

The Construction of Inland Ports to Boost Investment and Maritime Transport in Cameroon

Pelinzen Ndoke Leonel^{a*}, Youmbi Mbenowol Carene^b

^aThe University of Bamenda, Higher Institute of Transport and Logistics, Department of Maritime Transport, Bamenda, Cameroon

^bThe University of Bamenda, Faculty of Education, Bamenda, Cameroon

^aEmail: leonelndoke@yahoo.com

^bEmail: youmbi29@yahoo.com

Abstract

The construction of dry ports or inland ports in the Republic of Cameroon will boost investment and maritime transport tremendously. The Republic of Cameroon is endowed with a plethora of natural lakes, rivers and seas, of which, if well developed in to inland ports, will generate other activities like the tourist industry, transportation of goods and persons, the construction of real estates to accommodate the offices of the various shipping companies and the human resource personnel's in the ports and also decongest the Douala port and the recently constructed Kribi deep seaport. Cameroon has only two major ports as of now, and this is not enough to meet international competition in this contemporary era. Therefore there is need to construct a number of inland ports to cater for some areas in the country, which does not have the opportunity to benefit from the location or nearness of the Douala and Kribi deep seaports and this will improve the standard of living of Cameroonians and curb unemployment which is plaguing our economy. This said, there is the desire to emerge in 2035 economically, socially culturally in Cameroon and this should be done by actions and not by words

Keywords: Construction; Inland port; Investment; trade; Maritime Transport.

1. Introduction

The development of inland ports has received a scientific focus in recent years; however, there is no consensus about the term inland port. Inland ports are ports whose waterways like rivers, lakes, and canals, does or may not have a link with the coast or the sea.

* Corresponding author.

Cameroon is a country blessed with inland water ways, there are several rivers, like river Sanaga, river Benue, river mungo, and a plethora of lakes ,which can be transformed in to dry ports or inland ports to boost trade, investment and maritime transport in Cameroon. Surprisingly, these natural waterbeds has not been adequately exploited to improve investment, trade and maritime transport in Cameroon. An inland port is an intermodal terminal, often considered as an extension of a seaport, located along an inland waterway, such as a river, a lake, or a canal system. It can be hundreds of miles from the sea or ocean, other inland ports are landlocked and connected to the sea by rails and motorable roads, for this article, we will embark only on the construction of inland ports in Cameroon.



Figure 1: A view of river Benue and its associated towns along the coastal waterways

Academic literature over the past years has begun to develop conceptual models to classify and analyze different methods of inland port development, with a dominant focus on Europe and the United States of America. Rodrique & Noteboom, they focuses on European container port terminals systems as a unique blend of different port types and sizes combined with a vast economy of the hinterland, the authors advocated for the construction of more hinterland port to accelerate a gateway to other ports and regions, the decentralization of ports is a means to foster regional development [1]. Mostly, inland ports are also known as dry ports; they are not located along the coastline. Therefore, the purpose of this suggestion are numerous and there are a catalogue of advantages to embark on the construction of inland ports or dry ports in Cameroon. In, Veenstra and his colleagues [2] it is considered that, inland ports are very similar to deep seaports as concerns their activities, they are similar irrespective of their geographical position, the simple difference is that, inland ports most often than not are located in the hinterland, as opposed to seaports which are along the coast. The hinterland freight geography of North America and Europe is interlinked between land and seaports, but in Cameroon it is characterized by coastal concentration, with low inland exploitation of waterways. There is the applicability of the conceptual model obtained from literature reviews, trying to explain the trends, on how inland ports can be locally and regionally established, the author focuses on the strategies on how inland ports can be developed, but it is essential for the creation of inland ports to link other major towns by road and rail and also to foster spatial distribution of ports to accelerate regional development. Lee and Paul Tae [3] Primarily, there are only two prominent seaports in Cameroon, that of Douala and Kribi, these two ports are not enough to meet international competition and even distribution of wealth regionally and not to talk of national satisfaction. Notteboom & Rodriques, [4] discusses how logistics integration has become imperative and network orientation in the port and

the maritime industry have redefined the functional role of ports in value chains and have generated new patterns of freight distribution and new approaches to port hierarchy. Characterized inland terminals ports and load centers as active point in shaping transport chains, the author focuses on the necessity of inland ports as a means to promote port regionalization. Note should be taken that, the development of inland ports across the Republic of Cameroon, will automatically curb the problem of congestion of the two famous ports in Cameroon, that is Douala and Kribi respectively. The ports of Douala and Kribi are far from other regions in the country, therefore, because of this set back, dry ports ought to be developed by the government to meet the needs of other citizens in the hinterlands and this will go a long way to enhance regional and balanced development and effective decentralization in Cameroon.

1.1 The Construction of an Inland Port in River Benue to Enhance Trade and Investment in the Northern Regions of Cameroon

Famous rivers for instance, River Benue is approximately 1,400 kilometer long and is entirely navigable during the summer months, therefore such a river is an important transportation route in the Adamawa region and this river stretches in to the Republic of Nigeria, meaning that, people and cargoes can be transported from the ships and passengers boats that will be sailing along the river side. Establishing a dry port in River Benue, will enhance rapid development and handles the Northern regions with the transportation of goods and persons by ships, the transportation of cotton, onion, millet and corn will flourish, because these are the principal crops cultivated in the northern regions of Cameroon. These river as of now is under-utilized because only local boats made of woods are sailing this waterways. Olivier & Slack [5] stated that, Structural change in container port operation and ownership over the past decade has seen the emergence of port operating transnational corporations, the emergence of the ports will lead to the attraction of transnational companies, which will form entities and a network of several marine terminals that is operating under a corporate logic, though the author did not stressed on inland ports, the importance of a seaport as a whole was absolutely elaborated therein. From a cursory examination of the above map of River Benue, the government of Cameroon can exploit the River Benue, by constructing an inland port from Garoua, an inland port in Garoua can be very strategic and can provide a better business hub for Chad which is a landlocked country and the Chadians will exploit this port for transportation of goods and persons, trucks will leave Ndjamenas from chad for the offloading and delivery of goods for onward shipment to other countries, Chad itself can be tempted to buy a marine terminal for their own maritime operations, since they have no port of their own, in Dooms and his colleagues [6] the Authors emphasized on the construction of inland ports so as to curb congestion in other ports, the paper offers a dynamic green portfolio analysis of a range of European inland ports based on traffic volumes generated in the period 1999 – 2010, he considers inland ports as a means to curb pollution, through the decongestion of metropolitan ports, the author request the collaboration of managers of inland ports to open up and improve the use of green portfolio analyses tools as a basis to support port strategies.

1.2 The Construction of an Inland Port along River Sanaga to Boost Trade and Link the Centre, Littoral and the Eastern Regions of Cameroon

Again, River Sanaga if exploited as an inland port, it will serve the Centre Region, the East Region, and the

littoral region, it will give a diffuse route for commerce, real estates, also wharfs and cranes will be developed alongside cargo and container terminals. The bridge at Ebebda where River Sanaga flows in the Mbam and Inoubou division, whose headquarters is Bafia, is a good site for the construction of a dry port; unfortunately, this river site is used only for quarrying. This area is a forest zone and timber will be transported easily from the forest to the port for transportation by ships and timber industries will be located along the inland port and selling of wood for domestic use will flourish .Bafia the headquarters of Mbam and Inoubou division, will become an economic hub, warehouses will be implanted for the storage of goods and maritime industries will be equally established therein. Ports are critical nodes in global supply chains, but the port management literature has been lacking in reflecting this enhanced role of ports, Anthony Beresford[7] describes the numerous types of business interactions that occurred at active ports, these include interacting with other ports and other inland ports, as well as coordinating deliveries with ships, overseeing port development, and enhancing security and environmental protection initiatives.



Figure 2: A view of river Sanaga and the associated towns linking each other through the waterway.

From a geographic interpretation of map 2 above, which inhibits the Sanaga River, it stretches through littoral region, the Centre region and the East region. Therefore, an inland port is imperative in Edea, Bafia, Monatele, Nanga Eboko, Belabo, Betare Oya, all these will provide the local inhabitants jobs and commercial development and the central Africans will exploit these ports for the transportation of goods, since it is a landlocked country and an immediate neighbor to Cameroon around Betare Oya and Meiganga.

1.3 Developing an Inland Port in the Noun to Facilitate Trade and Investment in the Western Region

Moreover, River Noun in the west region is linked to the Sanaga River and River Mbam, therefore an inland port in the Noun division, Foumban in particular, is definitely going to serve the West Region and logistic chain will be extended remarkably, agricultural products from the west will be shipped to other Regions and the Noun division with its variety of agricultural products will provide foodstuff to other regions of the country and also provide a touristic Centre. In Wiegman and his colleagues [8] proposes that, the creation of inland ports will foster road linkages for the operation of inland ports, this literature review considers the importance of deep seaports and marine container operators decisions on the buying, the choice and strategies of marine terminal

operations, the author further proposes that, for the creation of a port, the most important criteria are, the availability of hinterland connections, reasonable tariffs, and environmental considerations, but noted that, a one system strategy is not absolutely relevant. Terminals, boats, and shipping companies will evolve and the local population of these regions and villages will have employment and a better living condition. Besides, the construction of inland port or a dry port in Cameroon will boost development in a geometric progression and this will alleviate the unemployment rate which is very high in Cameroon. Foreign investors will be attracted to the inland ports and their activities will create a commercial hub and a navigable water way for the transportation of goods and persons by passenger boats and cargo ships.

1.4 The Creation of an Inland Port at River Logone to Enhance Trade within the CEMAC Regions

Again, River Chari in northern Cameroon is good for an inland port, the possession of an inland port along this waterway, will serve the northern regions of Cameroon, and it will be a very great hub for trade and marine activities due to the fact that, the dry port will serve the central African Republic which as of now, is still a landlocked country, Chad is the same situation, it is a landlocked country and the construction of an inland port will facilitate the transportation of goods from the port in Benue to Chad by this waterway, and the Chadians will not necessarily be going to the port of Douala to collect goods they will transport most of their goods from the Northern port of Benue, much revenue will be generated from this inland port because the Central Africans and the Chadians will exploit this port for their supplies of goods and other logistics and also the maritime sector will be very flourishing for the betterment of the economy of Cameroon and the northern region in particular.

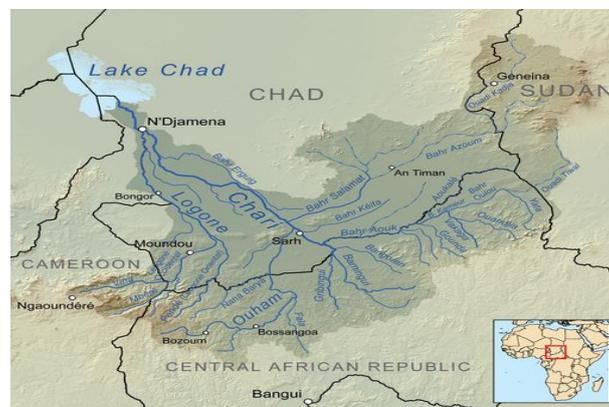


Figure 3: Logone and Chari River showing the main towns linking the waterway

Source: Wikipedia

Furthermore, the construction of inland ports will give rise to specialization of activities around the port area, road construction will evolve to link the port town with the neighborhoods and other towns, for instance, the construction of an inland port in Campo, which possesses the Campo river or river Ntem in the southern region of Cameroon, will bring huge benefits to the local population of Campo by first of all creating a business hub and the town of Campo is a border town that separates Cameroon and Equatorial Guinea, business will flourish, maritime transport will grow, the local population will use the waterways for transportation of goods and

persons, especially remotes villages which are not accessible by roads will prefer using the water transport network to go to other towns and inter- border crossing between Cameroon and Equatorial Guinea and Gabon will be more convenient and accessible to all these neighboring countries. The importation of hot drinks from Equatorial Guinea will rise due to transportation from the waterway system and the Equator – Guineans will import more foodstuffs from the Cameroonians, because they rely on Cameroonians for most of their food crops, likewise, the republic of Gabon. Moreover, pollution will reduce drastically, green cities will develop because this port will decongest the Kribi deep seaport, more space will be available for containers, warehouses and marine associated companies will flourish and more development will be realized in the neighbouring towns and villages, population density will rise and human activities will equally rise as a result of increase in demand of goods and services.



Figure 4: A side view of river campo

Source: Wikipedia

More so, the construction of inland ports in Cameroon will invite specialized companies for port operations, for instance, transit companies which are responsible for the claiming of goods on behalf of their clients will locate numerous offices along the dry port areas and there will be need for human resources to care for the activities of these transit companies, equally, insurance companies will emerged to cater for the workers and to insure their goods and the life of the employees. Again, the port will implant industries in charge for the lifting of containers and the transportation of logistics from one end to the other, heavy trucks will not be left out of the race, the trucks will engage in the loading and distribution of goods from the ports to the areas of demand and this will foster development and regional advancement. We are all witnesses of the poor road network in Cameroon, inland or dry ports will reduce some of these difficulties faced by road transporters in Cameroon in the distribution of goods and services and water transport will enhance the transportation of goods and services through the waterways of the ports. Interdependency of commercial activities will be realized, shipping companies in the ports areas will hire the services of other maritime firms, like the Tugboat operators whose services are always hired by the port authorities for the excursion of the ship in to the deep waters and for the anchoring of ships along the river berths. Seamen services will be required and the human resource companies in charge of providing labour force will deliver work force to ships and this will create employment and improvement of the standard of living the citizens, social happiness will be attained and social unrest and disgruntle citizens will be at a low magnitude. Moreover, real estate's development will flourish in the inland ports, the buildings hosting the offices of port activities will be built and ware houses for the storage of goods and logistic companies will set their enterprises around the port vicinity and around the town of the dry port,

similarly, houses to host workers will be raised and visitors will come in to sleep in the hotels and inns and restaurants as well. The indigenes where the inland port is constructed will be happy to sell their lands to strangers at exorbitant prices, since land will be of high value for industrial and domestic expansion, the establishment of warehouses, container terminals will rise and other agricultural products will be cultivated and sold. Additionally, the energy sector will emerge in this area, since no port can operate without electricity, the government will be obliged to install a heavy electricity power plant to supply energy to the port and this will benefit the local population, if at all, there was no electricity in this environment. Moreover, all associated services linked to electricity supply will emerge, for instance, information technology will rise in these areas and since most ports, and operations require electricity. There is going to be an increase in transportation management system and a plethora of telematics through mobile services, and this will generate in – transit visibility for supply chains and promote the distribution of goods and services from one town to the other and this will enable the inland port to operate like the famous ports which are located along coastal waterside. Internet services will flourish for communication purposes and for business transactions, computer centers and cyber cafes will be established, telephone services, all mobile network companies will find themselves in these port areas and it will be managed by personnel's and these personnel will receive monthly income as salary for a service rendered. Obviously, another important sector that will develop is the tourism industry, tourists will be attracted to do site seeing in these inland ports areas, foreigners will bring foreign currencies and spend good time in the hotels, the restaurants, the green parks, casinos and recreational gardens, all these touristic activities will be accompanied with expenditure and the local population will gain remarkably from businesses and economic growth. Environmentally, the construction of inland ports or dry ports will reduce air, noise, water, and land pollution, since many ports will be able to manage maritime activities, a single port will no longer be an area of congestion, since, car goes and containers terminals will be distributed around the country, subsidiary ports of the inland waterways will be receiving goods and passenger ships and the emission of toxic waste in to the air, land, and water will be deconcentrated to other local ports in the country and balanced development will easily be achieved and environmental hazards will be reduced in the ports and in the maritime waters in Cameroon. Reference [9] discusses on the construction of a better port industry, presents to the readers an insightful collection of current challenges for governing and developing ports, using economic reasoning, management tools and concepts, de Llangen explains vital issues in port governance and development without exposing the reader to complicated economic models, instead the author provides real life examples. The author argues that, a port can be reviewed as an economic cluster, due to firms clustering together in port regions for their mutual benefit. Notably, water transport is far more cheaper to be managed as compared to road transport, earth road is expensive to managed, why because, to disenclave an area, the government commences by hiring carpillars, man labour, subcontractors, all these involves a colossal sum of money, budgetary allocation for its realization, again, in Cameroon during the rainy season, roads are muddy, and slippery, water ways are natural, they do not need maintenance, they do not need to be tarred, all we need is to float our ships and boats on them for navigation, therefore, the government should revamp the marine sector in Cameroon. Besides, the quarrying of these rivers is of utmost importance, since sand is needed for construction of houses, the quarrying of these river ports will automatically increase the depth of the water and more ship and more heavier ships will have access to these ports because the threat of ship grounding will be reduced. Furthermore, fishermen will create their own business venture from the development of the fishing industry, the Ministry of Livestock and

Fisheries will implant a cold store for the storage of fish and fishing nets and boats should be distributed to the local Fishermen by the government to improve their catch and this will increase their sales of fish and generate income for their families and provide food and a good source of protein from the fish products, all these will go a long way to alleviate poverty and increase investment in Cameroon. Just a handful people do exploit the natural waterways in Cameroon, we should be civilized enough to create a positive destiny for our nation, canalized water ways can be used to ferry passengers from one town to the other or from one neighbourhood to the other, it depends on the local councils in collaboration with the ministry of transport to canalize rivers passing in cities to ferry individuals from one destination to the other as city taxis do performed, this will reduce traffic congestion in our towns and cities and the maritime sector will be flamboyant . River Benue in particular can serve the northern regions with inland ports due to the fact that ,it originates from the Adamawa plateau, where it flow west through the towns of Garoua and the Lagdo reservoir in to Nigeria, meaning that, an inland ports can be created in Ngaoundere and Garoua to serve the northern regions and these ports can stretch to Nigeria southwards to the port of Calabar and this will give an impetus to trade and investment up north and boost the maritime activities of these regions, since the movement of cargoes and persons will be facilitated by the waterways of the inland ports. The long distances made by road, will be done by boats and ships and commercial investment will flourish along these areas with the neighboring countries in the region. Additionally, from a cursory look around the national territory, River Mungo is a strategic river for the construction of an inland port, it will serve the neighboring towns like Tombel,Bangem,Etam,Kumba,,where cash crops like cocoa, rubber, coffee, banana, and food crops like cocoyam, corn, groundnut, beans, plantains, will easily be shipped to Douala and the construction of industries will flourish in this area, because it is a river that separates East and West Cameroon, towns in the French zones which are nearer the port of Mungo will utilize this ports for commercial purposes and for the transportation of goods and services and the logistic chain will remarkably improve around these areas, heavy industries will be located around the banks of the river, Djoungo where gravel is used for the manufacturing of cement is located around the Mungo area, all these industries will form a commercial hub along the towns around the Mungo river and this will go a long way to improve the transport network which is not the best as of now in terms of motor able roads.



Figure 5: A view of River Mungo

Source: Wikipedia

Besides, tourism will be the order of the day in this area. Tourists will not only want to visit the port site and beaches, but also to make tourism on the Kupe and the Manengouba Mountain which are all located around the Mungo area.

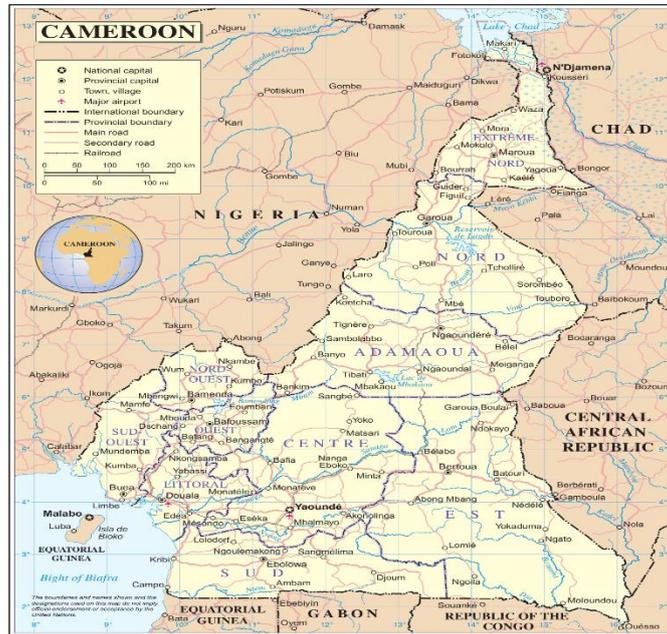


Figure 6: A view of the map of the republic of Cameroon and its boundaries with the CEMAC states

Source .Wikipedia

1.5 Results

The Republic of Cameroon has just two major seaports that Douala seaport in the littoral region and Kribi deep seaport in the south region of Cameroon. The development of inland ports to develop the hinterlands is very essential to foster development. Inland waterways in Cameroon are under-utilized, from the far north region, to the northern region of Cameroon and to the Adamaoua region, inland ports cannot be traced, there government should use initiatives to construct inland ports in all regions of Cameroon. The local communities with the Mayor as head can take personal initiatives to construct inland ports rather than relying on the central government which has a huge burden to managed. Rodrigue and Notteboom, focuses on the development and changes in port hinterlands, that have received considerable attention as they represent substantial opportunities to improve the efficiency of global freight distributions, the authors focused on the regionalization of ports to accelerate economic prosperity and develop the hinterland ,through ship containerization, supply chains and the setting of hinterland port terminals.[4] Inland ports in Cameroon are exploited by local population, for petit trading and fishing purposes, it is not out of the government making, the inland ports emerged due to the adventurism of the local population, goods and persons are transported in small boats and local wooden canoes. There is no service provision and no custom clearance is offered at these sites. Source: compiled by the author from various data sources, including websites, companies' information and personal correspondences. The natural rivers and lakes which the country is endowed with, should not be used just for quarrying and local

fishing, but it should be revamped into inland ports that are similar to those in Europe and America.

2. Limitation of the study

Honestly and assuredly, this research paper has some limitations, the research is limited to particular regions which has strategic waterways for inland ports construction and it did not cover other regions, because Cameroon has series of lakes and rivers, to take sample evaluation for all the rivers and lakes was not possible, furthermore, carrying a vast sample for all the regions with the series of rivers and lakes, will make the research paper too voluminous. In the same vein, the data collected were particularly for the rivers that are elaborated and discussed in the article. Actually, it was impossible to cover all the regions, it was a herculean task to cover all the regions of Cameroon, time was limited and some areas are inaccessible.

2.1 Conclusion

Conclusively, constructing inland ports in Cameroon will enhance trade and investment in the republic of Cameroon; it will facilitate trade, promote regional integration, and decongest the main ports in the country. Moreover, there is going to be movement from one place to the other through waterways and it may come a long way to curb traffic congestion as well. Rapid development will follow suit, due to the influx of trucks in the inland ports for loading, and offloading of goods. Again, road linkages will rise to promote accessibility to the port towns. Job opportunities will be available, this will increase the standard of living of the citizens, and the communities that are directly involved in the port operation transactions. Regional autonomy of port management will increase regional development, dependency of other regions on the giant ports of the country will be something of the past, and the emergence slogan of 2035 in Cameroon will be on the rail of realization.

Acknowledgements

The completion of this undertaking could not have been possible without the participation and assistance of some people. Their contributions are sincerely appreciated and gratefully acknowledged. I would like to express my deep appreciation and indebtedness particularly to the following: Professor Fombe Lawrence Fon, the Director of the Higher Institute of Transport and Logistics (HITL), University of Bamenda, who advised us to always write articles to upgrade our academic profiles. Special thanks also goes to Professor Nfi Joseph Lon, the Deputy Director and Head of Department of Maritime Transport, at the Higher Institute of Transport and Logistics, University of Bamenda, without forgetting, Doctor Mofor Gilbert, and my academic mentor, Professor Mbifi Richard.

References

- [1]. Rodrigues and Notteboom (2010), Foreland-based regionalization: Integrating intermediate hubs with port hinterland, *Research in Transportation Economics* Vol 27 Issue 1, 2010, pages 19-29, Elsevier
- [2]. Veenstra et al (2012), The extended gate concept for container terminals: Expanding the notion of dry ports, *Maritime Economics & Logistics* **14**, pages 14–32 (2012). Springer
- [3]. Lee and Paul Tae, *Dynamic Shipping and port Development in the Globalized Economy*, 2016

- [4]. Notteboom and Rodrigues, (2005) Port regionalization: towards a new phase in port development: *Maritime Policy & Management*, 2005 Issue 3, Vol 32 Pages 297-313,
- [5]. Daniel Olivier and Brian Slack: Rethinking the port, August 1, 2006.
- [6]. Dooms et al (2013), Dynamic green portfolio analysis for inland ports: An empirical analysis on Western Europe, *Research in Transportation Business & Management*, Vol 8, pages 171-185, 8 October 2013
- [7]. Anthony Beresford, competition, market concentration, and relative efficiency of major container ports in south east Asia, feb 2010
- [8]. Wiegmans et al (2008), Port and terminal selection by deep-sea container operators: *Maritime Policy & Management*, 2008 Issue 6, Vol 35 Pages 517-534,
- [9]. Peter W Langen (2020), *Towards a Better Port Industry: Port Development, Management and Policy*, 1ST Edition, imprint Routledge, world maritime university, by routledge, pp.32