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Factors Affecting the Growth of Maritime Centers in West and Central Africa: Evidence from Nigeria

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Abstract

This study investigated the potentials for a Nigeria port complex to develop into a regional maritime center in West and Central Africa. It has been the desire of Nigeria to have one of her port cities develop into a load center and then progress to the status of an international maritime center. The opinions of experts were sought about factors affecting the maritime industry in Nigeria on important dimensions towards becoming a regional maritime center. We interviewed chief executives of shipping firms in the maritime sector of Nigeria on four specific areas, namely the competitiveness of Nigerian maritime environment, the potential of Nigeria to become a maritime hub, the factors which could constitute a barrier to Nigeria becoming a maritime hub, and the strategy that could be adopted to enable Nigeria become a regional maritime center. The consensus is that Nigeria has a great potential to grow one of the port cities into an international maritime center, like London or Singapore with a major hub port, but that a lot needs to be done to realize that status because of the problems of infrastructure, image problems, high cost of doing business, and competition from ports of other countries in the region. The problems highlighted provide useful insights that have global appeal especially in the context of maritime business across developing countries.

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1. Introduction

The West and Central Africa sub- Region constitutes more than half the countries that make up Africa. It consists of 15 coastal countries, 8 landlocked countries and 3 insular countries located in the Atlantic Ocean. In terms of maritime interest, the sub-region can be viewed in the context of Western Africa consisting of countries from Senegal

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down to South Africa, with a coastline of approximately 13,553 kilometers in the Atlantic Region. It is made up of 22 coastal countries with many active ports.

The coast of the region is characterized mostly by low sandy beaches alternating with lagoons along the Gulf of Guinea (Ivory Coast, Ghana, Togo, Benin, and Congo Estuary up to Angola) and by a largely marshy area formed by Niger Delta around much of Nigeria. There are a number of islands and archipelagos in the Atlantic Ocean off the coast of Western Africa (Canary & Cape Verde Islands, Bissago Archipelago) and in the eastern part of the Gulf of Guinea (Sao Tome & Principe and Annabon in Equatorial Guinea).

Given these natural endowments, the region is blessed with a number of maritime sectors that are of significant economic importance to African economies. Much of the region is also rich in Oil and Gas especially in the areas within the Gulf of Guinea, including Angola. Many of the ports in the region are active, notably the ports of Dakar, Accra, Tema, Abidjan, Lome, Lagos, Port Harcourt, Doula, Pointe Noire, and Luanda. There is therefore a great opportunity to use the huge maritime resource base to unlock the economic potentials of the region. Ports, shipping and associated offshore activities are the veritable tools in this endeavor.

This realization has encouraged a vision of growth in the region, based on the use of port development as an economic strategy to drive the growth of the maritime sector. The vision is pervasive in much of the Atlantic region of Africa. Notable examples of port investments in the region whose strategy is to grow hub ports or load centers include the Cabinda deep-sea port (Angola), Kiribi deep-sea port (Cameroon) and the deep-sea ports of Ibaka, Lekki, and Olokola which are in various take-off stages in Nigeria. Similar strategic investments in mega ports have been made recently in the Eastern Coast of South Africa (Ports of Coega and Ngqura) at the Indian Ocean region, around the cities of East London and Port Elizabeth. It is clear that the South African vision of deep-water port development is driven by the strategy to advance the growth of emerging maritime clusters in that region. The Nelson Mandela Bay Maritime Cluster Model established in South Africa illustrates the inter-relationship between port development, maritime cluster and the wider development of a thriving maritime industry.

As the elements of emerging African maritime clusters become discernible, so does the need for collaboration and synergy among the regional maritime clusters. European Network of Maritime Clusters is already in existence. Following the European model, the African Network of Maritime Clusters was inaugurated in 2013.

The emerging Nigerian Maritime Cluster is driven by the hub port concept (fig. 1). The strategy is to build the maritime cluster around dominant deep-sea ports with Oil & Gas Industry and Industrial Development Zones leading the growth. Based on the classification of Maritime Clusters elaborated in Zhang and Lam (2013), it seems evident that the core activities of port, shipping and

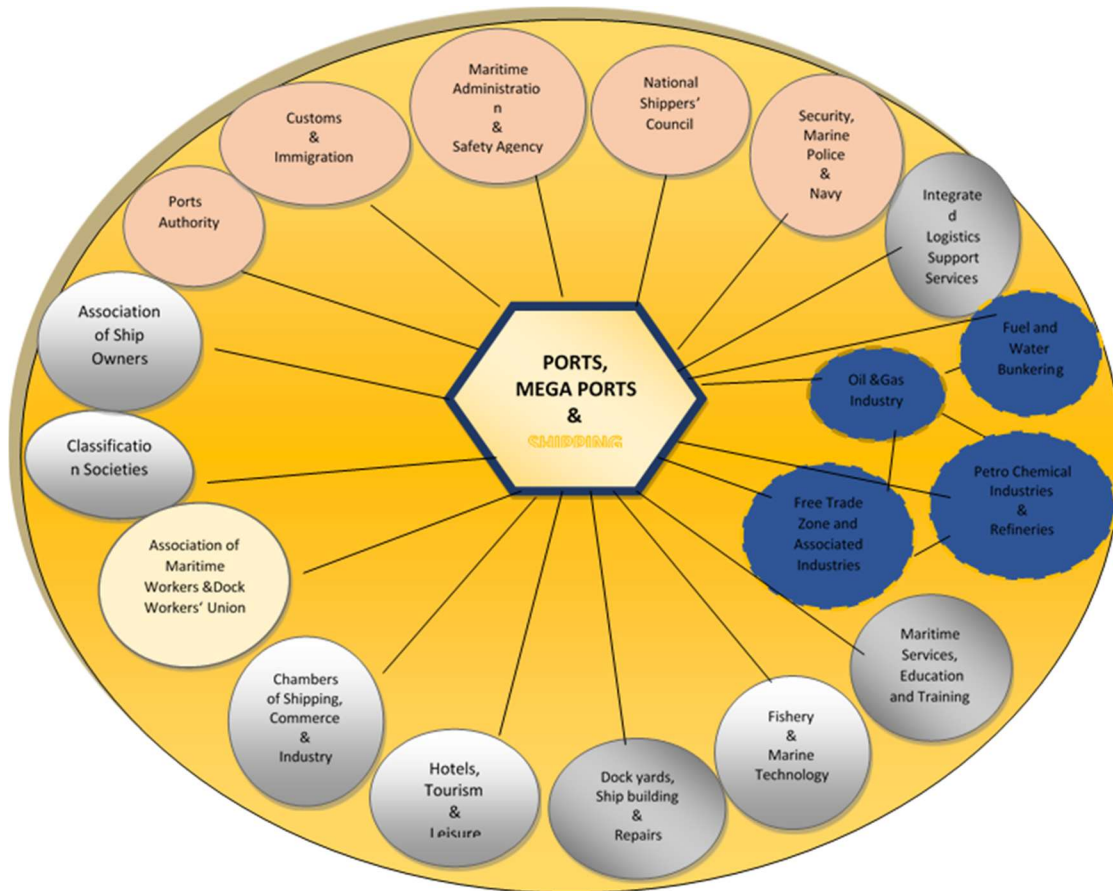


Fig. 1. Emerging Nigerian maritime clusters

Source: Author

Offshore are sufficient to drive some Types of Maritime Clusters representing to a large extent the role of the first and second generation ports in the evolution process, like Dublin in Ireland and Selangor in Malaysia. The Nigerian maritime clusters belong to these categories. The port city must assume a more active and efficient role as a load center and as a platform for international business and logistics for it to progress to the status of International Maritime Center. A lively maritime cluster is therefore needed to sustain the role of a maritime center, so much so that it seems natural to associate both concepts quite closely.

1.1. Objective of study

The aim of the study was to find out what factors influence the growth of a hub port in the context of a Maritime Center. To accomplish this aim, the study addressed the following objectives:

- Identify the factors affecting the maritime industry in Nigeria on important dimensions towards becoming a regional maritime center.
- Assess the competitiveness of Nigerian maritime environment and the potentials of Nigeria to becoming a maritime hub.
- Identify the factors which could constitute a barrier to Nigeria becoming a maritime hub,

- Based on findings from the above suggest the strategy that could be adopted to enable Nigeria become a regional maritime center.

2. Literature Review

A regional maritime center is a place or service area, where related maritime services are pooled together for the purpose of facilitating the provision of composite or supplementary services to users. Often a major driving force for the growth of such a maritime center is the presence of a hub port or a load center which fulfills the conditions for the dominant shipping lines that are involved in round-the-globe services to be attracted to the designated port complexes.

Some Port Cities like London, Hong Kong and Singapore have become the hub ports or load centers which have attained the status of international maritime centers. The concept of a load center entails the consolidation of cargo in a few break-bulk ports which are then used for transshipment operations (Ogwude, 1993}. Under the arrangement, main shipping line services are concentrated on key ports along coastal ranges that are selected for their strategic locations and greater efficiency. Such load centers become the hub ports. To become a regional maritime center and eventually an international maritime center, the hub port must also evolve as the hub of a vibrant maritime services cluster with highly skilled and experienced professionals. While London represents the best example of this status, some port cities like Singapore and Hong Kong have developed strategic plans capable of driving an improved version of the International Maritime Center. The Singapore vision 2030, for example, has adopted a plan tagged the “London-plus” whose purpose is to develop Singapore as the best International Maritime Cluster globally (IMC 2030 Advisory Committee, 2017).

The international experience and achievements of London, Singapore and Hong Kong are useful models for African countries who have the desire to grow into regional maritime centers, with the associated maritime clusters around the port cities and their neighborhoods within the region. Nigeria, like some other countries in the Atlantic Region of West and Central Africa, has the aspiration to grow a hub port which will drive the process of one of the Nigerian port cities becoming an international maritime center thereby attracting and growing the types of maritime clusters currently emerging in Lagos and in Onne-Port Harcourt Metropolitan Areas.

3. Methodology

Expert Opinions were sought to identify critical factors affecting the growth of a hub port. As the shipping lines are both major stakeholders and experts in the port and maritime sector, their opinions were sought about factors affecting the maritime industry in Nigeria on important dimensions towards becoming a regional maritime center. A questionnaire was designed and administered to the shipping lines, mostly through their chief executives in Nigeria resident in Lagos.

The questionnaire was in four parts. The first part sought information about technical factors considered by shipping lines in choosing any port as a hub port, and factors that could hinder the realization of the status of a hub port in the Nigerian environment. The second part of the questionnaire consisted of the assessment of the potentials of Nigeria for becoming a regional maritime center. A shipping line was asked to suggest what strategy, or strategies, could be adopted to realize the status of a maritime center. However, if the shipping line considered that Nigerian had no potentials in the area, the shipping line was asked to explain why Nigeria may not be able to grow a regional maritime center.

In the third section of the questionnaire, shipping lines were asked whether the Nigerian financial environment offers any special advantage in the context of becoming a regional business or maritime center. If the answer was yes, the shipping line was asked to explain the factors that constitute these advantages, and if the answer was no, they were asked to suggest briefly what could be done to improve the financial and market opportunities in Nigeria towards improving the chances of some Nigerian port becoming a load center.

Finally, the fourth section invited general observations and comments about any aspect of the survey that might not have been addressed in the questionnaire

As the purpose of the survey was to obtain expert opinions about Nigeria becoming a regional maritime center, some individual experts in the field of maritime studies were also interviewed, through the means of unstructured questions.

4. Finding and discussion

This study was driven by the vision to create in Nigeria an International Maritime Center and to focus the attention on the need for a master plan for the realization of the vision in the ports and maritime sector. Such a master plan would focus on specializing three main sectors including logistics, finance and industry with the aim of transforming the maritime sector into a knowledge-based industry within the context of a vibrant and service driven economy. The logistics dimension is considered crucial given the strategic and business location of Nigeria in the West and Central Africa sub- region.

To motivate this vision a comprehensive and realistic assessment was carried out. It was desirable to obtain some feed-back from the maritime community dominated by foreign firms as to whether the hub concept is a realistic vision for Nigeria and whether Nigeria has the potentials to transform a major port city into an international maritime center.

An earlier study in Nigeria (Ugboma et al. 2004) concerning the perception and expectations of customers in the two major Nigerian port complexes of Lagos and Port Harcourt showed that ratings on the quality of services offered seemed low on some important dimensions but the results did not constitute the desired feed-back on the issue of growing a hub port in that only the shippers and their agents were surveyed whereas the shipping line themselves are the dominant actors and shareholders on the question of maritime centers or hub port activities.

The findings of this study are focused on four specific areas namely: the relative advantage of the Nigerian maritime environment, the potential of Nigeria to become a maritime hub, the factors which could constitute a barrier to Nigeria becoming a maritime hub and the strategies that could be adopted to enable a Nigerian port city become a maritime center.

Despite all that could be said to the contrary, the consensus was that Nigeria has a great potential to become an international maritime center, with a hub port driving the growth, but that a lot has to be done to realize that status in the near future, beyond problems of infrastructure, image problems, the role of government, high costs of business and others.

It seems obvious that Nigeria should aspire to establish itself as a regional maritime center given the geographical and economic advantages that Nigeria has within the sub-region. As the concepts of maritime center, hub ports or business hub, appeared clear to major participants in the shipping firms, considerable success was achieved in the feed-back sought. It seemed clear enough that the study was to find out if some Nigerian port or ports could successfully transform like Singapore, Hong Kong, or London into a hub port and whether a Nigerian city or metropolis could become a maritime center like London, for example. Some observers might have referred to a logistical hub, or a regional financial center, or to the reality of the emergence of a mega-hub port as currently proposed given the enormous geographical advantages of Nigeria. Any focus on Nigeria as a regional maritime center would entail any or all of the concepts even though to some, Nigeria as a business hub might appear somewhat unrealistic, for now, before a more security-friendly business environment would have been more firmly established.

Maritime centers or hubs do not get established over-night. They evolve over time when, for example, multi-national companies are headquartered in the center after many years of successful business there (Lee and Hobday, 2003). Many multi-national shipping firms are located in Nigeria but they are also located in other offices within the sub-region such as Ivory Coast, Ghana, Senegal, and Cameroun.

4.1. Factors considered in choosing a port as a hub port

We asked the big shipping lines operating in the sub-region what factors they may consider in choosing any ports as a hub port. Their responses given in order of importance are revealing (Table 1). The cost of doing business at the port, or the cost of service received, tops the list followed by the level of security offered at the port and the security environment at sea within and around the region.

The security issue is quite important given the high incidence of piracy and armed robbery in the Gulf of Guinea since 2007. A stable labor environment and a port with a high labor and capital productivity are also quite important to multi-national carrier companies. Other favorable factors include the ability to offer round-the-clock-service, regulatory environment as seen from the interventions of government regulatory bodies and centrality of locations conferring a geographical advantage.

Table 1. Factors considered by carriers in choosing a port (in order of importance)

Factors	
i.	Service Cost
ii.	Security
iii.	Labor Stability
iv.	High Productivity
v.	Round the Clock Service
vi.	Regulatory Environment – Stability and Reliability of Government
vii.	Regulatory Bodies
viii.	Transshipments Potentials
ix.	Location Centrality of Port And Country
x.	Deep Draught (15-18 Meters)
xi.	Effective Dock Labor System
xii.	Good Education Level For Staff
xiii.	Infrastructure, Including Road and Rail
xiv.	Smooth Customs Operation
xv.	Transparency in Legal Matters
xvi.	No Berth Congestion

It is insightful to underline the significance of the cost of doing business as a crucial choice factor because Nigerian ports are known to have been relatively more expensive than the neighboring ports of Abidjan, Lome and Dakar, for example (Gidado, 2008). In many cases, high service cost has been a reason for diverting cargo traffic from Nigeria to Benin Republic in recent times.

Labor – management conflict at ports, elements in the environment such as corruption, red tape and cumbersome customs operation, berth congestion are some of the factors which make unattractive most ports of developing countries including Nigeria.

4.1.1. Barriers to becoming a hub port

For any port to become a hub port, it must be adequately supported by both hard and soft infrastructures. The hard infrastructures include: information and communications technology and transport and logistics infrastructures. Education and leisure facilities for foreigners are also included as hard infrastructure. The soft infrastructure is somewhat diffuse. They include social infrastructure, role of government, competitive financing, international culture, language spoken (lingua franca) and a good supply of skilled people (Lee and Hobday, 2003).

Many barriers to Nigeria grooming a hub port were identified, especially in the areas of soft infrastructure. But there are a lot of problems in the hard areas, as well. The hard infrastructural problems include poor logistics, poor railroad accessibility and limited draughts of ports. A leading shipping line reported that they "transit some volumes via Cotonou and Abidjan to Nigeria, as those ports have a higher productivity per crane hour thereby the delays to our vehicles are reduced". The existing ports in Nigeria do not have sufficient draft to cater for today's mother vessels which require 15 - 18 meters of drafts. All of these add to the cost of business at ports. Transaction costs are therefore very high, much higher than in Angola, for example, especially in the oil and gas sector.

Table 2 shows a list of the factors which could hinder Nigeria from producing a hub port as identified by experts. As already noted, the factors belong to the soft areas of infrastructure. Again, high cost tops the list. Many government agencies operate at the ports indicating excessive government presence, which adds to costs of doing business. Complex, cumbersome and inefficient customs procedures, delays of different kinds and corruption at port are some of the other barriers, which must be overcome to transform to a hub port.

Lastly, the role of government as a barrier must be noted. Experts point to some uncoordinated government interventions in port operations and to lack of government incentives for investment in the ports as in the maritime sector, despite the appointment of an interim economic regulator in the port sector since April 2014. In general, government red tape is a real barrier and poses some challenges to foreign investors.

Although financing has not been mentioned in Table 2, it is clear that the financing environment of Nigeria is one of the problems that should be remarked as a barrier to Nigeria becoming a business hub. The banking sector wants to lend short and is incapable of providing the big capital necessary for investment in the shipping industry. The insurance industry is also relatively underdeveloped with little experience in marine insurance. As one of the experts remarked, insurance plays a major role in shipping as the need for re-insurance is very necessary to provide the relevant security against monumental risk.

The absence in Nigeria of leading banks with strong portfolios in ship finance and the absence of major protection and indemnity clubs constitute a great barrier to hub port development. There is a need for a major city, like Lagos, to become the location for marine insurance and ship finance activities.

Table 2. Factors which could hinder Nigeria from growing a hub port

Factors	
i.	High Cost
ii.	Excessive Presence of Government Agencies and Absence of Economic
iii.	Regulation in Port Operations
iv.	Complex, Cumbersome, Inefficient Customs Process/ Procedures
v.	Low Productivity despite private sector participation
vi.	Policy Inconsistency/ Management Billing
vii.	Complex .Port Tariff
viii.	Delays at Port
ix.	Poor Security at Port
x.	Corruption of Port Officials
xi.	Poor Infrastructure- Poor Rail- Accessibility/Poor Intermodal Interchange
xii.	Limited Draught- Ports
xiii.	No Government Backed Guarantee for Investment
xiv.	Space Constraints within the Ports

The Nigerian capital market is not strong enough. Leading shipbrokers have not been attracted to Nigeria, which is yet to gain a reputation as a location for ship operation and chartering activities. Nigeria is not yet a host to international maritime related companies. For now, Ivory Coast and Ethiopia, for example, have been chosen as

headquarters of international and multinational companies more than Nigeria. The brand image of Nigeria is contestable in international circles casting doubts on the hub vision.

4.1.2. *Nigeria's potentials as a maritime center: opportunity and advantages*

Most shipping lines agree strongly that Nigeria has the potentials for growing a port city to becoming a regional maritime center. Some elaborate the benefits of growing to hub port arguing that Nigeria has comparative advantages over other countries in the West and Central Africa sub-region. The disadvantages of other countries are as follows:

Ghana	-	Relatively low trade volume- not centrally located
Cameroon	-	Not central enough, stagnation of economy, relatively low trade volume
Ivory Coast	-	Political instability not too long ago; relatively low trade volume
Senegal	-	Relatively low trade volume /no central location
Togo	-	Political instability in the medium term/low trade volume
Benin	-	Economy not strong enough –cannot become the hub of the region
Sierra Leone /Liberia	-	Not fully recovered from severe political crises and the crises of Ebola / very low trade volume because of small economy.
Angola	-	Competitive and rich in Oil & Gas but relatively low trade Volume; English language problem.

In some of these respects, Nigeria performed well against the other countries in the sub-region and in the Gulf of Guinea. All the experts agree that Nigeria is centrally located or positioned to produce a hub port; most argue that Nigeria is the most important country in West and Central Africa. In terms of volume of trade, Nigeria is the most important country in West Africa. Nigeria caters for over 30 percent of the total container volume to and from West Africa, and about 70 percent of the volume of total trade of that sub-region. Nigeria is the largest economy in Africa since 2013, with a good prospect of sustained, even if modest, economic growth. The huge population and the potential purchasing power add to the country's advantage.

It is also to the advantage of Nigeria that it commits towards the development of a full democratic society and the government accepts responsibility for the basic infrastructure like road and rail, dredging, brake waters and so on. As one expert argued, Nigeria could be the natural center of the regional market of West and Central Africa. It can become the regional hub with a strong and dominant economy like Korea in North East Asia; Nigeria can become the “test market” for the region and a global innovation center.

A new brand image is however needed to portray Nigeria in a more positive light. The country is a lovely place with exciting new opportunities. Attitudes to business are keen as are the growth of international culture. Local business accepts competition and the bureaucrats in government are relatively easy to do business with, although the cost of transactions is high, and the threat of insecurity due to Boko Haram insurgency in some Northern States is not good for business.

However, in general, Nigeria is an easy place to do business. Aspects of the social infrastructure of the country seem favorable to the development of business hub. The tax rates are not harsh; in most cases they tend to favor foreign business in that poor enforcement of tax collection enables some degree of tax evasion by both foreign and local business. To be sure, corporate and income tax rates imposed on foreign companies in Nigeria are not that burdensome; they constitute no hurdle to foreign business.

On the whole, there has been no doubt among the experts interviewed that Nigeria has an enormous potential to become a regional maritime center and a business hub in West and Central Africa. It has already achieved much of the prerequisites. The advantage of English as a Lingua franca, the global outlook of most Nigerians, the economic reforms that are steadily in progress and the overwhelming potentials of the Oil and Gas sector despite the recent dip in oil prices, all convey the advantages of the country towards becoming a regional hub.

An outline of some of the factors showing Nigeria's Potentials as a regional center is given in Table 3 and Table 4. While looking at the tables, it should be borne in mind that some other requirements must be met in order to attain the hub vision.

Table 3. Factor influencing the emergence of a regional hub port

Factors	
i.	The Size of Market.
ii.	Market Factors: In General Big Volume of Imports and Exports
iii.	Centrality of Location
iv.	Political Relationship
v.	Availability of Shipping Facilities
vi.	Incentives and Opportunities

Table 4. Factors showing Nigeria's potentials as a regional maritime center

Factors	
i.	Centrally Located/ Positioned
ii.	Good Volume of Trade
iii.	Direct Access to the Ocean
iv.	Good Relationship with Neighbors
v.	The Prospect of Economic Growth
vi.	Capacity to Improve Infrastructure
vii.	Availability of Maritime Resource Centers
viii.	Nigeria Is a Major Oil Producing Country
ix.	Export Free Zones Available
x.	Nigerians are in general talented

5. Conclusion

The study investigated the potentials for Nigeria to grow a Regional Maritime Center. It has been the desire of the country to have one of her port complexes develop into a load center and progress to the status of a Regional Maritime Center. The study ascertained the views of the chief executives of the shipping firms in the maritime sector of Nigeria on four specific areas, namely: the comparative advantage of the Nigerian Maritime environment, the potential of Nigeria to become a maritime hub; the factors which could constitute a barrier to Nigeria becoming a maritime hub and the strategy that could be adopted to enable a Nigerian city become a maritime center.

On the whole, the consensus is that Nigeria has a great potential to become an international maritime center, with a hub port, but that a lot needs to be done to realize that status in the near future because of the problems of infrastructure, image problems, weak economic regulation, high costs of business and the challenges of insecurity on the high seas around the Gulf of Guinea.

There has been no doubt among the experts interviewed that Nigeria can become a Regional Maritime Center and a business hub in West and Central Africa. The country has already achieved some of the prerequisites. The use of English as a Lingua Franca, the global outlook of most Nigerians, the economic reforms in progress, the great potentials of the oil and gas sector, entrepreneurial talents, all are advantages for the country becoming a regional hub.

To realize the vision of a regional hub in Nigeria, some road map should be drawn in the context of a strategic plan for the development of maritime clusters which will reinforce the growth of a maritime center and also add

considerable value to the economy. Such a master plan should focus on specializing three main sectors including logistics, finance and industry with the aim of transforming the maritime sector into a knowledge-based industry within the context of a vibrant and service driven economy. The logistics dimension is considered crucial given the strategic and business location of Nigeria in the West and Central Africa sub region.

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