An appraisal of ports to the socio economic development of Cameroon: case of the port of Douala

Munge Mbongalle

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AN APPRAISAL OF THE CONTRIBUTIONS OF PORTS TO
THE SOCIO ECONOMIC DEVELOPMENT OF CAMEROON: THE
CASE OF THE PORT OF DOUALA

By

MUNGE MBONGALLE
Cameroon

A dissertation submitted to the World Maritime University in partial
fulfilment of the requirement for the award of the degree of

MASTER OF SCIENCE
In
MARITIME AFFAIRS

PORT MANAGEMENT

2019
Declaration

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me. The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

Signature: ...................................

Date: ....24th Sep 2019....................

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Maritime Economist
Maritime Energy Management Specialisation
WORLD MARITIME UNIVERSITY
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Many thanks go to my classmates for their support and readiness to share their experiences in research.
ABSTRACT

Title of Dissertation: An Appraisal of the Contributions of Ports to the Socio economic Development of Cameroon: The Case of the Port of Douala

Degree: MSc. Maritime Affairs

This research work intends to bring out the link existing between the role of ports and socio economic development. It reflects on reason why the port has not induced social and economic development in Cameroon as a whole and Douala in general despite its strategic location and being a natural hub in the Central African Economic and Monetary Community. The success of most cities like Singapore and Rotterdam are attributed to the presence of the ports in the area. As a tentative response to our question, we formulated our main hypothesis as follows” the port will contribute to the development of the region, if there are well managed”. The study thus has as main objective is to appraise the extent to which the port of Douala can contribute to the socio economic development of the region.

The methodology used includes observational, documentary and opinion sampling research procedures. In the course of this process, questionnaire was used as the main research instrument. The research design involved a careful representative sample of 50 stakeholders in the maritime sector. Data collected were analysed using descriptive statistics method and conclusive interpretation of the findings was done.

The findings revealed that ports are vital for the development of nations. it also revealed that for ports to act as tool for development it requires not only intermodal connection but also adequate infrastructure, modern port facilities, motivated management and most importantly qualified workers. The lack infrastructure, no clarity of port dues, corruption, bureaucracy and administrative bottleneck constitutes a major setback for the port to contribute to development socio economically.

Following the above findings, it was proposed that the government and stakeholders should properly put in place marketing strategies that will help the port advertise or make known to the population the services and opportunities available in the port, in view of developing the port so as to enhance the development of the region. Finally, it is postulated that a committee should be created so as to follow up on the maintenance of port infrastructures.
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<th>Description</th>
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<tbody>
<tr>
<td>ADF</td>
<td>African Development Fund</td>
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<td>AICD</td>
<td>Africa Infrastructure Country Diagnostic</td>
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<td>CAR</td>
<td>Central Africa Republic</td>
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<td>CCAA</td>
<td>Cameroon Civil Aviation Authority</td>
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<td>CEMAC</td>
<td>Central African Economic and Monetary Community</td>
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<td>CEU</td>
<td>Cameroon Economic Updates</td>
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<td>ECCAS</td>
<td>Economic Community of Central African States</td>
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<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
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<td>ESPO</td>
<td>European Sea Port Organisation</td>
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<td>ESCAP</td>
<td>United Nations Economic and Social Commission for Asia and the Pacific</td>
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<td>EU</td>
<td>European Union</td>
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<td>GDP</td>
<td>Gross Domestic Products</td>
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<td>LCAS</td>
<td>Logistic Capacity Assessments</td>
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<td>MINT</td>
<td>Ministry of Transport</td>
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<td>MPA</td>
<td>Maritime and Port Authority of Singapore</td>
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<td>PORA</td>
<td>Port of Rotterdam Authority</td>
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<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>HPA</td>
<td>Hamburg Port Authority</td>
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<tr>
<td>PAD</td>
<td>Port Authority of Douala</td>
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<tr>
<td>PAK</td>
<td>Port Authority of Kribi</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNECA</td>
<td>United Nation Economic Commission for Africa</td>
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<td>USD</td>
<td>United States Dollar</td>
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<td>UCCC</td>
<td>United Councils and Cities of Cameroon</td>
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<td>WMU</td>
<td>World Maritime University</td>
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CHAPTER ONE

1.1 Background of the study.

“Seaports are interfaces between several mode of transport, and thus they are centers for combined transports. Furthermore, they are multifunctional markets and industrial areas where goods are not only transit, but they are also sorted, manufactured and distributed. Seaports are also multi-dimensional systems, which must be integrated within logistic chains to fulfil properly their functions. For a port to be efficient it requires not only infrastructure, equipment but also adequate connections to other transport modes, a motivated management and most importantly qualified workers or employees” (UNCTAD, 2013). Ports are very important for the support of economics activities in the hinterland since they act as crucial connections between sea and land transport. Seaports are means of integration into the global economy. Trade carried out at ports and by means of seaway transportation has a direct effect on the macro-economy of any country and is one of the factors affecting that country’s economic development. Ports can also be defined by different approaches that is geographical, economic and institutional. It is a place of exchange between land and sea, that is a geographical area to receive ships and goods. It is a complex system composed of material and immaterial elements (economic) which involved transshipment of persons or goods between land and water. Institutionally a port is a place on the coast design by competent administrative authority to serve the purpose of seaborne trade. “According to Hali & Hammami (2017)”, seaports have evolved over time depending on the stages of port development. it can be first, second, third, fourth and even fifth generation port;

✔ 1st generation dated back from 1950 and were conceived to be an interface between two mode of transport.

✔ The 2nd began from 1950 -1980 and was a center of transport for industrial activities and trade.

✔ The 3rd started since 1980 and its incorporated logistics functions into the port system.
The 4th was a networks ports and began since 2000. It was characterized with new technologies and communication network.

Finally, the 5th generation which started since 2011, and based on customer orientation and quality of service.

This research work intends to bring out the existing link between the role of ports and socio economic development in order to make propositions, which will go a long way to ameliorate the wellbeing of the population in the region where the port is located. What benefit do they have because of the presence of the port in the locality? Given the fact that ports are gateway to development of every nation and more especially the region that they serve.

Cameroon has a pivotal place within central African economic grouping, providing important access routes to seaports on the Gulf of Guinea for its landlocked neighbors. It’s economic and demographic weight as well as its strategic position at the heart of CEMAC makes Cameroon the central African natural locomotive. A leadership that the Central Africa Republic, Congo, Gabon, Equatorial Guinea and chad could not contest because even combined, these countries hardly achieve the economic importance of Cameroon, which alone accounts for 52% of CEMACs GDP. Commercially, Cameroon serve as a locomotive, if not almost the only country in the area which exports to all other central African countries, without importing anything from its neighbours. Thus it serves as a natural hub for the region, since it has one of the most important largest trading hub in central Africa that is the port of Douala.

Ports in Cameroon are now used as a distribution stop over point for goods bound for chad and the Central African Republic, and its upgraded facilities are contributing to the trade of these neighboring countries proceeding more smoothly (Douala Port).

Cameroon is a port state with over nine ports, out of which, only few are operational and the Douala Bonaberi port is the principal one. Although not blessed with much navigable rivers and natural seaports, the population of Cameroon depends so much on the ports for their physical mobility and for the transportation of bulky goods, and also manufacture goods from Europe and were head loaded to the hinterlands. Douala seaport is deep-sea port of considerable size which was
constructed by a German plantation company, where several vessels load and discharge at the port. It was considered as the focal points for regional development, as it attracted many people from other cities into the city of Douala for employment, so as to improve the lives of their families (Nkwi, 2017). Also this port attracted the presence of many industries in the area like the rubber factory, banana plantation and the iron foundry. This port speeds up the insertion of the domestic economy in the international economy, as it brought about many traders from neighbouring countries like Nigeria, Sierra Leon and host of others who came for trading purposes, consequently contributing economically to the country. Accordingly, ports continue to play economic, social and political roles in any given nation.

1.2 Problem statement

Although Cameroon serve as a natural hub in the CEMAC region due to its strategic location, inefficiencies at its ports represent a major constraint to growth. The problematic issues encompass the following: most of these ports lack adequate infrastructure, which is a major obstacle towards achieving its full economic growth potential. Douala poor infrastructure (superstructure and transport network) is slowing down its economic development and results in a low level of intra African trade and trade with other regions. Apart from the physical infrastructure, there is also malfunctioning regulatory systems, poor governance and policies, unequitable distribution of investment projects and poor management. These factors translate into poor port efficiency, and also raising trade cost in Cameroon. In spite the slight improvement in the overall quality of infrastructure, indicators trait those of regional peers. Be as it may, the Cameroonian government is continuing to invest heavily on transport and infrastructure. Several projects are being realised in the transportation sector to permit movement of goods and raw materials to the national and international market. Major projects in the transportation sector include construction and rehabilitation of the Limbe and Tiko ports. It is expected that the new ports will facilitate the transportation of aluminium, oil, iron and other raw materials (Carl, 2016).
The country launched a reform of the maritime sector in 1998, which led to the creation of the Cameroon national port authority, which is in charge of defining the strategic policy of the maritime sector and planning the development of port activities in the country (Camilla, 2018). Still in the framework of the reforms, autonomous ports were created for each of the ports, with the exception of the one of Garoua which was transferred to the town council. The responsibilities of the autonomous ports include the management of ports infrastructures and their commercial exploitation. Despite all these efforts and measures put in place by the government, the port of Douala just like any other port is supposed to bring about development to its immediate population and the nation. The reason for the underdevelopment of the area despite the important roles they play in development. The question is why? This led us to the main problem of our research work, which is the inability of the ports to effectively and efficiently act as a tool for the development of the region they serve.

Today, by far the greatest growth in port developments is in Asia, the continent with some of the world largest ports such as Singapore and Shanghai. The success of most cities like Singapore, Hong Kong and Rotterdam are attributed to the presence of the ports in the area and they have witnessed rapid growth. (ESCAP 2002). This is not the case with the port of Douala which was among one of the most important ports during the colonial days.

1.3 Aim and Objectives

The aim of this research is to evaluate the level in which ports can contribute to the socio economic development of the region.

The existing situations generated the determination of the main objective of our studies and three specific objectives. The main objective of this study is:

- To appraise the contribution of Douala port to the socio economic development of the Littoral Region.

The specific objectives of the study are:

- To examine the extent to which the port of Douala has contributed to the socio economic development of the region.
To evaluate some of the challenges faced by the management of the port in relation to the development of the area.

To envisage potential strategies and measures capable of enabling the Douala port to efficiently and effectively foster socio economic development of the region.

1.4. Research Questions and Hypotheses

The above problems enable us to formulate a general question and three specific questions which are going to facilitate our study:

➢ **General Research Question:**
  • To what extent has the port of Douala contributed in fostering socio economic development in the Littoral region of Cameroon.

➢ **Specific questions:**
  • How can the port of Douala effectively and efficiently act as a tool for the socio economic development of the region?
  • What are the challenges undermining or hindering the management of the port to permit it enhance the development of the area socio economically?
  • What measures can be taken by the management of Douala port and other stakeholders involved in the field of maritime to overcome these challenges?

In order to lay the bases for the investigation of the problem identified above, a general hypothesis and two specific hypotheses were formulated to be used as tentative position of the researcher vis-a-vis the research question.

➢ **General Hypothesis**
  • The port will contribute to the development of the region, if there are well managed.

➢ **Specific hypotheses**
  • If the ports are properly managed, then it will lead to the socio economic development of the region.
  • If good policies or strategies are put in place by the government for the effective management of this port, then it will contribute to development socio economically
1.5. Significance of the study
The interest of this study is to raise awareness on the major contributions ports can play in the development of nations as a whole and Cameroon in particular. The outcome of the study would help stakeholders decipher the possible ways to ensure maximization of the benefits which ports could bring to the country. The Research can also be used for the implementation of strategies in policy making. Consequently, the study will benefit the researcher, the population and the Ministry of transport. The work is a step for the researcher to enter into the world of research and thus will be important for her to master the various procedures involved in carrying out such an exercise for future endeavour. Furthermore, the researcher will also gain professional skills in tackling maritime related problems as an expert in maritime affairs.

1.6. Methodology of study
The researcher endeavoured to make this study systematic by proceeding from observations to documentary research to inquiries using opinion polls strategies and quantitative instruments like the questionnaire. Documentary research (books, articles, journals, published and unpublished work) which are the secondary sources will be obtained from WMU library. For inquiries, we will use the questionnaire to question some 50 stakeholders of the Douala Municipality to have their own point of view. That is from the port of Douala. The data collected from the sample population will be analysed using the simple descriptive statistics methods and then interpreted. It is from the analyses that conclusion of the findings will be made.

1.7. Scope or delimitation of the study
The scope of the research is to explore the history of port management and the economic development of the nation by putting into place best practices This research is to appraise how ports can contribute to socio economic development of the region., it does not take into consideration the environmental impact. The scope of location precisely is the Douala municipality and it gives us the ability to carry out our study within the time frame and the resources we have at our disposal. Therefore, the central issue in this study is to appraise the contribution of ports to the socio economic development of the region, the case of Douala port.
The research is carried out within a well-defined period of time and during a particular school year, which is from September 2018 to September 2019. During this period, we closely looked at how ports contribute to development in the region they serve.

1.8. Limitation of the study

The potential limitation for this research are financial constraints and the outcome of the respondents. Also the availability of data for the research will be a problem due to the cumbersome and lengthy procedures involved. Since we are dealing with humans whose behaviour is often unpredicted.

1.9. Plan of work

This work is organized into a 6 chapters:

Chapter 1- background of the study, problem statement, research question and hypotheses, research objectives, significance of the study, scope of the study, research methodology and limitation.

Chapter 2 – Literature review and conceptual framework

Chapter 3- Research methodology

Chapter 4 –Port development case study in Cameroon

Chapter 5- Presentation, analysis and interpretation of findings

Chapter 6- Conclusion and recommendation.
CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Introduction

This chapter provides a literature review of related publications on the relationship between ports and development be it socially or economically. It will also take into considerations some key concept on ports and development. The contribution of port to socio economic has a wide range of documents which actually furnishes information on how ports can be a tool to development of individuals, regions and the nation, particularly the nation of Cameroon in general and the world at large. This chapter is sub divided into three sections and of which the first section focuses more on the literature review, the second section examines the concept of ports and development, and finally the last section lay emphasis on the overview of ports and socio economic development.

2.1 LITERATURE REVIEW

The section of this chapter constitute a vital aspect because it reviews the key concepts of our work, what the concept entails and what people have written and said about the concept. These are works related to our study and are either works written in our area of study or works written elsewhere but related to our topic of study.

Jung (2011), in his publication analysed that ports are expected to have a positive influence on economic development both on the national and the local economy. But from his analysis, it is not the case the port cities are always the less developed in most cases and benefit very little from the ports. All these was as a result of the advancement in the transportation system, technology, changes in economic situation and most business especially international tend to locate where land and qualified labour is easily accessible and cheap. He lay emphases on the economic aspect of ports contribution but fail to mention the social aspect which is an integral part of our research work.

“According to Vleugels (1969)”, reiterated on the fact that seaports and inland ports have always play an important role in development and especially in the region they
serve. That is the region is always or on an advantage compared to others. Ports are promoters of economic and social development and are indispensable for international trade and industrial development. Though his work furnished us with some vital information concerning our research topic, but he nonetheless failed to show the social impact of ports and how the ports function.

Ports are basically established to provide a fast and efficient dispatch of vessels and a rapid safe and economical flow of cargo through the port. He reiterated that to achieved this rapid economic development, it is absolute necessary for developing countries to improve their port facilities to facilitate fast and efficient of cargo moving through the port. This will intend reduce the cost of their imports and make their exports cheaper on the world market and bring in more foreign exchange, which could be used on importing the necessary machinery and equipment for industrialization and other import for development and improving the living standards of their citizens. (Lee & Cullinane, 2016).

According to United States Environmental Protection Agency (EPA), ports act as a tool for development in the communities through the following ways. They are gateway for domestic and international trade since they handle over 90% of the country’s trade by volume. Thereby contributing to an increase in GDP of the nation. In addition to their impact on the national economy, they also have an impact on the local and regional economies through their role in job creation and transportation of goods. They also offer training programs in partnership with other communities, so as to offer development programs to the workforce(labour). Also this sector contributes significantly to the region where the port is located through employment opportunities at the port and employment opportunities in port related sectors include rail and trucking industries, increase tax base for the state government and local. They also serve as an important transportation hub that facilitate goods of businesses in local communities and worldwide market. Ports can connect goods to consumers through the highway system, rail, road and domestic marine highways. In addition to serving as economic drivers and transportation hubs, ports play an important role in national defense. These ports can help to support military deployment because of their large
staging areas, connections to rail infrastructure and the ability to load non-containerized cargo. Ports can also use these capabilities to support emerging relief activities such as emergency management and natural disaster homeland security. The agency's idea is to show how ports contribute not only in the social or economic domain but also security wise.

Ports are becoming more and more vital in the development of the economy, as they play an important role in the transition of an economy. As one of the components of the transportation sector, they link the hinterland and seaway transportation is the cheapest means of transportation when compared to others. Thus any country without a port is lacking a vital necessity. Ports possess a unique feature that makes them important and ports are also multi-functional that is hinterland production and logistics functions are important elements to economic development. (Berkoz & Tekba, 1999).

"According to Ferrari et al (2010)", they emphasized on the role of infrastructure as very vital for ports to enhance economic development. This is due to the fact that good infrastructure will stimulate the growth of international trade and the hinterland will be made accessible. This will also increase competition which will intend increase the GDP of the economy since over 90% of goods are transported by sea. Furthermore, the impact of ports on local development was done taking into consideration the manufacturing service and the total number of employment.

2.2 PORT CONCEPTS

Ports are the main industrial and commercial tools for social and economic development of nations. This sector is always affected by socioeconomic changes which are characterized by the required development in the countries, via commitment by countries. Thus seaports have always been disposed to changes in socioeconomic trends. These developments have created a highly complex and uncertain environment for ports and fundamentally changed the port concept. In the changing international environment, ports have gone through radical changes, especially in terms of organization and structure. (Wiegmans et al.2004, Konings 2007, Notteboom 2007).
It is within this framework that ports have passed through their main generations. Thus it is very necessary to define the port concept and determine its model of operating and also by examining its different functions and importance of its service.

### 2.2.1 DEFINITION OF PORTS

According to Stopford (1997) “a port is a geographical area where ships are brought alongside land to load and discharge cargo, usually a sheltered deep water such as a bay or river mouth”. Thus ports are interface between land and sea. This is where the real activity takes place.

The economist Bauchet in his book define “a port as a place where the ships are sheltered, also the place where the goods pass or even where they are transformed, in the economic sense the port a complex system composed of material and immaterial elements, destined for the service of ships and goods”

A seaport can be defined as a terminal and an area within which ships are loaded with and or discharged of cargo and includes the usual place where ships wait for their turn or are ordered or obliged to wait for their turn no matter the distance from that area. (Alan, 1986).

According to Patrick Alderton, ports can be defined in an operational context that is operational definitions of ports which are,

- Port: a town with a harbour and facilities for a ship / shore interface and custom facilities.
- Harbour: a shelter either natural or artificial for ships.
- Dock: an artificial constructed shelter for ships
- Lock: in tidal waters the majority of docks have been maintained at a fixed depth of water by making the access to them through a lock, which allows a ship to be raised or lowered as it enters or leaves the dock.

We cannot discuss ports without talking of how they function as well as their importance. Alderton gives a summary of how they function and their importance. They function in the following ways:

- Administrative function, here there are involve with the control of vehicles that is all mode entering and leaving the port. Also control dangerous cargo,
safety and security within the port area. There is also the immigration, health, customs and commercial documentary control.

- Engineering function include infrastructures for ship berthing, sea land access, rail and road network and industrial area management.
- Operational function, which involve pilotage, tugging and mooring activities, use of berths and sheds, loading, discharge, storage and distribution of cargo.

Ports are very important in the following ways:

- The main transport link with their trading partners and thus a focal point of motorway and railway system.
- A major economic multiplier for the nations prosperity. Not only is a port a gateway for trade but most ports attract commercial infrastructure in the form of bank agencies, as well as industrial activities. Multiplier role of ports, distribution centre, industrial zone and energy supply base, urbanization and city redevelopment, life style base this is particularly the case for the Small rural ports.

2.2.2 MODEL FOR PORT STRUCTURING

Ports are no longer mere modal interface between land and sea transport. They are now platform for logistics and distribution in the supply chain network. Trade internationally has become more transport intensive and time sensitive and the port of Douala is not yet ready for this changing environment. Thus it is very necessary to restructure the port sector so as to improve efficiencies and reduce cost. According to the world bank port reform toolkit the following type of port management operating structure exist,

Service ports which are having a public character and the port authority offer most of the services, they own, maintain and perform most of the services in addition of owning all the infrastructure of the seaport. They are mostly branch of government ministry and the director general is a civil servant appointed by the minister concerned. The number of service ports have declined because of the inefficiencies relate d to it.
Also there is the tool port management operating structure, which is a transition between a public service port and a landlord port. The port authority owns, develops and maintain the infrastructure as well as the superstructure including cargo handling equipment. The cargo handling service is offer by a private cargo handling firm.

More so, there is the landlord port which is a mixed of public-private orientation. The port authority acts as regulatory body and as landlord port, the port operations are carried out by private companies. The private operator is also responsible to provide terminal equipment so that operating standards are maintained. The most common form of lease is a concession agreement where a private company is granted a long term lease in exchange of a rent. While service and tool ports mostly exist to promote public interests, landlord ports attempt to balance public and private interests.

2.3 CONCEPT OF DEVELOPMENT
Here we are going to explain the meaning of development and also identify some development indicators which are appropriate and best describe the relationship that exist between ports and the growth of the nation.

Development is the upward movement of the entire social system. The social system which is made up of economic and non-economic factors which involves all form of consumption by group of people, health and educational facilities, power distribution more especially social, economic and political satisfaction. (Gunnar, 1974)

According to Todaro and Smith, Development is a multi-dimensional process involving the reorientation and reorganization of the entire economic and social system. The society make use of a combination of economic, social and institutional processes as a means to acquire better living conditions. It is involving in the improvement of the quality of human lives with the 3 vital aspects which are:

- Raising peoples living levels that is income and consumption, medical services, education through relevant growth process.
- Creating conducive conditions to the growth of people through jobs, education by establishing social, economic and political system and institutions which promote human dignity and respect.
Increasing people’s freedom to choose by enlarging the range of their choice variables for example varieties of goods and services.

“According to United Nation Development Programme (1991)”, defined “development as expanding the range of choices for the population that allows development to become more democratic and participative access to income, participation in decision and employment of human, economic and political liberties.

“Burkey (1993) defines “development as a process by which an individual develops self-respect and become more self-confident, self-reliant, cooperative and tolerant to others through becoming aware of his/her shortcomings as well as his/her potential for positive change”. This is done by working with others, acquiring new knowledge and active participation in economic, social and political development of communities.

It is a process whereby members of the society increase their personal and institutional capacities to mobilise and manage resources to produce sustainable and justly distributed improvements in their quality of life consistent with their own aspirations. (Korten, 1990). It should be noted that the purpose of development is to create an environment in which all people can expand their capabilities.

Tahmina in her book titled international development listed some indicators of development which are economic (gross domestic product), social (education and literacy, health insurance) and demographic (life expectancy, infant mortality, natural increase).

Gross Domestic Product(GDP) is an important indicator of development since it has a direct link with the port related services. It is defined as the total value of goods and services produced within the boundaries of a nation within a year (Mahatma & Gregorio, 2009). It involves goods and services produced within the boundaries and it is very significance because it incorporates trade. It is mathematically written as follows

\[ GDP = C + I + G + (X - M) \]

\( C \) = house consumption that includes any expenditure in goods and services that a household spend.
I= investment includes every investment made by household or business in goods and services.
G= government expenditure includes every expenditure made by government on goods and services.
X= gross export includes goods and services produced for other nations consumption.
M= gross import includes goods and services imported from abroad.
It has a link with the ports because it involves international trade in its calculation, the export(X) and import(M) goods are usually transported by seaborne transportation which uses the ports.

2.4 OVERVIEW OF PORTS AND SOCIO ECONOMIC DEVELOPMENT

Port activity is an important economic activity in terms of development and integration in the world economic market. It plays a vital role in the consolidation of economic growth. It also constitutes an important transit points on borders which link national and international economies that is almost 95% of exchanged goods is done through ports. In this regards ports are view as a source of trade sustainability and a factor of consolidation of economic growth. the process of seaport development is seen as a form of transportation development system, the thing which facilitates the progress of international trade. Also seaports promote the exploitation of goods and logistics and are considered as focal point for the regional development. It is also viewed as a business system which operates within a highly competitive market and hence they require continuous development (Tahar, 2016).

The growth of ports (especially in the improvement of infrastructure) are very vital in the economy development of the nations through trade increased. The transport sector is a strong factor in terms of economic and regional balanced development as well as having a great influence on the national integration to the world economic market. The higher the throughput of goods and passengers, the more infrastructure, provision and associated services are required. This will bring varying degree of benefits to the economy and the country. As far as industries are concern, they will require a safe and cheap mean of exporting finished products and importing raw materials. Hence
majority of industries in the world are located in the coastal belt, in the vicinity of major ports. These industries in term influences the lives of the employees and indirect benefactor. It was emphasized that for ports to efficiently promote development, countries should construct large and efficient ports (Dwarakish & Muhammad, 2015).

The Seaports are much recognised for the important role they play in facilitating trade growth and economic development. It is often said that ports have a close relationship with national economy growth, that is the influence of a port in an area may not only boast the commercial sectors of a nation but also serving in effect in an entire economic region (Baird, 2004).

Ports are very important for the support of economics activities in the hinterland since they act as crucial connections between sea and land transport. Seaports are means of integration into the global economy. Trade carried out at ports and by means of seaway transportation has a direct effect on the macro-economy of any country and is one of the factors affecting that country’s economic development. (Hali & Hammami, 2017).

Ports exist as an important and fundamental part of overall pattern of transport and trade and they play significance roles in these domains.
CHAPTER THREE

RESEARCH METHODOLOGY

The aim of this study is to examine the activities of the port of Douala and see how far they have been able to develop the region in particular and the nation at large. To better appraise the issue at stake, a large indefinite number of techniques, procedures, methods and resources were used to acquire data through a methodical investigation according to the laid down scientific method, in order to reach at the findings and make recommendations at the end of the work. The researcher shall accordingly present the research procedures, research instruments, the research design and finally underline some of the limitations encountered during this research.

3.1 RESEARCH PROCEDURES

This section describes the procedural framework on how our study was undertaken. According to Grawitz 1996, research procedures are the various stages through which scientific investigation is undertaken. This is the different stages in the course of the research process that were used to seek information. These procedures started from observation of the situation of ports in Cameroon and Douala in particular. This was followed by the exploitation of documents, and then we concluded with the sampling of opinions of the stake holders.

3.1.1 Observation Procedures

Here, observations were made on the situation at stake. It was carefully observed the activities of port sector and try to understand how it could help in the socio economic growth for Cameroon. Then the researcher started to question the importance of the port to the region of Douala in particular and to Cameroon as a whole. It is from this observation that a foundation of our work was built. This procedure was of great help in understanding the issue at stake in this work. The observations enable us experience the difference between the existing situation and that which was expected. We actually built the foundation of our work on observations.

These procedures of observation helped us impressively to see the various issues at stake as far as the port and its impact on the nation is concerned. Also, it is from the observed situation that the problem was stated and hypotheses were
formulated to guide us find out information so as to better perceive and understand the problem. It should be noted that this first stage is very important in every research because it is always after the observation of an existing situation that someone is stimulated to carry out a scientific investigation. However, observation alone in research procedures cannot necessarily present a total perception and understanding of the prevailing issues at stake. This explains why the researcher had to go ahead to other research procedures, which includes the documentary procedures.

3.1.2 Documentary Procedures

After the observation which helped us to build a solid foundation, the researcher proceeded by documentary research. It is a research procedure which analysis documents that contains information about the phenomenon we wish to study (Bailey, 1994). Many researchers have written on the ports and socio economic development, hence, there are lots of documents on them. Documentary research was imperative because from it, a scientific outlook was given to our work.

Documentary procedures helped to provide a more elaborate literature which formed the basis of our second chapter in this work. It presented some related literature and concepts that explain the problem at stake. In this light, documented literature was retrieved from the internet, journals, library (WMU library), authors and specialist in the domain which could be applied to socio economic development and the port sector like the port of Douala. This procedure eased the understanding of our subject by getting the point of view of other researchers who have published books and articles in relation to our topic. The literature review provided in this work helped the researcher to make scientific conclusion since it contains ideas on how related issues have been tackled by other writers and researchers. Thus it was from the point of view of other researchers and writers in the domain of port impact that we were able to realise this piece of work. All information needed for this study could not be gotten through observation and documentary research procedure, given that it dealt with a particular region; this explains why opinion poll research procedure was employed.
3.1.3 Opinion Polls Procedures

“According to Encyclopaedia Britannica (2019)”, opinion poll is a method of collecting information about the views of a given group, this information is usually shed light on and potentially allow inferences to be drawn about certain attributes of a larger population. it is a research instrument used to sample respondents’ opinions on the phenomenon included in the questionnaire which must be formulated for it to attain its objectives. this technique was use to complement the other procedures mentioned above and to help verify our stated hypothesis. The opinion of the various stakeholders (customers, freight forwarders, transporters, port authorities and custom officers) were gather, analysed and interpreter through this procedure. The conclusions gather from this opinion poll will assist in the rejection or confirmation of our hypothesis.

This procedure is very vital because it help open a new scientific opinion as the views of the various stakeholders concerted in this work permitted us to either reshape or redesign our position or introduce a new orientation in relation to the subject matter. It is through this procedure that new trend of knowledge is developed because not all knowledge is documented and personal contributions of some persons having knowledge in a particular domain or area can open new avenue for further scientific investigations. As far as ports and development is concerned, questionnaire were administered to the population of Douala, and other stakeholders who responded to the different questions through which valuable information and data were obtained. In conclusion, the procedure contributed immensely to the information and data that were gotten to obtained the most needed results. The above procedures made use of some instruments which led to the design put in place.

3.2 RESEARCH INSTRUMENTS

In order to obtain data and make analyses necessary for the operational framework and investigation, a number of research tools were used, they include documents, general questionnaire (quantitative research instrument) and some media and multimedia device. Some were used for findings and others for analysis. This section gives room for description, justification and validation of the instruments.
3.2.1 Description of Instruments

Documents like books, magazines, articles, dissertations and journals serve as instruments mean of gathering information on issues concerning the contribution of port to development both socially and economically. A great majority of these books were obtained from the WMU library. We also got a good amount of information from the internet especially articles written by international organizations such as UNCTAD, World Bank and United Nation Development Programme and other authors. Written materials provide an added advantage in most research work.

The main instrument used was the questionnaire, which is a list of simple questions to be answered by the targeted population with the purpose of getting information from them on the issue at stake. These questions were outline from our hypotheses, made up of closed and open questions. Which gave us the opportunity to gather information from the respondent without much difficult.

The description of the questionnaire used in this work will be done in two main angles; the physical presentation and the presentation of its content. The physical presentation of the questionnaire began with the letter head of WMU and the introductory part of the work which specifies the specialization, the level of study of the researcher, the research topic and complementary information on how the questionnaire is to be filled followed by two parts of the questions. The first part was based on the identification of respondents where the researcher wanted to get vital information about the respondents contacted in the study such as work experience. The second part is based on specific questions related to the study which consist of fifteen questions which are both open and closed questions.

As concerns the media and multimedia devices, they were quite a resourceful instruments used in the research. Since it involves the use of technological device to get information needed for the study. Through the internet, radio, telephone, exploited search engines such as google, yahoo, we were able to get vital information and related documents to our study. The phone was also used for booking appointments or reaching persons in faraway distances who could assist in the advancement of the research. The USB flash, hard drive were used as a storage device for the information.
and data gotten. The instruments described above is very important in the conception and operational frameworks of our study. From the use of documents, through questionnaires, then the exploration of media and multimedia instruments all played a vital role in the advancement of the work. After describing the instruments, we have to justify the reason why we employed them for the realization of the work.

3.2.2 Justification of instruments

This section provide justification of the instruments used in this work. This has to do with giving reasons for the use of these instruments.

The researcher made use of libraries, journals, articles and magazines were used because documents with information especially published and defended research works are considered by most scholars to be the most reliable source of information that is books edited and published by licensed publication houses. This implies that the information gotten from books are very accurate and reliable hence the best source of information. The internet services have ease the exploitation of books, since most researchers exploit this services.

The questionnaire as a quantitative research instrument was used because it permits us to touch a large number of our target population and to ensure a logical investigation of the issues at stake. Questionnaire also permit us to get first-hand information from the opinion of the respondents of the Douala municipality. Through it, the researcher was able to reach out to a good number of respondents within the sample population. the questionnaire in most cases is easy to conceive, saved time and energy. In this work, we provided simple and straight forward questions to make sure the respondents were able to answer.

The media instruments used in this research ease communication throughout the research period as most of the questionnaires were answered through the internet. Telephone facilitated our work as it was used to make contacts and appointments with the target population and some resource persons. The use of internet to acquire information was very vital because in some cases, the researcher could not gain access to the libraries. But it also provided us with up to date information on the ports and how they contribute to development as well as other related information.
which could be useful in our findings. Current information could be easily gotten from the internet

3.2.3 Validation of instruments

After the conception and elaboration of these instruments, there were validated both scientifically and professionally. The questionnaire was taken to the supervisor who is an expert in this domain and he rephrase some questions and oriented the researcher on how to perfect the structuring of the questions, thereby validating the instruments professionally. More so they were later submitted to the ResearchEthic Committee for validation scientifically.

3. 3. RESEARCH DESIGN

Ghauri and Groundhog 2002, states that “research design relates to the choice of strategy to collect data needed to answer the stated problem”. As for Nworgu 1991, a research design can be defined as a plan or blueprint which specifies how data related to a given problem should be collected and analysed. This section thus handles the various procedures used in the collection and analyses of data. It is concerned with the population of the study, sample and sampling, administration of instruments and data analyses. A sample survey design was adopted which was closely associated with the case study approach in order to design the research.

3.3.1 Population, sampling and sample size of the study

Douala being a cosmopolitan city, is made up of a population which is a representation of all the 10 Regions of Cameroon, different beliefs, culture and works of life. The people of Douala are business men and women, agriculturalist, students and civil servants.

The targeted population were those from the maritime sector, government ministries especially ministry of transport, ministry of commerce, ministry of trade, ministry of finance. They were also agencies involve in the maritime domain. Service providers at the port, shippers, freight forwarders, port authority of Douala, trade associations, custom officers, transporters and most importantly customers.
Information sheet was given to the participant to introduce them to the research topic and purpose of the research. A consent form was given to the participant to seek their consent.

Sampling according to Nworgu 1991 is considered as a smaller group of elements drawn from a specific population using a defined procedure.

The sample size of the study involved fifty (50) respondent drawn from the population of the study. They include selected freight forwarders, transporters, port authorities, custom officers and customers operating in the port of Douala.

3.3.2 Administration of instruments to the sample population.

Talking of the administration of the instruments, reference is made on how the questionnaires were administered to the sample stakeholders after their conception and validation. This help the researcher gather the necessary and appropriate data for this research work. It should be noted that the questionnaire was sent through an email. Most of the respondents were contacted through email and phone calls. In the same light 50 copies of the questionnaire were administered to the stakeholders directly involved in the domain, and 50 copies were retrieved.

3.3.3 Data collection

The data was collected with the used of questionnaire from the various stakeholders. Which contained both open and closed questions. Questionnaire was used because it can touch a larger population and it is less cost effective. Secondary data was also considered on the port and development of the nation, so as to unravel the real state of the research problem.

3.3.4 Data analysis

After the collection of data from the various stakeholders with the use of the questionnaire, it was processed and analysed. The method used in summarizing the data obtained was the descriptive statistic method. The percentages were calculated and presented in figures and tables. The opinions of all respondents were taken into consideration in the treatment of the results. The analysis gotten from the statistics were used to drawn up conclusive findings and recommendations. As earlier stated,
facts were equally assembled from books and other fields as well as from the observations made which were useful in analyzing and concluding of findings.

Despite the fact that the researcher was able to collect data and make analyses, a scientific investigation of this nature could not have been carried out without some limitations.

3.4 LIMITATIONS OF THE STUDY
The search for perfection is the wish of every human being but to attain it has been the most challenging and unreachable aspiration of mankind. It is for this reason that no matter how perfect a work may prove to be; one must always find shortcomings. In the course of this work which focuses on an appraisal of the contributions of ports to socio economic development, some difficulties were encountered. This section aimed at outlining the difficulties faced in this study and to show how the researcher surmounted these difficulties in order to come out with a scientifically accepted work.

Scientific Limitation: Due to the fact that the researcher is new in the field of research and still in the learning process, we were obliged to learn many approaches and methods which helped to slow down the zeal we had in carrying out our research work. This particular difficulty was solved with the help of our supervisor. We also faced difficulties in exploring documents in relation to our topic even though some documents were obtained from the library of WMU. However, these scientific limitations were overcome with the constant corrections and orientation from our supervisor, coupled with our personal engagement to make our work scientifically accepted by overcoming these challenges.

Periodic limitation: The periodic limitation was also one of the element that constituted an obstacle encountered during the realization of this work. The research was carried out during a period of intense activities characterized by a very busy schedule which occupies the students from the beginning of the year to the end. During the period this research work was carried out, we were involved with examinations as well as field studies.
It should be noted that all limitations were nothing but obstacles which were under our control and as such were surmounted using diverse alternatives. These ups and downs faced by the researcher helped to better prepare us for the future endeavors and to take precaution in order to reduce the limitations encountered in this work. These limitations were overcome by the researcher and our research work carried out, thereby permitting us to be able to present, analyses and interpret the obtained findings.
CHAPTER 4

PORT DEVELOPMENT CASE STUDY

Introduction
According to the logistic capacity assessment 2019, Cameroon is a middle income country found in central Africa and aspiring to reach full middle income status by 2035. It shares boundary with Nigeria to the west and north, Chad to the northwest, Central Africa Republic (CAR) to the east, Equatorial Guinea, Gabon and republic of the Congo to the south. It is a state in central Africa with its capital in Yaounde and has two official languages that is French and English. It has 10 regions with two English speaking region (North and south west) and an estimated population of 23,248,044 in 2017 with an area of 475,442sq/km. it is a middle income country which can achieved full middle income status through the diversification of some five economic sectors, which can generate employment and growth. They include agriculture, tourism, forestry (wood and wood processing), infrastructure, agribusiness focusing on cotton textiles and palm oil and not forgetting the most important sector which has been technology and innovation. (World bank report, 2016).

In the 80s, the economic situation of Cameroon was precarious as it went into steep decline. By the 90s the GDP has dropped by more than 25%, resulting into a 50% devaluation of its currency. Since then the recovery economically has been slow but steady with an average annual growth of 4.0 %. (World bank ,2017). One of the most important engine for economic growth is to improved infrastructure services. The lack of infrastructure has led to a decrease in the growth by 0.28 %. If the problem of infrastructure could be improved in Cameroon to the middle income countries level in Africa, then the growth rate would have been improved by 3.3%. Significant progress has been made in infrastructure across a wide range of sectors, through institutional reforms with the hope of attracting private sector investment. The case of the port of Douala which was awarded a private concession, camrail railways, national power utility (AES SONEL), national water utility (AIDC, 2011). Among all these reforms, there was also a three-year (2015-2017) emergency plan to accelerate the
country’s growth with the aim to develop small and medium size enterprises which was consider unanimously as the main engine behind economic growth. This plan was to improve the lives of the people through social projects, and accelerate socio economic growth on the various sectors.

4.1. TRADE ENVIRONMENT. (MARITIME TRADE).

According to Lloyd’s bank, Cameroon is a member of the commonwealth, CEMAC, economic community of central African states (ECCAS) and also a signatory to the African continental free trade agreement. Cameroon export commodities such as minerals (coal, aluminium), fuel (oil, gas, wood), cocoa and rubber whereas its import foodstuffs (rice, wheat, fish), fuels and oil, medicines, minerals and manufactured products (vehicles, machinery, electrical and electronic equipment).

Table 1. Shows the goods exported by Cameroon to other countries through the port of Douala.

<table>
<thead>
<tr>
<th>Exports commodities</th>
<th>Main export destination countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>Italy, Portugal, France</td>
</tr>
<tr>
<td>Logs and Woods</td>
<td>Italy, China, France</td>
</tr>
<tr>
<td>Cocoa</td>
<td>Germany,  Malaysia, Netherlands</td>
</tr>
<tr>
<td>Aluminium</td>
<td>Netherlands, France, Italy</td>
</tr>
<tr>
<td>Cotton</td>
<td>China, Malaysia, Turkey</td>
</tr>
<tr>
<td>Rubber</td>
<td>Spain, China, Netherlands</td>
</tr>
</tbody>
</table>

Source: (CEU, 2015)

Blessed with rich natural resources, Cameroon is one of the leading world producer of certain foodstuffs like bananas, coffee, palm products, tobacco, cotton, rubber, cassava and maize. Reason why it has so many trading partners but these are the main partner countries Cameroon trade with:
4.2. TRANSPORT OUTLINE

The ministry of transport through its designated functions is responsible for the coordination and development of all transportation network. It maintains and regulates the organisation and functioning of air, rail, road and maritime transport. It is also involved in the formulation and implantation of the statutory and legislative measures relating to transport safety. The ministry is also responsible for civil aviation as well as river and maritime navigations. The most challenging issue in the transport sector is the absence of coordinated approach to inter modal transport, thus making Cameroon one of the lowest countries in the international market to move and connects goods to its manufactures and consumers. The achievements and challenges faced by Cameroon in its major infrastructure sectors are show below.

<table>
<thead>
<tr>
<th>Table 2. Cameroon main trading partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main customers</strong></td>
</tr>
<tr>
<td>Italy</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Netherlands</td>
</tr>
<tr>
<td>Spain</td>
</tr>
<tr>
<td>India</td>
</tr>
<tr>
<td>Belgium</td>
</tr>
<tr>
<td>Portugal</td>
</tr>
<tr>
<td>Vietnam</td>
</tr>
<tr>
<td>Bangladesh</td>
</tr>
</tbody>
</table>

Source: comtrade 2019
Table 3. Transport outline in Cameroon.

<table>
<thead>
<tr>
<th>Infrastructure in major sectors</th>
<th>Achievements</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>Relatively high private sector participation.</td>
<td>Boosting logistic performance index.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improving the quality and efficiency of its infrastructure to reduce trade cost for chad and CAR</td>
</tr>
<tr>
<td>Roads</td>
<td>Average road network density and rural accessibility to all seasonal roads</td>
<td>Improving the condition of the road network in particular in regional corridors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spending maintenance funds more effectively and securing finance for road rehabilitation.</td>
</tr>
<tr>
<td>Railways</td>
<td>Relatively high performance of CAMRAIL</td>
<td>Update rolling stock and rehabilitate tracks</td>
</tr>
<tr>
<td>Air transport</td>
<td>Turnaround of traffic and connectivity competition in market</td>
<td>Boosting domestic market.</td>
</tr>
<tr>
<td>Ports</td>
<td>Port sector reform. Private sector participation. Relatively good performance of the port</td>
<td>Expanding the capacity of ports.</td>
</tr>
</tbody>
</table>
Despite the level of financing, maintenance activities are still ineffective and poorly planned in optimising the life cycle of the transport system. This has thus left the transport network in a very poor state.

4.2.1 Land transport.

Land transport mostly involves the movement of people, goods from one location to another on land and mainly through roads and rail. During the German colonial days, two railway lines were built inland from the port of Douala. Eastward in Eseka, Bonaberi on the north side of the Wouri estuary, and Nkongsamba in the north. After the World War I, Cameroon was now a French colony, and the railway from Eseka was linked to Yaounde. Also a 626 km trans-Cameroon railway was done from Yaounde north to Ngoundere in 1974 with support from the European funding. Despite the numerous importance that railways have to the economy of Cameroon, it’s still provide poor quality services to its customers due to lack of maintenance of the tracks and the rolling stocks and poor infrastructure condition leading to decline. The railway system required substantial repair and rehabilitation work which is not always done due to lack of commercial orientation and continued meddling in management by the government. Camrail was also given a 20 years’ concession to improve, operate and maintain railway infrastructure but government retained ownership of infrastructures which at stations and tracks. (World Bank, 2017).

The Cameroon road network is about 50,000km, with 20,000km as national, regional and local roads while 30,000km of it is the rural road. 5000km has paved
The construction of roads in Cameroon is done under the legal and institutional framework of its national road work strengthening strategy. There was the construction of the north–south trade route linking Yaounde the capital with the centre and the south regions with the Adamawa, north and far norths. These roads will serve the communities, villages and localities directly or indirectly through a feeder network of connected roads. Which will boast the economy of Cameroon, since it improves access for agricultural products to consumption areas and leading to higher value added especially in the agricultural sector. Roads are linking points to every country and its facilitate transportation to the landlocked countries since it provides transit alternatives to Chad via the port of Douala. (ADF,2007).

In all Cameroon has 18 national roads which are classified and described as follows,

<table>
<thead>
<tr>
<th>Road network</th>
<th>Kilometres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads</td>
<td>50,000km</td>
</tr>
<tr>
<td>National, regional and local roads</td>
<td>20,000km</td>
</tr>
<tr>
<td>Rural roads</td>
<td>30,000km</td>
</tr>
<tr>
<td>Paved roads</td>
<td>50,000km</td>
</tr>
<tr>
<td>Unpaved roads</td>
<td>45,000km</td>
</tr>
</tbody>
</table>

Source: Adapted from ministry of transport
4.2.2. Air transport

The origin of air transport is traced far back in the colonial days in Africa in the mid-1920s. In those days’ imperial airways, Dutch Lufthansa and air France initiated air services to Africa which was primary in the interest of the administrative requirement. (UNECA, 2005). There are four major international airports in Cameroon which are Yaounde- Nsimalen, Douala international airport, Garoua and Maroua. Douala airport receives 38 % of flights that landed or departed from Cameroon. While the city suburb’s Yaounde –Nsimalen carries 31 % of the flights.

According to journal business in Cameroon 2015, aviation companies is undergoing metamorphosis as commercial flights are taking off the skies of Cameroon and boosting up their economy. Around 2013, there was virtual competition in the skies of Cameroon as there was influx of airlines with air France, Brussels airlines and CamairCo topping the rank with 45% at the international markets, at which 97% of the flights goes to Europe, America and Asia compared to 3% of customers of domestic flights. In the mist of this competition African companies were not left out,
they include Royal Air Maroc, Air Nigeria, Sky, Air Ivoire, and Rwand´air. By 2014, there were a total of 26 airlines in Cameroon which was a growth rate of 60% in the number of airlines operating in Cameroon. The top ranking airlines intern of carrying passengers (arrivals and departure) according to Cameroon Civil Aviation Authority (CCAA) are tabulated below.

**Table 6. Airlines in Cameroon**

<table>
<thead>
<tr>
<th>Airlines in Cameroon</th>
<th>Percentage of passengers carried</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air France</td>
<td>21 %. (leader in Cameroon skies)</td>
</tr>
<tr>
<td>Brussel airlines</td>
<td>13 %</td>
</tr>
<tr>
<td>Camairco</td>
<td>11 %</td>
</tr>
<tr>
<td>Ethiopian airways</td>
<td>8 %</td>
</tr>
<tr>
<td>Asky</td>
<td>7 %</td>
</tr>
<tr>
<td>Turkish airlines</td>
<td>7 %</td>
</tr>
<tr>
<td>Kenya airways</td>
<td>5 %</td>
</tr>
<tr>
<td>Royal Air Maroc</td>
<td>5 %</td>
</tr>
<tr>
<td>South Africa airways</td>
<td>4 %</td>
</tr>
</tbody>
</table>

*Source: Adapted from CCAA*

4.2.3. Maritime transport.

Ports are gateway for international trade and over 80% of trade passes through maritime transportation system. Which is very significant as its increases the flow of goods and services in an economy, especially the case where the transportation is well connected and linked to other regions. (Godius & Debora, 2018). This will reduce the cost of transportation and increase trade flow in an economy. Cameroon has 4 coastal ports which are Douala, Limbe, Kribi, and Tiko, with Douala being the largest port in central Africa region and an important trading hub for international trade. Due to the poor state of infrastructure in Cameroon transportation cost is very expensive, thus the volume of cargo leaving the country to other regions will be expensive, especially in the CEMAC region.
4.3 PORTS IN CAMEROON

Figure 1. Map of ports and terminals in Cameroon

Source: (LCA, 2019)

Table 7. shows Cameroon’s 4 main ports and 5 terminals.

<table>
<thead>
<tr>
<th>Main Ports in Cameroon</th>
<th>Main terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douala</td>
<td>Ebome marine terminal</td>
</tr>
<tr>
<td>Limbe</td>
<td>Kole oil terminal</td>
</tr>
<tr>
<td>Kribi</td>
<td>Kome kribi 1 marine terminal</td>
</tr>
<tr>
<td>Tiko</td>
<td>Limoh terminal</td>
</tr>
<tr>
<td></td>
<td>Moudi marine terminal</td>
</tr>
</tbody>
</table>

Source: Adapted from PAD

According to the Port Authority of Douala (PAD), the port of Douala is the major and busiest port in the country representing 95% of international trade, with an estimated annual capacity of 7 million mt and 11 million mt storage capacity. It is located in the wouri estuary in Bonaberi on latitude 04°03’5 north and longitude 09°41’8 east. It is
protected naturally from sea movement and have a calm water and cover a great area of 1000 ha with 60% of its space being used.

Douala which is the main port in Cameroon is serving as a natural hub for central Africa and also servicing most of the neighbouring countries in the region. It is also an important port for the country because it handles 95% of cargo by volume. It has facilities like quays, stocking yard, warehouses, container facilities administrative buildings, fire brigade facilities and safety facilities like video monitoring system and radiological x-ray scanner.

The ports of Douala, Kribi and Limbe are having the following cargo handling facilities excluding the container terminals of Douala and Kribi. This is made up of the type of equipment used in ports in Cameroon, their quantity and capacity.

### Table 8. Cargo handling equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile cranes</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Reachstacker</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>Forklifts</td>
<td>15</td>
<td>4 to 32 mt</td>
</tr>
<tr>
<td>Floating cranes</td>
<td>2</td>
<td>40 mt/each</td>
</tr>
<tr>
<td>Shore cranes</td>
<td>3</td>
<td>40 mt/each</td>
</tr>
<tr>
<td>Tractors</td>
<td>40</td>
<td>-</td>
</tr>
<tr>
<td>Trailers</td>
<td>49</td>
<td>40 mt/each</td>
</tr>
<tr>
<td>Dockside crane</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Fixed cranes</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Container gantries</td>
<td>5</td>
<td>RTG</td>
</tr>
</tbody>
</table>

Source: (LCA, 2019)

Storage facilities are available throughout the country especially in main urban centres including all port cities. These facilities are used as an option for the temporary or long term storage of cargo.
4.3.1. Port infrastructure and logistics

Cameroon is a transit country for the neighbouring landlocked countries of central Africa. However, deficiencies in logistics performance prevent the country from playing its role effectively. These inefficiencies are caused by poor performance and long waiting time in the port, excessive numbers of formal and illegal checkpoints, poor road quality as well as governance issues in the management of the port services. Although some improvements have been done in the ports and railways sectors but still the needs in this sector is huge. Also in the road sector massive investments have been done on the hinterland and inland road network, the case of the Douala – Ndjamena and Douala –Bangui, which will go a long way to improve the current situation. (AIDC, 2011). The development of port infrastructures requires huge capital and thus long term planning, thus the design should anticipate the needs of logistic and transport connectivity. The sustainability of these investment is not guarantee due to the lack of an efficient road maintenance system, despite the creation of the Cameroon maintenance fund. Thus there is need to design a more resilient and flexible, intelligent port infrastructure to be able to adapt to the changing environment. The port

Table 9. Storage facilities

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Number</th>
<th>Area /M2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open storage area</td>
<td>15 poles</td>
<td>35m</td>
</tr>
<tr>
<td>Refrigerated container</td>
<td>1</td>
<td>192 units</td>
</tr>
<tr>
<td>Warehouses (Limbe port)</td>
<td>4</td>
<td>1,638/ each</td>
</tr>
<tr>
<td>Warehouses (Garoua port)</td>
<td>6</td>
<td>4800</td>
</tr>
<tr>
<td>Bonded warehouse</td>
<td></td>
<td>58000</td>
</tr>
<tr>
<td>Cold storage</td>
<td></td>
<td>8000</td>
</tr>
<tr>
<td>Container storage yard</td>
<td></td>
<td>380,000</td>
</tr>
<tr>
<td>General cargo storage yard</td>
<td></td>
<td>200,000</td>
</tr>
</tbody>
</table>


4.3.1. Port infrastructure and logistics

Cameroon is a transit country for the neighbouring landlocked countries of central Africa. However, deficiencies in logistics performance prevent the country from playing its role effectively. These inefficiencies are caused by poor performance and long waiting time in the port, excessive numbers of formal and illegal checkpoints, poor road quality as well as governance issues in the management of the port services. Although some improvements have been done in the ports and railways sectors but still the needs in this sector is huge. Also in the road sector massive investments have been done on the hinterland and inland road network, the case of the Douala – Ndjamena and Douala –Bangui, which will go a long way to improve the current situation. (AIDC, 2011). The development of port infrastructures requires huge capital and thus long term planning, thus the design should anticipate the needs of logistic and transport connectivity. The sustainability of these investment is not guarantee due to the lack of an efficient road maintenance system, despite the creation of the Cameroon maintenance fund. Thus there is need to design a more resilient and flexible, intelligent port infrastructure to be able to adapt to the changing environment. The port
infrastructure is the base for any port operations in course of serving the vessels, cargo and passengers who passes via ports.

4.3.2. Port berthing facilities.

There are 2 types of berth in the kribi port, according to the port authority of kribi (PAK) that is the conventional berth with a length of 265m and a maximum draft of 16m and the container berth with the length of 350m and maximum draft of 16m. The main port in Douala has 8 berths which are there to handle all types of cargo.

Table 10. Shows the current berthing facilities

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of berths</th>
<th>Length of berth(m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanker (No .1)</td>
<td>1</td>
<td>140</td>
</tr>
<tr>
<td>Alumina petcoke/ore, pitch.</td>
<td>(no .2) 1</td>
<td>150</td>
</tr>
<tr>
<td>General cargo, log sawn timbers</td>
<td>(no.3 -11) 9</td>
<td>150</td>
</tr>
<tr>
<td>Fruits (no.12)</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>Bulk wheat (no.13)</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>Containers (gantry cranes)</td>
<td>(no.14 -16) 3</td>
<td>150/ each</td>
</tr>
<tr>
<td>Bonaberi side liquid gas/product</td>
<td>(no.51) 1</td>
<td>130</td>
</tr>
<tr>
<td>Bonaberi side clinker</td>
<td>(no.52) 1</td>
<td>160</td>
</tr>
</tbody>
</table>

Source: (LCA,2019)

The Limbe- Tiko complex port has a berth which design essentially for handling petroleum products for the oil refinery unit in limber and export of timber.

4.3.3. Douala international terminal

It is the largest container terminal in central Africa operated by APM –Bollore consortium since 2005. It has as function to managed and develop container handling at the port. After the signing of the concession agreement on June 28, 2004, the
volume of the terminal has increased tremendously between 2005 and 2017, from \textbf{131,994 TEUs} to 386,367 TEUs equating an annual growth of 15%. This container terminal has the following technical specification. (APM Terminals, 2019).
- Total wharf length: 660m
- Draught: 6,5 mt tidal range
- Container yard: more than 26 ha
- Equipment: 2 ship shore gantries (STS), 2 mobile harbour crane, 14 reachstacker.
- Storage capacity: near 18000TEUs
- Theoretical annual capacity: 530,000TEUs
- Terminal operating system: Oscar

\textbf{Figure 2.} Map of the Douala International Terminal.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{map.png}
\caption{Map of the Douala International Terminal.}
\end{figure}

\textbf{Source:} (LCA, 2019)

\subsection*{4.4 BEST PRACTICES IN PORT DEVELOPMENT.}
Port development planning involves the in depth knowledge about future development in the ports in terms of services, cargo handling equipment and infrastructure. It is a catalyst that stimulate growth economically and create employment. Nations can increase their wealth through the provision of some port development related services. (UNCTAD, 2013). Ports today are faced with a number of challenges which in one way or the other affect the investments in infrastructure. Here are some of the challenges, digitalisation and automation, growing trends in maritime industry (increasing vessel sizes, increasing man power through alliances), decarbonisation,
increase urbanisation and increasing pressure from expanding cities. All these challenges need to be mitigate through the provision of new infrastructure or adapting existing port infrastructure. (ESPO, 2018). In 2016, European union exported goods worth $ 2,659 trillion lower when compare with Asia, which exported $5,858 trillion worth of goods higher than EU (Kiprop, 2018). The following case studies highlight the best practices of port development in terms of infrastructure in EU main ports of Rotterdam and Hamburg and Asia main transhipment port of Singapore.

4.4.1 Case of European Union

The European union(EU) depends mostly on sea transportation to carry out trade with the rest of the world and also between EU member states. 74% of its goods in tonnes (import and export) and 37% of intra EU make use of seaports. They emphases on the need for a well performing maritime access by removing bottlenecks that cause congestion, extra cost for transport operators, shippers, consumers and the society in general so as to enhance economic development in a sustainable way. (ESPO, 2018)

Port of Rotterdam

Rotterdam is the largest busiest cargo port in Europe and handle about 466.4 million tons of cargo annually. Its excellent position is due to the accessibility from the sea and its hinterland connections (PORA, 2009). According to the PORA, hinterland connection is more important for efficient port development, by strengthening the hinterland network, reliable infrastructure network will enhance the capacity of the port. (PORA, 2015). This port depends largely on road transport to transport about 57% of container throughput, thus there is much reliant on road transport for inland transport services, 30% of container is transported by inland waterways and 12.7% is transported by rail in 2018. To meet up with its infrastructural need, the port has primarily met its financing needs through the long term subordinated loans from its municipality, which will be used for investment in the port infrastructure (PORA, 2019). The port draws up infrastructure agenda, in which the government and PORA jointly map out investment strategy for the port. Finally, adequate maintenance is needed for the deterioration of existing infrastructure in many ports of Europe.
Investing in port infrastructure pays off, reason why PORA invest 150 to 200 million euro per year in port infrastructure.

**Port of Hamburg**

It is also the largest in Germany and third largest in Europe and handles about 138 million tons of cargo annually. *(Kiprop, 2018).* The port development plan of Hamburg is aimed at utilising the growth potential of the port for strengthening its future competitive edge through land strategy and transport connection in the long term. It is one of the leading port in the world due to its strategic port development plan to maintain its position. It is termed the transport hub for central, northern and eastern Europe because of its efficient and modern facilities which facilitate the smooth exchange of goods internationally. *(HPA, 2012).* The main criteria for the success of this port is the reliable connection to the dynamically growing economy, a wide range of logistics services, large regional cargo volume due to the interconnected hinterland mode of transport (railways, roads and inland waterways) and also the concentration of consumption, production and distribution activities in the region. The modernisation of the transport infrastructure and the improvement of the hinterland connection which is very significant for the port to developed, and most importantly the competitive criteria such as reliability, efficiency, cost level, safety and security, IT integration and environmental standards. The port development strategy adapted by the port of Hamburg in terms of optimising infrastructure include *(HPA, 2012)*:

- The expansion of hinterland connection which involves the strengthening of inland waterways connections, expansion of railway lines and offering new funding system for the hinterland infrastructure facilities
- To enhance its development in infrastructure, innovative transport system is being put in place to prevent future over burden of the infrastructure facilities in line with the potential growth
- Finally, there should be constant maintenance of these infrastructures and its should be a sustainable port in term of energy management. In order to have a sustainable port, Hamburg encourage environmentally friendly modes of transport such as railways and inland water vessel.
In their annual press conference in 2018, they lay emphases on the fact that the key to success lies in the investment made on infrastructure. They acknowledge the fact that lack of efficient and sufficient infrastructure will reduce the turnover of every port.

4.4.2 Case of Asia

The Asian economy has been booming in the past two decades due to the following factors; growth in manufacturing, processing of raw materials and technological industries. Exports volume from this continent has increase rapidly with china capturing majority of the African markets, by importing and exporting tons of goods. The port of Singapore which is our case study is the world’s busiest transhipment port and transport half of the world’s crude oil supply. (Kiprop, 2018).

The port of Singapore

It is the busiest transhipment hub in Asia. It was given an award in 2018, September as best ‘’port infrastructure development of the year’’ by the Lloyd list Asia Pac award. The port is known for its outstanding port infrastructure investments that drives the economic situation of Singapore booming. This port has some of the best infrastructures in the world, so as to meet the demand of the world’s busiest port. (MPA, 2018). Singapore’s success has proven that a developing country with fewer resources can become a leading hub, if it has a vision and it is determined. The following factors can be accounted for the success of Singapore and a lesson to some developing countries like Cameroon seeking to improve its infrastructural and logistics network. (Yin & Karina, 2017).

- The expansion of local markets by developing high level concentrations to the rest of the world. It has work in close collaboration with shipping lines so as to build a maritime transport network. The port of Singapore has made free trade agreement with many trade partners so as to enhance access to major markets.
- Moreover, to facilitate trade, the port created an innovative infrastructure like the e-document which digitalized trade permit.
- Also the corporatisation of port is very important as it increases the cargo volume. The involvement of private sector in public investment is to make sure
that the infrastructure built will be in line with the business need, so as to increase competition in the industry and making it more efficient.

Infrastructure development is one of the main drive for economy development of nations. With the recent port development, new technologies, old infrastructure, larger demands, port growth, all these challenges make the port infrastructure planning uncertain.
CHAPTER FIVE

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

This chapter focuses more on the presentation, analysis and interpretation of findings. Here we statistically look at the result of the survey carried out in the course of this research work. Each question was analysed in percentages, graphs and diagrams to give a better understanding and meaningful conclusion.

5.1 QUESTIONNAIRE ANALYSIS

In this work, we randomly sampled fifty (50) respondents in the Douala municipality where our case study is focused. The first section takes a close look at the different respondent and their working experience.

Table 11. Percentage representation of respondents and their working experience

<table>
<thead>
<tr>
<th>Identification of respondents</th>
<th>Number of respondents</th>
<th>0 -5 years</th>
<th>5 – 10 years</th>
<th>10 years and above</th>
<th>Total percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port authority</td>
<td>05</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Custom officer</td>
<td>05</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Transporters</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Consumers</td>
<td>14</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>Freight forwarders</td>
<td>16</td>
<td>3</td>
<td>8</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>14</td>
<td>18</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table shows that we had 50 respondent corresponding to hundred percent (100%). The port authority and custom officers represented 10% respectively, transporters 20 %, customer sum up to the 28% and freight forwarders 32 %, giving a total of 100%. The results also show that as to what concern working experience, from 0 – 5 years was made up of 14 respondents, 5 – 10 years was made up of 18 respondents
and 18 correspondents also sum up those who had working experience from 10 years and above.

The information from the table above highlight that a majority of the population falls within the 5 – 10 years and 10 years and above duration in service making them to be very knowledgeable of the subject matter. Also the majority of the respondents are freight forwarders, reason being that they act as intermediary between the port and their customers, as they are directly involved with the day to day transaction.

**Q1. This question seeks to ask the respondents their opinion on the relevant contribution of the port to socio economic development of the region and nation.**

These were the propose answers;

- ✓ It helps in bringing revenue in the region which will definitely help in booming economic / social activities
- ✓ Increase in business activities due to the presence of the port.
- ✓ It helps the state to raise revenue and developed the region where it is located by providing basic infrastructures like roads, social facilities like schools and hospitals
- ✓ Creation of employment in the region due to the concentration of many companies in the region.
- ✓ Exportation of cash crops which generate foreign currency.

**Q2. The number and percentage of respondents with the opinion if the port can improve the living condition of the population in the region.**

The information below indicate that 42 persons of the total respondent admitted that the port of Douala can improve the living condition of the population in the region thus corresponding to 84%, whereas 6% of the respondent answered No, while a total of 10% had no idea if the port could contribute to the improvement of the living condition of the population in the region. It is clear from the figure above that the port can help improve the living condition through all the various services they provide in the port.
Q3. the number and percentage on the view of the respondents on the management of the port with respect in carrying out its activities.

From the figure below, there is a divided point of view on the management of the port of Douala in carrying out its activities. Here 16 % of the general respondent think that the port is well managed in carrying out its activities, whereas 84% are of the fact that the port of Douala is not well managed thus not carrying out its activities properly.

Q4. This question focuses on the challenges faced by the port in the management of its activities. These were the responses from the respondents.

- The procedures of clearance are not straight and not defined, too much corruption.
The shallow depth of the port, which is generally subjected to very expensive dredging operations for the port and necessary for the access of large vessels to the wharf. This weakness of the channel has the effect of limiting access to certain container ships and bulk carriers.

Administrative bottleneck and too much bureaucracy, too much taxes on imports and exports.

Inefficiency in managing its activities and hyper centralisation of decision making.

Continuous increase in the percentage of custom duty on imported goods.

Insecurity.

Ineffective control, outdated equipment and infrastructure.

Lack of training Programme for workers.

Q5. It is based on the potential measures to be taken by government in order to aforementioned problems. The following responses were given;

- The government has undertaken the construction of the port of Kribi with a longer channel which is a deep water port, having the capacity to accommodate any type of ships.
- The government should fully decentralise the function of the port authority.
- Taxes should be reduced on importation and one stop shop should be put in place where one pays for everything.
- There should be a forum of importers, exporters and government to discuss issues faced during clearance of goods.
- Reducing government shares to bring in private investors for faster and efficient decision making.
- Improve the condition of the infrastructure.
- Corruption should be check and stop around the port.
- Employed skilled and competence managers.

Q6. The reason for this question is to know how aware the respondents are on the opportunities provided by the port.
It is observed that 22% of the total respondent were of the opinion that the population are very aware of the existence of the opportunities provided by the port of Doula, 18% admitted that the population are aware of the opportunities provided by the port while 60% pointed out they were not aware of the opportunities provided by the port.

**Table :12**

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Very Aware</th>
<th>Aware</th>
<th>Not Aware</th>
<th>None of the above</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Port authority</td>
<td>03</td>
<td>60</td>
<td>00</td>
<td>20</td>
<td>02</td>
</tr>
<tr>
<td>Custom officer</td>
<td>01</td>
<td>20</td>
<td>04</td>
<td>80</td>
<td>00</td>
</tr>
<tr>
<td>transporter</td>
<td>01</td>
<td>10</td>
<td>03</td>
<td>30</td>
<td>06</td>
</tr>
<tr>
<td>consumer</td>
<td>02</td>
<td>14.3</td>
<td>02</td>
<td>14.3</td>
<td>10</td>
</tr>
<tr>
<td>Freight forwarder</td>
<td>04</td>
<td>25</td>
<td>00</td>
<td>00</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td></td>
<td>09</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>% total</td>
<td>22%</td>
<td></td>
<td>18%</td>
<td></td>
<td>60%</td>
</tr>
</tbody>
</table>

Q7. the numbers and percentages of respondents’ opinion on the quality of services offered at the port.
As displayed in Fig 5, as seen above, the respondents were requested to indicate whether or not the quality of services offered at the Douala port are very satisfactory, satisfactory, not satisfactory and don’t know. 00% of the respondent are of the opinion that the quality of services offered by port are very satisfactory, 30% claimed it was satisfactory while 68% were of the view that the services offered by the port are not satisfactory and 2% never had any idea on the subject matter.

Q8. The question seeks to find out if the quality of services offered by the port can facilitate trade and led to development socio economically.
From the above fig, 30% of the total respondent were of the opinion that this port can partially facilitate trade and led to socio-economic development, whereas 24% of the respondent claimed the port of Douala can facilitate trade and led to socio-economic development while the remaining 46% were of the NO point of view emphasizing that the quality of services offered by the port cannot facilitate trade and led to development.

**Q9. the numbers and percentages of respondents on the impact the port have on the population and the community.**

On this table there is a divided point of view on a given orientation on; if the ports have an impact on the population and community. For this reasons, 88% of the total respondents attested that the port does have an impact on the population of Douala in particular and Cameroon in general while 12% claimed it does not have any impact on the population.
Q10. This focuses on the problems faced by the region due the present of the port. These were the responses of the respondents.

- Insecurity a lot of pick pockets, environmental pollution and congestion in the city of Douala
- High crime wave, overcrowding and traffic congestion
- Damaged of roads because of heavy duty vehicles, houses have become scarce and rents have increased tremendously due to increase population.
- It has brought about the concentration of many industries in a particular region thereby causing regional in balance

<table>
<thead>
<tr>
<th>Respondents</th>
<th>YES</th>
<th>NO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Port authority</td>
<td>100</td>
<td>00</td>
<td>10</td>
</tr>
<tr>
<td>Custom officer</td>
<td>100</td>
<td>00</td>
<td>10</td>
</tr>
<tr>
<td>Transporter</td>
<td>80</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Consumer</td>
<td>100</td>
<td>00</td>
<td>28</td>
</tr>
<tr>
<td>Freight forwarder</td>
<td>75</td>
<td>25</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>% total</td>
<td>88%</td>
<td>12%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Q11. This question talks on how the respondents can judge the quality of infrastructure in the port

Table .14

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Very satisfactory</th>
<th>Satisfactory</th>
<th>Not satisfactory</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Port Authority</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>20</td>
</tr>
<tr>
<td>Custom Officer</td>
<td>00</td>
<td>00</td>
<td>02</td>
<td>40</td>
</tr>
<tr>
<td>Transporter</td>
<td>00</td>
<td>00</td>
<td>03</td>
<td>30</td>
</tr>
<tr>
<td>Consumer</td>
<td>1</td>
<td>07</td>
<td>01</td>
<td>07</td>
</tr>
<tr>
<td>Freight Forwarder</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>6.25</td>
</tr>
<tr>
<td>Total</td>
<td>01</td>
<td>08</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>% total</td>
<td>2%</td>
<td>16%</td>
<td>82%</td>
<td></td>
</tr>
</tbody>
</table>

The answers displayed on table above sought to ascertain the quality of infrastructure in the port of Douala, 2% of the respondents are of the opinion that the quality of infrastructure are very satisfactory. 16% of them claimed it is satisfactory and 82% are of the fact that the quality of infrastructure is not satisfactory. 80% of port authorities, 60% of custom officers, 70% of Transporters,86% of customers and 93.75% of freight forwards abide by the fact that the quality of infrastructure is not satisfying, it can be seen that the greater trend is for the fact that the quality of infrastructure is not satisfactory thus hindering the port of Douala to efficiently promote socio-economic development of Cameroon.
Q12. how effective are the strategies used by the management of the port to promote development in the region?

Figure 7 above, reveals that, 24% pointed out that the strategies used by the management of the port is effective, 76% think is less effective and none of the respondents affirmed that the strategy used by port towards the promotion of development in the region is very effective.

Q13. This question seeks to examine how efficient is the port of Douala in carrying out its function of development?

Q14. How successful is the port to the socio economic development of the region?
The results on the table shows that 20% of the total respondents pointed out that the port of Douala is very successful to the socio-economic development of the region 24% for successful. 56% for not successful and none admitted they have no idea on the subject matter. The port authority and custom officers said it was very successful given a percentage of 100 and 80 respectively.

Table 15.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Very successful</th>
<th>Successful</th>
<th>Not successful</th>
<th>No idea</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Port Authority</td>
<td>05</td>
<td>100</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Custom Officer</td>
<td>04</td>
<td>80</td>
<td>01</td>
<td>20</td>
<td>00</td>
</tr>
<tr>
<td>Transporter</td>
<td>00</td>
<td>00</td>
<td>07</td>
<td>70</td>
<td>03</td>
</tr>
<tr>
<td>Consumer</td>
<td>00</td>
<td>00</td>
<td>03</td>
<td>21,4</td>
<td>11</td>
</tr>
<tr>
<td>Freight Forwarder</td>
<td>01</td>
<td>6,25</td>
<td>01</td>
<td>6,25</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>20%</td>
<td>12</td>
<td>24%</td>
<td>28</td>
</tr>
</tbody>
</table>

Q15. What strategies do you think the government/stakeholders can put in place to enhance the efficiency of the port of Douala. The following answers were gotten from the respondents.

- The government has to see into it that good infrastructures, roads, warehouses, shelter for clients (importers and clearing agents) be will constructed.
- More flexible management using modern management techniques.
The government should reduce custom duty, taxes and improve on the clearance procedures by making a more transparent clearing system for the effective removal of goods and the taxes levied on imported goods.

The state should clearly define and enhance fully the free and land verification on how workers in the port carry out their activities.

Minimise corruption and stop tribalism in the port and in recruitment at the port. All these will encourage mediocracy at work.

Government should bring in modern machine in lifting containers at the container terminal of the port.

The government and stakeholders should employ skilled labour to work in the port.

A committee should be created to come down to the less privilege to know their own opinion about the port and also to sensitise them on the importance and opportunities the port can offer them.

Increase the wages of the workers, trained more skilled labour and reinforce security.

5.2. SWOT ANALYSIS

It is the framework use for analysing the strength, weakness, opportunities and threat of an organisation. It focuses on the strengths, minimise the threats and take advantage of the opportunities of the port of Douala.

**Strength**

- The strategic location of the port as a hub in the central Africa region is a threat to its competitors.
- The growth of cargo traffic adapted to the growth and demand of containerized traffic

**Weaknesses**

- Delay in entire documentation procedure because clearing containers takes average between 6 to 10 working days
- Costs of handling is very expensive compared to Lagos and Ivory coast
✓ Lack of specialized berth limits its operations with the growth in container trade, more modern berth facilities are required.
✓ It is a government owned thus making it difficult to separate the intervention from its activities. Frequent change of director general affects the operations of the port activities.
✓ Lack of land for expansion except through reclamation

Opportunities
✓ Introduction of a centralised and electronic documentation system to ease clearing procedure
✓ If the handling cost is decrease the port would be more attractive for shipping companies that will benefit from lower costs and increase competitiveness in terms of timing of entry and exit.

Threat
✓ A lot of competition from the port of Lagos, Congo and Ivory coast
✓ Importation of goods is cheap in these ports reason why most importers and shipping companies prefer to import through these ports which is less expensive
✓ The provision of value added services
✓ Greater integration of the port system
This analysis is to access the competitiveness of the port of Douala in Central Africa and to identify potential areas for improvement in the operation and exploitation to attract a greater flow of containerised cargo. In this regards the growth of cargo traffic is necessary to the development of the Douala port system. More so, this highlights the strengths and weakness, opportunities and threats related to the port of Douala and to pave way for the identification of strategies to be pursued to attract greater flows of containerised traffic. Furthermore, this will help improve the potential for the Douala port system especially for the container sector to attract increasing market flows which would result in further development of services and in general wealth to Cameroon.
5.3. DISCUSSION OF FINDINGS

From the finding 84% of the respondents admitted that the port of Douala can improve the living condition of the population, with all the respondents responding more than 70%. This can only be achieved if they are well managed, because according to the results 84% of the respondents said it is not well managed. It shows that the consumers who are the main target are not satisfied with the level of management in the port of Douala, with a percentage of about 92%. More so, the challenges faced by the port (lengthy clearance procedures, administrative bottleneck, corruption and outdated equipment) also stands as a hindrance for the port from carrying out its managerial activities efficiently. In order for the port to act as a tool for development some necessary measures are to be put in place by the government which are; decentralisation of the function of the port authority, reduction in taxes and clarity of port dues and private investors should be encourage.

Furthermore, there should be a strong sensitisation campaign to make know the opportunities offered in the port, because from the findings about 60% of the community is not aware of these opportunities. The result shows that the majority of the respondents agreed that the populations are not aware of the existence of the opportunities provided by the port reasons being that they are not sensitive of what they stand to gain by using the port. We can conclusively interpret that the population of Douala in general are not aware of the existence of the opportunities provided by the port because of poor sensitization campaign carried out by the management of the port. Thus a strong advertising and sensitisation campaign should be carried out in the port.

The level of management which embodies the quality of services offered at the port is a basic factor that could attract traders and shipping companies at the Douala seaport. The port of Douala must therefore put in place a better managerial personnel and have modern and adequate infrastructure that suit the growing maritime industry. It can be that the greater trend is for the fact that the quality of services offered by the port are not satisfactory that is 68%, thus hindering the port of Douala to effectively and
efficiently promote the socio-economic development of Cameroon in general and Douala in particular.

A majority of 46% affirmed that the quality of services cannot facilitate trade and led to socio economic development, reason being that it does not satisfy its services at the real and appropriate time thus slowing down trade (delay in clearance procedures, fluctuating rates) and making businesses to have a slow turnover. Thus, out of the total respondents a greater majority said “NO” to this effect that the quality of services offered by the port of Douala cannot facilitate trade and led to development.

Despite all these obstacles, 24% of the respondent said it can facilitate trade if the taxes are reduced and it is well managed. Also a lot of economic activities are springing up in the region and led to creation of jobs, which will reduce unemployment rate and empowered the population socio economically. The findings reveal that the port do have an impact on the population through the various trade transaction carried out in the port., with 88% attesting to that. there is also the influx of industries in the area thus making Douala a business municipality and also one of the most congested cities in Cameroon and poor town planning due to the presence of the port. In addition, a greater number of respondent said the quality of the port are not satisfactory since they are outdated and there is lack of infrastructural maintenance committee to follow up. It is noticed that majority of the respondents accepted the fact that the strategy used by the management of the port is less effective. This is because most of the marketing strategies are not well utilised due to lack of training. From the judgement above it comes to confirm the fact that the port of Douala is not fully in line with its objectives, since most ports are gateway to development the case of Singapore in Asia and Hamburg in Europe. Thus indicating why their strategy in promoting development in the region is less effective.

In addition, a majority of respondents accepted that the port of Douala is averagely efficient in carrying out its developmental functions this is because their strategies put in place in the management of port is less effective reason why they are averagely efficient in performing their functions.
According to the opinion expressed by the respondents on the port of Douala to the socio-economic development of the region. They were divided opinion as 56% said it was not successful and above 40% said it was successful. It seems from statistics that the port of Douala can effectively and efficiently contribute to socio economic development of the region, if all the necessary measures and strategies are put in place by the government and all stakeholders involved in the maritime industry. Despite all these challenges and problems faced by the port they still emerge as a hub in the CEMAC region.
CHAPTER SIX

CONCLUSION AND RECOMMENDATION

This chapter of our work rounds up our study by giving a conclusion to the work and also propose some recommendations to the stakeholders so as to address the issue at stake. These recommendations are envisaged strategies to educate the population of Douala on the importance of the port to development

6.1 Conclusions

This dissertation was on “an appraisal of the contribution of ports to socio economic development of Cameroon: the case of the port of Douala. Ports are gateway to a nation’s growth and act as a great effect on the movement of trade. Its contribution to economic growth is enormous since they have a direct impact on the economy. It was as result of the importance of ports to development that the researcher decided to examined the extent to which, the ports can enhance development. However, from the findings, it was notice that the port can contribute to greater extent to development, if infrastructures facilities were fully developed and constant maintenance of the existing ones was done. This is also coupled with lack of adequate advertisement strategies and inadequate management policies. In this regard the population is not well oriented on the opportunities at the port. It is from this observation that the researcher thus sought to redress this issue that hinders the port to act as a tool for development. The aim of this research was to evaluate the level in which ports can contribute to the development of the region. The above findings made us to conclude that port can lead to development of the region as 88% of the respondents agreed that the port has a positive impact on the community, and can improved the living condition of the people in the region, this can be seen from the 84% of the respondents who attested to the fact via the services offered. Also if nothing is done both by the government and the stakeholders as regards the management of the port as 84% affirmed that it is not well managed, then its impact will be negatively felt. Lack of aware is also a big challenge for the port as 60% are not aware of the opportunities they have due to the present of the port. Worthy of
note is the fact that the port can greatly contribute to development in the region, if the numerous challenges faced can be mitigated.

It was from the above situation that the researcher made some recommendations which were channelled to the stakeholders to ameliorate the existing situation in the port.

6.2 Recommendations

Following the analysis made in this study, the researcher was able to appraise the contributions of ports to development of Cameroon. It was thus imperative for the researcher to make suggestions to the various stakeholders in order to remedy the situation. Some recommendations were made to the government and to the management of the port of Douala.

- There should be transparency and accountability when carrying out infrastructural development in the port with regards to public tender for projects and management operations.
- Infrastructural development should be a long term planning based on the economic viability of the project and managed on a commercial based practices.
- Private sector involvement in the management of the port should be encourage, so as to set standards for efficiency and benchmarking of quality and competitiveness.
- Also the reduction of port charges will encourage exporters and importers to frequently used the port of Douala instead of the neighbouring ports. Discount should also be given to the port users so as to encourage them in choosing the port of Douala
- Content marketing should be used by the port authorities, wherein they write and published content of the port activities to educate potential customers about the services they offered.
- The lengthy clearance procedures should be reduced in order to minimise the waiting time in the port.
The port should adopt a competitive strategy, wherein they provide distinct services from the other ports by differentiating their products. Also reducing operation costs helps the port to become a low cost service provider.

The management of the port should also participate in Government meetings by exposing their concerns that require policy changes, to improve on their services.

Also the government and management of the port should allocate budget for the purchase of new equipment and maintenance of existing infrastructure.

The port authority should improve on their sensitisation and advertisement campaign to make the population aware of the opportunities in the port.

Training of employees on the new information and communication tools, which will enable approach their online customers according, so as to mitigate the risk of saying the wrong things online and also be able to adapt to the new electronic systems in ports.

A committee should be put in place to follow up on the financing and maintenance of infrastructure in ports.

6.3 Suggestions for further studies

As a result of time constraint, our research work was limited within Cameroon and on a particular port. If thus given another opportunity and enough time to conduct the research on a similar or same topic, I will look at it from a more global perspective. Thus the researcher suggest that a research work should be carried out on port’s contribution to the development of Africa. This will go a long way to edify the stakeholders on how ports can contribute to development in the continent.


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GENERAL QUESTIONNAIRE

Dear Respondent,

I am a student at the World Maritime University Malmo Sweden studying for a masters in maritime affairs with specialisation in Port Management. I am undertaking a research for my master’s thesis on the topic: An Appraisal of the Contribution of Ports to The Socio Economic Development of Cameroon: The Case of the Port of Douala.

This work is purely for academic motives and I therefore solicit your contributions by responding objectively to the following questions. The confidentiality of your responses will be guaranteed.

Please, place a bold tick in the boxes provided next to the answer of your choice and provide short and precise answers where necessary. Once completed, please email back to w1802948@wmn.se. Thanks for your assistance

Identification of respondents
I) In relation to the above mentioned research work, how your organisation can be identified?
   a) Port authority
   b) Custom officer
   c) Transporter
   d) Customer
   e) Freight forwarder
   i) Others _______________________

II). Work experience:
a. 0-5 years ____________, b. 5-10 years ____________, c. 10 and above

1) In your own opinion, what are the relevant contributions of the port of Douala to the socio-economic development of the region and the nation?

2) Can the port improve the living condition of the population in the region?
   a. Yes     b. No      c. Don’t know

3) Is the port of Douala currently well managed in terms of carrying out its activities?
   a. Yes       b. No      c. No idea.

4) What are the challenges faced by the port of Douala in the management of its activities?

5) In your opinion, what are some potential measures to be taken by the government in order to address the aforementioned problems?

6) How aware regarding the socio-economic benefits offered by the port of Douala?
   a. very aware    b. aware     c. not aware    d. none of the above

7) How can you rate the quality of services generally offered at the port?
   a. very satisfactory    b. satisfactory    c. not satisfactory    d. don’t know

8) Do you think the quality of services offered by the port of Douala can facilitate trade and lead to development socio economically?
   a. Yes  b. No  c. partially.   justify your answer_____________

9) Does the existence of the port in Douala have a direct impact on the population and the economy of Douala? In which way does it impact on the economy?
   a. Yes  b. No  c. please justify your answer___________________________
10) Please, list some of the challenges faced by the region as a result of the present of the port? ________________________________

11) What is your judgement on the quality and performance of the infrastructure in the port of Douala?
   a. very satisfaction  b. satisfactory  c not satisfactory. justify your response____________________

12) How effective are the strategies used by the management of the port to promote development in the region?
   a. very effective   b. effective   c. less effective

13) How efficient is the port of Douala in carrying out its function of development?
   a. Excellent     b. quite good    c. average    d. not good

14) How successful is the port in term of the socio-economic development of the region?
   a. Very successful    b. Successful    c. Not successful    d. No idea

15) What strategies do you think the government/ stakeholders can put in place to enhance the efficiency of the port of Douala?