed (Cieza De León, 1962). With the arrival of the chroniclers, the presence of this fruit in the Andean towns was evidenced, which was known by the name of mortiño, considering it a ceremonial fruit, because they used it to prepare Ayaapi, porridge for the dead (Estrella, 1986).

The fresh fruit found in its natural environment is consumed by animals and birds that are close to the place of maturation of the plant. The animals disperse the seeds in their environment and allow their natural use. But due to its sweet taste, consumption is not limited to animals but also to humans, who generally consume it as fresh fruit or in juices, mixed with water to calm the silk. Nevertheless, it is necessary to take into account other uses that certain companies in our country have been able to see in it and give added value to their product by including this fruit in their list of ingredients (Santamaría et al., 2012).

- *As a dehydrated fruit:* the Pacari chocolate company has used this dehydrated fruit as one of its flavors to present Ecuadorian culture to both the national and international public and thus personalize one of its chocolate presentations.
- *Wine:* the entrepreneurship of the Association of Agricultural Producers and Merchants of Quinticusig, of the Sigchos canton in Cotopaxi, has developed this new proposal to make wine using the mortiño as raw material.

Among other uses that can be given to the mortiño are:

- *Pharmaceutical and medicinal:* the extracts of the fruits and leaves stop the development of bacteria that cause serious diseases such as salmonellosis and in certain cases it works better than antibiotics such as ampicillin. In addition, its

consumption helps restore normal blood sugar levels in people with diabetes and hypoglycemia. It is also used in people with digestive problems.

- *Ornamentals:* The mortiño shrub is perfect for ornamental purposes due to the bright, smooth, colorful characteristics of its leaves, and the shape and form it can take if properly pruned.
- *Floristry:* the use of its leaves, due to its color and texture, allows the creation of flower bouquets with more exotic foliage and new shades.
- *Dye:* it can be used as a natural dark purple dye because its ripe fruits have a long-lasting color that is satisfactory to the eye (CORANTIOQUIA, 2009).

1.4.7. Cultivation

1.4.7.1. Zones.

1.4.7.1.1. Nacional Cultivation.

The mortiño in Ecuador is distributed in the Andes area from the province of Carchi in the north of the country to the province of Loja in the south (Jorgensen and León Yáñez, 1999). This plant can grow in a broad range since it is found from 1,600 to 3,800 m altitude, in other words, it develops and grows in both temperate and cold climates, with temperatures from 8 to 16 °C. It is found in dry lower montane forests and humid montane forests, and specifically in moist, well-drained soils (Bernal and Correa, 1990). This berry in Ecuador is considered a wild plant that grows in the high parts of the mountain range. The *Vaccinium Floribundum* species grows from the páramos del Ángel in Carchi to El Tambo in Cañar.

The data provided by the Cotopaxi National Park specify that the mortiño adapts to areas between 1,000 meters above sea level and 4,500 meters above sea level, but in fact, there is a small amount of moorland that has a significant number of plants, this is due to the

rapid expansion of agricultural areas that relegate this species to paramo areas appear between 3,400 to 3,500 up to 4,500 meters above sea level (MAGAP, 1988), as shown in the following chart:

Chart 8: Zoning map of the mortiño in Ecuador

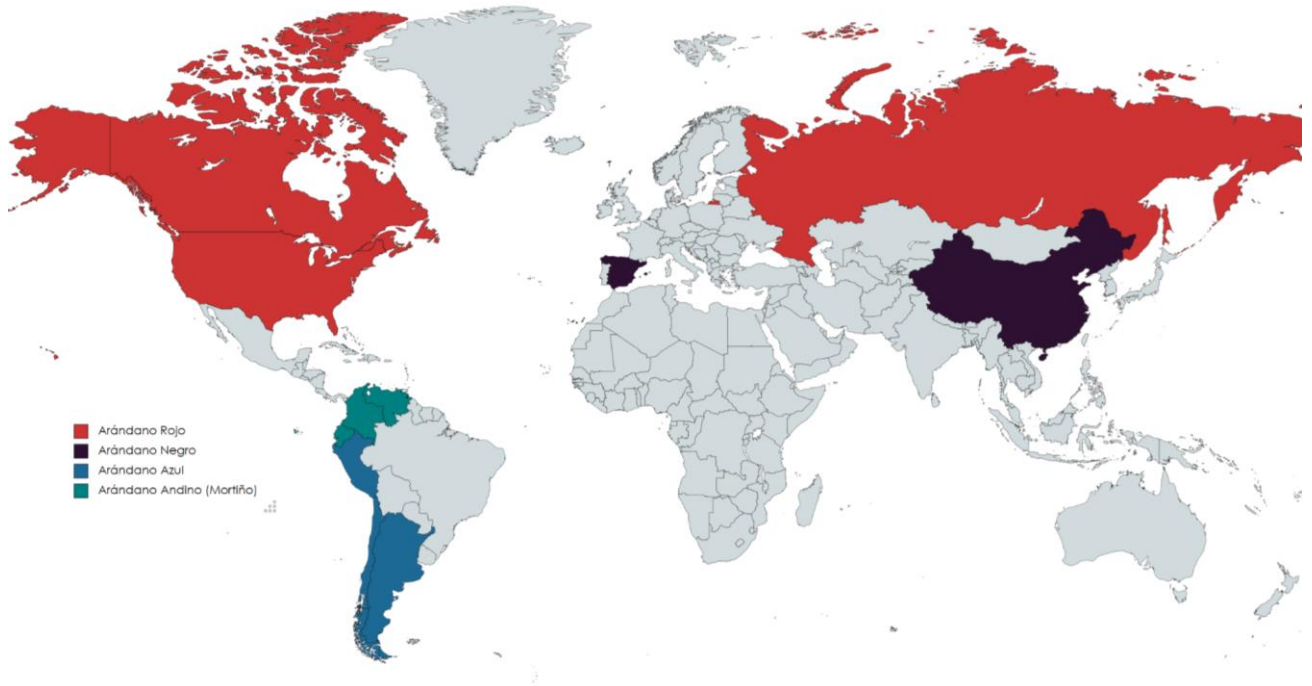


Source: self-made based on the Aguilar's Zoning of the Mortiño in Ecuador (2009)

According to different collections made, it has been described that *Vaccinium floribundum* is found in the Sierra in the provinces of Carchi, Imbabura, Pichincha, Cotopaxi, Tungurahua, Bolívar, Chimborazo, Cañar, Azuay and Loja. *Vaccinium distichum* and *Vaccinium crenatum* are located in the provinces of Azuay and Loja (Luteyn, 2002).

1.4.7.1.2. *International Cultivation.*

Chart 9: *Map of international cultivation of blueberry*



Fuente: Self-made image according to information from Pineda et al (2017)

Among the other countries that produce Mortño are Colombia and Venezuela, but none of them has taken this product to export it to other markets. The same happens with Chile and Peru who, although they have production of mortño, this is not in large quantities because they focus in the export of the blueberry, a fruit of the mortño family, but which has been domesticated over the years and its harvest time is largest than that of the blueberry, so it has become more profitable to stay in the production of this berry before changing it for that of the mortño.

In the international scenario, we can also find the United States, Canada, and Russia, which also have production of a substitute berry for the blueberry, the lingonberry, because due to its climatic conditions it is easier to produce it. Lastly, we have the production of black blueberries, which are mostly produced in China and Spain but remain as products for national consumption.

1.4.8. *Propagation and management*

The seeds are the most common way to reproduce the mortiño, for this, the fruits are harvested when they begin to ripen and take on a maroon or purple color. Sow the seeds in seedbeds previously prepared on the ground. These seedbeds are prepared by mixing soil, sand, and mycorrhiza in proportions of 7.5: 1.5: 1 part, respectively. The seeds are taken from the ripe and larger fruits, which are macerated through a sieve fine enough to separate the seeds from the pulp in water. About one thousand seeds weigh 0.44 gr, in other words, 2,272,000 seeds are needed to complete the kilogram. It is suggested to dry the seeds in the shade before planting.

After sowing, it is recommended to cover them with pine needles in a state of deterioration, which contain the inoculum of mycorrhizae, which are the union of an element of the fungus family, commonly called fungi; in the case of the mortiño, it helps in the reception and synthesis of minerals and vitamins, subsequently benefiting its development (CORANTIOQUIA, 2009). The Andean blueberry grows best in acid soils with a pH less than or equal to 5.0, which are humid, but well-drained because their roots are superficial and do not support waterlogging.

The mortiño and other berries of the *Vaccinium* genus have the same principles of vegetative reproduction as those propagated by fruit trees and shrubs. Several tests carried out by Corantioquia that planned to study the reproduction of the blueberry by layering and cuttings did not give good results, while those studies related to micro cuttings from less mature plants did. In the wild, reproduction by stolons¹ is very important as it allows them to be extracted for transplanting and starting small orchards closer to homes and houses.

¹ Side shoots arising from the stem

When orchards are made and strengthened, it is necessary to maintain certain care in the growth of the bushes, such as proper pruning for strong plants that do not break under the weight of the berry clusters. On the other hand, it is necessary to take into account the place of planting, because not all plants flower and produce fruit, and by maintaining a solar greater than 75%, the plants are exposed to higher production (CORANTIOQUIA, 2009).

1.4.9. *Harvest and Post-harvest*

The physiological maturity of the mortiño can be identified when the fruit begins to turn soft, approximately 40% of which is slightly lighter in color. It is harvested manually in containers that have paper or shavings to pad their interior. The result per hectare that has not been technified is approximately 2 to 3 tons and for each plant, it is 0.68 kg.

The fruit harvest must be carried out manually and individually so as not to break the branches or damage the foliage. In this way, only the ripe fruits can be taken to allow the subsequent collection of the green fruits when they ripen, which do not have a good flavor and therefore would be lost when harvested before time.

On the other hand, it is recommended that the field harvest be carried out in plastic baskets of 52 cm x 35 cm x 18 cm, also padded with blank sheets of paper, and later, the harvested fruit should preferably be treated in a cold chain at a temperature between 1°C - 5°C, with a relative humidity of 80% - 90% so that it does not suffer changes or rot.

1.5. Supply of mortiño from Ecuador to the International Market

Speaking of tariff item 081040, which refers to CRANBERRIES, BIRBERRIES AND OTHER FRUITS OF THE VACCINIUM GENRE FRESH, Ecuador has been significantly increasing its export of said product to the world market, having as its first

trading partner for this item the United States that in 2020 imported a quantity of 9,357 tons, while there are no export data for these fruits to the South Korean market.

Table 4: Quantity in Tons of export of item 081040

2016	2017	2018	2019	2020
1762 t	2812 t	6757 t	9938 t	18101 t

Source: self-made based on data from the Central Bank of Ecuador and TradeMap

1.6. Description of South Korea as a Destination Market

A market was sought where the characteristics of the blueberry as fresh fruit with great health benefits were widely recognized. South Korea is the cradle of the most recognized cosmetics and beauty treatments worldwide and based on this, it is known that a large part of their time and income is dedicated to the search for their health. Being the blueberry, a fruit that probably contributes to the repair of dead cells, the prevention of diseases, as well as facial rejuvenation, the South Korean market is considered the most suitable to be the destination of the product.

According to information from Euromonitor (Promperú, 2017), the Korean consumer profile has a high sensitivity to issues related to brand-product, and therefore they are willing to pay for a product as long as it is of high quality. In addition, they are especially interested in those products that have health benefits and are interested in good after-sales service. In the high and medium socioeconomic strata, high consumption of imported products has been observed, thus revealing that Koreans are not particularly nationalistic when buying products for their consumption.

According to ProColombia (s. f.), the fresh fruit market in Korea is continuously growing thanks to the high purchasing power of the population and the trend to eat a healthier

diet driven by beauty and personal care trends. Although Korea produces a large part of the fruits that are consumed domestically and is capable of supplying part of the national demand, this country offers great opportunities for exotic fruits. Some of the most important fruits are cherries, mangoes, bananas, grapes, brambles, and pineapples. Regarding the decisive purchase factors, the freshness of the fruit is the most important factor, followed by the price, the sugar content, the place of origin, and the certifications. In addition, South Korean consumers have a high preference for organic products, over which they are willing to pay additional value if they have health benefits.

However, an already consolidated market in South Korea is that of processed fruits, such as juices, pulps, and dried fruit snacks, of which the main suppliers are the Philippines, Guatemala, Peru, Thailand, Taiwan, and the United States. Also, it should be noted that the United States is the main supplier of blueberries and dried plums to South Korea, and a very low percentage, less than 5%, exports it as fresh fruit.

Fruits imported into South Korea are often brought into the country through networks of independent importers associated with hypermarkets and supermarkets. Importers are responsible for distributing the products to wholesalers, who in turn distribute to retailers, and finally into the hands of the final consumer. In South Korea, the main distribution channels for fruit are medium-sized supermarkets, hypermarkets, and traditional markets where the majority of the population buys their food (ProColombia, s. f.).

It is important to emphasize that the main expense in households in South Korea is on food, and non-alcoholic beverages (16.1%), and after that, there are expenses on furniture, home maintenance, and appliances (13.6%), culture and leisure is only 11.9% (Promperú, 2017).

The food industry uses 30% of frozen blueberries, and this is a percentage that is expected to continue to increase. According to studies carried out on the frozen blueberry market in South Korea by the ProChile Commercial Office located in that country, today there is a high and growing variety of products that have blueberries among their ingredients, such as syrups, concentrates jams, and even a blueberry powder that is later used by companies that produce dairy products, juices, cakes, sauces, ice cream, among others. It is estimated that 70% of frozen blueberries in Korea are sold directly to retailers and supermarkets.

On the other hand, it is necessary to emphasize the importance that the South Korean consumers give to well-being and health. And that has expanded the use both fresh and frozen and powdered of this fruit is precisely the antioxidant properties that it possesses (Promperú, 2018).

1.6.1. Target Market Segmentation

To segment the market, it will be taken into count: geographical variables (South Korea), demographic variables (women between 20 and 45 years old), medium and high social status (65.7%), and behavioral variables (organic and ecological consumption). Thus, as shown in the following table, the result is:

Table 5: South Korean market segmentation

Segmentation variable	Value
Geographic: South Korea	\$ 51.781.000,00
Demographic: Women	\$ 25.858.715,00
Demographic: Age (20-45 años)	\$ 8.658.498,00
Demographica: Medium and high social status (65,7%)	\$ 5.688.633,19
Behavior: Organic consumption (58,7%)	\$ 3.339.227,68
RESULT	\$ 3.339.227,68

Source: self-made

1.7. Bilateral Relations Ecuador – Corea del Sur

Diplomatic relations between the Republic of Ecuador and the Republic of Korea were introduced on October 5, 1962, but it took several decades to strengthen these relations in practice. During the Korean War, in 1950, Ecuador as not being a member of the United Nations Security Council gave its support to South Korea condemning the armed attack of its northern counterpart, thus giving its vote in favor of the resolution 83 of the Security Council of June 29, 1950. In addition, Ecuador supported the creation of the United Nations army that established protection barracks for the South Korean people. Likewise, Ecuador sent 500 tons of food and medicine to meet the needs of the population.

South Korea, in the same way, has provided continuous aid to Ecuador through direct investment or participation in construction contracts, as was the case of the Avenida de la Prensa in Quito during 1977, which was awarded to the Daewoo Construction company. Another notable case was the expansion of the drinking water system for Santo Domingo for an estimated amount of USD 43 million, which was agreed upon by the presidents of both countries (Yoo, 2012).

Among the agreements signed between both countries we can highlight:

- Framework agreement for technological and scientific cooperation signed on March 28, 1983.
- Fishing agreement signed in 1984.
- Cooperation agreement in the area of culture signed on May 14, 1985.

- Bilateral agreement on the Economic Development Cooperation Fund (EDCF) signed on April 18, 2003 whose purpose was to promote economic cooperation, where Ecuador was allowed to finance the sewerage project of the city of Santo Domingo.
- Memorandum of understanding for sending volunteers from the Korea International Cooperation Agency (KOICA) to Ecuador that was signed on September 7, 2005 (Yoo, 2012).

Currently, the country has pending the Strategic Economic Cooperation Agreement with South Korea that would help protect and promote investments in Ecuador, such as the creation of the beach train between Guayas and Manabí that would boost tourism in the area.

Exports from Ecuador to Asian countries went from 8% in 2013 to 17% in 2016. From South Korea, the exports represented 2% in 2013 and 3% in 2016. The detail of the content of Ecuadorian exports to Korea indicates that the main products demanded by the South Korean market have been related to crude oil, waste, paper and aluminum waste, and bananas (Tapia, 2019). Korea sells Ecuador vehicles and their parts, petroleum derivatives, electrical appliances, chemicals, and pharmaceuticals, among others, while Ecuador offers Korea shrimp, bananas, fish, crude oil, among others (Calvopiña, 2020).

Imports made by Korea from South America are approximately 2.5%, from which Chile, the largest supplier, represents 42%, Brazil, 33%, Peru, 11%, Argentina 5.8%, Bolivia, the 3.4%, Colombia 2.3% and Ecuador 1.9%. And the products that are most in-demand in South America are Coffee (35%), frozen fruits (29.53%), frozen fish (6.95%), scrap copper (6.31%), fish fillet (3.69 %), jam, and jellies (3.63%), chocolate (1.21%) and other products (13.68%). On the other hand, Korea imports frozen fruits mainly from the United States (23%) and China (22%), but its main suppliers in South America are Chile, Peru, Brazil, and

Ecuador, of which Korea imports 21%, 8.4%, 0.06%, and 0.05% respectively. For its part, of Ecuadorian exports of frozen fruit, most destined for the United States and the Netherlands, only 0.23% of the total is exported to South Korea (Central Bank of Ecuador, 2017).

On issues related to the incursion of South Korea in Ecuador, during 2019 Chang-Wan Son, president & CEO of Korea Airports Corporation, delivered to the vice president of Ecuador, Otto Sonnenholzner, a management proposal for the Manta Airport. This proposal is part of the South Korean initiative to support the country in issues related to education, science, and technology, mobility, energy, foreign trade, infrastructure, and transportation. With this, it is intended that both economies become complementary and grow together (Vice-presidency of the Republic of Ecuador, 2019).

For this reason, currently the country is working to have more trade agreements with Asia, especially with South Korea, in order to reach the level of competition of Peru and Chile, which have been entering these markets for years.

Finally, it is necessary to emphasize that the potential to highlight for the mortiño exports lies in the high number of antioxidants that it possesses due to its location and development in areas that are rich in nutrients and minerals, which in the destination market, will reinforce the image of the product. Mortiño is a highly enhanced product for health, and that will stand out against traditional blueberries whose market is already consolidated. The potential of the company to export the product and the different opportunities and threats within the project will be discussed in Chapter 2.

CHAPTER 2:

Internal and External Analysis

First, this chapter deals with different analyses, both of the company and its financing, as well as of the macroeconomic environment and the implications that these variables have on the project. Market competitors and their different marketing methods in foreign markets are also discussed. Finally, the most important point of the chapter is the financing of the project and its viability and profitability.

2.1. Situational Analysis of the Company (The Andean Garden)

2.1.1. *Raw Material*

In Ecuador, there is no production of domesticated mortiño for mass marketing, but it is the small collectors who go in search of the berry in the moors or in specific sectors where this fruit grows. Very few places in the country have been dedicated to its production, for example, Hacienda Los Mortiños, located in the Pedregal Valley, on the slopes of the Cotopaxi volcano, which is located at 3,620 meters above sea level. It was a farm built from 2005 to 2011 in its area of production and cultivation of mortiño. This farm has focused mainly on the cultivation of the berry to be able to provide for the clients and guests who arrive at the hotel and restaurant. However, they have not been harvested or planted in large quantities for off-farm consumption or mass sale (Ecuador Travel, 2017).

Chart 10: Aerial view of Hacienda Los Mortiños and its surroundings



Photo taken from: Hacienda Hotel Los Mortiños (2021). GoRaymi

On the other hand, the Sumak Mickuy company, created in 2007, has focused on rescuing and dehydrating Andean fruits for local consumption. The berries are obtained from small collectors in the sector, who are responsible for harvesting the fruit mainly from December to May since these are the periods in which more flowering and maturation of the wild fruit occurs (Rodríguez B., 2015).

Several farms produce mortiño to be sold as raw material to companies that produce jam, wine, dehydrated fruit, among others. In the Sierra, there are at least 10 haciendas that produce mortiño, and several communities that collect the product and sell it inside the country. Each year is obtained at least 5 tons of mortiño per hectare.

2.2. Competitors and Substitutes

2.1.2. Competitors

The local mortiño market is extremely small and focused on a particular season, November when is celebrated the Day of the Dead in Ecuador, and the traditional colada Morada is consumed, which recipe contains fresh mortiño. However, and as has been stated previously, this fruit is not consumed outside these dates and is not known in depth, therefore, there are no competitors inside the country.

Abroad, Colombia, Venezuela, Peru, and Chile, are those countries that have varieties of mortiño; however, they do not sell it. Peru and Chile have focused their fruit exports on a particular product, the blueberry, which is the most consumed forest fruit worldwide. However, despite having mortiño in their moors, they are not exploited or consumed locally, so they do not export mortiño to the world either.

2.1.3. Substitutes

As substitute products we have the blue or black blueberry, which is the most commercialized and well-known berry in the world; to the lingonberry called cranberry; grapes, which despite not being known as berries, are biologically so; brambleberries, which are a variety of wild blackberries; and strawberries, which are one of the most consumed berries (Agrifood and Fisheries Information Service, 2017).

2.1.3.1. Blueberry.

According to information from Pascual (2020), the blueberry is a plant of the *Vaccinium* genus, which also has many wild bushes that produce round edible berries whose shape is almost spherical and which can vary in size, from 0. The clusters are white at first, but as they mature their color changes to reddish, when ripe they are blue. It is produced in different parts of the world, especially in the southern hemisphere, but the United States has its variant of this blueberry, as does the Netherlands (Pascual, 2020). How they are mostly marketed is through supermarket and hypermarket chains in the destination markets, and to a lesser extent in organic stores where the product and its benefits are displayed, highlighting its added value.

The incoterm used for the blueberry is 081040.

Chart 11: Blueberry



Source: BBC News (2011)

2.1.3.2. Cranberry.

According to Megan Ware (2019), the lingonberry belongs to the genus *Vaccinium*, of the subgenus *Oxycoccus*, it grows in the cold areas of the northern hemisphere. The lingonberry bush is short, stems 10 cm or less, with slender stems and small evergreen leaves. The fruit is initially white but turns deep red when ripe, then it is harvested with small machines that do not damage the product. These are native fruits of the United States but have also been cultivated in Chile and Canada (Ware, 2019). Although they are not widely marketed in South America, they are very popular in Europe at a time when their production cannot meet demand, being a substitute for blueberries. They are under the same tariff heading as blueberries, 081040.

Chart 12: Cranberry plant



Source: APAMA, Asociación de Productores de Arándanos de Argentina (2015)

2.1.3.3. Brambleberry.

According to Espinosa (2020), the brambleberry is a wild plant from which the fruits are harvested, small black or very dark, aromatic, and acidic. They are rich in vitamins and minerals. In addition, they provide a large amount of fiber and contain few calories that benefit health. It is a bush that forms thorny stems of up to 4 meters that extend along the ground. The flowers form berries that are formed from the grouping of many small black fruits.

Brambleberries are largely marketed in the United States, United Kingdom, Germany, and other countries of the European Union, and a very low percentage in the southern hemisphere. The tariff heading for fresh brambleberries is 081020, while frozen blackberries use the tariff heading 081120 (TradeMap, s.f.).

Chart 13: Brambleberry plant



Source: Proain (2020)

2.1.3.4. Grapes.

Grapes are fruits that come out from the vine in the form of clusters. It is a juicy, rounded berry that grows in clusters. The color of the fruit can be green, purple, or black, depending on the variety. Its meat is white or purple, and with a sweet flavor with plenty of

antioxidants, minerals, and vitamins. They are grown almost all over the world, from Europe to the Americas, and in each territory, new varieties will tend to emerge that, by standards, are used for winemaking, but also jams (Penelo, 2020). The grapes are produced almost all over the world, from Chile and Argentina in Latin America, to South Africa and Australia. The main markets for this product are the United States, the United Kingdom, the Netherlands, Germany, and China with tariff heading 080610, which belongs to fresh grapes.

Chart 14: Grapes



Source: Hansen (2020)

2.1.3.5. Strawberry.

The strawberry is a conical-shaped fruit, of variable size (between 15 and 22 mm in diameter), crowned by small green and red leaves. What most characterizes this fruit is its intense aroma which characterizes it as a kind of *Fragaria*. It is cultivated in several countries of the world, being that it began in France and Spain and during the colonization this plant was eliminated in other places, even being present in Asia. In Latin America, a variety of its own originating in Chile was found, with which the European strawberry was mixed, and the strawberry was created, a more resistant and tasty variety (Valero, Rodríguez, Ruíz, Ávila, & Varela, 2018).

The main strawberry producers are Mexico, Spain, the United States, and the Netherlands, while its main markets are the United States, Canada, the United Kingdom, and Germany. They are exported under tariff heading 081010, which corresponds to fresh strawberries

Chart 15: Strawberry



Source: Últimas noticias (2018)

2.1.3.6. Comparative Frame of Nutritional Properties.

Table 6: Comparative Frame of Nutritional Properties per 100 gr of Blueberry, Red Blueberry, Blackberries, Grapes and Strawberry

Nutritional properties for 100 gr	Blueberry	Cranberry	Brambleberry	Grapes	Strawberry
Carbohydrates	6,05 gr	13,42 gr	13,84 mg	18,1 gr	5,51 gr
Fats	0,6 gr	0,14 gr	0,7 gr	0,16 gr	0,4 gr
Water	87,4 gr	87,8 gr	88,15 gr	84,29 g	10,9 gr
Proteins	0,3 gr	0,625 gr	-	0,72 gr	0,81 gr
Fiber	1,7 gr	2,4 gr	7 gr	0,9 gr	2,2 gr
Potassium	72 mg	44 mg	162 mg	191 mg	190 mg
Calcium	14 mg	5,4 mg	42 mg	17 mg	25 mg
Vitamin C	12 mg	7,7 mg	30,2 mg	4 mg	60 mg
Pantothenic acid	12 mg	-	-	-	-
Phosphorus	10 mg	6 mg	22 mg	22 mg	26 mg
Magnesium	6 mg		20 mg	10 mg	12 mg
Chlorine	4 mg	-	-	-	-
Sodium	2 mg	1,1 mg	1 mg	2 mg	2 mg
Manganese	0,5 mg	3,3 mg	0,646 mg	0,1 mg	
Iron	0,5 mg	0,12 mg	0,89 mg	0,4 mg	0,8 mg
Copper	0,26 mg	-	0,165 mg	0,1 mg	-

Nicotinic acid	0,2 mg	-	-	-	-
Vitamin B1	0.014 mg	-	0,02 mg	0,1 mg	0,03
Vitamin B2	0.0024 mg	-	0,026 mg	0,1 mg	0,05 mg
Vitamin B6	0.012 mg	-	0,03 mg	0,1 mg	-
Zinc	-	0,05 mg	0,53 mg	0,1 mg	0,1 mg
Vitamin E	0,8 mg	0,72 mg	-	0,1 mg	0,2 mg
Riboflavin	-	-	-	0,02 mg	0,04 mg

Source: self-made based on data from Esther Pascual (2020); Megan Ware (2019); Espinosa (2020); Fundación Española de Nutrición (2018); Valero, Rodríguez, Ruíz, Ávila, & Varela (2018)

2.1.3.7. Comparative Frame of Nutritional Benefits.

Table 7: Comparative frame of Benefits of Mortiño Substitutes

Benefits	Blueberry	Cranberry	Brambleberry	Grapes	Strawberry
Improves vision	X			X	
Boosts the immune system	X		X		X
Antioxidant function	X	X		X	X
Boosts the body's collagen	X	X	X	X	X
Helps the intestinal function			X		
Detoxifying				X	
Anti-inflammatory effect					X

Source: self-made based on data from Pascual (2020); Ware (2019); Espinosa (2020); Panelo (2020); NBC Universal (2019)

2.3. PESTEL and FODA Analysis

2.3.1. PESTEL

Table 8: Political Factor

FACTOR	DESCRIPTION	RESULT	VALUE
POLITICAL		FAVORABLE	+1
<i>Current Situation</i>	Instability caused by discrepancies between the legislature and the executive that led to the possibility of a cross-death promoted by the National Assembly (La Tercera, 2021)	Unfavorable	-1
<i>Government Policies</i>	Increase in Income Tax for people with monthly earnings of more than USD 2,500. Reduction of the Value Added Tax (VAT 12%), tax facilitation for small and medium-sized companies (Gómez Ponce, 2021).	Favorable	+1
<i>Foreign Trade Policies</i>	Establishment of the Operating Regulations of the National Committee for Trade Facilitation that covers the reduction of time in commercial operations and procedures for export (Ministry of Production, Foreign Trade, Investments and Fisheries, s.f.).	Favorable	+1
<i>Investment Protection and Intellectual Property</i>	There is the Organic Code of Production, Trade and Investments (COPCI) that categorizes investments: productive investment, new investment, foreign investment, and national investment. The COPCI also contemplates and protects the registration of sectoral brands and country brands; of invention patents; and art protection (Mora-Bowen, 2018).	Favorable	+1
<i>International Political Alliances</i>	Ecuador joined the Pacific Alliance as an associate country and is expected to become a member state in the near future (Presidency of the Republic of Ecuador, n.d.). The country has bilateral treaties in force with South Korea on road construction, trade facilitation and South Korean investments in Ecuador, etc. (Ministerio de Producción, Comercio Exterior, Inversiones y Pesca, n.d.).	Favorable	+1

Source: self-made

Table 9: Economic Factor

FACTOR	DESCRIPTION	RESULT	VALUE
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ECONOMIC		FAVORABLE	+2
<i>Current situation</i>	Debt with the International Monetary Fund of 6 billion dollars that caused riots and paralysis in the country with losses of 821.68 million. According to data from the Central Bank of Ecuador (2021), in 2020 the country's Gross Domestic Product was USD 66,308 million, which represents a drop of at least 7% compared to the GDP of the previous year.	Unfavorable	-1
<i>Global Picture</i>	The 2021 economy will grow 5.7% and 4.9% in 2022. Specifically, East Asia and the Pacific is forecast to grow 7.7% in 2021 and about 5.3% in 2022. And in Latin America and the Caribbean the regional economy is expected to grow by 5.2% in 2021 and 2.9% in 2022 due to the pressures of the pandemic and the appearance of new variants (World Bank, 2010).	Favorable	+1
<i>Taxes</i>	Ecuador, in relation to other Latin American countries, mandatory taxes reach 23% of GDP, a high percentage that affects the development of companies. The taxes that are paid are the Value Added Tax, the Special Consumption Tax, the Income Tax (BBC News Mundo, 2019).	Unfavorable	-1
<i>Country risk rating</i>	2021 began with a country risk of 1,062 points; however, in February and March there was a daily average decrease of -0.1, 1,202 points and 1,264 points, respectively. By April 2021, the country risk fell to 824 points (Sánchez, Vayas, Mayorga, & Freire, 2021).	Favorable	+1
<i>Balance of payments</i>	According to data from the Central Bank of Ecuador (2021), in 2019 the balance of payments balance was -61 million dollars despite the October protests; and for 2020 the balance of payments had a positive balance in surplus, of 2,468 million dollars.	Favorable	+1
<i>Inflation, Growth and Debt</i>	-The Ecuadorian economy decreased by 7.8% in 2020, which with past years represents growth of less than 1%. -The inflation rate for 2020 was -1.50%, which reflects a decrease in the product price index compared to December 2019, whose rate was 3%, and throughout the year it was 1.94 (Sandoval, 2021).	Unfavorable	-1

	-During 2020, as GDP fell to 96,677 million dollars due to the pandemic, the public debt went from USD 57,317 million to USD 63,164 million, which is equivalent to approximately 65.3% of GDP (Public Expenditure Observatory, 2021).		
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Source: self-made

Table 10: Social Factor

FACTOR	DESCRIPTION	RESULT	VALUE
SOCIAL		FAVORABLE	+1
<i>Social Stability</i>	In reality, there is no high level of social unrest regarding certain groups that seek specific political or social objectives (Pérez, 2012), but there is high instability, especially those that limit social stability, including crime, the exclusion of groups vulnerable and extreme poverty. This makes Ecuador a country with reduced social stability (Torres A., 2006).	Unfavorable	-1
<i>Demography</i>	According to projections of the National Institute of Statistics and Censuses (INEC, 2010), the population of Ecuador has an average annual growth of 1.6%. In other words, by maintaining population growth, there is also a greater number of people who in the future may be part of the market and the productive force of the country.	Favorable	+1
<i>Employment trends</i>	According to INEC (2016), there has been a relative stability on employment, with a slight increasing trend. However, adequate employment in the country only reaches 32.4%, while unemployment is 4.9%.	Favorable	+1

<i>Living confitions of the population</i>	On one hand, a more positive scenario is observed, when taking into account a gradual increase in basic and public services. On the other hand, these efforts have not been sufficient to cover the most basic needs of the entire population, for example, 32.5% do not have access to a drinking water network, and approximately 50% of the population does not have sewerage (ECLAC, 2010).	Unfavorable	-1
<i>Trends and fashion</i>	In recent years, the reduction of fats, sugar and their derivatives has been reduced worldwide, as people seek healthier options to eat, including the consumption of superfruits (ProEcuador, 2015).	Favorable	+1

Source: self-made

Table 11: Technological Factor

FACTOR	DESCRIPTION	RESULT	VALUE
TECHNOLOGICAL		FAVORABLE	+1
<i>New technologies impact</i>	According to the research from the ADEN Institute, Ecuador occupies a tenth place among 18 economies analyzed in its Competitiveness Ranking for Latin America 2017. Being at a level below the average is due to the access to technology since, according to the research, Ecuador has a qualification of 3,6 over 10 points (ADEN Institute, 2017).	Favorable	+1
<i>Research and technological development investments</i>	In Ecuador, the number of public funds destined for development increased, achieving USD 152 million, i.e., it rose to 0,16% of the GDP in 2013. Although this number may appear high, the investment is much below the regional average, which is 0,89% of the GDP (Loor & Carriel, 2014).	Unfavorable	-1

<i>Automation of production process</i>	Although many production processes may automate to reduce costs, such as packaging in agricultural production, some processes may not be automated, for example, mortiño needs to be collected manually and very specific to not harm the plant and let the fruits that have not been mature.	Neutral	0
<i>Information and Communication</i>	Even if in past points limited access to technology and development can be observed, there have been some advances in certain areas, mainly in those of communication and information, as exposed by the National Institute of Statistics and Census (2014).	Favorable	+1

Source: self-made

Table 12: Ecological Factor

FACTOR	DESCRIPTION	RESULT	VALUE
ECOLOGICAL		FAVORABLE	+3
<i>Law in favor of environment</i>	In the Constitutional Norm has been added laws and regulations related to the environment. This represents innovation and a change compared to previous regulations because in this one Nature is elevated to a subject of rights that enjoy rights (Constitution of the Republic of Ecuador, 2008).	Favorable	+1
<i>Control Organisms</i>	The Environment Ministry is a public organization that regulates environmental topics, the same that counts with many secretariats and attention points in different cities of the country (Ministry of Environment of Ecuador, 2017). It works with other organisms, such as Decentralized Autonomous Governments, local and international NGOs, etc., which collaborate with the control and surveillance inside its powers.	Favorable	+1
<i>Seasons and Climate Changes</i>	By having the Andean Mountain Range and the Amazonian territories, Ecuador has a variety of altitudes that, together with the country's location in a tropical zone, presents a series of different floors and climatic conditions that are suitable and favorable for planting and harvest of a great diversity of products (Ministry of Environment of Ecuador, 2016).	Favorable	+1

<i>Pollution</i>	According to the region and the anthropic activities in Ecuador, it presents different types and levels of pollution. In plantations and agricultural zones, pollution of hydric fonts and earth is more frequent, especially for the waste of chemical and biological products. While near populated centers and industrial or mining zones there is anthropic pollution.	Unfavorable	-1
<i>Companies and sustainability</i>	Pollution and scarcity of raw materials have been factors that have boosted the importance of sustainability, thus certain companies have begun to negotiate and redirect their operations ethically and sustainably and to adhere to carbon footprint objectives established by authorities and public administration (Gardner Curtis, 2020).	Favorable	+1

Source: self-made

Table 13: Legal Factor

FACTOR	DESCRIPTION	RESULT	VALUE
LEGAL		FAVORABLE	+2
<i>Current legislation in the local market</i>	Ecuador has a wide system related to regulations and trade laws because it seeks to promote justice and adherence to the law in commercial activities. Thus, the Constitution recognizes private property and the ability to carry out production and marketing activities (Constitution of the Republic of Ecuador, 2008). There are regulations of the conditions of equality in the market to reduce and limit monopolies and oligopolies (Superintendencia de Control del Poder de Mercado, 2013).	Favorable	+1
<i>Labor legislation</i>	In the country, laws, and norms generally do not favor the employer, but the worker. Thus, some forms of labor relations have been eliminated in the last years which makes work precarious, such as outsourcing (Código del Trabajo, 2015).	Favorable	+1

Source: self-made

2.3.2. Berries Market SWOT.

Table 14: SWOT Matrix

STRENGTHS	OPPORTUNITIES
• The berries market is growing (over 50% in Europe and 30% in Asia). • Diversification of berries consumption. • Distribution system preset (supermarkets, street markets and organic stores) both for the berries and for the fruits that set a pattern about how to do it in South Korea. • Market with ecological and organics tendencies. • In Ecuador, there is an extension of wild mortiño and in plantations of small farmers that would be enough to supply the market demand. • ProEcuador commercial office in Seoul to position national products in that market (Enríquez, 2016).	• There are not many potential competitors in the market nor mortiño exports so this initiative would classify the country as a pioneer in the exploitation and commercialization of the product. • Possibility of the product to be positioned correctly in the market with the tools that South Korean distributors already know and practice. • Highlight nutritional components of mortiño over other berries and classify it as a super fruit with more antioxidants, which represents a competitive advantage over the other berry exporters.
WEAKNESSES	THREATS
• Do not count on massive production of domesticated mortiño may generate that there is no perennial production during the year. • If there is no information about how to treat the product during the harvest and transport of it, it can be harmed easily	• Uncertainty about the status of the treaties signed between South Korea and Ecuador regarding the marketing of fruits, as well as their tariffs. • The threat that freight, both air, and sea, will continue to rise in price, so the final cost of the product would increase and

and it may result as a direct loss. • There is no known about long-term production. • There is no production at the level of other products that are easier to market and that have places destined to their production.	would not be attractive in the target market compared to other options. • That the intermediaries do not accept the conditions of purchase and sell and that adequate commercial relationships cannot be established. • Diseases or pests that would come to affect the crop and new suppliers have to be found, or the quantity of mortiño due to this problem would decrease and does not satisfy the demand.
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2.4. Product Entry Feasibility Analysis

2.1.1. Consumer profile

- High standard of living.
- They are interested in keeping a healthy lifestyle and a youthful appearance.
- They consume healthy food, especially organic, natural and dietetic products that has an international certification. For that reason, they reduce their consumption of alcohol and cigarettes.
- They tend to follow trends and are also based on those who impose them, whether they are pop stars, actors, or influencers, which greatly influence their consumption preferences.
- They are not afraid to pay high prices at the moment of buying products of quality and renowned brands.
- They are interested that the product has also an excellent after sale service that is always available.
- They are likely to buy foreign products.
- High levels of online shopping (Simfruit, 2017).

2.1.2. Shopping Trends and Habits of South Korean Consumers

- Based on a survey to the final consumers realized by Simfruit Colombia (2017), the factors that South Koreans consider at the moment of buying fruits are freshness (29,2%), price (24,2%), the degree of sugar it contains (11,7%), the birthplace (11,5%), the productive zone (5,5%) and the organic certification (1,5%), etc.
- *Compulsive consumption*: the purchase is instant and emotionally made within the same establishment where the product is commercialized.

- *Supply polarization*: It looks for the cost or cheapest at the moment of making a purchase, and usually there are no middle points.
- *Brand image*: loyalty to a new foreign brand which is associated with quality and good service, also, are related directly with the image of the country.
- *Technological addiction*: As being at the forefront of the latest technological innovations in the world, and being South Korea one of the countries with the most advanced technological level, they also use these mechanisms to know and purchase products.
- *Purchase frequency*: At least 46,3% of the population buys once a week in supermarkets, convenience stores, and traditional markets; 20% buys once each fifteen days, and 17,6% between two or three times a week (López, 2016).

2.1.3. *Salary Expenses in South Korea*

Currently, the average salary in South Korea is USD 2.356,206, while the last one was USD 2.258,921, an increase of almost one hundred dollars, and it is one of the highest monthly incomes in the world. Nevertheless, it should be emphasized that living in South Korea is also costly. In the past two years, the South Korean economy has suffered some decreases in the minimum salary due to the economic contractions because of the Covid 19 pandemic (Korea Trade Investment Promotion Agency, s. f.).

According to KOTRA (Korea Trade Investment Promotion Agency) in 2020, the average monthly consumption expenditure of South Korean households recorded 2,40 million won (approximately USD 2.038.858,56), which means a fall of 2,3% compared to 2019. About expenses in food and drinks, this is 14%; home equipment, 9,8%; and health is 9%. The items of expenses in Clothing and Footwear had negative growth of 14,5%; in Entertainment -22,6%; in Education -22,3%, and in Restaurants and Hotels -7,7%.

On the other hand, there has been a fall in the expenses of the shopping basket mainly due to the increase of consumption in restaurants and hosting services of 4,88%, which the last year was 68,6 trillion won, approximately USD 59.920 million (Oficina Económica y Comercial de España en Seúl, 2021).

According to the data from the Economic and Commercial Office of Spain in Seoul (2021), during 2020, 69,9% of the users of the internet used at least one digital platform to shop products such as cosmetics, food, to ask for different services like deliveries, etc.

2.1.4. *Statistical Data on the Consumption of Blueberries and Berries in South Korea*

South Korea is one of the countries whose Gross Domestic Product is higher, and in 2020 it was 1,631 billion dollars. While its GDP per capita was USD 31.489,123. These last values represent the growth in purchasing power of the population, which has driven them to increase their demand for foreign products that would be healthier and more diverse, especially related to food, such as fruits and vegetables (World Bank, s.f).

According to a market report realized by Simfruit Chile, around 75% of foods consumed in South Korea come from abroad, being fruit one of most demanded products and that have been able to import a greater variety (2017).

Regarding the consumption of fresh fruits, in the last twenty years, it has increased 1,7% annually. Tropical fruits imports during 2015 were 0,7 million tons, i.e., 1,164 million dollars approximately. Within these imports, there are two groups: first, traditional fruits, such as apple, pear, peach, watermelon, and grapes, with a percentage of 44,9; and second, tropical fruits, such as banana, pineapple, dragon fruit, and mango, that represents 20,3% of this item. Blueberry, within the berries group, represents 2% (López, 2016).

Their consumption of dry raisins, blueberries, and plums come from imports from the United States, which is their biggest provider of this type of product. While the biggest providers of blueberry to South Korea are Chile and the United State. Nevertheless, fresh blueberry has a substitute which is frozen blueberry whose lower price makes more attractive the product in times of less offer; it can also be sold during the whole year. 35% of this frozen blueberry is used as raw material for the food industry that transforms them into jam, candies, and juices (López, 2016).

2.1.5. *Ecological and Organic feeding in South Korea*

In 2019 in South Korea, organic foods had a value of 395 million dollars, and in the last 5 years, their average annual growth rate has been 3,93%. The country has an ecological production: rice, vegetables, and dairy products. Meanwhile, the rest of the products like fruits, processed and fresh vegetables, as well as juices, are imported.

The main reason for the South Korean inhabitants to acquire ecologic products is due to the concern for health. Thus, in 2018, 58,7% of homes purchased ecologic foods, but only 12,4% did it weekly due to their high price in the specialized stores.

On the other hand, the organic food market in South Korea is the second largest in Asia after China. According to the Economic and Commercial Office of the Embassy of Spain in Seoul (2020), the market is expected to continue growing, and they also assure that this tendency will increase in the future because consumers will be interested in purchasing healthy products as a result of the Covid 19 pandemic.

With this information, it can be concluded that the project is favorable and has great opportunities for the product to consolidate in the market because South Korea already has a well-established foreign fruit market with its methods of distribution and growing demand. About prices, even though it may seem exorbitant, it is coherent with the tariff reality of the country because, as noted above, customs duties to pay are high in comparison to their purchasing power. The mortiño to export will count with certifications that will classify it as fair trade and organic product that will favor the destination country where local consumption trend is about health, beauty, and conservation.

2.5. Financing

To finance the project, there will be needed equity capital as a partner contribution and financing from banks to be able to buy machinery and cover production and export expenses.

2.5.1. Investment Plan

Table 15 details the investment needed for the project, being the initial investment of \$452.571,42, which will be covered as follows:

- 60,76% loan from BanEcuador, which is \$275.000 at 11% per year for 3 years.
- 39,24% partner contribution, which is \$177.571,42.

The investment plan considers working capital (machinery), direct costs (workforce and raw material), indirect costs, maintenance, advertising, certification and exportation expenses, and cost of sales.

The mortiño export quota that is planned to cover is 11% (30.000 kg) of the exports of berries to South Korea with the tariff item 081040, that is, 27.021 annual tons. The quote of

30.000 kg is also a quantity that the country can produce with no problem due to the number of mortiño-producing farms and of the communities that commercialize it internally.

Table 15: Project investment

Required investment	Quantity	Unit cost	Total value
Raw Material			\$30.000,00
Mortiño	30.000	\$1,00	
Working Capital			\$24.400,00
Conveyor van 6m	1	\$4.800,00	
Moisture conditioner	1	\$800,00	
Packaging machine	2	\$2.500,00	
Telemetry system	8	\$300,00	
Pre-cold Chamber	2	\$3.000,00	
Cold chamber	2	\$2.700,00	
Operating Permits			\$400,00
Workforce			\$21.535,50
Workers	10	\$425,00	
Indirect Costs			\$48.250,0
Reception and washing		\$450,00	
Labels	400.000	\$0,01	
Packaging	200.000	\$0,15	
Wooden container	4.000	\$1,00	
Basic services			\$4.850,00
Maintenance			\$12.000,00
Plant maintenance		\$500,00	
Equipment maintenance		\$500,00	
Surveillance			\$14.287,10
Surveillance system	2	\$400,00	
Security guards	2	\$425,00	
Insurance			\$45.000,00
Administrative expenses			\$168.962,05
Administrative salaries		\$4.850,00	
Rent		\$2.500,00	
Office supplies			\$4.000,00
Advertising expenses			\$32.100,00
Web page		\$600,00	
Web page maintenance		\$425,00	
Advertising in South Korea		\$19.800,00	
Certification costs			\$4.689,42
Fair Trade Certification		\$2.739,42	
Organic Certification		\$1.950,00	

Sales Expense			\$37.987,35
Sales department	3	\$900,00	
Export costs			\$8.960,00
Documentation		\$1.000,00	
Temporary warehouses		\$750,00	
Inspection and control		\$180,00	
Customs approval		\$250,00	
Port and terminal		\$550,00	
Inland transport		\$1.500,00	
Insurance (rate of 0,5%)		\$250,00	
TOTAL ANNUAL COSTS			\$452.571,42

Source: self-made

Table 16: Project capital structure

Financing	Value	Percentage
Equity capital	\$177.571,42	39,24%
Bank loan	\$275.000,00	60,76%
Total	\$452.571,42	100%

Source: self-made

Within the workforce, 10 workers are needed who are in charge of packaging of the products, controlling the pre-cold and cold chambers, as well as verifying telemetry systems. Within workers' salaries, there are included also the social benefits, as well as of the members of the sales department.

The containers to be used are 2 of 20 feet refrigerated.

2.5.2. 5-year Projections

2.5.2.1. Sales Revenue.

Sales revenue is given by the 2% growth of South Korean society, which implies a low increase; nevertheless, it means high incomes. The price of a 150 gr of mortiño is determined by international prices and by the production costs of the product, so a box of it will cost \$5,5.

In the following table can be observed the units to sell and the annual earnings.

Table 17: Revenue from sale of 150 gr of Mortiño projected for 5 years

Year	Units	Price	Annual Total	Monthly Total
1	\$ 200.000,00	\$ 5,50	\$ 1.100.000,00	\$ 91.666,67
2	\$ 204.000,00	\$ 5,50	\$ 1.122.000,00	\$ 93.500,00
3	\$ 208.080,00	\$ 5,50	\$ 1.144.440,00	\$ 95.370,00
4	\$ 212.241,60	\$ 5,50	\$ 1.167.328,80	\$ 97.277,40
5	\$ 216.486,43	\$ 5,50	\$ 1.190.675,38	\$ 99.222,95

Source: self-made

2.5.2.2. Direct Workforce.

Table 18 details the increase in salaries and benefits are given that the government salary increase percentage is 4%, taking into account also the average inflation in the last years, 1%.

Table 18: Workforce salaries and social benefits projected to 5 years

Year	Salaries and Social Benefits
1	\$ 21.535,50
2	\$ 22.844,86
3	\$ 23.758,65
4	\$ 24.709,00
5	\$ 25.697,36

Source: self-made

2.5.2.3. Raw Material.

Considering the population growth rate of South Korea population, 2%, raw materials will increase to the same extent, and the cost of mortiño quantity will increase according to the rate of inflation in Ecuador. Table 19 details the 5-year breakdown.

Table 19: Raw material costs projected at 5 years

Year	Quantity	Price	Total
1	\$ 30.000,00	\$ 1,00	\$ 30.000,00
2	\$ 31.500,00	\$ 1,05	\$ 33.075,00

3	\$	33.075,00	\$	1,10	\$	36.465,19
4	\$	34.728,75	\$	1,16	\$	40.202,87
5	\$	36.465,19	\$	1,22	\$	44.323,66

Source: self-made

2.5.2.4. Production Indirect Costs.

Production costs will increase according to the growth of the units to be sold since more wooden containers and labels are required.

Table 20: Indirect production costs projected at 5 years

Year	Total
1	\$ 48.250,00
2	\$ 49.010,00
3	\$ 49.785,20
4	\$ 50.575,90
5	\$ 51.382,42

Source: self-made

2.5.2.5. Projection to 5 Years of Maintenance, Supplies, Advertising, Sales, Reception and Washing, and Export Costs.

Since the number of units to export does not grow to a great extent, there is not an increase in the number of containers to use, therefore, this item will not increase during the 5 years.

The costs of the following items are maintained during the 5 years:

Table 21: Projection to 5 years of maintenance, office supplies, advertising, reception and washing, expenditure on sales, and export costs

Description	Total Annual
Maintenance	\$ 12.000,00
Office Supplies	\$ 4.000,00
Advertising expenses	\$ 32.100,00
Sales Expense	\$ 37.987,35
Reception and Washing	\$ 5.400,00

Export cost	\$ 8.960,00
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Source: self-made

2.5.2.6. Certification Expenses.

FAIRTRADE Certification expenses are constant during the five years, but the Organic Certification is not since the first year it costs \$1.950 and the following years \$950. The result of the first year is \$4.689,42 and of the following four years is \$3.689,42.

2.5.2.7. Financial Expenses.

The loan from the bank is for \$275.000 at 11% per year, and the following table shows the rent, interests payable, and the principal over the 3 years.

Table 22: Financial Expenses

Year	Unpaid Capital	Interests	Rent	Paid Capital
1	\$275.000,00	\$30.250,00	\$112.704,92	\$82.454,92
2	\$192.545,08	\$21.179,96	\$112.704,92	\$91.524,96
3	\$101.020,12	\$11.112,21	\$112.704,92	\$101.592,70

Source: self-made

2.5.3. Profit and Loss Statement

Table 23: Profit and loss statement

	1	2	3	4	5
Sales	\$1.100.000,00	\$1.122.000,00	\$1.144.440,00	\$1.167.328,80	\$1.190.675,38
Production cost	\$141.585,50	\$141.329,86	\$146.409,04	\$151.887,77	\$157.803,44
Gross Profit	\$958.414,50	\$980.670,14	\$998.030,96	\$1.015.441,03	\$1.032.871,93
Administrative expenses	\$168.962,05	\$168.962,05	\$168.962,05	\$168.962,05	\$168.962,05
Operating Permits	\$400,00	\$400,00	\$400,00	\$400,00	\$400,00
Surveillance	\$14.287,10	\$14.287,10	\$14.287,10	\$14.287,10	\$14.287,10
Advertising expenses	\$32.100,00	\$32.100,00	\$32.100,00	\$32.100,00	\$32.100,00
Sales Expense	\$37.987,35	\$37.987,35	\$37.987,35	\$37.987,35	\$37.987,35

Insurance	\$45.000,00	\$45.000,00	\$45.000,00	\$45.000,00	\$45.000,00
Export Cost	\$8.960,00	\$8.960,00	\$8.960,00	\$8.960,00	\$8.960,00
Certification Cost	\$4.689,42	\$3.689,42	\$3.689,42	\$3.689,42	\$3.689,42
Financial Expenses	\$30.250,00	\$21.179,96	\$11.112,21	\$0,00	\$0,00
Depreciations	\$2.396,00	\$2.396,00	\$2.396,00	\$2.396,00	\$2.396,00
Profit before Employee Profit	\$613.382,58	\$645.708,26	\$673.136,83	\$701.659,11	\$719.090,01
15% Employees	\$92.007,39	\$96.856,24	\$100.970,52	\$105.248,87	\$107.863,50
Profit before tax	\$521.375,19	\$548.852,02	\$572.166,30	\$596.410,24	\$611.226,51
12% Value Added Tax	\$62.565,02	\$65.862,24	\$68.659,96	\$71.569,23	\$73.347,18
22% Income Tax	\$114.702,54	\$120.747,45	\$125.876,59	\$131.210,25	\$134.469,83
Profit before Legal Reserve	\$344.107,63	\$362.242,34	\$377.629,76	\$393.630,76	\$403.409,50
5% Legal Reserve	\$17.205,38	\$18.112,12	\$18.881,49	\$19.681,54	\$20.170,47
Net Profit	\$326.902,25	\$344.130,22	\$358.748,27	\$373.949,22	\$383.239,02
(+) Depreciation	\$2.396,00	\$2.396,00	\$2.396,00	\$2.396,00	\$2.396,00
(+) Legal Reserve	\$33.575,59	\$35.331,04	\$37.454,46	\$39.199,81	\$40.960,03
(-) Paid-in debt Capital	\$82.454,92	\$91.524,96	\$101.592,70	\$0,00	\$0,00
Net Cash Flow	\$280.418,92	\$290.332,30	\$297.006,03	\$415.545,03	\$426.595,05

Fuente: self-made

Table 23 shows that the profits in the first year are already positives and high and that during the following four years these are maintained at an acceptable growth. In the first year, there will be a net profit of \$280.418,92; in the second year it increases to \$290.332,30; in the third year it reaches \$297.006,03, this slow growth is due to the payment of the bank loan; while in the fourth year, since there is no longer any need to cancel this item, the profits amount to \$415.545,03; and finally, the fifth year the profits are \$426.595,05.

2.5.4. *Average Payback Period*

As shown in table 24, the average payback period for the investment is 1 year and 7 months given the high level of income in the first year, which is maintained in the rest of the periods.

Table 24: Average Payback Period

Cash Flow	-\$452.571,42	\$280.418,92	\$290.332,30	\$297.006,03	\$415.545,03	\$426.595,05
Amount to recover		-\$172.152,50	\$118.179,79	\$415.185,83	\$830.730,86	\$1.257.325,91
Payback Period	1,59	19,12	MONTHS			

Source: self-made

2.5.5. *NPV y IRR*

The result of the Net Present Value (NPV) calculation is \$779.762,48, i.e., the project not only creates value but is also highly profitable because NPV is greater than zero. In the same way, when calculating Internal Rate of Return (IRR), the result is 62% which indicates the rate at which we will recover the investment. This is quite favorable because when compared to the CPCC of the project which is 7,34%, the IRR has to be higher to be acceptable.

Table 25: NPV y IRR

NPV	\$779.762,48
IRR	62%

Source: self-made

2.5.6. *Break-even Point*

To obtain the Break-even Point of the project, the following values must be known:

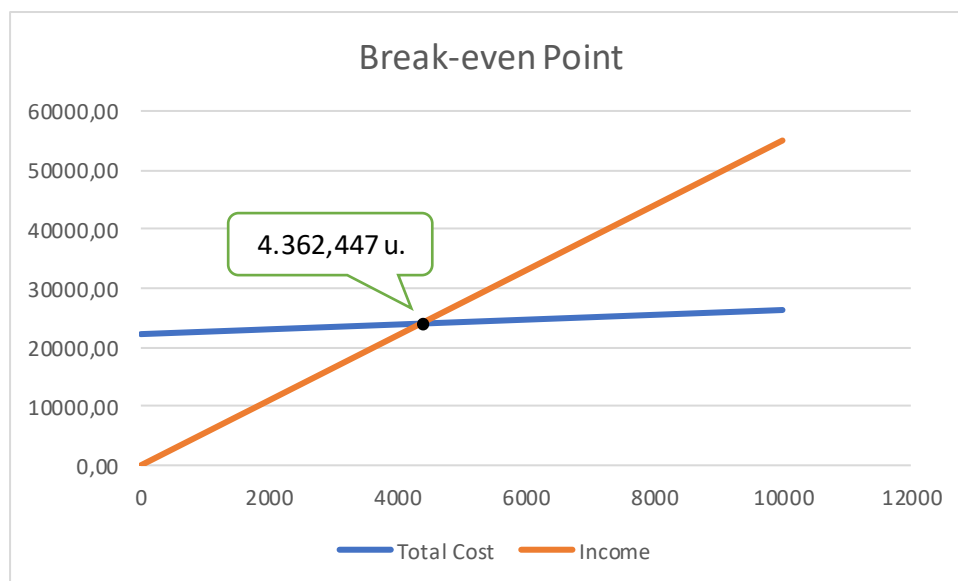
- Monthly Fixed Costs: \$22.212,5
- Variable Costs per unit: \$0,4082.

Thus, by applying the formula:

$$BP = \frac{\text{Monthly Fixed Costs}}{\text{Price} - \text{Variable Costs per unit}}$$

The result of the equation is 4.362,447 units which is the break-even point. The reason why it is low is due to the price of the product per unit of 150 gr, \$5,50. Therefore, it can be seen that with the minimum number of units sold, the project is above the break-even point and obtains a high percentage of profit.

Chart 16: Break-even Point



Fuente: self-made

With the data collected in this chapter, the following section covers the composition of the mortino logistics chain and the distribution site in South Korea, the documents required for

importation (permits from sanitary entities, regulations, and other non-tariff barriers), the specifications for shipping the product, as well as marketing and promotion strategies.

CHAPTER 3:

Action Plan

This chapter covers the project's action plan, in which the most relevant aspect are logistics, documental management and distribution points, the product's setting and the marketing strategies to be used to attract the consumer's attention. For this purpose, a questionnaire was sent to Luis Salcedo, zone specialist of Directorate 6 of the Ministry of Production, Foreign Trade, Investment, and Fisheries, who helped with his knowledge and expertise on the subject to determine certain aspects of the logistics chain, as well as the promotion of the mortiño. Unfortunately, it was not possible to obtain other opinions from entities such as Fedexport, KOTRA, or ProChile as there was no positive response to the e-mails sent.

3.1. Questionnaire.

The questionnaire obtained the following answers:

Question 1: How innovative do you think the product is?

As a result of the pandemic, there is a worldwide trend for the consumption of products that allow strengthening the immune system of people, based on a trend of a culture of consumption of healthy products, so the product has an advantage to be known and consumed in new markets or non-traditional markets thanks to the benefits it has and that makes is novel.

Question 2: How could the mortiño, similar to blueberry, compete effectively in the berry market?

It should be considered that the mortiño is an Andean product. Although there is a consumption of blueberries in different countries, it is necessary to analyze the target market, markets with similar consumer cultures, countries where there is a preference for the consumption of berries, or potential markets that thanks to a promotional campaign can generate that demand for a new product. In this case, the properties of the product can help to better promote it in new markets and, by highlighting them, it can compete with the blueberry and surpass it.

Question 3: Where do you consider the product should be commercialized, in a supermarket chain, or in chain of stores specializing in ecological and organic products?

To be able to recommend a sales point, it is necessary to analyze the distribution chain of this type of product in the target market. Likewise, we should analyze which potential customer profile I, as an exporter, am interested in contacting. It may be an importer who will then be in charge of distribution or a supermarket chain or specialized stores. This must be defined within the marketing strategy to be implemented as an exporter and on what you want from the product, if its competition is on price or on the added value of the product.

Question 4: What do you think is the greatest difficulty in positioning this product in the new market?

Since the product is of vegetable origin and fresh, it is important to know if the phytosanitary status of the product in the target market has been opened. If this is not the case, a request can be made to AGROCALIDAD to initiate the negotiation process so that the authorities of the target market approve the entry of this type of product. This may take time since it is a technical process of negotiation, verification of pests control techniques, among others. If there is no opening of phytosanitary status, a fresh product cannot be exported.

Question 5: What advertising techniques do you think would be appropriate to promote the purchase of mortiño in South Korea?

As for advertising activities, to this type of product, since it is edible, it must definitely be tasting, activations at points of sale, promotion or alliances with a gastronomic center, nutritionist centers, among others, seems to me to be an appropriate way. The consumer's curiosity must be awakened and their attention must be attracted. Let's remember that it is a new product and a culture of consumption must be created.

Question 6: What details or what do you give more relevance to when choosing an organic product?

In the international markets, the products that have private certifications that guarantee the quality and the characteristics of the product are highly valued. An international certification can be a good strategy to help marketing or sales in specific niche markets such as organic.

Question 7: How much influence does the price have on the purchase of this product, in relation with the advantages that this fruit has over other berries?

The price is an important factor when making a purchase decision, so the characteristics of the target market or the niche of the market to be targeted must be carefully analyzed. In this case, if the marketing strategy is oriented to organic products, some countries have a consumption culture and are aware of paying more for this type of product characteristics because they are synonymous health and wellness. There may be other markets in which this awareness does not exist, so the high price may influence the purchase decision.

Question 8: What do you think would be the best form of the packaging for this product?

The presentation of the product talks about presentations of 150 gr. for the final consumer, if so, the packaging must permit the conservation of the product from its shipment to its placement on the hanger and its permanence in it. For this, you could work with a food engineer who can help to develop appropriate packaging. Likewise, the master packaging must preserve the good condition of the fruit and even, if it is necessary, that the logistic means of transport chosen has climate control to preserve the product in the export process.

Question 9: How do you think using packaging that promotes sustainability influences purchasing?

It also depends on the consumption culture of the target market. For example, if it is a market in which there is a trend of consumption or demand for products, whose production process and packaging are related to sustainability. This factor will help to make a purchase decision and, in a certain way, create that link that allows the creation of a habit of frequent consumption.

Question 10: Do you know any limitations to export this product to South Korea due to the restrictions for the Covid-19 pandemic?

I do not consider that there are any limitations derived from the pandemic, rather this can be an opportunity, as was mentioned, most of the markets have sought and still seek products that help in the good maintenance of health. What I consider a limiting factor is that there is no phytosanitary status for the export of this fruit to South Korea.

3.2. Logistics and Distribution Channels

The logistic chain for the mortiño is based on that of the blueberry since this product is the most similar and already has a logistic chain. The incoterm to be used for the export of the mortiño is FOB (Free On Board) where our responsibilities end when the merchandise is on board the ship, which means that the importer is the one who assumes the costs of freight and insurance, in addition to the customs clearance procedures in South Korea.

3.2.1. Production Logistics

According to the Regional Agrifood Research and Development Service (SERIDA in Spanish), the distribution channel to be used for fruit depends not only on its final destination but also on its presentation. In the case of blueberries and cranberries, great care must always be taken with their transport method over long distances due to their inability to keep for long periods, as the fruit must be frozen to be transported (García, 2010). This same principle applies to the mortiño which, although it can be kept refrigerated for more days than the blueberry, requires special care in transportation.

The product supplied by Sierra Centro suppliers enters the warehouses in cardboard boxes with paper on the base to prevent the fruit from being damaged. Although it can be sold in the same containers in which fruit is picked during harvest, this is not the case since the first point of production is the storage of the fruit in a Precooling Chamber that adapts the mortiño for production. This chamber helps that the mortiño does not dehydrate due to the sudden change of temperature and to keep it fresh.

Chart 17: Pre-cold Chamber



Source: Gimei Group, s.f.

The entire production plant has fans that lower the temperature according to that of the pre-cooling chambers to avoid decompensation.

A very specific cold chain is used because of the risk of early damage to the fruit if it is not transported at the right temperature. As Luchsinger (2017) says, most fruits can remain a couple of days without refrigeration until they arrive at their destination because of enduring characteristics, but blueberry and cranberry are at the opposite extreme. Because of this, it requires powerful fans and evaporators that form the pre-cooling chamber that must be able to keep the fruit at the correct temperature before it enters the coolers where it will be stored. The fruit's own temperature and humidity will cause it to be damaged if there is even the slightest failure in the pre-cold chain. The air that the fruit warms up with its temperature is removed by the fan and replaced by the cold air thanks to the evaporator.

After that, they go to the coolers where the fruit waits to be washed, dried, and packed. The temperatures for the packing area and the temperature of the product must be in accordance so that the product coming out of the cold chamber does not have a decompensation as it would result in a problem of water condensation.

Once the fruit has been washed and dried, the packaging process begins in 150 gr plastic clamshells with openings on the sides, which allows for better ventilation, conservation, and control of the product. With the use of a conveyor belt, these boxes are located in wooden fruit crates of 100 dpi x 30,1 x 25,4, with a capacity of 50 clamshells each.

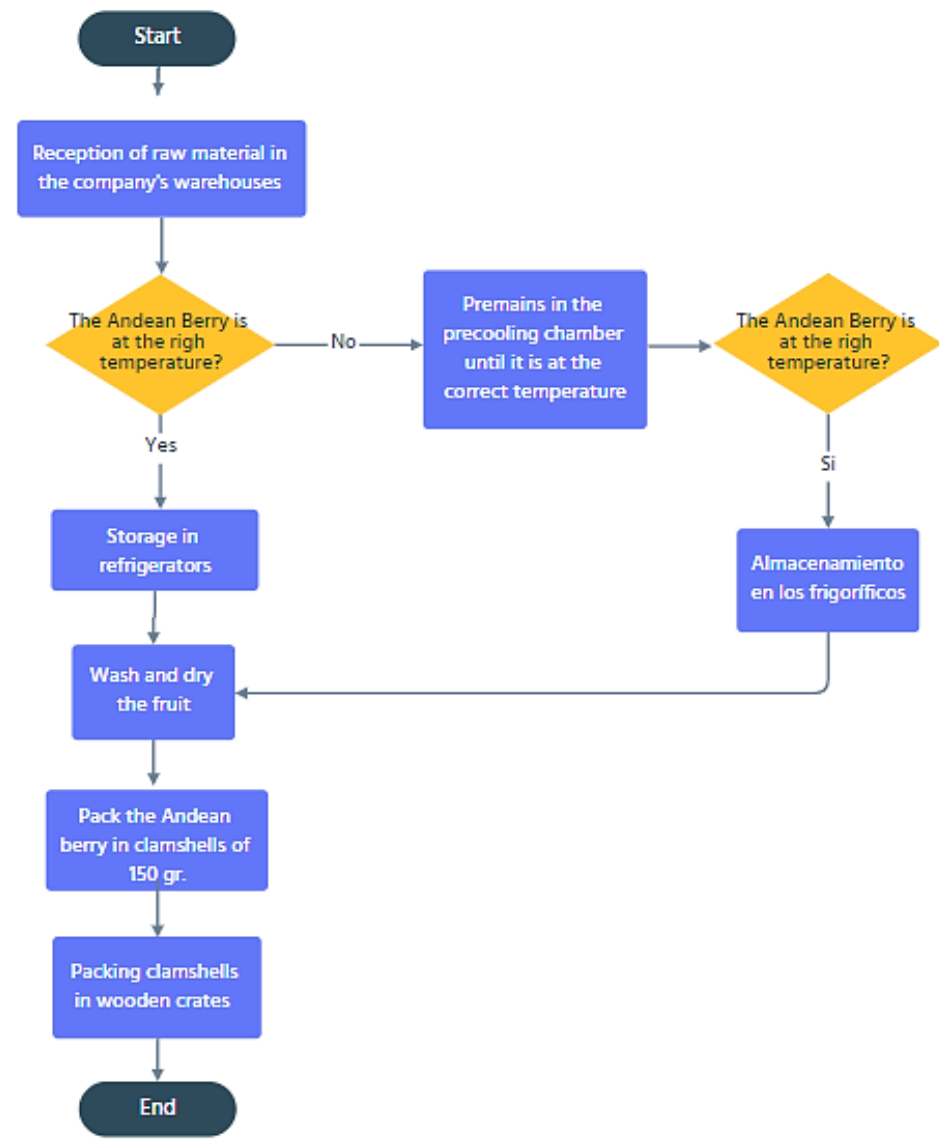
As Salcedo advises, this type of packaging that is used for long trips must ensure the conservation of the product, such as clamshells, and that also has a rigid control of the temperature of the load due to its characteristics. And since the product is organic and with an ecological impact, Salcedo recommends that the packaging should also be in line with these qualities after an analysis of the target market and the end consumer. Thus, to respect this trend, the packaging, although made of plastic, should have a low impact on nature, i.e., be biodegradable.

Chart 18: Clamshell



Source: Seine S.A., s.f.

Chart 19: Production logistics flowchart



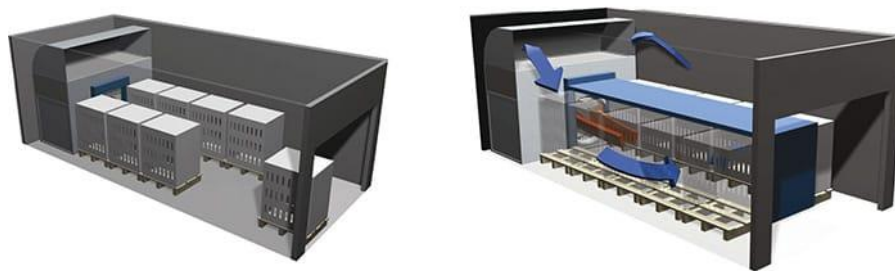
Source: self-made

3.2.2. *Export Logistics*

For the process of structuring the load to be transported, pallets are very important since they form a Californian tunnel where the fans are located at one end and the evaporators are located under them, in the middle are the pallets forming rows that are covered with plastic tents that form a vacuum through which the cold air passes. Nevertheless, the only flaw of this method is that because of the difference of materials in the structure, the zones closer to the fans cool faster than those that are farther away. However, this disadvantage can

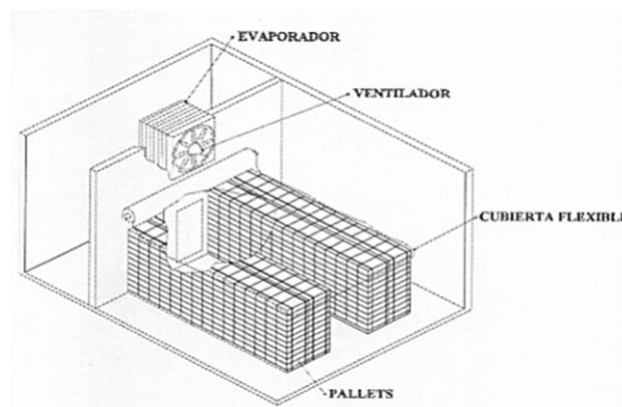
be exploited if those packaging materials that are more difficult to cool are placed near to the fans than those that will cool faster, thus maintaining a homogeneous situation among all the pallets.

Chart 20: Californian Tunnel



Source: Superfrigo, s.f.

Chart 21: Californian Tunnel Composition



Source: Servicios Agrícolas Agro-Regiones Ltda. (2016)

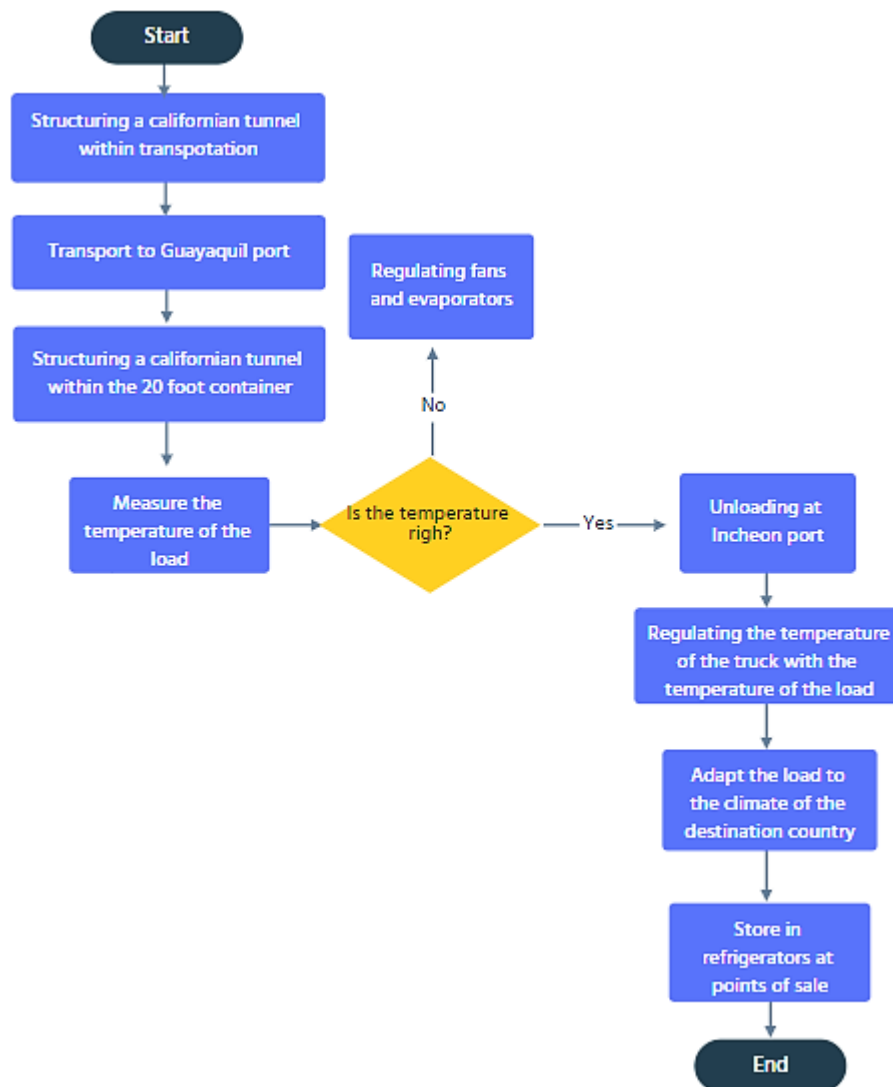
This process of creating a Californian tunnel is used for internal transport in refrigerated trucks where the pallets are placed until they reach the seaport of Guayaquil, as well as for the 20-foot refrigerated container.

To measure and regulate the temperature of the packages on the pallets during the transport, small 7 cm long sensors are needed that pass through the box and the clamshell. Wired or wireless telemetry systems are also used, which record the sensor data and store it in a computer from where it is monitored. Pallet monitoring should be made at least in 6 or 20 pallets, each one with 2 sensors, one where it is the coldest and one where it is the hottest. An ambient sensor is also necessary to provide data on the general state of the Californian tunnel.

During the trip, the container will keep a homogeneous temperature, neither too hot nor too cold, so that the fruit is preserved longer and, as this is a critical point in the chain, it must be controlled with one or more sensors in the engine area, at the door, under the pallets and in the middle; in this way, many information is provided that, in the worst case, will alert to faults that can be corrected in time.

Finally, when unloading the load at the Incheon port, South Korea, the importer should be careful with the temperature to which the fruit is being subjected, and that this is homogeneous to that which came in the container. Once the fruit has been acclimatized to the climate of the destination country, store refrigerators are optimal for holding the product while it is being sold (Luchsinger, 2017).

Chart 22: Export Logistics Flowchart



Source: self-made

3.2.3. *Distribution in South Korea*

Following the recommendations from Salcedo, in the distribution two aspects are analyzed, the consumer profile and the competitors' distribution. In the first place, the client profile is that of a consumer concerned about the health and the inclusion of organic foods in his diet; he focuses on the brand and the product's reputation, which involves its valuation abroad. There are no limitations about the price because he maintains a high level of social and economic life; and he is prone to follow trends related to any type of aspects, such as foods and beauty.

In the second place, the competitor's distribution is the blueberry. The main places where blueberries are commercialized are supermarkets, specialty stores, and greengrocers, whether organic or vegan. The rest of the distribution chain is supplied from those central locations in the destination country that aggregate market demand. Since blueberry has seasonal producers, such as Argentina that exports blueberry to Europe from October and supplies them all winter, distribution channels also take into account this variable based on which the prices are set, especially in the most demanding season (García, 2010).

Although it is more common to find blueberries in supermarkets than in specialty stores, this is because the product does not highlight its nutritional values, but is sold like a 'no branded' product which means that a package of blueberries will have blueberries from Chile mixed with those from Perú or Netherland, and this implies a low added value. This is a mechanism widely used in Asia to lower the prices and to make a foreign product more affordable and attractive. Nonetheless, the mortiño internationalization project does not plan to compete on price but quality and added value. Therefore, to make these attributes of the mortiño stand out, it is necessary to market it in a more appropriate place, in this case, an organic store.

Taking these aspects into account, the mortiño will be commercialized in Chorocmaeul (초록마을), a store that was founded in 1990 and which, over the years and the development of the organic trends, has become a market leader in ecologic products, both in food and in other categories inside South Korea. It has approximately 470 physical stores and an online store.

By being marketed in an organic store, the product's added value will be enhanced and a stronger image of its attributes will be established. On the contrary, if a supermarket

had been chosen as the point of sale, the mortiño and its image as an organic and nutritive product would have been affected.

3.3. Document Management

3.3.1. Documents and Permits necessities to Exports

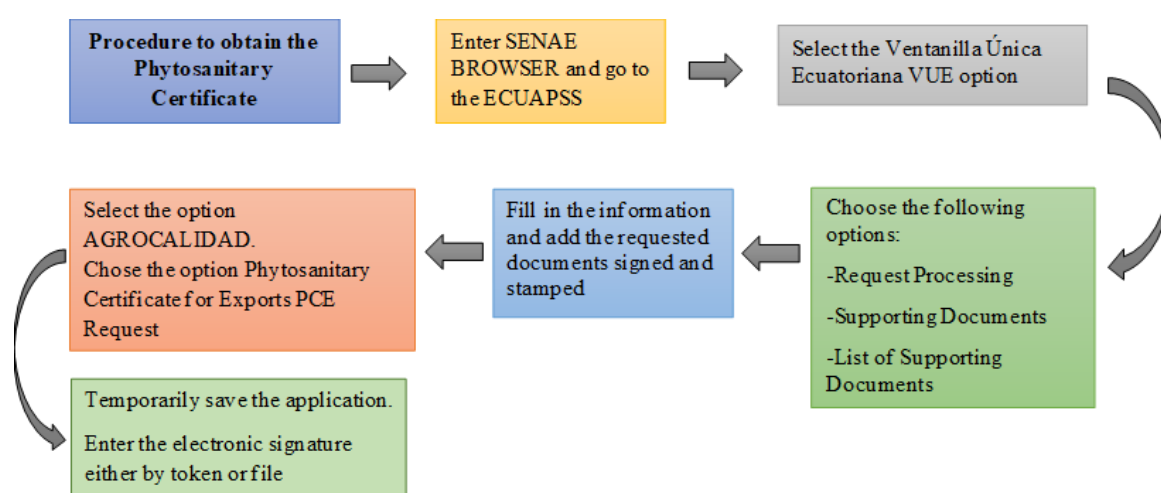
- Unique Taxpayer Registry (RUC in Spanish)
- Municipal Registry needed for the exercise of economic activities
- Fire departament permit
- Brand registry
- Certification of good manufacturing practices
- Permission from the Ministry of Public Health
- Categorization granted by the Ministry of Productivity
- The operating permit from the Phytosanitary and Zoosanitary Agency (ARCFZ in Spanish)
- Organic Certification
- Distinctive country seal ‘Mucho mejor si es hecho en Ecuador’
- Exporter registry
- Registry in the Ecuapass system
- Origin Certification
- Phytosanitary Certificate of Export of Organic Products
- Transaction or lot numbering certificate
- FAIRTRADE Certification

3.3.2. *Phytosanitary Certificate of Export of Organic Products*

The Phytosanitary Certificate of Export (PCE) was established by Resolution 0156 of the ARCFZ in 2019, and it was established that this document is responsible for certifying that the products are suitable for consumption and are free of pests, bacteria, and other organisms that may be harmful to the human being. It also endorses the phytosanitary requirements demanded by the destination country and the ability to know the phytosanitary condition of plants, vegetable products, and regulated articles before to their importation (AGROCALIDAD, 2019).

Salcedo mentions that is important to know the restrictions that exist to the entry of the product, and he recommends that, in case of not opening the phytosanitary status, it can be negotiated through AGROCALIDAD, although this process is subject to controls, load checks, and more procedures to endorse the merchandise as optimal for consumption.

Chart 23: Procedure to obtain the Phytosanitary Certificate

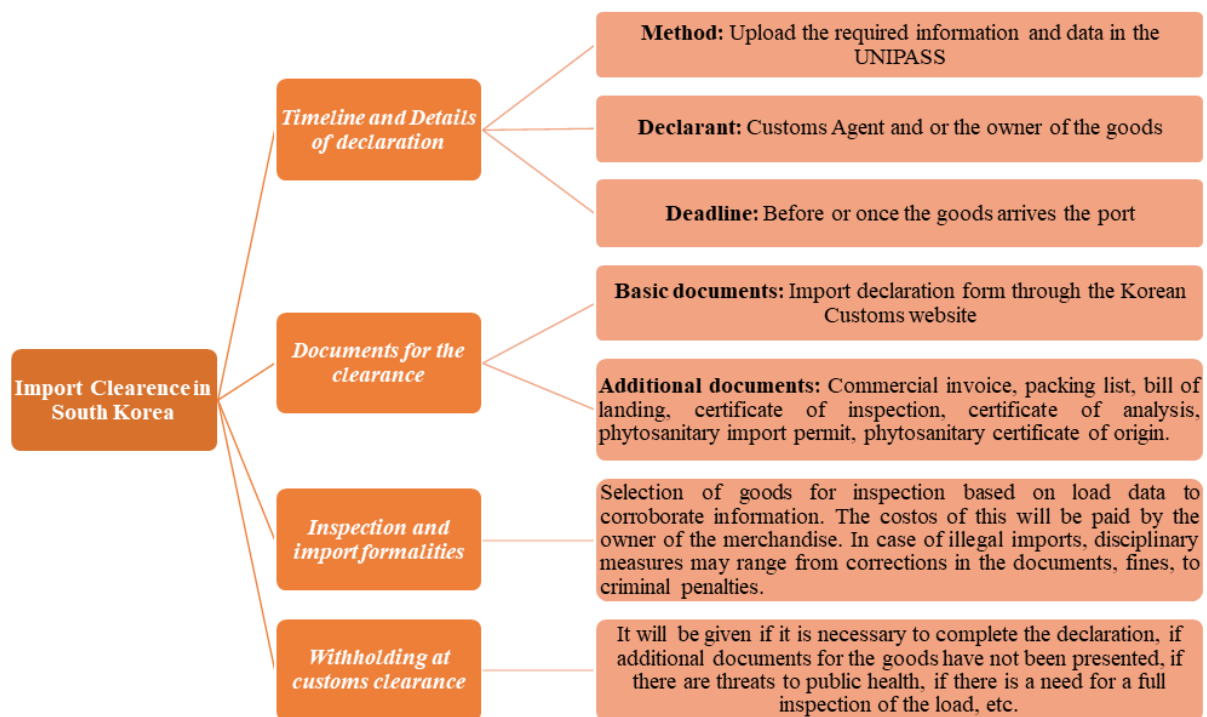


Source: self-made on basis of the information from Agrocalidad (2019)

3.3.3. *Import Clearance in South Korea*

Import clearance refers to a series of procedures for the nationalization of imported goods. The importer declares to the Chief of Customs the goods to be imported. The chief will review the declaration and accept it only if this is legitimate and complies with the Customs Act and other regulations. Subsequently, Customs issues an import declaration certificate to the declarant to ensure that the goods are in order. These processes are carried out through an electronic clearance system called UNIPASS (Korea Customs Service, 2022).

Chart 24: Import clearance in South Korea



Source: self-made on basis of the data from Korea Customs Service (2022)

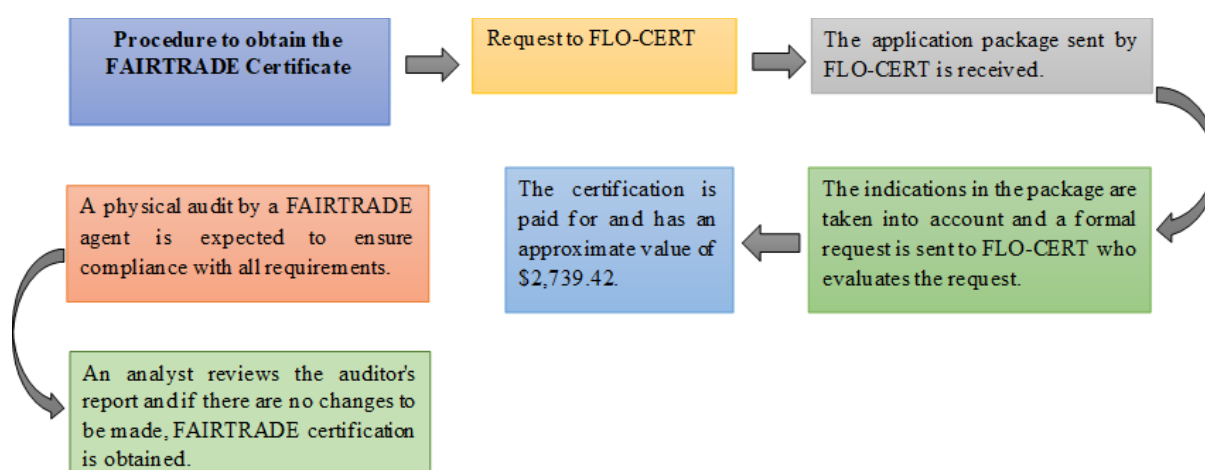
Once the declaration is accepted, the imported must pay the customs duties other taxes corresponding to this merchandise. The companies that have a high rate of compliance with the law may receive certain privileges, among them, the payment of the taxes after the clearance of the goods.

The Custom Chief, once the declaration has been approved, issues a certificate protected by several seals: the special customs seal, a watermark, a serial number, a barcode, and a ‘copy’ mark. Once the acceptance of the declaration has been confirmed, the goods can be removed from the bonded area or the bonded warehouse (Korea Customs Service, 2022).

3.3.4. *FAIRTRADE Certificate*

To increase the added value of the product and comply with the necessary requirements, it is essential to have the FAIRTRADE Certificate for traders. It should be emphasized that for obtaining this certification, the supplier of the raw material, in this case of the mortiño, may have its own FAIRTRADE Certificate that approves that the product has been given under optimal conditions for the small workers and suppliers of the fruit. Likewise, as being owners of the brand ‘The Andean Garden’ is necessary that all of the used supplies are FAIRTRADE certified.

Chart 25: Procedure to obtain the FAIRTRADE Certificate



Source: self-made on basis of the data from FLOCERT (2021)

3.3.5. *Organic Certification POA*

To obtain this certification is necessary to:

- Contact a certifying organism accredited by the Ecuadorian Service of Accreditation and registered in the Agency, in this case, KIWA has been selected.
- Register in the guide system with the Organic Certification, the organic management plan, the inspection report, and the labels stock declaration.

A contract will be made in which the marketer undertakes to:

- Comply with the provisions of the instructions and keep the relevant records of nature, quantity, lots, products, and inputs introduced to the production unit.
- Give access to the Certification Organism and the National Competent Authority to the facilities, as well as providing the pertinent sales and purchasing documents.

3.4. About the product

To make it easier to understand and pronounce the fruit, in English we have named it as Andean Berry.

Labeling: The label of the product is in Korean for easier understanding by the customer. It specifies the name of the product and the company, a brief description of the Andean berry, the weight, the certifications, the barcode, and sanitary specifications required in South Korea, such as the phytosanitary certificate.

The label's legend says: *The Andean berry is an ancestral fruit full of nutrients and benefits for health, such as antioxidants that prevent skin aging, and that has been consumed by the Andean communities as a fountain of youth and strength.*

Chart 26: 150 gr Andean berry package label



Source: self-made

Package: The material of which the 150 gr Andean berry package is made is biodegradable, elaborated on basis of renewable raw material, such as wheat and corn; in this way, both the production and packaging of the product will be linked to eco-friendly processes which will favor the image of the product.

3.5. Marketing and Promotion

The product is characterized for being organic and with broad benefits for health which, as Salcedo points out, blends appropriately with the current situation which, as a result of the pandemic, has generated a consumption of products that allow strengthening the immune system, as well as reinforcing a culture of consumption of healthy products. Salcedo also mentions that this is an advantage for the product to be known and consumed in new or non-traditional markets. Nevertheless, he points out that for the product to have the expected acceptance, a more aggressive promotional campaign must be made, principally because South Korea has already a high rate of consumption of blueberries and other berries, so, to

compete successfully with them, diversified and high-impact campaigns must be carried out to highlight the properties of the Andean berry.

Because of this, the promotional mechanisms to be used are the following, based on the market segment we are targeting (South Korean women between 20 to 45 years of age from middle to high social strata, and with organic behavioral tendencies):

3.5.1. *Tastings at International Fairs and Points of Sale*

One of the strategies to be used to attract the attention of the target public is to hold tastings at international fairs realized in South Korea, as well as tastings at the points of sale. Since for the vast majority of the public the Andean berry is a completely unknown fruit, it is coherent to carry out a tasting so that the customer gets to know the product and becomes familiar with it. This would be made in conjunction with the presentation of various dishes that could be done with the Andean berry, for example, jams, salads, juices and smoothies, sauces, etc. In this way, the customer not only will know the product but also how to consume it, which will increase the interest and the purchasing intention.

In these tastings, there would be a banner with the information and pictures of the product, a table with many units of Andean berry, and the dishes. To complement this publicity, a sales assistant will be instructed about the product so that she will be the one to approach the public and attract them to learn more about the Andean berry.

3.5.2. *Collaborations with YouTubers and Influencers*

Since the South Korean culture is widely related to the consumption by influence, especially if it is from celebrities or public figures, one of the mechanisms to attract the attention of the public is to realize collaborations with YouTubers that speak about health and

beauty, as with influencers known in the country. This is a very effective advertising medium in a society so linked to technology as it is the South Korean.

Appropriate people will be contacted and paid for their advertising services. Information about the product will also be provided, its benefits for health and its potential for beauty with food recipes that they recommend based on the Andean berry.

3.5.3. *Social Media and Website Promotion*

Another promotional strategy that has been taken into account is to use social media. South Korea is a country where the population is constantly connected and this provides the opportunity for the potential consumers to observe, inform and discover this new product through the internet. Through this means, a human connection between the target market and the brand can be generated since people are shown how this product, and specifically the brand, has helped the consumers, showing the real side of the company. This is possible through platforms such as Instagram, Facebook, YouTube, or even Tik Tok where the product can be promoted in a didactic and entertaining way.

Likewise, having a website will allow the consumers and potential consumers to give information about the product, the benefits it has for health, and many recipes that they can try with it. The website is a broader information site not only about the product but the company itself and the certifications that endorse it.

3.5.4. *Bus Advertising*

Buses are one of the alternatives that South Korean have to transport daily and, in comparison to advertising on television or radio, they cannot be turned off so people will see them for a long time. In South Korea is usual that the buses or big cars have LED screens on their sides where commercials and diverse advertisements are visualized. There is also the

advantage that they generate constant reinforcement of the product or the message about it because the bus passes several times a day and by moving it allows the advertisement to spread to different places of the city.

3.5.5. *Alliances with Gastronomic Centers and Nutritionist*

Lastly, offering to cafeterias, organic drink centers, or restaurants an alliance not only allows them to obtain the product first hand and with no intermediaries, but allows the Andean berry to show the taste of the product and incentivize household shopping. On the other hand, setting contact with nutritionists and telling them about the number of benefits for the health the product has, allows them to speak about this new alternative to their patients and they follow these recommendations to look and feel better.

Conclusions and Recommendations

The realized investigation allows us to conclude that the South Korean population and consumers are looking to buy products that focus on health wellness, prioritizing skincare, and that allow them to maintain the appearance of youth for a long time. That is why the Andean berry, due to its high antioxidant properties, is a profitable product for this market.

Since the Andean Garden has the need to become an exporter company of a recognized product, both for its flavor and quality, it is focusing on a more aggressive advertising campaign to create a differentiation with the traditional blueberry. Because of this, it is necessary to have good advertising and certifications that prove that the product meets what it offers, i.e., being organic and being a part of a fair-trade network, qualities that are highly appreciated in the target market.

Based on calculations made and the net cash flows that will be generated, is possible to recover the investment in a period of 1 year and 7 months. This means that from that moment on, the Company's profits will be free from the initial investment and could be reinvested more widely in the productive process.

This research shows that the exportation of Andean berry to South Korea is a project that can be made, first, because it has the necessary tools in the country and abroad to be able to realize the necessary export and import procedures; second because the calculations allow to observe a high profit in sales in a short time; and third, because of the characteristics of the product that are consistent with the target market.

It is recommended that, by observing the good reception of this product in the South Korean market, the analysis and exportation of other non-traditional products, such as golden berry, to this same market could be expanded.

For future investigation is recommended that conversations and negotiations be held directly with South Korean supermarkets to which exports are planned in order to deepen the analysis.

It is also preferable to have a delegate in Quito city who can directly approach the South Korean Embassy offices, unfortunately, they do not give information or help to those who try to contact them by call or mail.

Finally, it would be necessary to realize a survey to the target market after the purchase of the product as part of the after sales service to make visible any suggestion from the public and observe if there is any change that should be made.

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