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Financial Processes of Maritime Transport in Colombia

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Abstract

Throughout history, seaports have been synonymous with progress. Apart from injecting dynamism into the economies of coastal cities, they have gone from being distribution and storage centers to becoming indispensable instruments of countries' foreign trade (García, 2017). Cartagena on the other hand, since its discovery in 1502 by Pedro De Heredia became the strategic port for the continent. Trade from this side of the hemisphere flowed through this area of the Caribbean. Caravans of galleons sailed our seas back then and centuries later the port is filled with container ships. Cartagena is always the protagonist with its port. After 518 years of its foundation, Cartagena not only remains strategic, but its port is the "Best in the Caribbean" and the only one in Colombia that appears in the ranking of the 100 best ports in the world (Figueroa, 2008). The port area of Cartagena today is characterized by being the largest in the country by having 54 docks, within which 18 carry out foreign trade activities thus mobilizing more than 3000 ships a year for a total of 40 million tons per year (Sociedad Portuaria Regional de Cartagena S.A., 2020).

Keywords: *State of the art, Port companies, Economy*

Introduction

Since the privatization of Colombian ports in the nineties, cargo capacities have increased, maritime traffic has been more efficient and logistics processes have become more effective. It is an initiative of the national government, the Colombian Navy and all public and private entities involved in maritime trade to maintain development. The support of technology will begin to take an important role in the maritime market, where thanks to automation, artificial intelligence, Internet of Things (IoT), etc., the ports of Cartagena will be shaped into the future (Munim et al., 2020). Due to the importance of seaports for the economy of a country and the impact that the port of the city of Cartagena has for the region, it is essential to carry out a state of the art to carry out an analysis of the growth and logistics capabilities offered by the container terminals that are located in the bay of Cartagena, as they are: SPRC, CONTECAR and Compañía De Puertos Asociados COMPAS (former Muelles El Bosque).

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Problem formulation and Justification

A port is considered one of the most promising cities in the Colombian Caribbean. This city has been working to achieve significant advances in its operation and structure to generate a precedent and a differentiator in the social and economic block to which it belongs. This is a city that has a lot of potential to exploit which is overshadowed by many problems, it has all modes of transport, sea, land, river and air which generates a number of benefits that give it a good position as an important port in the Caribbean. At the port level, the city of Cartagena has made significant progress in recent decades. Ports have had to change their work structure and the logistics system on which they rely, adapting to the new needs of the industry to provide a series of services in the most efficient way. How has the evolution of the territorial planning, international trade and human capital of Cartagena been as a result of the port development of the city?

The importance of this research is to determine the actions and logistical processes to be improved in the port of the city of Cartagena. In any organization, continuous improvement must be a primary philosophy and the port society cannot be the exception. That is why through international entities and bibliographic reviews the different items will be typified to take into account. The project will be carried out because the port society of the city of Cartagena represents an economic importance for the whole country, in addition, that the port has great influence in the region; its proximity to the Panama Canal, its direct international routes, its favored geographical position, makes the port of Cartagena influential for the foreign market.

This project is important for all personnel interested in the Colombian maritime market, financial institutions and even public entities related to making Colombia a maritime country. The relevance of the project is supported by the evolution of technology in recent years, ports increasingly need to be faster, with minimal margins of error and to meet the required needs. The technology will allow the service and procedures from docking to the departure of ships to be effective. Based on the portfolio of research, development and innovation of the Naval School of Cadets "Almirante Padilla", the Faculty of Naval and Nautical Sciences, and the Faculty of Marine Infantry within its lines of research by the *POSEIDON* group it was determined that the project was aimed at sustainable institutional development, maritime power and military education with a research subline called maritime power, naval power, maritime activities and interests, geopolitic (Doria-González et al., 2022).

General and Specific Objective

Determine the importance of the Maritime Port of Cartagena in the economic development of the region. Describe the current situation of the ports, Grupo Puerto de Cartagena in order to understand their operation and development. Describe the productive growth that has been generated in the face of technological advances.

Frame of Reference Background

The first work corresponds to Juan Carlos Martínez Ávila (2016), who carried out: "Analysis of the Growth of the Port of Cartagena on the Economic Growth of the City" seeking to explain and demonstrate the different relationships that the growth of port activity has through the analysis of the generation of direct and indirect jobs. This work relates to current ongoing research, as it shows the levels of taxes paid by the SPRC to the nation that are generated as a result of port activity.

In their essay "Is port development an alternative for the economic growth of nations?" they explain how in recent years economic integration has increased, which leads to a significant increase in foreign trade, improvement in technology, the commercialization of products from one country to another is increasingly important and trade relations are closer. This essay identifies the importance of seaports for economic growth and trade development (Fratila et al., 2021).

In her work "Global Perspective of the Ports of Cartagena" seeks to make an analysis of the logistics platform in the city of Cartagena to propose strategies that allow optimizing its operation and being more competitive at the local and national level. Carried out the project "Perspective of the Caribbean Ports" where thanks to severe visits she began the study of the port logistics sector, with the need to know the ports of the city of Cartagena since these have been considered over time logistics assets in the exchange of international goods and services (Montoya-Rojas et al., 2020).

Historical and Theoretical framework

The ports of Colombia began their history at the time of the conquest, when in 1525, the Spaniard Rodrigo de Bastidas founded Santa Marta and then in 1533 the city of Cartagena was founded by Pedro de Heredia, which is quickly positioned as the port of South America of greater importance, moving goods to and from the old continent, including gold and slaves. Years later, the country's ports were managed by regional state entities or by private companies. In the case of the Cartagena dock, it was built by the company "Snarf Corporation", starting its operation in December 1933 by the same construction firm, until 1941, at which time, the General Directorate of Navigation and Ports of the Ministry of Public Works, assumes its administration along with the Barranquilla dock, until 1961.

Maritime trade throughout history has played an important role within the economic development of countries worldwide. Ports began as engineering marvels, but loading and unloading tasks continued to be done with the oldest machinery, human strength. Generally, these tasks were done by the people who inhabited the different coasts that offered possibilities of docking and safe shelter to the primitive boats. From this moment, the process of technological improvement of the port of Cartagena begins, the formulation of public policies begins, oriented to the administration and constant improvement of the country's ports, through the promulgation of Law 154 of 1959, which creates the company Puertos de Colombia.

This research is descriptive and analytical, it is intended to evaluate how prepared the three main ports of the city of Cartagena are: SPRC, Muelles el Bosque S.A. and Contecar S.A. To meet the growing international demand for goods, through the application of a Political, Economic, Social, and Technological Analysis. Published studies related to the project will be taken into account, with documentary information based on secondary sources since the companies of the port logistics sector in the city of Cartagena are analyzed. The proposal is designed based on the current situation of the Port of Cartagena Group, so it is important to know its profile: The Port of Cartagena Group is the main logistics platform in the Caribbean. Thanks to its strategic location and the high efficiency of its maritime terminals, it has established itself as a fundamental connection center for the transshipment of cargo both regionally and globally. Currently, it connects with 750 ports in 150 countries around the world and serves 25 shipping lines. Likewise, it is the main exporting port of Colombia.

Seaports

The seaport is an important interface in the supply chain, connecting maritime and land transport

with cargo distribution components, such as the entry of products, cargo and passengers to a given country, and all export doors to the international market. The port is the meeting point between the internal and coastal transport systems and is defined as the internal area affected by the port. This function can be performed directly through road crossings, it can also be performed when goods arrive at a temporary dock (for example, a train station), or it can be performed by merging the traffic volume of regional ports and transporting them along the coast. The seaport is the distribution point that leads to the internal and coastal transport system, which is defined as the external area affected by the port. Seaports perform different types of operations: Embarkation, disembarkation and transfer of passengers and crew, Embarkation, disembarkation and transfer of cargo to and from a vessel, Storage and storage of goods on land and stowage to and from ships, provide internal access and intermodal connectivity, Complementary services for sea carriers, The main functions of seaports are:

Legal and Conceptual Framework

The city of Cartagena, according to DANE projections for the year 2017 had 1,013,375 inhabitants, of which 96% resided in the urban area and the remaining 4% in the rural areas of the district. The Tourist and Cultural District of Cartagena, is regulated by Law 768 of 2002, through this the political, administrative and fiscal norms of Cartagena are enshrined, whose essence is to "provide the municipality with the faculties, instruments and resources that allow it to fulfill the functions and provide the services under its charge, and promote the integral development of its territory to contribute to the improvement of the quality of life of its inhabitants, from the use of its resources and advantages derived from the characteristics and special conditions that it presents as a port city.

The Port Society of Cartagena is considered an integrated logistics center, among the advantages offered by its infrastructure are its eight docking points with a depth of 13.41 meters, construction of new piers and use of state-of-the-art technologies; the technological transformation in the Port of Cartagena has been done through information systems, cranes with high technology that are used for the stacking of containers guided by satellite, a software for the handling of documents that generates an interface with customs in order to expedite the entry and clearance of cargo and simultaneously generate high reliability and security in operations. As evidenced in the table and in the graph port society of Cartagena mobilized 0.8 million tons, in which containers stand out with a percentage of 99%, a situation that has occurred because it is a Port Company specialized in the modality of transshipment of merchandise, the infrastructure that SPRC has been characterized by its adaptation to the needs of the market, situation generated by the creation of the International Logistics Support Warehouse (DALI), an establishment created with the aim of reducing transport times and managing inventories without customs costs.

The port system is made up of three types of docks, the Private, which are operated by private agents that execute all kinds of activities related to international trade, the Specialized, are all those who are responsible for the export of traditional products such as hydrocarbons, coal, fruits, etc., and the Regional Port Societies, the latter, they are responsible for providing their services for the rest of the products that need to be mobilized inside and outside the country. The Port of Cartagena in 2006 mobilized 16,392,632 tons of cargo, was in third place, below the ports of Santa Marta and La Guajira, however, during 2012, despite continuing in third place in terms of cargo mobilization, with a volume of 33,409,891 tons, below the ports of Santa Marta and the Gulf of Morrosquillo, it had already surpassed in mobilization the Port of La Guajira. The district of A port is regulated by Law 768 of 2002. As established in this law the district was divided politically-administratively into 3 main

localities. And these in turn in 15 Urban Government Common Units and 12 Rural Government Community Units.

Methodology

Type, method and approach of research

Descriptive, because it includes the registration, analysis and interpretation of the impact of the port on the city, specifically, in the evolution of its territorial planning, foreign trade and development of its human capital. The development of the research will be done in a practical way, the collection of information will be done in a general way on the entire topic that we will address and then it will be organized in what is appropriate and follows the line of the study and what is not. To develop the procedure of this proposal, descriptive research is used for the development of this, it should be borne in mind that this approach provides a socio-critical paradigm "adopts the idea that critical theory is a social science that is not purely empirical or only interpretive; their contributions originate from community studies and participating research." This methodology and way of investigating, whose main characteristic is to link two approaches, on the one hand, the experimental approach of social science, on the other hand the social action programs, which respond to main social problems, since social attitudinal problems arise from the usual and every day, action research, is a pioneer in the questioning of what happened, starting on a purely usual part, systematically passing to the philosophical, using action research seeks to address two concepts and unify them to work in parallel social changes with knowledge as a purpose to mix the practical with the theoretical.

The distinctly traditionalist concept of this research model comes from the author and creator of this, Kurt Lewin, who implants a model that has as its name, "the Lewin model", this model proposes three stages, they are the stages of social change: Descriptive research aims and leads to the consolidation of transformative and purposeful knowledge, all this through a continuous and cyclical process of debate, reflection and joint construction of knowledge without neglecting the different groups and characters of a territory with the sole objective of achieving the transformation of society. To achieve the adequate synthesis of research and generate a significant contribution as a society, two conceptual processes are mixed, the process of knowledge acquisition, and the other is the process of acting, these two involve the population, whose reality is addressed and specialized, in constant processes of combining theory and practice, all this enables and creates learning, the critical awareness of the population, about the reality in which they live, their empowerment, the reinforcement and expansion of their social networks, to achieve their collective mobilization and their transformative action.

Investigation Procedure

For this work, the following phases will be carried out: 1) A Bibliographic Review will be carried out on the logistics processes of the ports of the city of Cartagena and the importance they have in the economy of Colombia, 2) A parallel will be made with the main ports of the world to identify the processes to be improved, the methodology of their efficient work and the implementation of technology with which they have. 3) This will typify the different proposals that can be adapted to the conditions of the port of Cartagena so that it is updated and at the forefront of the needs of the Maritime Trade of the future.

Techniques and Instruments for Information Collection

The technique that will be implemented for the development of this research is the documentary inspection, the consultation will be carried out in which the information obtained will be qualified, allowing to resolve the formulation of this research project. On the other hand, it is also a qualitative study of

frequency, it is necessary to return to the previous stage, so the stage arrows from the initial immersion to the results report are shown in two directions. For example, the first research design can be modified by defining the initial sample and pretending to have access to it. This may be a situation where we want to observe certain people in a natural environment, but for some reason, we find that we make the required observations. It is not feasible. Therefore, the environment of the sample and research must change and the design must be adjusted (Hanelt et al., 2021).

Mertala (2019) synthesizes the main activities of the qualitative researcher with the following comments: Acquire an internal point of view, uses different research techniques and social skills in a flexible way, it does not define variables in order to manipulate them experimentally, produces data in the form of extensive notes, diagrams or "human charts", Extract meaning from data and does not need to reduce it to numbers or analyze it statistically.

Results and Discussion

At present, world trade is growing faster than GDP, which has led to major changes in the infrastructure and business strategies adopted by several countries. However, the intensity of port logistics is even greater, because this sector is the basis of trade relations between countries. To that extent, Colombia is an example, given the changes and free trade agreements it has signed with certain countries/regions and the relationships it establishes day by day, Colombia's port logistics have changed. However, since not all cities have ports or other mechanisms to promote trade, these changes have not occurred in all cities in the country.

The literature review shows that Cartagena has become one of the areas of greatest strategic importance in the region and even internationally, and it is from fortunate geopolitics to have a high-class port. However, like other economic sectors, it also presents weaknesses, threats, strengths and opportunities, which are of great interest for the development of most of the literature consulted.

Therefore, the development of this results focuses on identifying these four components of the industry. From the documents presented above, it is reflected that the logistics department associated with the port activity of Cartagena has been investing heavily in its most important companies (such as the Regional Port Association of Cartagena (SPRC)), taking into account the expansion of the Panama Canal and its presence in Latin America (Costa Rica, Peru, Mexico, Guatemala) restarted investment in port matters. This is to maintain and strengthen comparative advantages, but it is more focused on breaking the traditional trade paradigm, which exports raw materials to industrialized countries and imports manufactured products from these countries. On the other hand, to achieve commercial self-sufficiency, give way to trade concessions between Latin American countries; Preference for new maritime services, these services involve feeders, ferries, barges and other non-traditional vessels. To make the proper characterization a reality, the SPRC considered the export potential of Colombia (exports and imports, not only related to transshipment), and implemented different investment plans in modern technology, such as the acquisition of modern cranes dedicated to the loading and unloading of containers, which has doubled its capacity, strengthened the capacity of the terminal and deepened its neighboring areas, this seems to be one of the best strategies for the industry and supports the investments already made and the company's ongoing investments. It also takes into account the economic growth achieved by most countries in the region in the last five years.

Cartagena has become a general cargo port. As of 2006, due to the clearing of the canal to the bay (15 meters deep), it has space to house solids, liquids, general bulk cargo and tourist cruises. The above planned for 2021, the cargo volume will exceed 15,000 T. In turn, this situation is an important economic project for the country, mainly because of the freight obtained, which has improved the competitiveness and export dynamism of many domestically produced products. All these aspects make the port of Cartagena one of the most important ports in the world, and it has been named the best port in the Caribbean on five occasions by the Caribbean Transport Association. In addition, it is one of the first ports on the African continent to obtain CTQI certification and subsequently ISO 9001:2008 certification. According to the World Bank's forecast, freight costs will be reduced by 50% by 2020, which is a great opportunity for ports, so the agency's forecast foresees a five-fold increase in trade between countries. Your partners. In turn, statistics predict that the Caribbean center will mobilize 4.5 million TEUs, which will reduce transaction costs, which in turn will become a significant part of the increase in sectoral and national GDP. On the other hand, economic statistics predict that in the coming years Colombia and Brazil will establish important trade relations, while Colombia and Brazil currently do not have good or advanced trade relations, stimulating port activity substantially.

Due to structural imbalances, companies in this industry must implement policies and plans to seek to connect the port with other transport nodes (multimodal transport) at the national level; It is one of the main ports of Cartagena (coastal), and is the main center of production and consumption of the country. On the other hand, due to the prosperity of technology and the advent of the new digital era, the relevant suggestion for the agents of this department is that they allocate resources to virtual technologies (service platform, quotation, monitoring and verification of the status of the merchandise). International companies will be more interested in using new port technologies, if they do not provide these services, it will be a weakness, but if they focus on this area, it will be a great advantage.

Conclusion

Thanks to the realization of the present research, it can be concluded that: Due to structural imbalances, companies in this industry must implement policies and plans to seek to connect the port with other transport nodes (multimodal transport) at the national level; It is one of the main ports of Cartagena (coastal), and is the main center of production and consumption of the country. On the other hand, due to the prosperity of technology and the advent of the new digital era, the relevant suggestion for the agents of this department is that they allocate resources to virtual technologies (service platform, quotation, monitoring and verification of the status of the merchandise). . International companies will be more interested in using new port technologies, if they do not provide these services it will be a weakness, but if they focus on this area, it will be a great advantage.

The company's participation in the logistics process in the port company of Cartagena is threatened for entry into the national and international market. At the national level, ANI franchise rights for the last five years (2011-2015). Internationally, Ecuador's port concession rights, the positioning of China and the United States, and Panama's reliance on feeder ships have interfered with increased market share. Similar. Thanks to cooperation treaties with other ports and seeking greater support from the National Infrastructure Agency (ANI), Cartagena has protected itself from such violations.

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