

**THE PROSPECTS AND CHALLENGES OF LOGISTICS COMPANIES IN
GHANA, CASE STUDY: MAERSK LOGISTICS GHANA LIMITED.**

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ABSTRACT

This is a dissertation on the topic; The Challenges and Prospects of Logistics Companies in Ghana, with Maersk Logistics Ghana Limited as a case study. The objective of the study was to find out the challenges confronting logistics companies operating in Ghana, and also to identify the prospects that are available to them. Areas considered under the challenges that logistics companies face in Ghana included; the transportation infrastructure, social, legal, political and economic factors.

Assessment of available infrastructural facilities, the prevailing political, economic, legal, and social conditions in the country was made to find out if logistics companies had prospects in Ghana. The case study organization was Maersk Logistics Ghana Limited.

A survey conducted using the Headquarters staff of Maersk logistics Ghana limited revealed the following:

Apart from the port facilities and services which were rated as quite good the other transportation infrastructure namely; the road, the rail, and the air were rated as poor and not conducive for logistics business.

The survey also indicated that the Information and Communication Technology (I.C.T.) system in the country is poor, the telecommunication sector in the country is, however rated as good and conducive for doing logistics business.

Furthermore, the findings of the study with respect to the economic environment in Ghana showed that many economic variables in the country such as the rate of inflation, the exchange rate, the interest rates and the general cost of doing business in Ghana were not conducive for logistics business. The banking sector of the country was however rated as good and favourable for logistics business.

The social factors identified by the survey as challenges to logistics business included; bribery and corruption, business partners who are not trustworthy, poor business ethics in the country.

The political condition in Ghana was rated as good; the legal system however did not receive favourable rating with regard to the creation of conducive business environment for logistics companies:

The conclusion drawn from the survey showed that Ghana's economy was not favourable to logistics business; it however, indicated that the availability of markets for logistics

services, the good political environment, the vibrant telecommunication system, the good banking business as well as good ports facilities provided prospects for logistics businesses in the country.

A number of recommendations were made to the government, and the business organizations, including the logistics companies. These recommendations suggested measures be taken to improve infrastructure, eliminate bottlenecks, improve the human capital of logistics businesses, improve the social, economic and legal structures of the country with the aim of promoting logistics and other business activities in Ghana.



DEDICATION

To Christ my Lord and Master, and to my virtuous wife, and also to my grandfather.

KNUST



ACKNOWLEDGEMENT

This thesis was made possible by the contributions of a number of people to whom I am very grateful.

I would like to express thanks to my supervisor, Mr. Jonathan Annan who tirelessly offered constructive suggestions to the research process and who also took the pain to meticulously read and make the necessary corrections to ensure quality.

I would also like to express gratitude to the management and staff of Maersk logistics Ghana limited for granting me the opportunity to use their organization as my case study, I am also grateful to them for responding to the questionnaires.

My thanks also go to my dear wife for her understanding and moral support throughout the period of the research. Sweetie, I appreciate all the support you gave me and God richly bless you.

I also acknowledge my colleagues who read through the work and offered suggestions, and everybody who helped in one way or the other to make this project a success.

Glory be to God who has provided all that was needed for the successful completion of this work.

DECLARATION

With the exception of other works which have duly been acknowledged, I hereby declare that this is an original work submitted towards the award of a master of business administration degree and that this work has never been submitted in part or whole for the award of any other degree in the university.

Signature

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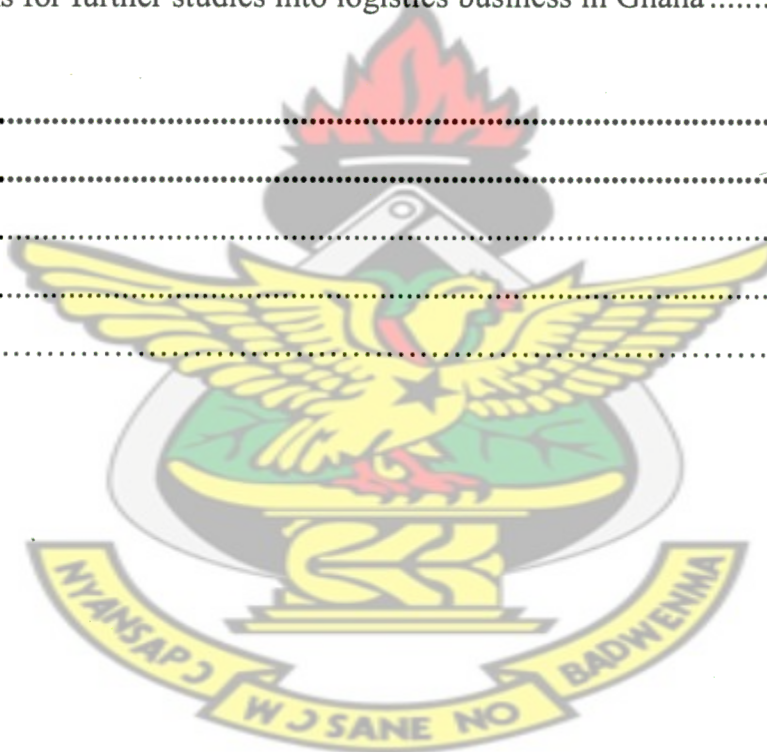
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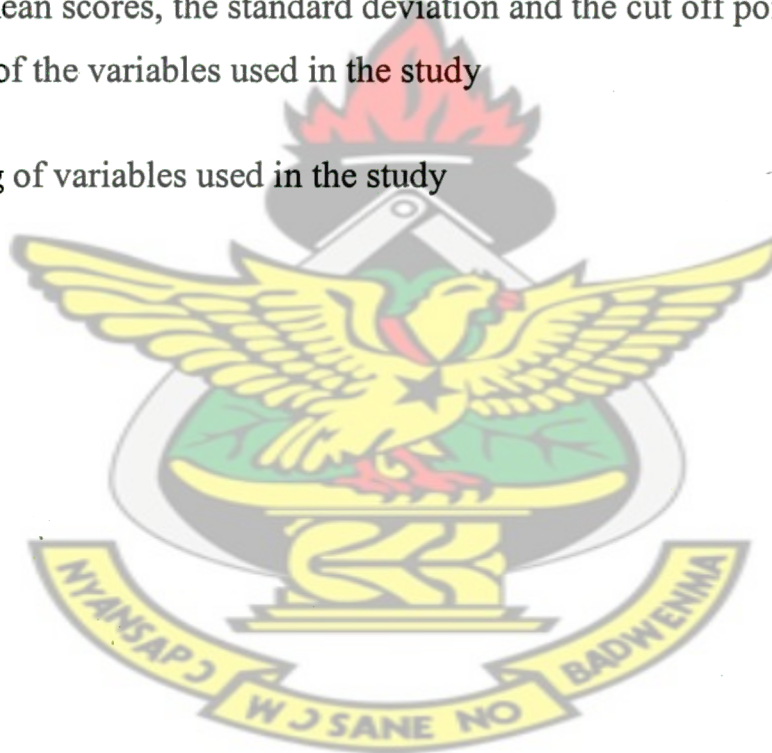
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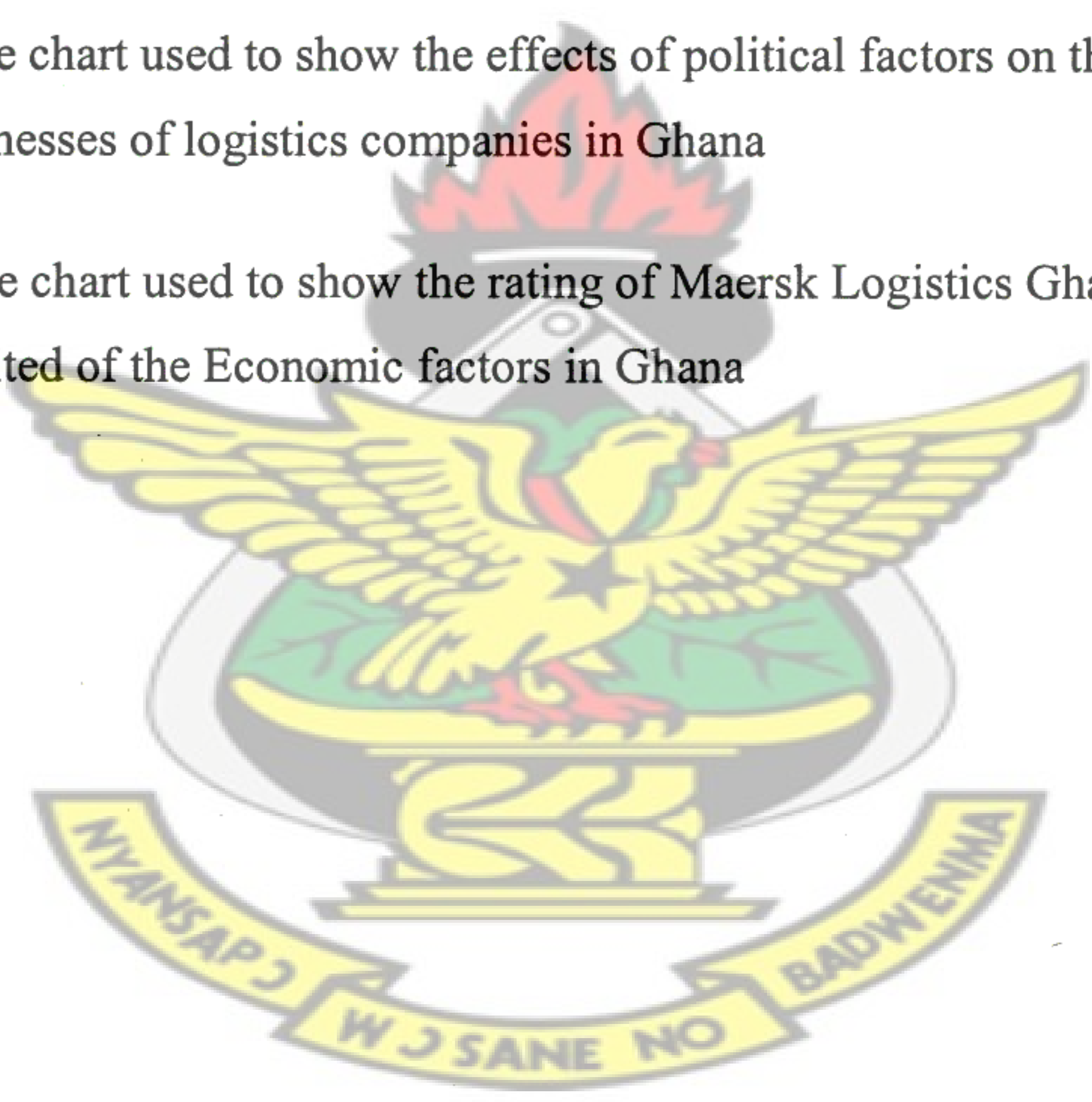
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CHAPTER ONE

1.1 BACKGROUND TO THE STUDY

Mankind will not cease to be amazed at the swiftness of change and how tremendous global events can happen within a very short period of time.

Decades ago, many thought the industrial revolution of the 1700s was the greatest event that could ever happen to the world. However, when we look at the world's event in retrospect, the days of industrial revolutions can best be described as pathetic shadows of what the world is today. In much the same way, the scientific and technological breakthroughs that the modern world prides itself with today, including the computer and information technology, will in a decade or so hence become outmoded and so much archaic that they will only be suitable for historical references.

One interesting characteristic of change is that it carries every other thing along with it and anyone who decides not to move along is left behind to wallow in ignorance and out of touch with reality.

James, (1901-1989) the West Indian Political theorist, literary critic, Pan-African leader and sports historian had this to say about change: "time will pass, old empires will fall and new ones take their place I discovered that it is not quantity of goods and utility which matter, but movement; not where you are or what you have, but where you come from, where you are going and the rate at which you are getting there." This article was cited in the Microsoft corporation student encounter, (2008).

The business world is one of the most affected sectors when there is change. Impacts of change on business organizations have far reaching consequences with the potential of tremendous success as well as disastrous consequences for businesses. Business people have come to recognize and appreciate the effects that change has on their businesses; both positive and negative, as result many have taken measures to guard against their businesses being taken unawares by changing events. In-fact the success or failure of

business depends to a large extent on how change is managed in the organization. According to an article cited in Microsoft student encounter (2008), Bill Gates, commented on the significance of proper management of change in organizations as follows: “one of the lessons from the Darwinian world is that the excellence of an organism’s nervous system helps determine its ability to sense change and quickly respond, thereby surviving or even thriving”.

The quest of modern business organizations for competitive advantage, greater share of the market and of course maximization of profits has made businesses to adopt innovative ways of doing businesses.

Many businesses have come to the realization that to become competitive and also to maintain a competitive edge in the current business environment, businesses must focus on value addition as their way of doing business than any other thing else. This realization has given birth to other aspects of their operations.

According to a study carried out in USA by Joint Research Initiative of Centre for Advanced Purchasing Studies, and Kearny (1998); many organizations are now placing emphasis on value chain and logistics management and this trend is likely to continue well into the future. It will not be an exaggeration to say that the future of modern business lies in logistics and supply chain management.

According to Christopher (2005), a famous professor of Logistics at Cranfield, School of Management, “Logistics is the process of strategically managing the procurement, movement and storage of materials, parts and finished inventory (and the related information flow) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfillment of orders”.

Supply chain management on the hand is defined as “The management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole”, Christopher, (2005).

In Ghana, like many of the less developed countries, logistics business is not as vibrant as it should be. Though some Ghanaians business organizations that make use of third party logistics express satisfaction about the services of logistics companies, the awareness of the important role of logistics as a business enabler is very low in the country. A study conducted by *Sohail et al.*, (2004), indicates that data relating to sixty four (64) organizations in Ghana showed that over eighty percent (80%) of users of Logistics Services reported a positive impact of Logistics outsourcing and have largely been satisfied with the services.

A number of Logistics companies are operating in Ghana. Among these are Maersk Logistics Ghana Limited, Antrak Logistics, D.H.L., McDan Logistics etc.

According to Maersk's website; www.maersklogistics.com, assessed on 25th February 2009, Maersk has been operating in Ghana since 1991. Since then, development has been tremendous. Maersk Ghana Limited is now the major player in the Ghanaian container shipping market, with offices in Tema, Takoradi, Kumasi and Accra, offering highly efficient container sea and land transport solution.

The aim of the study was to research into the challenges and prospects of logistics companies in Ghana. The study would look at how conducive Ghana's economic environment is to the operation of Logistics businesses. It would also identify the challenges / difficulties of Logistics businesses in the country. The study would also look at the performance of Logistics companies in Ghana over the past five years. Recommendation would be made to the government of Ghana and other stakeholders in the country's economy on what should be done to improve the performance of logistics businesses in the country. Maersk Logistics Ghana Ltd, a leading logistics company in the country was used as a case study.

1.2 STATEMENT OF THE PROBLEM

The need to carry out this study was motivated by the following factors:

Challenges experienced by logistics companies make it difficult for them to reduce their operational costs. According to Christopher (2005), logistics management provides cost

advantages to organizations that make use of logistics services. The study of challenges of logistics companies in Ghana will help in the identification of these problems so that solutions could be found to them in order to minimize the cost of doing business in Ghana thereby increasing the profitability of the businesses.

Another important reason for which this study is worth undertaking is the fact that challenges to logistics operations in Ghana have the potential of affecting the revenue generating ability of the country. A well functioning logistics sector in Ghana will make the logistics businesses and the businesses for which they provide services more profitable all other things being equal, and this has positive tax implications for the state. Ghana will not be able to benefit from increased tax revenue from businesses so long as logistics businesses face challenges which prevent them from maximizing their profits. A study of the challenges of logistics businesses is necessary because its outcome will help in finding solution to the challenges that face logistics businesses in the country which will in turn impact positively on the nation's tax revenue, all other things being equal.

Again, challenges to logistics businesses have the potential of impacting negatively on customer satisfaction which in effect could spell dire consequences for businesses since customer satisfaction has become a critical success factor for businesses in recent times. These reasons mentioned and many others provide strong basis for studying the challenges of logistics companies in Ghana.

Not knowing the prospects of logistics businesses in Ghana will deny the country the needed investments since prospective investors will not be aware of the business opportunities that exist for logistics companies. Other multinational businesses that rely on logistics companies to be able to function effectively may not be attracted to Ghana due to the lack of knowledge about logistics business potentials which could attract the logistics companies and thereby attracting the other businesses.

Lack of knowledge about the prospects for logistics businesses in Ghana will prevent businesses from investing in the potential opportunities which could create a number of

employment opportunities for the nation's teeming unemployed population. The study of the prospects of logistics companies in Ghana will help identify the available prospects, and this could be a major step towards job creation.

1.3 THE OBJECTIVE OF THE STUDY

The study seeks among other things to:

1. Investigate how conducive Ghana's economic environment is for logistics companies
2. Find out the difficulties faced by logistics companies in Ghana
3. Study the performance of Maersk Logistics Ghana Ltd. over the last five years
4. Recommend appropriate measures that will enhance the performance of logistics companies in Ghana.

1.4 JUSTIFICATION OF THE STUDY

The study is of importance to business organizations, logistics companies, the government of Ghana and potential investors. The study will help local businesses to appreciate the augmented value that Logistics management provides to make businesses more cost effective, competitive and more profitable.

Logistics companies will also benefit from this study. Information provided on the prospects and challenges of logistics companies in Ghana will inform both existing and prospective logistics companies in their decision making and strategy formulation process.

The study will also bring to government's attention what the challenges of logistics companies are in the country. Government can then take measures to solve the identified problems in order to make the operations of logistics companies smooth. When a conducive business atmosphere is created for the logistics companies, these companies will become more efficient which consequently will lead to increased profitability for these businesses and also increased tax revenue for the government.

As Ghana prepares to become an oil rich economy, it is of crucial importance that special attention is paid to logistics companies since their role in the oil sector cannot be over emphasized. This makes the study very relevant to the needs of Ghana's economy now and in the future.

Potential investors will also benefit from this study. Investors of today consider the availability of logistics facilities as one of the critical determinants which informs their investment decisions. The study will provide information on the operation of logistics companies in the country. This will serve a very useful purpose for potential investors in their investment decisions concerning Ghana.

1.5 SCOPE OF THE STUDY

The study is limited to Logistics companies in Ghana. The relevance of logistics in modern business management as well as its relatively new nature especially in developing countries like Ghana informed the researcher's choice of this particular study.

The study narrows down on Maersk Logistics Ghana Limited as its case study for logistics companies in Ghana. The choice of this company is due to its relatively well established nature in Ghana.

Furthermore, the study focuses on the prospects and challenges of logistics companies in Ghana. This aims at assessing how robust or otherwise Logistics companies are in Ghana. Time and Logistical constraints were the reasons why the study narrowed on Maersk Logistics instead of conducting the study on many of the logistics companies in the country.

1.6 LIMITATIONS OF THE STUDY

This study could not cover all the logistics companies in Ghana. Out of a number of logistics companies in the country, the study was carried out on only Maersk Logistics Ghana Limited. This was as a result of the limited time period available within the

academic calendar to conduct this study. Another limitation was the inadequacy of funds needed to conduct a more expanded research on logistics companies in Ghana. Another limitation was the difficulty involved in gaining access to relevant data.

1.7 ORGANIZATION OF THE STUDY

This study is structured in line with the requirements of the graduate school of the Kwame Nkrumah University of Science and Technology (KNUST). The main sections of the study are arranged as follows:

Chapter one provides a general introduction to the topic of the study – Prospects and challenges of Logistics Companies in Ghana, the case of Maersk Logistics Ghana Limited. ” This chapter gives a background to the study, followed by the statement of problem of the study. The purpose, the relevance, the justification, the scope as well as the limitations of the study are discussed in this chapter.

Chapter two reviews the existing literature on the topic of study.

The theoretical framework considered existing literature on the definition of logistics, the importance as well as the evolution of logistics as a business enabler. The Ghanaian economy was also touched on in this unit.

The empirical framework reviewed actual research works that have been done in similar research topics.

The conceptual framework is a schematic model used to create a vivid pictorial impression of what the research seeks to achieve and how it is conducted.

Chapter three presents the research methodology. It provides information on the organizational profile of Maersk Logistics and also discusses the research design, population of study, the sample size and sampling procedure, instruments used as well as data collection procedure. The method of data analysis is also discussed in this chapter.

In chapter four data collected is analyzed by using statistical and other data analysis tools. The findings of the research are also presented and discussed in this chapter.

In chapter five conclusion and recommendations are made based on the findings of the study.

Another very important area which is captured in the organization of the study is the references and the appendices. Referencing in this study follows the Harvard Style.



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews existing literature on the topic of the study. Research materials and reports done in other countries have been used to supplement the limited work available locally. This chapter has been treated under the following sub-headings.

2.2 CONCEPTS OF LOGISTICS

LOGISTICS: Definition

According to Lambert and Stock (1993) "Few areas of study have as significant an impact on a society's standard of living as logistics. Almost every sphere of human activity is affected, directly or indirectly by the logistics process". The importance of logistics in a nation's economic development cannot be overemphasized. This is because logistics to a considerable extent affects production, distribution efficiency, energy availability and cost, inflation and interest rate.

Logistics has been defined in many ways among which are the following:

Christopher (2005), a renowned professor of Marketing and Logistics at the Cranfield, School of Management, defines logistics as "the process of strategically managing the procurement, movement and storage of materials, parts and finished inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfillment of order".

Ballou,(1985) defines logistics as "the management of all move, store and related activities as they take place between the points of acquisition and the points of consumption".

The council of Logistics Management Professionals, USA, (1998), defines Logistics as "that part of the supply chain that plans, implements and controls the efficient, effective

flow and storage of goods, services and related information from the point of origin to the point of consumption in order to meet the customer's requirement".

The definition by the council of logistics professionals, USA captures logistics as an integral part of a broader concept i.e. the supply chain. The definition also indicates that the planning, implementation and control functions of production and distribution of goods and services from the origin to the point of consumption are all encapsulated by logistics.

Professor Martin Christopher's definition emphasized the cost reduction and profit maximization role of logistics. He also pointed out the management of the related information in logistics.

Good logistics management involves the planning and designing of effective and efficient co-ordination of two interdependent networks:

- i) Product flow and
- ii) Information flow that will facilitate distribution of a firm's product at the right place and time as they are demanded by customers; Christopher (2005).

According to Porter (1995), success in fulfilling an organization's logistical mission depends on how it organizes and performs the activities of obtaining raw materials, processing the raw materials into finished products, physical distribution, marketing and sale services. This also entails, human resource development, providing the needed technology, improving the firm's infrastructure and procurement.

2.3 IMPORTANCE OF LOGISTICS

Itarni (1980) considers logistics vital to the success of the Japanese management strategy.

Lysons *et al* (2000), highlights some important logistics concepts which contributed significantly to efficient management of organizations. For instance, total system management, Trade-offs, cooperative planning.

According to Nansi (2001), no marketing manufacturing or project execution can succeed without logistics support. For companies, ten to thirty five percent (10% to 35%) of gross sales are logistics cost. This means, efficient logistics management leads to cost reduction.

The logistics industry of a country has been likened to the blood vessels in the body carrying the blood stream to flow to different parts. If there is any difficulty in the blood vessel, it may ultimately tend to harm the body. This is same with the logistics industry playing the role of blood vessel in a country. This is the way in which “Word Press”(2008), an electronic article described how important logistics is to an economy.

A paper presented at a symposium of European commission, 1997, identified the importance of logistics in achieving quality production and distribution of goods and services. The paper mentioned that logistics management ensures better services, better customer orientation, guaranteeing quality in design and production of goods and environmental quality standards; Word Press (2008).

In addition, the importance of logistics in purchasing and product development, manufacturing and assembling, warehousing inventory, transport and delivery cannot go unmentioned.

According to Christopher (2005), Logistics and supply chain management can provide a multitude of ways to increase efficiency and productivity and hence contribute significantly to reduced unit cost. This cost advantage can be used strategically to assume

a position of price leader. Alternatively price may be maintained, enabling super normal profit to be earned and this has the potential to further develop the position of the product in the market, thus making the organization to have a competitive advantage.

2.4 THE EVOLUTION OF LOGISTICS

Logistics according to Christopher (2005) is not a new idea. From time immemorial, the principles underpinning the effective flow of materials and information to meet customers' requirements have been with mankind. Throughout history, wars have been won and lost through logistics strengths and capabilities or the lack of them. It has been argued that the defeat of the British in the American war of independence can largely be attributed to logistics failure. For the first six years of the war the administration of these vital supplies was totally inadequate, affecting the course of operations and the morale of the troops. An organization capable of supplying the army was not developed until 1781, and by then it was too late.

In the Second World War, logistics also played a major role. The invasion of the Allied Forces was a highly skilled logistics exercise as was the defeat of Ronald, the renowned German field marshal in the African deserts. Rommel (1891 – 1944), once said ‘...before the fighting proper, the battle is won or lost by quarter masters’, Christopher, (2005).

According to Coyle *et al.*, (1999), the critical role of logistics was understood and used earlier in history by the military. No wonder logistics is referred to in certain quarter as a military science. Whilst the Generals and Field Marshals from the earliest times have understood the critical role of logistics, it is only recently that business organizations have come to recognize the vital impact that logistics management can have in the achievement of competitive advantage.

According to Kent Jr. and Flint (1997), logistics first appeared in the academic literature in the early 1900s and was then known as physical distribution.

In a research conducted by Kent Jr. and Flint, the evolution of logistics spanned over six eras:

Era 1; This era was associated with the Ancient times and the Middle Ages. At that time, attention centered on transporting products from the farm to the point of sale. Thus, until World War II, agricultural economics had a great deal of influence. In fact, the discipline economics was the primary influence on both marketing and transportation at this early stage.

Era 2; This era embraces two sectors: business and military. World War II marks the beginning of this period and the late 1950s ends it. From 1945 until the late 1950s, business saw physical distribution as a subset of marketing and viewed it from a functional perspective. Warehousing and wholesaling researched and compartmentalized.

Era 3; The era three began with the integration of functional areas. Beginning in the early 1960s, the total cost concept was explored and a system approach was used in the business sense. There was a shift in focus from logistics as physical distribution to an entire system of activities working with and relying on one another.

Era 4; Another perspective of logistics emerged in the early 1970s. The customer was regarded as the primary focus of the firm. Customer service became an important issue just as inventory carrying costs, productivity and link node concepts also gained prominence in logistics research and practice.

Era 5; In the early 1980s, logistic started to gain recognition as a key means of differentiation for the firm. This era continues through the present. Logistics is viewed as a critical success factor in the strategy of the firm.

Era 6: This era speculates the future. The future direction is probably towards integrated supply-chain management, which looks at logistics management as processes that extend across total supply chains.

This study by Kent Jr. and Flint outlines the evolution of logistics thought based on the writings and comments of experts in the field of logistics management.

2.5 THE ECONOMY OF GHANA

Ghana is a developing economy just like the other countries in the West Africa sub-region. Her immediate neighbours are the Republic of Togo to her east, La cote D'Ivoire to her West, Burkina Faso to her North. At her South is the Gulf of Guinea. Ghana a former British colony then called the Gold Coast attained independence in 1957 and a republican status in 1960. The domestic Ghanaian economy revolves around subsistence agriculture which accounts for about 34% of the GDP and employs about 60% of the workforce. Industrial output represents about 25% of the GDP and employs about 15% of the Labour force, with manufacturing about 9% of GDP. The World Factbooks: Ghana (2005).

Since 1983, Ghana has been implementing various types of economic reforms aimed at reverting decades of economic decline. Most of these reforms which were undertaken in coordination with financial institution such as the World Bank and the International Monetary Fund include Trade Liberalization, removal of price control and government subsidies, floating of the domestic currency, and removal of all restriction on imports. These measures were aimed at boosting productivity and increasing exports; United States, State Department (2005).

The Economic reform has created an unprecedented change in Ghana's business environment through increased competition both in the domestic market and from imports into the country. For example, food processing and textile manufacturing output in 1990 were less than 60% of their volume in 1997. The rate of growth of imports into the country between 1988 and 1999 was 7.3% while the GDP growth was only 4.3% ISSER, (2002).

The Ghanaian economy is characterized by lack of access to manufactured inputs, unavailability of human capital in the necessary skills areas, for example, technicians and scientists, lack of access to capital, high cost of business transactions, demand /supply uncertainties, inefficiencies and economic volatility (Frazer, 2005, Tybout, 2000).

In order to succeed firms, have to invest in new equipments and technology, increase the quality of their products and services, offer a diverse set of products to meet changing customer needs, increase their productivity and produce goods cheaply. Rankin *et al*, (2002).

Due to the rapidly changing political, institutional and economic changes, it is important that firms in Ghana and similar environments, if they want to survive, upgrade and re-configure their production capabilities Wright *et al.*, (2005).

The Ghanaian economy is yet to embrace and experience the unprecedented competitive advantage that come with aligning the economy with logistics system. It has been suggested that global manufacturing strategies provide the greatest competitive advantage when they are appropriately supported through key-value added Logistics activities Fawcet *et al.*, (1993). For example, Cillers and Nagel (1994), contend that South Africa's comparatively advanced logistics system is the reason of her economic competitiveness and ability to attract foreign investments relative to the other African countries.

EMPIRICAL FRAMEWORK

2.6 INTRODUCTION

A number of studies have been conducted on the state of Logistics, Management issues in less developed countries. Some of these are discussed below:

2.7 CHALLENGES TO LOGISTICS DEVELOPMENT: THE CASE OF A THIRD WORLD COUNTRY – BANGLADESH

According to the author of the research work Razzaque (1997), the current trend of changes in global business is highlighting the importance of logistics in the development of Third World Businesses and Industries. However, many of the Less Developed Countries lack logistics facilities; the task of developing a good logistics system in these nations is quite challenging.

This study, in a bid to understand the challenges of developing a good logistics system by less developed countries, examines the logistics development situation in Bangladesh.

Based on a survey conducted, the country's logisticians identified five broad challenges facing logistics development in Bangladesh and proposed a model that integrates efforts and inputs from four sources to solve these problems.

The outcome of the study revealed that the challenges of developing good logistics system in Bangladesh are multifaceted and include;

i. Infrastructural related challenges:

Inadequate transport and telecommunication networks, and poor port and related facilities were identified as the major factors hindering the development of a logistics system in the country.

ii. Challenges stemming from the Economic system:

These challenges are as a result of frequent changes in the government and governmental policies and lack of understanding of the nature of market economy and its management. Since her independence in 1971, the Bangladesh economy has passed through four distinct phases. In Chronological order these are: State Capitalism (1971 – 1974), a left-of-centre (Pro socialistic) mixed economy in a military regime, (1975 – 1980), a right-of-centre (pro-capitalistic), mixed economy in a military regime (1981 – 1989), and an emerging market economy in a democratic dispensation since (1990).

iii. Management system problems:

A great number of the firms in Bangladesh do not follow modern tenets of management practices. A large proportion of the top managers are from the civil service and the armed forces, who follow a bureaucratic style of management, Quddus (1993). Bangladesh management style always tended to be based on a strong bureaucratic system that placed much faith in the bureaucrats to set the right conditions for growth through effective macro-economic management. These bureaucratic policy makers seem to be unwilling to accept that adoption of economic and market reforms entails devolution of power.

iv. Managerial problems

Management's resistance to change according to Razzaque (1997) has been identified as one of the challenges to logistics development. There is no infusion of new ideas and no desire for new or innovative ways of doing things. It is reported that many managers in Bangladesh view customer service, trade-off, just-in-time inventory, or total quality management as concepts with no practical value in business firms of less developed countries like Bangladesh. The managers fail to understand and appreciate the role and importance of logistics as a distinct management function; consequently they are reluctant to support the establishment of such a department in their organizations. Moreover, people in logistics related occupations in Bangladesh are perceived to be corrupt and dishonest, and this de-motivates qualified persons from pursuing a career in logistics or related fields.

v. General problems:

General problems of logistics in Bangladesh include, political instability, lack of continuity in government policies, and resource limitation of the country. Because of political instability, Bangladesh failed to plan and pursue any long-term national economic agenda, Razzaque (1997).

2.8 PROSPECTS OF LOGISTICS COMPANIES IN LESS DEVELOPED COUNTRIES, THE CASE OF INDOCHINA

A research work by Goh and Argus (2000) both of the department of Decision Sciences, Faculty of Business Administration of the National University of Singapore, looks at some logistics realities in Indochina. This research makes mention of some of the factors that boosted business performance including the performance of logistics in Indochina.

Indochina, in this paper comprises Vietnam, Cambodia, Laos and the English speaking Myanmar. These four countries have certain commonalities, for instance their relative poverty, war legacies, attractiveness to Foreign Direct Investment (FDI) and the continue need for foreign assistance.

According to this research work, some International initiatives have been targeted at the problems of Logistics infrastructure in these countries. These initiatives target Indochina's transportation and telecommunications system. Plans have also been initiated to streamline customs procedure across the region to ease trade flows. Most of these countries are members of Asian Free Trade Agreement (AFTA), and as result of this trade agreement trade procedures and documentation are expected to be streamlined.

All these measures are aimed at creating a conducive business environment for logistics to thrive. In its concluding remarks, the paper noted that the integration of these countries into ASEAN and the implementation of AFTA is a boost for Logistics potential in that region.

It also points out the fact that, Logistics concerns over custom bureaucracy, poor transportation networks, primitive warehousing facilities, low investment in material handling and the like can hinder the profit motives of many foreign investors, forcing them to re-think their logistics strategy. Risk notwithstanding according to the paper, Indochina is an exciting frontier for logistics. Managers, manufacturing companies and Third Party logistics familiar with logistics issues in this region have the opportunity to create niche distribution networks for themselves. For transportation providers, particularly, the demand for innovative solutions has never been greater Goh *et al.*, (2000).

2.9 LOGISTICS DEVELOPMENT IN GHANA

Ghana, like many of the Developing Economies is mostly engaged in the extractive productive activities. The country depends on the export of cocoa, timber, gold, manganese and of late non-traditional exports such as fruits and vegetables pawpaw, snails, mushrooms craftworks and other such products. The nation is currently gearing up towards becoming an oil exporting economy. The nature of the nation's economic activities as well as the state of the nation's development makes logistics a very important tool for the nation's development. Over the years no conscious effort has been made to develop logistics in the country.

According to Dadzie (1990), problem of poor transportation infrastructure in Ghana is as result of the short term outlook of planners and the ad-hoc strategy adopted in solving problems. The roads were not properly designed; this is further compounded by lack of maintenance for the facility. There is also poor loading and unloading facilities at the Ghanaian ports.

Until 1995, the Ghana telecommunication has been under the strict control of the central government. An article by Overa (2005) indicates that since the telecommunication sector was liberalized in 1995, there has been a phenomenal growth in access to all phones, this had changed the mode of doing business in Ghana and has reduced both transaction and transportation cost of doing business. The article intimated that, traders with access to tools for more efficient communication over long distances provide better services and create a higher profit potential than others. It further argues that adoption of new technology enhances trust building in trade networks, thus facilitating a higher number of transactions in an uncertain economic environment.

The improvements in the telecommunication sector and the introduction of the information and communication technology in some of the sectors of the country's economy have led to major improvement in these sectors and in the national economy as a whole.

Another work by Amekudzi *et al.*, (2006) titled; 'Transportation System Sustainability issues in high middle and low income economies', states that the road sector in Ghana accounts for 94% of freight and 97% of passenger traffic. Ghana, according to the research work has a total road network of about 40,000km, consisting of 13,433km of truck roads, 24,000km of urban roads; two large deep water ports, (at Tema and Takoradi) which handle about 7 million tons of import and export traffic; and a 944km railway system serving the Southern part of the country. Ghana has one international airport and 8 regional airports and airstrips throughout the country.

The transportation sector according to Amekudzi *et al.*, (2006) is faced with problems of deplorable road conditions, poor vehicular maintenance, poor law enforcement and others. The study further stated that, there is disparity in road network between the rural and the urban areas, whilst almost all the regional capitals and most of the district capitals have accessible roads, most rural areas have deplorable road conditions. The end result is that the agricultural produce, in particular major exportable perishable commodities, on which the country's economy depends, can be subject to decay in the inaccessible areas, and this creates disincentives for farmers to produce. The poor nature of roads also leads to increase fatalities on the roads Afukaar *et al.*, (2003).

Another area of Ghana's logistics sector worth considering is warehousing. There are challenges to logistics development in Ghana in the area of warehousing. According to a research conducted by Baah (2008), one of the major challenges of cocoa related companies is lack of sufficient infrastructure in the form of warehousing.

A study by Sohail, *et al.*, (2004) to investigate the extent that organizations in Ghana use the services of logistics companies revealed the following:

- i. Out of the total of 64 responses, 46 respondents indicated that their organizations used Logistics Services while 18 did not use Logistics Services.
- ii. Almost 40% of the organizations that use the contract logistics services employed more than 500 people as compared to the non-users which have mainly been smaller organizations employing smaller number of employees.
- iii. Over 80% of organizations not outsourcing have employed fewer than 200 employees, which is in contrast to the few organizations, in the same category that outsource.

It is apparent that there is a significant difference between the organizations that choose to outsource and those that do not; the bigger and well established organizations in Ghana use Logistics Services more than the smaller organization.

A statistics gathered by the work of Sohail *et al.*,(2004) shows the following:

Table 2.1: Percentage of users and non-users of contract Logistics services in category of organizational size

Current employment	Users	Non-users
<100	30.4	61.1
100 – 199	8.7	22.2
200 – 299	0	5.5
300 – 399	17.4	0
400 – 499	4.3	5.5
>500	39.1	5.5

Source; Sohail *et al.*, (2004)

According to Sohail *et al.*,(2004) among the non-users of contract logistics services, sixty six percent (66%) of them indicated that they would consider using those services in the future.

Of those using contract logistics services, most are relatively experienced in the use of third party logistics services. Overall, fifty percent (50%), eighteen percent (18%) and twenty seven percent (27%) of the respondents indicated that they had been using the services of third party logistics for over five (5) years, three to five (3 – 5) years and one to three (1- 3) years, respectively. Only about ten (10%) stated that they had been using third party logistics services for a year or less.

Another findings of the study revealed that those surveyed were asked to indicate the organizational level at which the strategic decision to use contract logistics services originated within their company. Over ninety percent (90%) of the respondents indicated that the decision was made at the corporate level, while eight point seven percent (8.7%) traced it to the divisional level.

None of the respondents attributed the decision to use third party logistics services to the local level. The study also found that, the level of commitment to the utilization of contract logistics providers has been very encouraging with about eighty percent (80%) of the organizations responding to the survey characterizing their level of commitment as moderate to extensive. Additional evidence of this high level of commitment is provided by seventy percent (70%) of the organizations allocating up to forty percent (40%) of their total logistics budget to contract providers. In almost all cases, service logistics executives view the use of contract organizations as having a positive impact on logistics costs, logistics system performance, customer satisfaction and employee morale.

Some of the respondents however, expressed some reservations about the use of contract logistics services; these were mainly related to the cost implications of outsourcing and service quality of contract logistics providers.

The survey also indicates that the market for third party logistics services in Ghana has a good potential for further developmental Sohail *et al.*, (2004).

2.10 LOGISTICS AND GHANA'S EMERGING OIL SECTOR

Ghana's Ministry of Energy and Kampac Oil Terminals, an international oil company based in Dubai signed an agreement in 2005 for Kampac oil to construct and operate a floating storage unit off the coast of Tema. The construction of the storage facility is estimated at US \$70 million. The facility will have a capacity of 2.3 million barrels and store crude oil and fuel, BBC Monitoring Africa (2009).

In a related development Ghana's High Commissioner to India, Williams J. Bentum is of the view that Ghana and India could collaborate in the oil sector as both nations have potential oil resources. He further stated that Ghana could benefit from Indian technological and logistics support, Business Standards (2000).

By October, 2008, twenty-three companies had so far been granted permits by Ghana National Petroleum Corporation (GNPC) to operate as sub-contractors to support oil

firms in the country. Out of the number, 12 of them are Ghanaian firms with 51% foreign ownership, while two others are foreign firms not registered in Ghana. Eighteen other applications are been processed.

The sub contractors are to provide subsidiary services in transportation in shipping and helicopter, logistics and others, News in Ghana, (2008).

Some new dimensions of logistics management are emerging and two very important new dimensions will be considered namely; Green logistics and Reversed logistics.

i Green Logistics

Environmental issues affect numerous logistical decisions throughout the value chain, as observed by Murphy *et al.*, (2000). According to Poist (1989) logistics can offer potential solutions to a variety of social issues such as consumerism, employee education and training, occupational health and safety, hunger and homelessness, environmental and ecological issues. He maintains that, logistics is especially well positioned to contribute to environmental and ecological control in terms of packaging, pollution control, energy and resource conservation.

Gathering from the contribution of a number of authors including;

Mackinnon A. (1995), Lambert and Stock (1993), Murphy *et al.*, (1995) Wu and Dunn (1995) and McIntyre *et al.*, (1998), Green logistics can be explained as the practice of logistics in such a manner as to protect the environment and also using logistics practices to correct environmental and ecological problems.

A study by Murphy *et al.*, (2000) to identify green logistics strategies been used by companies and an analysis of usage patterns revealed that, the most popular green logistics strategies been used currently are materials recycling and reduction of consumptions. According to the study, over eighty percent (80%) of the respondents are using recycling and reduction in consumption as green logistics strategies.

The least used strategy as per the findings of the study is encouraging greater government involvement /regulation; this is currently used by about fifteen percent (15%) of the

respondents. This finding is an indication that environmental regulations can actually benefit a firm's performance and market competitiveness. For example, Japanese and German car manufacturers responded to more stringent fuel consumption standards by producing higher and more fuel efficient automobiles. U.S car manufacturers, by contrast, aggressively opposed these fuel consumption standards of- a stance that ultimately wasted billions of dollars and weakened their competitive position, Porter *et al.*, (1995).

The study further indicated three strategies in the redesign of logistical systems, increased education and training and rejecting supplies lacking environmental concerns, are likely to be added in the future as green strategies, as expressed by at least thirty percent (30%) of the responding organization, Muller (1992).

Some of the implications of the study as pointed out by the authors; Murphy *et al.*, (2000) explained that:

- i. Firms that are more intensely committed to environmentalism consistently manifest this commitment through heavier usage of various specialized green strategies in addition to the more universal ones. For instance, companies placing high importance on environmentalism and having formal or written environmental policies are much more likely to conduct environmental audits and publicize environmental efforts and accomplishment, among others.
- ii. Firms that are more committed to environmental issues tend to rely upon a comprehensive set of green strategies rather than just one of several. As result, it appears that a sincere commitment to environmentalism consists not only of words, but a tangible set of strategic actions as well.

Closely related to Green logistics is Reverse Logistics.

REVERSE LOGISTICS

Reverse Logistics Association (2009) defines Reverse logistics as all activities associated with a product/service after the point of sale, the ultimate goal is to optimize or make

more efficient after market activity, thus saving money and environmental resources (Wikipedia, 2009).

Reverse Logistics is another environmental topic that has been receiving increased attention in recent years. According to Kopecki *et al.*, (1993), reverse logistics refers to the process involved in reducing, managing and disposing of hazardous and non-hazardous waste from packaging and products.

The growth and interest in Reverse Logistics is very likely to continue in the future as firms have come to recognize reverse logistics as a key component of the total logistics management process in much the same way as it true for inbound and outbound logistics.

According to Gooley (1998) today, companies such as Xerox, Eastman Kodak, Mobil, Hewlett Packard, Sears and Home Depot are taking a proactive value seeking approach to Reverse logistics, rather than simply a reactive one.

Moreover, Marien (1998) observes that a reverse logistics programme combined with source reduction practice, can be used to increase competitiveness and gain a competitive advantage.

Similarly, Blumberg (1999), estimates the current worldwide market for reverse logistics to be grater than US \$20 billion and further suggests that Reverse Logistics will become a major business opportunity in the very near future.

Lysons *et al.*, (2006) maintain that, the two principal drivers of interest in reverse logistics has been the increased importance attached to the environmental aspects of waste disposal and recognition of the potential returns that can be obtained from the re-use of products or parts or the recycling of materials. Reverse logistics may also apply to goods sent to distributors on a sale or return basis, unused materials to be returned to stores from contracts or projects sites or from sub-contractors.

LOGISTICS AND GLOBAL ECONOMIC RECESSION

An article by Supply chainBrain.com (2009) titled “Peering through the Fog of Recession to Spot Opportunities in Asia Pacific” states that the assertion that China and the rest of Asia pacific region would take on the responsibility for driving global economic growth no longer holds.

Recent economic numbers according to the article, from some of those countries have been as bad as figures from anywhere else in the world. For example, Singapore’s government now expects its economy to shrink by two to five percent (2 – 5%) over the next twelve (12) months; Singapore has been savaged by the drop in consumer demand for its re-export services, the crash in the chemical sector and a fall in sea and air traffic.

Although the port of Singapore reported an overall rise of seven percent (7%) in container traffic during 2008, the single month of December saw a fourteen percent (14%) fall. The experience of Singapore’s changing airport was similar, with a two percent (2%) fall in cargo volume for the whole of 2008, but monthly year on year declines of fourteen point two percent (14.2%) in November and twenty one point four percent (21.4%) in December.

Japan’s recent performance has been worse. Japan has seen its export, fall by a third. Companies such as Sony, Toyota and Canon are under acute pressure to reduce production. The article maintains that, in spite of the devastating effect of the global economic crisis, powerful economies such as Singapore and Japan are changing their competitive position and also, the wider Asian supply chain continues to evolve.

A reshaping of the Chinese and other pacific economies is anticipated, and this would imply huge opportunities for the development of new types of logistics services in the Asian pacific region, Supply Chain Brain.com (2009).

2.11 THE CONCEPTUAL FRAMEWORK

The conceptual framework used in this study is a diagrammatic representation of the topic of study. It presents a vivid picture of the prospects and challenges of logistics companies in Ghana.

The diagram provides a list of possible areas of prospects for logistics companies, these include; political stability of Ghana, the economic environment, the availability of market for logistics services, and the infrastructural development the country has so far achieved.

A number of challenges that logistics companies face in Ghana are also outlined in the diagram some of which are the state of the road infrastructure, the rail system, the ports and harbours, the telecommunication, the warehousing facilities, the state of the information and communication technology, the availability and reliability of social amenities, the economic environment.

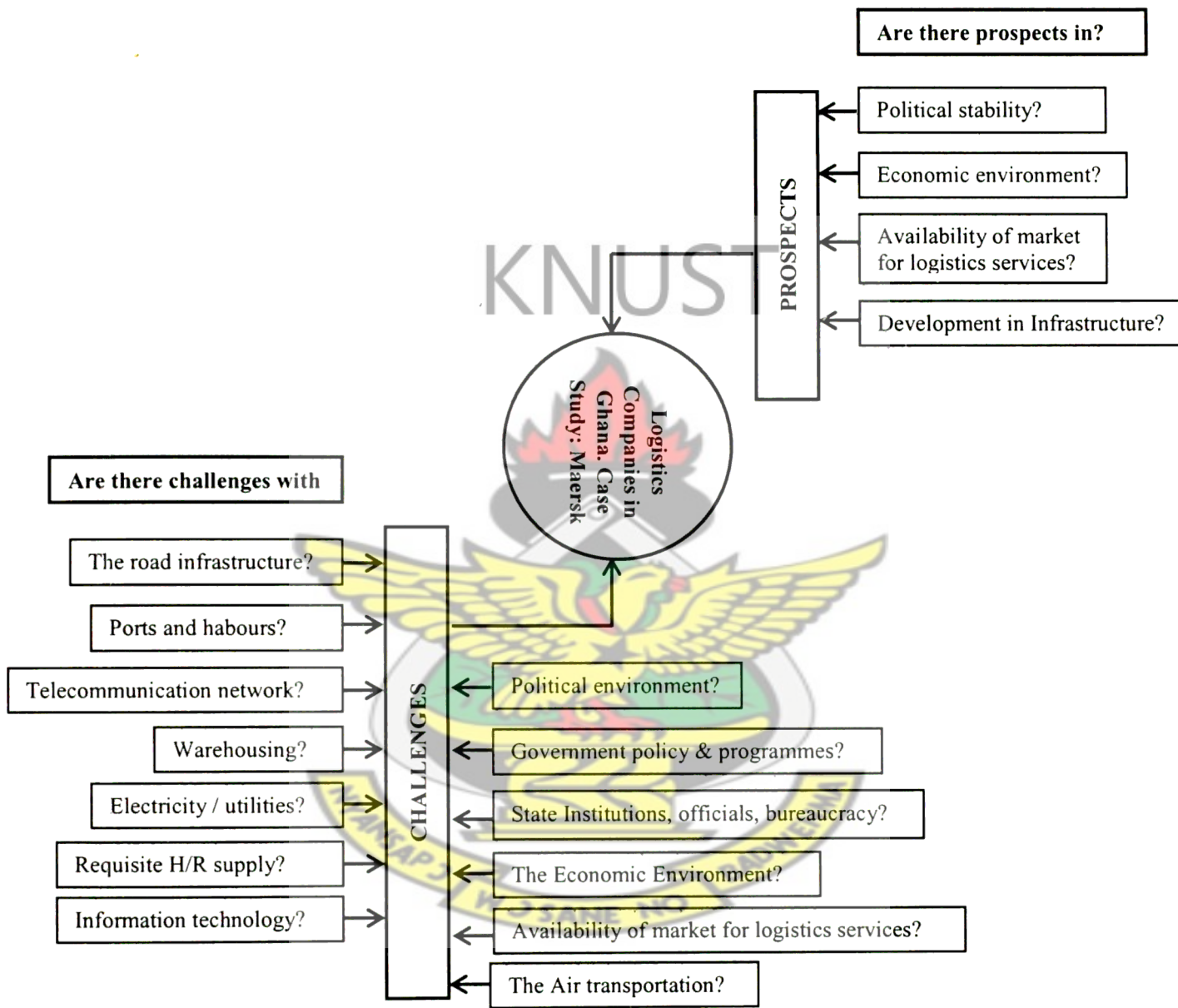
The conceptual framework is expected to yield the following benefits;

- i. Help those who will make use of the research document to see at a glance what the study is all about.
- ii. Assist the author to design a good research instrument since the diagram represents a summary of all the essential elements of the study.
- iii. Make it easy for the author to maintain focus in course of conducting the study since the author is able to remember diagrams easier than words.
- iv. The simplicity of the diagram makes the understanding of the concept of the study less difficult.

The conceptual framework is the author's field study, 2009.

Below is the conceptual framework.

Figure 2.1: The conceptual Framework



Source: Author's field study, 2009.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter is the research methodology. Its contents include; the organizational profile of Maersk logistics Ghana limited, the research design, the research population, research instruments, the method of data collection as well as the method of data analysis. Also considered in this chapter are issues of the validity and reliability of the research, ethical issues are also considered.

3.2 RESEARCH DESIGN

This study made use of case study to find answers to the research questions. This strategy, involves making empirical investigation of Logistics business in the Ghanaian economic set up. As pointed out by Morris and Wood (1991) “The case study will be of particular interest if one wishes to gain a rich understanding of the context of the research and the processes being enacted”.

Case study was resorted to because it stands a better chance of helping the researcher investigate questions under real life conditions from one of the leading players in the Logistics and supply chain businesses. Questionnaire was the instrument used in collecting the data.

A single case; Maersk Ghana Limited was used in this study. This was because Maersk Ghana Limited in a very unique way embodies most of the business activities conducted by Logistics Companies in Ghana.

Maersk Ghana is renowned in its business activities of container sea and land transport, integrated supply chain management solutions, warehousing, including ocean freight, air freight and landside services. Using Maersk Ghana Limited therefore, provided a unique opportunity to obtain valuable information on Logistics business in Ghana probably more than one could find in any other logistics company in Ghana.

It is worth mentioning that in choosing this strategy of research design, the researcher was not oblivious of the associated short coming such as limited basis for generalization and its “unscientific” feel. Having this potential shortcoming at the back of the researcher’s mind, informed the choice of questionnaire items. Moreover, the choice of a renowned organization such as Maersk Ghana was with the aim of reducing possible biases and shortcoming as much as practicable. This is because, Maersk as an organization has a huge positive corporate reputation, which it might work hard to protect and not compromise by providing inaccurate or misleading information.

3.3 THE RESEARCH POPULATION AND THE PROCEDURE OF QUESTIONNAIRE ADMINISTRATION

The research population is the management and staff of Maersk Ghana Limited. The size of the population was forty (40), made up of senior managers, departmental managers and other staff. Since the research population was quite small, the entire population was used for the purpose of this exercise. Ten (10) questionnaires were given to the managers and thirty (30) to the other staff.

The questionnaires administered to the managers, were slightly different from that of the other staff in that it had additional questions that requested information on the profile of the organization.

3.4 RESEARCH INSTRUMENT

Questionnaire was used as the instrument for data collection. Before pilot testing, the instrument for data collection was reviewed by the researcher’s supervisor. The comments of other lecturers as well as colleague students influenced the review of the research instrument. With suggestions made on the structure, representative nature and suitability of the questionnaire items, the expectation is that content validity would be ensured.

The questionnaires were pilot tested with the aim of fine tuning the item covered by the research instrument. It was also anticipated that, the pilot test would assess the validity of

the questions and the reliability of data collected. The respondents of the pilot test were asked to share their opinion on the strengths and short-comings of the questionnaire; the clarity of the instrument, how long it took to complete the questionnaire, if there were omissions of very important areas, which question the respondents found uncomfortable in answering and any other comments.

In all ten respondents, from Maersk Ghana, at the Kumasi, office were used for the pilot.

In this study, self-administered questionnaires were used; these were mostly hand delivered.

The questionnaire items included open ended questions and also closed ended questions. Some of the questions expected the respondents to list certain factors or items, there were others which wanted the respondents to rank, categorize, rate and quantify the items of the response.

Some of the closed ended questions requested just Yes or No answer. Some of the questionnaire items wanted the respondents to rate a situation on a scale of Very Good, Good, Quite Good, Poor, and Very Poor.

Some of the questionnaire items also provided space for the respondent to record his/her opinion on certain situations. The questionnaire items that requested record on Maersk's organizational profile provided a range of five (5) years period against which the data were to be recorded.

The questionnaire items centered on the following issues;

1. The conduciveness of Ghana's Economic Environment for Logistics companies.
2. The difficulties that logistics concerns face in Ghana.
3. The performance of Maersk Ghana Limited over the last five years.
4. Recommendations on measures that should be adopted to improve the performance of Logistics companies in Ghana.

3.5 DATA COLLECTION PROCEDURE

Both the pilot and main data collection were done by hand delivery. Forty (40) questionnaires were administered in all. Ten (10) of these were allocated to the managers and thirty went to the other staff.

Ten questionnaire were allocated to the managers because the researcher was informed by the head office of Maersk Ghana Limited that there were few senior managers of the company and ten (10) questionnaires were enough for all the managers. The remaining thirty was allocated to the other staff.

The thirty(30) was enough to take care of almost all the other staff members. Due to the relatively small number of staff, the study used the entire staff population of Maersk logistics Ghana limited in Tema as its sample size.

3.6 METHOD OF DATA ANALYSIS

The study applied quantitative method to analyze the data collected. A numerical value was assigned to the response categories of the questionnaire items provided.

Using the number codes assigned to the questionnaire items, the scores obtained were used to produce a pie chart which was used to analyze whether Ghana's economic environment is conducive for logistics companies or not.

The responses provided were used to identify the difficulties that logistics companies face in Ghana and the possible opportunities that exist in Ghana for logistics companies.

Using the values obtained from the responses provided, the arithmetic means were derived and a standard deviation calculated. A cut off point was established and this was used to determine if a condition or factor created a favourable condition for logistics businesses or not. Mean scores lower than the cut off point indicate that a condition is not favourable for logistics companies but a mean score higher or equal to the cut off point is an indication that the condition been tested creates good condition for logistics companies in Ghana.

Pie charts were also used to present the analyzed information pictorially.

3.7 THE RESEARCH DESIGN AND THE RELIABILITY OF STUDY

To ensure that the data collection techniques and analysis procedure yield consistency in the research findings, the following measures were taken:

The approval and consent of the organization and the staff that participated in the study were secured before the research was conducted. This measure was taken to reduce or eliminate problems to validity that can occur from the respondent.

Information was collected at two (2) levels; managers level and other staff. This provided opportunity to compare and contrast the various responses from the different levels of the organization. Questions were framed in a way to avoid issues that the organization might uncomfortable providing answers to.

The questions were discussed with the researcher's supervisor and some student colleagues to ensure that the questions were actually conveying the intention of the researcher.

3.8 THE RESEACH DESIGN AND THE VALIDITY OF THE STUDY

The following measures were taken by the researcher to ensure that the research findings actually reflected what the researcher intended to measure.

The research objectives were clearly defined to avoid ambiguity and distortions.

The items of the questionnaire were reviewed and fine tuned to avoid the situation whereby the questions are misunderstood.

Respondents were contacted on telephone to find out if they were facing any difficulty understanding the questions. The data analysis was carefully done to ensure that errors were minimized or eliminated in analyzing the data.

The AP Moller-Maersk Group is also into oil and gas business. Some of the group's activities in oil and gas business are; transportation of crude oil, refined products and liquefied gases. Support to the off shore oil industry operation of drilling rigs, exploration and production of oil and gas. Other related services include; maintaining, servicing and securing oil and gas exploration and production activities.

With respect to shipping and off shore activities, the AP Moller-Maersk Group provides a number of services which include; tankers, crude carriers, gas carriers, cars carriers, operation of floating production, storage and offloading.

Other activities are; operation of jack-up based production units, tow- out and installation of offshore installation and other chartering services. The Group is also into the business of retail of food and other merchandise goods.

Other areas of operation of the group include maintenance of ship yards, ship building, repair and maintenance, container manufacturing, ferry services, harbour services, ocean services, coastal services, and also ocean towage and salvage services. In fact the A P Moller-Maersk Group provides total logistics services.

The group recorded revenues of about US\$51,309.7 million during the financial year ended December 31, 2007, an increase of seven point two percent (7.2%) over 2006. The operating profit of the group was about US \$7,107.3 million during the financial year of 2007, an increase of twenty one point three percent (21.3%) over 2006. The net profit was US \$3,280.40 million in 2007 financial year, an increase of fourteen point six percent (14.6%) over 2006, Data Monitor Report, sited in EBScohost, (2007).

Maersk-Ghana, started operation in Ghana in 1991. Since then the development has been impressive. Maersk Ghana Limited is now the leading player in the Ghanaian container shipping market with offices in Tema, Takoradi, Kumasi and Accra, offering highly efficient container sea and land transport solution. Maersk Logistics provides integrated solutions for supply chain management, warehousing and distribution and convenient

freight forwarding services, including ocean freight, airfreight and landside services. Maersk Logistics.com (2008).

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CHAPTER FOUR

ANALYSIS OF DATA AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

The data collected on the field is analyzed and discussed in this chapter. Mean scores, standard deviation, cut off points and pie charts were used to analyze the data. The table presented below is used to show the mean scores, the standard deviation and the cut off points of some of the variables used in the study

Table 4.1: The mean scores, the standard deviation and the cut off points of some of the variables used in the study

Variable/item	Mean score	Standard deviation	Cut off point
Infrastructure	2.66	1.06	3.00
Social factors	2.50	1.31	3.00
Legal factors	2.46	1.12	3.00
Political factors	3.62	1.12	3.00
Economic factors	2.40	1.22	3.00

Source: Author's field study, 2009

The mean score was computed using the formula

$$\bar{X} = \frac{1}{n}(x_1 + x_2 + \dots + x_n)$$

Where \bar{X} is the mean score, X_1, X_2, X_n are the values in the set. n is the number of elements in the set.

The standard deviation θ was computed using the formula

$$\theta = \frac{\sqrt{(\bar{X} - X_1)^2 + (\bar{X} - X_2)^2 + \dots + (\bar{X} - X_n)^2}}{n}$$

θ is standard deviation

X, X_1, X_2, X_n have already been defined. The rating used in this study is on a scale of very good/very high, good/high, quite good/ quite high, poor/low, very poor/very low

Table 4.2: Rating of variables used in the study

Rating	Score
Very good	5
Good	4
Quite good	3
Poor	2
Very poor	1

Source: Author’s field study, 2009

The cut of point was a score used as a threshold for favourable condition. Any score equal or higher than the cut off point is an indication that the variable under investigation creates a favourable condition for logistics companies. A score lower than the cut off point is an indication that the variable in question does not create a favourable condition for logistics business.

The cut off point is the average score of the maximum available score and the minimum score. For example on the range of very good to very poor, very good which is the highest rating has a score of 5. Very poor which is the lowest rating has a score of 1.

The cutoff point = $\frac{5+1}{2} = 3$

The data collected was analyzed as follows:

4.2 HOW DOES MAERSK LOGISTICS GHANA LIMITED RATE THE INFRASTRUCTURE IN GHANA?

Out of the forty (40) questionnaires administered, thirty-six (36) responded which represents ninety percent (90%) response rate.

In all thirteen (13) females and twenty three (23) males responded to the questionnaire items. From the results obtained from the thirty six respondents, twenty eight percent (28%) of the responses indicated that the road sector in Ghana was good for logistics business, seventy two percent (72%) of the responses stated that the road network in Ghana was poor for logistics business.

The computed mean score for the road sector was 2.56 and the cut off point was 3, the standard deviation was 1.54.

The scores obtained indicate that the road system in Ghana is poor and not conducive for logistics business. The standard deviation of 1.54 is an indication there was little variation in the responses provided.

The responses obtained for the rail sector indicated the following:

Eleven percent (11%) of the responses rated the rail system as good, forty four percent (44%) indicated that the rail sector was poor and forty five percent (45%) indicated that the rail sector was very poor. The mean score for the rail system was 1.78 and the cut off point was 3.00, the standard deviation was 1.36.

The rail system, according to this finding is poor and not favourable for logistics business and the standard deviation shows that the respondents' assessment of the status of the rail system in the country did not vary significantly

For the port facilities and services, thirty percent (30%) of the respondents indicated that the port facilities and services were good. Twelve percent (12%) stated that it was quite good; forty eight percent (48%) was of the view that it was poor and ten percent (10%) mentioned that it was very poor. The mean score for the ports was 3.07 and the cut off point was 3.00, the standard deviation was 1.25.

The outcome of the study indicated that the port facilities and services in Ghana are quite good and conducive for doing logistics business in the country. There was no significant variation in the responses as indicated by the standard deviation.

With respect to the air transportation services, the respondents rated international airline services to be better resourced and managed than internal air transport services. Twenty three percent (23%) of the responses indicated that air services in Ghana were good, fifty six percent (56%) was of the view that they were quite good, eleven percent (11%) indicated that the air services were poor and ten percent (10%) indicated that they were very poor.

The mean score for the airline services was 2.89, the cut off point was 3.00 and the standard deviation was 1.18.

The findings indicated that air transportation in the country is bad and not conducive for effective logistics business. The standard deviation shows that the variation in the responses was insignificant.

Concerning the availability and quality of the services of public utilities, forty one percent (41%) of the respondents was of the view that the availability and reliability of public utilities was quite good, fifty nine percent (59%) on the other hand indicated that it was poor. The mean score was 2.41 and the cut off point was 3, the standard deviation was 0.51.

The findings show that the quality of utility services in the country is poor and not favourable for logistics companies. The standard deviation indicates that the respondents did not vary significantly with regard to this view.

In terms of the cost of renting business premises, ten percent (10%) of the responses indicated the cost of rent of business premises was good, forty five percent (45%) was of the view that it was quite good and another forty five percent (45%) indicated that it was poor. The mean score obtained was 2.67, the cut off point was 3 and the standard deviation was 0.88.

The result of this finding suggests that the cost of renting premises for business purposes is high and not conducive for logistics business. The variation of responses was insignificant.

For the telecommunication sector, thirty nine percent (39%) of the responses pointed out that the telecommunication was good, forty five percent (45%) indicated that it was quite good and sixteen percent (16%) was of the view that it was poor. The computed mean score was 3.22 and the cut off point was 3, the standard deviation was 0.85.

The findings indicate that the telecommunication sector of the country is good and favourable for doing logistics business. There was little variation in the responses with respect to the status of the telecommunication sector as indicated by the standard deviation.

With respect to the Information and Communication Technology (ICT), eleven percent (11%) of the responses showed that the state of ICT was good, forty four percent (44%) was of the view that it was quite good and forty five percent (45%) indicated that it was poor. The mean score was 2.67, the cut off point was 3.00 and the standard deviation was 0.88.

The state of the ICT in the country is poor, according to the findings of the study, and the standard deviation shows that there was no significant variation in the responses provided.

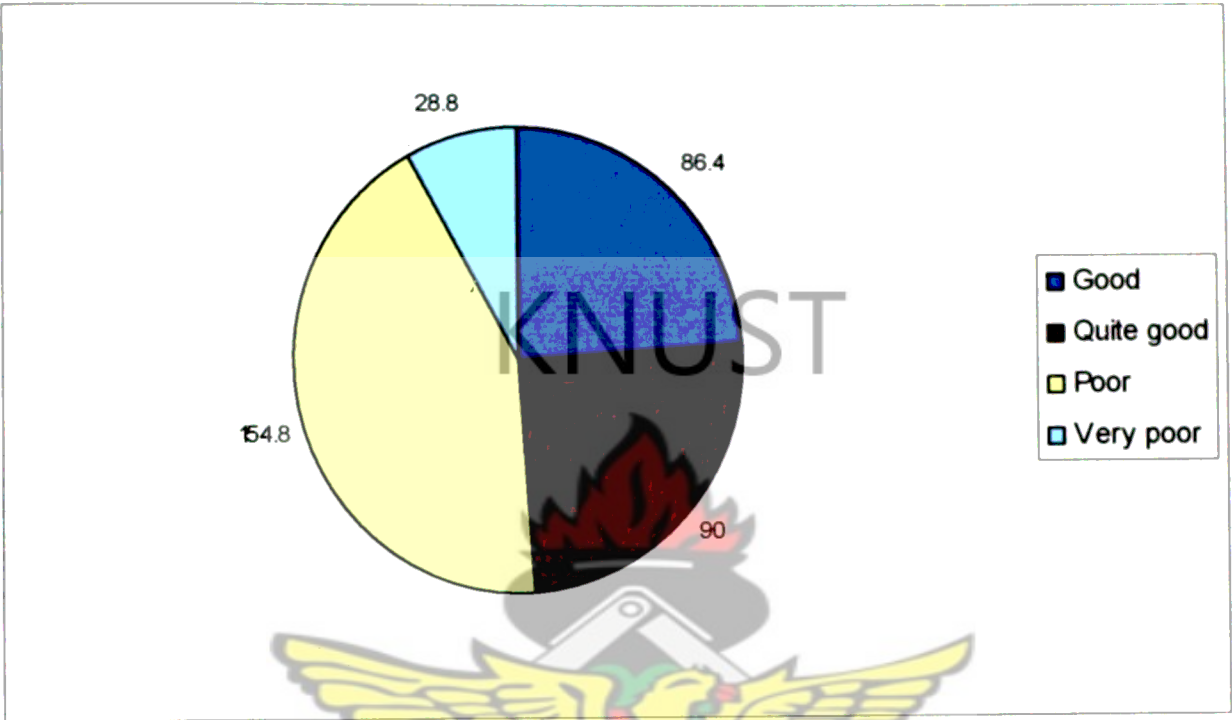
Taking the entire infrastructure as a unit, the average of the various mean scores was 2.66 and the average of the standard deviations was 1.06, the cut off point was 3. The implication of the scores obtained is that the infrastructure in Ghana is bad and does not create a favourable business environment for logistics business to thrive. The mean score of 2.66 was lower than the cut off point of 3.00.

The standard deviation of 1.06 is an indication that there was little variation in the responses provided.

In a gist the outcome of the case study indicated that the major infrastructure and facilities such as the road, the airlines, the rail system, public utilities, cost of rent, the ICT were of poor standard as far as logistics business was concerned. It was only the ports and the telecommunication which were rated to be quite good for the business of logistics in Ghana.

A pie chart is used to depict how Maersk Logistics Ghana Limited rates the state of infrastructure in Ghana.

Figure 4.1: The pie chart used to show how Maersk Logistics Ghana Limited rates the state of infrastructure in Ghana



Source: Author’s field study, 2009

Taking the averages of the percentages obtained;

Good	-	24%
Quite good	-	25%
Poor	-	43%
Very poor	-	8%

Translating the percentages into degrees

24%	-	86.4
25%	-	90
43%	-	154.8
8%	-	28.8

4.2.1 Maersk Logistics’ rating of social factors that affect logistics business in Ghana

On the question of corruption;

Yes attracts 1 point

No attracts 5 points

Very high rate of corruption is scored 1

High 2

Quite high 3

Low 4

Very low 5

The responses provided were as follows;

Seventy eight percent (78%) of the respondents indicated that Maersk Logistics often suffers from the activities of corrupt state officials, twenty two percent (22%) indicated that Maersk does not suffer from corrupt state officials. The mean score for this response was 1.89, the cut off point was 3.0 and the standard deviation was 2.29.

The findings indicate that logistics companies suffer from the corrupt practices of certain state officials and this practice does not create favourable environment for logistics businesses to thrive. There was little variation in the responses as captured by the standard deviation.

On the rate of bribery and corruption against logistics companies in Ghana, forty four percent (44%) of the respondent was of the view that bribery and corruption against logistics companies in Ghana was very high. Thirty three percent (33%) indicated that it was quite high, twenty three percent (23%) was of the view that it was low. The mean score was 2.33, the cut off point 3.00 and the standard deviation was 0.87.

According to the findings bribery and corruption against logistics companies is high in Ghana and this does not create good business environment for logistics companies. The

standard deviation shows that the variation in the responses with respect to this opinion is insignificant.

About the level of awareness of business people in Ghana with respect to the importance of logistics management in business success.

Forty three percent (43%) of the respondents indicated that the level of awareness was high, twenty nine percent (29%) was of the view that it was quite high, fourteen percent (14%) indicated that it was low another fourteen percent (14%) was of the view that it was very low. The mean score was 3, cut off point 3 and standard deviation was 1.22.

According to the findings, the level of awareness of business people in Ghana with respect to the importance of logistics management in business success is high, and this is an indication that there is a potential market for logistics business in Ghana. The standard deviation does not show significant variation in the responses provided.

With respect to trustworthiness of business partners, twenty five (25%) indicated that the level of trustworthiness of business partners was high, thirty eight percent (38%) was of the view that it was quite high, thirteen percent (13%) thought it was low and twenty four (24%) was of the view that it was very low. The mean score was 2.63, the cut off point was 3, and the standard deviation was 1.13.

The findings imply business partners in Ghana are not trustworthy and this does not create a conducive business environment for logistics companies in the country. The standard deviation shows that there was little variation in the responses obtained.

Regarding the general business ethics in Ghana, seventy eight percent (78%) of the respondents thought that the general business ethics in Ghana was quite good, eleven percent (11%) said it was poor and another eleven percent (11%) was of the view that it was very poor. The mean score was 2.67, the cut off point 3 and the standard deviation 1.06.

The general business ethics in Ghana according to the findings is not good and does not favour logistics business in the country. The standard deviation shows that the variation in the responses was insignificant.

Putting all the sub-units under social factors together the average of the mean scores was 2.50 and the average standard deviation was 1.31.

In summary, the outcome of the study on the social factors in Ghana that affect logistics business indicated the following;

Generally, the social factors in Ghana are not conducive for logistics business, logistics companies often suffer from the actions of corrupt officials and the rate of bribery and corruption is high.

Trustworthiness of business partners was rather low and the general business ethics in Ghana is poor. It was only the level of awareness of business people in Ghana about the importance of logistics management that recorded a positive score with respect to the conducive business environment for logistics companies in Ghana. The average percentages under social factors are:

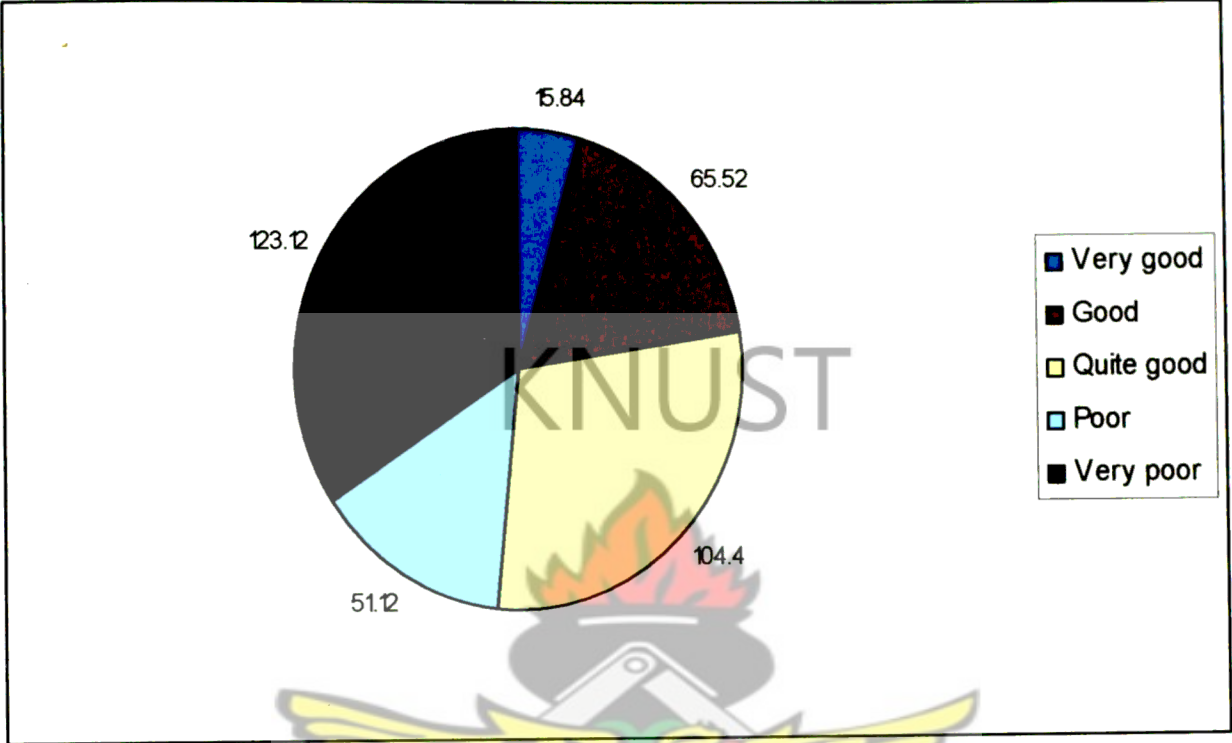
Very good	-	4.4%
Good	-	18.2%
Quite good	-	29%
Poor	-	14.2%
Very poor	-	34.2%

Expressing the percentages in degrees

4.4%	-	15.84
18.2%	-	65.52
29%	-	104.4
14.2%	-	51.12
34.2%	-	123.12

Using pie chart to illustrate Maersk Logistics’ rating of the social factors in Ghana

Figure 4.2: Pie chart to illustrate Maersk Logistics’ rating of the social factors in Ghana



Source: Author’s field study, 2009

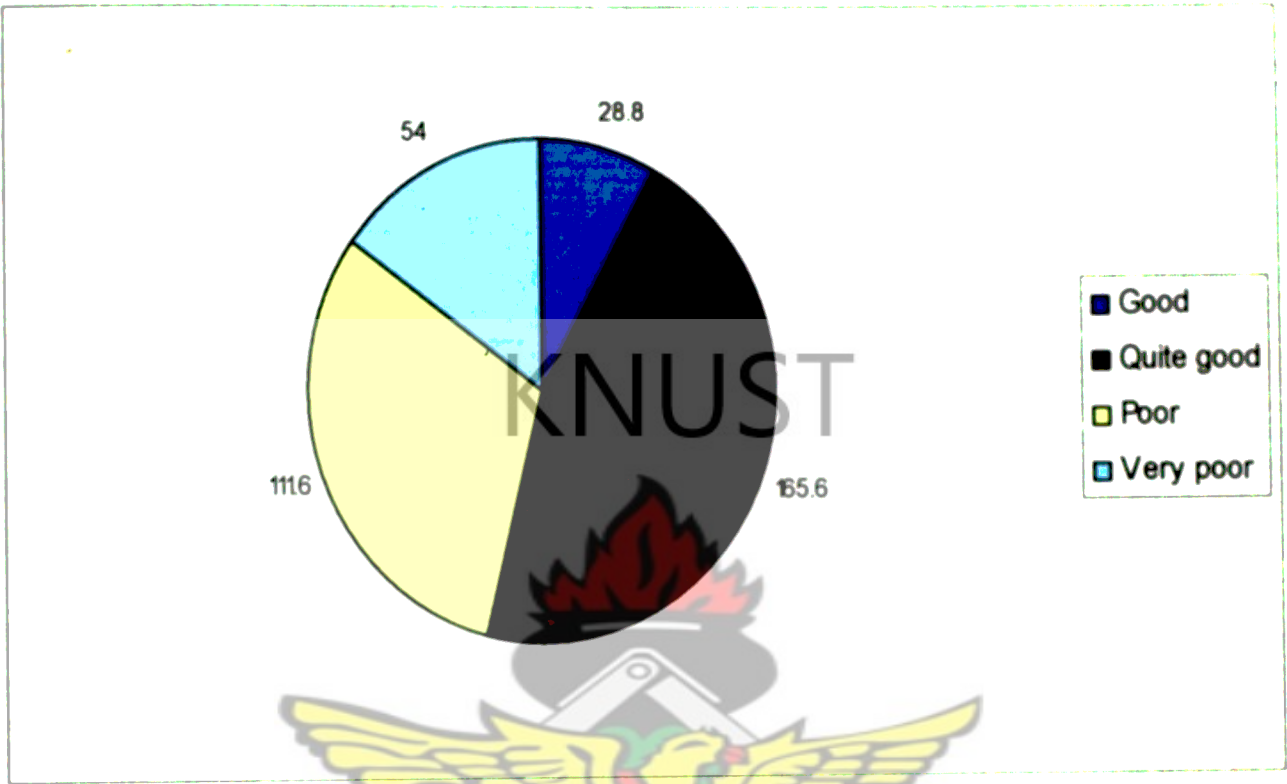
4.2.2 How does Maersk Logistics Ghana Limited rate the legal system in Ghana?

In terms of the creation of conducive business environment; the data gathered on the above subject indicated that, eight percent (8%) of the respondents thought Ghana’s legal system was good with respect to the creation of favourable business environment for logistics business. Forty six percent (46%) was of the view that the legal system was quite good, thirty one percent (31%) said the legal system was bad and fifteen percent (15%) was of the view that it was very bad.

The mean score computed was 2.46, the cut off point 3 and the standard deviation 1.12. The mean score of 2.46 is lower than the cut off 3, this implies that the legal system in Ghana does not promote the needed business climate to facilitate the thriving of businesses including logistics business.

Pie chart illustrating the findings on the legal system in Ghana.

Figure 4.3: Pie chart illustrating the findings on the legal system in Ghana



Source: Author’s field study, 2009

Expressing the percentages in degrees

8%	-	28.8
46%	-	165.6
31%	-	111.6
15%	-	54

4.2.3 To what extent does politics in Ghana affect logistics companies?

Maersk logistics respondents indicated the following:

Thirteen percent (13%) of the respondents was of the view that interference of political parties in their activities was high, thirty one percent (31%) indicated that it was quite high, thirty eight percent (38%) said it was low and eighteen (18%) indicated that it was

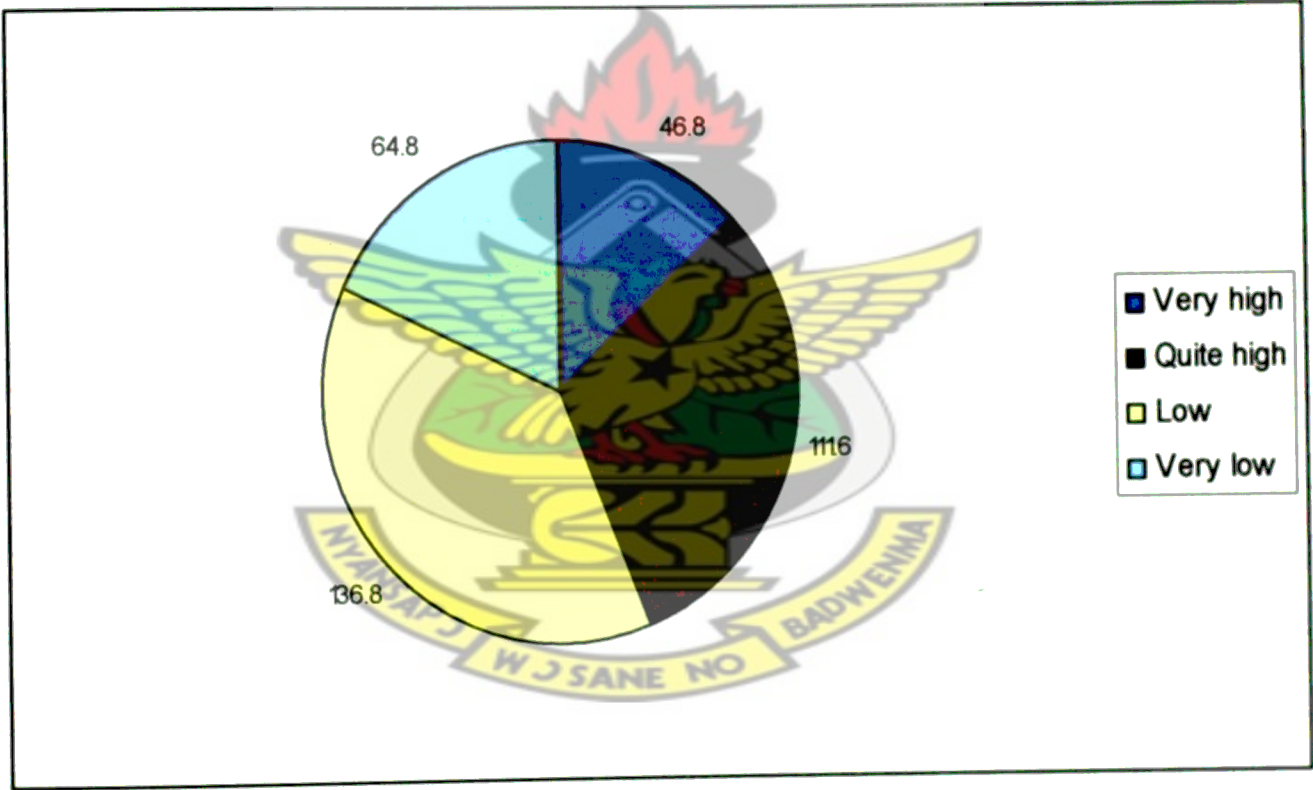
very low. The mean score was 3.62, the cut off point was 3 and the standard deviation was 1.12.

The result thus obtained is an indication that political factors do not have much negative effects on the businesses of logistics companies in Ghana.

Presenting the above information using a pie chart;

13%	-	46.8
31%	-	111.6
38%	-	136.8
18%	-	64.8

Figure 4.4: A pie chart used to show the effects of political factors on the businesses of logistics companies in Ghana



Source: Author’s field study, 2009

4.2.4 The rating of Maersk Logistics Ghana Limited of the Economic factors in Ghana with respect to good business environment for logistics companies.

Economic factors on which data was collected were; the banking sector, inflation, rate of interest, exchange rate and the cost of doing business.

Fifty percent (50%) of the respondents was of the view that the banking sector in Ghana was doing well and it was good for logistics companies. Thirty eight percent (38%) indicated that it was quite good, twelve percent (12%) was of the view that it was bad.

With respect to inflation, twelve percent (12%) indicated that the rate of inflation was low, another twelve percent (12%) said the rate of inflation was quite high, fifty percent (50%) was of the view that inflation was high and twenty six percent (26%) indicated that inflation was very high.

For the rate of interest twelve percent (12%) of the respondents indicated that interest rate was quite high and eighty eight percent (88%) stated that interest rate was high. With respect to the exchange rate in recent time, forty two percent (42%) indicated that exchange rate was poor and fifty eight (58%) was of the view that the exchange rate was very poor.

In relation to the cost of doing logistics business in Ghana, sixty seven percent (67%) was of the view that the cost was high and thirty three percent (33%) indicated that the cost was very high.

Considering the prospects of logistics business in Ghana, sixty seven percent (67%) was of the view that logistics business has high prospects and thirty three percent (33%) indicated that the prospect was quite high. On the question of the availability of qualified human resource for logistics business in Ghana, fifty four percent (54%) was of the view that qualified human resource availability was quite good, eighteen percent (18%) thought said it was good and twenty eight percent (28%) indicated that it was poor.

Computed average score for the economic sector as a whole; mean score was 2.4 the cut off point was 3 and the standard deviation of 1.22. The result of the information gathered on the existing economic factors in Ghana with respect to logistics business indicates that apart from the fact that the respondents were hopeful that Ghana held prospects for logistics business and the banking sector in Ghana which was rated as quite good, all the other factors could not meet the cut off point.

In a nutshell, the economic environment in Ghana is not conducive for logistics companies.

Using a pie chart to illustrate the above information;

Average percentage		
Good	-	21%
Quite good	-	21.3%
Poor	-	37%
Very poor	-	20.7%

Expressed in degrees		
21%	-	75.6
21.3%	-	76.68
37%	-	133.2
20.7%	-	74.52

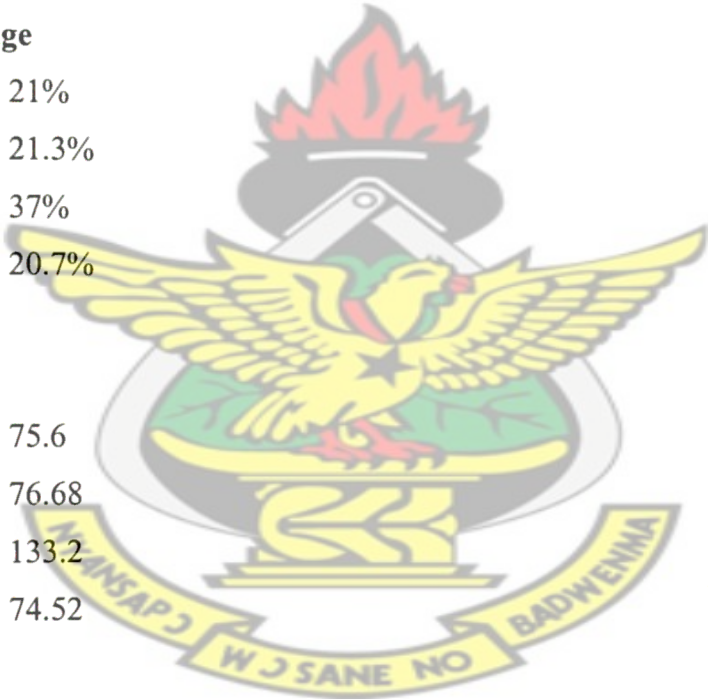
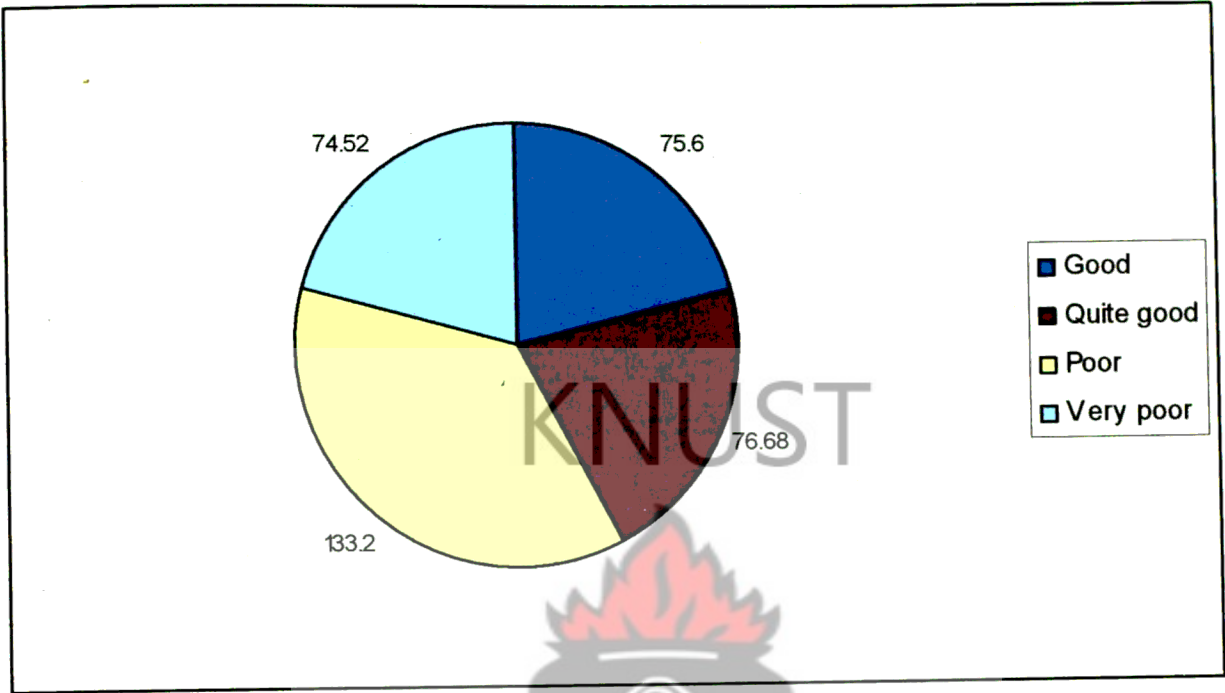


Figure 4.5: A Pie chart used to show the rating of Maersk Logistics Ghana Limited of the Economic factors in Ghana



Source: Author’s field study, 2009

4.2.5 Questionnaire on what should be done to improve the performance of logistics companies in Ghana

The recommendations made were varied and were centered on what the government should do to improve the condition of logistics businesses, what the business sector should do, what logistics companies should do and what other things should be done to improve the performance of logistics companies.

What should the government do?

The respondents recommended that government should ensure processes at the ports are streamlined and that unnecessary bureaucratic processes are eliminated when making shipments and clearing of goods at the port.

Sixty percent (60%) of the respondents recommended streamlining the processes at the ports including putting in place measures to reduce bribery and corruption at the ports.

Twenty percent (20%) of the respondents wanted the government to introduce logistics related courses in schools, colleges and universities. Another twenty percent (20%) recommended that government should come out with clear legislation on the activities of logistics companies and make these laws available to all especially the players in the logistics industry.

What should businesses do?

Forty percent (40%) of the respondents recommended that businesses should provide accurate information to the logistics companies to enable logistics companies serve their clients better. Another recommendation was that businesses should document information about their business.

Twenty five percent (25%) of the respondents recommended that the business organizations should focus on their core business activities and outsource the logistics activities. Twenty percent (20%) suggested that business organizations should be transparent in their business dealings with the logistics companies. Fifteen percent (15%) of the respondents advocated the formation of well organized business associations.

What should logistics companies do?

Thirty eight percent (38%) of the respondents recommended that logistics companies should employ qualified and skilled human resource. Fifty percent (50%) advocated the provision of adequate training and education of employees to upgrade their technical competencies and professionalism. Twelve percent (12%) recommended that logistics companies should identify the value activities in a supply chain and concentrate on these.

What other things should be done?

Thirty seven percent (37%) of the respondents did not answer the above question. Thirty three percent (33%) of the respondents recommended that the government should facilitate more education for logistics companies in the area of custom laws and the consequences of default. Thirty percent (30%) recommended that ports authorities should put in place measures to reduce bureaucracies at the ports.

Questionnaire on the performance of Maersk Logistics Ghana Limited over the last five (5) years;

The research also sought to find out the performance of Maersk Logistics Ghana Limited from 2004 to 2008. The areas to be covered were; performance in terms of market share, employment creation, staff training, opening of branches, computerization of operation, corporate net profits, delivery of shipments, provision of warehousing facilities, and number of customers served annually.

Unfortunately access was not given to the above requested information. The country manager of Maersk Logistics Ghana Limited explained that such information falls under classified information and this is not accessible to the public. The release of such information according to the manager could amount to causing a blunder, a risk which was too high for him to take.

No persuasion was able to convince him to grant access to the information. As a result of this challenge, data could not be collected and analyzed on the performance of Maersk Logistics over the last five (5) years.

The access to the information would have afforded the researcher the opportunity to use secondary data to study the trend of performance of Maersk Logistics over the years and that would have provided another opinion on how logistics companies were faring in Ghana.

In the absence of this data, discussion of the research finding will be based only on the primary data collected.

4.3 SUMMARY OF FINDINGS

The analyzed data produced the following findings:

Many factors in Ghana do not make Ghana's economy conducive for logistics businesses. Out of five variables studied under the conduciveness of Ghana's economy for logistics business only one namely political factor was rated to be fairly conducive for logistics

business. The rest of the factors namely, infrastructure, social, legal and economic failed to meet the threshold of conducive environment pegged at a cut off point. A summary of the mean scores, standard deviation and the cut off points are presented in table 4.1.

The information provided by the outcome of the study is that Ghana's economy does not provide a conducive business environment for the success of logistics companies. The study also found that the challenge of logistics companies in Ghana include infrastructure, social, legal and economic.

The infrastructural challenges comprised poor and inadequate road network, poor and inactive rail sector, poor airline facilities and services, inadequate and poor service of public utilities, high cost of rent for business facilities and poor and underdeveloped ICT sector.

The telecommunication and the ports were the only variables under infrastructure that were able to meet the cut off point. With a cut off point of 3.00 the mean score for telecommunication was 3.22 and that of the port was 3.07.

The challenges under the social factors included bribery and corruption, lack of trustworthiness of business partners of logistics companies, poor general business ethics. It was only the level of awareness of the importance of logistics companies by business people in Ghana which was able to meet the cut off point. The challenges of logistics companies in Ghana with respect to the legal system include speedy adjudication of commercial cases, the integrity of the administrators of justice and the protection of the rights and interests of logistics business.

The research findings indicated that the legal system in Ghana is not doing enough to protect the rights and interests of logistics companies in Ghana. Logistics companies in Ghana according to the findings of the study are faced with a number of challenges as result of certain economic factors, some of these are high rate of inflation, high interest rate, fast depreciating Ghana Cedis and high cost of doing logistics business.

The findings also revealed that in spite of all the challenges that logistics companies face in Ghana, the logistics industry has positive future prospects. The study also made available the recommendations that were made by the respondents which included streamlining the processes at the ports, taking measures to reduce bribery and corruption at the ports. The study of logistics courses in schools and also the provision of necessary laws that would guide players in the logistics industry.

Other recommendations were the need for businesses keeping and providing accurate information about the businesses, the importance of outsourcing logistics functions and ensuring transparency in business dealings. A recommendation was also made for businesses coming together to form well organized business associations.

A call was made on logistics companies to employ qualified and skilled human resource and also to invest in the education and training of their personnel. It was also recommended that logistics companies should concentrate on the value activities in the supply chain.

The findings of the study were used to identify the challenges that logistics companies face in Ghana, how conducive Ghana is for logistics business and the recommendations on ways to improve logistics activities in Ghana.

With respect to the prospect of logistics companies in Ghana, not much was identified as prospects. Though the ports, the telecommunication, political factors and the banking sector in Ghana were found to be quite good for logistics business, a lot of work need to be done before Ghana could become an attractive destination for logistics businesses.

4.4 DISCUSSION OF FINDINGS

The findings of the study are discussed under the following headings:

4.4.1 Ghana's economy is not conducive for logistics business;

The variables used to gauge the conduciveness of Ghana's economy for logistics companies were basic facilities and factors that are needed to facilitate logistics business. These facilities and factors include infrastructure, social factors, political factors, economic factor and legal factors.

The research revealed that Ghana's infrastructure is poor. Road, rail and air transportation face myriad of problems ranging from poor road and rail networks to inefficient airline services. Though the port was rated to be doing quite well, numerous concerns were raised about its operation, including unprofessional conduct of staff, unnecessary delays of business transactions, inefficiency, bribery and corruption. This finding about poor infrastructure in Ghana is a confirmation of an earlier study done by Amekudzi *et al.*, (2006) on the topic "transportation system sustainability, issues in high, middle and low income economics". According to the work done by Amekudze *et al.*, (2006) the transportation sector in Ghana is faced with problems of deplorable road conditions, poor vehicular maintenance, poor law enforcement and others.

Another study done by Dadzie (1990), attributed the problem of poor transportation infrastructure in Ghana to the short term outlook of planners and the ad-hoc strategy adopted in solving problems.

The telecommunication sector in Ghana according to the study was doing quite well. The improvement in the telecommunication sector could be as result of the liberalization of the sector to trigger competition.

An article by Overa (2005) indicates that since the telecommunication sector was liberalized in 1995, there has been a phenomenal growth in access to all phones and this

has changed the mode of doing business and has reduced both transaction and transportation cost of doing business.

The findings of the study concerning political parties and other political factors is quite encouraging, it is good and necessary that political parties should leave businesses alone to do their legitimate businesses. By so doing, the businesses will have confidence in the economy, investment will fly into the country and the private sector will actually serve as the engine of growth of the economy.

Much work needs to be done by the government, the private sector and individuals to address the problems of poor infrastructure, bribery and corruption and other negative tendencies which do not make Ghana an attractive business destination.

4.4.2 The challenges of logistics companies in Ghana.

The findings of the study pointed out a number of challenges that logistics companies face in Ghana, among which are;

- poor road infrastructure
- poor rail infrastructure
- poor air transportation
- bureaucracy and inefficiency at the ports
- bribery and corruption
- high rate of inflation
- high rate of interest
- poor exchange rate
- absence of the necessary legal framework to guide players in the logistics industry.

It can be seen from the list of challenges that it is quite a tall list. The problem with poor infrastructure appears to be a feature of less developed economies. Other studies conducted on the challenges of logistics companies in less developed countries found out that infrastructure was a major challenge to the developing countries. For instance, a

study conducted by Razzaque (1997) on the topic “challenges to logistics development: the case of a Third World Country – Bangladesh”.

One of the major challenges identified by the study was infrastructure, inadequate transport and telecommunication networks and poor port and related facilities were identified as the major factors hindering the development of logistics systems in that country. In the case of Ghana, another reason which might have contributed to poor infrastructure is the turbulent and instable political environment that characterized the history of the country from 1966 through to 1981. Another possible reason for the poor state of Ghana’s infrastructural development could be as Dadzie (1990) puts it, “the result of short term outlook of planners and the ad hoc strategy adopted in solving problems”.

The challenges that have to do with bribery and corruption, bureaucracy, inefficiency could be traced to dysfunctional social system. It is interesting why these negative tendencies are features of less development countries. The study by Razzaque (1997) also identified bureaucracy, bribery and corruption as some of the challenges that logistics companies faced in Bangladesh.

Another problem which is a challenge to logistics companies is Ghana’s weak economy. High rate of inflation, high rate of interest, poor exchange rate are some of the common features of Ghana’s economy. This seemed to have been worsened by the global credit crunch in recent times. Failure to set the right national priority and the mismanagement of Ghana’s economy by successive governments cannot be ruled out as possible causes of Ghana’s weak economy. Interestingly, Razzaque(1997) also found from his study that the economic system of Bangladesh was a challenge to logistics businesses. Razzaque attributed Bangladesh’s challenged economy to frequent changes in the government and governmental policies and also lack of understanding of the nature of the market economy and its management.

4.4.3 Discussion of the recommendations that were made to improve logistics business in Ghana

What should the government do to improve logistics business in Ghana?

A good number of the respondents, about twenty percent (20%) recommended that the government should help increase the knowledge base of Ghanaians in logistics. To this end, a recommendation was made that logistics related courses should be introduced in schools and colleges.

Increasing logistics education will indeed increase the level of awareness of Ghanaians in the critical role that logistics management could play in success of a business. Another recommendation made to the government was streamlining processes at the port and reducing the number of processes involved in shipping and cleaning of goods at the port.

In a situation where there are no clear cut procedures, confusion is created, therefore streamlining the procedures and making people aware of what should be done will go a long way to reduce if not eliminate the frustration people suffer when doing business at the ports.

With respect to the recommendation on the processes involved in shipping and clearing of goods at the port, it should be realized that the more it takes to go through procedures the more corrupt the system becomes. There is therefore the need to eliminate unnecessary bureaucracies to facilitate faster rate of doing business and also to reduce bribery and corruption.

It is also necessary that appropriate legislation should be put in place and enforced not only for logistics business but for the entire business sector. When the right laws are made and also made available to those who are affected by them and more importantly when these laws are enforced, sanity will prevail in the business sector and business people will know what their rights and responsibilities are.

What should the business sector do to improve logistics business in Ghana?

Forty percent (40%) of the respondents identified lack of documentation and provision of inaccurate information by some businesses as a major problem. When information is not documented or documented wrongly it creates a lot of difficulties for both the author of the information and also those who make use of the information provided. For instance, logistics companies will not be able to offer the appropriate services to a business when the information provided is inaccurate or inadequate, a wrong address for example can create a lot of problem to both the giver and the user of the information.

The recommendation that business organization should focus on their core function and outsource the non-core functions is worth considering. A number of organizations in Ghana have realized the importance of concentrating on their core function and outsourcing the non core function to experts in that domain. However, the negative side of outsourcing should be considered critically and more importantly the core functions should be identified correctly so as not to plunge the company into a worse situation than it was in before the outsourcing.

The need for businesses to be transparent in their business dealings is a very important requirement for business success and mutual benefits. Whenever businesses keep their business partners in the dark on certain important issues, such issues might not be resolved and this may create problems for both businesses in the future. Moreover this situation may breed mistrust and suspicious which may further damage the business relationship thus leading to the eventual collapse of the business. The other side of transparency is that by being transparent a business partner may gain access to the business trade secrets and this could also adversely affect the business. It is the view of the researcher that in matters like this there should be a clear definition of a business relationship, the kind of information that should be shared and the kind of information that the businesses are not obliged to disclose.

What should logistic companies do to improve logistics business in Ghana?

A recommendation was made that logistics companies should employ qualified personnel. The need for skilled human capital and its importance to success cannot be over emphasized and this need is not limited to logistics companies. From the information gathered in course of the study it was observed that Maersk logistics Ghana Limited has a crop of highly qualified personnel but these are few, and a good number of less qualified personnel are employed to make up for the shortage. The recommendation that logistics companies should employ qualified human resource when heeded to by these companies will lead to a lot of improvement and efficiency in these companies.

It was also recommended that logistics companies should invest in the training and education of their employees. It is necessary that the knowledge, skills and competencies of staff of organizations should be updated to meet the current requirements. By so doing these organizations will be abreast with current trend of doing things thus making them competitive.

The cost for education and training of staff may be high but the output of a well trained staff will be far more than enough to pay for the cost, all other things being equal.

Another recommendation made was that logistics companies should concentrate on the value activities in the supply chain. For logistics companies to maximize their value, they should be able to clearly identify the activities that add value to their operation and concentrate on these and at the same time avoid wasting resources on activities that are just seams and fringes.

CHAPTER FIVE

CONCLUSION, IMPLICATION OF RESEARCH FINDINGS AND RECOMMENDATIONS

5.1 CONCLUSION

The topic “The challenges and Prospects of Logistics Companies in Ghana, Maersk logistics Ghana Limited as a case study” was researched into to find out the following:

- Is Ghana conducive for the business of logistics companies?
- What are the challenges of logistics companies in Ghana? Are there any prospects for logistics business in Ghana?
- How has Maersk Logistics performed in the last five years?
- What should be done to improve logistics business in Ghana?

A case study was used, and Maersk Logistics Ghana Limited was the organization used for this purpose; questionnaire was used to collect data. Data analysis used mean scores, standard deviation and pie charts as tools for analyzing the data. The analyzed data provided the following findings:

- i. Ghana as an economy is not conducive for logistics business.
- ii. The major challenges of logistics companies in Ghana include poor road, rail and air transportation infrastructure. Economic factors in Ghana are not favourable for doing logistics business. Bribery, corruption and other negative social factors make Ghana unfavourable for logistics business. The legal system has not done much to protect the rights and interests of logistics companies in Ghana.
- iii. The prospects for logistics companies in Ghana were determined by; favourable political factors, good telecommunication system, a developing banking sector and moderately good port facilities. Fairly qualified human resource base in the country, these and other factors provided optimism for the prospects of logistics business in Ghana. Information could not be obtained on the performance of Maersk Logistics Ghana Limited from 2004 to 2008, with the explanation that such information was classified.

- iv. The respondents recommended among other things, streamlining the operation of the ports, introduction of logistics courses in schools, documentation of information of businesses, logistics companies to invest in the education and training of their staff and also the employment of qualified personnel by logistics companies.

Based on the research findings, the following recommendations were made;

Government was to invest in the nation's infrastructural development as a matter of urgency. The needed social structures were to be put in place and enforced to reengineer the Ghanaian society with the aim of doing away with negative tendencies that impede development.

The needed laws were to be provided and enforced to protect the rights and interest of businesses in Ghana. It was also recommended that there should be collaboration between the state and the private sector in finding solutions to Ghana's economic, infrastructural, social, legal and the other problems.

Another recommendation was that national economic policies should be instituted, and these policies should outlive the terms of office of political leaders. Prudent management of the economy was to be given critical consideration, so as to propel the country out of its economic woes that have more or less assumed a permanent condition.

Logistics activities most often are not visible to many people, unlike production, marketing, human resource and other traditional functional areas of an organization. The fact however is, for the other functional areas to be able to perform efficiently and effectively they must be supported by logistics management. Logistics management is the way to go in this twenty first century.

Many successful organizations and world economies have realized the indispensable nature of logistics management in modern day business. Drastic cost reduction, just in time delivery of goods and services, seamless operations, value maximization and cost

minimization and of course customer satisfactions are some of the benefits of logistics management.

It is of great importance that countries especially developing countries develop logistics management. The age old canker of corruption and mismanagement of resources will be greatly reduced when the procurement aspect of logistics management is put into practice.

The hindrance to the development and proper functioning of logistics businesses should be addressed especially the problems of infrastructure, social system legal and economic conditions. These should pre-occupy the concern of the administrators of the national economy.

When Ghana gives logistics business the deserved attention, then the nation will be on her way to real economic success and prosperity, greater happiness for the citizens and hope for the future.

5.2 IMPLICATION OF THE RESEARCH FINDINGS AND RECOMMENDATIONS

The implication of the research finding which states that Ghana's infrastructure is poor and not conducive for logistics business include the following:

The government of Ghana has not done enough to provide the necessary infrastructure to create a conducive business environment. Judging by the deplorable state of infrastructure as depicted by the research finding, a lot of investment should be made into infrastructural development of the country if the government is serious in its call on foreign investors to come and invest in Ghana.

The poor infrastructure also has serious revenue implications. Because the infrastructure is poor, investment is low and even existing companies under perform due to the poor nature of the infrastructure. The revenue implication is that investors which would have come to invest in Ghana are not coming therefore the potential revenue that government

would have collected through taxes and royalties are not forthcoming, moreover businesses which currently operate in Ghana are not able to pay the maximum taxes that they could pay because the businesses are not performing at their peaks as result of the poor infrastructure.

Based on the implications of poor infrastructure to the government, the businesses, potential investors and the economy as a whole it is recommended that the government should consider the long term benefits that improved infrastructure will yield to the country and make the development of the country's infrastructure one of its topmost priorities.

Government and the private sector should collaborate and find solutions to the infrastructural challenges that businesses face in the country.

The findings which state that the social factors in Ghana are not conducive for logistics business, among other things imply the following;

There is the absence of necessary social structures or weak and ineffective social structures which ensure good qualities such as discipline, good values, ethics, moral uprightness, patriotism, commitment to duty, selflessness etc.

The findings also imply lack of professionalism and code of conduct. It also points to the failure of the value system in the country and also the failure of homes and schools.

Another implication of the negative social factor in Ghana with respect to logistic business is that potential investors would fly away and businesses already operating in the country could resort to dubious means in their business transaction.

The recommendation is that of social reengineering; homes and families should instill good values in the children, the schools should not concentrate only on the academic success of the students but more importantly give serious attention to the moral and

ethical aspect of the students. The churches and other religious organization have a major role to play in addressing these social problems.

The state should also put in place the necessary social structures and ensure that these are working effectively. Laws should be enforced; the penalties for negative social behaviours should be deterrent enough to prevent potential perpetrators.

The research finding which indicates that political factors are favourable to logistics companies in Ghana imply that political development in Ghana is positive.

It also implies that there is limited interference in the affairs of businesses by politicians. It might also mean that companies which do not show political alignment are not disturbed by political parties. The recommendation concerning this finding is that government must not put impediments in the way of businesses and politicians should leave private businesses alone. When these are done coupled with the relative peace in Ghana and the impressive democratic credentials of the country, Ghana could become the preferred destination for investors in the sub region and Africa as a whole.

One of the research findings states that the legal system in Ghana does not create a conducive business environment for Logistics Companies. This finding implies Legislations needed to protect the rights and interests of businesses are non existent or if they exist, they are not functioning properly. Another implication is that the administrators of justice are not dispensing justice properly. Expression of lack of confidence in the legal system by businesses implies potential investors will not come for fear that their interest would not be protected. It also implies issues which should be dealt with in the court of law would be addressed using other means, some of which could be dubious and illegal.

It is therefore recommended that the necessary legal structures should be put in place and made to function properly. Administrators of justice should deal with issues decisively

and fairly to restore the confidence of the business community in the country's legal system.

Another finding of the study was that Ghana's economic factors did not create a favourable business environment for logistics businesses. The implication include Ghana's economy not been managed properly by governments and other stakeholders in the economy. It also implies the policy strategies that have been used over the years have not yielded the desired results. Potential investment could be scared away and capital flight from the country could result.

Another implication is that credit is hard to come by and the cost of doing business in Ghana is generally high. The recommendation for the solution of this problem are; government should apply the necessary fiscal and monetary tools to tackle the problems of inflation, high rate of interest, poor exchange rate and the other micro and macro economic problems.

It is also recommended that Ghana should have a national policy which should not be derailed irrespective of the political party in power. By this, there will be continuity in programmes and sustainable economic growth and development.

As much as possible government should allow and even encourage healthy business competition and the private sector actively participating in the management of the national economy. As evidenced in the telecommunication and the banking sector which are doing well in Ghana as compared to other sectors where there is no or only little private sector participation and competition. The study revealed that the banking sector in Ghana and the telecommunication sector are doing well, this positive rating of these two sectors is to a significant extent due to the kind of competition that exist in the industry.

In appointing managers to manage the affairs of the nation, political leaders should give appointment based on qualification and competencies rather than on political loyalty. It is also very important that the managers of the national affairs should set right priorities.

There is also the need for restructuring a number of sectors of the economy to ensure efficiency and effectiveness. The labour force of the nation needs to be given the needed training and education and also guided by professionalism and the relevant code of ethics. When all these are done properly there would be a major improvement in the country's economic condition.

The respondents also recommended a number of measures to help improve logistics business in Ghana. It was recommended that government should streamline the activities at the nation's ports and also ensure that the lengthy and at times unnecessary processes that people are made to go through are reduced drastically to ensure faster and better way of doing business. Government was also called upon to introduce logistics education in schools. It was also recommended that businesses should focus on their core function and outsource the non-core function to experts. There is the need for adequate information and knowledge on what outsourcing is all about, the benefits associated as well as its drawbacks.

The government through the department of civic education, the registrar general's departments and all the other relevant bodies should make businesses realize the essence of documenting information as well as providing correct and credible information.

It was also recommended that logistics companies should invest in the training and education of their employees to achieve higher returns and efficiency. Logistics companies were also asked to concentrate on value adding activities and avoid wasting resources on activities that do not contribute much to value addition of the business.

When all these recommendations are translated into action Ghana will be one of the best business and investment destinations on the globe.

5.3 LIMITATIONS

The following challenges and short comings were identified in conducting this study:

1. Access was not given to information about the performance of Maersk Logistics Ghana Limited from 2004 to 2008. The researcher should have obtained explicit assurance from the company regarding such sensitive information before proceeding to prepare questionnaire on it.
2. The selection of Maersk logistics alone for the purpose of this study is not adequate, collecting data from other logistics companies such as D.H.L., MacDan Logistics and others would have enhanced the credibility of the study.

Time constraints and financial limitations were the main reasons why this study was not expanded to include more logistics companies. Another limitations identified was that questions on warehousing were omitted in the questionnaire. In fact, questions were prepared on warehousing but in the typesetting and final editing these questions were omitted and this was realized only during the analysis of the data collected.

5.3.1 Suggestions for further studies into logistics business in Ghana

The study conducted, the findings made the implications of the findings and the recommendations arrived at indicate that there is the need for more studies into logistics companies and their business operations in Ghana. The following topics are worth researching into:

1. The trend of performance of logistics companies in Ghana. This study will provide facts and figures to show the progress logistics companies have made in the country over the years. Attempt was made to obtain some figures from Maersk but access was not given in this regard, therefore future researchers should ensure that definite assurance is obtained that relevant figures will be provided before proceeding with such a study.
2. The preparedness of logistics companies in Ghana for the emerging oil sector. This study will reveal measures that logistics companies have put in place to ensure a smooth and successful take off of oil production in Ghana.

3. The development of logistics business in Ghana, where does it fit in the government's development programmes. This study will provide information on what the government's position is on the development of logistics business in Ghana, this will also provide insight on the future of logistics business in Ghana from the perspective of national policy.



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APPENDICES
APPENDIX ONE (1)

THE DRAFT QUESTIONNAIRE THAT WAS USED FOR THE PILOT STUDY

Name of organization:

Business activities of the organization:

Location of country office(s):

Year business started operation in Ghana:

**QUESTIONNAIRE ON THE CONDUCTIVENESS OF GHANA'S ECONOMIC
ENVIRONMENT FOR LOGISTICS COMPANIES**

Please, provide answers to the following question by ticking the appropriate boxes.

1. Does road network affect the business activities of your organization?
Yes ☐ No ☐
2. How do you rate the road network in Ghana with respect to motorability?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
3. How do you rate the road network in Ghana with respect to adequacy?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
4. Would the availability of a good railway system impact positively on your business operation?
Yes ☐ No ☐
5. How do you rate Ghana's railway in terms of adequacy?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
6. How will you rate the rail system with respect to its operations?
Very good ☐ Good ☐ Poor ☐ Very poor ☐

7. Does your organization make use of ports and harbours?
Yes ☐ No ☐
8. What is your assessment of the facilities at the nation's ports and harbours?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
9. How do you rate the ports and harbours in terms of adequacy?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
10. What is your rating of the nation's ports and harbours with respect to safety of shipments?
Very adequate ☐ Adequate ☐ Not adequate ☐ Limited ☐ Very limited ☐
11. How do you rate the ports and harbours with respect to the professionalism and efficiency of their staff?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
12. How do you rate the ports and harbours sector of Ghana in general?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
13. Do you make use of flight services in your organization?
Yes ☐ No ☐
14. How would you rate international flight services in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
15. How would you rate internal flight services in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
16. Does your organization make use of warehouse facilities?
Yes ☐ No ☐

17. How would you rate availability of good warehousing facilities in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
18. What is your assessment of availability of high quality human resource for your organization in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
19. How would you rate the electric energy sector in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
20. What is your rating for the other utilities in terms of availability and reliability?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
21. How would you assess the cost of rent of business premises and facilities in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
22. Does your organization suffer from the activities of corrupt state officials?
Yes ☐ No ☐
23. How would you rate the level of bribery and corruption against logistics companies in Ghana?
Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐
24. Has the government made any policies to promote the business of logistics companies in Ghana?
Yes ☐ No ☐ Not sure ☐

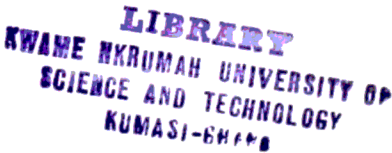
25. If yes what is (are) these policy(ies)?
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.....
.....
.....
26. Does the government interfere in the activities of logistics companies?
Yes ☐ No ☐ Not sure ☐
27. If yes, how does government interfere?
.....
.....
.....
28. How would you rate the level of awareness of people in the business sector in Ghana with respect to the importance of logistics management in business organization?
Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐
29. How would you rate the banking sector in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
30. What is your rating of Ghana's exchange rate over the years?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
31. How would you rate Ghana's level of inflation over the years?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
32. How would you rate the general cost of doing logistics business in Ghana?
Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐

33. Does Ghana's economy hold any prospects for logistics companies?
Yes ☐ No ☐
34. What can be done to improve the prospects of logistics businesses in Ghana?
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.....
.....
.....
35. Does the emerging oil sector have any prospect for logistics companies in Ghana?
Yes ☐ No ☐
36. If yes, enumerate some of the prospects.
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.....
.....
37. How would you rate the telecommunication system in Ghana with respect to availability?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
38. What would be your rating of the telecommunication in Ghana in terms of efficiency and quality service?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
39. How would you rate the Information and Communication Technology (ICT) in Ghana?
Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐

QUESTIONNAIRE ON THE OPERATIONAL DIFFICULTIES OF LOGISTICS COMPANIES IN GHANA

Please provide answers to the following questions in the space provided

40. What problem(s) does Maersk face with road transport in Ghana?
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.....
.....
41. What difficulty (ies) does your organization face with the rail system?
.....
.....
.....
42. Mention the main problems that your organization encounters at Ghana’s ports and harbours?
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.....
.....
43. What problem(s) does your organization experience with the air transport?
.....
.....
.....
44. Enumerate some of the problems that your organization faces with respect to warehousing in Ghana?
.....
.....



45. What are some of your organization(s) difficulties with respect to the telecommunication in Ghana?

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46. What difficulties does your organization face in Ghana in terms of taxation?

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47. What are the organization's difficulties with respect to the exchange rate in Ghana?

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48. What are the problems associated with the stability of the cedi?

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49. State problems that your organization experience with the banking sector in Ghana.

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50. Mention the organization’s problem with the electric power situation in the country?

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51. What difficulties does your organization experience with of other utilities?

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52. What are the problems of your organization with respect to the nation’s Information and Communication Technology (ICT) system?

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53. Mention the organization’s difficulties concerning the availability and quality of human resources?

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.....

54. What problem(s) does the organization have with the country’s political environment?

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.....

55. State the difficulties faced by your organization in assessing local financial resources?

.....
.....

56. Does your organization suffer from the actions of corrupt state officials?
Yes ☐ No ☐

57. If yes, how does the situation affect your organization?

.....
.....
.....

58. What difficulties does the organization experience with respect to availability of market for your services?

.....
.....
.....

59. Does the business community in Ghana recognize the importance of logistics in their business activities?

Yes ☐ No ☐

60. Is the Ghanaian business person gradually becoming aware of the importance of logistics in the success of his/her business?

Yes ☐ No ☐

61. Has your organization organized any education or sensitization programme to enlighten the Ghanaian businesses on the importance of logistics management to their businesses?

Yes ☐ No ☐

62. If yes, what has been the response to the business people?
.....
.....

63. What other challenges does your organization face in doing business in Ghana?
.....
.....
.....

KNUST

QUESTIONNAIRE ON THE PERFORMANCE OF MAERSK OVER THE LAST 5 YEARS

Please provide data on the performance of your organization for the years indicated in the following questions

64. What has been your organization’s performance in terms of its market share in the years?

2004	2005	2006	2007	2008
------	------	------	------	------

65. Performance with respect to employment creation in Ghana

2004	2005	2006	2007	2008
------	------	------	------	------

66. Performance in terms of training of staff

2004	2005	2006	2007	2008
------	------	------	------	------

67. Performance in terms of opening of branches

2004	2005	2006	2007	2008
------	------	------	------	------

68. Performance with respect to computerization of operations.

2004	2005	2006	2007	2008
------	------	------	------	------

69. Performance in terms of corporate net profit
- | | | | | |
|------|------|------|------|------|
| 2004 | 2005 | 2006 | 2007 | 2008 |
|------|------|------|------|------|
70. Performance in terms of timely delivery of customer shipments
- | | | | | |
|------|------|------|------|------|
| 2004 | 2005 | 2006 | 2007 | 2008 |
|------|------|------|------|------|
71. Performance in terms of safe delivery of shipments
- | | | | | |
|------|------|------|------|------|
| 2004 | 2005 | 2006 | 2007 | 2008 |
|------|------|------|------|------|
72. Performance in terms of providing warehouse facilities to customers
- | | | | | |
|------|------|------|------|------|
| 2004 | 2005 | 2006 | 2007 | 2008 |
|------|------|------|------|------|
73. Performance in terms of providing shipping services
- | | | | | |
|------|------|------|------|------|
| 2004 | 2005 | 2006 | 2007 | 2008 |
|------|------|------|------|------|
74. Performance in terms of number of customers
- | | | | | |
|------|------|------|------|------|
| 2004 | 2005 | 2006 | 2007 | 2008 |
|------|------|------|------|------|
75. Other areas of company's performance. Mention the performance and provide data for the years
- | | | | | |
|------|------|------|------|------|
| 2004 | 2005 | 2006 | 2007 | 2008 |
|------|------|------|------|------|

**QUESTIONNAIRE ON WHAT SHOULD BE DONE TO IMPROVE THE
PERFORMANCE OF LOGISTICS COMPANIES IN GHANA**

76. What key issues should the government address to improve the performance of Logistics companies in Ghana?

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.....

77. What should the business sector do to improve the performance of logistics companies in Ghana?

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.....
.....

78. What should private investors do to improve the performance of logistics companies in Ghana?

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.....
.....

79. What should logistics companies do to improve their performance in Ghana?

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.....
.....

80. What other things should be done to improve the operation of logistics companies in Ghana?

.....
.....
.....

81. Does the global economic downturn have any impact on Logistics companies in Ghana?

Yes ☐ No ☐

82. If yes, what are some of the impacts?

.....

.....

83. How can these impacts be managed to the advantage of logistics companies in Ghana?

.....

.....

.....



APPENDIX TWO (2)

QUESTIONNAIRES ON THE PROSPECTS AND CHALLENGES OF LOGISTICS COMPANIES IN GHANA, MAERSK GHANA LIMITED

Dear Sir/ Madam,

This questionnaire is for the purpose of academic research on the topic; 'The prospects and challenges of logistics companies in Ghana, Maersk Ghana Limited as a case study'. Thank you for making time to answer these questions.

PART I

Please provide responses to the following questions

1. Gender of respondent Male ☐ Female ☐
2. Age of respondent; Below 20 ☐ Between 20 and 30 ☐
 Between 30 and 40 ☐ Above 40 ☐
3. Job description/position in organization:

4. How long have you been working in a Logistics company?
5. How long have you been working at Maersk Ghana Limited?

PART II

QUESTIONNAIRE ON THE CONDUCTIVENESS OF GHANA’S ECONOMIC ENVIRONMENT FOR LOGISTICS COMPANIES

INFRASTRUCTURE

Please, provide answers to the following question by ticking the appropriate boxes.

1. How do you rate the road network in Ghana with respect to its motorability?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
2. Assess the road network in Ghana with respect to adequacy?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
3. Rate Ghana’s railway in terms of adequacy?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
4. How will you rate the rail system with respect to its operation?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
5. What is your assessment of the facilities at the nation’s ports and harbours?
Very good ☐ Good ☐ Poor ☐ Very poor ☐
6. What is your rating of the nation’s ports and harbours with respect to safety of shipments?
Very Good ☐ Good ☐ Quite Good ☐ Poor ☐ Very Poor ☐
7. Assess the ports and harbours with respect to the professionalism and efficiency of their staff?
Very good ☐ Good ☐ Poor ☐ Very poor ☐

8. Rate the international flight services in Ghana?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
9. How will you assess internal flight services in Ghana?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
10. How would you rate the availability of utilities?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
11. How would you rate the reliability of utilities?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
12. How would you assess the cost of rent of business premises in Ghana?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
13. How would you rate the availability of telecommunication system in Ghana?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
14. How would you rate the quality of service of telecommunication in Ghana?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
15. Assess the Information and Communication Technology (ICT) in Ghana?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐

SOCIAL FACTORS

16. Does your organization suffer from the activities of corrupt state officials?
 Yes ☐ No ☐
17. Rate the level of bribery and corruption against logistics companies in Ghana?
 Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐

18. What is the level of awareness of business people in Ghana with respect to the importance of logistics management in business organization?
 Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐
19. What is the level of trustworthiness of your business partners in Ghana?
 Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐
20. How would you rate the general business ethics in Ghana?
 Very Good ☐ Good ☐ Quite Good ☐ Poor ☐ Very Poor ☐

LEGAL FACTORS

21. To what extent does the legal system in Ghana cater for the welfare of logistics businesses?
 Very Well ☐ Well ☐ Quite Well ☐ Poor ☐ Very Poor ☐
22. Assess the speed with which commercial issues are adjudicated in Ghana's courts of law?
 Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐
23. What is your view on the enforcement of the provisions of the commercial laws in Ghana?
 Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐
24. Rate the level of integrity of administrators of justice in Ghana
 Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐

POLITICAL FACTORS

25. Provide rating for the level of negative political interference in your business activities.

Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐

26. To what extent does change in political governance in Ghana affect your business activities?

Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐

ECONOMIC FACTORS

27. Rate the banking sector in Ghana?

Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐

28. What is your assessment of Ghana's level of inflation in recent years?

Very high ☐ High ☐ Quite high ☐ low ☐ Very low ☐

29. Rate the level of interest rate in Ghana in recent years

Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐

30. How would you rate the exchange rate of Ghana in recent years?

Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐

31. How would you rate the general cost of doing logistics business in Ghana?

Very high ☐ High ☐ Quite high ☐ Low ☐ Very low ☐

32. How do you see the prospects of Logistics Companies in Ghana?

Very high ☐ High ☐ Quite High ☐ Low ☐ Very low ☐

33. What is your assessment of availability of high quality human resource for your organization in Ghana?
- Very good ☐ Good ☐ Quite good ☐ Poor ☐ Very poor ☐

PART III

QUESTIONNAIRE ON THE PERFORMANCE OF MAERSK OVER THE LAST 5 YEARS

Please provide data in the boxes provided on the performance of your organization for the years indicated in the following questions: Data could be in numerical figures or percentages, whichever is applicable.

1. What has been your organization's performance in terms of its market share over the years?

2004 2005 2006 2007 2008
2. Performance with respect to employment creation in Ghana

2004 2005 2006 2007 2008
3. Performance in terms of training of staff

2004 2005 2006 2007 2008
4. Performance in terms of opening of new branches

2004 2005 2006 2007 2008
5. Performance with respect to computerization of operations.

2004 2005 2006 2007 2008
6. Performance in terms of corporate net profits

2004 2005 2006 2007 2008

7. Performance in terms of delivery of customer shipments
 2004 2005 2006 2007 2008
8. Performance in terms of providing warehousing facilities to customers
 2004 2005 2006 2007 2008
9. Performance in terms of number of customers served annually
 2004 2005 2006 2007 2008

PART IV

QUESTIONNAIRE ON WHAT SHOULD BE DONE TO IMPROVE THE PERFORMANCE OF LOGISTICS COMPANIES IN GHANA

1. Mention what government should do to improve the performance of logistics companies in Ghana.

2. What should the business sector do to improve the performance of logistics – companies in Ghana?

3. What should logistics companies do to improve their performance in Ghana?

4. What other things should be done to improve logistics business in Ghana.

APPENDIX THREE (3)

The Ordered Scale of Scores assigned to the Responses of the questionnaires.

. Ordered scale of numbers was allocated to the responses as follows:

- | | | |
|-------------------------------------|---|---|
| <input type="checkbox"/> Very Good | - | 5 |
| <input type="checkbox"/> Good | - | 4 |
| <input type="checkbox"/> Quite Good | - | 3 |
| <input type="checkbox"/> Poor | - | 2 |
| <input type="checkbox"/> Very poor | - | 1 |

On matters such as the level of corrupt practices that affected the logistics operations;

- | | | |
|-------------------------------------|---|---|
| <input type="checkbox"/> Very High | - | 1 |
| <input type="checkbox"/> High | - | 2 |
| <input type="checkbox"/> Quite High | - | 3 |
| <input type="checkbox"/> Low | - | 4 |
| <input type="checkbox"/> Very Low | - | 5 |

For the question that sought to find out whether the organization suffered from corrupt officials or not.

- | | | |
|------------------------------|---|---|
| <input type="checkbox"/> Yes | - | 1 |
| <input type="checkbox"/> No | - | 5 |

For the question which wanted to find out if government interfered in the activities of logistics companies.

- | | | |
|------------------------------|---|---|
| <input type="checkbox"/> Yes | - | 1 |
| <input type="checkbox"/> No | - | 5 |