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EXPORT FRUITS FROM SPAIN TO FINLAND

CASE: KARAMELO CITRUS S.L.L.

Thesis

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Thesis Abstract

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The target of this project is to analyse a line of exports of citric fruits from Spain to Finland, taking in account the characteristics of this kind of goods and requirements in weather and evaluating if it is worth the pain to deal with different areas in Spain in order to get this goods.

To achieve the purpose of this project and reaching a real deal with a Spanish company, all legal issues within inner European markets, risk, advantages and disadvantages of each area are taken in account, and the way to arrange the transport using the most economical and easy means. This project provides information about the goods, the logistical centres used as middle storage to reach Finland faster and keep the goods in good. It follows the advices of Karamelo Citrus and the information submitted by this company and completes this information with articles and webpages related to this area on different webpages.

Using the information and experience of a company already working in the international inner European market, we can provide Finland, a cold weather country with a wide range of fresh products which have been grown in warm and tropical and sub-tropical areas. The fact that this project answers to real needs are also showed along the thesis using several articles from some webpages.

Key words

Export, fruits

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1. INTRODUCTION

Since the European Union was born, its steps have led this association of countries to a closer and better understanding, commercial advantages and to specialization of each member.

Strategic advantages are used and decide what country is most able to produce better and to export to rest of Europe in time the goods that are not easy or are impossible to produce can be imported. So that, some countries not able to produce primary sector goods like agricultural products are developing their industrial sector or creating strong financial services to offer the rest of Europe in order to import in better quality and prices goods from other European countries.

History, weather, natural resources have been carefully studied by each country to give the best they can to the rest of Europe better than other countries do. In this process, the whole Europe gets profit.

Within this framework of European relationships and free flow of money, people and goods in most of countries, easier bureaucracy and quality control matching preset standards accepted within this area, the first idea to start this project was born.

South and north in Europe are completely different and in the Nordic group, Finland has a really different culture, life style and economy. Finnish main businesses are:

"In recent years, metal, engineering, and electronics products have accounted for half of the country's exports, with forest products accounting for another third. The revolution in high-technology industries has been dramatic. These industries did not become prominent until the 1990s but now produce a large and growing share of exports. The Nokia Corporation, known in the 1980s primarily for paper and rubber products, has an expanding international market for mobile phones, computers, and related telecommunications products.

After the mid-nineteenth century, foreign trade shifted toward Saint Petersburg and Russian markets with lumber, paper, and agricultural products becoming the chief exports. After World War II, forest products remained crucial to the export economy, but they are now complemented by sophisticated metal, electronics, engineering, and chemical

products. In recent years, trade with countries in the European Economic Community has expanded and has been reinforced by Finland's membership in the European Free Trade Association." (http://www.everyculture.com/Cr-Ga/Finland.html).

2. LOCATIONS AND COMPANIES.

2.1. "Where in Spain?" and "why?"

The Mediterranean Sea includes the area enclosed by Europe, Asia and Africa, starting from the strait of Gibraltar. In this area, weather is warm and many fruits and vegetables are grown safe from the Nordic climate contingencies. In Mediterranean regions, agriculture and horticulture are important motors for economy, exploiting the advantage of warm to mild weather in this area. The southern area in the European Mediterranean coast is Andalusia and Murcia in the south of Spain.



GRAPH 1. Countries that border the Mediterranean Sea. (www.worldatlas.com)

Spain is located in southern area of Europe and it has warm weather most of the year, winters are soft, which gives advantages for growing fruit and vegetables while most of Europe is covered by snow. The southern area of Spain on seaside of Mediterranean Sea like Murcia, Andalusia and Valencia are especially appropriate for farming.

Within this area, the diet is rich in natural and fresh fruits and vegetables: cereals, legumes, carrots, onions, garlic, plums, peaches, cherries, apricots, apples, pears, walnuts, hazelnuts and chestnuts are from the Near and Middle East to the Mediterranean. From Northern Europe came beets, chicory, cabbage and asparagus, from the Far East, chickpeas, sesame seeds, cucumbers, eggplants, mustard, basil, citrus fruits and Indian millet, from Southeast

Asia and Oceania came rice, rosemary, peppers, cardamom, ginger, watermelon, dates, and from the Americas came corn, beans, potatoes, tomatoes, peppers, zucchini and squash. This mix of traditions and cultures dealing with Spain and the mild to warm weather in this area offe to Spain a strong point where Finland has a weak point.

This project will focus on citric products such as Lemons, oranges and mandarins.

The reasons to choose these products are their high content in C vitamin, sweet taste in case of oranges and mandarins and their high endurance, making them be one of the less risky options for transport in long distance and adding guaranties to receive the goods in good conditions despite the long distance separating Finland and Spain. Once the line for oranges, mandarins and some lemons is well established, the option for importing more of these goods could be considered and evaluated, assuming more risk but also being better prepared after the first experience starting with this project.

The area of Valencia-Alicante-Murcia is specialized on this kind of fruit and still can offer other kind of goods which can be added to the range of imports if it were necessary and after checking the Finnish demand and requirements of fresh fruits and vegetables. The dry and warm to hot weather makes citric fruits and bell peppers be the most popular within the big range of goods grown during all year time. Even in winter, there are different varieties of these groups of fruits available for local consume as good as for export.

A decisive factor to choose South of Spain: Weather

To explore all the possibilities European Union opens for all the countries belonging to it, we compare advantages and disadvantages of each country. This will allow each country to specialize what they can do best and increase the life quality for each other. The first point creating a big gap between these countries is weather and distance. Here is a view of the forecast for both areas, Murcia (where Karamelo Citrus S.L.L. is located) and Finland, for 14th of March 2012, just few days before the official beginning of spring on 21th of March:



Mostly cloudy to cloudy in the morning, becoming cloudy in the afternoon.

GRAPH 2. Weather forecast for Helsinki (Finland). (http://www.nordicweather.net)

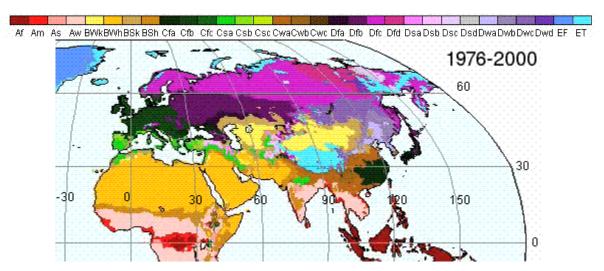
El Tiempo en Murcia



GRAPH 3. Weather forecast for Murcia (Spain). (http://www.eltiempo.es/murcia.html)

Comparing these two forecasts it is possible to appreciate the difference in temperature and the kind of weather existing between the two countries studied in this project. Maximum temperatures in Finland are lower than minimum ones in Murcia, where they rarely reach 0 or go below zero Celsius. Time to time night low temperatures can cause some damages to fruits and countryside products, but this is not a common situation.

But to show a more clear view and comparison of these two climate areas, we can use the map of climate zones, published by Wladimir Köppen (1846-1940) on 1884 and redesigned by Rubel and Kottek (2011) which classifies the world climate areas depending on their latitude, temperatures and humidity. The picture that follows shows this classification:



GRAPH 4. Köppen-Geiger climate classification. (http://koeppen-geiger.vu-wien.ac.at)

TABLE 1. Koppen Climate Classification Chart.

(http://geography.about.com/library/weekly/aa011700b.htm)

В	Dry	BSh	Subtropical steppe	Low-latitude dry		
99	3	BSk	Mid-latitude steppe	Mid-latitude dry		
С	Mild Mid-Latitude	Csa	Mediterranean	Mild with dry, hot summer		
	3	Csb	Mediterranean	Mild with dry, warm summer		
33	8	Cfb	Marine west coast	Mild with no dry season, warm summer		
D	Severe Mid-Latitude	Dfb	Humid continental	Humid with severe winter, no dry season, warm summer		
		Dfc	Subarctic	Severe winter, no dry season, cool summer		

According to this chart, we see how Spain is located in the Bsk-Bsh(Murcia) with a low to mid latitude and mostly dry weather, hot summers and mild to warm winters. The rest of Spain fits mostly Sca-Csb area with a characteristic Mid-latitude and mild-dry weather and warm to hot summer.

Finland is in the Cfb (Helsinki) Dfb-Dfc area, what means that in Helsinki area it is possible to find a mild weather with no dry season and more or less warm summer due to southern location and effect of ocean, while in rest of Finland weather is within the range of Severe Mid-Latitudes, suffering severe winters in an always humid climate and warm to cool summer.

The conclusion for this part is: Spain has better weather for farming and growing agriculture and horticulture products all year long, providing a good range of good in during the severe winter weather months in Middle to North Europe.

2.2. Mediterranean diet

In our days, fast food and sedentary life style are deteriorating the health of many people all around the world. Ylivieska may be not an exception to this rule. Modern life makes people spend long time focused on developing their mind and technologies forgetting the other part of a healthy life: Body.

"Finland is a country located in northern Europe, bordered by Sweden, Russia and Norway. This country is known for long, harsh winters and mild summers -- the northern third of Finland is located within the Arctic Circle. The climate of Finland has a significant impact on the country's cuisine, although Western-style fast food has become a common element of the Finnish diet in recent decades." (http://www.livestrong.com/article/376342-diet-nutrition-in-finland/).

Further in this article we can read what are the most typical products used in Finnish cuisine:

There is lot of meat "because the country's climate limits the production of plant-based foods" and mostly fish of the numerous lakes in Finland.

Other important component in Finnish traditional food is rye bread, usually served with butter. "Oat, cracked wheat and barley breads are also common. Pulla, dough made from wheat flour, is used to make sweet buns, rolls and pies filled with seasonal fruits and berries."

Despite they are not too common due to the limitations of production within Finland; here are some plant-based foods. Forest fruits like cranberries and raspberries are used in jams and pastries or even mixing with meat dishes. Wild strawberries, known for their strong taste and aroma, are typically served with ice cream."

The article concludes with accepting the fast of the growing trend to consume fast food: "In recent decades, Finns have grown increasingly dependent on pizzas, hamburgers, French fries and other Western fast food fare. Sausages made with mustard are also common fast foods, particularly at music festivals, sports events and fairs. (...) Today, about 20 percent of adult Finns are considered obese, according to the National Institute for Health and Welfare. Cardiovascular disease is a factor in half of all deaths in Finland. Although saturated fat intake has decreased since the 1970s, Finnish cuisine is still high in these fats, which contribute to heart attack and stroke. Also, although Finns traditionally used whole-grains in breads, Western influence have increased consumption of refined flours -- these flours may increase the risk of diabetes, a growing concern in Finland."

(http://www.livestrong.com/article/376342-diet-nutrition-in-finland/)

As the ancient quote "Mens sana in corporate sano" by Juvenal says, a sound mind in a sound body is the best project each person can achieve during life. It is thought that Mediterranean diet can help getting this condition as it consists mostly in fresh fruits from "huerta". Finland offers a wide range of activities and has a perfect environment for open air and winter sports, but the complement for this is a healthy diet. In the next article we can read a proposed diet to promote by Finnish government to encourage people looking for better nutritional habits. Reading the allowed or recommended products and the forbidden ones in this diet, introducing typical products of the Mediterranean diet:

"The diet is developed at the initiative of the Government of Finland for overweight people to help them lose weight quickly. This diet is based on exclusion of high-calorie foods, like animal fats and sugar. Table salt (only natural salt contained in food) is limited. It is recommended to drink no less than 2 liters of non-carbonated mineral water a day.

The approximate menu for one day:

- 1st breakfast: soup, oat porridge with low-fat milk (2 tablespoons), fruit juice.
- 2nd breakfast: soup, fresh fruits.
- Lunch: Soup, a slice of a boiled chicken without skin, salad made of greens and carrots, juice.
- Dinner: Soup, roast from low-fat meat, buckwheat porridge, fruit salad, low-fat organic yogurt.

Before going to sleep: One glass of warm low-fat milk (http://alengreen.articlealley.com/the-finnish-diet--lose-weight-quickly-731567.html).

TABLE 2. Forbidden and Recommended products in Mediterranean Diet (modified from http://alengreen.articlealley.com/the-finnish-diet--lose-weight-quickly-731567.html).

Forbidden products:	Recommended products:
Products contains animal	Any vegetables
fats	Porridge (pearl-barley, buckwheat, oat)
Bread	Low-fat meat and fish
Macaroni	Low-fat milk and dairy products, low-fat cottage
Rice	cheese
Sweets	Fruits
Smoked products	Tea and coffee without sugar
Canned food	Fruit juice, non-carbonated mineral water.

"The Mediterranean Diet is characterized by abundant plant-origin foods such as bread, pasta, rice, vegetables, legumes, fruits and nuts; the use of olive oil as the main source of additional fat, moderate consumption of fish, seafood, poultry, dairy products (yogurt, cheese) and eggs, as well as small amounts of red meat and a daily moderate intake of wine generally at meals. Its importance to the health of individuals is not limited to the fact that it is a balanced diet with a varied and adequate supply of macronutrients. To the benefits of its low content of saturated fatty acids and high content in monounsaturated fatty acids and in complex carbohydrates and fiber, we must add the wealth derived from its antioxidant substances. Iberians, Celts, Greeks, Romans, Barbarians and Arabs all have contributed to the ongoing "Mediterranean triad" bread. olive oil and wine." (http://fdmed.org/en/mediterranean-diet).

2.3. Karamelo Citrus S.L.L.

There are many companies concentrated in Spain dealing with farmers and ready to export the goods to rest of Europe, adapting quality standard and packaging to meet the need of each possible destination.



GRAPH 5. Conveyor with oranges in Karamelo Citrus S.L.L. (Provided by Karamelo Citrus S.L.L.)



GRAPH 6. Packages for fruits (Provided by Karamelo Citrus S.L.L.)

In order to get farther information, Karamelo Citrus S.L.L. agreed to provide the necessary information and collaborate in this project. Karamelo is a young company but with a long time experience in the area of citric fruits. They have their central in Murcia, one of the best areas to cultivate oranges, mandarins and lemons (South East of Spain). There, they have direct contact with farmers and seek the country side of Murcia for the best quality fruits. This region appeared due to accumulation of sediments in a marine trench, having mostly clay lands, really rich in nutrients. Despite the problems caused by lack of water in this region, technologies developed there allows local farmers to grow different kind of horticultural products such as peppers, tomatoes, cabbages, carrot, and many others.

They have 4.000 m2 facilities where fruits are washed, selecting only the best quality ones and leaving the rest for the local market for juices or other uses. The best ones are prepared and packed according to European quality standards involving a rigorous and strict quality control.



GRAPH 7. Warehouse with packed fruits which are ready to be load. (Provided by Karamelo Citrus S.L.L)

The production at the moment is about 60.000 kg per week. It comprises of all kinds and varieties of citric fruits, including the next ones:

TABLE 3. Brand names of fruits. (Provided by Karamelo Citrus S.L.L.)

Oranges	Mandarins	Lemons
Lane Late	Clemenrubi	Primofiori
Navelina	Oronules	Verna
Navel Late	Orogrande	
Navel Power	Hernandina	
Valencia Late	Ortanique	
	Afourer(Nadorcott)	

They rely on several brands and possibility to create new ones to answer to the need of their customers and help them finding their place in market. Some examples of the work developed by Karamelo could be like the one for their 2 more famous brands in some East countries like Poland:



GRAPH 8: Brand names of mandarins and lemons (Provided by Karamelo Citrus S.L.L.)

They have experience on international exports, having deals with Russia, Poland, Germany, France and Central America.



GRAPH 9. World map with regions where Karamelo Citrus S.L.L. works. (Provided by Karamelo Citrus S.L.L.)

2.4. Future opportunities

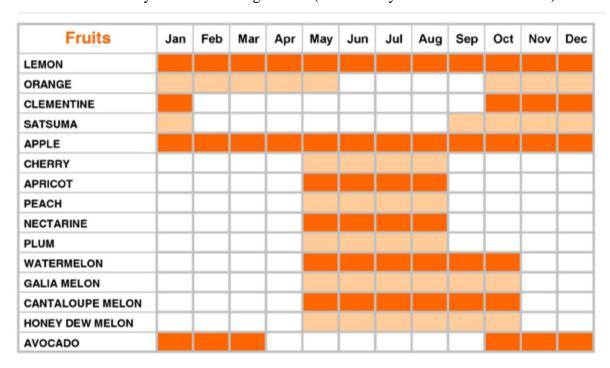
The big choice of fresh fruits and vegetables located in Spain has already been mentioned in previously, as well as the chance to achieve a fluent logistical channel and experience, allowing this project to grow and expand to other kind of goods. Once the conditions for transportation, storage and customer's network are established, it is possible to increase the list of suppliers and varieties and kinds of goods available. The "know how" acquired with citric fruits will be just the first brick of a tall tower.

3. AVAILABLE GOODS AND SEASONS FOR EXPORT

3.1. Seasonality

In such a thing as fruit business it is necessary to pay attention to seasons of different fruits in different countries, because knowing it is easier to predict future sales and demand. It is necessary to be prepared for possible demand when a season is coming, for example in Russia and ex-USSR countries there are strong stereotype about mandarins in New Year times, so in these countries there is always huge demand of them for that time.

TABLE 4. Seasonality of fruits and vegetables. (Provided by Karamelo Citrus S.L.L.).



Vegetables	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BROCCOLI												
CAULIFLOWER												
CHINESE CABBAGE												
AUBERGINE												
CAPSICUM												
COURGETTE												
CUCUMBER												
ICEBERG LETTUCE												
ROMANA												
ТОМАТО												
CHERRY TOMATO												
POTATOES												

3.2. Oranges (*Citrus sinensis* Osbeck) Laranja (Brasil, Rep. Dominicana, Cuba) Sweet orange, Chinese orange (Mexico)

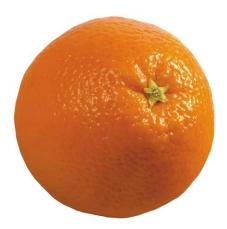


PHOTO 1. Orange. (Provided by Karamelo Citrus)

Sweet oranges (Citrus sinensis Osbeck) are one of the most popular and healthy fruits in the world. It has a high amount of C vitamin and a sweet and acid refreshing taste. This fruit grows on orange trees, a hybrid originally growed in India, Vietnam and Southest of China.

Varieties: There are three main kinds of oranges; sweet orange, sour orange and sanguinelli. In Spain, the most common ones are sweet orange varieties.

Early season:

Navelina(easy peel off Sub-variety of Navel). It season is from October to January.

Navel Late: Another Sub-variety of Navel harvested from December to February.

Salustiana (Salus): Very appreciated Spanish variety. It is Seedless, medium to large size, very juicy and it has a sweet taste. Its season is from November to February, and oranges can be found on extent lands mostly located in Valencia area, Cordoba and Seville. It is also grown in Algeria and Morocco.

Mid-season:

Blood orange (Spanish Sanguinelli): It has red stripes on the skin and its juice is red with a sweet taste. Sanguinelli is a late mid-season (from December to February) blood orange variety from Spain.

Navel: Also called California's Orange. It's origin is a mutation occurred in Brazil on 1820. It season is from February to March.

Lane Late: The most common variety after February. It season is from Mach to May.

Navel Power: It season is from Mach to May.

Late season: Valencian Orange (Valencialate): It is a sweet and juicy variety very demanded for juices (Over 50% of the production is pressed for juice). After Navel season, this is the main variety in markets. Despite its name, its origin has no any relation with Valencia. Its season is from May to June but it can be kept refrigerated in special refrigerated room until September, when orange season starts again with the early varieties.

Best season: Season for oranges is from January to May and in this moment there can be found big amounts of oranges at a really good price from Spain. There are some differences in prices for oranges for juice and "table oranges" which have better look and bigger size. However, there are can be found early and late varieties during rest of year in higher prices (depending on the stock).

Recommendations for storage: Fresh oranges can stand more than three weeks in fridge, but they become juicier when they are kept at room temperature.

Recommended for: It helps recovering and fighting colds and flue. It also helps to prevent arteriosclerosis and C vitamin is one of the best antioxidants. C vitamins also help burning fats.

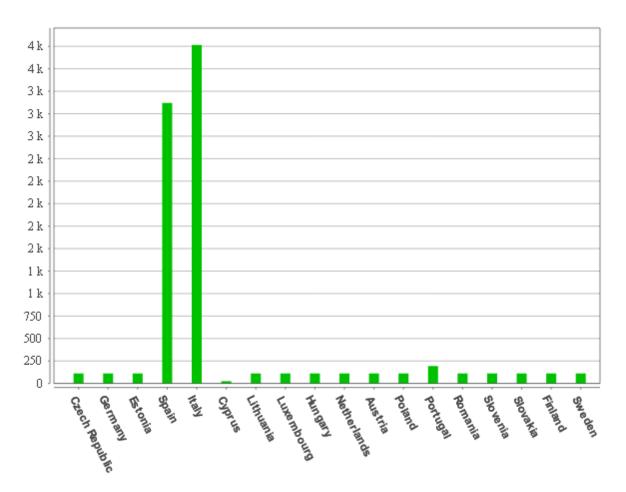
Nutritional facts: Orange juice helps detoxing and preventing many diseases when drunk with empty stomach. Sweet oranges (Citrus sinensis Osbeck) are one of the most popular and healthy fruits in the world. They have a high content of C vitamins and an acid and sweet taste. About 90% of them are water and from 2% to 5% is sugar. There is also C and A vitamin, low amount of fats and sodium, fiber, calcium, magnesium and phosphorus.

TABLE 5. Minerals and Vitamins which found in oranges.

Mi	nerals		Vitamins			
Calcium	mg	52,400	Vitamin C	mg	69,692	
Iron	mg	0,131	Thiamin	mg	0,114	
Magnesium	mg	13,100	Riboflavin	mg	0,052	
Phosphorus	mg	18,340	Niacin	mg	0,369	
Potassium	mg	237,110	Pantothenic acid	mg	0,328	
Sodium	mg	0,000	Vitamin B-6	mg	0,079	
Zinc	mg	0,920	Folate	mcg	39,693	
Copper	mg	0,059	Vitamin B-12	mcg	0,000	
Manganese	mg	0,033	Vitamin A	IU	268,550	
Selenium	mg	0,655	Vitamin A, RE	mcg	27,510	
			Vitamin E	mg	0,314	

Cautions: Not recommended if there are digestive problems as gastritis, hiatus' hernia, heartburn and ulcers.

Orange production in miles of tons (corresponding to harvested oranges to be consumed fresh or for the manufacture of fruit juices).



GRAPH 11. Orange production in miles of tons among EU countries. (http://epp.eurostat.ec.europa.eu/)

During last winter 2011-2012, Italy suffered a cold wave which frosted most of production, pushing Italy to import straight from Spain.

"Italy suffered on days 15, 16, 17 and 18 strong frosts reaching -4°, what will affect notoriously the local production of horticulture and fruits. (...)The gap left on the international market by Italian goods is as important as the place opened in its inner market, with a high demand of fruits and vegetables" (http://www.freshplaza.es/news_detail.asp?id=4674).

The same winter some time later, Andalusia and Valencia lost also part of their crops still on trees due to cold weather. Valencia demanded oranges and mandarins from Murcia to pack them and sell them as part of their normal production to be able to accomplish the pending orders.

The strategic location of Murcia surrounded by 2 lines or mountains and oceanic effect gives this region an advantage against cold temperature. The other side of this effect is the problem with water. The same mountains protecting from extreme temperature are also holding clouds and rain.

3.3. Mandarins



PHOTO 2. Mandarins (Provided by Karamelo Citrus)

Mandarinas (Citrus aurantioidea)

Mandarins are fruits within the "**Rutaceae**" family and there are more than 1.600 varieties and in citrus branch 20 varieties. Mandarin is one of the most common citrus in the world but they only can be grown in tropical and subtropical climates areas due to their low tolerance to cold temperatures.

The main producers of mandarins are Brazil, USA, China, Mexico, Spain, India, Italy and Argentina. Within Spain, the main region growing mandarins is Community of Valencia and following Valencia are Andalusia, Murcia, Catalonia and Balearic Islands.

There are 4 basic mandarins' varieties are satsumas, clementinas, clemenvillas and hybrids.

20

Beginning of season:

Satsumas: The first one appearing in market but their taste is not the best.

Clement Rubi (Prim 23): It appears on beginning of September and it has medium to large

size, orange to red very intense color, juicy and good taste.

Okitsu /Owari: Just few seeds, medium size and good taste. One of the first of the season

with good endurability.

Clementinas: Good taste and easy peel off.

Marisol: Good size, good color and lot of juice but poor taste and the tree is very sensible

heavy rain, which can cause problems in rain season. To avoid problems with rain, very

often fruits are picked and kept in refrigerated rooms or degreened for an earlier mature

look. It season is from October to November.

Oronules: Lot of juice, really good taste, shiny skin and just few seeds.

Mid-season:

Clemenule (Nules' Clementine): Good size, intense color and lot of juice. It has the best

taste and easy to peel off the skin. It has just few seeds. Originated in the town of Nules in

the Castellon province, Noth of Community of Valencia, Spain. The tree produces a huge

amount of fruit. Its season is the month of November.

Clemenpons: It is a mutation of Clemenule with same characteristics but smaller size.

Clementine fina: Most of the Spanish varieties have their origin in this one. The clementine

family is one of the best flavored ones.

Clemenvilla (Nova): It is a hybridization of Fina and tangelo Orlando. In Europe it is

called Clemenvilla. Medium to large size and very reddish color. This variety has good

quality and lot of juice with a sour & sweet taste and they are easy to peel off. It dries and

loses its juice when it's too mature. If the trees share the lands with other varieties fruits it

can be more or less seedy, but if it is grown separately the fruits are seedless. It can hold

well in tree after its season, starting on December-January. Due to its sweet taste, it is very

used in marmalades.

Late varieties:

Ortanique: Ortanique is a hybridization of orange and mandarin originated in Jamaica. From there it was imported to many countries and grown in places like Spain, Morocco, Cyprus and South Africa. Depending on the country, the name can be: Orantanique, Artounik, Mandor, Ormanda, Ortaline, Uruline, Australique, Urunique or Villa late. Medium to large size and slightly flattened shape. Lot of juice, sweet taste but difficult to peel off. It has intense color. Really good for marmalades.

Fortuna: It is and hybrid from Ortanique but in smaller size. It is juicy as clementina variety, very sweet and very easy to peel off. It is available from January.

Nadorcott: Also called Afourer, it was grown from a Murcott from Marocco. Its season is from mid-January to April (late ones). Trees are very productive, giving an average of 150 Kg./tree in the peak of their harvesting time. Orange-reddish color and shiny skin. Good amount of juice and easy peel off.

Best moment: The best time for mandarins is from September to March, during their season.

Storage: They can stand about 2 weeks in fridge. They don't stand cold temperatures, so they must be stored in moderated cold temperatures. For longer time storage they can stand temperatures from 3°C to 5 °C.

Nutritional facts: Mandarins are water in an 88%. The rest of its volume consist on a huge amount of C vitamin, A vitamin and in a minor amount also B1, B2, B3 and B6 vitamins. They contain also endurability, calcium, magnesium and phosphorous. Other components are Folic acid, big amount of citric acid, Oxalic acid, beta-carotene and antioxidants.

Recommended for: Hypertension, stress, cholesterol, iron deficiency anemia, intestinal transit, gout, arthritis, rheumatism and uric acid. It helps also in problems for fluid retention, purifying, detoxing and even burning fats. Prevent cancer and diseases during pregnancy, even having a healthy effect during nursing. In addition to all these advantages, mandarins also reinforce defenses, red and white blood cells, and resistance to some infections. Eases degenerative diseases and cardiovascular problems. It has anti-

inflammatory effects and helps fighting cough and colds in general. Good for nails, bones, teeth, sight and hear.

Not recommended for: gastritis, hiatus hernia, heartburn, ulcers, kidney disease, and kidney stones.

3.4. Lemons

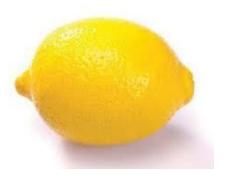


PHOTO 3. Lemon (Provided by Karamelo Citrus)

Lemons (Citrus x limón): It is a part of the Rutaceae family in the citrus branch. Very spread though the Mediterranean area. Murcia and Alicante are two of the best producers of this fruit, also grown in Andalusia and Community of Valencia.

Early season varieties (autumn):

Limón verna: Big size, rough skin and oval shape. It has just few seeds and good juice not too acid.

Fino verna: Medium size and very juicy. Its skin is tin and has a good color. Not the best taste.

Primafiori: Medium size and lot of juice. Its skin is thin and good colored and its taste is good with a regular acid taste. This variety is the most common in Spanish markets.

Late season varieties (Beginning of Spring):

Eureka /Rodrejo: Medium size, juicy and with thin and good colored skin. Regular taste and more acid than Primafiori.

Best moment: It has its season from early autumn to beginning of spring; however it is harvested during the whole year, except of July and August when Spain imports lemons from other places.

Storage: It can be stored in room temperatures or in refrigerated rooms from 6° C to 8° C.

Nutritional facts: Lemons are really rich in C vitamins and they also have some amount of A, E and B group vitamins. There is also magnesium, calcium, phosphorous, copper, zinc, iron and manganese and high doses of potassium.

Recommended for: Its high content of C vitamin makes lemon a good ally against cancer, viruses and bacteria. It has antiseptic properties for urinary and digestive systems and also helps preventing colds and reinforces defenses. Also used as external antiseptic for mouth and teeth diseases, having a bleaching effect. Reduces blood pressure and stimulates pancreas and liver functions.

Its citric acid acts against fats, helping burning them and being included in many diets. Also helps correcting cholesterol problems and eases heavy digestions. This strong is its power against fast that it is used even in some detergents or oil correcting beauty products. Lemon also has astringent effects.

Not recommended for: As rest of citrus, they are not recommended in case of gastritis, hiatus hernia, heartburn, ulcers, kidney disease or kidney stones.

3.5. Future projects for imports

The Mediterranean diet is really complex and rich, and also the range of products available grows only in mild and warm areas. This project starts with more or less safe fruits with strong rind protecting their juice flesh, but as long as Finnish markets have a minimum demand of other rich products not standing Finnish and surrounding areas climates, there can be an option to bring them from Spain or even other Mediterranean regions near Spanish area. The main groups of products mostly to be acquired in Spain are horticultural ones. In Spanish "huerta" we can find:

Tomatoes (**Lycopersicon esculentum**): Very much used fresh in salads and for sauces. Their taste and infinite possibilities in kitchen are not the only good points of tomatoes. They have a big amount of, a kind of pigment giving them their characteristic red color. Some studies found out that these pigments could help preventing some kinds of cancer. Available year-round in fresh and preserved forms.

Bell peppers (Capsicum annuum): Peppers belongs to the family Solanaceae. It is a round-year plant, but it is very sensitive to low and cold temperatures. They can be red, green and yellow color. They can be used in salads, added to vegetarian pizzas, cooked in a pan with small amount of olive oil or even stuffed and baked. Bell peppers are a good source C vitamin source as critics, and they also contain thiamine (B group), B6 vitamin, beta-carotene, folic acid and they have antioxidant properties thanks to chlorogenic, zeaxanthin, and coumaric acids. All colors have more or less the same taste. The only difference is that red ones have more pigments and C vitamins, being the best ones helping in prevention of cancer and heart diseases. One of the most popular varieties in Spain is California bell pepper. (http://www.everynutrient.com/healthbenefitsofbellpeppers.html; http://fichas.infojardin.com/hortalizas-verduras/pimientos-aji-pimiento-morron-pimientos-morrones.htm; http://es.foodlexicon.org/p0000140.php).

Cucumbers (Cucumis sativus L.): Good complement for salads, crunchy and mild taste making them a good company for almost any dish. This squash has diuretic and cancer preventing properties, as well as lot of fiber without any calorie, water, beta-carotene, alpha-carotene, C vitamin, A vitamin, zea-xanthin and lutein. This vegetable is a really good antioxidant and helps preventing hosteoporse, Alzheimer and heart diseases thanks to its high amount of K vitamin. The best option is to get fresh young ones and eat with rind or un refreshing juices.

Other products: The list is long and includes Eggplants (Solanum melongena), Potatoes (Solanum tuberosum), Lettuce (Lactuca sativa) Iceberg or Romana, Cabbage (Brassicaceae), Strawberries (Fragaria), Broccoli (Brassica oleracea Botrytis cymosa), Artichoke (Cynara scolymus) and many more.

All of them will complete the plan to change a high-calorie diet for a more balanced and healthy one not really taking this much time. There are many dishes easy and fast to prepare and with a balanced amount of fats essential oils, vitamins, minerals and fiber. All them can be added to the best part of Finish diet, as fishes and low-fat meats, whole-grain breads and all kind of berries growing during mild seasons. (http://www.nutrition-and-you.com/cucumber.html).

3.6. Exporting.

Exporting is the kind of trade taking place out of the national market of the exporting company. There are two kinds of exports for European Union countries, the ones which destiny is other country in the European Union Area or inner European market and the ones which destinations are out of European Union borders. For the inner market, thanks to the harmonization in regulations and common politics for all the European countries, the market is very flexible and there are almost no differences with the national market. In the outer market, the goods must be ready to cross customs and meet the policies of the importing country.

Finland is part of the European Union, which saves time and money in legal issues and certifications to cross borders and that are not required within the European inner market.

Exporting has its advantages and disadvantages, and they must be taken in account before starting any deal (http://www.nzte.govt.nz/develop-knowledge-expertise/export-guide/ways-of-entering-a-new-market/pages/direct-and-indirect-exporting.aspx):

Disadvantages:

- Increased cost (Transport)
- Wrong ideas or perceptions about the target market in the other country that can vary in legal requirements, some quality standards not compulsory but demanded (e.g. ISO 9000 or other quality certification and regulations).
- Conditions of goods after bringing at their arrival can vary during their transportation.

Advantages:

- New markets for products.
- Exporting is the way to make profit by selling goods in foreign markets.
 - Direct to customer in another country
 - Indirect (through agents) to buyer in home country who imports the product

Direct exporting

Direct exporting is a commercial relationship in which the exporter and the customer establish a a relationship B2B without any other middle agent connecting them. This kind of business can reduce the expensive of the distribution chain, but in the other hand it also increases the necessary research and resources used to make the contact and start making businesses with the foreign company. Thanks to the advances in technologies, once the contact is made and the main points for deals settled, the relationship can work in distance. Gathered information during the deals can improve and speed up the negotiation and quality of the service and offered goods to adapt to each other.

Advantages of exporting directly:

- Control over the tactical tool of pricing
- Better control of brand image and positioning
- More accurate information about the target market and customer behavior
- closer and better adapted relationship with customers
- Better chances to identify new market gaps and opportunities
- Some customers prefer direct relationship with producers.

Disadvantages of exporting directly:

- Building and keeping the distribution chain requires time and resources.
- Local providers may have a better company image in their area.
- Some services to customer may require skills using the local language.
- Some troubles will require a physical presence to be solved, visiting the customer.

Indirect exporting

In this kind of commercial relationship there can be one or several intermediaries necessary to complete the negotiations and businesses between the 2 main parts, the exporter and the foreign customer. This is a kind of distribution chain bringing the goods from the producer company to the end user. This can give an advantage comparing to the direct exporting as the different agents added to the chain can add information and own experience in the target market. In this kind of relationships is important to get as much as possible a feedback from this distribution chain as well as provide a good support to all the agents involved on the business process.

Advantages of using an intermediary:

- The knowledge of each intermediary can enrich the final sale.
- Language skill of intermediaries can save money and time on preparing the staff for dealing with the target market.
- Possibility to offer better additional services which can improve the customers' perception and experience.
- Fast and easy access to new markets.

Disadvantages of using an intermediary:

- Difficulties getting information and contact with the end customer.
- Each agent in the chain reduces the control of salling process and increses the need of support of the distribution chain.
- not possible to get to learn about the overseas market

(http://www.nzte.govt.nz/develop-knowledge-expertise/export-guide/ways-of-entering-a-new-market/pages/direct-and-indirect-exporting.aspx).

4. LEGAL ISSUES

4.1 Features of EU and Schengen agreement.

EU's four freedoms: the free movement of goods, capital, services, and people. As one of them is giving this opportunity to move any goods and products inside the EU, what makes this market is quite easy to move in as there are no customs and not this much paper work.

Here are two articles from "CONSOLIDATED VERSION OF THE TREATY ON THE FUNCTIONING OF THE EUROPEAN UNION", which describe regulations about free movement of goods:

Article 28

- 1. The Union shall comprise a customs union which shall cover all trade in goods and which shall involve the prohibition between Member States of customs duties on imports and exports and of all charges having equivalent effect, and the adoption of a common customs tariff in their relations with third countries. EN 30.3.2010 Official Journal of the European Union C 83/59
- 2. The provisions of Article 30 and of Chapter 2 of this Title shall apply to products originating in Member States and to products coming from third countries which are in free circulation in Member States.

Article 29

Products coming from a third country shall be considered to be in free circulation in a Member State if the import formalities have been complied with and any customs duties or charges having equivalent effect which are payable have been levied in that Member State, and if they have not benefited from a total or partial drawback of such duties or charges. (http://eur-

 $\underline{lex.europa.eu/LexUriServ.do?uri=OJ:C:2010:083:0047:0200:en:PDF}).$

4.2 Value added tax (VAT)

VAT is a tax, which is included in the cost of the product (service). It is paid by end customer when buying the product (indirectly) and it is given to government by seller. The economic essence of VAT - a tax on consumption, because ultimately all burden of it falls on the last buyer in the chain of sales, that is, the consumer.

While buying and selling the fruits and vegetables it is necessary to include VAT all the time and calculate prices more careful. Creating prices for fruits what need to be sold can be another headache, so and it is necessary not to forget include VAT in the price and make calculations with it. (http://www.protorg.com/node/1118).

4.3 Safety regulations.

As there in EU is a law about free flow of good, there are appearing some difficulties with medical monitoring of food flowing through borders, including fruits and vegetables. In case of transporting through borders of all EU area, for example between EU and Russia, there is necessarily to pass customs, which includes special medical reports that fruits are not toxic or poisoned.

In case of an export fruits from Spain, all responsibility about the condition of goods is on the side of farm what is providing the fruits and vegetables. The farm is not allowed to use any restricted chemicals on fruits and vegetables, and they should be washed before packing and loading. So if there will be discovered some poisoned fruits or vegetables it will be difficult to find out which company is responsible and from where these products were brought.

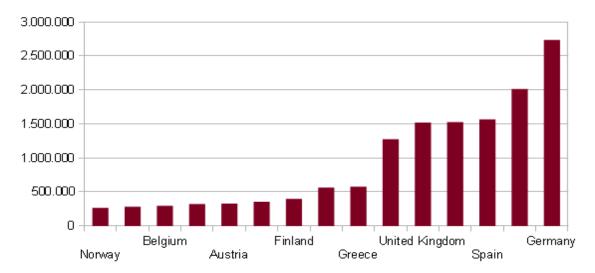
5. TRANSPORT

5.1 Introduction to transport.

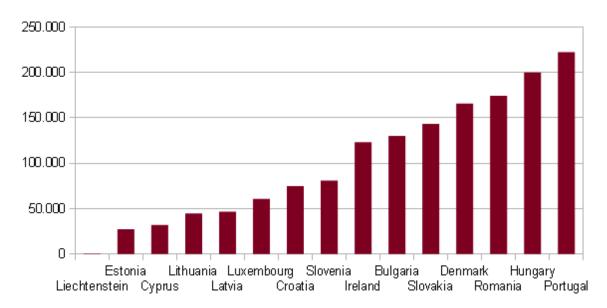
It is a rare thing the transportation between Spain and Finland is direct. It is not a main problem that the distance is too long and it requires that drivers make long breaks and what makes them spend many days to deliver one cargo. The main problem is the lack of return loads to Spain, because there are not so many businesses happening between Finland and Spain. The main solution for transport is to change companies on the way, mostly in Netherlands, Belgium or Germany. Spanish trucks leave goods in logistic centers which locate in these countries, especially in the Netherlands, because it is one of the most comfortable places in Europe for redirecting goods. There are located biggest centers for the Nordic region (Finland, Sweden etc.) and Eastern Europe (Poland, Czech Republic etc.).

There can be used two ways to deliver goods to Finland from the Netherlands; by using roads and being loaded in refrigerators or using refrigerated containers on the ship from the Netherlands or Germany.

Transport by road in 1000 miles of tones (The reporting countries may exclude from the scope of these statistics the goods road transport vehicles whose load capacity is lower than 3.5 t or the maximum permissible laden weight is lower than 6t.)



GRAPH 12: Transport by road in 1000 miles of tones in EU countries (Provided by Karamelo Citrus S.L.L)



GRAPH 13: Transport by road in 1000 miles of tones in EU countries (Provided by Karamelo Citrus S.L.L)

5.2 Transports companies in Spain

Transport: TRANSINTERCANO, SL

Range of serviced offered:

Full or partial cargo loading.

Pallet building service.

Double camera trailers (with enables to use different temperature in each).



GRAPH 14. Contact information of TRANSINTERCANO SL

(http://www.transintercano.com/web.htm)

PRIMAFRIO Transportes, S.L.

Services: International transports from and to Spain, 2 drivers per truck, tracking on the way.



GRAPH 15. Contact information of PRIMAFRIO Transportes S.L.

(http://www.primafrio.com/)

Departures: eduardo.oliver@primafrio.com

Returns: maricarmen.escudero@primafrio.com

National: francisco.garcia@primafrio.com

CAMPILLO PALMERA S.A.

Campillo Palmera counts on a fleet of more than 500 vehicles to guarantee the availability and the effectiveness to its clients. Its main facilities, located in the heart of Murcia, specialized in both the National and International transport, offering "Door to Door" services.

Main service: refrigerated transport by highway of both perishable and industrial goods.

Complementary services:

- Full load and groupage (National and International)
- Express service.
- Aerial and Marine transport service agreements.
- Storage of Merchandise service.

Contact: http://www.campillopalmera.com/

Head Office in Molina de Segura (Murcia- Spain)

Ctra. Madrid-Cartagena, Km 373 - Pol. Ind. La Serreta, Molina de Segura (Murcia - Spain)

Call center Tlf. +34 968 647 000 operadora@cpalmera.es

Administration Tlf. +34 968 647 000 administracion@cpalmera.es

Garage Tlf. +34 968 647 023 taller@cpalmera.es

Warehouse Tlf. +34 968 647 000 logistica@cpalmera.es

International Transport

Export (Refrigerated trucks) Tlf. +34 968 647 001

exportfrigo@cpalmera.es

Export (Taut line) Tlf. +34 968 647 015

Fax +34 968 386 407

exportlona@cpalmera.es

Grupage Tlf. +34 968 647 014

comercial.int@cpalmera.es

Sevilla Branch

Autovía A-92, Km 0, c.t.m. Sevilla, Edf. Administración - Planta Baja A. CP 41006, Sevilla - Spain

General Tlf. +34 954 255 375

Fax +34 954 259 033

andalucia@cpalmera.es

Delegation of Cartagena

Carretera Cartagena - Alhama de Murcia, Km 15, CP 30390, La Aljorra, Cartagena

General Tlf. +34 968 598 744

Fax +34 968 598 746

logistica@cpalmera.es

Grupajes Europeos

Specialized on International Transport. Grupajes Europeos guarantees the shipments without any incident. Confirmation of deliveries just at the moment.

Services: Grupajes Europeos S.A. Specialization is express transportation of International and National less than full container cargo, as well as bulking. The company belongs to MARCOTRAN TI, S.A. group, which specialization is full container loadings and logistical projects.

Fleet of transport means: 400 mega trailers, 50 jumbos, 50 Refrigerators, 15 ligt vehicles.

Contact: http://www.grupajeseuropeos.com/ingles/index.asp

Ctra Logroño km 271,100 - 50.690 Pedrola - Zaragoza (Spain) - Tel. +34 976 61 90 92 - Fax +34 976 61 91 14

5.3 Transport cost estimates.

Transport costs were provided by company for whom this project has been made as they already have clear data about prices what they are agreed to provide.

Transport from Spain to Holland or south regions of Germany has a regular price €2500/2700 or it can reach up to €3500 in Christmas time and to reach north ports of Germany can cost extra €300/400 per truck.

6. LOGISTIC CENTERES

6.1 Introduction about logistical centers

An alternative to direct transport in such a long distance can be using the services of a logistical center which provides all necessary facilities to keep the goods in good conditions and to move them from a truck to another or even keeping them in refrigerated chambers which guaranties freshness of fruits and keep natural quality and properties.

Germany and Holland are common destinations for Spanish goods. Trucks are reaching this area bringing and taking different cargo from other companies importing goods to Spain. This will reduce the cost for transport and easier the search for available drivers. Trucks coming from these points with goods imported by Spain need to make their way back to some point in the middle of Europe. These trucks are more likely to accept bringing goods to a logistical center there as well as reaching it to come back with other goods from these areas in the case of Spanish companies.

From the Finnish side, it will be also easier to find trucks ready to reach middle Europe and make their way back to Finland, as they will move all the time in these areas and will have always or in most of cases some goods to carry in their return to their origin.

6.2 Storages

To answer to the need of a storage point, the logistical centers provide different additional services. Some of them offer only storage services and facilities for unload and load the goods, but many of them offer additional services like bulking (cargo joint from different trucks) or even re-packaging or many other additional services. Some options for this step can be the following ones:

Grupajes Europeos

Services:

Bulking, picking and packaging, stock management, storage and delivering.

Delegations in Portugal (Palmela), Morocco, Zaragoza (Central), Spain North (Galicia), Spain South (Cadiz), Italy (Parma), Poland (Pyskowice) and Russia (Moscow).

Network of Corresponders: South France (Genas), North France (Patin), Belgium (Brucargo), **Germany (ubstadt-Weiher and Hagen)**, Greece (Patras), Turkey (Istambul), Lithuania (Vilnus), Denmark (Odense), Sweden (Gotterborg) and UK (London).

Contact: http://www.grupajeseuropeos.com/ingles/index.asp

Ctra Logroño km 271,100 - 50.690 Pedrola - Zaragoza (Spain) - Tel. +34 976 61 90 92 - Fax +34 976 61 91 14



Yusen Logistics Co., Ltd.



GRAPH 16. Map of Europe where operates Yusen Logistics and logo of company (http://www.yusen-logistics.com/eng/)

Head Offices of logistical centers which can be useful:

1) Theodorstrasse 299, 40472 Duesseldorf, Germany

TEL: (49)-211-41854-0

FAX: (49)-211-41854-200

E-mail: ylde-info@de.yusen-logistics.com

2) Rzymowskiego 53, 02-679 Warszawa, Poland

TEL: (48)-22-567-36-10

FAX: (48)-22-567-36-29

E-mail: info@pl.yusen-logistics.com

3) Reykjavikweg 1, 1118 LK Luchthaven Schiphol, The Netherland

TEL: (31)-88-5522-300

FAX: (31)-88-5522-308

E-mail: <u>yleu-ga@eua.yusen-logistics.com</u>

Services which are provided:

Collection

Yusen Logistics provide various inbound transport solutions best match to customers' requirement such as Milk-run collections into manufacturing site, or international forwarding into distribution centers.

Warehousing & Distribution

With global network bases spanning across the globe, a full range of warehousing and distribution services are available.

Value Added Services

Pre- and post-manufacturing services performed within the warehouse environment improve the use of your resources.

Crossdock

Crossdock to streamline transport lanes between multiple origins and destinations enabling improved frequency and truck/container utilization.

Supply Chain Consultancy

Yusen Logistics designs, builds and implements customer-focused supply chain solutions, engineered to the highest performance standards, with the execution and results continually measured against key metrics.

IT Solutions

Logistics information systems are constructed to meet the needs of each client, from total system proposals that combine transportation information and warehouse control to those designed for supply chain visualization. (http://www.yusen-logistics.com/eng/).

Conclusion about Logistic Centers

According to research it is possible to see that there are a very big availability of suitable storages and logistic centers in Europe. There is big number of them in Netherlands as it is comfortable place for goods exchange and in Germany as it has good location in central Europe. Both countries can be perfectly used for exporting operations between Spain and Finland.

7. RISK ANALYSIS

As most of business, and especially the ones related to perishable goods, the venture of importing goods crossing the whole of Europe is not free of risk. Each risk will be widely analyzed in this part, but as a summary for possible risks in this business can be:

Market: Fruit market is very unstable, which means that prices may increase or decrease in important amounts in very little time. Transport used to move them make prices depend on fuel market too, suffering rises or taking advantage of drops in prices for fuel.

Goods: Working with perishable goods makes times and delivery a very important point, but in addition to this, other problems can happen in origin or destiny related to health of goods and conditions they are kept at. Some examples of problems and risk related strictly to the goods are rotten pieces, damages during packaging showing after some time, damages during transport due to packages or movements within truck, long delays in storage process or long stock rotation periods.

Consequences of all this can lead to increases in prices or even total loss of value for the fruits, not being able to sell them and assuming all expenses for transport and storage in case the goods already came from origin with problems, or also assuming cost for the goods if the problem appears in Finland. Insurance is need for both companies: seller and buyer.

Transport: When goods are loaded, the driver is responsible for the cargo. However, there are some possible problems which can spoil and decrease the quality of good related to transport. Breakdowns, delays during pauses, loading goods or other incidents during the way can be good examples of these inconveniences during transport.

Other problem related to transport can be the kind of truck required by the goods depending on the season and kind of goods. Breaking cold chain in some point of the way for goods needing refrigerators may also lead to rottenness or spoilage of the cargo. During winter season and during summer, there are some moments when extreme coldness or heat can make it advisable to use fridges, able to keep the goods within a preset range of temperature, not freezing and not overheating.

7.1. "Cause and Effect Matrix" tool from Six-Sigma Analysis can help to work with processes with many exact details. With all problematic inputs and outputs of process steps the exact roots of risks can be found. First of all the analyzer should create a table with all Key Inputs, Key Outputs and Process Steps.

TABLE 8. Process Steps and its Inputs and Outputs.

Key inputs	Process steps	Key outputs							
phone calls	Looking for customer	phone call back							
e-mail		e-mail answer							
advertisement		visit							
search in internet	Looking for fruits (for seller)	recieving a price list							
	,	for fruits in email							
		information about							
phone calls		fruits through phone							
		call							
e-mails									
links and									
connections to									
people									
		recieving an answer							
e-mail	Ordering fruits	and bill for fruits							
phone calls									
personal visit									
		email with pricelist							
search in internet	Looking for transport	for tranportation							
links and									
connections to		phone call with							
people		information							
e-mail with order	Ordering transport	answer							
phone call with									
order		bill for tranportation							
truck/train/ship		paying for							
arrives	Recieving fruits	transportation							
Quality manager	Qality control	Quality overview							
	Unloading and storing								
workers	fruits	fruits in storage							
forklifts									
Bill for customer	Payment from customer	receiving money							
	Loading transport of								
workers	customer	tranposrt loaded							
forklifts									

After getting to know all process steps, it is possible to work out tool itself. All the data will be used in to analyze correlations between Process Steps and Process Outputs. After filling in everything on its places, correlation ratings should be written by analyzer on the field between Process Outputs and Process Steps: 0, 1, 3 or 9 (analyzer deciding which correlations stronger and which are weaker); it shows how strong correlation is. This tool will calculate Total rating of Process Steps and it will be possible to see which of them are having strongest effect on whole picture.

TABLE 9. Cause and Effect Matrix 1. (http://www.bmgi.org/node/1638)

Rating of importance customer	for	4	4	4	6	6	6	6	3	3	8	2	10	10	2	10	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	Process Output	phone call back	e-mail answer	visit	recieving a price list for fruits in email	information about fruits through phone call	recieving an answer and bill for fruits	email with pricelist for tranportation	phone call with information	answer	bill for tranportation	paying for transportation	Quality overview	fruits in storage	receiving money from customer	tranposrt loaded	
Process Step		Ω	Ψ	>	-	.= 0.	L	Ψ	Ω	ro	Δ	Ω	0	4		4	Total:
Looking for customer		9	9	9	1	1	1	1	1	1	1	1	1	1	1	1	180
Looking for fruits (for seller)		3	3	3	9	9	3	1	1	1	1	1	1	1	1	1	216
Ordering fruits		3	3	3	3	3	9	3	3	1	1	1	1	1	1	1	198
Looking for transport		1	1	1	1	3	1	9	9	3	3	3	1	1	1	1	194
Ordering transport		1	1	1	1	1	3	3	3	9	9	1	1	3	3	3	246
Recieving fruits		1	1	1	1	1	1	1	1	1	3	9	3	3	3	3	180
Qality control		1	1	1	1	1	1	1	1	1	3	3	9	3	3	3	228
Unloading and storing fruits		1	1	1	1	1	1	1	1	1	1	3	3	9	3	3	212
Payment from customer		1	1	1	1	1	1	1	1	1	1	1	3	3	9	3	160
Loading transport of customer		1	1	1	1	1	1	1	1	1	1	1	3	3	3	9	208

After finding out total ratings in previous table, more accurate research of the Process Steps can be done. All technics are the same as in previous table. After analysis of this table, three most important Process Inputs can be found which can have strong effects on the company.

TABLE 10. Cause and Effect matrix 2. (http://www.bmgi.org/node/1638)

	Rating of importance customer	for	6	6	3	8	10	10										
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
		Process Output	recieving a price list for fruits in email	information about fruits through phone call	answer	bill for tranportation	Quality overview	fruits in storage										
Process Step	Process Input			+	10	11	_	4										Total:
Looking for fruits (for seller)	search in internet		3	3	3	1	3	1										93
,	phone calls		3	9	3	1	3	1										129
	e-mails		9	9	3	1	3	1										165
	links and connections to people		9	9	3	1	3	1										165
Ordering transport	phone calls		1	1	9	3	1	1									П	83
	e-mail		1	1	9	9	1	1										131
	advertisement		1	1	9	3	1	1									П	83
Qality control	Quality manager		1	1	1	1	9	3									\Box	143
Unloading and storing fruits	workers		1	1	1	1	1	9										123
	forklifts		1	1	1	1	1	9										123

Mechanical Factors Logistics Condition of workers or equipment Truck and Refrigerator Not proper transportation or keeping of fruits Fails in factory machines Leagal Issues Mateinance problems Customer won't be satisfied Criminal factors Accounting Weather Quality control Bad condition of roads Orginizing External factors Human factors

10.2 Fishbone Analysis (Cause-Effect analysis)

GRAPH 17. Fishbone analysis

(http://apps.business.ualberta.ca/yreshef/orga432/fishbone.html).

"The fishbone diagram is an analysis tool that provides a systematic way of looking at effects and the causes that create or contribute to those effects. Because of the function of the fishbone diagram, it may be referred to as a cause-and-effect diagram." Here is possible to see which factors can happen during all process and will cause unsatisfaction of the customer. In such a business of exporting fruits everything is connected to everything else and disappearing or failure of any step can destroy everything, like if some machine on packing factory broke down, truck cannot be filled in time and it cannot arrive in time, fruits can be rotten on the way and the customer won't be satisfied.

(http://www.nefstem.org/teacher_guide/prep/fishbone.htm).

8. PESTEL analysis

PESTEL analysis is a tool which is very easy in use and it helps to understand the Political, Economical, Sociological, Technological, Environmental and Legal aspects which you are operating in (http://www.mindtools.com/pages/article/newTMC_09.htm).

- PESTEL analysis is an effective tool when you are sure that everything what is
 done will have positive effect with the forces of change that are affecting our
 world.
- Well-presented PESTEL analysis can help to eliminate actions which can be failure because they are out of control.
- PESTEL can helps to adapt to the realities and new environment when you will start to work in new country or new region.

How to Use the Tool:

PESTEL is a simple way to understand and remember Political, Economical, Sociological, Technological, Environmental and Legal aspects.

There are three stages in using of the tool:

- Brainstorming the relevant factors
- Identification of the data that applies to the factors.
- Conclusions from the data.

Political

In Finland there are some government programs (see chapter 2.2) about healthy diets, this business can help these programs.

Economical

This project will help Spanish side to sell fruits which are in abundance there and it helps the Finnish market to be full filled with fruits. It also helps Spanish national income and to reduce Spanish unemployment.

Sociological

There will be a positive impact on Finnish health, improving life quality for all ages (see chapter 2.2 Mediterranean Diet).

Technological

There are no big contributions in the development of new technologies in this project. It is based on a primary sector activity with some mechanization but mostly based on human resources due to the care necessary to keep the goods in good conditions.

Environmental

There is a problem that transport burns fuel and it creates more CO2 gas in the air. And there is a good point as this area of business helps Spain stay green with help to agricultural sector, and keep environment in good condition.

Legal

Competition laws and free movement of goods and people within the European Union allows the free movement of cargo. In addition, harmonization in European politics and quality standards ensures that the goods pass health and safety controls with similar protocols in all European countries. (see chapter 4.1 Features of EU and Schengen agreement)

(http://www.oup.com/uk/orc/bin/9780199296378/01student/additional/page_12.htm)

9. CONCLUSION

How to create a profitable deal for Finland with other countries in Europa?

Giving what they can produce faster and better, increasing their presence in Europe and teaching them what they can offer and how they feel about nature. Nature and technology are not adversaries in this country and quality is a strong point for them. Weather also allows them to export paper and wood-based goods and not only mobile phones.

What Europe can give to Finland?

The weak point of Finland is weather (see chapter 2 LOCATIONS AND COMPANIES), for agriculture at least. Modern life style also makes more difficult to keep a good balance. If Europe can come to Finland for bad, it can also come for good, offering the richest and healthy diet combined to national meats and summer berries.

The finality of this project, after analyzing all the exposed points is to work like a lubricant approaching the farther point of Europe and its almost tropical weather to the cold Finland and create a connection that can enrich both sides and be the beginning of many other interesting deals what able to help Spain developing and adding better logistical, technological and nature-friendly policies and equipment.

The final conclusions are:

There is a possibility to run an import line from Spain in fruits and vegetables sector. Experience can increase quality and efficiency of this service, as well as satisfaction for both sides. Future lines of products are available if some more risk assumed (see chapter 7 RISK ANALYSIS). The line of businesses can work also backwards from Finland to Spain based in different goods and Spanish requirements. The project is possible by the means described in this thesis and profitable for both countries.

SWOT Analysis

SWOT shows a resume of the strength and weaknesses of the company helping to fix the weaknesses and improve the strength and making tactical decisions. It also remarks the opportunities and threats in the market and different situations, helping creating long term plans exploiting the opportunities and adapting to face the threats the best possible way with the available means in each moment. This way a company can use a proactive strategy instead of just reacting to the environment and it threats.

As the SWOT analyze involves research of the environment of the company and competitors, it also helps analyzing their strategies and creating strategies to differentiate your company from the rest of competitors by using brand new models and choosing a different positioning in market and mind of customers. Using this knowledge the company can be a hard opponent to competitors. It has been handled with Risk Analyses (see chapter 7 RISK ANALYSIS). http://www.mindtools.com/pages/article/newTMC_05.htm.

TABLE 11. SWOT Analysis

Strengths:

- Good Contacts and Relationship with suppliers in Spain
- Knowledge of Market
- Good quality of product (fruits)
- Contacts with possible customer

Weaknesses:

- Business area in which is difficult to join
- Time, what is required to deliver the product

Opportunities:

- Chance to reduce expenses in transport
- Find new lines of products and make export from Finland
- Find markets in other countries

Threats:

- Prices for fuel for trucks which are not stable, what can increase price for fruits
- Other markets closer to Finland, than Spanish one

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