



**EVALUATION AND ANALYSIS OF PLAN
INTERNATIONAL LOGISTIC, ITS IMPACT ON
COSTS AND SATISFACTION OF PANELITAS
COPELIA**

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Summary

In this paper grade, a problem was identified in the international physical distribution of Copelia panelita, manufactured and distributed by the company Food Copelia S.A. This study was performed, based on a compilation of information that allowed us to determine factors of negative influence in the process of exporting the product; in this order of ideas it has been determined an inadequate planning and execution of the distribution logistics, where the channels of distribution were analyzed, throwing that these ones are too prolonged, so the lifetime of the product is reduced followed by a poor condition when it is delivered to the final consumer.

For the development of the solution of the problem three factors were established, cost and handling times and preservation of the product, and the variables that affect the international physical distribution.

This in order to determine strategies to help us make an efficient logistical planning process that allows to deliver the finished product in the proposed time and in good condition; fulfilling the promise of value for the final consumer; all this in the hands of the excellent structure of its financial, commercial, production quality and administrative processes that the company Copelia Foods S.A. can count with.

Palabras clave:

- Costs
- Inflation
- Logistics

- Conservation
- Distribution
- Inadequate Planning

Abstract

In this paper grade, a problem was identified in the international physical distribution of Copelia panelita, manufactured and distributed by the company Food Copelia S.A. This study was performed, based on a compilation of information that allowed us to determine factors negative influence on the process of exporting the product; in this vein inadequate planning and execution of distribution logistics, where time between the distribution channels analyzed, throwing that this is long lasting, so the lifetime of the product is reduced is determined by this is not in good condition when it is delivered to the final consumer.

For the development of the solution of the problem under study three factors, cost and handling times and preservation of the product, and the variables that affect the international physical distribution were established; this in order to determine strategies to help us make efficient logistical planning process that allows to deliver the finished product in the proposed time and in good condition; fulfilling the promise of value of the final consumer; all this in the hands of the excellent structure in its financial, commercial, production quality and administrative processes with which the company has Copelia Foods S.A.

Keywords:

- Costs
- Inflation
- Logistics
- Conservation
- Distribution
- Inadequate planning

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List of Symbols

- €. Indicates the Euro currency symbol
- % Calculating a percentage
- \$ Sign to denote Colombian pesos
- °C Degree celsius

List of abbreviations

Gr: Grams.

KLS: kilos.

Ton: Tons.

Cm: Centimeters.

US \$: US dollar.

TIC: Treaty of free trade.

CAN: Andean Community of Nations.

S.A.: joint stock company.

NTC: Colombian Technical Standard.

ICONTEC: Icontec.

SWOT: Weaknesses, opportunities, strengths, threats.

DANE: National Administrative Department of Statistics.

EFTA: European Free Trade Association.

Introduction

This degree assignment emerges as an academic project within the framework of international business, the aim of this is to identify a problem of Copelia Alimentos S.A. During the Course of this assignment it will be evident the relevant information that that will help us with the solution of the problem that is being postulated.

For the execution of the identified problem; the unappropriated physical international distribution for the export of its star product, in this project was necessary to fix three factors under this study; and handling cost, timing and product preservation, and the variables that affect the international physical distribution, this in order to determine strategies that will help the solution; a efficient logistics planning process which allows to deliver the finished product in the proposed time and in good condition, fulfilling the promise of value of the final consumer; all this in the hands of the excellent structure in its financial, commercial, production quality and administrative processes with which the company Copelia Foods S.A. counts.

In synthesis, what we want with this project is to identify through a thorough analysis provides the most effective way to make an action plan that will allow the company more competitive in order to comply fully with the process of international physical distribution at the time of exporting the product (panelita Copelia).

1. Project Formulation

1.1 Background

To contextualize the issue raised is important to attach the story of the creation of the company, which step by step will unveil all its process.

In 1983, in La America (Neighborhood in Medellin - Colombia), there was a cafe, which was for sale at that time two students from public universities were seeking to pay their study, so they saw in this cafe a great potential so they bought it and gave it the Copelia name. To be attended college schedule like this one worked in the morning and the other in the afternoon also committing to perform well in their carrerr

In the months thatt hey were working in the cafeteria it was noted that the product that presented more rotation was the panelitas thus taking the decision to sell only these, seeing their level began offering sale to other cafes and shops.

In 1984 came a young brother who resided in the United States, testing and analyzing the amount of work generated the panelitas was decided to be born COPELIA food company S.A on July 10 of that year.

With the union of the three brothers work was becoming more balanced as its functions were more involved in what each studied divided into sales, production and business management tasks. Since in 1985.Soon after the dedication of these young man and their positive results for the company and family were given, sales were continuously increasing and the product was already being recognized in department stores, warehouses and supermarkets in the city.

Two years later with the increase in demand of the product it was having problems with the basic tools in the preparation of the product, for example, a blender and a greater used for coconut damaged more easily to the high usage of these, but the three brothers known as "madmen and geniuses" decided to design its own machinery for the production and processing of panelitas. At present the machines that were invented is the same with great quality and time performance.In 1986 market opened in Bogota, Cali, Bucaramanga, Cartagena and Manizales.Years later It is thought about product standardization, making this a necessity and for this purpose they start communication with automation companies of this kind of products but these companies refuse

to give help by the conditions in which the product is made, but still two extra young Men from outside those companies were up to the challenge.

For lack of resources they perform a project showing the manufacture of the machinery required and submit the idea to some banks for a money loan .The process of realization of the project was between 90 and 91 but at the time of testing in the company Copelia did not meet the quality standards required at the time.Finally, in 1994 they manage to discover where the fault of the machine was making process more adequate.At the same time this project has been developing the idea of packaging the panelita individually, the machine for this process it was own by the largest companies and it was too expensive and so Copelia decided to only do this development. on a national level Still counting with several difficulties the machine was obtained in 1994. This was the first Flowpack developed in Colombia. Machine which is currently exported from Colombia to different countries in the world.

In late 1993 the company includes one product, adding arequipe thanks to suggestions that companies that they had to try the product, the company Nabisco.

Copelia currently produces panelitas arequipe and coconut, coconut candies, caramel and condensed milk.In 1996 the company made its first direct export to Venezuela, this was the point where he came to discuss the foray into new international markets, enabling all staff and acquiring new. In 1997 the leader in the market of La Nacional de Chocolates candy company seeks to Copelia to develop condensed milk to make new product line and thus the Copelia company enters a new business and thanks to this the management processes reaches quality goals established years ago. In 1999 and 2000 it is achieved install a distributor in Florida. Copelia company is the first to bring to market milk in doypack condesando presentation.This product completely change the basis of condensed milk consumption in Colombia.

The company currently has open market in countries like the United States and Venezuela already mentioned above in addition to Costa Rica, Guatemala, Canada, Dominican Republic and Peru the goal is to reach more countries, for this is developing a strategy to have an excellent distribution international physics, based on delivery times and costs. The success of the company

lies in having maintained the quality and industrialized a product that is manufactured only by hand without losing their essence.

Then we enter to discuss issues of utmost importance that occurred during the growth of the company and who himself helped the continuity of it.

Amid the economic slowdown in the Colombian foreign trade in food and still seeks to maintain and not lose the ground gained has for some years with the widely international alliances. Colombia in recent years has signed several free trade agreements where politics and Colombian economy are focused on further growth and development through preferential and permanent relationship with a key player in the global economy, in order to generate new employment opportunities, improve the quality of life of the population, increase their well-being and contribute to the development of the country.

- **Existing trade agreements in recent years:**

- CAN

- Venezuela

- Mexico

- Mercosur

- Chile

- Northern Triangle

- Canada

- EFTA

- European Union

- United States

- Trade Agreements signed 2015:

- Panama

- Pacific Alliance

- Israel

South Korea

Costa Rica

TABLE 1. Share of exports to countries with existing agreement from 2014 to 2015

Acuerdo	2014		2015		Variación %
	US\$ Mill	Part. %	US\$ Mill	Part. %	
Estados Unidos	14.200	41,5%	9.853	41,1%	-30,6%
Unión Europea	9.406	27,5%	6.008	25,1%	-36,1%
CAN	3.210	9,4%	2.730	11,4%	-15,0%
Mercosur	1.863	5,4%	1.393	5,8%	-25,2%
Venezuela	1.987	5,8%	1.060	4,4%	-46,6%
México	914	2,7%	914	3,8%	0,0%
Chile	989	2,9%	737	3,1%	-25,5%
EFTA	542	1,6%	460	1,9%	-15,0%
Canadá	665	1,9%	417	1,7%	-37,3%
Triángulo Norte	449	1,3%	382	1,6%	-14,9%
Total Exp. hacia países con Acuerdo	100,0%	34.225	100,0%	23.954	-30,0%

Fuente: DANE.- DIAN. Cálculos OEE - MinCIT

In 2015, exports to countries with trade agreement continued to be led by the US, EU and the CAN, to where the 77.6% of those exports went.

Country background:

According to calculations Proexportes, it is important that countries have greater participation in food processing exports at close range; it is Venezuela, although currently with the problems facing politically we have been affected but have always been taken as a potential customer.

Followed by the US which has a high market share and the Colombian development. Counting other neighboring countries such as Peru, Chile and Brazil are that I carry more food and drinks Colombia, as well as Central American countries, such as Panama, Guatemala and Costa Rica.

We also found large amounts on exports to countries like Germany, Belgium and the UK since entering the European market is no easy task gives us ample opportunities to food intake.

It is noteworthy that no Asian country appears at the top, showing great opportunities to export for now is to enter that market strategies first as input suppliers and food after processing.

As it is logical for the Colombian market records show that the main exports are occupied by coffee and bananas, but now with the expansion and the opportunities given to Colombian businessmen are disclosed in international markets portfolio of foods such as candies, chocolates and cookies, also showing companies with technology that gives them the ability to innovate and develop products that stand out impact and leadership in generating foreign consumers

The country aims to sustainable development where all economic sectors to take large slices of participation in different markets, for it shows the world, ie the other countries commitment, quality and innovation working companies. In our case it is marketing panelitas, processed foods belonging to the snack industry, harineria, milling or confectionery offers opportunities that have conditions in production of goods of international stature, domestic raw materials, where a culture is shown a tradition want to become known and recognized,

For this sector of processed foods can be thought of entering the market of Guatemala and Honduras, conducting previous research denote that in 2014 these countries made imports of these products from US \$ 160millones to figures of US \$ 251 million; if the input is analyzed to Asian markets are countries like China, Japan and India with imports of US \$ 91 million to US \$ 650 million.

On issues where the steps taken by the country for the development, growth or logistical strengthening can mention that is becoming part of meetings, conferences and multiple alliances with different modes of transport are evaluated, one of the most recent meeting was held on 22- October 23, 2015, EXPO BAR, meeting presentation given food, hotel, restaurant, catering in Bogota; 15-18 October 2015 Food pairing featuring food, drinks, deli, bakery, cheese, held in Medellin restaurants and mentioning some important this is to attend the Fair ALIMENTEC Bogotá Colombia 2016, between 8 and 11 June , Alimentec and Anuga together to make ALIMENTEC 2016 event will bring together the most representative of the national and international industry in terms of industry Food, beverages and related services; among others as:



FIGURE 1: Flair

SOURCE: Portalferias.com

27 - May 28, 2015, the 17th Latin American Meeting of Logistics, is the only meeting in specializing in logistics region, the meeting is a unique area for update on process improvements, technologies and trends, opportunities, exchange bestpractices and new challenges and solutions.

Adding the variety of events offered by state entities, ProColombia for business growth counted for it with these logistics developments.

- Colombia participates in the most important food fair in the Middle East and Africa.
- Chinese investments in machinery and technology.
- Familiarization trips with 167 wholesalers from 27 countries will travel 13 departments.
- Corferias event with the participation of more than 800 entrepreneurs.

It focus on key points where Colombia generates and strengthens the progress of exports and imports is very important to mention-including seaports port operators and port companies and

private- public sector moved a total of 153 million tons of cargo, an increase 1.3% compared to 2011, according to figures from DANE

For our foray into foreign markets has found good news, Buenaventura now opens the doors to Asian markets highlighted porposeer the main routes across the world generating for the Colombian market great opportunities with free trade agreements currently executed, this port includes investments 450 million dollars, of which 175 million will be allocated to teams, 215 million in infrastructure and \$ 60 million in logistics.

1.1.1 State of the Art

The food product of the company are panelitas Copelia, on which our work is focused.

2010 - 2015

- *“Food Copelia launches the Conchita filled Arequipe. Market launch of cassiterite Line, line brought us to the Colombian population with a distinct, economical and easily accessible product. Market launch of Coco Dulce de Leche with a spoon able version of Traditional panelita of Arequipe and Coco Copelia. And though this release is made only nationally, the company in previous years as mentioned in the background makes a big investment in 2000 by creating its own distributor in the United States.”*

(Copelia, 2016)

- Colombia signed several free trade agreements, including NAFTA with Canada, the United States, Costa Rica which are the largest markets Food Copelia, but in turn also signed FTAs with Chile, Mexico, South Korea, the European Union among others, thus encouraging the export of Colombian products and increase exports. For Copelia food, of course the free trade agreement that benefits them most is the United States that was signed in 2006, five years after it is approved by the United States Congress. The agreement diverse topics as the origin criteria in this way, the tariff must pay the copelias panelitas to enter the US market is 6.4%, product benefits from free trade were discussed.

(Comercio, 2016, pág. Princ.), (Schedule, 2016)

- Similarly Colombia seeks to encourage investment in the country, to increase trade, and one of its projects is focused on road infrastructure with 4G-way (also known as highways fourth generation) the main objective is to reduce costs and times the logistics process through new road, tunnels, bridges and dual carriageways; with an estimated \$ 47 billion pesos (about \$ 18 billion dollars) a project that has been thinking since 2013. Project that its benefits are forecast to grow by 1.5% of GDP during the years of construction, a decline in investment 1% in the rate of unemployment, decrease in time will be 30% and costs by 20%, between the main works is the bypass of prosperity that connects Cartagena and Barranquilla.

(Enciclopedia, 2016)

1.2 Problem Proposal

Situation or problem diagnosis

Copelia Alimentos S.A., located in the municipality of Medellin, Antioquia, is currently (December 2014) by presence in international markets in countries such as Costa Rica, the United States and the Dominican Republic; exporting food stuffs, (Product Star) cajetas arequipe and coconut, caramel, condensed milk, among other products that are in the portfolio. In the process of exporting the products of the company, inadequate planning and execution of international physical distribution, where it is analyzed, the time between the distribution channels, which is long lasting is evidence, which decreases the time product life, making this is not in good condition when it is delivered to the final consumer. Thus, negative impacts, where significant losses affecting the economic development of the company are reflected are caused,

so it is necessary to make a strategy to run the assembly of the entire chain of specialized international physical distribution (logistics), to deliver the product to the consumer in an estimated 6 months before its expiration time and in good condition.

For the process a methodological tool, called matrix involved established; logical framework tool that allows us to identify individual interests, common interest, individual problems and problems in common, presenting the different groups involved.

TABLE 2. Matrix involved

Interes Groups	Individual interests	Which is the common interest?	Perceived Problems	Common Problems	Resources		
Imports and Exports	Decrease in Delivery times	Identify elemnts that allow the strengthening of logistics and the international distribution of Copelia to be more competitive	Reduced competitiveness at the International markets	Inadequate planning and execution of international physical distribution for export of their products	Freight agency		
	Improve in the distribution chain		Delays in the documental operation		Custom agency		
	Well use of Commercial agreements and Free Trade Agreement		Lak of analysis in the supply of customs and freight agencies		Proexport		
	knowledge of distribution costs		High costs in customs and logistics formalities leading to operation		National Tax and Customs		
			Delays in transit and delivery times				
			High costs of local and international transport				
Status	Increase of Imports and Exports		do not start planning the execution of the export starting from the approval of the innvio				
	Increase of GDP		failure to comply with the tax obligation				Republic Bank
	Employment generator		Unemployment				Industry commerce and tourism ministry
	To promote International Commerce		Increase state costs leading to a lower social investment				Superintendence of society
	Foreign investment attraction		Decrease of foreign investment				Proexport
			A country less competitive				
Guilds	Sectoral level strengthening		Exchange risk				
	Ability to generate managements of representativeness at sectoral level against government bodies		Market volatility		Disintegration of the companies that make the guilds		Fenalco
	Development of models of associativity		more rigorous normativity		Lost of competitiveness at local level		Commerce Chamber
	Promote strengthening program of costumers and suppliers that allow them to become ALTEX				decrease of commercial chain		Proexport
Educational institutions	Develop information model according to the research groups needs				Les competitive professionals		Education and secretary ministry
	Obtain commercial discounts				Lost of credibility		
	Permanent update process						
Financial Sector	More international exchange operations		Increase of portafolio		Republic Bank		
	Increase of profitability through increase international transactions		Decreased profitability		Proexport		
	Development of new portafolio and services						

(Jimenez, 2016)

On the other hand, to enter further analyze the topic in research, a problem tree was made: tool through which it was possible to identify the causes and effects that occurred from the problem present in groups interest in this project.

TREE APPROACH TO THE PROBLEM.

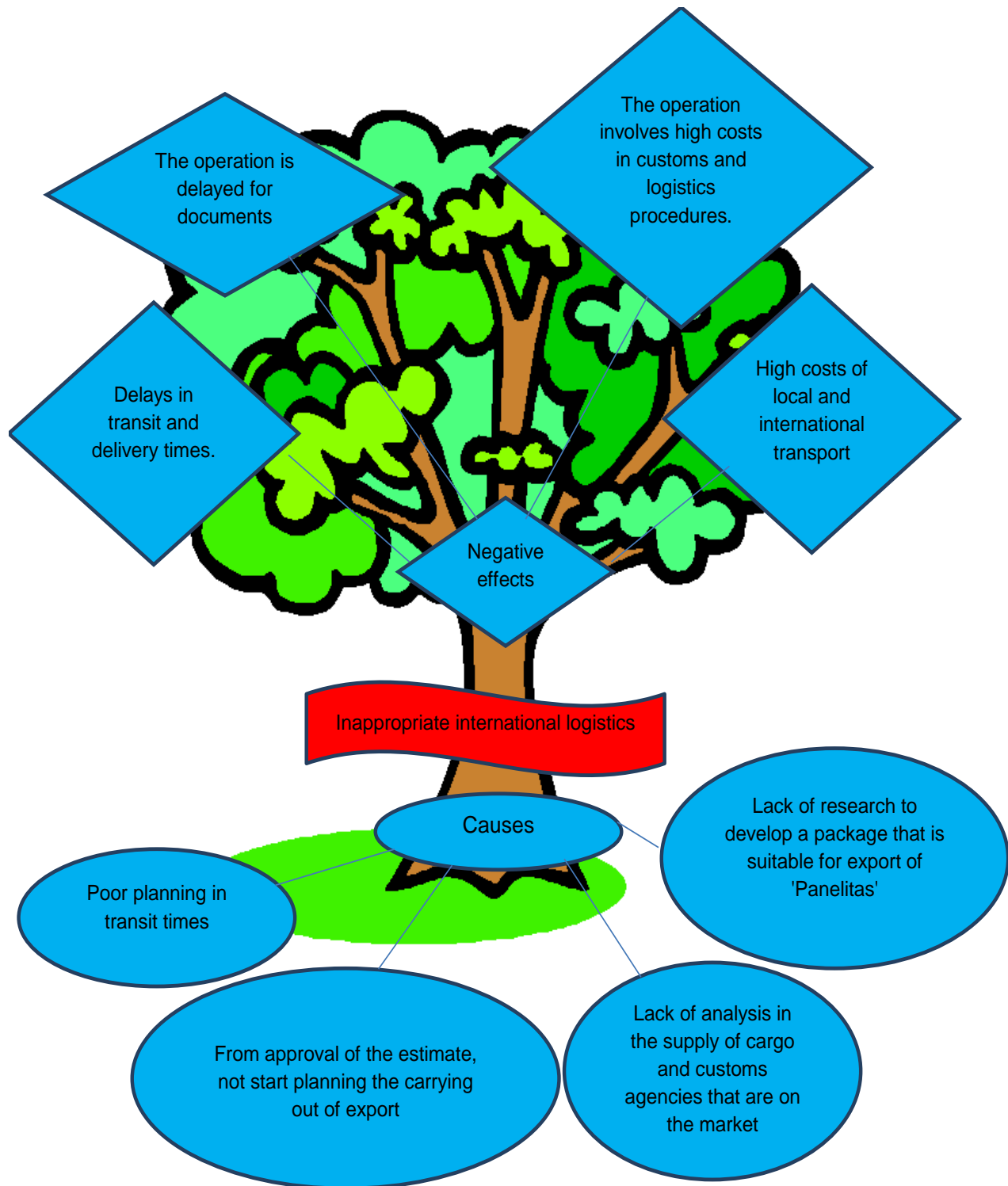


FIGURE 2: Tree approach to the problem.

(Copelia I. A., 2016)

Given the above, the following questions are asked, which will be resolved during the development of this research and that will frame the objectives of the study object:

- If food Copelia had a strategy for planning transit times, control in measuring delivery times, in which the lifetime of the product it would be preserved?
- If you start to plan the implementation of export from the approval of the quote would the process of logistics (transit times and delivery) for the export of products more efficient?
- By studying and analyzing offers cargo agencies and customs that exist in trade, Could you determine an efficient work in the distribution chain?
- If food Copelia had made a preliminary investigation to develop packaging that allow appropriate export panelita, were presenting difficulties in international physical distribution currently?

1.3 Rationale

Theoretical Justification

This project is given taking into account the negative variables identified in the development of an analysis by the company distribution channels, in which international logistics inadequate that the company has identified, which is quite worrying as both a very important challenge because this depends largely on increased sales abroad. According to the above the company has focused on raising a strategy that allows them to identify possible solutions, guided by very specific data such as product quality and service life, unique features for the consumer they are quite important in consuming the product.

Social justification

This project registered is a response to a problem found in the company Food Copelia for international logistics inadequate that has been showing in delivery times, making the product reaches the destination country with a much lower life on its packaging; the above no longer would do so commercial product, due to the quality that this presents for impairment, meaning a significant loss for the customer, as this could not sell the Copelia panelita to the final consumer, as the undertaking as to reconcomiendo and lost his client. On the other hand, it is important to mention that the solution to the problem presented by the company, will bring benefits when competitiveness and product recognition in the market, which would generate customer and the company increased its sales.

Personal Justification

This is a project that focuses us in terms of growth and development concepts with a broader professional profile, to the extent that we move from theory to real practice, allowing us to focus our ideas to solve a problem.

1.4 Objectives

1.4.1 General objectives

Develop a plan of international logistics for air and sea exports that would meet the goals of logistics; integrals reduce costs to a minimum payment in accordance with customer expectations and reduce the use of capital to a minimum.

1.4.2 Specific objectives

- Check the current costs of the international air and maritime export physical distribution of products.
- Know the product storage times to determine strategies that enable efficient planning of the logistics process, in order to fulfill the promise of the end customer value.
- Identify and analyze the variables that affect the international physical distribution, to improve competitiveness of the company.

. 1.4.3 Methodological Framework

In Colombia have signed free trade one of them and the most important is the present you have with the US through a platform that allows entrepreneurs have a business development that allows boost foreign trade and competitiveness of the country.

The free trade agreement between Colombia and the United States, Mexico and all the countries of South America (except the Guianas) in addition to the four treaties signed by the country which you are:

The importance of signing free trade agreements generates an efficient means to provide a stable environment without barriers to trade and investment and thus ensure access of products and services in the country to external markets. To be used by domestic entrepreneurs, allows the economy to grow, increase the marketing of domestic products, more employment is generated, the productive apparatus modernize, improve the welfare of the population and, in addition, the creation of new is promoted companies by domestic and foreign investors.

Currently, most countries in the world are celebrating free trade agreements, opening its doors to the world market and, in this way, achieving better conditions for selling their products and services to other nations. If a country does not want to simply lose comparatively the advantages offered among the countries that do.

By itself, a bilateral free trade is not enough to generate development. Despite its positive aspects, the willingness of countries is also required to implement policies that allow for security and stability to the economy and to reduce domestic economic and social differences. It is therefore necessary to work to modernize public institutions, reduce insecurity, improve roads, ports, utilities, telecommunications, and face problems such as corruption and failures in justice, among other factors.

Countries often use a wide range of mechanisms to hinder trade in third countries, including prior licenses, quotas or tariff quotas, technical barriers, sanitary and phytosanitary barriers, safeguards, among others.

One of the goals of free trade agreements is precisely regulate all these mechanisms, in order to make them transparent and predictable, rather than arbitrary and discriminatory.

Competition policy: When removed the barriers to entry are likely to increase incentives for there to be a distribution market in an artificial way, or applied by other means anticompetitive practices with international scope, and that the absence of formulas between allowing states to investigate and punish anticompetitive practices having effects on the free trade area, conducive nullification or impairment of benefits under that free trade. Therefore, in a field such as free trade areas the main objective of the competition rules is to prevent the benefits of trade liberalization being affected by the effect of restrictive practices and being able to preserve a competitive environment. For instance, national standards are not the appropriate solution in all cases, primarily on jurisdictional grounds of the application of the law, why in the treaties is necessary to have mechanisms to prohibit and / or counteract anticompetitive practices affecting trade in goods and services between the parties by companies that have market power.

It is evident that at the beginning of XXI Century, SMEs, face new challenges, as the quality, speed and agility of their work will not be enough attributes to compete successfully. Therefore, it is necessary to develop new skills, learning unlearning some things and others. The argument warrants that have an address where the positions actually change the prevailing conceptions and allow the new manager, be adaptive, with high responsiveness and intellectual conditions to think beyond the unthinkable (Ludovic, 1995).

It is clear that continuing anchored in old paradigms will paralyze the ability to think, to act, to learn new experiences, hampering bring fundamental changes in the areas of innovation, intuition or inspiration. The presence of SMEs in the composition of the industrial fabric is prominent worldwide. This is evident with the support of the figures presented by Diaz D (2001), in Europe, SMEs constitute 77% of companies; in Germany, 99% of companies. In 1993, in the current European, EU Union (formerly European Economic Community) there were 17 million SMEs; In the United States of America (USA), SMEs make up 95% of companies. In Asia, Japan, consisting of 99% of companies. Regarding Latin America, SMEs are 99% in Mexico, in Argentina correspond to 26.8 and My SMEs 71.7%, also in Colombia they are 56.2% and Mi SMEs 30.9%, according to data supplied by the division of Production and Management of ECLAC, on official figures for each country (ECLAC, 2002). Thus the high representation of SMEs in the economy of nations is demonstrated, which translates into a social and economic relevance, helping these companies to the country's economy, being decisive sectors that

generate high levels of occupancy labor force; also, as a contributor to exports, investment and its impact on the gross domestic product per person. (GDP / p).

According to López (2009), globalization is a reality in motion, and the consequences of this process affect the competitiveness of business, then the need for innovation and adaptation of enterprises to changes that occur in their environment are topics of current interest. The attitude of organizations towards technology and generation, selection, acquisition and use is what is known as R & D "that provide competitive businesses with the internal generation of technology innovation advantages. The internal development of I + D is shown as the main strategy for the introduction of new products on the market. There should therefore overstate the importance of external knowledge acquisition and design innovation policy it must be fundamentally aimed at strengthening the capacities internal and external companies.

Alan Lerner (2007), asserts that it is possible to say that for companies already positioned in the market, it is difficult to innovations, since they are governed by greater attention to the customer demands and make investments that generate high returns. In companies already established market and values define what the real impact on your business. Because the material resources are more flexible and adaptable than processes or values, small businesses tend to respond better to changes in the context that large corporations. Therefore, it is necessary to understand and systematically thinking in terms of value creation capabilities that has the organization, ie, those residing in its processes, products and values in creating new knowledge.

According to Jose Enebral Fernandez (2002), innovation companies are not simply about new products or services; also new methods and tools, new ways to manage their resources and capabilities, or new ways to reach customers. It is not innovation for innovation, but to improve the business; We innovated to approach the vision or strategic objectives formulated as a business project. As regards the promotion of ideas for innovation, we must remember that it is not only original and efficiently solve old or new problems; companies also require creativity to achieve new goals and better exploit its advantagesCompetitive.

The My SMEs have great power generator of jobs and at the same time employing hand more abundant, thus producing an improvement in the levels of unemployment in the population.

Thus it is how SMEs make a contribution to the industry as they help large producers to produce its products, in most cases, especially those engaged in the manufacture of a product, whether intermediate or final consumption which focuses its business, usually the domestic market. Therefore, even small and medium enterprises must adopt technologies that fully support the objectives of the company allowing to react quickly and flexibly to external events, taking part in the organization: commercial, production logistics, and decision-making financial. One of the great challenges for SMEs of familiar character, is to achieve the independence of its management regarding ownership, moving to a purely technical level. In smaller industries, this problem is even on the finances of the organization, which with difficulty are independent of family finances. In these times of permanent transformations product: The development of new technologies, increasing globalization in the economy, accelerated pace of introduction of innovations, development of new products and competitors in the markets, among others, it is necessary for companies to prepare for these changes through the advance thereof. The development of new products specifically contributes to the challenge of SMEs, in considering the global nature of its markets and the need to cope with the increasing existing competitiveness. Faced with the uncertainty caused by mutations and complexity of systems, companies are called to use more than ever, flexibility, coordination and imagination, which will anticipate and overcome the crisis caused as a result of the inadequacy in production structures the sustained changes permanently. A comprehensive and orderly perspective helps manage technology and Innovation Company in the theoretical and practical levels, with special emphasis on the situation of Colombian companies regarding the various aspects to be considered to innovate efficiently and keep going

The certifications have become an important tool for negotiations in foreign markets, thanks to the recognition of governments to demonstrate compliance with standards that are mandatory in other countries. In addition, product certification as Icontec is accredited by the National Accreditation Agency of Colombia (ONAC) in Colombia and by the American National Standards Institute US (ANSI) in a variety of sectors for product certification.

The quality of products has become attribute greater weight in purchasing decisions of consumers, a factor which represents significant added value for products bearing the Seal of Quality Icontec. Copelia advantages and benefits of the export of its products to the American market.

- Provides confidence to customers about the products they buy.
- Press to open the doors to new markets.
- Continuous improvement of processes to achieve product profitability
- Strengthens exports, with the support of government recognition with several countries, and facilitates the entry of products certified by Icontec.
- Facilitates the marketing of products in the government sector, which requires purchases in product certification.

The problems facing the department of Antioquia place location of industrial headquarters Copelia requires roads to intervene in dual carriageways, construction, paving, rehabilitation and periodic maintenance are significant to improve the state of the road network in the department and enable the connection with national flows and international; the projects will be implemented in a comprehensive manner and under the environmental conditions required.

The problem would be solved by the Strategic Plans implemented by the Government of Antioquia, for the development of road infrastructure and transportation that allows to overcome the isolation of production areas to urban consumption centers within the department with national markets and international.

1.4.4 Method

The method used to address the object of study will be through research, interpretation and news, in order to analyze the impact of road infrastructure in the process of internationalization for foreign investment and its impact on the competitiveness of the Department of Antioquia.

The research is done based on the methodology of exploratory research. Following an introduction to it so they know how they will develop the types of analysis done previously proposed. Exploratory Research Exploratory research is considered the first scientific approach to a problem. It is used when it has not yet been addressed or have not been sufficiently studied and the conditions are not yet decisive, it was decided to choose this type of analysis why it is justified that strategic planning and management indicators as a control technique that allows the optimization of processes supporting the value chain of companies exporters in Colombia. This

research is aimed at the collection, interpretation and analysis of external information, which can be used to support decision-making, as well as support developed strategic plans. It is to this end that the application uses market research, technical analysis and organizational analysis.

Rodrigo Varela. Business Innovation: Art and Science in business creation, Prentice Hall, 2001, (Chapter 7, Page 169) Depending on the nature of the targets for the level of knowledge to be achieved on the impact on the road infrastructure to transport goods in the department of Antioquia and its impact on international trade in the region, allowing optimization of processes supporting the value chain of export companies in Colombia to generate, refine and evaluate actions performance and improve understanding of the researcher.

About the need for information Kinear (1.998) says: "The first step in the research process is to establish what the need for information for an investigation is. The research project must provide certain information relevant to decision making. "Considering the above, define a specific situation when applying the study, is the basis for structuring this delving deeply into the different areas. In the case of an exploratory research to include the collection of previous studies, in each of their areas and external data query that could guide the development of the project. After this it is imperative to develop the guidelines continue research to improve the implementation process. About the research design and data sources.

Kinear (1.998) says: "*Having defined the objectives listed study and information needs, the next step is to design the formal research project and identifying appropriate data sources for the study. A research design is the basic plan that guides the phases of data collection and analysis of the research project.*" (Kinear, 1998)

It carried out an investigation which combines some of the essential elements of qualitative and quantitative research type; but also have a fundamentally descriptive.

It should initially be considered qualitative research all remarkably privileged experience who is investigating; in this sense Taylor and Bogdan consider qualitative research: "It is one that produces descriptive data: people's own words, spoken or written and observable behavior" (1992, p.20).

Enabling with this interpretation of the impact of road infrastructure to transport goods in the Department of Antioquia and the impact on international trade in the region in this regard Denzin and Lincoln say that qualitative research "involves an interpretive approach, naturalist to its object of study "(1994, p.2).

It is the structure that specifies the type of information to be collected, data sources and collection procedures and data analysis.

By bringing as soon raised to an exploratory study it shows that is during this process that information collected by the collection instruments depth information will be filtered, analyzed and converted by tables or graphs used the researcher to perform analysis and so complete the objectives.

1.4.5 Methodology

Collection of secondary information: Because this work is purely investigative and interpretive essentially secondary sources of information be treated as a bibliography of road infrastructure, internet, government publications, news, in order to develop the object of study with analysis and prioritization information.

the short- and long-term impact of economic development and competitiveness generated by the creation of new ways to improve the road infrastructure in the Department of Antioquia thus generating better connectivity at regional and national level will be reflected.

It carried out an investigation which combines some of the essential elements of qualitative and quantitative research type; but also have a fundamentally descriptive.

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In addition it should be noted that qualitative research is essential theming and categorization of a lot of documentary information; for LeCompte qualitative research is designed precisely: "From observations in the form of interviews, narration, field notes, written records of all kinds, pictures or films and artifacts" (1995, p. 2) Data. support research that is intended, will be taken as they are, not rebuild or modify, quality, according LeCompte means "the real, rather than the abstract; global and concrete, rather than what disintegrated and quantified. "(1995, p.3).

However being a joint investigation is to take the quantitative model the possibility of establishing a relationship representable by a numerical model. As they refer Hernandez, Fernandez and Baptista quantitative research:

Use the collection and analysis of data to answer research questions and test hypotheses made previously, relies on numerical measurement, counting and often use statistics to pinpoint patterns of behavior in a population. (2003, p.5).

Additionally this research is descriptive and therefore "seeks to specify properties, characteristics and important features of any phenomenon is analyzed" (Hernández, Fernández and Baptista, 2003, p.119).

The description also brings together the results of research in a coherent and orderly exposition; and as regards Carlos Arturo Alvares Monk (2011) corresponds to "the step that takes the researcher to present the facts and events that characterize the observed reality as they occur, preparing with this the conditions necessary for the explanation thereof." (P.96).

The main objective of this methodology is then seek the analysis of the impact generated Broadly speaking it is intended to carry out a joint investigation I agreed some of the essential elements of qualitative and quantitative research type; but also have a fundamentally descriptive.

1.5 Scope.

This paper makes the analysis process operation Copelia Food Company S.A. the United States today and to identify the best alternatives logistics process for the export of the same, with respect to international standards for compliance, management of cold chain, logistics costs and variables that influence to improve competitiveness of the company.

This study is based on data collected over the last five years in international logistics operation trends that can be implemented by the food company Copelia S.A.

2. Project Implementation

From an estimated 360000 panelitas sales for the distributor in Florida we have made a number of contributions to international freight to reach the following conclusions.

The packaging of the panelitas be 50 units boxes with the following dimensions: length 18 cm * width 14 cm * height 10 cm and net weight of 1150 gr.



FIGURE 3: Photo presentation panelita Copelia

SOURCE: (Photo Food Coppelia, 2016)

For handling and safety of the goods we use boxes with the following dimensions: length 40 cm * width 30 cm * height 20 cm and a net weight of 500 gr.

To get our product will use the sea or air, handling cargo in standard pallet with the following dimensions:

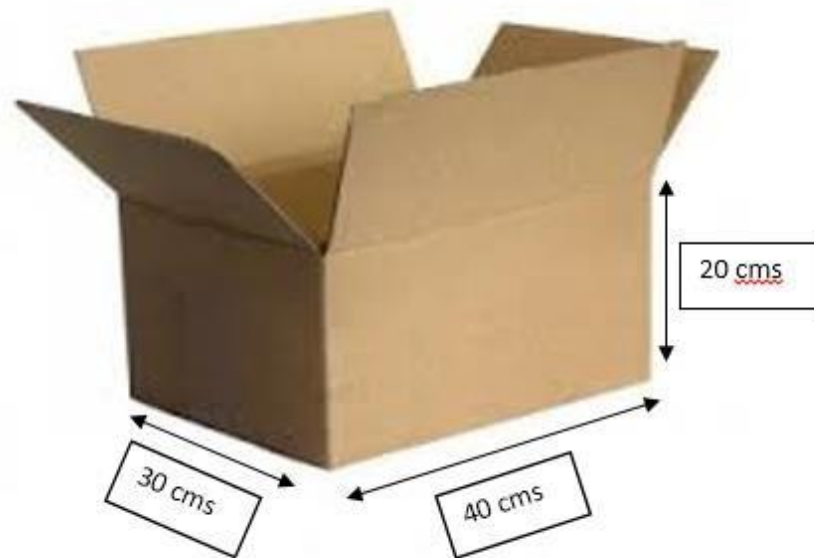
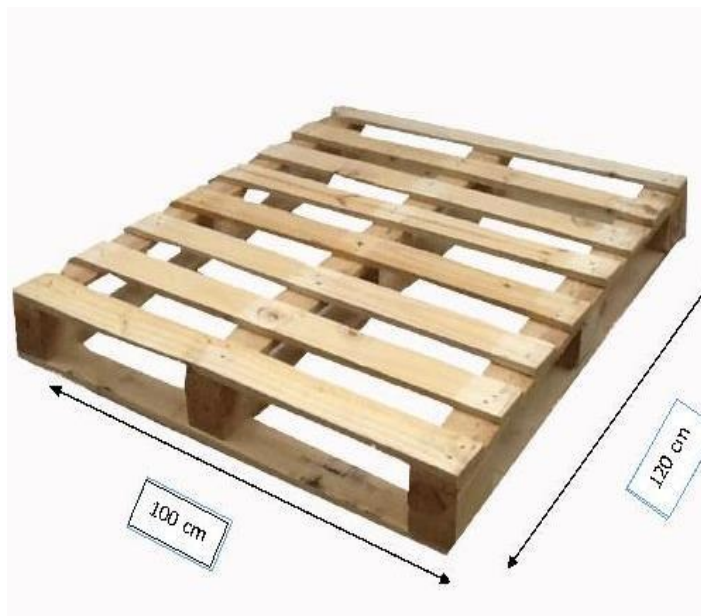


Figure 4: box measures

Source: (Research, 2016)

In this way we fit in the box 6 units on a first-lying and other 6 units in a second lying; for a total of 12 units per box and 600 panelitas per box; with a gross weight of 14.3 kilos.

To get our product will use the sea or air, handling cargo in standard pallet with the following dimensions:



SOURCE: service pallets Mexico, 2016)

FIGURE 5: pallets measures

Therefore the pallet fit 6 boxes located along x length and breadth x width, high give us 5 floors with a height of 100 cms boxes plus 15 cms height pallet for a total of 115 cms, and weight of 25 kilos of pallet plus the weight of the goods 429 kilos for a total of 454 kilos equal to 0.454 tons; for a total of 30 cases and a total of 18,000 panelitas per pallet.

Later in a 20ft container we fit 10 pallets standard size interspersed with a weight of 0.454 tonnes and a height of 115 cm, so you can make another floor, for a total of 20 pallets, weighing 9.08 tons tare 2.4 container would be a gross vehicle weight of 11.48 tonnes and a height of 230 cms; for a total of 600 cases and 360000 panelitas

20 pies estándar (dry cargo) 20'x8'x6'



MEDIDAS	EXTERNA		INTERNA		PUERTA ABIERTA	
	Metros	Pies	Metros	Pies	Metros	Pies
LARGO	6.05	20'	5.90	19'4"		
ANCHO	2.43	8'	2.34	7'8"	2.33	7'8"
ALTO	2.59	8'6"	2.40	8'6"	2.29	7'6"

FIGURE 6: Measures 20ft container.

TABLE 3: Measures 20ft Container.

SOURCE: (International freight, 2016)

Total amount of <u>panelitas</u>	
<u>Panelitas</u> * Between box	50 Units
Between box	7200
Between box * Box	12 Between box
Between box * Pallet	360 Between box
Box * Pallet	30 Box
Box * Container	600 Box
Pallets	20 Pallets
<u>Panelitas</u> * Container	360000 Units
Weight * Between box	1150 Grams
Weigh * Box	14.3 Kilos
Weigh * Pallet	0.454 Tons
Weigh * Container	11.48 Tons

Table 4: Number stuffs

Source: Construction

AIRWAY		SEAWAY	
FCA value of the goods	US\$ 60000.00	FOB value of the goods	US\$ 60000.00
<u>Freight</u>	US\$ 14573.00	<u>Freight</u>	US\$ 930.00
<u>Insurance</u>	US\$ 52.20	<u>Insurance</u>	US\$ 42.65
CIF	US\$ 74625.20	CIF	US\$ 60972.65
<u>Documentation</u>	US\$ 200.00	<u>Documentation</u>	US\$ 200.00
<u>Nationalization</u>	US\$ 10558.01	<u>Nationalization</u>	US\$ 8626.37
<u>Expenses on arrival</u>	US\$ 646.64	<u>Expenses on arrival</u>	US\$ 646.64
<u>Total shipping cost</u>	US\$ 86029.85	<u>Total shipping cost</u>	US\$ 70445.66

Table 5: import costs

Source: (Research, 2016)

For calculations of the cost of the goods we use a TRM of \$ 3000 and a selling price of Copelia panelita of \$ 500 which is already included the cost of internal transportation in destination port or airport, so the value FOB / Long FCA U \$ 60000, insurance is 0.07% (rate negotiation with Seguros Sura) and the goods and freight quoted with Panalpina shipping ensures the Copelia panelita pay a tariff of 6.4%, the agent customs charges a fee of 0.3% on VAT, the tax (equivalent to VAT in the United States) is 7%, these are the costs of nationalization in the United States, the unloading of the container is US \$ 8 per ton plus cost of transportation on arrival is US \$ 50 a tonne this are the spending target.

Journey times vary depending on the bulking agent is hired for shipment of the goods and the end of this destination, in air transport bound for Florida travel time can vary between one and two days, and maritime transport is eight to ten days.

With this we can define shipping costs are more favorable for sea transport but the transit time is the most favorable air transport, and that when choosing the means of transport for sent come into play several factors such as: type of cargo, destination, quantity, conservation and others.

Source: (CEPOCAMBIARIO, S. F.)

For determination of product preservation, Food Copelia S.A, I conducted a study under Colombian technical standard NTC 4979 Milk and milk products. Which has as its main objective the Determination of total solids in milk, heavy cream, evaporated milk, sweetened condensed milk, caramel, caramel, ice cream and cheese, by which it is governed.

For the application of this standard, we take into account governed by it in the first 3.1 for milk, heavy cream, evaporated milk, sweetened condensed milk, cheese and processed cheese predried a sample in a water bath boil and continue with the remaining water evaporation by dry heating at 102 ± 2 °C in a drying oven.

This standard allows companies in the food sector, provide security to the customer, because the fundamental mission of this is to provide support and development to product and consumer protection; making companies more competitive in the markets in which these wish venture; also because the ICONTEC, also provides information service on international, regional and national standards. (947-1, 2001).

To determine the times of conservation Panelita Copelia is important in the first instance to meet its raw material, because this is a determining factor when establishing the duration of the product, taking into account the properties that each gives the final product.

In this vein, and certain raw materials, product development given by concentrating by boiling a mixture of milk, brown sugar, butter, flour and coconut starts. It is an exquisite food supplement rich in energy, minerals, carbohydrates, proteins and vitamins; perfect in all stages of growth and ideal complement at any time of day.

Study to help determine the conservation and duration of panelita Copelia.

- **Tasting**

Colour: characteristic Brown

Taste and smell: sweet characteristic odor or taste

Appearance: texture hard or dry, without a specific form.

- **Physical- chemical characteristics**

Brix: 69- 71 ° Brix

Humidity: Max. 30%

Fat: 6-9%

- **Nutritional Composition**

Carbohydrates: 60%

Protein: 6.5%

Liquid-fat 7.0%

Water: 20%

Minerals: 6.5%

Calories from 100g and 300 cal

- **Storage conditions and shelf life**

Recommendations of conservation and use

Store in a cool, dry and ventilated environment, after opening its packaging store in a refrigerator between 2 and 8 ° C, keep in mind always the good manufacturing practices during the lifetime.

- **Presentations**

Box 50 units x 1150 g



Jar 552 g x 36 units

FIGURE 7: Introduction Copelia boxes

FIGURA 8: Introduction Copelia, jars

Source: (Copelia I. A., 2016)

The panelita Copeliacremosita internally pure coconut and natural fresh arequipe (Product Star) has a tech development, mentioned above, which allows you to have a shelf life of 6 months established taking into account the conditions of storage, packaging and capacity thereof, as well; as Food Copelia SA, has an excellent use in their raw materials, which are of the highest quality already mentioned, allowing obtaining one unique and original product, with the highest standards of quality, hygiene and easy consumption (suppliers-superstores, 2011-2016).

Presentations / Lifespan

Packing Type	Capacity	Shelf Life
Plastic pot	400g	6 months
Plastics Package	1 4kg	6 months
Plastic package	2 10kg	6 months

For business opportunities that bring the sale of the panelita Copelia it is essential for the company to have clear best practice in logistics of perishable foods, which require cold chain.

In this vein it is important to note that products Food Copelia in its production have undergone a process of cooling, in order to prevent the occurrence of micro-organisms, reducing heat emission, release of carbon dioxide and oxygen. Based on the panelita Copelia is perishable because this contact with the air tends to decompose in the shortest possible time, because of their content of milk and nutrients that pose a high risk of poisoning.

Micro-organisms are bacteria that reproduce in a product, making this unfit for human consumption. According to the Pan American Health Organization, these parasites.

In recent years have killed more than 150 thousand people because they are highly polluting, because when introduced into the food they change the odor, taste and color of the product transforming its composition insofar as they grow bacteria. It is worth mentioning that in Colombia, annually 630 million tons of perishable products of which 10% are for world trade, 30% are lost during primary production and 60% consumed within the country are produced; but much is lost during mismanagement in the cold chain.

Given mentioned initially, for Alimentos Copelia SA is essential to ensure the process temperature of its exports according to its characteristics throughout its successive phases to have a proper conservation and to achieve a product in good condition when it is delivered to the final consumer.

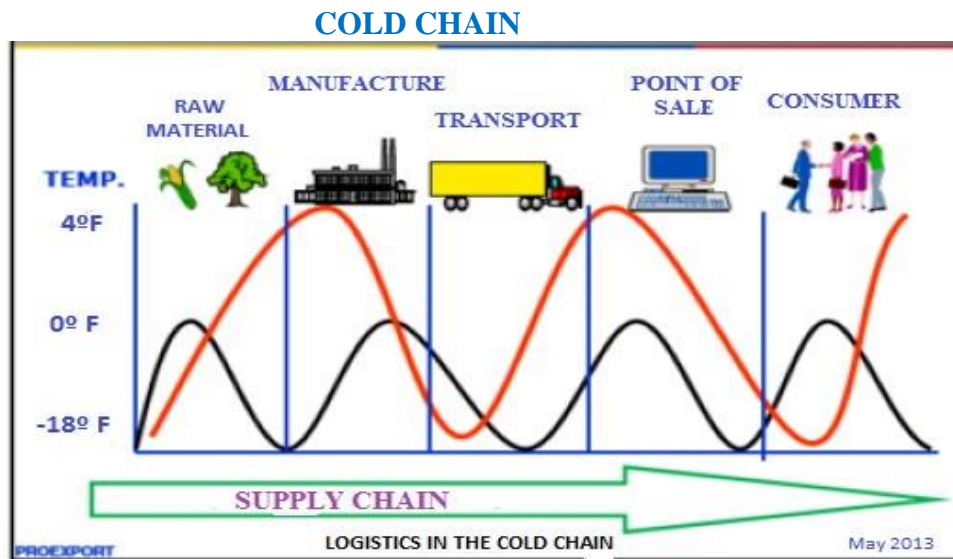


FIGURE 9: Cold chain and supply
 SOURCES: (PROEXPORT, 2013)

In the previous cold chain activities to ensure proper temperature should be handled during the transport of the goods according to their characteristics within the supply chain, from the time of purchase of the raw material evidence, storing it and the finished product, transportation and marketing to the final customer. All this in order to preserve the product in good condition.

Alimentos Copelia, is an organization that seeks to have a great success in its logistics cold chain, for this is essential to bear in mind the impact and influence that can be given in the process of supply and cold chain product, is why the following factors when trying to achieve success in every process within the international physical distribution chain should be taken into account.

Continuous measurement and control of temperature should be a rigorous temperature control of perishable products using portable thermometers, thermograph and the fixed thermos, these instruments should have an accuracy of plus or minus 0.5 ° C and be in a range between -30 ° C and 20 ° C, with a response time to reach 90% of the differences between the initial and final reading in three minutes addition; The device must contain a valid calibration certificate, this

point of the process is critical in the cold chain because it ensures compliance with the temperatures at which a product can range.

CONTROL DE TEMPERATURA

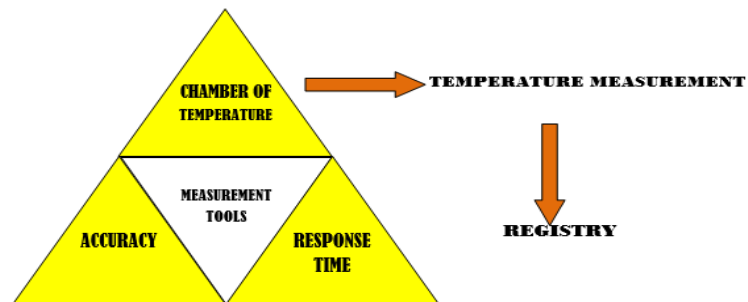


FIGURE 10: Temperature control container for conservation
SOURCE: PROEXPORT-May 2013

Storage: Storage is in a cellar, cold room or refrigerated within this should keep in mind several strategic fairly important points when take excellent care and preservation of the product:

- ✓ Location of product and equipment
- ✓ Packaging
- ✓ Storage Temperatures
- ✓ Charge and discharge

Must maintain minimum distances, as shown in the graph.

CAMERA SECTION FRIGORIFICA



FIGURE 11: Coldrooms
SOURCE: (PROEXPORT, 2013)

Recommendations for storage

- Doors must remain open the shortest time possible.
- The place intended for storage must meet basic sanitary conditions of order, cleanliness, cleaning and disinfection.
- Rotation of products should be FIFO (First in first enter Exit).
- The storage area should have ante-chambers and / or post-cameras with similar interior temperature, to support the operations of loading and / or unloading.
- Do not place the product directly on the floor or along the walls, this would hinder the circulation of cold.
- Packaging

It is important to note that the cargo units used in a cold room must allow adequate circulation of air flow which is inside the room.

For fresh produce packaging side vents are used; for frozen packages with hard sides. The plastic baskets can be used in both types of products.

It is recommended that these measures are in line with packaging pallets, for further optimization thereof; ie 60 cm. x 40 cm., height depends on the type of product being stored.

Pallets must be plastic or metal material. Wooden pallets favor the accumulation of bacteria and when filled with moisture are split easily, creating risks in handling.

- Storage Temperatures

It depends on the type of food, type of packaging and system used for freezing.

- Load and unload

Vehicles must previously cooled before being loaded, this procedure must be done as quickly as possible, with very short times from the fourth cold to the vehicle, verify the product temperature and the vehicle before loading and / or download.

Transport: It should be noted that it is essential for determining this:

The speed to transport a product that has so little life as Penelita Copelia.

The security, which must preserve the product, ie; compliance in controlling the temperature in the optimum range of each product.

Adaptability, protection requirements of varying qualities of a product to another, as the organoleptic, freshness, presentation, etc.

It is important to note that the equipment installed in the transport means is designed to remove heat from sunlight, heat air and product as such, these teams help maintain product temperature, not decreases.

Logistics operators: Another key point in the process of international logistics, logistics operators is carried out; which aim outsourcing processes within the cold chain, which requires a high specialization, to ensure the temperature of perishable products throughout the supply chain.

It is clear that each sector (dairy, meat, poultry, fruit and vegetables, etc.) has very specific characteristics that reveal logistics strategies either distribution or supply, different, particular and specific.

It is relevant to say that, in Colombia, most operators only exclusive services storage or transport are offered, there are very few who have developed the true concept of Logistics Operator, to deal holistically throughout the chain, management and conservation of products requiring controlled temperature, which is very important within the requirements needed to comply fully with the requirements of the end customer, compared with a timely and optimum product delivery.

That is why outsourcing these services is strictly necessary because it would provide customers not only the possibility of reducing costs by converting fixed to variable, but also to devote himself to the manufacture or sale of their products and improve service quality.

Based on the above and taking into account the problem with Food Copelia SA in international physical distribution of panelita Copelia because transit times between the distribution channels, the following strategies are determined for efficient planning process logistics enabling deliver the finished product in the proposed time and in good condition to the final consumer.

Strategies

- ✚ Conduct an analysis to establish an action plan in order to ensure proper temperatures that should be in the cold chain to preserve Pamelita Copelia (Perishable) from the start of the procurement process; purchase of raw materials, storage, transportation and marketing of the product until it reaches the final consumer, all this in the hands of a highly qualified staff.

- ✚ Conduct a competitive analysis to help determine the best partner in logistics operations in the country, this in order that this design for the company an excellent process stages of the supply chain (transport, storage and distribution, in the shortest time possible under strict conditions of good manufacturing practices.

- ✚ Implement comprehensive control over the entire chain, management and conservation of the product, because this requires a controlled temperature.

- ✚ Encourage training of employees, because with their experience in product development it may grow the way to make valuable innovations in preserving the finished product in the process of the cold chain.. (*Navarro, Mayo de 2013*)

As a fundamental part for compliance strategies, and obtaining efficient planning in the logistics and deliver on the promise of customer value process, the company Food Copelia SA, has an excellent structure in its financial, commercial administrative, quality and production, which are represented in a process map, which identifies the activities carried out within the corporation, contributing not only positive, but also negative; This graph also allows to assess compliance with the chain of those tasks that are initially required to complete the final outcome of the negotiations.

In this vein, to comply fully with the process and make a proper export of the product and consequently the above, the design flow chart of the process of international physical distribution of panelita Copelia is performed, in which It shows the description and relationship stages of the supply chain, facilitating comprehensive vision of all joint activities, allowing the analysis of the most viable alternatives to alternatives when making decisions regarding time and costs, in order to adjust the process towards meeting the needs and expectations. Through this chart, it also establishes excellent control and measurement tasks, yielding results, specific objectives of the operations being carried out so we can have more clearly the fulfillment of the promise of end customer value.

(AITECO CONSULTORES, 2016)

• *PROCESS MAP*

SOURCE: (Food Copelia version 001, 2013)

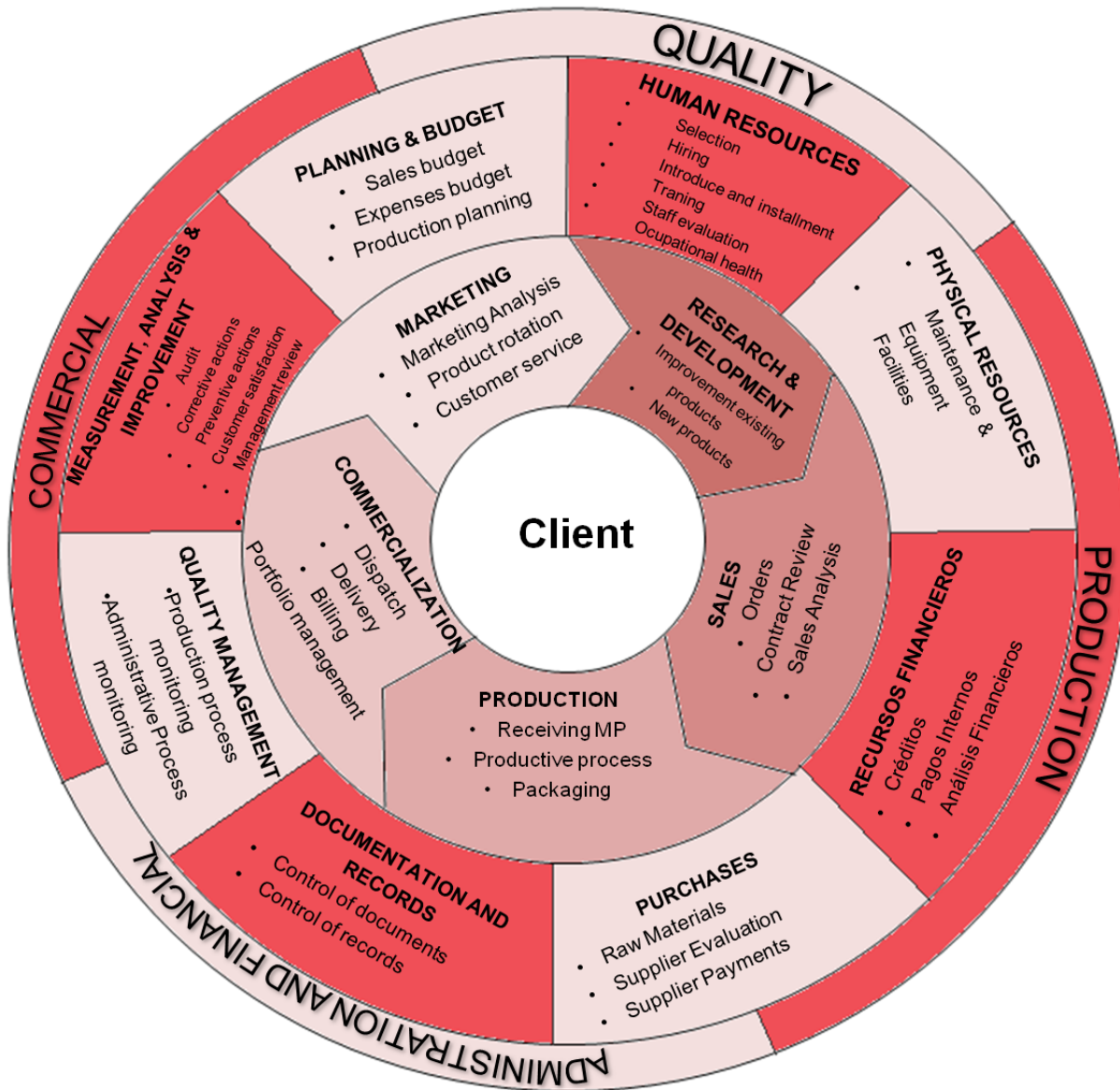


FIGURA 12: Process map

• FLOWCHART

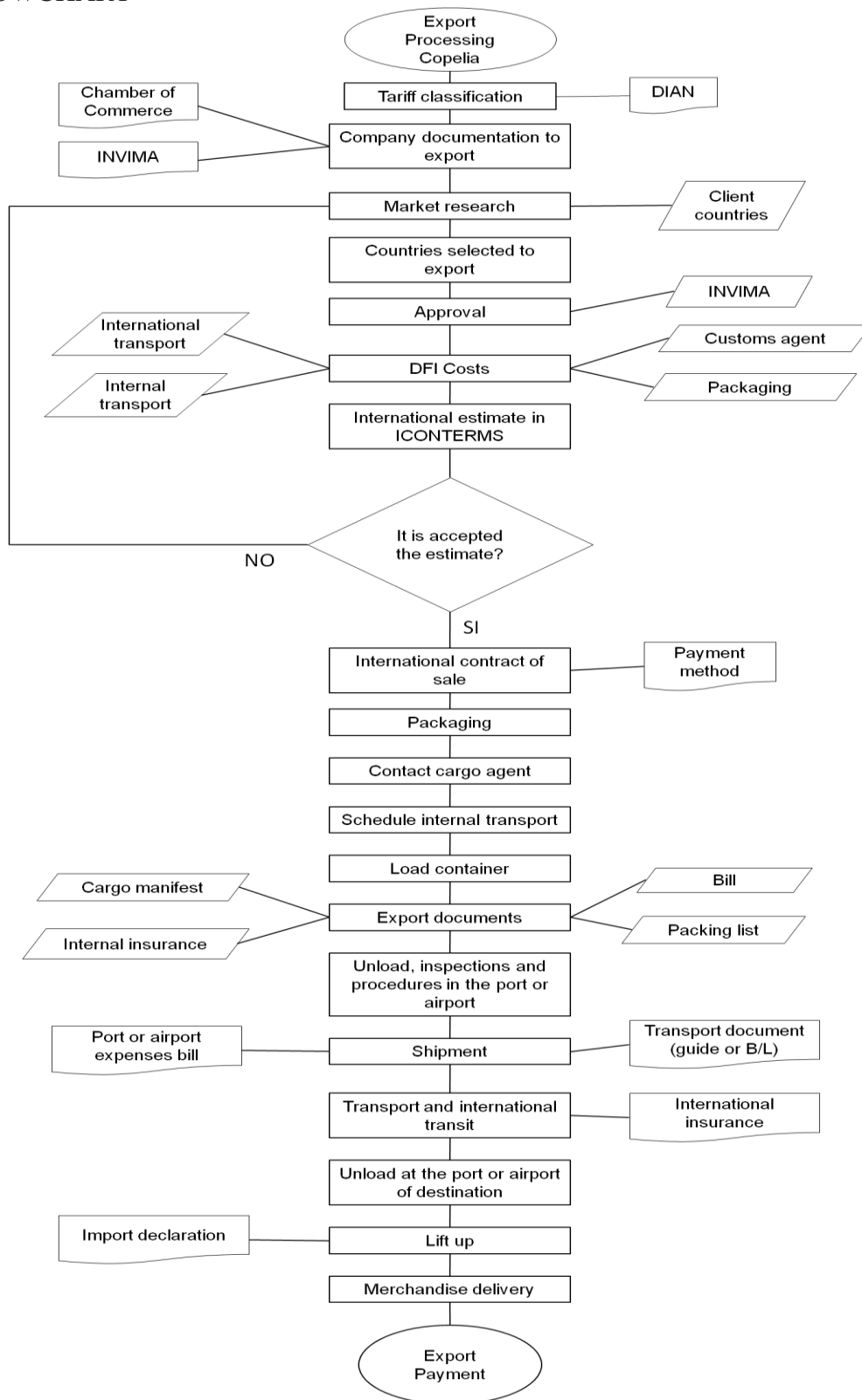


FIGURE 13:FLOWCHART
SOURCE: (Research, 2016)

To develop this goal has identified some variables that have greater significance, importance or support in seeking opportunities for continuous improvement of the company in an international environment. A brief study of these variables where the behavior of these, the effect on our industry and food to which you want to give greater market penetration shown is done. The variables have thought have an impact:

- The representative market rate
- Harnessing or free trade treaties (US, Central American countries)
- Tariffs at the entrance or sector
- Distribution Channels
- Analysis of the food sector
- Matrix SWOT

Conditions of the economy in the country definitely changed in recent months the market has been very volatile in terms of price and the more days pass citizens will have to go molding to a high dollar and the increase in value of some goods and services.

On August 4, 2015 the representative market rate showed an increase of \$ 40.47 and stood for the next day at \$ 2902.98 figure not seen since about 12 years ie close the \$ 3000, a price dollar has never seen the country.

In a report presented on inflation in the country has mentioned that the least dynamic in the food supply, transmission nominal consumer price depreciation and increased costs of imported raw materials, largely explains the acceleration of inflation so far this year.

Illustration of the dynamics of the dollar in the period 2014- 2015 evidence where its steady rise.



FIGURE 14: Evolution TRM
SOURCE: (Newspaper, El País, 2015)

“For the food industry from this time (2015 - 2016) where the dollar has made gains has been affected the basket, rising inflation falls directly on Colombian households as this makes the power of acquisition is reduced goods and services, ie families buy fewer products with the same salary. The increase in food costs is mainly due to the increase of imported materials.

Although our product does not require imported raw materials it is important to note that our suppliers somewhere in their logistics chain must need some supplement and important input which ultimately represents for us an increase in its value.

This can be seen from the point of technology acquisitions, realization of packaging products, improvement or maintenance of machinery, supplies for washing milking equipment, impellers and supplies electric fences for establishments where care is properly the animal.

The peso devaluation increases the prices of some imported inputs being essential to the functioning of livestock in the country affecting our case the supply of one of the most important raw materials for the preparation as is the milk since the importation of medicines,

agrochemicals and especially in the concentrates is very high, the price of concentrates has risen from 6 to 10%; while drugs up to 25%.”

Source: (Contextoganadero, 2015).

“To give a possible solution to this issue of the representative market rate that generates so much controversy and effects on production and marketing of panelitas would be taken as an option or strategies negotiating with suppliers subject to set prices were not us much increase the value to be reached the end consumer, this being feasible at that point where the dollar shows many changes can keep thinking about the foray into international markets to increase the competitiveness of the company. ”

2.1 Use of free trade treaties

This shall mention free trade agreement with the United States because it is one of the most important mentioned and which tried to sign for so long.

For years it was signed and comes into effect the free trade agreement increase the sector's exports that we are betting on this work; confectionery food industry, milling and bakery.

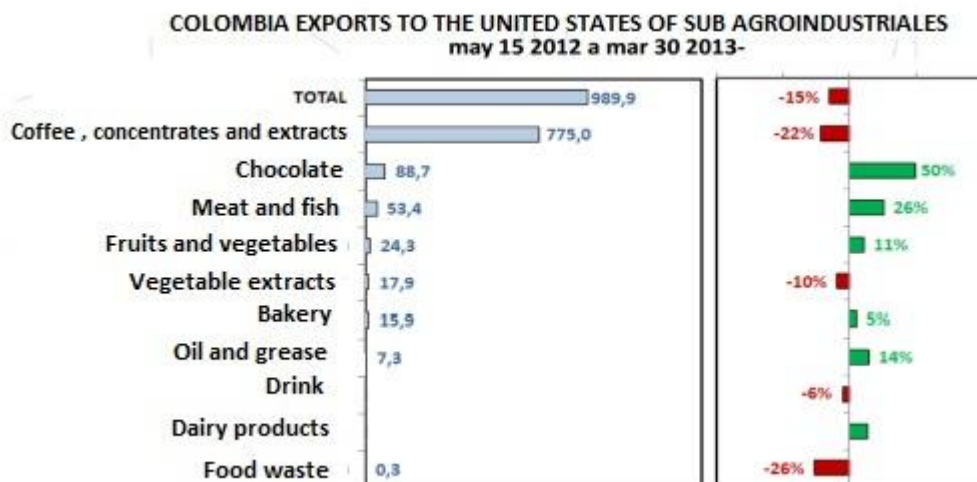


TABLE 6. Exports of Colombia

SOURCE: (ANDI, S. F.)

Most Colombian products entering the agribusiness sector United States without tariffs, for this we are talking about oils and fats, derived from coffee, fresh flowers, fruits, vegetables, fresh and processed vegetables, bakery products and grain mill.

For our sector exploration companies that perhaps this willing to import our product find data through 2012 of 506 companies that were registered for the year in which the free trade agreement was coming into effect now; this year we have an increase in companies willing and interested in panelitas.

Among the products carefully and potential in the Colombian market and greater protection by the United States is sugar, factor and striking ingredient in our product and in accordance with the signed and established in the treaty will increase significantly the share export, including some industrial products with sugar content that are part of productive transformation program where the company would be part Copelia developing strategies to increase imports reaching states of the country where consumption is increasing and show us opportunities.

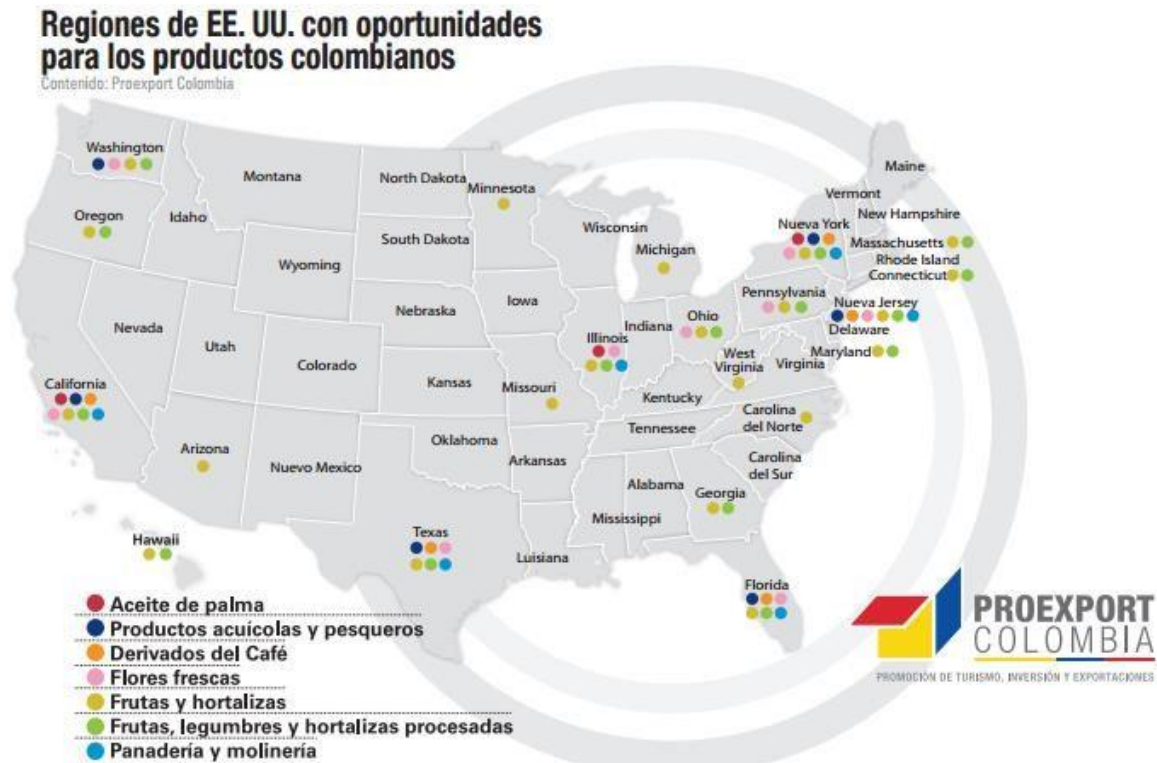


FIGURE 15: Opportunities for Colombia in USA

SOURCE: (PROEXPORT, 2015)

Ecuador was the largest recipient, with US \$ 20 million, equivalent to 20.8% of total Colombian exports of this sector.

Venezuela with 14.6%

Panama with 8.4%

Puerto Rico with 6.1%.

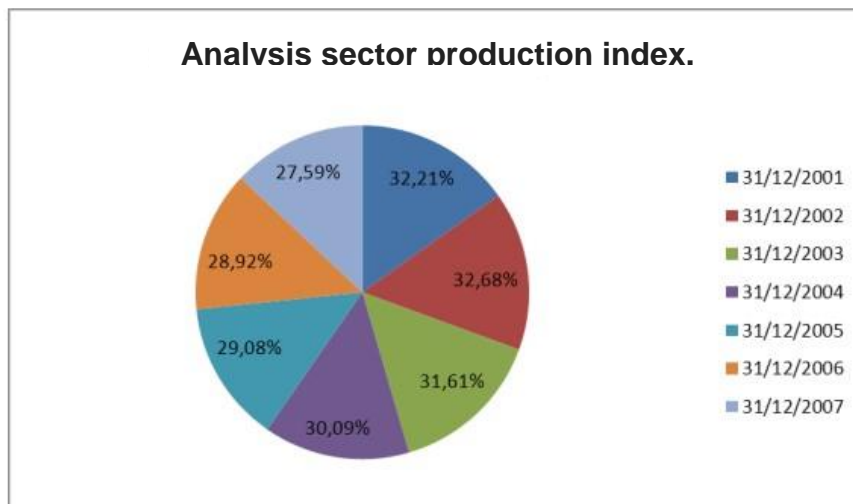
Source: (BANCOLDEX, 2015)

Tariffs before the free trade agreement in the bakery and milling industry paid tariffs to 14.9%. And entering into force sector products enter with tariff of 0%.

Colombia ranks in the top positions in this sector suppliers of food; bakery and grain mill with 0.7% of imports, ie US \$ 3.7 million.

4. Distribution channels, methods that analyze the exporter must be given time primarily conservation panelita. For this you think retailers who delivers the product in this case panelitas grocery stores, drug stores and mass merchandisers, to reach the final consumer. Another embodiment is that the importer distributes its products to institutional channel for this pass to the final consumer.

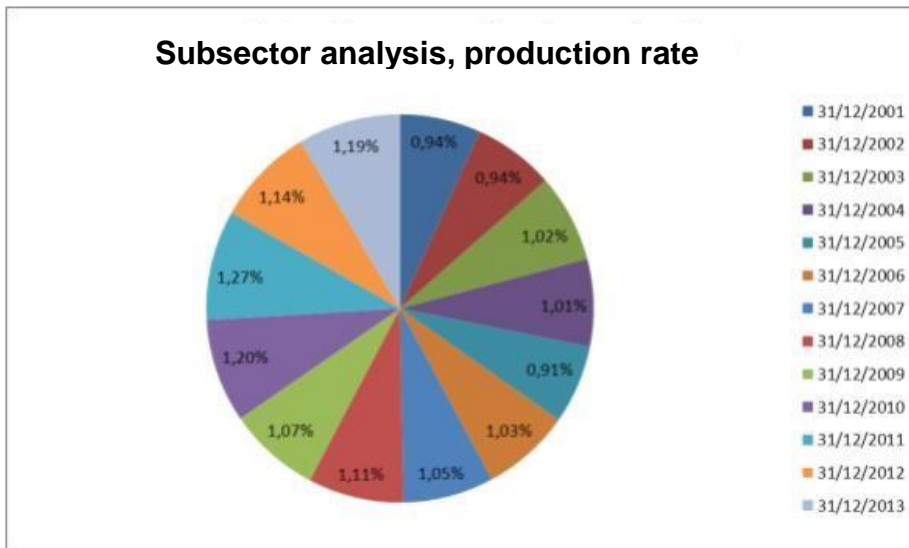
5.



Fuente: Análisis propio

TABLE 7. Analysis sector production index.
SOURCE: (Research, 2016)

Analyzing the graph of the historical behavior of the food sector in Colombia observed that between the years from 2001 to 2007, was reduced by more than 4 percentage points, going from 32.2% in 2001 to close with a 27, 59% in 2007 so the dynamics of food production sector present levels as favorable as expected.



Fuente: Análisis propio

TABLE 8. Subsector analysis, production rate.

SOURCE: (inves Group, 2016)

Political environment

The most relevant government policies in the sector have been the free trade agreements which show little benefit for this, we can determine that because they have entered the country substitute products that have led to a marked reduction in the growth of the sector.

Another government policy initiatives are national government to push growth in the sector such as ease of access to credit to start or push companies.

In political factors, it is important to analyze policies that are used in the creation and strengthening of enterprises from the Ministries of Agriculture, Development and Foreign Trade (now the Ministry of Commerce), the Seine, the chamber of commerce, unions and NGOs, among others.

Sector participation in Colombia's GDP

The effort in productivity in the sector has been presented in an environment with advances in economic policy. They are also the integration strategy of the sector, a favorable macroeconomic environment; innovation policy that is driving the government. One is the reform of the royalty law, which aims to capture broad economic resources, which will likely result in further regional development and greater investment in science and technology and productive development policy.

6. Matrix SWOT

STRENGTH	WEAKNESSES
<ul style="list-style-type: none"> • Product quality. • Installed capacity of production (installed production capacity). • Industrialized products with hand-crafted features. • Innovation in the product presentation. 	<ul style="list-style-type: none"> • Logistic capacity for exportation. • Marketing capacity internally and externally. • High costs for the logistic process. • Low experience of exportation of products abroad.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Creation of complementary products. • Innovation and diversity in packages. • Better brand positioning at the internal and external market. • Make the Colombian translation products to incorporate on daily consumption. • Free trade agreements. • The products are innovators in the abroad market. • Strengthen marketing strategies. 	<ul style="list-style-type: none"> • Low recognition of the brand internationally. • Potential competitors. • Weak financial structure.

TABLE 9. MATRIX SWOT

SOURCE: (own, 2016)

Bibliographic references

3. Findings

- The treatment and handling of Copelia panelita when being packed and packaged is of utmost importance for conservation it.
- Air transportation can have a cost almost double in freight unlike maritime transport.
- The cold chain must have the Copelia panelita care is high because it creates a great impact on their quality.
- Good storage is given to the Copelia panelita will be reflected in the life with which you reach the end consumer.
- The free trade agreements are a great opportunity for Food Copelia. S.A especially in Colombia and the United States by the distributor with which it has in this country.
- The volatility of the dollar affects exports because their fluctuations do not allow for a constant price sale.

4. Conclusions and recommendations

4.1 Conclusions

We propose that if it is ultimately decided to continue using the means of sea transport for shipping the goods, we suggest the port of Cartagena is used for shipments to the distributor Florida because transit time is shorter and the final price product is not affected.

It is recommended that a thorough analysis to ensure the temperatures of the cold chain and thus determine the best partner in the logistics operation to provide have control over the chain.

- We recommend having a negotiating table for currencies since this way the fluctuation of the dollar does not affect the final profits of the company.

During the investigation of the three objects of studies that were set for the solution of the problem, we realized that although air costs have a higher increase than the maritime transport may be more favorable due to travel time and chain cold that must have product.

It is important to say that good planning helps reduce risks in the conservation of the product, to be kept in good condition and his life is not affected at the time of reaching the final consumer.

We conclude that free trade agreements have encouraged exports from Colombia and the Copelia panalita to the United States is a breakthrough because the number of Latinos living in this country and like product. In this order food ideas, Copelia should exploit its advantages such as quality, flavor and capital to reach more places around the world through treaties and trade agreements among countries achieving higher profits and better penetration in foreign markets.

Likewise, the company must strengthen its economic capital not only intellectual but also to create better processes and strategies in different areas of administration and execution of the company to be at the level of national and international competition.

Continued with the notion food Copelia must stay ahead of market changes without neglecting economic, political and social changes, since these depend on the stability, profitability and especially the survival and leadership among its competitors.

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- Knowledge about the appropriate treatment should be performed to Copelia panelita in the process of packaging and unitization is the key to the process.
 - We understood that although air costs have a higher increase than the maritime transport may be more favorable due to travel time and the cold chain must have the product.
 - For good conservation panelita Copelia the cold chain must be at the proper temperature.
 - Comply with the necessary storage time requirements allows Copelia panelita not get contaminated the final consumer.
 - We conclude that free trade agreements have encouraged exports from Colombia and the Copelia panelita to the United States is a breakthrough because the number of Latinos living in this country and like product.
 - We must say that the fluctuation affects them as they should analyze whether to be more competitive and reduce their profits by lowering the sale price or the contralo hold.

Recommendations

- Propose that if it is finally decided to continue using the means of sea transport for shipping the goods, we suggest the port of Cartagena is used for shipments to the distributor Florida because transit time is shorter and the final price product is not affected.
- It is recommended to make a deep analysis to ensure the temperatures of the cold chain and thus determine the best partner in the logistics operation to provide have control over the chain.
- advisable to take a negotiating table for currencies since this way the fluctuation of the dollar does not affect the final profits of the company.
- constantly train people in charge of packaging and packaging for proper handling that must have the Copelia panelitas to ensure proper handling are given.
- propose that if it is finally decided to continue using the means of sea transport for shipping the goods, we suggest the port of Cartagena for shipment to the distributor of Florida is used as the transit time is shorter and the final price of product is not affected.
- It is recommended to make a deep analysis to ensure the temperatures of the cold chain and thus determine the best partner in the logistics operation to provide have control over the chain.
- Be vigilant against any inconvenience that may impair the proper storage and thus the product can be seen at risk of contamination.

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