

**PORT CONCESSIONING AND THE FUTURE
OF NIGERIA PORTS**

BY

EGBENINE OBIJARE ANTHONY

REG. NO. 20045580799

**DEPARTMENT OF TRANSPORT MARITIME
MANAGEMENT TECHNOLOGY**

**IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR
THE AWARD OF MASTER IN BUSINESS
ADMINISTRATION (MBA) DEGREE IN MARITIME
TRANSPORT MANAGEMENT**

**FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI-IMO
STATE**

JUNE, 2009



Port concessioning and the future of Nigeria Ports... By Egbenine, O.A. is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

CERTIFICATION

Certify that his project work was done by Anthony Obijara Egbnine with registration number FES 04/TMT/MBA/05 of the department of Maritime Transport Management Technology, Federal University of Technology Owerri.

Dr. Lazarus Okoroji

.....

.....

Signature

.....

Date

Dr. C.C. Ibe

.....

Head of Department

.....

Signature

.....

Date

DEDICATION

This research work is dedicated to God Almighty for working this dream a reality. To have granted me good health and inspiration while the programme lasted inspite of the odds understanding and encouragement. It was tough, but the harder the battle, the sweeter the victory.

ACKNOWLEDGEMENT

I want to acknowledge God for the kindness and tender mercies showered on me throughout the period of course work and research programme.

I also wish to acknowledge the generosity of Mrs. Okeudo for her steadfastness and encouragement throughout the period of the programme. Dr. Nnadi and the programme coordinator Engr. Nwokoro, Dr. Lazarus Okoroji my project Supervisor for their immense and valuable contribution, encouragement, suggestion to the quality of this programme and project.

Many thanks goes to all my enviable lecturers Department of Maritime Management Technology Mr. Emegharar, Dr. Ukegbu, Mr. Paul Ogbeide Chief Ugbuaja and other lecturers in the school of Management Technology.

My special thanks to the Head of Department of Maritime Management Technology Dr. C.C Ibe for his contribution and valuable assistance for imparting quality knowledge in us throughout the period of the programme.

I am mostly indebted to my loving wife Mrs. Agness (Chibugo) for the lovely support and encouragement. I equally owe a great deal to my Children for their understanding while I was always away for the programme. Thank you all and may the Almighty God richly bless you

TABLE OF CONTENT

| | Pages |
|-------------------------------------|-------|
| Certification | ii. |
| Dedication | iii |
| Acknowledgement..... | iv |
| Abstract..... | .v |
| Table of Content..... | vi |
| CHAPTER ONE | |
| 1.0 Introduction..... | 1 |
| 1.2 Historical background..... | 4 |
| 1.3 Statement of the problem..... | 6 |
| 1.4 Objective of the study..... | 8 |
| 1.5 Research Hypothesis..... | 8 |
| 1.6 Significance of the study | 9 |
| 1.7 Scope of the Study..... | 11 |
| 1.8 Limitation of the Study..... | 12 |
| CHAPTER TWO | |
| 2.1 Literature Review..... | 13 |
| 2.2 Conceptual Framework..... | 19 |

| | |
|---|----|
| 2.2.1 Definition of Concessions..... | 19 |
| 2.2.2 Types of Concessions..... | 20 |
| 2.2.3 Legal and regulatory Framework for concessions..... | 21 |
| 2.3 The Case for Private Sector Participation in National Ports..... | 22 |
| 2.3 Legislative Backing for the Port Concessions policy..... | 24 |
| 2.4 Landlord Ports System experience so far..... | 25 |
| 2.5 Form of Privatization participation..... | 28 |
| 2.6 Port Restructuring..... | 38 |
| 2.7 Model for Port Restructuring..... | 46 |
| 2.7.1 Service Ports..... | 46 |
| 2.7.2 Tool Port..... | 47 |
| 2.7.3 Landlord Port..... | 47 |
| 2.8 Port Restructuring in India-Policy Initiative..... | 48 |
| 2.8.1 Corporatization..... | 50 |
| 2.9 An Overview of Maritime Trend in Nigeria..... | 52 |
| 2.9.1 Power of Competition..... | 59 |
| 2.9.2 Power of Commitment..... | 60 |

| | |
|---|----|
| 2.10 Dangote Commits \$200 Million on Project at Ports ... | 60 |
| 2.11 Comet Consortium Takes over Roro Port at Tincan Island Lagos..... | 63 |
| 2.12 Assurance of the Company..... | 64 |
| 2.13 Levels of Port Development..... | 64 |
| 2.13.1 Obligation and Payments..... | 66 |

CHAPTER THREE

| | |
|--|----|
| 3.1 Research Methodology..... | 74 |
| 3.2 Research Design..... | 75 |
| 3.3 Method of Data collection..... | 76 |
| 3.4 Problem of Data collection..... | 77 |
| 3.5 Method of Utilization of Data..... | 78 |
| 3.6 Validity and Reliability..... | 79 |

CHAPTER FOUR

| | |
|------------------------------------|-----|
| 4.1 Results and Discussion | 82 |
| 4.2 Presentation and Analysis..... | 92 |
| 4.3 Test of Hypothesis..... | 99 |
| 4.4 Discussion of Results..... | 102 |

CHAPTER FIVE

| | |
|---|-----|
| 5.1 Conclusion and Recommendation | 105 |
| 5.2 conclusion..... | 105 |
| 5.3 Recommendation..... | 112 |
| References | 114 |
| Appendix A..... | 119 |
| Questionnaires..... | 120 |

ABSTRACT

The inadequacies of Nigerian ports toward the delivery of quality services such as good infrastructure, cargo handling, vessel quick turn round time, corrupt and fraudulent tendencies has given rise to privatization and concession since this practices can brief about the required level of efficiency and effectiveness when compared with international standards. This research work would enable us ascertain the effects of concessioning of Nigeria seaports. And also evaluate the viability of concessioning in the National economy. In order to analyse these facts stated above, a research questionnaire was sent out to various staff of ports, shipping companies and the public for respective views. The response were collected and collated. Analysis of chi-square was utilized to test the operational performance. The resulting effect was poor and there was the need for concessioning for our ports to see the light of the day and measure up to international standard. Recommendations were made to assist in beefing up the operational standard. Infrastructural development that will enhance good productivity and delivery of qualify services to port user, as well as sustainable economic development to benefit the nation.

CHAPTER ONE

1.0 BACKGROUND OF STUDY

1.1 INTRODUCTION

Maritime transport is related to the movement of goods, via sea transport mode from one place to another where its relative importance is higher. This international business originates from a port and terminates in another port called destination port. It equally provides the driving force for the movement of people and flow of information, raw materials and finished products, which build and maintain society.

The port which plays host to most maritime activity can be described as the gate way connecting a country to other countries, it equally provides an interaction between sea and land mode of transport. The port being a complementing system is very vital and instrumental to the national economic survival of any nation. The Nigerian nation is renowned for her international trade nature and our socio - economic development depends so much on the volume of

our external trade exchange. The Port system is made up of above four sub system namely.

- (a) Navigational Aid System
- (b) Quay handling and transfer subsystem
- (c) The storage and delivery subsystem
- (d) The co-ordination of the Port (Personnel)

This interdependent but interrelated companies of the Port must efficiently complement each other for there to be a vibrant, productive and co-operative port. The inadequacies of this system in the Nigerian port gave rise to Privatization. The advent of privatization in Nigerian port is intended to increase productivity and efficiency in our ports by:

- Increasing cargo through put
- Increasing quality of services to customers
- Building a user friendly Ports
- Reducing time of delivery of goods
- Reducing cost of operation
- Reducing Port Tariffs

- Reducing loss of government revenue
- Encouraging government and private sector partnership/ participation.

The Nigeria port before privatization lost a lot of cargo to neighboring ports of Cotonou and Togo Port. This was as a result of so many abnormalities prevents in our Ports. These abnormalities range from:

- Inconsistent government Policies
- Inadequate funding
- Bureau bottle neck
- Excessive vessel decay time.
- Use of obsolete equipment
- Multiplicity of necessary and un- necessary agencies
- Labour related problems
- Draft restriction
- Lack of day light hours (Slight)
- Sea Piracy
- Reduced channel with due to silting and unwholesome obstacles

- Inadequate berthing space
- Inadequate functioning plant and equipment
- Corruption and fraudulent tendencies.

This ugly situation ensured that our ports were unattractive and as such port uses device means of cutting corners, a situation that are under declaration of goods, under invoicing, over evaluation and other unwholesome practices.

Several attempts have been made by successive government to actually address these issue starting with the 1996 to 1998 Port reforms and that of 2001. These are policy measures of the government aimed at revitalizing and strengthening the operational modalities of the Port which in return would yield increased efficiency and productivity.

1.2 HISTORICAL BACKGROUND

A traditional seaport, before the introduction of reforms reflecting changes in the maritime transport industry could be described by the following:

- 1) State or local government budgets are used to finance the building of most large infrastructure construction costs, but public budgets are becoming together.
- 2) Port authority is financed partly with funds and the rest by port tariffs and fees from private firms operating in the port.
- 3) There is an excess of employees working in the port which have a high degree of unionization and strong positions at collective bargaining.
- 4) Port authority (general public) finances the costs of maintenance and repairs for infrastructure
- 5) Port efficiency in terms of tariff and waiting times for ships is relatively poor, regarding infrastructure financing.

In particular, it is possible to identify a municipal model of port such as those used in south Europe and South America, in which central government control and finance all main ports and a private model of ports where investment costs are paid by private or by port authorities from the resources obtained from changes to port items.

Changes that have occurred in the maritime transport industries are irreversible and all would ports will be affected by them.

1.3 STATEMENT OF THE PROBLEMS

Seaports in Nigeria have not been able to achieve the required level of efficiency and effectiveness, as compared with international standards.

Before the introduction of concessioning, port governance had solely been managed and regulated by the government. Port governance has been classified in terms of “regulator” (for example, licensing, vessel traffic and customs) “landlord” (for example towage, cargo handling and pilot age functions) Also the Nigerian ports authority (NPA) had some outstanding institutional problems that needed to be addressed before privatization. These include;

- i. Inflated tariff and port charges which have made our ports to be the most expensive in the African sub-region.
- ii. Fraying relationship between NPA and Dock workers.

- iii. Failure to make necessary reforms to conform with the best practice worldwide in handling cargo
- iv. Politicalization of port administration
- v. bureaucracy in ports administration
- vi. Ineffective port operations management
- vii. Lack of port marketing/user responsiveness
- viii. Inefficient port services and lack of competition.

In view of the forgoing, this work is geared towards examining port concessioning procedures and how it influences Nigerian economy. Other port models that have been introduced and for long been used have proved to be in appropriate. The problem of congestion has always been a nightmare to port users, especially fright forwarding agents. This is as a result of poor or lack of cargo handling facilities, little or absolute use of information technology (IT) for import and export documentation procedures, use of unskilled and manual form of labour, there problems consequently have led to poor services being rendered to port users and major maritime stake holders. It is therefore,

hoped that the concession process will go a long way in improving there services after its implementation.

1.4 OBJECTIVE OF THE STUDY

The central objective of those researches is to ascertain the effects of concessioning of Nigerian seaport. Most Nigerian seaport stand to be concessioned, and the specific objective of concessioning include;

- 1) The evaluation of the viability of concessioning in a national economy.
- 2) Assessment of the effect of concessioning on port development and in turn how it affects national economy.
- 3) Making recommendations on effective concessioning on the basis of findings.
- 4) To evaluate the impact of private sector performance in the port in accordance with the port co-operative goals.

1.5 RESEARCH HYPOTHESIS

H₀ Port Concessioning is not global tool for Port development

H₀: Landlord Port model is not preferable for Port development

H₀: Port concessioning has not been proved as an efficient Port management System

1.6 SIGNIFICANCE OF THE STUDY

This study has become relevant in the exploration of concessioning of port for the following purposes.

1) To assist in the financial resources, generation to meet the growing burden of social demands. This is in view that government had become too big over staffed and too expensive, yet it must contain to meet with the high demands and expectations.

2) The proponent of the public choice approach posited that the problem of inefficient public administration was rooted in lack of control of state bureaucracy through the political process. Hence, this study tends to improve the system of accountability to elected representatives.

3) The managerial approach held that there must be a move away from concern with administration that emphasizes final

procedures and process. On the contrary, the study reveals that there should be movement towards management that will be primarily concerned with the efficient application of resources to achieve effective results. Since this managerialistic approach was, introduce the methods and principles of the private sector into the public sector. This will through realignment of boundary, between the public and private sectors, and thereby reshape the essential) relationship between the market and the state.

This study also shows that managerial approach has gained acceptance in the most developed and developing nations and forms the basis of current efforts worldwide at privatizing state owned enterprises.

Infact, the competitiveness nature of the port in offering of its relative and cheap services to the outside world will inturn increase cargo throughout and sea traffic at the advantage of the national economy

1.7 SCOPE OF THE STUDY

The port concessioning and national economy as a topic of research is multifarious. Port sector reform encompasses full privatization, concessioning that is built operate and transfer creating a new independent company.

This study reflects at the nature of port sectional reform (concessioning) and its impact on the economical development of the nation.

As the topic capture concessioning for economic development tentacles of the research will be extended to Indian ports, London ports, Shoreham ports, African port most especially Nigerian ports hence Lagos port as the case study.

Conclusively, problems militating against achieving better port sectional reforms will be identified, suggestion and recommendations are made to alleviate or lessen the problems

1.8 LIMITATION OF THE STUDY

The problems encountered during the study associated with not having sufficient data, accessibility, transportation and hoarding of information by management, infact the researcher went through hurdles in order to collect the required data, finance equally was a limiting factor as there were not enough funds to executes the researcher.

A research work of this nature needs adequate time and finance in order to source for the right materials that are relevant to the subject matter.

The entire research work is limited to the concept of concessioning as an appropriate port model to be implemented in Nigerian seaports and the subsequent benefits to be achieved therein.

CHAPTER TWO

REVIEW OF RELATED LITERATURE AND STUDY

FRAMEWORKS

2.1 LITERATURE REVIEW

A paper delivered by chike Ekweieme Esq., at the seminars Negotiating and Drafting leases in landlord Ports at Gateway Hotel, Otta, Ogun state, December, 2003.

SYNOPSIS

This literature review deals with an examination of the various Ports governance models available globally. It links the landlord Port model with the proposed Ports concessioning policy currently being undertaken in Nigeria and highlights some of the issue for consideration in implementing the policy.

INTRODUCTION

This work is designed to provide a detailed analysis of the drafting of places for landlord Ports since the inception of the current privatization programme of the federal

government. Several models have been suggested to address the privatization or commercialization of the Ports. The concession model currently being adopted by the Bureau of Public Enterprises, any discussion of the landlord Port system must therefore be within the context of the current Port concessioning programme. But it may be useful to put in place a proper foundation by considering the various Port governance model in existence globally (Ekwuem 2003).

This chapter also presents a revisit of the impact of Port reform (Concession/Privatization) as a single tool in improving Port efficiency using the Some Ports as a case study. The recent handover of six terminals to their concessionaries calls for celebration. The media in the Past few years had been saddled with stories of complaints from Port users over severe congestion and delays at the nation's seaports, arising from inadequate berth spaces for ships, lack of modern equipment for off loading ships, bureaucracy in processing of clearance documents, and corrupt practices

by various government agencies in the Ports. According to such reports, the delays led to ships incurring avoided demurrage, increased Port charges and tariff, long turn around time for ships, as well as vandalization of imported items by thieves called "Wharf ratts". This scenario led to the reported diversion of Nigerian cargoes by importers to neighbouring countries such as Togo and Benin Republic, thereby denying the nation of its deserved revenue it is hoped that sanity will come to the nation's Port operations with the concessioning and handover of six Port terminals at the Apapa Port complex to private investors or operators. Our needs to commend the efforts and dynamism of the Bureau of public Enterprises (BPE) under the leadership of Mrs Hene Chigbue, who has pursued the Port concessioning process with great enthusiasm and forthrightness (Onyeku Udejinta, 2006). So far, 25 Port terminals had been carved out for concessioning by N.P.A and BPE. These include Apapa container terminal, Apapa general cargo terminals C and D, Tin can Island terminals A, B and C, Tin Can Roro

terminal Liliypond Inland Container depot, and Apapa bulk terminal A, B and E others are Port Harcourt Multipurpose terminal A and B, Onne Ocean terminal B, Onne Federal Lighter terminal A and B, Warri new Port terminal A. All the terminals are goldmines considering the fact that they command high business operations, especially, clearance of imported goods namely vehicles, industrial equipment and raw materials, bulk cargos such as cement, rice, sugar, fertilizer, chemicals, household appliance, building material, etc (BPE, 2006) government. For instances, AP Moller south Africa, a Denmark based maritime giant will pay US \$ 3.6 billion for the Apapa container terminal over a 25 years lease period. The Company is said to be the parent company of Maersk Sea land, one of the largest shipping companies in the world.

Another company, ENL consortium won the bid to manage Apapa general cargo terminals C and D for US \$ 13.585 Million and \$ 2.256 Million respectively. An Italian firm Grimalali won the concession to build a new Roll -On-

Roll -Off (Roro) Seaport at the Tin Can Island or a build operate and transfer basis for a 25 years period. A.P Moller finance of South Africa won the Lillypond Inland container Depot for US \$ 9.622 Million for 10 years.

In the concessioning processing, some indigenous investors have also emerged and include Sifax Nigeria Limited, which won the bid for terminal C of Tin Can Island Port with US \$ 104, 428 Million for ten years, Joseph Dan and Sons, which won Terminal A of Tin can Island container terminals Limited got terminal B for US \$ 83.319 Million over 15 years. Others are Nigerians Flour Mills for Apapa Bulk terminal E and B. Brawol for Onne federal lighter terminal B. The way forward is that NPA and BPE should accelerate the handover of all the terminals already concessioned so that port users can extricate themselves from the stronghold of poor services delivery at the ports, incessant congestion and loss of cargo to vandals, bureaucracy and corruption. Private sector involvement in the port will surely lead to competition consolidation, high network investment, employee

generation, as well as better and prompt services which are the hallmark of the private sector. For the sakes of history, it is important to note that the touted privatization or outright sales of the nation's seaports to private investors during the tenure of chief Ojo Maduekue as Minister of Transport generated much controversy and opposition by many Nigeria, especially employee of the NPA. It was not too long that BPE, the drivers of the nation's privatization programme, decided it was better to concession the ports instead, (BPE 2006). Port concessioning, a major element of economic reform, had progressed rather slowly due to various administrative and labour issues. But much progress has been made since the takeover of the affairs by Mrs. Gene Chigbue, a lawyer- Technocrat who is enjoying the confidences and respect of the stakeholders including labour leaders.

Port concessioning can be explained as the breaking up of the ports into small autonomous terminal, and allowing private operators to acquire and manage them for a specific

period, thereby removing the hitherto monopolistic ownership and management of the ports by NPA, which would now play the role of a landlord, and regulator of the activities of the concessionaires, as such functions as dredging, pilotage, towage, services, channel conservancy and management (Onyeka Udejinta, 2006).

2.2 CONCEPTUAL FRAMEWORK

2.2.1 DEFINITION OF CONCESSIONING

Concessioning is a process by which the assets of a state-owned enterprise are entrusted for a limited period of time - which duration can be extended to a private operator - responsibility is to manage them in a commercial fashion, maintain, renew and at the end of the concession hand them in good shape.

From a government policy point of view, this is a less cumbersome procedure than total and outright privatization as it allows the government to be relieved from the burden of financing activities which may require heavy investments to

implement without losing control of the enterprises and its public objectives.

2.2.2 TYPES CONCESSIONS

There are basically two models of port concessions:

1. Build operate and transfer (BOT)
2. Lease operate and transfer (LOT)

BOT CONCESSIONS:

Here the investor will build the port, operate it for a determined duration and at the end of the lease term, *I* transfer the asset and facilities will be handed over to the government at a mutually agreed price that is usually determined at the time of signing the contract.

LOT CONCESSIONS:

Here the existing port facilities are handed to private operators for a determined period. Financial returns to the government will be in the form of rents of royalties.

2.2.3 LEGAL AND REGULATORY FRAMEWORK FOR CONCESSIONING

At the moment, the NPA is under government control. The port authority is regulating both their customers and themselves. The minister of transport to whom statutory powers are conferred is the "owner" and the "shareholder" of the business conducted by the port authority on behalf of the government of Nigeria. The structure will no longer hold under a privatized set up. A lot of restructuring will have to be done to put the ports in a position to receive private operators. As earlier indicated, concessioning involves outsourcing and contracting out of the operations and management of an enterprise. It does not involve transfer of ownership by outright sale. To this end, NPA will remain in government ownership and control under concessioning.

The following Legal and Regulatory framework for concessioning is illustrated:

- i. Determining the regulatory framework for concessioning.
- ii. If the regulatory function of NPA will

- be transferred to an independent regulator, then there would be need to review the NPA Decree and other existing statutes to separate the regulatory from commercial function and to determine who is to perform either functions. And
- ii. Drafting the transaction document that will set out the parties existing users of the risks and obligation and the rights of existing user of the port, etc.

2.3 THE CASE FOR PRIVATE SECTOR PARTICIPATION IN NATIONAL PORTS

The Ongoing privatization programmes by the federal government seeks to divert ownership and control of public assets from the federal Government and place these assets in private hands. The rationale for the policy include such perceived advantages as increase efficiency / reduction of waste, increased return on the assets in private hands. The rationale for the policy includes such perceived advantages as increased return on the asset involved smoother operations, etc. In pursuing the programme government has

already diverted its interests in various enterprises including: Commercial Banks, Insurance Sector, Petroleum marketers and Hotels.

For Port operations, it is felt that a more commercially driven sector would serve the industry and the country better in the face of increased global competition. Also, with the impending economics liberalization of the West African sub-region the competition from neighbouring Ports will certainly intensify. There is therefore a lot to be gained from running the Ports in such a way that vessels traffic would be increasingly attracted. The much debated issue of the privatization of the nation's Ports, has resulted in the general consensus that their ownership should remain with the public sector. In order to achieve the intended benefits of privatization which would attend other government assets such as those listed above, it was felt that transferring the operational responsibilities of the Ports while retaining their ownership would augur for their efficient operation and increased revenue. This evolved the concept of

concessioning the Ports. As can be readily seen, the model being followed is very similar to the landlord Port system.

2.3 LEGISLATIVE BACKING FOR THE PORT CONCESSIONING POLICY

The NPA Act of 1999 has been considered to be flexible enough to allow for the concession of the Nigerian Port system. However, a new Act which would give statutory enablement to the reform agenda is necessary and is said to be awaiting legislation action in the form of a draft bill. There are therefore two broad phases of the Port reform process (NPA Act 1999).

Partial Port reform on the basis of the present legislation. This includes the reform of the NPA and initial concession arrangements with private operators. Full Port reform on the basis of a new Port Act. This would ultimately involve the full concession of all Ports in the country.

The approach appears to tackle the Port with less complex existing arrangement under the partial reform

phase, leaving the residue of the Ports to be treated under full reform phase with a fresh, robust Ports Act.

2.4 LANDLORD PORT SYSTEM EXPERIENCES SO FAR

The best institutional structure for promoting private sector participation in the public Ports system is landlord Port model. This provides a broad framework in which the private sector can replace the public sector in the provision of services to the vessel and its cargo it allows the public sector to retain ownership on the Land and infrastructure and to continue regulating their use while sharing responsibility for coastal investment.

This framework has been used throughout western Europe, and the united states for much of the century.

In the last decade, it has become increasingly popular in Asia and South America. Its popularity is based on the efficiency, providing flexibility in the structure of the tripartite relationship between government, labour and private management and promoting event - oriented management. It allows Port to improve the quality of its

services through a process of evolution which can accommodate the changes in trade, shipping and regional practice call structures.

The introduction of the landlord structure requires a consensus between government, labour and private management on the procedures for transferring contract of services and assets to the private sector. This is followed by a regional expansion of the private sectors role in operations and investment in the evolution of the contractual relationship between the parties and the development of a common set of goals for the port and its users. Ideally, the process should not emphasize the form one institutional structure to another but rather the continuing allocation of responsibilities so as to improve the quality of Port services (Ekwuem, 2005).

In order to be effective this process requires specific objectives. The experience of the need for commercialization of arrangement, timely and efficient investment, and effective allocation of risk between the public and private

sector, and acting competition among service providers. To achieve these objectives, there arose the need to promote the integration of the Port into logistics chain connecting producers and consumers. In this vein a strong client orientation is needed both for improving existing services and facilities.

Time investment requires the ability to determine if existing assets are being used efficiently as well as the capacity to produce new assets with encumbered by lengthy procurement procedures. Effective risk allocation requires that risks assigned according to which party has the counter capacity to mitigate the risk since the objectives of this process is to produce commercial behaviour, the commercial risk would be transferred entirely to the public sector. The public sector would retain the regulatory risk since it is directly involved in the design and enforcement of these regulations.

SUCCESS STORIES

The above cursory analysis shows that landlord Ports can serve the shipping industry immensely, if implemented throughout the country, a claim supported by success stories within and inside the jurisdiction. A case point is the Indian Port of Ennore, designed as Asian's energy Port, the land has only 16 employees.

Operation on a Landlord Port concept, it is our sourcing all services required for operation and maintenance, and new terminals are being developed with the participation of the private sector. Ennore is a good example of how synergy of a clear vision, dedicated technology, and a well-trained work force (Ekwueme, 2005).

2.5 FORMS OF PRIVATE PARTICIPATION AT SEAPORT AND REGULATION NEEDS

When choosing the best form to introduce private participation in the organization of Port services there are several alternatives depending on Port size, initial condition

and the type of services considered among the different possibilities, the following can be mentioned:

1. Selling the seaport as a whole (full privatization). Using this form all assets and liabilities are transferred to the private sector, which can be justified by serious focal needs from the public sector.

2. Transferring to the private sector part of the seaport for their development by the private operators (build operate and own, (BOO). Short - term financial needs justify the use of this form of privatization.

3. Introducing private participation in the Ports in order to build or renovate facilities required for services provision (Build/ Rehabilitate, Operate and Transfer, (BOX) or (ROT).

In this case, the public sector does not lose ownership of the Port infrastructure, and even those new facilities built by the private firms are transferred to the public sector after a specified period of time, this is the case of classical concessions.

4. Creating a new independent company, from the combinations of efforts of two or more firms, joint-ventures. This type of agreement arises when two parties with common interest join forces. Thus, for example, in some cases a firm can supply technology and know-how, between Port authorities and private firms, as in the cases of Shanghai (China), Kelany (Manaysia), and other Asian Ports with large investment projects, where Port authorities have formed many joint ventures to develop and operate new terminals. In other cases, collaboration may be found between several public firms, as in the example of the Singapore Ports Authority with the authority of Dalian, to develop and operate a container terminal in the Port of Dalian, Port of Dayaowo (China).

5 Leasing: In some cases, Port authorities simply rent Port assets to be used by private operators during a fixed period, and thus they obtain income from contract fees, contrary to concession contracts, in this case private firms are usually not required to make investments, therefore they only

assure commercial risks. Some Ports facilities such as storage buildings or cranes are rented by operators under this scheme.

6. Licensing: In this case the Port authority allows operators to provide some services which only require relatively simple equipment, and these assets are generally owned by private operators. Infrastructure is provided for these operators to use it, generally for some specified fee, and in some cases they may use some superstructure element owned by the Port authority stevedoring companies, pilots, tug operators or consignees can work under this type of agreement.

MANAGEMENT CONTRACT: A simple form of introducing private participation in a Port is by contracting out the Port management. In this situation, the Port authority is the owner of infrastructure and Port facilities, but decisions on its running are taken by a private firm which can provide a more commercial risk are in this case faced by the public sector, such management do not invest their own capital in

the Port. In Port of British (U.K) is an example of this type of contract, where facilities are owned by the local government, but the Port is managed privately. When choosing among the options in the list above to determine which is the best alternative for a particular Port, the Port objectives must be considered. The type of service may determine the possible degree of private participation. A basis determinant would be to consider whether the services requires the exclusive use of a Port fixed assets.

LEVELS OF PORT DEVELOPMENT

1. SMALL LOCAL PORTS: They serve small communities and therefore through them passes all kinds of general cargo and containers usually transported by relatively small ships (Short sea shipping). Facilities are basic berths for general use with some storage areas nearby.

2. LARGE LOCAL PORTS: When traffic reaches a given level, it is Profitable to invest in specific equipment, like for example, a dry bulk terminals with berths able to serve deep-draught ships. It is also likely that some investments

to handle containers, although they would still be moved through general cargo berths.

3. LARGE REGIONAL PORT: A seaport which handles a significant level of long haul traffic starts requiring large investments in specialized terminals, specialized in some goods (Coal, Oil, Wheat, etc). This type of Ports have capacity to serve huge ships of more than 60,000GRT, used in the long haul bulk transport.

4. REGIONAL DISTRIBUTION CENTRES: The largest world Ports (e.g Rotterdam, Hong Kong or Singapore) are a collection of highly specialized terminals that only serve particular traffics. These Ports have excellent equipment for transport interchange between all modes (railways, road, and inland navigation). The role of these Ports is to act as hubs, where huge long-haul ships call at, mainly to make transshipment operations from the hubs, smaller ships or other transport modes distribute cargos to the region.

OBLIGATION AND PAYMENTS

A concession contract must explicitly mention what the obligation of the concessionaries are, in terms of the level and quality of service. It also should specify clearly how charges to users are to be determined, who owns the revenue obtained from these charges, and what the payments to be made between the parties are the usual norm is that the concessionaries is obliged to pay a fixed annual fee to the Port authority or the institution responsible for the concession. It is possible to design a contract in which this fee is negative, if the concessionaries receive payment from the Port authority, when the concessionaries obligation include the provision of some service under the consideration of public service, and revenue from Port users for that service do not cover costs. Although not frequently observed, concessionaries fees can sometimes be lined to the level of traffic served by the terminal or the infrastructure subject to concession (e.g Making it proportional to tons or T.E.U.S handled including a

guaranteed minimum payment to the Port authority concession granted in the Port of Buenos Aires have used this system of proportionality plus a minimum guaranteed payment. In some cases, the concessionaries can be made responsible for collecting Port dues charged for ships and cargo for the general use of the Port, and then transferring the revenue to the authority. When performing that task, the concessionaries acts simply as an agent for the Port authority, since the level of these Port dues is determined by the latter. Alternatively the level of charges for the services, providing by the concessionaries (cargo handling, storage, etc) is usually left in the hands of the operators, although it is a subject to some form of external regulation. As discuss in the previous section the need for those small Ports with a single terminal, and it decreases if there is intra or inter-Port competition concession contracts in the seaport industry are usually associated with provisions for the building or rehabilitation of facilities (EOT, or ROT type of contracts). In these cases, it must be well specified in the contracts which

are the completion and starting dates of operations. And also very importantly, the moment in which the ownership of the assets is transferred, there are also technical issues about infrastructure, building (Materials employed, methods etc) that should not be left to be freely determined by the concessionaries, but specified in detail in the concession documents.

TERM

There are no universal rates about how long the life of a concession should be. Economic theory on regulation indicates that the longer the life span, the more incentives the private concessionaires has to make in terms of adequate investment to enhance the assets, since profitability will be dependent on the state of the facilities. However, the longer the period between two concessions, the less information regulator may have on cost and demand conditions. Therefore, there is a trade - off between incentives and information for regulating a concessionaries optimally. Additionally, those concessions associated with

large investments is for operators to recover construction costs. In practice, concessions with large projects are usually longer than those with no investment requirement. The average term of concession contract is for more than 15 years, and those with large projects can be around 25 years. Sometimes there are also provisions for allowing operators to obtain the automatic renovation of concessions, if they fulfill investment or rehabilitation plans. Some examples of the terms of concessions for some contract signed in Ports around the world.

Examples of concession contract in practice:

Port period (yrs)

| | |
|-----------------------------|--------|
| Buenos Aires terminals | 25yrs |
| Buenos Aires terminal | 18 yrs |
| Mar del plata (Anghentina) | 15 yrs |
| Manzunillo (panama) | 20 yrs |
| Karachi (Pokinstan) | 29 yrs |
| The Navre (France) | 50 yrs |
| Kelang West Port (Malaysia) | 30 yrs |

| | |
|--------------------------------------|------------|
| Manilla South Harcourt (Philippines) | 15 yrs |
| Santa (Brazil) | 25 yrs |
| Mapuyto (Mozambique) | 15yrs |
| Apmoller terminal Lagos | 25yrs |
| West Africa container terminal Onne | 25yrs |
| Ports and Terminal Operators ltd Plc | 25yrs etc. |

2.6 PORT RESTRUCTURING

India has nearly 5,560 Kms long coastline and presently has 12 major Ports of which 11 are operational and the 12th is under construction. There are 148 Ports of which only 30 handle cargo. 95% of India's foreign trade by during the first 25 years after independence, aggregate traffic grew modestly commodities handled being crude oil and iron ore. However, following the liberalization and opening up of the economy in the early 90's, there has been a significant increase in India's maritime trade.

Containerization of general cargo, which comes, late in India in comparison with other Asian economics, has also shown a steady increase and is currently around 10% of all

traffic in major ports. The traffic handled by major and minor Ports during last six years is given in table 1

TABLE 1: TRAFFIC HANDLED BY MAJOR AND MINOR PORTS

| PORTS | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 |
|------------------------|---------|---------|---------|---------|---------|
| MAJOR PORTS | 197.26 | 25.34 | 227.13 | 251.44 | 251.70 |
| MINOR PORTS | 18.41 | 20.30 | 24.93 | 26.13 | 35.66 |
| TOTAL | 215.67 | 235.65 | 235.06 | 277.57 | 287.36 |
| % SHARE OF MAJOR PORTS | 92 | 91 | 92 | 91 | 88 |
| % SHARE OF MINOR PORTS | 8 | 9 | 8 | 9 | 12 |

Source: Basic Ports Statistics, 1998 – 99

STRUCTURE OF PORTS IN INDIA AND COVERING LEGISLATION

REGULATORY FRAMEWORK.

MAJOR PORTS

In India, the major Ports are placed under the union list of the Indian constitution, and are administered under the India Ports Act, 1908 and the Major Port.

PORT RESTRUCTURING IN INDIA

Trust Acts, each major Ports is government by a Board of trustees appointed by the Government of India, their composition gives dominance to public enterprises and government departments. The powers of the trustees are limited and they are bound by directions on policy matters and orders from the government of India.

MINOR PORTS

Minor Ports are placed in the concurrent list of the constitution and are administered under the India Ports Act, 1908. The Act defines the jurisdiction of central and state government over Ports. It lay down rules for safety of administration of Port dues, pilotage fees and other charges.

At the state level, the department in charge of Ports or the state maritime board (created through state legislation as in case of Gujarat), is responsible for formulation of water front development policies and plans, regulating and overseeing the management of state Ports, attracting private investment in the development of state Ports,

enforcing environmental protection standards etc. Maritime boards have so far been constituted only in Gujarat, Maharashtra and Tamil Nadu.

PORT PERFORMANCE

CAPACITY CONSTRAINTS

The major Port handled traffic of about 250 million tonnes in 1998 -99 as against an assessed capacity of about 220 million tones. The overall capacity utilization for all the major Ports was about 115% which indicates that the major Ports were handling traffic in excess of capacity. As a result, in India, ships have to wait for berths instead of berths having to wait for ships. Port traffic has been projected to grow to a level of 650 million tones by 2006.

POOR PERFORMANCE

The productivity in Indian Ports is poor as compared to other Ports in the region as discussed below:

(i) Vessel turn Around Time: The average vessels turn round time for Indian Ports varies from 3.3 days to 8. 3

days, (1998 - 99) as compared to 15 to 35 hours in major European Ports and less than a day in Singapore (1998 -99).

(ii) Equipment Utilization: The average availability of equipment in Indian Ports around 70% as compared to 85% - 90% for other Asian Ports (World Bank, 1995). The number of containers handled per ship/hr. is 10 at JNPT Port which is India's most modern container terminal, As compared to 30 in Colombia and 69 in Singapore respectively. While efficiencies have improved since 1995, productivity of Indian ports is still below international standards.

(iii) Labour productivity: On an average, Indian Ports handled around 1424 tonnes of cargo/employee in 1998 - 99. In comparison ports in U.K. handled around 47,000 tonnes of cargo per employee in 1997/98. The Port of Rotterdam handled around 50,500 tonnes of cargo / employee during 1998 -99. Manning scales at different Ports for specific activities such as containers handling and stuffing vary widely. For example, for transfer of containers

from ships to quay Calcutta Port employs a total of 32 persons as against 12 at Haldia, 15 of Mumbai, 21 at Chennai and 4 at JNPT. Again for container stuffing/destuffing, Calcutta and Mumbai employs 28 persons, Chennai 7 and Haldia 2 for unitized and 7 for non-unitized cargo. Such large manning scales result in excessive transaction and manning costs, again making Indian Ports highly uncompetitive. The main factors that have led inefficiencies in the Indian Ports are:

- Most major Ports were originally designed to handled specific categories of cargo which have declined in time while other types of cargoes gained importance. The Ports have not been able to adjust to the categories of cargo which grew the most. There are thus several berths for traditional cargo, which are under-utilized and only a few for new cargo, which are over-utilized.
- Equipment utilization is very poor both because equipment is obsolete and poorly maintained.

- Over staffing at Indian Ports remains rampant and productivity indicators in respect of cargo and equipment handling continue to be poor.
- Documentary procedures relating to cargo handling such as customs clearance requirements are unduly complicated and time consuming. Electronics document processing is still to be introduced in all the Ports.
- Port access facilities and arrangements for moving in bound and outbound cargo are inadequate and unsatisfactory.
- Absence of inter-port and intra-port competition which have been conducive to substantial productivity increases in other countries is absent in India due to poor inland connectivity and a policy regime that protected domestic Ports against competitive pressures.

The consequences of these various shortcomings for the Indian economy are severe. Few large liner ships are willing to call on Indian Ports as they cannot afford to accept the long waiting times. Indian container cargo is

transshipped in Colombia, Dubai or Singapore resulting in additional costs and transit times. As a result, the Indian exporter is not in a position to avail of "fixed-day-of-the-week" services offered by the liner industry at a time when manufacturing and trading companies abroad are increasingly buying and selling on a "Just-in-time" basis. Indian exporters are, therefore operating on the basis of substantial buffer stocks which also makes annual incidence of these various factors such as demurrage charges, transshipment costs, pre-berthing delays and vessel turn around time could be as high as US \$ 1.5 billion per annum. These costs have ultimately to borne by the end user, raising the costs of India's exports in international markets and the price of imports for the Indian economy.

Ports are no longer mere modal interfaces between surface transport and sea transport. They are now logistics and distribution platforms in the supply chain network international trade has now become transport intensive and time sensitive and Indian Ports clearly are not ready for this

changing environment. There is, therefore, an urgent need to restructure the Port sector in order to improve efficiencies and reduce costs.

2.7 MODELS FOR PORT RESTRUCTURING

There are basically three types of Port operating structures:

1. SERVICE PORTS
2. TOOL PORTS
3. LANDLORD PORTS

2.7.1 SERVICE PORTS

The Port authority provides all commercial services to ships and cargo, owns and operates every Port assets, and fulfills all regulatory functions, the service Port. Authority can be either a public entity, as used to be in former socialist countries, and in Singapore, or a private one, as in the case in Felixstowe (United Kingdom), or Hong Kong are outstanding references as far as productivity of Port services are concerned, this could suggest that to some extent, ownership could be a secondary matter. However, the service Port experience in former centralized economics

clearly demonstrated its shortcomings, and the former Port of Singapore authority was turned in 1997 into PS A Corporation, a Port operating company, while regulatory powers were vested into the newly created maritime and Port Authority (MPA).

2.7.2 TOOL PORT

The Port Authority owns the infrastructure, the superstructure and heavy equipment, rents it to operators which carry out commercial operations, and retain all regulatory functions.

2.7.3 LANDLORD PORT

The Port Authority owns the basic infrastructure only, land and access and assets, and leases them out to operators, mostly on a long - term concession basis, while retaining all regulatory functions. Some of the examples of landlord Ports are Rotterdam (Netherlands). Buenos Aires (Argentina) or learn chabang (Thailand).

The landlord Port and Tool Port Authority are usually public bodies owning the related assets on behalf of the

Government, while the commercial operators leasing the facilities or renting the superstructure and equipment are private companies.

2.8 PORT RESTRUCTURING IN INDIA - POLICY INITIATIVES

The government of India which administers the major Ports has now realized that Port restructuring is essential if Indian exporters are to be given an opportunity to enjoy the efficiencies and low cost in transportation as are available to their competitions elsewhere. The Government also recognizes that the additional Ports capacity to meet the projected traffic by 2007 cannot be achieved unless there is massive private investment in the augmentation of Port capacity. The Government of India, has therefore, decided to adopt the concept of landlord Ports, and gradually secure Private participation in the provision of Port services.

Accordingly, in October 1996 policy guidelines were issued which provided for private sector participation / investment in the following areas:

1. Leasing out existing assets of the Port.
2. Construction / creation of additional assets, such as construction and operation of container terminals.
 - Construction and operation of bulk, break bulk, multipurpose and specialized cargo berths.
 - Warehousing, Container freight stations, storage facilities and tank farms.
 - Carnages / handling equipment.
 - Setting up of captive power plant.
 - Dry - docking and ship repair facilities.
3. Leasing of equipment for Port handling and leasing of floating crafts from the private sector.
4. Pilotage
5. Captive facilities for Port based industries.

As Part of this initiative the procedure for inviting private participation and the criteria for evaluation were prescribed, model tender documents and concession agreements were also formulated. The major Ports were advised to identify projects for private sector participation on

the basis of viability, and proceed to take steps to obtain private investment.

As a further step towards security private participation, policy guidelines were issued in 1997 to enables the major Ports set up joint ventures with foreign Ports, minor Ports or private companies. The major port trust Act was amended to give effects to the guidelines issued in 1996 and 1997.

2.8.1 CORPORATIZATION

As stated earlier, the major Ports are governed by the major Port Trust Act, 1963 and the Minor Ports by the Indian Ports Act 1908. Both these acts were modeled after the then British practice in managing Ports and carry a lot of baggage from the acts the century governing the Ports three presidencies Pf. Madras, Calcutta and Bombay. The Board of Trustees who are appointed by the Government of India to administer the Port represent government departments involved with Port operations, labour and services providers such as stevedores, their turts and not in promoting the commercial well being of the Ports. The financial and other

powers of the trustees are also limited. In fact, they could incur expenditure only up to Rs 5 billion in respects of new works and replacements. The different operations in the Ports were also set up as separate profit centres. The accounting practices followed were revenue accounting practices and not commercial accounting practices.

Recognizing that Port operations cannot be made efficient or cost effective unless Ports were encouraged to operate on commercial lines, the government of India, as part of the 1996 policy guidelines, substantially increased the financial and other powers of the Port Trusts. The government of India also took a decision that new Ports will be set up as companies under the Indian companies Act and the existing Port Trusts will also be gradually corporatized and set up as companies

This decision is based on the belief that corporatization of Ports will necessarily make Ports to evaluate their performances on the basis of their profitability. It

This decision is based on the belief that corporatization of Ports will necessarily make Ports to evaluate their performances on the basis of their profitability. It will also expose the Ports to the financial markets for meeting their working capital and project funding requirements and thereby subject them to market discipline. Also corporatization of Ports could eventually lead to their privatization. Accordingly, the 12th new major Port, which is under construction of Errore near Modres, has been set up as a company under the companies Act, with the conservancy functions.

2.9 AN OVERVIEW OF MARITIME TREND IN NIGERIA

That transport is central to development and civilization does not appear to have been appreciated in Nigeria as much it has been in many advanced nations. In concrete terms, transport is the ingredient for the socio-economic and political development of any nation. Development and transport are synonymous hence transport is the landmark of a developed nation. Man, is the center of universal

activities, is always in constant movement in order to I organize other activities and sustain his life needs. Based on this, man has directly or indirectly moved products, materials and services from points of less demand to areas of higher demand. This has resulted in the expansion of national and world trades, [FAULK, 1990]. These unaccomplished goals of man had always led him to search for solace outside his environment.

This ultimate search or unfulfilled goals and the burning desire to improve on his well being as a man, had indeed led to the development of maritime operations. This in turn, has enhanced international trade between widely separated nations, involving an exchange of goods and money transfer in the process, [Faulks, 1990].

Comparatively, available cost figures have shown that maritime transport is the cheapest mode, for the transportation of bulk cargo, Couper [1970], in a study of transportation of same by sea offered British steel the cheapest modal cost on freighting. Indeed, for a third world:

country's port [as in Nigeria], the port helps to achieve greater functionalities and efficiency in operation, and that imports and exports passing through it benefit from cheap and economically competitive port charges (Badejo, 1997), since the maritime transport services have strong relative connection's with port activities, it is pertinent to state that the degree of economic development in maritime industry depends wholly or partly on the average waiting time of vessels and the berth occupancy rate, {Alder man, 1984}.

To achieve this measure of success, there is need for the presence of geophysical facilities, available technology and back up human resources {Waters, 1979}

These geophysical attributes should come as a policy frame work, supported by clear objectives and goals.

These include safe channel and port policies etc. Apart from the physical conditions of available technology to provide safe port, it is equally important that the management of port should be trained personnel and provide adequate facilities to ensure quick turn round time

of ships. These could be achieved through availability of general cargo handling equipment.

Adequate berthing space for generality of trade handled by the port, adequate communication systems, and the development of good inter model interface for the movement of goods i.e. Evaluation and forwarding of consignments. In addition, specialized infrastructural facilities are very necessary to cope with the emergence (Badejo, 1997).

Demand for sea transport services is necessitated by a variety of geographical and economic factors, which result in raw materials to be moved from their resources to manufacturing sites spread around the globe. World trade, as it affects shipping operations, is therefore likely to average four percent growth per annum in the medium term (Adesanya, 1997)

Ideally, the capacity utilization for our port could be estimated in 85% but currently, it operates at 55% due to government policy inconsistency on our ports, {NPA abstract,

1995}. Meanwhile, David, (1987) said that, ship building capacity is under pressure, as owners clamour for new vessels to meet the said demand.

Specifically, the essence of maritime transportation is principally to facilitate the shipping activities by providing avenue through which large quantity of goods can be transferred from one place to another, with the help of water/mode. In order to realize the principal motive for the use of maritime transportation four important elements are necessary and these elements actually constitute transport system [Faulks, 1990].

A system can be described as a group of interrelated objects interacting to form a complete whole. In other words, it constitutes discreet components known as subsystems. These subsystems include the vessels or vehicles, the way, the motive power and the terminals. These have strong relationships to both maritime operation and port services. The link between both of them are dependent on the stated subsystem {Badejo, 1997}

The sub-systems to a very large extent have helped in cementing the already existing relationship between maritime and port operations.

To this end, there is no way the four sub-systems of maritime activities will not exhaustively be discussed in terms of port reforms (concessioning) without the harmonization of port services or its attendant operations, in the context of port reform it is evident that both maritime and port operation work hand in hand and are inseparable to a very large extent. This has been indeed evidenced in the exploration of the benefit of shipping services, as reflected in the nation's local cottage industrial growth and economy [Alderman, 1997]

Having identified the landlord port system as the most suitable structure for modernization of our ports, envelopment of the sector, and for involving private investment therein, it would be necessary to look at the practical steps to be taken towards granting concession of a port or part thereof.

Negotiation is a wide area on which a lot has been written, public sector negotiations however have certain factors that we can narrow down on, it is prudent to treat fundamental aspects of negotiation in the following arrangements.

According to Ekwem (2005) negotiation principle (should be taken very serious. He reiterated the place of communication.

The foundation of good negotiation is good communication, negotiations are best done in face to face meetings, where all the elements of communication must be turned and skillfully deployed for instance, while an invitation for bids from multinational port operators could be made in foreign newspapers and be tailored in such a way as to command attention of prospective investors, one might not be taken as seriously as he should be, if he ultimately negotiate the terms of such a billion dollar deal in inappropriate appearance itself being only one of the very many elements of effective interchange.

Negotiation is about the balance of proper, perceived or government by its nature has power. Thus, there is a strong presumption in private-public collaboration (such as presented by the port reform agenda), that the government is the stronger party. Apart from the natural association of government with power, because in port concession the government is the party that invites various prospective operators to take up leases, government is naturally perceived to be the stronger party in the bargain, since it is the one making the call.

2.9.1 POWER OF COMPETITION

This works both ways, if the prospective investors have similar investment opportunities beyond the shores of Nigeria and they can communicate this effectively, they can use the competition for alternative investment locations as a source of power. From the government's prospective, it would have several bidders, all competing against each other, to choose from, the competition of a particular port thus becomes a big stick that the authority can wield in

separate negotiation sessions with individual prospective operators. The keener the competition, therefore the more the power or government.

2.9.2 POWER OF COMMITMENT

Fully understanding the port reform agenda, the goals of the concession programme and the rewards to be reaped and being committed to those element enhances your power, loyalty of one's organization, it's management and it's goals makes for more effective negotiation on behalf of that organization. If you believe in your self and your view point you will stand up more firmly for them, and that will be transparent in your negotiation.

2.10 DANGOTE COMMITS \$200 MILLION ON PROJECT AT PORTS

Dangote group of companies, says it has committed a ransom of \$200 million or #20 billion as investments in the Ration's seaports (Ray Ugochukwu, 1999). The investments include sugar refining factory, salt refining and bagging factory, among others, for a lease of 21 years agreement.

The company made this known in a memorandum it sent to the brigadier-General Oluwole Retrine commission of inquiry for the investigations of federal government landed property {Ladi Sonuga, 1999}.

The memo made it clear that recently, the Nigerian Port Authority (NPA) has over 70 tenants in the Lagos port complex, most of whom are in the manufacturing and service sector of the economy (Ladi Sonuga, 1999)

In the last couple of years and uptill now,, there is a continuous clarion call for foreign investors to come in and invest in our ports, it is on record that it is only the Dangote group had put up 5 different factories in the country within two years, with which comes a chain of economic activities and has created direct employment for up to 7,000 Nigerians. This laudable effort needs to be supported to enable the port to encourage and provide business activities for the economic development of the country (NPA-IMews, 2000)

On its' operations and resultant benefit to the NPA, the group disclosed in the memo that its' activities at the Lagos port complex along would amount to 48.3 million tones of cargo per annum from which the landlord would be reaping \$285.6 million {Ray Ugochukwu, 1999).

According to rent per annum to the NPA, would be #382) Million annually. A break down of the figures showed that at warehouse "II" alone, according to the company, 700,000 tons at \$5.0 per ton would be generated for imported raw sugar while exported raw sugar would total 300,000 at \$12 levy per ton. The NPA bulk charger for the two would be \$3.5 and \$3.6 million respectively, with rent for export amounting to N10.6 million (Ray Ugochukwu, 1999). At warehouse "8", the salt plant would give a total production of 300,000 tons at \$5.00 per ton for the NPA and a charge of \$1.6 million and #3.9 million rents, the group stated.

Similarly, the cement factory at warehouse "F" will turn out 750,000 tons at \$5.00 per ton levy with bulk charges for

NPA amounting to \$3.8 million with a payable rent of #3.7 million (Godwin Oritse 1999).

2.11 COMET CONSORTIUM TAKES OVER RORO PORT AT TINCAN ISLAND LAGOS

Official take over of RORO terminal at tin can island port, in Lagos by comet consortium, a five star logistic Ltd, (a joint venture company formed by the consortium (maritime news, 2006).

Further to the successful but for RORO terminal at the tin can Island in Lagos by the comet consortium and the 15 years concession granted to the consortium fine star logistics Ltd takes over the operational responsibilities at RORO terminal which took effect from Wednesday, 10th may 2006 (NPA News 2006).

This is by agreement with the bureau of public enterprises, the Nigerian port authority (NPA) and national council on privatization that the consortium shall in the next 15 yrs run the management, operation, investment and maintenance of the RORO port

2.12 ASSURANCE OF THE COMPANY

- a) To maintain fast, efficient, secure and reliable services for all importers and exporters, for cars/motorized vehicles and containers/palletized goods
- b) Operation from May 10th 2006 that five star logistics Ltd shall maintain safe and secure working environment for all employees and affiliated personnel requiring entry into the terminals.
- c) Hours of operations remain the same till further notice.
- d) All movement in five star logistics premises shall be in compliance with ISPS CODE requirements.

2.13 LEVELS OF PORT DEVELOPMENT

- 1) Small local posts:** They serve small communities and therefore through them passes all kinds of general cargo and container usually transported by relatively small ships (shorts sea shipping). Facilities are basis, berths for general use with 'some storage areas nearby.
- 2) Large local port:** When traffic researcher a given level, it is profitable to invest in specific equipments, like for

example a day bulk terminal with berths able to serve deep-draught ships it is also likely that some investments are dedicated to improve level access and to buy equipment to handle containers, although they would still be moved through cargo berths.

3) Large Regional port: A seaport which handles a significant level of long haul traffic starts requiring large investments in specialized terminals, specialized in some goods (coal, oil, wheat, etc), this has capacity to serve huge ships of more than 60,000 GRT, used in the long haul bulk transport.

4) Regional distribution centers: The largest ports (e.g. Rotterdam, Hong Kong or Singapore) are a collection of highly specialized terminals that only serve particular traffics. These ports have excellent equipments for transport interchange between all modes (railway road, inland navigation). The role of these ports is to act as hubs, where huge long haul ships call at, namely to make transshipment operations. From the

hubs, smaller ships or other transport modes distribute cargoes to the region.

2.13.1 OBLIGATION AND PAYMENTS

A concession contract must explicitly mention what obligation of concessionaire are, in terms of the level and quality of serve. It should specify clearly how changes to uses are to be determined, who owns the revenue obtained from these charges and what the payments to be made between the parties are the usual norm is that the concessionaire is obliged to pay a fixed annual fee (some and camen) to the port authority or the institution responsible for the concession. It is possible to design a contract in which this fee is negative, if the concessionaire receives a payment from the port authority, when the concessionaire obligation include the provision of some derive under the consideration of public service, and revenue from port users for that service do not cover costs. Although not frequently observed, concessionaires fees can sometimes be linked to the level of traffic served by the

terminal or the infrastructure subject to concession (e.g. making it a proportional to tons or TEDS handled including a guaranteed minimum payment to the port authority concession granted in the port of Buenos Aires have used this system of proportionality plus a minimum guaranteed payment. In some cases, the concessionaire can be made responsible for the general use of the port, and then transferring the revenue to the port authority.

When performing that task, the concessionaire acts simply as an agent for the port authority, since the level of these port dues is determined by the latter. Alternatively, the level of charges for the services, provided by the concessionaire (cargo handling, storage, etc) is usually left.

PRIVATIZATION

Privatization according to Holland (2000) is a globalized concept that has to do with the initiation of the private sector participation in the business of government owned public enterprise. It is equally a strategy where government owned public enterprise's functions and management is

transferred to private sector (Ndikom, 2006). The essence of this exercise is to ensure efficient performance and the spirit of productivity into a system that is so sick in terms of performance.

Privatization is only a temporary transfer, and does not strip the government of its role as a regulatory authority. Privatization is, in principle an irreversible operation and requires an appraisal of the share worth of the enterprises through various methods and the payment therefore at a site price, which differ from the appraised price since it is determined through competitive bidding which often allows for discount on the capital base (Ndikom 2003).

This principle of privatization is seriously anchored on restructuring and structural transformation that is blowing the wind of change within the port's system (Ndikom, 2006). It is also aimed at bringing investors, which would provide modern cargo equipment and plants, foster technological transfer and provide port services that would be efficient, safe and competitive. In this globalizing world, the essence

of Port reform has gone beyond waterfront operations to include Port efficiency which includes the arrival of vessels, the channels of passage, berthing, discharging, clearing and receiving of cargo channel management that would help to synchronize arrival of vessels, skill acquisition, equipment and funding as a requirement for the authority to attain international acceptable standard.

Concessioning is the contracting out of the management process that is aimed to improve the management and operational performances of day to day burning of the Nigerian seaports.

It is an aspect of privatization policy that emphasizes that ports authority are advised to cure private companies to operate and manage their facilities to reduce cost of operation and increase productivity and operational efficiency. Either way, the management of the port will be handed over to private operators for a period of time.

Since independence, the government of Nigeria (GON) has run and managed the vital sectors of the economy

through state owned enterprises (SOE). The economy was highly regulated and the principles of competition and operation of free market forces were absent.

The need to offer public services and supply some goods and services at prices lower than what is obtained under a competitive market justified retention SOE.

However, S.O.E proved on the long term to be inefficient, highly dependent on subsidies, unresponsive to modern technological changes and unprofitable to the government. The government of Nigeria is now committed to deregulate the vital sectors of the economy in order to move Nigeria from a public sector oriented economy towards a private sector driven economy that is competitive, export oriented and market based.

Privatization is a globalized concept that has actually injected proper efficiency and productivity spirit into a system that is ab initio stock in terms of performance.

There are two types of concessioning process and they are as follows:

(1) **BOT**: (Build, operate and transfer): It is pertinent to note here that the concept of BOT implies that the investor will build the port from the onset with all infrastructure facilities in place and has designed to sign on the following conditions.

- Operate within a period of time normally 30yrs and above
- Assets construction by private developer will be handed over to government at the end of the concession agreement.
- Full management rights and control will be granted to the private concessioner within the stipulated period of operation.

(2) **LOT**: Lease, operate and transfer:

- Here the management of the private concern within the stipulated period of agreement had no clear impetus to upgrade and modernize existing facilities and equipment.

- This means that the private concessioner had to operate the business with the existing structures in place
- Assets are handed over to government at the end of the concessioning agreement.
- Usually operate and manage existing facilities and structures in place for a period of 10-15 years.
- Financial returns to government will be in form of rents.

Deregulation implies the elimination or reduction of government regulation of business over a certain industry to permit free market and competition. The key vehicles through which the government deregulation policy is based on privatization and commercialization.

The government of Nigeria at the onset opted for commercialization of the ports. Under this scheme, the ports though essentially state owned, operated as purely commercial enterprises with profit as primary motive. This option appears unsatisfactory for reasons which are outside the scope of this project.

The government of Nigeria would seem to be considering concessioning. Whichever way, the government of Nigeria chooses to go, it must be emphasized that there is a wide structural gorge between a regulated and deregulated economy that needs a proper frame work to close through careful planning and serial implementation. Each has its distinct structures, mechanics, legal and regulating frame work, formalities, processes and procedure.

The structures of a regulated economy would be unsuitable for a deregulated economy.

Transport is the lifeline of any city. Any policy that describes the smooth running of the transport system will definitely affect the efficiency and well being of the society and its environments.

CHAPTER THREE

RESEARCH METHODOLOGY

INTRODUCTION

3.1 Research methodology is basically concerned, with the techniques that were employed in the cause of research, to enable the actualization of the purpose of study.

These techniques ranges from the various methods adopted for identification and analysis of the problem at hand, methods of data collection, and analysis. Consideration of available alternative solutions.

This research work tries to x-ray the impact of concession on Port operations, with emphasis on concessioning as the world most efficient Port model, for Port development in relation to efficiency and productivity. Using Apapa Port as a case study. Research methodology is perhaps one of the most difficult part of every research and sourcing, it determines the internal and external validity of

the results and equally depends on the ability used to control all the non-related facts or variable influences.

3.2 RESEARCH DESIGN

Research design is regarded as the plan structure and strategy of investigation conceived so as to obtain answers to research question. It is the overall scheme of the research and contains an outline of what the research proposes to accomplish. It also guarantees that relevant details are collected and that it is accurate and reliable.

The objective of data collection is to get relevant and useful data, for proffering solution to problem under study. For purpose of this study. It would be observed, that the method of data collection includes primary, secondary and territory sourced of information procurement. The primary data was sourced via self administration questionnaires and personal interview whereas the existing in form of Text Books, journals, articles, magazine and internet.

The various approach and methods employed explains the importance of this research projects both the survey and

historical methods were employed as a basic attempt to discover the effect of Port concessioning. Taking into account what was obtainable before the concessioning era, level of efficiency before it's implementation. With emphasis on Port performance indicators (cargo through put, ship turn around time, berth occupancy , ship idle time etc) as a yardstick for ascertaining the efficiency and productivity of a Port, which translates into high patronage and satisfaction on the Port of it's users which include, freight forwarders, licensed custom agencies, ship operators and owners etc.

3.3 METHOD OF DATA COLLECTION/DATA COLLECTION INSTRUMENT

As earlier indicated the researcher did source data from primary, secondary and territory sources. The primary source being an instrument x-ray and affirmation of the data (information) extracted from the secondary sources.

Questionnaires as a primary source is used as technique of questioning people and getting their responses recorded. It could be defined as a self administered process

whereby the respondent himself reads the questions and records in answers without the assistance of the interviewer. In this research work questionnaires were used with letters of introduction and identification attached, before dispatch to respondents.

The research has thus arranged the questionnaires in a format that enables respondent give responses according to degree of certainly, they have as it affects such question.

The use of questionnaires was chosen for this study because it presents the current view of stake holders of the industry, including the realities of ground.

3.4 PROBLEMS OF DATA COLLECTION

A research of this nature is certainly an enormous task with heavy challenges following. The bureaucratic processes involved in our organized institutions, the activities of our security agencies mining our Port entrances, the attitude of workers in the industry in responding to questionnaires, and interviewing from researchers. The un-cultured attitude of some workers, and finances involved in executing a quality

work, all this plus more stood as challenges to the researcher.

The researcher had to travel to Lagos in order to make contacts with managers in the administrative department of the Nigerian Port Authority, Apapa, selected shipping lines and Nigerian shipper's council in order to retrieve data and information based on concessioning of Apapa Port and Tincan. Data was also collected from Bureau of public enterprises BPE and on the internet.

3.5 METHOD OF UTILIZATION OF DATA

All the data assembled for this particular project were carefully and orderly arranged in such way that careful analysis of the problems be deviling our Port could be identified, causes and consequences of this problem, solutions adopted in similar circumstances by some advanced economics and countries, the result of this solutions on the Part of this nations of the world. The future of our Port in the event of the policy already adopted.

For more understanding of the subject matter comparative analysis of the Port of Kelang, Port of Singapore as a reference Port that has already implemented the concessioning programme. This is to ascertain and forecast the future of the Nigerian Ports having considered this concessioning model.

3.6 VALIDITY AND RELIABILITY OF RESEARCH INSTRUMENT

-VALIDITY

Validity can be described as the characteristics used to affirm research information and ascertain what it claims to measure. The validity test of a data thus denotes the degree to which it measures what it is intended to measured.

The researcher thus adopted a system to authenticate information actually sourced for by asking questions in relation to the questionnaire so as to assess the respondent understanding of the content of questionnaire and whether the information sought for from the respondents are considered relevant to the objective of the researcher.

RELIABILITY

Reliability can be defined as the degree to which a side yields consistent scores when attitude is measured a number of times. A proper analysis of the above definition suggests that reliability of a test is the consistency of result obtained throughout a series of measurement.

It also believes that for a test to be reliable it should be considered a number of times and the variations should not be significant. There are various methods of measuring reliability of attitudes which are in general use as.

- (a) Test re test
- (b) Equipment or alternate method
- (c) Split half
- (d) Odd even

The researcher decided to make use of the test method in this study.

TEST RE TEST

The test re test method entails twice within a reasonable length of time in order to determine the

reliability of data collected. Ten sets of questionnaires were served with another set of questionnaires a week later.

The responses in respect of each question were given weight and were then compared on an item-by-item basis taking into consideration, the question that the degree of correspondence was determined by calculating the coefficient of correlation between the results of X and Y and in this case 92% was determined which is satisfactory reliable.

METHOD OF DATA ANALYSIS TECHNIQUE

In this section, the Chi-Square Technique was used for the analysis of the impact of concessioning and the future of Nigerian ports. We then discuss the data that describes the position of people interviewed through the questionnaires.

CHAPTER FOUR

4.1 RESULTS AND DISCUSSION

This chapter shows the evaluation of the viability of concessioning in a national economy development.

ANALYSIS OF QUESTIONNAIRES

Out of seventy (70) questionnaires design to elicit information on the subject matter from firms and organization, only sixty (60) questionnaires were completed and returned to the researcher. These numbers of responses represent 85.7% value of the total distributed questionnaires and then form the sample size.

TABLE 4.1

This shows the percentage order with which the questionnaire was distributed.

| NUMBER | POSITION | PERCENTAGE |
|---------------|------------------|-------------------|
| 5 | Managerial staff | 8.33 % |
| 10 | Senior staff | 16.67% |
| 27 | Junior staff | 45.0 % |
| 18 | Casual workers | 30% |
| 60 | Total | 100% |

Years of service of respective officers that part took in the responses to the questionnaire.

TABLE 4.2

| YEARS OF SERVICE | NUMBER OF PERSON | PERCENTAGE |
|------------------|------------------|------------|
| 1-5 | 15 | 25% |
| 5-10 | 12 | 20% |
| 10-15 | 18 | 30% |
| 15-20 | 6 | 10% |
| 20 and above | 9 | 15% |
| TOTAL | 60 | 100% |

A total of seventy questionnaires were dispatched to respondents out of which sixty questionnaires were completed and returned to the researcher.

| NO OF QUESTIONNAIRES DISTRIBUTE | NO OF QUESTIONNAIRES RETURNED | PERCENTAGE RETURNED |
|---------------------------------|-------------------------------|---------------------|
|---------------------------------|-------------------------------|---------------------|

| | | |
|----|----|-------|
| 70 | 60 | 85.7% |
|----|----|-------|

$$\frac{60}{70} \times \frac{100}{1} = 85.7\%$$

TABLE 4.3 Some of the problems be deviling African Ports as rated in 1998.

| S/N | OBSTACLES | RATINGS |
|-----|-------------------------------------|---------|
| 1 | Corruption | 4.65 |
| 2 | Inadequate supply of infrastructure | 4.64 |
| 3 | Inflation | 4.31 |
| 4 | Financing | 4.19 |
| 5 | Tax regulation | 4.09 |
| 6 | Crime and thrift | 4.00 |
| 7 | General uncertainty on cost | 4.89 |
| 8 | Regulation on foreign trade | 3.68 |
| 9 | Policy instability | 3.69 |
| 10 | Labour regulation | 3.44 |
| 11 | Foreign currency regulations | 3.34 |
| 12 | Environmental regulations | 3.34 |
| 13 | Regulations for business | 3.25 |
| 14 | Price control | 2.75 |
| 15 | Terrorism | 2.2 |

Source: Bruneffi et al (1998)

Peculiar to Nigeria Port before the adoption of concessioning and privatization strategy includes.

- a) Inadequate maintenance of existing facilities.
- b) Obsolesced of plant and equipment.
- c) Decline in the quality of service, leading to serve congestion.

- d) Environmental degradation and high operation cost.
- e) Government policy inconsistency.
- f) High tariffs, Port changers and dues.
- g) Multiplicity of agencies, wharf rats and other associated bodies constituting till gares and adding to overall chos, inefficiency and cost of wing business in Nigeria.

TABLE 4.4

CARGO THROUGHPUT HANDLED IN NIGERIAN PORT

| YEAR | VOLUME OF CARGO (IMPORT AND EXPORT) |
|------|-------------------------------------|
| 1994 | 15256 |
| 1995 | 16840 |
| 1996 | 17800 |
| 1997 | 18900 |
| 1998 | 17703 |
| 1999 | 16701 |
| 2000 | 19337 |
| 2001 | 24711 |
| 2002 | 25644 |
| 2003 | 26500 |
| 2004 | 27448 |
| 2005 | 28564 |

Sources: Federal office of statistics section of: transport sector 2002

A careful look at this table, thus reveals the fluctuation state of our maritime trade. A situation traceable to unfriendly Port nature leading to cargo diversion and above

all, the issue of corruption, which prevent effective development in our Port, before the implementation of the concessioning agreement.

Table 4.5 DEMOGRAPHIC AND BASIC ECONOMIC STATISTICS FOR DPEC COUNTRIES.

| | Estimate of mid year | (1000) Area | POP Density | GDP at current price Billions per capital | | Economic Growth 1 % | Foreign Trade | |
|--------------|----------------------|-------------|-------------|---|--------|---------------------|---------------|------|
| Indonesia | 210.4 | 1,905 | 110 | 1153. | 730 | 48 | 62.1 | 35.5 |
| Iran | 64.0 | 1633 | 39 | 329.9 | 5178 | 49 | 0.9 | 3.8 |
| Kuwait | 2.2 | 18 | 122 | 37.8 | 179991 | 1.7 | 13.3 | 7.6 |
| Libya | 5.5 | 1709 | 3 | 34.9 | 6289 | 4.4 | | 18.2 |
| Nigeria | 115.2 | 923 | 125 | 39.4 | 342 | 3.9 | 8.7 | 21.0 |
| Qatar | 0.6 | 11 | 55 | 16.5 | 289.47 | 11.6 | | |
| Saudi Arabia | 20.4 | 2149 | 10 | 173.1 | 3504 | 4.5 | 77.6 | 302 |
| UAE | 2.6 | 83 | 31 | 67..9 | 26930 | 5.0 | | 38.1 |
| Veneluela | 24.3 | 912 | 227 | 121.8 | 5039 | 3.2 | 31.8 | 16.2 |
| Iraq | 23.0 | 16.33 | 53 | | | 10.0 | | |

Sources: UNCTAD Secretarial (2000)

This indices reveals that Nigeria's population is quite high, as a result the economic down trend of the country is imposing a devastating blow on the standard of living of the entire citizenry the per capital income is indicated as 342 (\$) which is about the lowest in the organization of petroleum

exporting countries (OPEC) also our import at cost, insurance and freight (GIF) is greater than our export in free on board (FOB) This is 21.8, 8.7 as at 2000 year evaluation.

TABLE 4.6

SHIPPING SECTOR (%) CONTRIBUTION TO GDD

1991-2000

| YEAR | OCEAN | TOTAL | CONTRIBUTION |
|------|-------|-------|--------------|
| 1991 | 0.17 | 3.12 | 4.45 |
| 1992 | 0.16 | 3.16 | 5.06 |
| 1993 | 0.15 | 3.21 | 4.67 |
| 1994 | 0.14 | 3.20 | 4.38 |
| 1995 | 0.14 | 3.18 | 4.40 |
| 1996 | 0.35 | 3.59 | 9.75 |
| 1997 | 0.35 | 3.92 | 9.18 |
| 1998 | 0.28 | 3.92 | 7.14 |
| 1999 | 0.22 | 3.38 | 6.51 |
| 2000 | 0.38 | 3.38 | 9.69 |

Sources: Federal office of statistics 2000

Please refer to the small leaf for table 4.12

The percentage of ocean/shipping contribution x GDP

Per capital head = Ocean contribution to GDP per capital income

$$= \frac{\text{Gross Domestic Product}}{\text{Population}}$$

Therefore Ocean /shipping contribution to per capital income equal % shipping x GDP per head.

Using Regression Analysis as a statistical tool to seen the data, we found out there it a relationship between the amount of cargo handled at the Ports and the contribution to per capital income of the country.

As the cargo handled at the Port increases, the per capital income of the country increases proportionally. Table 4.6 above, reveals that the percentage contribution of shipping to per capital income were 0.354 and 0.36 in 1996 and 1997 respectively. These gave rise to per capital of 1088.5 and 1126.8 respectively. Again in 1999, the percentage was reduced to 0.22 which resulted to per capital income of 654.5.

From table 4.7 it can be shown that the years mentioned above as having high percentage contribution to GDP per head also have had high cargo throughput along with them. This is made evident in 1997 recording 17800000

tonnes and 18900000 tonnes and 18900000 tonnes respectively.

From the research carried out and most especially from the information gotten from secondary source, it can be deduced that the shortcomings of the Nigeria maritime industry may be attributed to poor, insufficient and out dated cargo handling equipment. Also poor services which include high cargo clearing cost and the activities of wharf rat and dubious labour workers also impose adverse effect on the development of the industry.

From the analysis ran, the negative sign of "a" represents the shortcomings which "b' represents other Port facilities e.g. berths and ships within the time interval considered.

Lack of adequate facilities in Ports has forced shipping companies to acquire their own and loading gear, increasing import cost (Liqwoke, 2002).

The clearing processes are also complicated by the presence of too many regulatory and government security

agencies from who importers are required to obtain clearance and in 1998 they numbered 32 (NPA News, 2001) Based on the findings of the analysis carried out and from table 4.6 it can be observed that in 1998 cargo due to the effect of exorbitant cargo clearing cost percentage contribution of shipping to GDP was 0.28 where it was 0.35 in 1997 due to diversion of Nigeria bound cargoes to other Ports of African national (NPA news, 2001)

A 25 percent rebate on import duty was introduced in 1995 to ameliorate the adverse effect of inflation, this led to an increase in percentage contribution of GDP in shipping in 1996 (0.35) as compared to that of 1994 (0.14)

CORRELATION BETWEEN PER CAPITAL INCOME AND CARGO THROUGHPUT

From the calculation in the appendix, the result shows that the correlation between the per capital income and the cargo throughput is not strong,. Given that $r = 0.93$ means that it is a mild correlation.

As a result, we can deduce that all other sectors of the economy like the Agriculture, the mining construction and the manufacturing industry etc. have contributed immensely to the per capital income of the country.

This implies that the supplying sector only contributes a part of the per capital income of the nation.

Besides table 4.2 reveals that the supplying sector contributes about 10 -30 percent of the per capital income. Low value of r will indicate that the shipping sector has a high contribution to the growth of per capital income of the nation whereas the high value of r indicates the low contribution of shipping to the per capital income of the nation.

OTHER PROBLEMS OF OUR PORT INCLUDE

- (a) Inadequate berthing space
- (b) Draft restriction / levels
- (c) Sea piracy
- (d) Reduced channel widths due to unwholesome obstacles.

- (e) Labour problem
- (f) Advance Prioritizing of vessel call
- (g) Vessel delay problems
- (h) Inadequate functioning plant and equipment
- (i) Inadequate finance and funding of Port operations especially in the area of Port infrastructure
- (j) Obsolescence of plant and equipment
- (k) Decline in the quality of service leading to severe congestion
- (l) Proliferation of Government institution agencies operating in the Port.
- (m) Government policy inconsistency
- (n) Operational delays and documentation procedures
- (o) Activities of wharf rats.

4.2 PRESENTATION AND ANALYSIS OF DATA ACCORDING TO THE TEST OF HYPOTHESIS

Hypothesis are ideas, beliefs or assumptions put forward by someone for the purpose of helping and guiding him in arriving at reasonable conclusion these assumption

are believed to be the originally, but the result of research may prove otherwise thus there is need to rest each hypothesis put forward in this study. These hypotheses are generally referred to as "research hypothesis".

The purpose of this Part of the project is to interpret and discuss the result of the test carried out with respect to the hypothesis used for the study. The statistical or null hypothesis and the research or alternative hypothesis and the result, the alternative hypothesis describes explanation not covered by the null hypothesis. The null hypothesis is rejected while the alternative hypothesis is to be accepted. The table below shows the relationship of the questionnaires to the hypothesis.

| HYPOTHESIS | TEST | QUESTIONS |
|------------|------|-----------|
|------------|------|-----------|

HYPOTHESIS. I

Poor quality service and delays affects the productivity of a Port.

H_0 : Port comcessioning is not a global tool for port development.

NULL HYPOTHESIS (Ho): Poor quality services and delay does not affect the productivity of a Port.

This hypothesis is tested using question in the tables blow.

ALTERATIVE HYPOTHESIS (HI) Poor quality service and delays affects productivity of a Port.

| QUESTION | TOTAL | YES | % | NO | % | DON'T | |
|----------|----------|--------|--------|--------|--------|-------------|----------|
| | | | | | | KNOW | % |
| NUMBER | Response | Number | Figure | Number | Figure | Figure | Figure |
| | | | 93.3 | | | | |
| 16 | 60 | 56 | 93.3 | 3 | 5 | 1 | 1.6 |
| TOTAL | 60 | 56 | 93.3 | 3 | 5 | 1 | 1.6 |

The table above indicates that 56 respondent (93.3%) agreed that poor quality service and delays affects the productivity of a Port, 3 respondents (5%) disagreed and 1 respondents (1.6%) has no idea.

DECISION:

The Null hypothesis is rejected and alternative hypothesis is accepted, showing that poor quality service and delays affects the productivity of a Port.

HYPOTHESIS (2)

The private sector offers a more efficient service than government parastatals (NPA) in Port service delivery.

NULL HYPOTHESIS (HO):

The private sector does not offer more efficient service than government parastatals (NPA) in Port service delivery.

This hypothesis is tested:

| QUESTION Number | TOTAL Response | YES Number | % Figure | NO Number | % figure | DON'T KNOW Number | % figure |
|-----------------|----------------|------------|----------|-----------|----------|-------------------|----------|
| 4 | 60 | 45 | 75 | 13 | 21.6 | 2 | 3.33 |
| 18 | 60 | 48 | 80 | 10 | 16.6 | 2 | 3.33 |
| Total | 120 | 93 | 77.5 | 23 | 19.16 | 4 | 3.33 |
| Average | 60 | 47 | 78 | 11.0 | 19.16 | 2 | 3.33 |

The table above shows that an average of 4.7 respondents (78%) agree that the private sector offers a more efficient service than government parastatals (NPA) in Port services delivery. About 11 respondents (19.16%) disagree and 2 respondents (3.33%) have no idea.

DECISION

The null hypothesis should be rejected and the alternative hypothesis accepted, showing that the private sector offers a more efficient services than governments parastatals (NPA) in Port service delivery.

HYPOTHESIS 3:

High Port tariff encourages sharp practice by Port users Null Hypothesis (H₀).

High Port tariff does not encourage sharp practices by Port users.

ALTERNATIVE HYPOTHESIS (H₁): High Port tariff do encourage sharp practice by Port users.

This hypothesis is tested.

| QUESTION | TOTAL | YES | % | NO | % | DON'T KNOW | % |
|----------|----------|--------|--------|--------|--------|------------|--------|
| Number | Response | Number | Figure | Number | figure | Number | figure |
| 6 | 60 | 52 | 86.6% | 7 | 11.6 | 1 | 1.66 |
| 9 | 60 | 48 | 80% | 11 | 18.3 | 1 | 1.66 |
| Total | 120 | 100 | 166.6% | 18 | 30.0 | 2 | 3.33 |
| Average | 60 | 50 | 83.3 | 9 | 15 | 1 | 1.66 |

From the table above, 50 respondent (83.3%) agreed that high Pot tariff encourages sharp practice by Port users a respondents (15%) disagree and I respondent (1.66%) does not know.

DECISION

The null hypothesis should be rejected and the alternative hypothesis should be accepted showing that high Port tariff encourages, sharp practices by Port users.

HYPOTHESIS H:

Obsolete equipment affects Port services delivery null hypothesis (H₀) obsolete equipment does not affect Port service delivery.

ALTERNATIVE HYPOTHESIS (H₁): Obsolete equipment do affect Port service delivery.

The hypothesis is tested:

| QUESTION | TOTAL | YES | % | NO | % | DON'T KNOW | % |
|----------|---------|--------|--------|--------|--------|------------|--------|
| Number | Respons | Number | Figure | Number | figure | Number | figure |
| 15 | 60 | 55 | 91.6% | 3 | 5 | 2 | 3.33 |
| Total | 60 | 55 | 91.6 | 3 | 5 | 2 | 3.33 |

From the above 55 respondents (91.6%) agreed that obsolete equipment affects Port service delivery, 3 respondent (5%) disagree and 2 respondent (3.33%) are new about the matter.

DECISION:

The null hypothesis should be rejected and alternative hypothesis accepted showing that obsolete equipment affects Port service delivery.

HYPOTHESIS 4

Government policy in Consistence contributes to poor Port Management.

NULL HYPOTHESIS (H₀):

Government Policy inconsistence does not contribute to poor Port management.

ALTERNATIVE HYPOTHESIS (H₁): Government policy inconsistence does effect Port management.

| QUESTION | TOTAL | YES | % | ND | % | DON'T KNOW | % |
|----------|---------|--------|--------|--------|--------|------------|--------|
| Number | Respons | Number | Figure | Number | figure | Number | figure |
| 10 | 60 | 45 | 75 | 10 | 16.66 | 5 | 8.33 |
| 11 | 60 | 45 | 75 | 10 | 16.66 | 5 | 8.33 |
| Total | 120 | 90 | 150 | 20 | 33.32 | 10 | 16.66 |
| Average | 60 | 45 | 75 | 10 | 16.66 | 5 | 8.33 |

From the table above 45 respondents (75%) agree government policies inconsistency contributes to poor Port management 10 respondent (16.66%) disagrees and 5 respondents (8.33%) has no knowledge of the fact.

DECISION

The Null hypothesis should be rejected and the alternative hypothesis should be accepted, showing that government policy inconsistency contributes to poor management.

4.3 TEST OF HYPOTHESIS USING THE CHI-SQUARE

DISTRIBUTION

H_0 : Refers to null hypothesis

H_1 : Refers to the alternative hypothesis

1. H_0 : Port concessioning have no positive effects (not alternative) as a global tool for port development.

H_1 : Port concessioning have positive effects (significant) as a global tool for port development.

2. H_0 : Landlord port model have no positive effect (not significant) in port development process.

3. H_0 : Port concessioning have no positive effect (not significant) in the preference for effective management system.

H_0 : Port concessioning have positive effect (significant) in the preference of effective port management system.

TEST QUESTION 1

| Response | O | E | (O - E) | (O - E) ² |
|----------|----|----|---------|----------------------|
| Yes | 37 | 30 | +7 | 49 |
| No | 23 | 30 | -7 | 49 |
| Total | 50 | 60 | 0 | 98 |

$$X^2 = 98/60 = 1.63$$

From the calculation X^2 calculated was 1.04 using significant level of 5% (0.05) at degree of freedom of $n = 1$, the we have the theoretical value $X^2 = 9.55$.

Since table value X^2 is higher than X^2 calculated ($X^2_{tv} > X^2_{cv}$) $9.55 > 1.63$ we reject the null hypothesis H_0 , and accept alternative hypothesis H_1 , conclude that, port

concessioning have positive effect (it is significant) as a global tool for port development.

Consequently poor quality service and delay which is not a factor in concession affect the production of a port.

TEST QUESTION 2

| Response | O | E | (O - E) | (O - E) ² |
|----------|----|----|---------|----------------------|
| Yes | 39 | 30 | +9 | 81 |
| No | 21 | 30 | -9 | 81 |
| Total | 60 | 60 | 0 | 162 |

$$X^2 = 162/50 = 3.24$$

From the calculation X^2 calculated was 3.24 if using significant level of 5% (0.05) at degree of freedom of $n = 1$, then we have theoretical $X^2 = 9.55$.

Since table value X^2 is higher than X^2 calculated ($X^2_{tv} > X^2_{cv}$) $9.55 > 3.24$ we reject the null hypothesis H_0 , and accept alternative hypothesis H_1 , we conclude that, Landlord port model have a positive effect (is significant) in port development process.

TEST QUESTION 3

| Response | O | E | (O - E) | (O - E) ² |
|----------|----|----|---------|----------------------|
| Yes | 40 | 30 | +10 | 100 |
| No | 20 | 30 | -10 | 100 |
| Total | 60 | 60 | 0 | 200 |

$$X^2 = 200/50 = 4.0$$

From the calculation $X^2 = 4.0$ significant level of 5% (0.05) at degree of freedom of $n = 1$, then we have theoretical $X^2 = 7.7$ Since table value X^2 is higher than X^2 calculated ($X^2_{tv} > X^2_{cv}$) $7.7 > 4.0$ we reject the null hypothesis H_0 , and accept alternative hypothesis H_1 , we conclude that, port concessioning have positive effect (significant) in preference of effective management system.

4.4 DISCUSSION OF RESULTS

The results of the analysis shows that port concessioning is very viable in a national economy, because this research has revealed that port concessioning is highly significant as

a global tool for port development, unquantifiable gains to the economy of a nation.

Virtually, it eradicate poor quality service and delay which is a major barrier to commercial progression which realize from the revenue generated through efficient shipping services.

Moreso, port concessioning is significant in preference of system. Since it will expose the private sector concern for a more efficient service than government parastatals (NPA) in port service delivery.

Furthermore, it will proffer a lasting solution to the corrupt practices within the corridors of national port for the fact that, the private stakeholders would be more reasonable in their dealing to avoid government revocation of their licenses and unnecessary public reactions which reputation.

Hence, port concessioning contribute effectively to the future development of a nations economy in the following ways.

- The application of private capital socially and economically desirable projects, freeing up government funds for other priority projects.
- The transfer of risks for construction finance and operation of the facility to the private sector.
- The attraction and use of foreign investment and technology.
- Avoidance of drawbacks associated with monopolies through the inclusion of detailed concession conditions.
- Better and more efficient port management (especially port operations) performed by private operators.

CHAPTER FIVE

5.1 CONCLUSION AND RECOMMENDATION

This chapter deals with the conclusion and recommendation of the research, in relation to port and concessioning agreement the socio-economic benefit to the Nigerian economy.

5.2 CONCLUSION

In view of the above, the research is aimed at x-raying port concessioning agreement, what constitutes this agreement, its impact on Port operation and activities. The gains accruable or obtainable as a result of its implementation.

However, the research started with chapter one, which introduced the problem of study, presentation of hypothesis that were later tested as well as maritime transport development background, problems of our NPA managed Port, corruption practices obtainable and the dare need for a change.

Chapter two - "The literature review defined the privatization and concessioning agreement as a globalised concept, it also looked at the Nigerian Ports concessioning policy, the landlord Port system, legislative background, private sector participation, port restructuring and benefits of the privatization and concessioning agreement with references to some advanced Port and our new concessioned Port.

Chapter three of this research highlighted the methodology employed in this research while chapter four carefully looked into the hypothesis as they were advanced and tested in line with the answers obtained from the questionnaires it also made use of the Regression Analysis as a statistical tool to determine the relationship between cargo throughput and the contribution to per capital income of the country. The results obtained confirms that the higher the cargo throughput, the higher the contribution to per capital income of the country. The hypothesis results have confirmed that Port patronage can be increased through,

private sector participation (concessioning) as efficiency and productivity is higher in concessioned Port than unconcessioned Port.

Finally, chapter five gives the summary, conclusion and useful recommendations on the issue of study to relevant and regulatory authorities.

With the information gathered so far, from the literature review, to the empirical analysis conducted, it is obvious that profit can be effectively maximized and terminal productivity and customer satisfaction attained by both Port operators and Port users if Port service providers (concessionaries) will adhere to providing quality logistics services and charges commensurate with services rendered. They should also improve on existing infrastructures and equipment, hence the concessioning agreement is on build, operate and transfer. The goal of our government, to transform our Ports into a regional hub for West Africa, should be pursued with vigor reasonable effort should be constantly made to reduce ship turn around time and the

number of days cargo spend in Port, as this will ensure high profit maximization.

Finally, it is pertinent to note that inefficient and ineffective logistics operation will have adverse effects like low earning capacity, cargo diversion, terminal congestion and increased operation cost to Port users (shippers and ship owners) and operators alike, it is therefore a matter of necessary that Port operators (concessionaries) must adopt all necessity customer - centered value added logistics tools like reliability centered and cost efficient logistics management system.

5.3 RECOMMENDATION

The task of transforming our Ports into regional hub for the west African sub-region is a collective one, it should not be left only in the hand of our concessionaries our government has on all important role to play, it should be noted that most of our concessionaires are foreigners and as such there main aim and stake in our reform process it profit and wealth maximization.

Without due regulation and monitoring of the activities of our concessionaries, Port users specially should shippers will be unduly exploited by this organizations thereby making our Port un-alternative, hence it is not tariff friendly (or user friendly). The government should understand that the presence of foreigners in our boarders (i.e. the Port) also constitute a national treat, hence the need, to be on alters need not be over emphasized.

Finally, for the purpose of enhancing efficiency and effectiveness of terminal operators and increasing the productivity of our Ports. The following recommendation are made base on hypothetical test and Regression Analysis result:

1. The government should come into the issue of costing or charging (Port tariff) given by Port operators to Port users. This is suggested because this cut - throat charges paid by Port users for services rendered to them gives rise to inflation on the prices of goods and

- services, making the end-users (the consumer) to suffer.
2. The government should carry out a customer satisfaction survey, as this will enable them appreciate more than problems of Nigerian and West African shippers and take legislative measures to tackle these problems and also establish service standards and customer, friendly policies, that will transform our port into regional hubs.
 3. The government, through it's agency the NPA should not neglect it's statutory function which includes dredging of our water ways, as this affects the size of ships calling in our Port equally build goodwill among ship owners and operators. This function should be taken serious, if we must achieve our goal of having a regional Port.
 4. The government should make policies that will promote through transport system (inter modal system of transport) and encourage our shipping companies to

- adopt the system, as this will ensure, speedy development of our maritime trade.
5. The government should endeavour to revitalized our rail system ensuring that, there are rail tracks between the Port and our hinter land and also that all our access road leading to the Port are dualized to ensure easy flow of tariff.
 6. The government, through it's agencies, should ensure that our concessionaries keep to their own part of the agreement, which includes upgrading of existing infrastructures as this will foster quick and efficient service, avoiding, the problems associated with congestion.
 7. Competitions brings about improvement in performance, hence the government should create an enabling environment which will promote competition in each individual Port in the country, not allowing an operator a monopoly of a single Port and making Port users capture customers of these operators.

8. Technology has been found to be an efficiency and effective tool in increasing Port efficiencies productivity, hence the government should encourage terminal operators to support their logistics operation with advanced I.T (information technology) It applications, on line custom processing and value added services for clients, which may include packaging, promotional labeling and invoicing as these will allow clients to keep minimum inventory, resulting in better utilization of capital.
9. The government should ensure that the concessioning are committed, in training and retraining of their employees, especially those of Nigeria origin, to ensure technological transfer, which are dividend of Port concessioning. They should also ensure fair wages to these employees and other allied workers of these terminal operators.
10. My final suggestion as it concerns this research is that government and these terminal operators

(concessionaries) should partner together, in providing security of life. Security of cargos and security of our marine environment. By security of life, we mean, a conducive working environment, good community relationship with the Port host communities, absence of any potential threat of life of Port users and operators, proper guide against terrorist attack. By security of cargo we mean absence of potential lost of cargo, and by security of marine environment we mean both our aquatic life, our ocean, seas and rivers, should be properly guided and protected. Every act of pollution should be guided against knowing its effect on humans, the ship and the economy of our country as so much people depends on aquatic lives for their living hood.

REFERENCES

- Ikokide, Z.O. Aro O. (2005) Shipping management and policy in Nigeria freight and shipping Journal Lagos.
- GAC NEWS Information for professionals in shipping and Transport, No. 2 (April 2001)
- GAC CHAT, NEWS for the GAC group, No. 2, may 2006. Sterling, J.U. (1998) logistics quality and productivity. The free press, a division of Macmillan Inc.
- Porter, M.E. (1995) Competitive Advantage: The free press a division of Macmillan Inc.
- Murphy G.J (1978) Transport and Distribution, 2nd Edition: Business Books Limited, 24th Highbury crescent, London.
- Ndiokom, O.B.C. (2004) The Essentials of Port reform, the Nigerian experience' Bunmico Publishers.
- Ndikom, O.B.C (2006) "The Kernel concept of shipping operation policies and strategies. The industry overview" Bubmico publishers.
- Badejo, B.A. (1995) Maritime Transport in Nigeria. Problems and prospects

- TASCE, Ijebu-ode, Ogun State, Nigeria.
- Thomas, B.M. (1980) Management of shipboard maintenance Ebenezer Barylly and sons Ltd. London. World book Encyclopedia (2003). C. volume - 12.
www.Chinaoceanshippingcompany.com
- Ojo, I.A. (1982) Effective ways of maintaining infrastructural development.
- Alane Branch (1983) Element of Shipping Thepmanane Hill, U.S.A NMA (1987) National Shipping Policy Act 1987.
- NMA (2203) Guideline on implementation of coastal and island shipping act 2003.
- Thomas, B.M (1980) Management of shipboard maintenance, Ebenezer Barylly and Sons Ltd. London.
- World Book Encyclopedia (2003) C. Volume 12
- Godwin G.P. (1995) Maritime system and the cities - A paper presented in a seminar.
- Bruton, M.J. (1969) Introduction to transportation planning center of African studies - Transport in Africa Edinburgh

www. China ocean shipping
company . com.

- Adams, O.E.(2003) Income and Population,
Economic Review, Vol. 7, No.
1, PP.20-2
- Faulks, R. W. (1997) Principle of Transport London
ian Accan.
- Agbor, I. (2000) Past and Future of Nigerian's
Maritime Industry, Nigeria-
Issue, Vol. 7, No. 1, PP.15.
- Andrew, G.O et al (1995) Transportation and the
Nigerian Space Economy,
Benin: Social Science Series
for African University of
Benin.
- Farris, M.T. and Elhiney, M.C (1967) Modern Transportation
Selected Readings: Boston
Houghton Niffin Company,
P.32.
- Lambo, T. (1987) Nigeria Economy, A Textbook
of Applied Economics, Ibadan:
Evans Brothers Ltd. PP.15-17
- Inam Wilson (2001) Legal and Regulatory
Framework for
Concenssioning in Port
Operation. The Maritime
Newsletter, Lagos.
- Luhigo, S.M. (2002) Roe of African Port in
Development of National
Economics, Available at

http://www.porttalinn.com/iap_hmeeting.

- Maduekwuna O. (2002) Opportunities and Challenges in Oil and Gas Industries for Indigenous Marine Transport and Logistic Operators. Being a Paper Presented at the National Conference on the Changing Trends in Shipping by Industry Experts in the 21st Century
- Maduekwe, O. (2001) Maritime Industry Told to Toughen Up, being a paper presented at the three day seminar on the Maritime Industry.
- O'Neil, W. (1999) Enormous Changes Lie Ahead for world shipping. Being a paper presented at convention of Imo and New Millennium During World Maritime Day.
- Operie, U.N (2004) Effectiveness of London Ports Available at <http://www.Portoflondon.co.uk>.
- Ugboma, C.C. (2004) Services Quality in Ports of a Developing Economy- Empirical Evidence from Nigerian Ports, Managing Service Quality, Vol. 2, No.2,PP.20-21.

- Ugwoke, F. (2002) A Period of Mixed Blessing
Maritime, Maritime Watch,
Vol.2, No.1, P.16.
- Williams, J.U (2001) Analysis of European Ports,
Available at [http://www. portsh
reham. co.uk/ue- sev. Htme](http://www.portshreham.co.uk/ue-sev.Htme)
- Obed, B.C. Ndikom (2006) The Essentials of Port
Reforms, The Nigerian
Experience.
- Oliver Letwion, et al (1986), "New Direction in Privatization"
R.M. Rots Child and Sons Ltd.
Europe.
- M. Pirie and P. Young (1987), "The Failure of Privatization"
Adam Smith Institute,
London.
- Vuy Isteke, C. (1996) Technique of Privatization and
Commercialization Programme,
International Experience.
- Vuy Isteke, C. (1998), "Technology of Privatization of
State-Owned Enterprises".
Vol. 1, Methods and

APPENDIX A

Federal University of Technology,
Department of Transport Mgt. Technology,
P.M.B 1526 Owerri, Imo state.
1st August, 2007.

Sir,

LETTER TO RESPONDENTS

The Federal University of Technology is a Technological institute where disciplined students and professionals are trained for diverse purposes in the educational sector.

As an educational institute, we are exposed to any venture worth doing as regards education (Academics). This research work (project) is a requirement in practical fulfillment for the award of master of Business Administration (MBA) in maritime Transport management Technology.

I hereby solicit your assistance with any relevant information, which I would be requiring as stated in the questionnaires. I strongly promise that any information made available to me would be used strictly for the purpose of my research and will be treated confidentially.

My topic is the impact of privatization and concessioning agreement. The socio-economic benefit to the Nigerian economy.

Thanking you in anticipation for your kind co-operation.

Yours faithfully,

EGBENINE OBIJARE ANTHONY

QUESTIONNAIRES

Name:.....

Sex:.....

Sage:.....

Company:.....

Department:.....

Position:.....

Years served:.....

Marital Status:.....

Education Qualification:.....

(Pleas tick in the appropriate box)

1. Do you think that privatization of Port operation through concessioning will increase Port patronage

Yes No Don't know

2. Do you see concessioning as a globalize concept for Port efficiency?

Yes No Don't know

3. Can concessioning improve security conciousness of Port users.

Yes No Don't know

4. Could the private sector be more efficient than the government managed NPA (Nigerian Ports Authority).

Yes No Don't know

5. Do you think the concessioning of Apapa Port, to AP molar will import the quality of services at that Port.

Yes No Don't know

6. Do you think our Port tariff structure, is the problem of our NPA managed Port Yes No Don't know

7. Do you think our Port is customer friendly?

Yes No Don't know

8. Do you see the multiplicity of agencies in the Port, as a positive development that will ensure security and quality standard of imported goods.

Yes No Don't know

9. Can our tariff structure, which is relatively high, be responsible for cargo diversion of our Nigeria bound cargo?

Yes No Don't know

10. Government constant change in policies governing Port management and operation, can it affect our productivity and efficiency.

Yes No Don't know

11. Does Port reform affect our Port patronage?

Yes No Don't know

12. Can Port concessioning transform our Port into a regional hub for West Africa.

Yes No Don't know

13. Management of our Port by foreign experts. Is not this a national security treat.

Yes No Don't know

14. The use obsolete equipment is it peculiar to government managed institution or complex.

Yes No Don't know

15. have the use of obsolete equipment affected our Port efficiency.

Yes No Don't know

16. Do you think that the eminence of wharf rates is reduced or eliminated in our concessioned Ports.

Yes No Don't know

17. The cargo clearance process is it better now or before.

Yes No Don't know

18. Is there improvement in the number of days used for cargo clearance.

Yes No Don't know

19. Have the Port concessionaries upgraded existing infrastructures and equipment.

Yes No Don't know

20. Do you think that the ship turn around time has been relatively reduced?

Yes No Don't know

21. Do you think our communication system is better now than before?

Yes No Don't know

22. Do you think that is sharp practice has been reduced in our Port?

Yes No Don't know

23. Is there efficiency in berth allocation.

Yes No Don't know

24. Have concessioning reduced cargo diversion.

Yes No Don't know

25. Have concessioning improved our technological knowledge. Yes No Don't know



Port concessioning and the future of Nigeria Ports... By Egbenine, O.A. is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).