

## **FACULTY OF LEGAL SCIENCES**

## SCHOOL OF INTERNATIONAL STUDIES

# "THE BUSINESS ASSOCIATIVITY: A STRATEGY FOR THE INTERNATIONALIZATION OF THE WOOD SECTOR IN THE CITY OF CUENCA, ECUADOR"

# GRADUATION WORK PREVIOUS TO OBTAINING LICENSEE'S TITLE IN INTERNATIONAL STUDIES WITH BILINGUAL MENTION IN FOREIGN TRADE

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## **DEDICATION**

I dedicate the present work to God for giving me the blessing in order to achieve this success in my life.

In the same way to my parents and my brothers for giving me their unconditional support at all times, and always guiding me to be the best I can.

Adriana Hernández Zárate.

## **GRATITUDE**

I thank my parents for supporting me in the course of this project and in my professional life. To my brothers for always being present, for their patience and support in every moment of my life.

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#### **ABSTRACT**

The evolution of wood industry in the recent years has been progressive, reflecting opportunities for continued growth, considering that it has been accepted by consumers. Despite the great potential of the sector, it has been possible to determine that the wood industry has developed unequally. This proposal was developed to offer a model of associativity and internationalization for the formation of a cluster of the companies of the wood sector, in the city of Cuenca.

The cluster's objectives is that companies engaged in the activity of wood have a common strategy, looking for a relation with the sectors of support and maintaining bonds of supplies and of distribution among themselves. In order for them to offer goods and services, and at the same time increase their productivity, competitiveness and profitability.

**Keywords:** cluster, associativity, internationalization, wood sector, productivity, competitiveness and profitability.

#### INTRODUCTION

The timber industry is the sector which deals with the processing of wood, through extraction, cutting, storage or treatment and molding, whose final product may be the manufacture of furniture, construction materials and other products derived from this material.

Ecuador is a country with a great diversity of natural resources. Its forest potential makes it one of the richest in the world, thanks to the number of species per unit area, "the forest area of Ecuador covers about 40% of its territory (approximately 11 million hectares). Most of the forests are in the Amazon region" (ProEcuador, 2015). "Due to its geographical location, our country has numerous timber species, derived from several climatic floors as a result of the presence of the Andes mountain range and the influence of two marine currents; One cold (Humboldt) and the other warm (El Niño)" (ProEcuador, 2015).

The timber industry produces significant quantities of products that are destined for domestic consumption and for export, which has been increasing. Opportunities for timber factories are reflected in the continued growth in product consumption and consumer preferences, increased demand for furniture globally and the potential use of alternative varieties.

Despite the great potential of the industry at the national level, it is considered that the Cuenca timber industry has developed unevenly, because the strategies have not been implemented to manage an adequate level of competitiveness, have not been properly identified Chains of production, as well, has lacked a holistic vision that integrates different points of view oriented towards the same end.

This proposal offers a model of associativity and internationalization for the formation of a cluster of the companies of the sector of the wood, in the city of Cuenca. The business grouping will allow a group of companies dedicated to the wood activity to have a common strategy, which will be linked to the support sectors and maintain links between suppliers, product development and services, with the aim of raise their levels of productivity, competitiveness and profitability.

In order to fulfill the objective of the present research, chapter one establishes the theoretical references about the subject to be developed, to enrich the concepts that will be used; In chapter two it is tried to show examples of companies that have carried out processes of internationalization with the purpose of looking for previous experiences for the development of the raised subject; And chapter three presents the proposal to establish a model of associativity and internationalization for the formation of a cluster of companies in the wood sector in the city of Cuenca. Finally, the conclusions and recommendations of the present study are presented.

#### **CHAPTER I**

## THEORETICAL FRAMEWORK

This chapter presents the theoretical framework of the research based on the presentation of concepts and theories applied by different authors, in order to make a contrast in the research, respecting the criteria and positions of each author. For this purpose, a definition of clusters is made, such as their classification. Internationalization and foreign trade, their typology and objectives, as well as benchmarking strategies and business associativity are also mentioned.

#### 1.1 Clusters.

To begin the theoretical development of the research it is necessary to contextualize it by presenting the concept of cluster based on the vision of different authors.

According to (Porter, 2007, pág. 65), the clusters are "geographic concentrations of interconnected enterprises, specialized suppliers, service providers, firms in close sectors, and partner institutions (i.e. universities, government agencies, business associations, etc.) in particular areas that compete but also cooperate".

Agree to (Cruz, 2007, p. 56), the cluster "is a system to which companies and industrial branches that establishes links of functional interdependence for the development of their productive processes and for the obtaining of certain products".

Ramos (2010, p. 96), defines clusters as:

"The sectoral and/or geographic concentration of companies that are engaged in the same activities or activities closely related both backwards, to suppliers of inputs and equipment, and forward and sideways, referring to the processing industries and users as well as services and activities closely related to important and cumulative external economies, agglomeration and specialization (by the presence of producers, suppliers and specialized labor

and services attached to the sector) and with the possibility of carrying out joint action in search for collective efficiency".

The three concepts discussed above refer to congregations of industries or companies in certain sectors, which have a positive impact on the integrated operation for the creation of value in this sector.

### 1.1.1 Classification of clusters.

According to researchers in business economics and business management, clusters can be classified taking into account different criteria. For example, Roelandt and Hertog (1999), argue that clusters are classified into three basic levels of analysis:

- National or macro-clusters: refers to the sectoral linkages in the national economy, which are determined based on the country's specialization and trade patterns.
- Sectoral or meso-clusters: These include the inter- and intra-sectorial linkages of a specific industry of the economy; this type of cluster emphasizes the strategic competitive advantages for the sector.
- Enterprise or micro-clusters: arise as a result of interaction and networking.

  At this level of analysis, strategic alliances and partnerships are critical.

Another classification of clusters gives (Porter, 2010, p. 125), which refers to this type of integrations according to their characteristics in: vertical and horizontal. "Vertical clusters are those that bring together industries characterized by buy-sell relationships." This type of cluster is formed by companies that are suppliers-customers. On the other hand, "horizontal clusters include companies that share a common market for final goods, or use the same technology or workers, or require a similar natural resource" (Porter, 2010, p. 131).

## 1.1.2 Characteristics.

For Caamal (2011), clusters have essential characteristics, which can be summarized as follows:

- Distribution of work and specialization in production.
- Production structure constituted by SMEs.
- Specialization in production in a "family" of products.
- High internal competition.
- A very important social capital.
- Skilled labor.

## 1.1.1.3 Importance of clusters.

The importance of clusters is attributed to the systemic approach they have, in which the results of the integration are superior to that of each of the companies separately. This is based on the five elements that are presented below:

- The concentration of companies in a region attracts more customers, so the market is expanded for all, beyond what would be the case, if each one were operating in isolation.
- The strong competition that gives rise to this concentration of companies leads to greater specialization, division of labor, and, therefore, greater productivity.
- The strong interaction between producers, suppliers and users facilitates and induces greater productive, technological and marketing learning.
- Repeated transactions in proximity to the same economic agents generate greater confidence and reputation, which results in lower transaction costs.
- The existence of the complex facilitates the collective action of the group in pursuit of common goals (international marketing, training, monitoring and technological development centers, campaigns of quality standards, etc.) (Ramos, 2010).

## 1.2 International competitiveness.

In this section I proceed to define the main elements that make a company competitive in the international context. Several authors have addressed this issue with the aim of defining what are the elements that influence business success. The figure below is intended to explain the concept of international competitiveness in a company, taking into account the three fundamental elements (Serrano Moreno, 2012):

- Sources of competitive advantage.
- Internationalization profile.
- Participation in the foreign market and its economic performance.

Ex ante competitiveness:
Sources of competitive advantage

VSpecific advantages

VSpecific advantages of the firm

Internationalization profile

Competitiveness ex post:
Participation in the foreign market and its economic performance.

Figure 1 International Competitiveness.

Source: (Serrano Moreno, 2012)

International competitiveness can be defined as the ability of a company to achieve greater and better performance over its competitors in foreign markets and thus preserve the conditions underpinning its current and future yields (Peña-Vinces & Triguero Sánchez, 2011). This performance the author refers to is part of the results obtained by the company in the international arena, as the product of its actions that allows it to establish differences with its competitors based on the promotion of competitive advantages.

The following are the concepts of the elements that affect competitiveness according to (Peña-Vinces & Triguero Sánchez, 2011):

Ex-ante competitiveness is the source of competitiveness. The origin of the ex-ante competitive advantage rests on the factors of the environment, the resources of the country of origin and the foreign country of the company, together with their internal capacities. The internationalization profile indicates how international an enterprise is, six measurable dimensions are identified below. The profile of internationalization seeks to explain the performance of the firm and its presence at an international level (Peña-Vinces & Triguero Sánchez, 2011).

Dimensions of the internationalization profile.

- Income.
- Means.
- Geography.
- Attitudes.
- Capital and relationships.

International performance (ex-post competitiveness) can be measured by the following indicators:

- Participation in the international market.
- Proportion of the rate of growth.
- Return on Foreign Investment.

#### 1.3 Internationalization.

Internationalization is a long-term process, constituted by key stages, within a strategic and detailed plan for it. It is not a matter of having a presence in some other country, but of being completely settled in the economy of those countries, for it is necessary to define well the strategies in the local market and to study with caution the international markets, which contribute other variables helping the success of the product or service (Escuela de Estrategia de Madrid, 2014).

In order to internationalize a company, commercial opportunities must be exploited in other countries and/or take advantage of localization for productive activities. In essence, motivating factors must be established or studied that can be interpreted as a true business objective, among which are found (Escuela de Estrategia de Madrid, 2014):

- Saturated domestic market or foreign markets are few competitive, depending on the stage of the product life cycle, or that the product or service is competitive in quality or price in foreign markets.
- Well located economies in which an external supply is needed or it may also be that the development of the production process, at some stage is cheaper abroad, guaranteeing security of supply.
- The location close to consumers provides flexibility to the company in the face of increased demand, as well as avoiding loss of opportunities in front of competitors.
- Through wider markets, take advantage of idle production capacity or reduce production costs.
- To exploit synergies through economies of scope, in order to help the company to own certain assets that can be exploited in different markets.
- Competition between competitors can be another explanation of internationalization in two ways: following a domestic competitor who has internationalized or counteracted the attack of a foreigner.
- Diversify risks, as long as the different markets are independent, so that it will be possible to ensure greater stability in the overall results of the company.

## 1.3.1 Foreign Trade.

International trade in goods and services has grown steadily over the last few decades, and so has Ecuadorian trade flows. Theories of international trade coincide in pointing out that aspects such as: the climate; the factor endowment (considered a set of resources of a country: territory, labor and capital), as well as technological capability are some of the elements that explain the differences in international trade. This is why, in order to understand the commercial and political flows applied by a nation (levels of openness and protectionism), it is necessary to understand the historical context in which international trade developed, hence the importance of mentioning it in a simplified way.

### Protectionism.

Protectionism is an economic theory used by mercantilists, which aimed to achieve a favorable trade balance, i.e. net payments received from the rest of the world in the form of gold and silver, income that contributed to increased spending and an increase in national production and employment. In order to further the purpose of this theory, the mercantilists advocated government regulation of trade, for which they established tariffs, quotas and other trade policies that were proposed by them to minimize imports, in order to protect the position trade of a nation (Carbaugh, 2009).

## Aperture.

In his book "The Wealth of Nations" in 1776, Adam Smith, the leading exponent of classical free-trade theory, points out that international trade enables nations to take advantage of specialization and the division of labor, which increases general level of productivity within a country and, therefore; increases world production (wealth).

Smith's dynamic view of trade suggested that both trading partners could simultaneously enjoy higher levels of production and consumption with trade (Carbaugh, 2009). Smith talked about the principle of absolute advantage, where he explained that in a two-nation world and two products, international specialization and trade would be beneficial when a nation has an absolute cost advantage in one product and the other nation has an advantage of absolute cost on the other product.

## Ricardian Model.

On the other hand, the classic Ricardian model, based on labor productivity and comparative advantage, assumes that foreign trade gains increase when each country specializes in the production of the good in which it has a comparative advantage. "A country has a comparative advantage in the production of a good if the opportunity cost in producing this good in terms of other goods is lower in this country than it is in other countries" (Krugman, Obstfeld, & Melizt, 2012).

To illustrate this theory we refer to Colombia and the United States. The first is known to have a comparative advantage in the production of winter roses, and the latter in the production of computers. According to the Ricardian model, the standard of living may increase in these two countries if Colombia produces roses for the US market, while the United States produces computers for the Colombian market. Even if a country were faced with an absolute disadvantage, trade would still be mutually beneficial to the two countries, since the less productive nation had to specialize in the production and export of a product in which it had a comparative advantage.

Those in favor of free trade mention examples of success thanks to this, as is the case of General Motors, where the lack of effective competition, allowed him to languish in terms of innovation and development and the arrival of foreign competition in the decades subsequent forced General Motors to increase its productivity and to reduce its unit costs, causing lower prices and a greater diversity of vehicles that Americans can buy (Krugman, Obstfeld, & Melizt, 2012).

#### Heckscher-Ohlin Model.

Subsequently, the theory developed by the two Swedish economists, Eli Heckscher and Berlin Ohlin, better known as the Heckscher-Ohlin theory, points out that international trade is largely due to differences in country resources. "Thus the Heckscher-Ohlin model shows that the country that is abundant in one factor, exports the good whose production is intensive in that factor" (Krugman, Obstfeld, & Melizt, 2012). However, this evidence is ambiguous because it cannot explain the pattern of global trade alone as Wassily Leontief demonstrated with the Leontief paradox, where it exposes developed countries like the United States with labor-intensive exports qualified products (Krugman, Obstfeld, & Melizt, 2012).

## The debate between Protectionism and Aperturism.

Liberalization alone does not ensure growth.

"There are still those on the right who would pressure the developing countries to change immediately and intransigently towards free trade. And there are still those on the left who believe that the way to help developing

countries is to shield them vigorously from the forces of reform and liberalization. The theoretical and empirical evidence cannot be clear in all matters, but it certainly rules out extreme positions on both sides" (Stiglitz & Charlton, 2006).

The free-trade argument is persuasive, Carbaugh says that if each nation produces what it does best, in the long run everyone will enjoy lower prices, higher levels of production, income and consumption than could be achieved in isolation. In practice, however, the theories are far from the reality, although they have always served as a guide in formulating trade policies. Despite the power of the free trade argument, due to competition in imports, strong resistance from companies and workers facing losses in income and jobs have arisen The costs of free trade are immediate and impact specific and vulnerable groups, while the benefits of free trade are evident in the long term (Carbaugh, 2009).

One of the measures most used by protectionism are tariffs, which are justified by seeking to protect employment and national wages, to help create a level playing field for international trade, by matching the cost of imported products with the cost of national products, and allowing national industries to be temporarily protected from foreign competition, until national industry can be created and developed (Carbaugh, 2009).

Tariffs should be analyzed from two perspectives: first considering that it is a tax on imports, the first effect is felt by importers, who must pay taxes to the national government, and also experience a reduction in the sale of their products; and second, emphasize that the costs are immediately transferred to the buyers. To illustrate this concept, we point out that domestic exporters who buy imported inputs subject to tariffs face higher costs and a reduction in competitiveness. The biased view of development strategy has generally led to the subsidization of activities, the restriction of imports, and the imposition of tariffs without positive effects (Prado, 2010).

### The Ecuadorian Model of Import Substitution Industrialization.

In Latin America, structuralist Cepalino thought was promoted by the Economic Commission for Latin America and the Caribbean (ECLAC), which was proposed as a necessary condition for achieving development and achieving sustained growth, so that the economy could be sustained in the sectors of high productivity, mainly in the industrial sector (Correa, 2010).

The failure of the industrialization strategy through import substitution in Latin America included, among other factors, excessive trade protectionism, low growth in export demand and lack of economic-strategic coordination within the region. It is precisely here that it is demonstrated that a strategic insertion in world trade requires first the strengthening of institutions within the country, since free trade, despite its solid theoretical bases, does not present the expected benefits, and reveals the trade restrictions around the world. (CEPAL, 2015).

## 1.3.2 Regional Integration.

#### Insertion of Ecuador into world trade.

International trade or foreign trade in Ecuador is a controversial topic and of great interest to the government. It covers a few key processes for its good performance, for which there are regulations that govern it and at the same time to contribute to its integration with other countries in the region. To this end, agreements have been signed that have allowed it to promote itself and access to international markets and contribute to the change of the productive matrix and thus boost foreign investment, this undoubtedly improves the country's economy. Very closely linked to this, measures have been taken to reduce imports and stimulate exports, which undoubtedly lead to an improvement in the national production of goods and services.

In recent times with the measures adopted, it has been achieved that different products grow within the trade, which does not mean that it is sufficient. But it is necessary to maintain and increase the exportable levels, so that Ecuador definitely

improves the results of its balance trade compared to other countries of Latin America. Greater trade involves greater development. For many years, several authors have written the different stages through which the country has gone, looking for a sustainability of their exports or trying to achieve greater results and insert themselves in the market; some of these stages are shown below.

"Between 1965 and 1980 Ecuador, in its import substitution industrialization process, registered higher export growth than Brazil, China or Hong Kong. In the current decade exports exceeded US \$ 4 billion and its structure was modified, avoiding dependence on small products. But imports have also grown considerably, causing the disappearance of many companies that could not compete with foreign production. In addition, the growth of foreign debt and foreign investment - symptoms of a greater degree of insertion - has not produced a transcendental increase in the living standards of most Ecuadorians. So, despite the greater insertion in the world market, the economy has been denationalized, its natural resources have been depredated (...) Therefore, it is necessary to find another modality of insertion in the market that does not imply, In practice, to sacrifice the possibilities of true development " (Moncada, 1997).

There are two fundamental reasons why the country has unleashed with serious problems of its economy, and are the structures of primary export growth, and structures of power; which have made macroeconomic policy decisions in a context of external conjuncture and for the short term. The Ecuadorian economy is marked by different facts, which are described briefly in the following sections.

For the past and its written history, it is that can be made known the socioeconomic and political reality of Ecuador, account of several booms and crises through which it has crossed. The first boom dates from 1860 to 1920 and includes the so-called cocoa season. The period from 1948 to 1965 covered the second banana boom that introduced modern capitalist relations into the country, which until then were unknown. In addition to a weak substitution model for imports under the recommendations of the Economic Commission for Latin America and the Caribbean (Acosta, 2006).

Since 1972, the great oil exploitation in the country began with increase in oil prices, an accelerated growth of the economy and an expansion of the capitalist market. "The oil revenues gave rise to the military governments of the time increase their expenses in an excessive way, and the product of that excessive current departure caused strong fiscal imbalances" (Uquillas, 2007). However, as of 1982, the country no longer had the solvency that had allowed it to enjoy a period of prosperity and waste, declaring itself in default, unable to meet the payment of external debt and recording a negative balance in the balance of payments.

As a result of the crisis faced by Ecuador, structuralist measures are being implemented, and austerity programs are being implemented. The priority that President Oswaldo Hurtado gave at that time to the payments of the external debt, led him to assume in 1983 the losses of the private sector to the Ecuadorian State. In March of 1999, the country immersed into a deep crisis and under the Presidency of Jamil Mahuad, decreed a bank holiday, and in 2000 the dollar was established, as legal tender in the country. "It has been known that the world economies seek to increase trade flows with other nations of the world, and in this way, improve the balance of their trade balances, as a development strategy within the framework of globalization" (Evia, Pablo; Pericón, Osvaldo, 2012).

In addition, countries have been motivated mainly by achieving benefits such as "taking advantage of comparative advantages", increasing "trade flows", obtaining "economies of scale", or "differentiating and diversifying export products ", etc. (Jiménez & Lahura, 1998).

## ECLAC, among its publications of 2015, has stated that:

"Ecuador has been part of the Andean Community of Nations (CAN) since 1969, under the name of the" Cartagena Agreement". At present the CAN is integrated by Ecuador, Colombia, Bolivia and Peru. This economic integration is considered one of the most important and has been seen as strategic within the foreign trade for the country. Likewise, there is a consensus in the literature on international trade on the potential benefits, in terms of welfare, of opening to trade in relation to the autarkic

situation, provided that competitive conditions are assumed in the markets and without the presence of Asymmetries of information " (CEPAL, 2015).

The Ecuadorian economy has been characterized by the production of primary goods for the international market, with little or no technification and high levels of concentration of profits, which has contributed to increase in vulnerability to changes in the prices of raw materials. The international market is therefore in a highly unequal exchange situation due to the growing differential between prices of raw materials and products with higher added value and high technology. This forces the country to deepen the exploitation of their natural resources only to try to maintain their income and consumption patterns.

## Effects of Aperturismo in the period 2007-2014.

The term of trade liberalization emerges as an element to achieve growth in Latin American countries, looking for possibilities that lead to greater development in the medium and long term, as well as that their possible negative effects are mitigated by social policies. By the 1980s, Ecuador, like many Latin American countries, adopted a series of economic reforms, most of which are commercial, which are included in the context of the reactivation of the process of economic integration of the country with the Andean Community. By the beginning of the 1990s, trade and capital flows were liberated, and reforms were introduced in foreign trade, where most of the restrictions it had and financial liberalization were eliminated.

During the crisis of 1997-1999, the price of oil fell, dollarization was adopted and the implementation of bad economic policies. Resulting in the process of economic liberalization following different paths, in aspects such as vulnerability to shocks externalities due to the dollarization, and to have a greater macroeconomic rigor to the lack of an exchange rate monetary policy capable of absorbing these shocks in the short term. Competitive advantages change over time and behave in dependence on economic development; this may be a function of international trade, encouraging the rise of emerging industries and achieving global competitiveness, so that they can

expose their Products and processes, which would not happen in its absence (Caballero, Grazia, & Materne, 2012).

The Ecuadorian Institute of Political Economy (IEEP), among one of its fundamental interests, analyzes the phenomenon of protectionism against openness, due to the country's productive stagnation; According to Neira, the stipulated model is obsolete, since it raises the application of what is described by ECLAC, which recommends the import substitution strategy.

Neira, in his article, "Protectionism or aperturismo", in 2011, states that:

"These ATPDEA benefits ended, and have been renewed year after year, this had been relatively easy while these neighboring countries also depended on these advantages. However Colombia and Peru signed an FTA with the US, Bolivia was proscribed. Relations between Peru and the US behave with total fluidity, while Colombia advocates ratification of its FTA by the US Senate. For these reasons the preferences of the ATPDEA expired. On the other hand, in 2013 Ecuador unilaterally and irrevocably waives the Tariff Preferences Treaty (ATPDEA) with the United State" (Neira, Protecionismo o Aperturismo, 2011).

China, as a major economic power in the world, has great interest in continuing to develop, and to this end establishes trade relations with countries with natural resources. For its part, Ecuador, whose economy depends on oil activity, in view of the need to reduce dependency relations with the United States, has sought "mutually beneficial" trade agreements with "allied" countries. This relationship has resulted in a financing channel for the development of projects such as the Refinery of the Pacific. However, these contracts have caused strong controversy in the country, due to the interplay of interests between the two countries. In this regard, Garzon, in his report, Analysis of the People's Republic of China as a strategic partner of Ecuador. Case of Petroleum. 2007-2012, states:

"The Ecuadorian Government argues that relations with China are fruitful and allow the financing to create the proposed projects and at the same time to diversify the export market. Meanwhile, experts in oil, finance and

international relations assert that Ecuador is hindered in 3 of these contracts and loans with China, mainly because of the increasingly unfavorable conditions for Ecuador, which are agreed upon in each contract" (Garzón, 2013).

By way of summary, it may be argued that the opening to Ecuador's main market today is totally limited, largely due to inconsistencies between governments and positions of strength on both sides. Turning Ecuador's foreign trade policy To negotiate with Latin American markets and the introduction of the Republic of China, as a new economic partner with the current government of Rafael Correa.

## Effects of protectionism in the period 2007-2014.

Between the governments of Ecuador and the US, there have been differences, mainly political, which have brought a brake on the promotion of bilateral or multilateral agreements with this country and with the European Union, as opposed to neighboring countries which take action towards those countries. Regarding this, Neira continues:

"Without euphemisms - and without complexes - we must recognize that we are commercially dependent on the US and the EU, without prejudice to the fact that we must diversify products and markets within the fierce competition that is waged in this globalized world. Propose solutions; Nationalists; Sovereign Or accuse the entrepreneur of being a rentier, will only deepen the large deficit, as exports grow moderately, while imports grow rapidly as the socialism of the twenty-first century preaches, as part of the Marxist tradition." (Neira, 2011).

Making revisions to the different statistical results offered by the agencies responsible for it, it can be inferred that the Ecuadorian economy has lost some dynamism, which has been aggravated by the decrease in oil prices, which in turn produces a direct impact on the country's economic indicators, as it is a very important item and decides the behavior of other branches of the economy.

### 1.3.3 Trade policy instruments.

### Tariff barriers and non-tariff barriers.

#### Barriers to trade are:

"The limitations or obstacles that a country imposes to reduce or discourage imports; this is intended to protect domestic production against foreign production. It's greater or lesser amount can serve as an indicator of the degree of economic protectionism of a country. The most typical examples are tariffs and non-tariff barriers (quotas, quotas, etc.)" (La Gran Enciclopedia Económica, 2015).

These barriers constitute protectionist mechanisms, which countries by government regulations use to reduce imports of goods and services. Trade barriers are classified as tariffs and non-tariffs.

#### Tariff barriers.

The tariffs that are set and charged to importers and in the same way to exporters, in the customs of a country, in the case of the inflows and outflows of goods, are called tariff barriers. In the particular case of Ecuador a no export fee is charged. This is the type of barrier most commonly used. Their primary objective is to discourage the entry of some type of merchandise or services in a country, which are established through import duties. Therefore, tariffs move at the convenience of the importing country, the greater the amount of tariffs; the more difficult it will be to enter the country, and to compete with domestic products. The tariff directly affects the price of the products, increasing at the same time (Proecuador, 2014).

Tariff duties are already provided for in the merchandise import tariff, for the specific case of Ecuador is the Andean Nomenclature (NANDINA) and are applicable for all goods included in the import tariff (Instituto de Promoción de Exportaciones e Inversiones, 2015). In the chapter I, Title II, of the Organic Code of Production, Trade and Investment, with regard to tariff and non-tariff measures to regulate foreign trade, establishes that tariff rates may be stated in percentage terms of the value in (Ad valorem), in monetary terms per unit of measure (specific), or as a combination of both (mixed). Likewise, other modalities will be recognized, the same ones that must be agreed in the international commercial treaties, duly ratified by Ecuador (Asamblea Nacional, 2010).

"Value-added or ad-valorem tariffs: These are those established by the competent authority, consisting of percentages that apply to the value of goods (CIF)" (Reglamento al Título Facilitación Aduanera del Código de Producción, 2015). Specific tariffs: "are those established by the competent authority, consisting of fixed surcharges that are applied based on certain conditions of the goods, such as: weight, physical units, dimensions, volume, among others" (Reglamento al Título Facilitación Aduanera del Código de Producción, 2015).

Based on these two types of tariffs, other tariff combinations are formed:

"Anti-dumping tariff is a duty that applies to the importation of products receiving subsidies from the countries where they are produced. These subsidies allow them to export below the cost of production" (Instituto de Promoción de Exportaciones e Inversiones, 2015).

"Mixed tariff is the one that is composed of an ad valorem and a specific tariff that are taxed simultaneously to the import" (Instituto de Promoción de Exportaciones e Inversiones, 2015).

## Non-tariff barriers.

According to the Institute for the Promotion of Exports and Investments, non-tariff barriers constitute the provisions of the government, which hinder the free entry of goods into a country, for which income requirements are placed on products, or certain services, by means of rules or other characteristics. Non-tariff barriers are classified into two types:

"Sanitary barriers: they propose to avoid the entrance into a country of those goods that can damage the health of the population due to the possible content of harmful elements of typical physical, chemical or biological" (Instituto de Promoción de Exportaciones e Inversiones, 2015).

"Technical Barriers: refers to the requirements that a particular product must meet in terms of its general structure and components so that it can enter a given market" (Instituto de Promoción de Exportaciones e Inversiones, 2015).

## 1.4 Typology of internationalization.

There are different types of internationalization strategies according to the generic environment. These are presented below:

- Internationalization of fresh products.
- Franchises.
- Innovation in volume environments.
- Exclusivity and international vocation.
- Differentiation and size for competitiveness.
- Internationalization in the search for size.

Pastos Pérez, presents the characteristics of the different types of generic environments. In the context of the internationalization of fresh products, there is no possibility of differentiation through the segmentation of the market, while barriers to entry into the sector due to size and, therefore, cost competitiveness are not enough relevant information. The profitability in this environment will be low and

independent of the size that the productive unit acquires, once a minimum threshold has been reached. (Pasto Pérez, 2010).

Franchising environments are those in which the possibilities of diversification by segmentation of the market exist, but are not sufficiently relevant to establish a barrier to access to the sector; therefore, the perception of exclusivity is very relative, and customer loyalty is low. Innovation in volume environments, known as concentrated or volume environments, where profitability is directly related to market share, and where economies of scale are significant (Pasto Pérez, 2010).

The exclusive environments are those environments in which the key to competitiveness lies in the exclusivity perceived by the consumer. In this typology of environments, the market is strongly segmented and the degree of customer loyalty with its suppliers is quite high. The environments related to differentiation and size for competitiveness are referred to as mixed, in which there are identifiable market segments, but in which economies of scale can be decisive for competitiveness. Within these mixed environments, there are identifiable but sufficiently large segments of the market so that several competitors can coexist at the same time (Pasto Pérez , 2010).

Internationalization in the search for size is characterized and classified in mixed environments. In which there are relevant access barriers, being dependent both on the capacity of differentiation within the segment in which it competes, and on the use of advantages derived from size, mainly economies of scale (Pasto Pérez, 2010).

## 1.5 Benchmarking Theory.

According to Rubén, Benchmarking "is the tool that allows detecting and applying the best processes to obtain the best quality and greater productivity, based on the experiences that the leading companies in the market went through. Strategic Benchmarking is usually done by establishing benchmarking alliances with a limited number of non-competing companies. "It does not require great investment, since it

is limited to the formation of a small team of professionals and time to be able to carry out all the necessary studies and investigations" (Rubén, 2010). Strategic planning presents as a failure the tactical execution of its plans. From this perspective, benchmarking covers the great weakness of an organization in this field, because it is a great facilitator for the implementation of changes.

## 1.6 Business Strategy.

The authors of the main strategies books in the international context have determined a group of generic strategies among which are:

- "Growth strategies.
- Diversification strategies " (Fernández Lorenzo, 2012, pág. 2).

## 1.6.1 Growth Strategies

According to Fernandez, there are three types of generic competitive strategies that all the experts in the matter allude to:

- "Differentiation strategies.
- Leadership strategies in cost.
- Segmentation strategies ".

In order to define the type of strategy that a company must implement, it is necessary to determine its strategic position. The following figure presents the types of strategies that can be adopted.

Table 1 Matrix of growth strategies.

objective	A whole sector	Differentiation	Cost Leadership	
Strategic objective	Only one segme nt	Targeted Segmentation	Segmentation with low cost approach	
		Exclusivity perceived by the client	Low cost positioning	
Strategic advantage				

Source: Acero de la Cruz, 2013.

"The option to differentiate, although it has implications in all areas and activities of the company, is fundamentally based on the marketing capacity of the company, in its broadest sense (owner of the image of the company and its products)" (Fernández Lorenzo, 2012, pág. 8). The cost leadership strategy must ensure that the quality of the products or services is appreciable by the clients, since the costs should not be reduced by sacrificing quality, this would be a strategic mistake (León, 2016).

Currently, the strategic choice of cost leadership is more based on an adequate management of the value chain, which leads to subcontracting outside the company all those activities in which it is not competitive from the cost perspective, and keeping the necessary minimums of perceived quality and customer service (Fernández Lorenzo, 2012, pág. 7). The segmentation strategy is based on the premise that the company can thus serve its narrow target audience more effectively than competitors struggling in a more general way. Even if the approach strategy does not achieve low costs or differentiation from the market perspective as a whole, it achieves some of them against the goal of its limited market in size (Fernández Lorenzo, 2012, pág. 9).

## 1.6.2. Diversification strategies.

Diversification strategies are focused on developing their activities, ie expanding their range of products or services in order to be inserted in new markets, these strategies are classified into four types:

- Horizontal development.
- Vertical development.
- Concentric diversification.
- Total Diversification (Fernández Lorenzo, 2012, pág. 10).

#### **Business Association.**

Companies take decisions of various natures and depending on the objectives to be achieved. These include growth, in which the organization tries to increase operations by increasing the number of products it offers or the markets it serves, which can be achieved through three fundamental strategies:

- Concentration
- Vertical integration
- Horizontal integration

Associativity is an issue that must be promoted in order to increase collective well-being by developing productive articulation at all levels. In addition, it is a cooperation mechanism through which networks or companies are grouped together with similar characteristics, which allows horizontal articulation (between companies in the same category) and vertical (between suppliers and customers).

In such a way, the companies that belong to the network cooperate in some activities that prevent them from competing with each other in the same market. This type of network pursues a number of objectives, including: reducing export barriers and exploiting opportunities in international markets. This is possible thanks to the fact that it requires an internal study that covers all the employees and at all levels.

#### **CHAPTER II**

# BUSINESS ASSOCIATIVITY IN THE CLUSTERS, INTERNATIONALIZATION, ITS MODALITIES AND GLOBAL DEVELOPMENT.

This chapter aims to show examples of companies that have been involved in internationalization processes, with the aim of seeking previous experiences for the development of this research proposal. In the same way, it is inquired to know the situation of the clusters, both globally, as well as in Latin America and to review cases of business association in internationalized clusters.

## 2.1 Experiences of internationalization.

There are several successful cases of internationalization of companies globally and in different sectors. For the development of the research, five case studies were taken into account, which show how companies should proceed in order to develop export processes.

## 2.1.1 Castañas Naiciña Company

Castañas Naiciña is a Spanish company of the Galician region, whose date of commencement of activities is the year 1972. It is dedicated to the marketing of products from the earth. Thirteen years later it began to export chestnut. Its evolution has allowed it not only to be based on the export of chestnut as fresh fruit, but also in the development of an industrial process, having products with added value, obtaining little more than 30 derivatives, among which are: creams, purees, flour, brown syrup, brown glacé, among others (Castañas Naiciña, 2016).

The main strategy used by the company to publicize its products internationally has been the evolution in the design of its goods, as well as the launch of new ones that have impacted the market. This shows exhaustive research and development processes. "Naiciña was able to adapt to the demands of the consumer, packing the chestnuts in small formats of 10 and 15 kilos, and in packs of one kilo for

supermarkets. In 1995, "Naiciña" innovated again presenting a new product of the brand, chestnuts peeled and frozen "(Castañas Naiciña, 2016). Starting in 2000, the company continued to announce new products that demonstrate the effort and dedication of innovation systems (Castañas Naiciña, 2016). Among the main markets are the United States, the United Kingdom, Switzerland, Portugal, Mexico and the United Arab Emirates (UAE) (ECICII, 2013).

#### 2.1.2 IKEA.

It is an international group dedicated to the marketing of furniture and decoration services in its widest range. The company's executives explain that the results achieved by the group are focused on four fundamental elements: people, suppliers, infrastructure and authorities (Pozo Toro, 2014).

**People:** Human talent has the right to reasoning and thinking, which is a corporate value, dedicated and able to adapt quickly to new challenges. Committed people are willing to grow and learn more each day, are flexible and competent (Pozo Toro, 2014).

**Suppliers and sub-suppliers:** Flexible, competent relationships are the basis to support the needs in all areas, such as raw materials, training, recruitment, maintenance, technicians and security.

**Infrastructures:** There is a high level of development in terms of roads, ports, airports, hotels, logistics platforms, energy from green sources, universities, etc. This confirms a market demand, which guarantees the continuity of the services provided by the company (Fárez Chalco & Coronel León, 2010).

**Authorities:** Although there is still much to be done about bureaucracy and transparency, it is fair to say that the enormous development that has taken place in this area has been thanks to the quality and proactive partners that have been found, keeping all the agreements to date And making people feel at home, in a transparent environment (Fárez Chalco & Coronel León, 2010).

## 2.1.3 Ferpinta

Ferpinta is a business group founded in 1962; its corporate purpose extends to various sectors related to the production of steel and its derivatives, especially steel tubes, becoming a national reference in Portugal in the production of articles. The company's production includes agricultural tools, as well as tourism and livestock investments (Ferpinta, 2017).

The success of the group is based on its commitment to a business orientation, approaching the opportunities with an innovative approach, which lead to satisfy its emerging requirements. In the year of 1976 the production of Ferpinta began with a perspective of self-consumption, but soon began to focus on the commercialization of the product towards the metallurgical industry. The strong receptivity in the steel tube market, led Ferpinta to guide its strategy and increase the capacity of this product. Its process of internationalization of Ferpinta began in 1995, focusing on the Spanish market, with the opening of a branch in Madrid, and a year later, a delegation in Cordoba, in order to ensure the regular supply of its products in the market of Andalusia (Ferpinta, 2017).

Over a period of three years, the product covered the entire Spanish market. In 1988 an expansion was made towards the Galician market, through a delegation in Santiago de Compostela. Currently the group is the national leader in Portugal in the production of steel tubes and one of the main European players in the sector. In quantitative terms, sales of Ferpinta tubes still have the main market in the Iberian market, maintaining a market share of around 11% of this. Its presence in about twelve countries represents 16 percent of the company's total sales. Taking into account only sales, steel pipe exports account for 65 percent of activity.

In addition to Spain, the company has branch offices in France, the Netherlands, Angola and Mozambique. In these last two Ferpinta has production plants, which supports the exports of the countries of that region. In Central Europe, France and the Netherlands have been the markets where the business group has increased the volume of its exports. Its strategic focus is on growth, but above all on the increase

and diversification of markets due to the current economic climate in Europe. In this process for diversification the group has been exporting to the countries of North Africa and South America. Ferpinta has among its main characteristics the flexibility and the immediate response to the new challenges, the investment in recognized areas, the added value in the process of permanent adjustment to the new economic scenarios, tendentiously broader and more aggressive. The amount of its income is 147 million euros; of which 81million correspond to exports (Dialnet, 2017).

#### 2.1.4 Enercom.

This company is another of the most representative examples of internationalization at a global level and responds to an industrial development project. It was under "competition for the mechanical injection of utility grid allocation of the power system produced in the wind plants", launched by the Government of Portugal in 2005, which was the winner of phase A, with an allocation of 1,200 MW, to the wind consortium of Portugal. The total investment, including wind farms and industrial design, which took place between 2007 and 2013 amounted to 1,700 million euros, with production capacity that allows an annual maximum of 200 generators, 200 concrete towers and 600 rotor blades. An investment that actively participates in Enercon is betting on the country and the region in terms of innovation, technological development and sustainable growth (Moreno Casas, 2014).

Assuring the full production of the latest generation of wind turbines and more advanced technology, the industrial units were built in excellent locations for a period of only two years, in the port area, on the north bank of the Lima River and in a land of 107,000 square meters, next to the shipyards. Since 2008, the generator and mechatronics plant has been put into operation; the area it occupies is 50 thousand square meters. This choice is based on an internationalization strategy offered by Enercon as a world leader in the development and manufacture of wind turbines. An integrated interface that contributes more significantly to development since July 2011, has resulted in the company's increased exports from the port of Viana do Castelo, which is modern and competitive. Enercon's markets are: France, Italy, Germany, Romania, Estonia, Lithuania, Ireland and Brazil (Moreno Casas, 2014).

Given the large size of the components to be moved and depending on the final destination, there is a large flow of ships departing weekly to the different destinations from the port of Viana do Castelo, which has also been modified in association with Enercon, with an improvement of physical conditions and access infrastructure. Through the recent dredging operations that allow deepening the channels, the access to the bigger ships is obtained. With regard to ground infrastructure, the Municipality of Viana do Castelo has also carried out adequate roadworks, which facilitate all the movement and fluidity of the essential components for the success of the company. Likewise, several places and new accesses have been modified, both in Playa Norte and in Lanheses, where a new road allows an almost direct entrance in the park, where Enercon is located. Therefore, the flow of production to international markets is ensured, whether by sea or road. Associated with industrial units was formed a group that ensures in Portugal the production of the main elements of the value chain of a wind farm, and has allowed the creation of 2,000 workplaces, of which 1,400 correspond to direct employment in units of Enercon. The company aims to foster the creation of a first-rate skills center in Portugal, based on the transfer and exchange of a very valuable tool such as knowhow, not only with employees, but also with other partners who are part of the industrial cluster (Moreno Casas, 2014).

## 2.1.5 Viriato Hotel Concept.

The company began to boom in the beginning of the second decade of the twenty-first century, in the middle of a crisis both European and worldwide, but the success achieved was resounding. The association is a market leader nationwide and more than half of the turnover is already made in international business. The crisis, in fact, seems to have been the inspiration for the life of the firm. By the 80's Viriato de Muebles, established in 1952 by Viriato Rock, became the Viriato Hotel Concept, leaving aside furniture for the home, and beginning to specialize in the hotel market (Navarrete Vega, 2013).

The name of the company is associated with quality and total trust. To handle with the economic downturn, Viriato still has two main assets to strengthen its confidence. It is one of the few furniture manufacturing companies in the world, which provides personalized and versatile decoration services ranging from the classic to the contemporary. It also has a team of architects and interior designers, which guarantees to be the largest center of the world of interior design. Another relevant investment is the Viriato Angola Show House project in Luanda, representing a replica of the hotel with the most current trends and the most advanced equipment worldwide in this area. The hotel market already has hundreds of hotels decorated and equipped. These hotels are mid-range, high-end luxury, in projects scattered throughout the world. The main markets besides Spanish and English are Sweden, France, Saudi Arabia, Cape Verde, French Polynesia, among others (Navarrete Vega, 2013).

The list of clients is luxurious and contains the most prestigious brands: Marriott, Sheraton, Sofitel, Novotel, Holiday Inn, Pestana, Meridien, Renaissance, Club Med, etc. The company integrates a cluster, being one of the eight companies that compose hi global, a cluster to win hotel projects internationally. Its objective is to dominate new markets on a scale, looking for an integrated solution, capable of generating added value for the industrial group. It also has in common a strong application in the international sphere, which gives much of its production and commercialization. (Navarrete Vega, 2013).

# 2.2. Strategies for internationalization in Latin America.

Most Latin American countries lack effective and efficient means of production that meet the needs of the importation of industrialized products, constituting an alternative for export to the international market. The majority of the exports in the continent, focus on the raw materials that they have in order to strengthen the productive systems at the international level. From the present situation tactics are addressed to strengthen the internationalization of Latin American companies. The strategies consist of the analysis of the variables to evaluate the market and the competitive position in the sector, all in favor of the company. The same ones that

are presented below are reference for the development of the proposal of the investigation.

The ones that are related to the market are the following (Manuel, 2012):

- Size of the market.
- Market growth rate.
- Consumption trend / Economic impulse programs.
- Bilateral agreements.
- Prices.
- Competitive pressure in the market.
- Segmentation.
- Legal regulations / Changes in legislation.
- Country risk / Turbulence of the environment.
- Entry barriers.

On the other hand, the variables related to competitiveness are the following (Egea, 2012):

- Global market share of companies in the sector.
- Global sales growth in the sector.
- Quality of distribution.
- Technological level, R & D capacity.
- Image of the product / service / country.
- Level of costs versus competition.
- Profitability for companies.
- Quality / price ratio.
- Marketing mastery.
- Adaptation productive means.

As an example of the internationalization analysis, the South African market was taken into account, in which the variables in the furniture and lighting sector will be evaluated (see Figure 2).

Figure 2 Example of analysis for internationalization in Latin America.

		Assessment	udafrica Furt					Relative
Variable	-1	0	1	Value	Weighing	Final Value	Summation	Final Value
		A	ttractive Mar	ket				
Size of the market.	Low	Medium	High	0	6	0		
Market growth rate.	Low	Medium	High	1	6	6		
Consumption trend / Economic								
impulse programs.	Low	Medium	High	1	2	2		
Bilateral agreements.	Low	Medium	High	1	1	1		
Prices.	Unfavorable	Medium	Favorable	0	3	0		
Competitive pressure in the market.	High	Medium	Low	-1	3	-3	11	7,04
Segmentation.	Unfavorable	Medium	Favorable	0	2	0		
Legal regulations / Changes in								
legislation.	Unfavorable	Medium	Favorable	1	1	1		
Country risk / Turbulence of the								
environment.	High	Medium	Low	1	1	1	1	
Entry barriers.	High	Medium	Low	1	3	3		
	Comp	etitive posi	tion of the co	mpanies in	Murcia			
Global market share of companies								
in the sector.	Low	Medium	High	0	6	0		
Global sales growth in the sector.	Low	Medium	High	-1	6	-6		
Quality of distribution.	Low	Medium	High	1	5	5		
Technological level, R & D								
capacity.	Low	Medium	High	1	2	2		
Image of the product / service /							6	5,81
country.	Low	Medium	High	0	3	0		
Level of costs versus competition.	Low	Medium	High	0	4	0		
Profitability for companies.	Low	Medium	High	1	3	3		
Quality / price ratio.	Low	Medium	High	0	4	0		
Marketing mastery.	Low	Medium	High	0	2	0		
Adaptation productive means.	Low	Medium	High	1	2	2		

Source: (Egea, 2012)

#### 2.3 Internationalization in Ecuador.

In recent years Ecuador has sought to change the non-oil trade balance, dominated by imports in pursuit of exports. This is not favorable for the economy, so different projects have been undertaken to increase the commercialization of the Ecuadorian products extra borders. Among these purposes are the ones headed by Pro-Ecuador and the Economic Commission for Latin America and the Caribbean. The objective is to strengthen the capacities of governments in the five participating countries in the design and implementation of effective public policies to promote the direct and indirect internationalization of SMEs (Proecuador, 2014).

For the development of the project three aspects of work are analyzed (Proecuador, 2014):

- Measuring the internationalization of SMEs.
- Export innovation of SMEs.
- Financing for export innovation.

The first stage of this plan aims to characterize each of the country's exporting companies, which respond to the classification of SMEs. With the objective of determining in which strategic situation each one is in order to carry out processes of

export to new markets. Innovation responds to the need to look for innovative products that meet the real requirements of customers and compete with companies present in the international market.

Finally, it should be taken into account the sources of financing to carry out the project, for this the following are taken into account (Proecuador, 2014):

- Financing of private banking.
- Financing of public, national, regional and multilateral banks.
- Public promotional funds and programs.
- International cooperation.
- Another type of financing.

# 2.4 Clusters on a global level.

At the international level in recent years, clusters as industrial groupings in the same sector have had a favorable evolution, and have been used as business alternatives to increase the positioning in the market. This section seeks to address the most important international clusters. To do this, a study will be carried out on the main countries, including Spain, France and Germany. The methodology for the classification of clusters is explained below and is based on the granting of three stars (Análisis de Cluster y Arboles de Clasificación, 2010):

**Star size:** if employment reaches a sufficient proportion of the total in Europe, it is more likely that the significant economic effects of clusters will be present. The size measure shows whether a group is at the top of 10% of all European clusters, within the same cluster category in terms of the number of employees.

**Star specialization:** if a region is more specialized in a specific cluster category of the global economy, relative to all regions, this is likely to be an indication that the economic effects of the regional cluster have been strong enough to attract Related economic activity from other regions to this place, and that the overflow effects establish stronger links. The measure of specialization compares the proportion of employment in a category of the cluster in a region, in total employment in it, to the

share of total employment in Europe in the category of that cluster. The measurement must be at least 2 to receive a star.

**Star approach**: if a cluster represents a greater proportion of the total employment of a region, it is more likely that side effects and linkages actually occur, thus trying not to oppress the economic interaction of other parts of the regional economy. The measure of focus shows the extent to which the regional economy focuses on industries, which includes the group's identity and its relationship to employment in the total cluster in the region. The 10% of the groups that represent the greater proportion of the total employment of the region receive a star.

Table 2 Main Clusters in Spain, Germany and France

Country	Industry	Category	Quantity of employees
Spain	Animal and Agricultural	***	33 791
Spain	Maritime	***	40 100
Spain	Production of metal	***	60 301
Spain	Building	***	73 512
Spain	Distribution	***	54 166
Spain	Turism and hotelery	***	44 069
France	Financial services	***	341 065
France	Automotive	***	17 878
France	Processed food	***	57 929
France	Aerospace	***	26 818
Germany	Automotive	***	115 385
Germany	Production of metal	***	63 664
Germany	Production of technology	***	78 500
Germany	Information Technology	***	28 836
Germany	Plastic Products	***	9 659
Germany	Distribution	***	21 718
Germany	Structures, equipment and service	***	18 651

**Source:** (Cluster Observatory, 2013)

# 2.5 Clusters at the Latin American level.

The following table shows a summary of the success factors of the Latin American clusters, seeking to make known the experience that exists.

Table 3 Experience of clusters in Latin America.

Country	Cluster	Caracteristics	Success factors	
		Chile, thanks to its	The comparative	
		geography, owns more than	advantage of natural	
		25% of the world's copper	resources is a very	
		reserves. Likewise, due to its	important element for the	
		proximity, transport costs to	development of	
		international markets are productive conglomerate		
Chile	Mining	relatively lower.	Clusters must be business	
		In the 1980s new ways of	spaces for the creation of	
		developing new activities	significant added value in	
		were implemented, resulting	the products and services	
		in the employment of about	of the component	
		70,000 people in 56 plants	companies.	
		located in 20 cities in seven	Part of the work of the	
México	Automotive	states.	productive conglomerates	
		Exports of this cluster	is to favor the	
		constitute 25% of the consumption and gr		
		country, since it has a of industries and the		
		comparative advantage for	economy.	
		agricultural production,	Public and private	
		counting on the natural	investment in R & D.	
		resource and the generation	Development Bank	
		of necessary complementary	promotion policies and	
		services, due to the near exit	international agreements	
Argentina	Oily	to the sea.	for cooperation.	
		Between 1996 and 1998 there	Strategic alliances and	
Brasil	Bauxite	was an increase in production	long-term planning, to	

		from 11 to 12 million tons,	increase the profits with		
		and domestic consumption	products of greater added		
		grew. So you can see that the	value and to increase the		
		secret and profitability of the	capacity of attention to		
		business are in reducing costs	demanding markets in any		
		and making strategic	part of the world. This		
		alliances, looking for long-	eliminates duplication of		
		term contracts, where you can	costs in transportation,		
		guarantee the	increase efficiency and		
		commercialization of large	negotiate with more		
		volumes of products at	global customers and		
		constant prices.	fewer.		
		This cluster is a strict	Verticalization: forward -		
		educational system, in the	backward.		
		interests of companies. Intel			
		involved other software and			
		hardware companies, all			
Costa		located in the San Jose area.			
Rica	ICT				
Rica	101				

Source: (Arcos, 2008)

In the Table 2, it can be seen that Chile has an industrial cluster in the mining sector, based on the extraction of copper, of which the country has a high comparative advantage. The product has important linkages, both forward and backward, because that way there is a greater gain in value. Copper as a raw material has an approximate value of USD 10.00 per ton, but with added value, which consists of its smelting and refining, becoming a copper for export, its value amounts to USD 2,000.00 per ton. 15% of copper extraction costs concern labor, while 85% is used in chemical components, of which 25% is invested in capital goods, being machinery that will aid in the procedure; And 10% is used to be invested in structural, administrative and project engineering services. The conglomerate has become a very important part of the country, since Chilean domestic production supplies 2/3 of the inputs, 40% of

equipment, and 75% of the engineering required. That being so, that 60% of backward linkages are supplied by the domestic industry (Arcos, 2008).

In Mexico the development of productive chains was carried out by the failure of the programs of the seventies and eighties, which led to the development of new activities. Seeking to create groupings in selected sectors, especially in the automotive industry, causing the formation of regional clusters. Of the Mexican suppliers, the most successful was Delphi, who with a clear R & D vision (research and development), created a research laboratory with development of engineering processes. The formation of this cluster has helped Mexico to employ around 70,000 people in 56 plants located in 20 cities in seven states (Arcos, 2008).

Argentina's oilseed cluster accounts for 25% of the country's exports, which have increased 17-fold between the 1970s and 1990s. This has a comparative advantage over the agricultural production provided by the Argentine pampas and also by the ease In obtaining the necessary complementary services, due to the contiguous exit to the sea. This association has developed value chains forward, representing that it has formed a significant processing industry of soybean oil and sunflower. Taking into account that the value chain involves suppliers for the marketing phase, both storage, transport and shipping (Arcos, 2008).

The consumption of bauxite has increased with the passage of the years, reason why the production has been growing, what has done that there is a great development of an important productive conglomerate. Between 1996 and 1998 production increased from 11 million to 12 million tons, as well as domestic consumption. This shows that we should not only focus on competitive production to enter local markets, but the first objective is to benefit the development of national industries. It is transcendental that for the establishment of a productive conglomerate, the State provides sufficient guarantees where it is proposed that the capital can be invested with a long-term vision. "In Brazil, the secret and profitability of the business is to permanently reduce costs and make strategic alliances and long-term contracts that guarantee the commercialization of large volumes of products at constant prices" (Arcos, 2008).

Another successful cluster is that of Costa Rica, the company Intel discovered that in the country there was a higher level of use of technology than in other Latin American countries, so it was useful for their interests. Within this conglomerate was included more related companies, the same ones that were in the zone (Arcos, 2008).

## 2.6 Clusters at the level of Ecuador (case city of Cuenca)

# 2.6.1 Cuatro Ríos Tecnology

Figure 3 Information Technology Corporation.



Source: (Cuatro Ríos, 2011)

Cuatro Ríos is a corporation of companies in the sector of the technologies of the information, which provide services of computer of the best quality, always under a constant investigation, innovation and continuous improvement. This cluster is currently made up of 7 companies: IS Solutions, Infostudio, Estratego Consultores, Softbuilder, GnuThink, Multics and Smartsys, focused on several areas such as consulting and engineering and development of multiplatform systems, consulting and support for free software platforms And owner, multimedia and design, among other services (Cuatro Ríos Tecnologías, 2016).

The professional component that is part of the cluster is the basis to provide the customer with a service of the highest quality, and is made up of:

- 6 4th level professionals in information technology management.
- 40 Third-level professionals in information technology.
- 9 Technical professionals specialized in support.
- 12 Other resources in other areas (Cuatro Ríos Tecnologías, 2016).

As an organized corporation, they have established their strategic direction, in order to become more competitive in the market in which they operate.

Next, reference will be made to the mission, vision, transversal axes, as well as the institutional values of the cluster.

### Mision:

"We are a business organization that leveraged in the specialization of its human resource, in research, innovation and continuous improvement, offers products and services in information technologies, competitive in the national and international market" (Cuatro Ríos Tecnologías, 2016).

## Vision:

"We are a business organization with recognized prestige, technical and financial capacity, which develops and markets competitive and profitable information technology products and services in the national and international markets" (Cuatro Ríos Tecnologías, 2016).

# Transversal management axes

- Quality.
- Technological innovation.
- Specialization.
- Social responsibility.
- Awareness in environmental management.

# Areas in which they offer solutions:

Table 4 Areas where solutions are offered.

<b>Engineering, Management</b>	Consulting and software	Multimedia and design		
and Administration	development	- Educational		
- IT project	- Development of	software		
management	business systems	- 2D and 3D		
- Software quality	- Web Application	Animation		
management	Development and E-	- Interactive		
- Requirements	Commerce	presentations		
Engineering	- Solutions for mobile	- Photography, audio		
- Computer audit	devices	and video		
- IT training	- Geographic	- Digital channel		
	Information Systems	communication		
	(GIS)			
	- Automation of business			
	processes			
	- Business Intelligence			

Source: self-made.

# 2.1.1. Confecuenca

Figure 4 Confecuenca



Source: (Cultura Gráfica, 2016)

The financial crisis that affected the country in 2000, as a result of the change of currency and a greater opening of the international market, caused several entrepreneurs to look for new forms of production, so that the associativity presented

a necessary way for a rethinking of the productive system of the sector, conforming what is now known as Confecuenca. The cluster of this sector was made up of 25 companies whose mission was focused on strengthening the clothing sector as an indispensable strategy to compete not only at the national level, but to expand its field in the international arena, taking advantage of the opportunities presented by the agreements Trade that Ecuador has as a member of the CAN, UNASUR, and ultimately the one signed with the European Union, as well as others that may occur in the future.

Figure 5 Companies that make up Confecuenca.

#	Company	Contact	Products
1	F & Y Tissues	Fabián Toral	Cashmere, raincoat, casual wear, semi formal, female office uniforms.
2	M & L Products	Leonor Urgiles	Pajamas
3	Kossmoran	Norma Palacios	Cloth
4	Bordenim	Lorena Mendez	Embroidery
5	Daniela Creations	Monica Ortega	Pajamas
6	Risto Creations	Catalina Ruiz	Pajamas
7	Zhiros	Patricio Maldonado	Pants and jeans skirts, Cotton t-shirts
8	Cramer Sport	Eulalia Maldonado	Cloth
9	Trapitos	Patricia Jaramillo	Uniforms, Sport Cloths
10	Ortopedica House	Debora Bracero	Orthopedic articles
11	Amanecer Disigne	Paola Morales	Duvets, sheets, tablecloths.
12	Pachis Lengery	Patricia Hidalgo	Pajamas

Source: (Astudillo, 2016)

These 12 companies were the ones that started with the formation of the association, which later became a cluster, increasing the number of participants, so there is currently a group of 25 companies.

### 2.7 Business Associations in internationalized clusters.

Business clusters are one of the variants of associativity between different companies. There are programs at the international level that drive business integration. The International Organization Helping Governments is one of the organizations that supports and promotes business partnership programs with the aim of increasing the level of transition economies of the least developed countries. One of the examples of these projects is the "Cluster in Transition Economies", which is being implemented in countries such as Poland, Hungary, Slovenia, the Czech Republic, Slovakia, Lithuania, Ukraine, Estonia and Latvia (Grueso Hinestroza, 2013).

This section presents examples of internationalized clusters in different phases. The prototypes presented below show the different phases through which a cluster moves:

- Phase I. Incipient cluster
- Phase II. Articulated Cluster
- Phase III. Interrelated Cluster
- Phase IV. Efficient Cluster

Table 5. Characteristics of Chilean mackerel cluster Phase I

	Jurel's cluser (fish flour) in Chile (VIII Region)
	Large entrepreneurs who increase in number but there is no greater relation
Productive relations	between all the participating agents.
	Technical specialization Technological development was not accompanied by
	increased exports. The lack of business vision caused an oversized capital
Technology	(vessels) which was negative for the development of the cluster.
	Local and international demand for fishmeal does not encourage greater
Demand	dynamism in the production strategies of entrepreneurs.
	State regulatory weakness that could not prevent the overexploitation of the
Institution and regulations	jurel, which meant a huge drop in production.
	There was a boom in the export of fishmeal, which put Chile as the second
	largest exporter in the world. However, neither the sector nor the productivity
Productivity	increase is promoted due to the lack of management capacity.
	There is no evidence of the emergence of association experiences among flour
Cooperative competition	producing companies, except for the large firms that strengthened.
	Minimum The danger of overexploitation is latent and reduces the expectation of
Insertion of new agents	profit, so that few agents are integrated.

Source: (Pro expansión, 2015)

This cluster of Chilean origin has not met the objectives proposed initially, so it is classified within phase I, within the experience of internationalization it was established that the entrepreneurs did not give greater importance to the relationship between participating agents, the Technological development was not accompanied by increased exports, demand did not encourage entrepreneurial penetration strategies, there were no major experiences between the association.

Table 6. Caracteristics of caña in the Salvador cluster Phase II

	Cane cluster in El Salvador
Productive relations	Formation of relationships that materialize in a value chain.
	Local effort to access new technologies for greater efficiency. There are farmers
Technology	with good training.
	Multiple, destined mostly to the foreign market. A basic product (sugar) is
Demand	required to which value is added in other productive apparatuses.
	Existence of private support as far as training in the mills. Existence of guilds of
Institution and regulations	mills and producers.
	Fast articulation between various agents around the exploitation of the cane,
Productivity	however, is in a stage that seeks consolidation.
	The level of aid among cane producers is good. However, loses strength when
	integrating agents that can add value to their production, so it can not consolidate
Cooperative competition	a good productive relationship.
Insertion of new agents	Attracts the agents required to maintain production levels.

**Source:** (Pro expansión, 2015)

As far as this cluster of Salvadoran origin is concerned, it is identified within Phase II, that is, it is an articulated cluster that materialized in the determination of the value chain, a local effort was made to access new technologies, its Internationalization achieved greater access to the foreign market, had private support in terms of training, there was a rapid articulation among the participants, although it still needs to be further consolidated, so it is seeking to permanently improve its production levels with resources and limited elements with which it counts.

Table 7. Characteristics of the footwear cluster in the Sino Valley Phase III

	Cluster of footwear in the Sino vally
	Productive relations between companies for a given unemployment goal is not
Productive relations	common in business action.
	Technical development based on the work experience of agents who
Technology	concentrated in the area to serve in the repair of machines.
	Destined to the foreign market mainly. Are products of average quality that lack
Demand	a greater degree of sophistication in the desire and production.
	State development that has not been decisive in the dynamics of the area. The
	participation of private agents and developed institutions has been more
Institution and regulations	important.
	Have been integrated into world markets so productivity has had to be
Productivity	strengthened through action of the stakeholders in the cluster.
	There is a good degree of cooperation that responds to the interest to increase
	production capacity, although it has not been a sustained strategy. Collaboration
Cooperative competition	between firms is low.
	There are conditions to allow the participation of new agents even if it is not a
Insertion of new agents	sustained opening.

**Source:** (Pro expansión, 2015)

This cluster is classified within phase III, i.e., it is presented as an interrelated model where it is not common business action for productive relations, technical development is done on the basis of the work experience of actors in the sector, not There is an adequate state promotion, so that private agents have participated with greater impetus, have been integrated into world markets, there is a good degree of international cooperation and allow the conditions for the participation of new agents to strengthen business associativity.

Table 8. Characteristics of the Cluster Textile of India Phase IV

	Cluster textil of Tiruppur (India)
Productive relations	Generation of new productive relations that seek the use of the institutional framework. Despite this, the development and integration between producers has made the cluster more solid.
Technology	Development of own productive processes on the basis of prevailing social patterns.
Demand	Demand in function to the type of producing company. Small businesses produce for the domestic market without further sophistication. The largest companies have an export strategy in function of a product of quality and good finishes.
	There is a high institutional and regulatory development, expressed in the existence of export quotas per company so that all can participate in this benefit.
Institution and regulations	The population makes use of tricks to take advantage of the promotion programs.
Productivity	Production highly demanded by international companies because it manages to respond to its canons of quality, design and price.
Cooperative competition	Integration between entrepreneurs for the search of bigger companies that want to participate in the export activity.
Insertion of new agents	Process of inclusion of new agents, especially small producers based on the different relationships created within the cluster.

**Source:** (Pro expansión, 2015)

Finally, the textile cluster of Hindu origin, is classified within phase IV, here it is possible to identify that there are new productive relations that seek the use of a properly established institutional framework, which has allowed it to consolidate the cluster at national and international level, Has achieved the maximum development of production processes, based on the use of technology, so that its export strategy is based on a product of quality and good finishes, there is a high institutional development, expressed in important export quotas. There is a high integration among the entrepreneurs in search of bigger companies that want to participate in the export activity, which allows them to be more competitive to reach a greater participation in both the local and international market.

In the second chapter of the research, examples of successful companies are presented both in the internationalization of their products and in cluster formation.

From the development of the same one can be observed that the companies that lead these examples are of diverse natures, materializing also in different continents and countries. In this chapter, a methodology is presented that allows knowing the degree of success of an internationalized company according to size, specialization and approach.

**CHAPTER III** 

PROPOSAL OF ASSOCIATION AND INTERNATIONALIZATION

FOR THE FORMATION OF A CLUSTER OF COMPANIES OF THE WOOD

SECTOR, IN THE CITY OF CUENCA.

3.1. Advertisement ad feedback.

International experience has shown that local economies developed under the

concept of business groupings have significantly increased their competitiveness in

international markets, since the association of a group of companies can attract

productive factors in favorable conditions of quality and price, which reinforces the

competitiveness of the grouping. In addition, it has been shown that the most

successful production chains tend to be regionally concentrated.

Therefore, when making a business partnership, it would be possible for companies

in the wood sector of the city of Cuenca to achieve a shared vision of all the

economic agents involved, generate greater added value in the product with better

quality, respond quickly and Effectively to the changes of the industry, to strengthen

the productive chains, to establish a strategic plan oriented towards a common goal

of medium and long term, raise their levels of competitiveness through their

integration in the productive chains, generate economies of scale in the group

activities And achieve the specialization of companies in the products, processes and

machinery related to the activity.

The associativity and internationalization model for the formation of a cluster of

companies in the wood sector in the city of Cuenca will have the following

development scheme:

First phase: Collection of information.

1. Analysis of the wood sector:

1.1. Global industry behavior.

1.2. Regional industry behavior.

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1.3. National behavior of the industry.

1.4. Capacity of association of the wood industry.

1.5. Foreign trade situation of the wood industry.

2. Definition of competitive strategies:

2.1. Opportunities and threats for the sector.

2.2. Analysis of factors.

2.3. Identification of competitive strategies.

3. Identification and selection of productive chains.

Second phase: Cluster formation.

4. Groupings and alliances.

5. Organizational structure and financing.

6. Philosophical aspects of the sector.

7. Project development timeline.

3.2. **Developing** 

3.2.1. Analysis of Wood sector.

3.2.1.1 Global industry behavior:

The wood industry is one of the most important in the world. In most countries trees are used and felled for various purposes. The timber industry has existed for centuries in artisan forms, which has been developed until the last decades taking advantage of important technological advances, such as the introduction of electricity, improvement in the design of saws and automation of classification and other operations. Wood products can be made from a wide variety of tree species. To prepare a product, the choice of raw material is made according to the shape and size

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of the tree, the physical characteristics of the wood, strength or resistance to deterioration and its aesthetic properties (FAO, 2015).

According to reports from the Food and Agriculture Organization of the United Nations, forests cover 31% of the world's land area. In addition, the world's main source of timber supply is spontaneous or natural forests, while native forests account for a global area of 3.4 billion hectares. Of the 4 billion hectares of forests registered worldwide, Russia owns 809 million, followed by Brazil with 520 million and Canada with 310 million. The other countries have less than 305 million hectares (FAO, 2015).

As for the legal area, the preservation of forests and care of the environment is increasingly relevant in national and international legislation. As a result of globalization, the harmonization of regulations in the forest industry has led to a sustainability approach to production, through the planned use of forest resources. Supranational institutions such as the United Nations and NGOs such as the Forest Stewardship Council have pushed for changes in public policy for forest conservation and sustainable timber production (FAO, 2015).

Approximately 30% of the world's forests, or 1.2 billion hectares, are used mainly for the creation of wood and non-wood products. Also, some 949 million hectares are intended for multiple uses. The area of forests used for the manufacture of wood products has declined by more than 50 million hectares since 1990, because forests have been designated for other purposes. On the other hand, the area destined for multiple use has increased by 10 million hectares over the same period (FAO, 2015).

Similarly, the Food and Agriculture Organization of the United Nations states that "the world average production of the main forest products maintains a level of growth between 1 and 4 per cent worldwide". The demand for furniture and cut timber is linked to the housing construction sector. In order to generate added value, furniture manufacturers will have to gradually withdraw from retail marketing to concentrate on high-throughput production processes and commercial volume operations. In this sense, the manufacturers of furniture and other wood products in

the world know that they need new business models that are competitive based on innovation and knowledge (FAO, 2015).

In 2015, total furniture imports reached US \$ 70 billion, an increase of 3% over the previous year, which was approximately US \$ 67 billion. The most traded products worldwide are: other wooden furniture (US \$ 24 billion), wooden chairs and seats (US \$ 14 billion), pieces and pieces of furniture wood (US \$ 12 billion). It should be noted that China is the world's largest exporter of furniture, followed by Germany and Italy. In 2014, Germany replaced Italy from its position as the world's second largest exporter. Exports of furniture in 2015 in Western Europe showed growth of 5% (ProEcuador, 2015).

At the same time, the export / production share for this region is approximately 42%, well above the global average of 30% in 2015. With respect to imports over the last decade, the furniture market Of Western Europe has been opening market to foreign products, its import / production average is 50%, which means that about half of the market (in value) is satisfied with imports. Italy, for its part, still records the lowest proportion of imports / consumption in the area and the world, although import penetration is increasing (ProEcuador, 2015).

World exports of timber and its products totaled \$ 232 billion by 2015, an increase of 8.3 percent over the past five years. The main suppliers: China, Germany, Canada, the United States and Poland account for 43% of world exports by value (Instituto Bolivariano de Comercio Exterior, 2016).



Figure 6 Main exports of the wood industry worldwide, 2015.

Source: Instituto Bolivariano de Comercio Exterior, 2016

It is estimated that in 2015 the world production of furniture for the home reached US \$ 529 billion, a growth of 0.2% compared to the previous year. 31% (US \$ 162 billion) of this production was made by Western Europe, followed by Asia Pacific with 28% (US \$ 146 billion) and North America with 25% (US \$ 132 billion). The other regions accounted for 16% of the world total. The regions with the highest growth rate in furniture production in 2015 were Asia Pacific at 6.2% in relation to the previous year, followed by North America with 3.6%. On the contrary, Western Europe reduced its production by 5.9% and Latin America by 4.4% (Instituto Bolivariano de Comercio Exterior, 2016).

The variability of the global forest sector has several implications for the forest industries of both developed and developing countries. In developed countries, the changes will require a rethinking of economic strategies, production lines, exclusive markets and perhaps even the basic business model. In the new producing regions, all this will have to be defined and specified as the new industries are formed (FAO, 2015).

### 3.2.1.2 Regional industry behavior:

As the forest reserves reach a dangerous point of exhaustion, where could the industry turn its eyes? Latin America owns more than 50 percent of the world's remaining tropical forests and it is incomprehensible that most of the world's supply of tropical timber exports historically comes from the smallest reserve in Asia. In 1998, Asia accounted for 77% of tropical timber exports, while Africa accounted for 14% and Latin America accounted for only 9% (WWF Global, 2015).

At present, a new trend towards Latin America is emerging as a source of timber supplies. It is so that during the last two years, several international timber companies have settled in the region. Some of them continue to develop their activities in Asia, while operating and leasing concessions with purchase option in Latin America. Mahogany, a wood that, because of its durability and beauty has been used in the construction of boats and in the elaboration of furniture since the beginning of the 16th century, is no longer the only wood product that originates in the continent (OCDE para América Latina y el Caribe, 2014).

In Latin America, there are currently 48 independently certified forests for their adequate forest management, covering an area of 1,746,000 hectares, equivalent to an extension greater than that which, as a whole, Asia and Africa are able to guarantee as sustainable. The certification assumes the verification of the use of an adequate environmental and socially sustainable management, or practices established by a certification body (Forest Stewardship Council, 2015).

In the period 2011-2015, Latin America achieved 29% growth in timber exports, totaling 14 billion dollars by 2015. This shows the largest regional growth in the world, mainly for the production of raw materials for industries (construction, furniture and paper) (Instituto Bolivariano de Comercio Exterior, 2016).

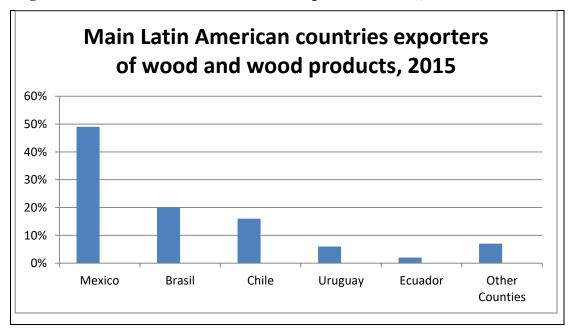


Figure 7 Main Latin American countries exporters of wood, 2015.

Source: Instituto Bolivariano de Comercio Exterior, 2016.

These five major exporters accounted for 93% of the exports of the Latin American region, with Mexico, which occupies the eighth place in world trade, in terms of timber and timber products (Instituto Bolivariano de Comercio Exterior, 2016).

In general terms, forest harvesting, production and trade in timber and regional products continue to grow, responding to the demand of industries that require raw materials for the development of their products and the final consumers who demand the same with differentiated attributes (Instituto Bolivariano de Comercio Exterior, 2016).

### 3.2.1.3 National Behavior of Industry:

Thanks to its geographic location, Ecuador is a mega diverse country with great natural resources and forest potential, which, combined with the innovation and technication of the sector, makes its offer varied; Counting also with products of value added that find their strength in the personalization, since they do not handle great volumes. Ecuador's forest wealth is transformed into high quality products such as: boards, furniture and construction finishes. Our country has approximately 2,616,546 hectares available for reforestation, so actions are needed to increase the

sector's efficiency and competitiveness. In this context, there are initiatives in the country by the Government, such as the implementation of the Program for Incentives for Commercial Reforestation (PIF), which aims to reforest 120,000 hectares until 2018, benefiting 8,602 forest producers For that year. With this, it is sought that in subsequent years the local demand for timber can be met, and the exportable supply expanded. Through this program an economic transfer is made to natural persons, legal entities, communes, associations or cooperatives, with the aim of covering the costs of establishing and maintaining forest plantations (ProEcuador, 2015).

This productive subsector is especially divided between the provinces of Azuay (Cuenca), Pichincha (Quito), Guayas (Guayaquil), and Tungurahua (Ambato). According to the Superintendence of Companies, approximately 92% of the manufacturing industry in the furniture manufacturing subsector is located in Pichincha, Guayas, Azuay and Manabí, and the remaining 8% among other provinces (Superintendencia de Compañías, Valores y Seguros, 2016).

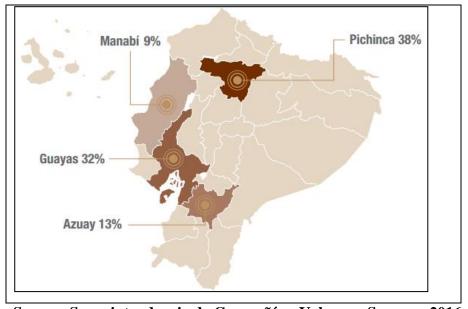


Figure 8 Main location of companies in the timber sector in Ecuador, 2015.

Source: Superintendencia de Compañías, Valores y Seguros, 2016.

In the following table it can be seen that the economic activity of furniture manufacturing registered annual revenues of US \$ 335 million in 2015, with 5,595 economic establishments throughout the country engaged in this activity. Likewise, it

is estimated that in 2015 the consumption of furniture was US \$ 345 million. According to the 2010 National Economic Census; 41% of the income generated by this sector comes from the city of Cuenca, while Quito is considered the largest buyer at the national level.

Table 9 Consumption of wood products in Ecuador 2015.

Element	
Production	334.576,00
Imports - Quantity	17.500,00
Exports - Quantity	7.139,00
Consume	344.937,00
	Production Imports - Quantity Exports - Quantity

Source: Instituto Nacional de Estadísticas y Censos, 2015.

According to the information of the directory of companies of the National Institute of Statistics and Censuses, updated to the year 2015, there are 66 companies dedicated to forestry and wood extraction, 38 companies of sawing and planing of wood, 86 of manufacture of leaves of Plating wood and wood-based boards, papermaking and derivatives, and 204 furniture manufacturing (Instituto Nacional de Estadísticas y Censos, 2015).

### 3.2.1.4 Situation of the wood industry in relation to foreign trade:

According to data from the Central Bank of Ecuador in 2015, exports of furniture and construction finishes have shown a decrease since 2010, decreasing 0.96% in FOB value, from USD 7,943 thousand USD 7,866 thousand dollars, having a decrease of 5.84% in quantities, going from 1,594 to 1,501 tons (Banco Central del Ecuador, 2015).

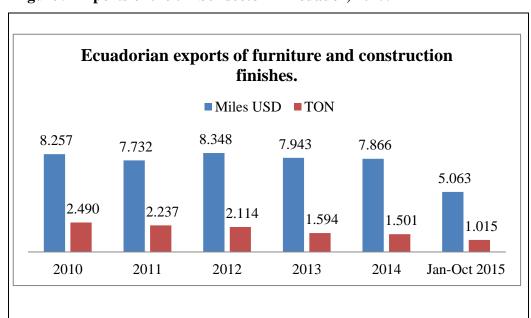


Figure 9 Exports of the timber sector in Ecuador, 2015.

Source: Banco Central del Ecuador, 2016

As can be seen in figure 7, among the main products exported between 2013 and 2015 are other wooden furniture (heading 9403), with a share of 36.49%, doors and frames with 16.39%, and wooden furniture With a 14.81% (Banco Central del Ecuador, 2015).

Figure 10 Main exports of the timber sector in Ecuador 2013-2015.

	Main Ecuadorian E	xports of Furniture and c	ostrution fin	eshes.	
		Thousands USD FOB			
Subpartite	Description	2013	2014	Jan-Oct 2015	% Part FOB 2014
9403.60.00.00	Other wooden furniture.	3004	2870	2134	36,49%
4418.20.00.00	Doors and their frames and thresholds.	1790	1289	980	16,39%
9403.50.00.00	Wooden furniture used in bedrooms.	944	1165	799	14,81%
9403.30.00.00	Wooden furniture used in offices.	558	946	287	12,03%
9403.40.00.00	Wooden furniture used in kitchens.	822	489	318	5,97%
9403.90.00.00	Parts of other furniture.	450	430	208	5,46%
4409.29.10.00	Plates and friezes, not assembled.	47	147	43	1,87%
Other Products		328	550	294	6,99%
Total		7943	7866	5063	100,00%

Source: Banco Central del Ecuador, 2015.

At the same time, as shown in the following figure, the United States appears as the main destination of Ecuadorian furniture exports and construction finishes in 2015, with a 25% share, followed by Panama with 23% By Colombia with 11%, Peru 9%, Venezuela 7%, Puerto Rico 6% and others with 19% (Banco Central del Ecuador, 2015).

Main destinations for wood exports in Ecuador.

USA
Panama
Colombia
Peru
Venezuela
Puerto Rico

Figure 11 Main destinations for wood exports in Ecuador.

Source: Banco Central de Ecuador.

To get a better view of the conditions of the Ecuadorian products of this sub-sector in their main destinations, the average tariffs applied by sub-heading in the United States, Panama and Colombia are shown below (ProEcuador, 2015).

Table 10 Main destinations of exports of the timber sector in Ecuador, 2015.

Subpart	Description	USA	Panama	Colombia
4409.10	OF CONIFERS	0.54	6.30	0.00
4409.21	DISTINCT FROM THE CONIFER, FROM BAMBOO	0.00	7.20	0.00
4409.29	THE OTHERS	0.61	6.30	0.00
	WINDOWS, DOORS GLASS, AND ITS FRAMES AND			
4418.10	CONTRAMARCOS	0.00	10.00	0.00
4418.20	DOORS AND FRAMES, CONTRAMARCES AND THRESHOLDS	0.00	10.00	0.00
4418.40	CONCRETE COVERS	0.00	7.20	0.00
	TABLETS FOR ROOF COVERING OR FACADE (SHINGLES AND			
4418.50	SHAKES)	0.00	10.00	0.00
4418.60	POSTS AND BEAMS	0.00	7.20	0.00
	ASSEMBLED PANELS FOR FLOOR COVERING, FOR MOSAIC			
4418.71	FLOORS	0.00	7.20	0.00
4418.72	THE OTHER, MULTICAPPES	0.00	7.20	0.00
4418.79	OTHERS	0.00	7.20	0.00
4418.90	OTHERS	0.00	7.20	0.00
9403.30	WOOD FURNITURE OF TYPES USED IN OFFICES	0.00	15.00	0.00
9403.40	WOOD FURNITURE OF TYPES USED IN KITCHENS	0.00	15.00	0.00
9403.50	WOOD FURNITURE OF TYPES USED IN BEDROOMS	0.00	15.00	0.00
9403.60	OTHER WOOD FURNITURE	0.00	0.00	0.00
	FURNITURE OF OTHER MATERIALS, INCLUDING ROTEN			
9403.81	(RATAN), WICKER, BAMBOO	0.00	10.80	0.00
9403.89	OTHERS	0.00	10.80	0.00
9403.90	PARTS	0.00	10.80	0.00

Source: Own elaboration based on information from the Central Bank of Ecuador, 2015.

On the other hand, exports of furniture and finished construction in 2015 were carried out through 56 companies; of which 44% were small enterprises, 29% were medium-sized enterprises, 21% were large enterprises, and 6% were microenterprises (Ministerio de Comercio Exterior, 2015). However, it must be borne in mind that small enterprises present major problems, such as inefficient marketing, accounting systems, limited production systems since they have no presence in the international market. Where the presence of these companies only focus on local supply, and at best national.

Exports of timber according to type of enterprise.

Micro
6%

High
21%

Small
44%

Medium
29%

Figure 12 Exports of timber sector in Ecuador 2015 by type of company.

**Source:** (*Ministerio de Comercio Exterior*, 2015)

## 3.2.1.5 Associative capacity of the wood sector:

Throughout the value chain of the Ecuadorian timber industry, several associations can be identified, which fulfill their role in different activities, among which are the following:

Figure 13 Ecuadorian Association of Woodworkers.



Source: (AIMA, Asociación Ecuatoriana de Industriales de la madera)

The Ecuadorian Association of Woodworkers - AIMA - is a union that seeks to promote sustainable forest development, encourage reforestation, and boost the growth and competitiveness of the timber industry (AIMA, Asociación Ecuatoriana de Industriales de la madera).

Figure 14 Corporation for Sustainable Forest Management.



Source: (COMAFORS, 2016)

The COMAFORS Sustainable Forest Management Corporation is a private, non-profit Ecuadorian company. Its objectives include the implementation of environmental management instruments, which are related to sustainable forest development (COMAFORS, 2016).

Figure 15 Fundepim Corporation.



Source: (Corporación Fundepim, 2016)

Corporación Fundepim is a non-governmental organization, which focuses on the promotion, promotion and support of the Ecuadorian timber and forestry sectors, seeking to help boost projects (Corporación FUNDEPIM, 2015).

Figure 16 International Bamboo and Rattan Network.



Source: (Inbar, Red Internacional de Bambú y Ratán, 2015)

The International Network of Bamboo and Rattan - INBAR - is an intergovernmental body, made up of countries that show interest or have bamboo resources (Inbar, Red Internacional de Bambú y Ratán, 2015)

Figure 17 Wood Sector of CAPEIPI.



Source: (CAPEIPI,ORG, 2016)

The timber industry of the Chamber of Small and Medium Enterprises Pichicha (CAPEIPI), consisting of productive sectors of MSMEs, is a firm that seeks to encourage the timber production sector for their participation and cooperation in projects of productive and social interest (CAPEIPI, 2017).

# **3.2.2.** Definition of competetive strategies.

## **Opportunities and Threats for the sector:**

From the analysis of the four factors of the current situation of the wood industry at the global, regional, national and foreign trade levels, the following opportunities could be established:

- There is good projection and prospects of international demand.
- Customers prioritize quality over price.
- Wood can be exported with added value, with a 0% tariff for the products of this industry in several countries of Latin America and the European Union.
- International resources can be obtained, which are granted through international technical cooperation, by industrialized countries, to outstanding nations in reforestation and wood processing.
- There is a probability of environmental and competitive improvement of companies, thanks to incentives from public and private organizations.
- There is possibility of integration of the productive chain to optimize the processes, improving the productivity of the companies and their participation in the international market.
- There is new and more efficient environmental and productive technology.
- Generation of a culture of utilization of the residues obtained in the production process.
- Credit lines are offered nationally and internationally to improve the environmental and business performance of the industry.
- The Government encourages reforestation. The country has more reforested hectares and environmental and productive research for the development of the timber sector.
- The change of the Productive Matrix of Ecuador as an economic policy, allows the entry of raw materials, in order to add value and export them, exempting them from import tariffs and other taxes in exchange for equivalent exports.
- There are economic incentives for reforestation and tax incentives for environmental investments.

On the other hand, the sector can be affected by the following threats:

- Smuggling and export of wood extracted from native trees.
- The economic instability of the country.
- Substitutes for wood, such as plastic and metal.
- Permanent increases and decreases in the demand for products in this sector.
- Decline in the sector's exports.
- Lack of knowledge on the part of the businessmen, of the internal and external market, due to the lack of adequate market research.
- Lack of incentives for research and development investment in the timber sector.
- A large number of small informal establishments that lack technology in their processes, which diminishes their competitiveness.
- Lack of associativity, which makes it difficult to establish strategic alliances to improve the level of competitiveness and internationalization of the sector.
- Lack of adequate common, short, medium and long term business vision.

# **Analysis of factors:**

The matrix of external factors evaluation (EFE), will allow the assessment of the opportunities and threats of the wood sector. The value scale determines:

Table 11 Matrix of evaluation of impacts.

Impact	Value
Low	1
Medium	2
Moderate	3
High	4

By: Adriana Hernández

**Table 12 EFE Matrix of Opportunities.** 

1. Good projection and prospects of international demand.  2. Customers prioritize quality over price.  3. Export value-added timber with 0% tariff for the products of this industry in several countries of Latin America and the European Union.  4. Obtainment of international resources, which are granted through international technical cooperation, by the industrialized countries to prominent nations in reforestation and wood processing.  5. Environmental and competitive improvement of companies, thanks to incentives from public and private organizations.  6. Possibility of integration of the productive chain to optimize the processes, improving the productivity of the companies and their participation in the international market.  7. Option of new and more efficient environmental and productive 0,083 3 0,249	Kev F	xternal Factors	Value	Qualification	Weighted value
1. Good projection and prospects of international demand.  2. Customers prioritize quality over price.  3. Export value-added timber with 0% tariff for the products of this industry in several countries of Latin America and the European Union.  4. Obtainment of international resources, which are granted through international technical cooperation, by the industrialized countries to prominent nations in reforestation and wood processing.  5. Environmental and competitive improvement of companies, thanks to incentives from public and private organizations.  6. Possibility of integration of the productive chain to optimize the processes, improving the productivity of the companies and their participation in the international market.  7. Option of new and more efficient environmental and productive 0,083 3 0,249					value
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process.		process.			
9. Lines of credit offered at national and 0,083 3 0,249	9.	Lines of credit offered at national and	0,083	3	0,249

international level to improve the environmental and business performance			
of the industry.			
10. The Government encourages reforestation. The country has more reforested hectares and environmental and productive research for the development of the timber sector.	0,083	2	0,166
11. The Change of the Productive Matrix of Ecuador as economic policy, allows the entry of raw materials, in order to add value and export them, exempting them from import tariffs and other taxes and taxes in exchange for equivalent exports.	0,083	3	0,249
12. Economic incentives for reforestation and tax incentives for environmental investments.	0,083	2	0,166
TOTAL	1,00		2,822

By: Adriana Hernández

Table 13 Location of the value scale of opportunities.

Impact	Value	Location
Low	1	
Medium	2	
Moderate	3	2,822
High	4	

By: Adriana Hernández

After analyzing the EFE matrix of opportunities, it was concluded that the benefits to be achieved are 2.82 / 4, which was obtained after making the value scale. Which indicates that the impact will be moderate, having a great possibility to carry out the cluster in the sector of the wood.

**Table 14 EFE Matrix of Threats.** 

Key External Factors		Qualification	Weighted
			value
Threats			
1. Smuggling and export of wood extracted from native trees.	0,090	2	0,180
2. The economic instability of the country.	0,090	4	0,360
3. Substitute products of wood such as plastic and metal.	0,090	2	0,180
4. Permanent rises and decreases in the demand for products in this sector.	0,090	3	0,270
5. Trend of growth of the exports sector.	0,090	4	0,360
6. Lack of knowledge of entrepreneurs, of the internal and external market. There is no adequate market research.	0,090	4	0,360
7. Lack of incentives for investment in research and development for the timber sector.	0,090	4	0,360
8. A large number of small informal establishments with a lack technology in their processes, which diminishes their competitiveness	0,090	1	0,090
9. Lack of partnership that hinders the establishment of strategic alliances to improve the level of competitiveness and internationalization of the sector.	0,090	4	0,360
10. There is no adequate business vision or short, medium and long term vision.	0,090	3	0,270
TOTAL	1,00		2,970

By: Adriana Hernández.

Table 15 Ubicación de la escala valorativa de amenazas.

Impact	Value	Location
Low	1	
Medium	2	
Moderate	3	2,970
High	4	

By: Adriana Hernández

According to the valuation scale, the threats presented have a moderate impact on the wood sector, with a location of 2.97 / 4. Although it is a new insertion in the market, the disadvantages are great, but it must be borne in mind that overcoming these will make the cluster competitive in the timber sector and achieve its goal.

## **Identification of competitive strategies:**

From the analysis to the sector of the wood industry, it has been possible to establish that in order to more efficiently access opportunities and mitigate threats to the maximum, it must focus its efforts on achieving the highest levels of quality, sophistication and transformation of its products. To do this, its driving force must be innovation in all its aspects: technological, management and organization, productive, in its business models and in its relationship with the markets. The timber industry must be geared towards the development of production capacities in the most elaborate stages of the value chain, for which it requires joint efforts, under a cooperative culture and behavior, which may arise from the decision of Form a cluster, which allows them to associate efforts to improve their competitiveness in an increasingly globalized market.

According to Alejandro Acevedo Ramírez, Claudia Patricia Lemus Ávila and representatives of the Forest Products Industry, strategies for the wood sector can be established as follows:

- Form associative cells to invest in machinery with state-of-the-art technology, which will help in productive processes.

- Choose distribution channels; identify the most suitable places for the facilities and better sources of raw material or inputs.
- Join the timber sector, as this will help reduce costs, as well as increase specialization, benefiting availability, quality, increased productivity and competitiveness.
- Modify and standardize the structure of organizations, so that there is an integration of the entire productive chain of the sector.
- Identify the productive chain that corresponds to the producers of wood, allowing the adequate and timely supply of raw material and inputs.
- Strengthen a productive nucleus of wood and furniture, promoting business associativity and facilitating specialization in production.
- Link to public and private institutions, seeking greater support for access to new international markets.
- Define clearly the forest areas, identifying the productive nuclei.
- Consolidate and strengthen distribution and marketing channels.
- To stimulate the use of the waste generated in the primary processing as pieces of wood and sawdust, as an alternative source for the improvement of productivity.
- Establish mechanisms, which help transport infrastructure and deposit, for which
  it is proposed to create raw material collection centers close to the areas of timber
  utilization, identifying the ways and needs of the same, to facilitate the Land and
  river transport.
- Promote the development of an information system on national and international
  prices, investment in research and technological development, market studies,
  supply and demand analysis, customer and supplier knowledge, foreign trade
  analysis, exclusively for the wood.

# 3.2.3. Identification and selection of productive chains.

The processes of globalization are changing the nature of manufactures worldwide. The cumulative effect of numerous factors such as the development of global information and communication networks, the extension of transport networks, the universal availability of the latest and best technologies, the reduction of trade barriers and other factors have influenced The rapid expansion of industrial capacity, including the ability to manufacture wood products.

Ecuador is a country with great natural resources and with a great forestry potential, making its products of high quality, having not only national but also international consumers. The companies in the sector of the wood have as differentiating characteristic their brand and customized designs, those that are related to the quality of the raw material and the productive processes; this allows them to offer competitive products in the market. The wood industry is in constant development, and focuses on satisfying the most demanding and distinguished markets, having characteristics of quality, design, brand, service, among others (ProEcuador, 2015).

Patricia Camacho, states that "a productive chain is a system constituted by interrelated actors and actors and by a succession of operations of production, transformation and commercialization of a product or group of products in a given environment" (Camacho, 2013). Under this concept, it is necessary to analyze productive chains, because they allow identifying the main critical points that slow down the competitiveness of a product, and then define and promote concerted strategies among the main actors involved.

The following is the production chain of the wood sector for the city of Cuenca:

furniture PRODUCTIVE CHAIN OF THE WOOD Board Sawmills Seeds manufacturers home Forest plantation accessories Furniture Reforestation Agrochemical waste projects manufacturer miscellaneous Natural forest items

Intermediaries or

merchants -

treated wood

Processed material

Figure 18 Productive chain of the wood sector.

Machinery and

supplies

tools

Source: Own elaboration based on "The Productive Chain" made by Proecuador.

raw material

Construction

company

Consumers

Manufacturer of

Producers

construction products

## Characterization of the activities of the productive chain:

# Inputs and equipment:

Inputs, equipment and agricultural products for forestry production are mainly marketed by private companies. The demand for these products is derived, in which both the price and the profits of the products harvested, as well as the cost of the input, make the demand highly variable (FAO, 2015).

Increasing importance is attached to the efficient, safe, sustainable and complementary use of fertilizers, pesticides and plant growth regulators. The use of purchased inputs requires previous investments in manufacturing facilities and storage and distribution infrastructures, thus absorbing considerable volumes of working capital (FAO, 2015).

According to the national cadastre of the agricultural supply stores, issued by Agrocalidad in 2014, in the city of Cuenca there are approximately 151 stores of agricultural inputs (Agrocalidad, 2014). Likewise, according to information from the Superintendency of Companies, there are 4 registered distributors of specialized equipment for agriculture (Superintendencia de Compañías, Valores y Seguros, 2016).

#### Raw material:

Due to its geographical location, Ecuador has numerous timber species. As indicated above, there are a variety of climatic floors, as the country has the Andes Mountains, as well as the Humboldt and El Niño streams (ProEcuador, 2015).

From this information, it is estimated that 52% of the Ecuadorian territory has forest aptitude, of which 42.38% owns natural forests. 80% are in the Amazon, 13% in the Litoral and 7% in the Sierra, 17.15% corresponding to the National System of Protected Areas (NSPA), 8.83% to Areas of Forests and Protective Vegetation, 7.02% % To State Forest Patrimony and 9.28% to private natural forests. Only in 0.01% of the national territory are plantations with cultivated forests, destined

directly to the industry and forestry economy of the country. It is also currently estimated that there are about 3.686 million hectares suitable for use in the recovery of degraded forest lands to establish forests planted for protection, conservation and production purposes (ExpoEcuador, 2014).

The primary products that are obtained from the forest plantations are the round wood and industrial round wood for the elaboration of logs, props, wood pulp, etc., the semi-finished products are the boards, agglomerates, plywood, medium density fibreboards (MDF), eucalyptus chips used in pulping; And among the products with higher added value (PMVA) are: furniture, decorative moldings, doors, frames, windows, floors, toothpicks. (ExpoEcuador, 2014).

The producers of forest plantations are mainly grouped in ASOTECA, which is the Ecuadorian Association of Producers of Teak and Tropical Timber, which has been a union with legal status since March 13, 2004, and has 56 members of tropical forest species. These producers are also grouped in CORMADERA, the Ecuadorian Forestry Development Corporation. It is a civil institution that since 1999 specialized in promoting the cultivation of forest species of excellent genetic quality, through the correct use of forestry, developing forest financial schemes so that the majority of the population has access to the environmental and financial benefits That provide the forest plantations (ExpoEcuador, 2014).

#### **Processed material:**

**Saw mills.** - The industrial facilities where the processing of the wood in roll is made to obtain lumber. They receive the name of sawmills or sawmills, which can be of two types: fixed installations and mobile installations. The influence of the type of sawing determines the yield of the wood, since with the fixed sawmills (sawmills of main band saw) a better use of the raw material is obtained, a situation that is not obtained from the mobile sawmills (saw sawmills Alternative multiple or circular). In our country, there are small sawmills, little developed technologically, that generate a low quality of the final product, in addition they use circular saws that cause a great waste. This segment concentrates around 5,000 chainsaws. In the city of Cuenca, according to information from the Superintendency of Companies,

Securities and Insurance, to the year 2016, 19 sawmills are registered (Superintendencia de Compañías, 2016).

**Residues.** - The splinter, conceptually, is the irregular fragment that remains of a piece or object of wood that breaks or breaks violently. Chip-making in Ecuador is carried out by a single company, which has already been in the market for many years, located in the province of Esmeraldas, which supplies the plantations of Eucalyptus globules in the Ecuadorian Sierra. Depending on the quality of the logs (diameter), the yield can vary between 25-35%, when the diameter of the logs is larger; the yield can reach 35% (ProEcuador, 2015).

**Treated wood**. - In Ecuador, the plywood industry is made up of five factories, which supply native forests and forest plantations. The agglomerate is an iron (plate, board, etc.) made with a mixture of wood particles (usually pines) and special glues. These agglomerate slabs can be veneered, melamine or decorated for various applications (ProEcuador, 2015).

MDF (Medium Density Fiberboard) plates are built with a mixture of small wood particles (usually pines) and special glues, pressed under controlled pressure and temperature conditions. These MDF plates can be machined for excellent finishes. They are used for multiple purposes like: furniture, moldings, doors, divisions, etc (Sub-Sector Transformadores y Comercializadores de Madera en el Ecuador, 2007). In Ecuador, the chipboard industry has two factories, and a factory that produces MDF boards. It is supplied with uniform raw material from pine and eucalyptus plantations in the region of the Sierra Ecuador. They operate with a modern equipment and rigorous quality control of the final product in their own laboratories, so the boards are considered of high quality and with this they have gained market niches abroad (ProEcuador, 2015).

**Innovacentro de la Madera.** - Cuenca currently has a center that offers technological services for companies related to the wood and furniture industries of Ecuador. The industrial site in which Innovacentro is located is located in the Eco Park Industrial Chaullayacu, in the sector of the same name, of the parish of Tarqui, which is a project of the Municipal Public Enterprise of Economic Development of

the canton of Cuenca (EDEC EP), which was implemented in 2012. It has German and French machinery to perform the dimensioning and dimensioning of the pieces of wood and has four dryers with a capacity of 60 cubic meters each. In addition, it has boilers, forklifts; sawmill lines, multiple saw, molding, press, sander, paint booth and compressed air systems (ProEcuador, 2015)

What is sought through this center is to generate technological services for the Austro of the country, especially focused on the wood and furniture sector, so that MYPIMES become more productive and competitive, making access to The factors of production are easier, so it is proposed to boost the sector in the handling of raw material and processed byproducts (EDEC EP).

## **Producers:**

It refers to the places where materials from the primary industry are processed, which are used in construction, such as furniture, pallets, doors, floors, etc. The key components that make up this industry are:

**Construction**. - The use of wood in the construction industry in Ecuador is limited. The Ecuadorian timber market cannot provide timber sized and graded for construction (ExpoEcuador & Corpei, 2007).

**Wood Industry**.- It is the most important segment of the secondary timber production in Ecuador, including from workshops to small factories. This segment is divided into two areas:

#### **Modular furniture factories:**

It includes furniture factories that use as an essential material particleboard covered with vinyl, formica, impregnated paper or decorative veneers of wood. Its main products are office furniture, partitions, desks, conference tables and chairs (Sub-Sector Transformadores y Comercializadores de Madera en el Ecuador, 2007).

## Workshops and small furniture factories:

This group mainly works with solid wood or combinations of decorative plywood. This sector of the industry has many problems, such as in the drying of solid wood and related dimensional stability, maintenance of tools and machinery, as well as in the final product finish. Likewise, workshops and small factories generally lack adequate space. Since this sector wants to be oriented towards exports, it may expand (ExpoEcuador & Corpei, 2007).

#### **Consumers:**

They are all those interested in the consumption of wood products, in any of their presentations.

## 3.2.4. Groups and alliances

The associative movement emerges as a tool that seeks the common good, based on daily work, collaboration and solidarity. Since the beginning of time people have sought the support of others, to achieve objectives that otherwise would have been difficult to achieve individually, thus facilitating their survival. These mutual aid practices have evolved over the centuries. Associativity is an activity whose central foundation is reciprocity and synergy with the other and harmony with the environment, seeks a perfect balance between economic and social, cooperation allows to create and develop initiatives and companies in a rich range of possibilities, which goes from the structural to the technological (Esteban Nikolai Lara Valverde, 2014).

## **Identification of the participating business groups:**

By 2015 in Cuenca, through the manufacture of furniture, generated approximately \$ 70 million dollars a year and 60% of the turnover of this industry in the country. In addition, this production generates more than 1,500 direct and indirect jobs. The percentage of participation that our city has in this market, is considered as strategic and dynamizing the national economy (Banco Central del Ecuador, 2015).

Below are the companies that will become part of the business cluster of wood:

Figure 19 Madeform.



Source: (Madeform, 2016)

Madeform was born as a small workshop, which was located in the Historic Center of Cuenca, in 1987, under the name Maderamen, under the administration of two partners. The main objective of the venture was to be able to manufacture small wood products, which would help you analyze the market. For the year of 1989 the company expands its facilities, relocating in the outskirts of the city, constructing a ship with the vision of increasing the production of furniture (Cedillo, 2016).

Teodoro Cedillo Feijoo became the sole shareholder in the year 1990, resulting in the name of Madeform. The plant has facilities of 5000 m2, conformed by state-of-theart technology and skilled labor. After its expansion, it has 3 outlets located in the cities of Cuenca and Guayaquil (Cedillo, 2016).

#### Mision:

The mission is "to produce wooden furniture with designs that fit the market trends, offering products focused on the needs of our customers and guaranteeing the excellent quality of them" (Madeform, 2012).

## Vision:

Within the vision, it is established: "to consolidate ourselves as one of the most important companies in the production and marketing of furniture in the country, being distinguished by our quality and generating a commitment of integrity towards our customers, workers, and our society" (Madeform, 2012).

## **Madeform sets the following values:**

Commitment to excellent customer service, and offering quality furniture.

Respect for our workers.

Responsibility to the environment and our society.

Honest and open communication.

Integrity in our actions.

# Figure 20 Edimca.



Source: (Edimca, 2015)

In the mid 30's, Juan Manuel Durini Palacios began his work in the world of wood, focusing on the purchase of products necessary for the construction of works. On July 28, 1964, the Durini Company became EDIMCA (Empresa Durini Industria de Madera, C.A.) in a constitution with its founding partners Juan Manuel Durini Palacios and Federico Arteta Rivera. Currently, EDIMCA has 24 own stores nationwide, five franchises and over one hundred and fifty distributors, two distribution centers, and five hundred employees. It focuses on the attention to the craft market, design and construction, with varied products and high quality (Duchi, 2016).

## Mision:

"Providing solutions to the sectors of construction, decoration, wood industry and general public, to meet their needs and contribute to the development of the country" (Edimca, 2015).

#### Vision:

"To be the leading chain of finishing solutions for construction, and a benchmark of business excellence" (Edimca, 2015).

## Within its values Edimca states:

- Integrity.
- Respect for others.
- Proactivity.
- Innovation and continuous improvement.
- Respect for the environment.
- Contribution to the development of the country.

Figure 21 Pisos y Maderas.



**Source:** (Pisos y Maderas, 2016)

The company Pisos y Maderas was founded in 1984, on the initiative of Mr. Lauro Quizhpe Quizhpe and Mr. José Quizhpe Avila, joining their capitals and experiences. They are dedicated to importing and distributing wooden boards, as well as carpentry accessories. The company in its beginnings was in charge of the distribution and commercialization at local level, reaching small carpenters, seeing its growth, this expanded, until becoming a distributor and marketer at national level (Quizhpe, 2016).

## Mission:

"To be a competitive and innovative company in the import and commercialization of wood boards and carpentry accessories, offering products and services of high quality" (Pisos y Maderas, 2016).

## Vision:

"To become the leading company in import and commercialization of materials that facilitate the work of the carpenter, builder and lovers of wood" (Pisos y Maderas, 2016).

# Pisos y maderas have 4 principals' values:

- Honesty: All our actions show the sincerity and integrity of the company in favor of the client and our collaborators.
- Commitment: With professionalism, loyalty and sense of belonging, we fulfill our duties and obligations both with the internal and external public, always attached to business objectives.
- Responsibility: Our functions are fulfilled in an efficient, efficient and timely
  manner with a view to the total satisfaction of the public.
- Teamwork: The integration and interaction of our collaborators guarantees the achievement of corporate and client objectives

Figure 22 DisTablesa.



Source: (Distablasa, 2013)

DISTABLESA "Distribuidora de Tableros del Austro SA" was incorporated in accordance with the Law of Companies, in the city of Cuenca, in September 1995, as a Limited Company, dedicated to the commercialization and distribution of wooden boards and fittings. The company begins its activities as a parent company (Zamora, 2016).

## Mision:

It is a "forestry group on the road to excellence that with high technology generates processes and optimizes the use of the natural resource by delivering timber products of the highest quality and value added to meet the needs of our customers" (Distablasa, 2013).

#### Vision:

"Compete within norms and ethical conduct for the improvement and well-being of our shareholders and the community, respecting nature and its biodiversity, being our goal to make our companies self-sustaining in the supply of their raw material" (Distablasa, 2013).

Figure 23 Vitefama.



Source: (Vitefama, 2017)

In October 1988, two colleagues from the Faculty of Business Administration of the University of Azuay, decided to undertake an activity aimed at the service of retapizado and repair of furniture for the home, in an area of 24 m2. After approximately one year, a new partner is added, the commercial name of its Vitefama activity being born. Similarly, the company stopped providing only service and also began to produce its own goods and to market them in the city and in some provinces of the country. Gradually the partners were detached from the society, becoming a company of purely family nature. At present, they have their own production plant, with two commercial premises in the city of Cuenca and one in the city of Quito, as well as distribution channels in the main cities of the country, such as Guayaquil, Loja, Machala, Ambato, Riobamba, Santo Domingo, Manta, Portoviejo, Ibarra (Castro, 2016).

As part of the social objective, Vitefama wants to generate jobs for Ecuadorian citizens, work sustainably, grow as a company, make a mark and, at the moment, stand on the market (Castro, 2016).

## Mision:

"Our commitment goes beyond designing, manufacturing, and supplying high quality furniture that meets the expectations of the Ecuadorian market, thus delighting our customers, we are also committed to contributing to the economic and social development of the city through the Creation of sources of work" (Vitefama, 2017).

## Visión:

"Very proud of our past and future projection we have set ourselves to be the number one in the national industry, and place ourselves among the leaders at an international level" (Vitefama, 2017).

Figure 24 Carrusel.



Source: (Carrusel, 2016)

The company Carrusel was founded in 1982, being recognized for the elaboration of traditional furniture, for the home and the office, middle and upper middle class. Within its strategies, the main one is its positioning in different parts of the country, which is why it has premises in Quito and Guayaquil. It also has points of sale in Juan Eljuri stores in Quito and Cuenca, this economic group being the owner of Carrusel. In the last two years, the company has experienced positive results, since in previous years it had a loss within its financial statements. Carrusel is one of the

wood companies that have relation with the international market, since it exports its products to Panama, having a commercialization from the year 2013 (Roldán, 2016).

#### Mision:

Carrusel focuses on the design and manufacture of furniture, which have a classic and modern style, high quality and durability, providing a great service to customers. (Roldán, 2016).

#### Visión:

What the company is looking for is to become a leading company in the production and export of household furniture, generating an increase in the country's economy (Roldán, 2016).

# 3.2.5. Organizational Structure and Cluster Financing

## **Organizational Structure:**

The Cluster of the wood sector of the city of Cuenca, will have to carry out activities to strengthen the value chain of wood, through the integration of all the companies that compose it, providing them with competitive advantages through cooperation and support, contributing With its activities to the sustainable growth of the whole sector, to guarantee its future.

The organizational structure of the cluster must respond to the sum of the efforts of all its members, establishing the way forward to strengthen the sector and be more competitive. The basic principles of the organization should be cooperation and integration. The four areas of work will be: forest policy monitoring, sectoral strategic planning, operational excellence and foreign trade.

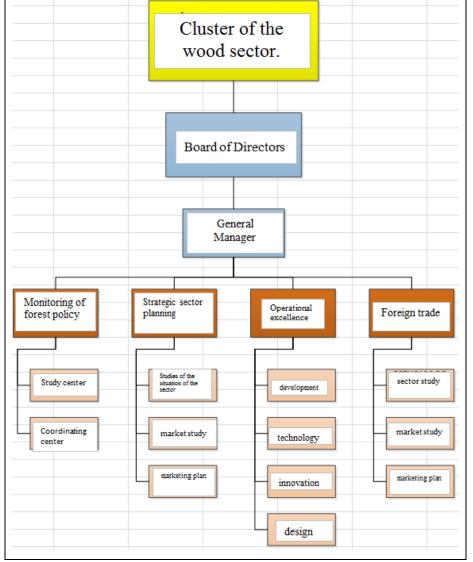


Figure 25 Organizational Structure of the Cluster.

Source: Own elaboration.

In order to achieve the objectives set out in the organizational structure, work must be done on several strategic lines, among which the following stand out:

- Encourage and coordinate with public and private bodies a sustainable forest policy that meets the needs of the timber industry.
- Promote the timber sector by developing the professional and human capacities of its members, promoting the internal market and implementing a marketing plan that promotes the use of wood solutions.

- To ensure that processes and operations are highly productive in quality and cost, promoting advances in innovation and design to improve the competitiveness of the sector.
- Identify and explore new markets, which allow the expansion of the sector's competitive capacity at the international level, boosting the sector towards new business opportunities.

# **Cluster financing:**

The cluster will be financed through the contributions of each and every one of its partners. The contributions will be via monthly or annual fees, in addition to their participation in the different projects and initiatives. The amount of the contribution will be raised by the Board of Directors and will agree on the level of participation of each member (size or structure of each associate). For the development of their various activities, they will also be able to count on the technical and / or economic support of private sponsors and even for contributions made by the local or national public administration.

# 3.2.6. Philosophical Aspects of the Sector

The application of diverse philosophical aspects in the sector of the wood industry of the city of Cuenca, is oriented to the search of the motivation to the associated companies, so that they reach the maximum levels of quality, sophistication and transformation of their products and Thus obtaining a quality product and achieving competitiveness in local, national and international markets. To do this, your guide will be: technological innovation, management and organization, product, business models and relationship with markets.

#### **Establishment of the mission:**

The determination of the mission of the cluster will be developed considering the goals and objectives set by the organization, therefore, it should be a guide to know which decisions and tasks are better aligned with the needs and requirements of the participating companies.

An important element of strategic planning is the mission, since it describes the role that the organization currently plays in achieving its vision, being the raison d'être of the company (Armstrong & Kotler, 2004).

It is thus, that to define it the following questions are established:

**Table 16: Mision** 

M	ision	
1	¿What is the organization?	Cluster of the wood sector of the city of Cuenca.
2	¿ What is the basicpurposeof theorganization?	Carry out activities to strengthen the value chain of wood, through the integration of all the companies that compose it.
3	What are the distinctive competencies in the organization?	Technological innovation, management and organization, product, business models and relationship with markets.
4	Who are the clients of the organization?	Productive chain of the wood sector of the city of Cuenca.
5	What are the present and future services?	Respond to the sum of efforts of all its members through cooperation and integration. The four areas of work will be: forest policy monitoring; Strategic sectoral planning; Operational excellence and foreign trade.
6	What are the values that will be added to the service?	Provide competitive advantages to the timber sector, through cooperation and support, contributing to sustainable growth throughout the sector to ensure its future.

Source: Own elaboration.

So the mission proposal for the company would be:

"To have technical and reliable information that allows the wood sector to generate wealth and well-being in the country, providing wood products with high added value, which comply with national and international regulations; worked efficiently and sustainably, on the basis of ethical, social and environmental values, to meet the needs of the national and international market."

#### **Establishment of vision:**

The cluster vision statement should provide a perspective of the values defined by each of the participating companies so as to provide medium-term organizational guidance, including a commitment to integrity, safety, quality, efficiency And profitability.

Fleitman, defines the vision as the road to which the company is directed in the long term and serves as a direction and incentive to guide the strategic decisions of growth together with those of competitiveness (Fleitman, 2000).

In order to establish the vision, the following tool is used:

Table 17: Vision

1	Vision	
		To be a model development organization that promotes
	¿ If the process were	companies in the timber sector towards sustainable
1	successful how it would	development, improving and constantly improving their
	be 3 years later?	processes, to meet the needs of the national and
		international market.
	¿ What achievements	The exploitation of new markets, which allows to extend
	would we like to	the competitive capacity of the sector at international
	remember within a few	level, driving the sector towards new business
	years?	opportunities.

3	could be made in the future at the institution	Technological innovations, management and organization, in products, business models and in relation to internal
	¿ What other stakeholder expectations could be met?	productive in quality and cost, promoting advances in

Source: Own elaboration.

So the proposal of the Vision for the company would be:

"Contribute to the development of the country by producing quality goods to meet the demand of the national and international market, under strict quality standards, taking advantage of and optimizing available natural resources."

# **Corporate values:**

The corporate values of the cluster will be established according to the organization's own elements and must be identified based on recognition of corporate integration, transparency, solidity, corporate structure and code of good governance, loyalty, teamwork, honesty, responsibility, Brand, technology, quality, timeliness, fulfillment, processes, and added value.

# 3.2.7. Project development schedule

# Table 18 Action Plan for the implementation of the project

Objective:		Carry out the activities and coordination with the participating companies and public the start of activities of the cluster of the wood sector of the city of Cuenca.													and private organ	nizations for										
Year:	Yeat 2017																									
Months:	Fe	Febrery 1 2 3 4			March			$\mathbf{A}$	pril			M	ay			Ju	ine			Ju	ıly			Responsible	Cost	
Weeks:	1				1 2 3 4			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	_		
Activities:																										
1. To prepare statistics on the social, economic and environmental impact of the industrial timber sector (with emphasis on the use of a renewable resource)																									Participating companies, Coordinating Group	2.000,00
2. Determine the needs of the wood industry																									Participating companies, Coordinating Group	2.000,00

3. Identify and segment									Participating	
the productive chain									companies,	1.000,00
and participating									Coordinating	1.000,00
actors									Group	
4. Identify options of									Participating	
technological									companies,	
equipment, innovation,										2.000,00
design, in productive									Coordinating	
processes									Group	
5. Identify and advise the										
participating									Caratinatina	
companies for the									Coordinating	1.000,00
formation of the									Group	
associations										
6. Determine the									Participating	
organizational									companies,	2 000 00
structure and sources									Coordinating	2.000,00
of financing									Group	
7. To establish a									Participating	2.000,00

regulation that allows an adequate operation of the cluster							companies, Coordinating Group	
8. Coordinate the							1	
beginning of								
agreements with								
different organizations							Coordinating	
of the central and							Group	1.000,00
sectional government,							O10 up	
private entities,								
cooperation agencies,								
etc.								
9. Establish and identify								
potential domestic								
markets through a							Coordinating	3.000,00
market study and the							Group	
development of a								
marketing plan.								
10. Establish and identify							Coordinating	3.000,00

plan.  11. Design and											Coordinating	
development of a web page for the promotion of the cluster.											Coordinating Group	3.000,00
12. Initiation of activities.											Coordinating Group	1.000,00
L	 	 			 	 	 		 !		TOTAL	23.000,00

Source: Own elaboration.

The wood cluster will be set up on the initiative of several companies linked to the sector, promoting, managing and gradually integrating companies and agents throughout the value chain of wood. Initially it will be made up of 6 companies from the city of Cuenca, which will be represented by a coordinating group, which will be made up of the production and marketing managers of each company. The companies will be solidly constituted and consolidated in the market of the wood, reason why this type of associativity could become a reference in the development of products at national and international level.

The advantages that will be obtained with the conformation of the cluster, can be identified of the following way, the same that were based in the cluster *da Madeira e o Deseño de Galicia (CMD):* 

- To stimulate projects of the associates, supporting the development of sectorial initiatives, as in the different business areas.
- Propagate the business activities, which will be developed by the partners, highlighting the actions, studies and activities that will be carried out to improve the sector.
- To harmonize institutional relations, in order to act as a spokesperson with administrations and institutions. Seeking the support of the projects of its partners.
- To improve the training of the associates, promoting, arranging and giving courses, seminars and training programs.
- Operate as an organ of collection and transmission of useful information for the companies associated to the cluster.
- Encourage relations with entities that have similar objectives (associations, clusters, etc.).
- Participate with your technology partner, in order to develop a higher level of innovation in products and processes of the cluster partners.

## CONCLUSIONS AND RECOMENDITIONS

#### **Conclusions**

The theoretical framework of the research allowed the presentation of concepts and theories applied by different authors, respecting the criteria and positions of each one, with the purpose of establishing a definition of the clusters. There are congregations of industries or companies in certain sectors, which have a positive impact on the integrated operation for the creation of value in this sector. The importance of clusters is attributed to the systemic approach they have, in which the results of the integration are superior to that of each of the companies separately.

The sectoral and / or geographical concentration of cluster companies will enable them to perform in the same activities or closely related both backwards. Including suppliers of inputs and equipment, and forward and sideways, referring to the processing industries and users, as well as services and activities related to important and cumulative external economies, agglomeration and specialization (by the presence of producers, suppliers and specialized labor and services attached to the sector) and with the possibility of carrying out joint action In pursuit of collective efficiency.

During the research process, it was possible to determine that there are several success stories of internationalization of companies at a global level and in different sectors, however, for the development of this thesis were taken into account five cases of studies that show how it should be The conduct of companies to develop export processes (Empresa Castañas Naiciña, Ikea, Ferpinta, Enercon and Viriato Hotel Concept). At the international level, during the last years, clusters as industrial groupings of the same sector, have had a favorable evolution, and have been used as business alternatives to increase the position in the market. Business clusters are one of the variants of associativity between different companies.

The proposal presented in this paper is aimed at proposing a model of associativity and internationalization for the formation of a cluster of companies in the wood sector, in the city of Cuenca. The business grouping will allow a group of companies dedicated to the wood activity, have a common strategy, which are linked to the support sectors and maintain links between suppliers, product development and service provision, for the purpose to raise their levels of productivity, competitiveness and profitability.

#### Recomendations

There are programs at the international level that promote business partnership. The International Organization Helping Governments is one of the organizations that supports and promotes business partnership programs with the aim of increasing the level of economies in transition or recession, where countries with less economic development are also taken into account. The companies in the lumber sector for the formation of the cluster could seek international advice to achieve the common goal they seek.

It is important that local and governmental authorities, as well as private companies, provide the support and promotion required by the timber cluster, because it will be set up on the initiative of several companies linked to the sector, promoting, managing and gradually integrating companies And agents throughout the value chain of wood. Initially it will be formed by 6 companies from the city of Cuenca, solidly constituted and recognized in the market of the wood, reason why this type of associativity could become a reference in the development of products at national and international level.

So it is sought to work with the mission and vision of the new cluster, so that the silver proposal is aligned with the goals of each company involved.

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