

# Post Concession and Users' Perceptions of Seaports in Nigeria

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# ABSTRACT

Seaports in Nigeria are gradually moving away from being publicly operated to engaging the private sectors in terminal operations through concession contracts. This paper examined the Users' Perceptions of the Pre and Post Concession of Nigerian seaports. The study employed qualitative and quantitative research method with data spanning between 1994 and 2019. The results showed that; the performances of Pre concession (mean = 3.49). Port users Perceived the performances of Apapa seaport at Pre concession as poor (mean = 1.88) while it was perceived as good at Post concession (mean = 3.11). Port users Perceived the performances of (mean = 1.75), while it was perceived good at Post concession (mean = 3.09). However Port Users in all the ports perceived level of corruption lower at the pre concession (mean = 1.64) than the post concession (mean = 2.87). In all the selected ports, users rated relevance of ICT in cargo clearance as most perceived good while the satisfaction of the port services was perceived least at concession (mean = 3.64, 2.75). The paper concludes that there was an improvement in the provision of adequate & modern critical infrastructures at concession. The relevance of ICT in cargo clearance as well as the managerial competency of the terminal operator. However, at the period of this paper, levels of corruption were perceived positive and significant at concession.

KEY WORDS: Users Perception, Concession and Seaports

# **INTRODUCTION**

Seaports in Nigeria are gradually moving away from being publicly operated, to engaging the private sectors in terminal operations through concession contracts. This is globally acknowledged in the maritime environment, that government role in port management is declining, while that of the private sector management and operation is waxing. Most container ports have been reformed, while specialized ports and terminals are either privately owned or leased. The belief is that ports play a role in the global trade logistics chain, which impacts heavily on the cost of many exported and imported good (World Bank, 2016). In Nigeria, container ports are facing unprecedented challenges under the context of increasing competition as users who have interaction with the ports, are more likely to choose those that have optimal performance in efficient operation and better quality services delivery.

Port reforms are policy measures by government aimed at enhancing efficiency and productivity of ports by revitalizing and strengthening the operational and functional modalities at the ports (Ndikom, 2004). Within the Nigerian context, ports reforms were with a view to making Nigerian ports both user and investor friendly, thus enhancing smooth operations at the ports. The reform model chosen by the Nigerian government was port concession, whereby it retains ownership the infrastructure, and contracts out the

management and operation of the facilities to the private sector on competitive basis for a specified period of time.

Bousquet and Fayard (2015), noted that a concession arrangement is one in which the government (or her agency) grants the right to fund, build, own, improve, upgrade, maintain or operate a public infrastructure, and charge users for the cost of services, for a limited period of time to a private sector operator. The official view about concession in Nigeria seems to be contained in the Infrastructure Concession Regulatory Commission Act (2005) where concession is described as: a contractual arrangement whereby the project proponent or contractor undertakes the construction, including financing of any infrastructure, facility and the operation and maintenance thereof and shall include the supply of any equipment and machinery for any infrastructure and the provision of any services.

With respect to port operations, concession refers to lease of port terminals and re-organization of stevedoring companies (Oghojafor, Kuye, & Alaneme, 2012). The contractual arrangement embodies service criteria and specifies the technical qualities and practices expected from the concessionaire. Perhaps, it is because of the stake that the government still has in the venture that motivates government to ensure that her policies are implemented both in technical and social terms as noted by (Awam, 2014). The improvement of port efficiency or productivity seems to be the major motivation for port concessions in Nigeria. However, the level of achievement of this objective is yet to be determined. This paper therefore seeks to examine the users' perception of the pre and post concession of Nigerian seaports, from 1994-2019. Attention has been drawn to the ways concession has improved the efficiency of services in the Nigerian ports, with recommendations capable of assisting in the actualization of the aims and objectives of the exercise.

# LITERATURE REVIEW

The governing body in charge of ports is often referred to as a port authority, port management or port administration. The administration or governance of ports is of crucial importance for the organization, coordination, and control of port activities (Cullinane & Song, 2002). A commission of the European communities, 2001, defined a port authority as "the entity, which whether or not in conjunction with other activities, has its objective under national law or regulation, the administration and management of port infrastructures, and the coordination and control of the activities of the different operations present in the port". De Monie, (2004), observed that the term port authority connotes a public form of port management. However, it is used as a generic term to describe the body with the statutory responsibility of managing a port's water and landside domain. Verhoeven (2010) argued that, irrespective of the ownership and management entities to which port authorities belong, they are hybrid entities that contain some elements of both public and private law. Therefore, they are conferred with an exclusive right of administrative action and in some cases even criminal law competence and at the same time they are undertakings that compete.

These far-reaching attribute flow from the fact that seaports possess both public utilities and private enterprise characteristics (Meersman & Van De Voorde, 2002). Port authorities can exist at all tiers of government, be it national, regional, or local. Although the most prominent is the local port authority, that is an authority that exercises jurisdiction over the port area. National port authorities exist in countries such as Aruba, Nigeria, Sri Lanka, and Tanzania (World Bank, 2007). The traditional roles or 21 functions of port authorities are classified into three categories; landlord, regulator, and operator (Baird, 1995; Baltazar & Brooks, 2001).

These classifications are in tandem with the legal status of port authorities (Van Hooydonk, 2002). Other classifications do exist, but they are still linked to the three major broad categories. Regardless of whether the port authority owns the land or manages it on behalf of the national or local government, the functions of



ports are carried out or coordinated by the port authorities. For instance, the landlord port authority performs the duties of the landlord of the port. As the administrative responsibility of the Landlord port is vested with the Landlord port authority (Baird, 2000; Baltazar & Brooks, 2001; Van Hooydonk, 2002).

Likewise, the operational and regulatory roles of ports, although the landlord function is regarded as the most important function of a modern-day port authority from the value chain perspective (Dooms & Verbeke, 2007). The statutory roles of national port authorities, as listed in the United Nations Conference on Trade and Development (UNCTAD) Handbook for Port Planners in Developing Countries UNCTAD (1985) are as follows: (a) the approval of a port investment plan in line with the national plan maintained by the authority; (b) setting of the port's financial policy which will bring a return on investment; (c) infrastructural funding and to advise government on funding alternatives; (d) regulation of rates and charges by setting a tariff policy that will protect the public interest; (e) set the labour policy, which is impartial, to minimize friction between labour unions and management; (f) licensing of third parties to provide certain services to the port; (g) collect, collate, analyze and disseminate information on port activities and sponsor port research when necessary and (h) provide legal advice to local port authorities. The changing role of the port environment, due to privatization, has altered the traditional role of port authorities. It has been so much, that Goss, (1990) questioned the need for port authorities recommending the repositioning and development of new strategies. Notwithstanding the necessity of establishing public ports' authorities have been called into question.

The prevailing situation globally favors having one, either at a local or national level, depending on the size of the country (Juhel, 2001). It is necessary to have a clearly identifiable public partner that represents the public interest, to act as a partner to the private sector in negotiating and implementing new operational strategies for the port industry. The absence of such authority, that can be accessible locally, could be an obstacle to the development of a viable public-private partnership. Moreover, the new envisaged roles apply mainly to port authorities in developed countries, as the developing countries are still struggling to fulfil the traditional roles.

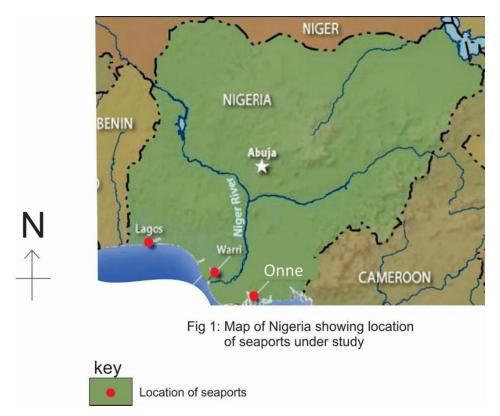
However, Ndikom, (2006) and World Bank (2012) viewed the primary objectives of the port privatization to include; the reduction in cost of transit and ease of doing business, enhancing quality services, encouraging cheap and users' friendly ports, increasing healthy competition between ports. However, the main objectives of port privatization in the form of concession have favoured an all public–private participation (PPP). However, Tangens (2005) in his studies supported the above suggestions that the basic objectives of port privatisation was in foam of concession of the seaports and this was to favour all public-private participation. Management of the seaports world Bank, (2012), posited that countries expecially the advance maritime nations have gained advantages into the maritime sector, thus resulting to improve productivity and efficiency of the operations of the seaport, decreasing prices of ports customer satisfaction, prevention of government monopoly and increase private sector participation in the financial and operational management of the ports (World Bank, 2016; Wu & Leighland & Palson, 2007).

Vieher and Yarrow (1991) concluded that concession in economies with well-developed institutions is well placed to benefit from the benefits of the concession of seaports. This was supported by WU and Goh (2010), and reaffirms that port users satisfaction of port service reawakens the concession of the port users. This was supported by Maggision and Netter(2001), in their contributions, concessions heavily developed economies and institutions are yet to develop a relationship between concession and performance. The above assertions according to Lee and Cullianne (2005) address the issue of the possibility of ports to invest in the Logistics chain to achieve a wide broader market for International trade. Asserting further, Leighland and Palson (2007) said that government interventions in the port management reduced private sector investment and thus reduce competition in the port. Vistours (2009) pointed that the integration of the ports into the logistics chain process of international trade, shall help the port system thus encourage the movement of goods and services in advantageous direction.



# METHODOLOGY

This paper adopted an ex-post facto research design, a quasi-experimental study among three selected ports / Terminals of; A P Moller container terminal (Apapa, Lagos), Onne Port (Rivers state) and Warri port (Delta state). The study population of the three container ports were selected based on their geographical location, sizes, age, homogeneity of cargo imports (containerized) and cargo availability (imports). Importantly, the selection of the ports of the study excluded those ports / Terminals that specializes on cargo types such as bulk cargoes, petroleum product imports. However, considerations were given to the terminal operators (concessionaires) as well as the port stakeholders and the port users who operate in these ports as part of the population of the study.



A multi-stage sampling technique was deployed. The first stage was strata sampling, whereby, 8 (eight) strata sub-sector were identified, followed by random sampling of the respondents. The research population comprised of the port stakeholders and users of the ports. The selection of sample size comprised of the entire stakeholders in the three selected ports considered and a total of 236 questionnaires administered to the port stakeholders and the port users, thee stakeholders that includes the port users are identified as those individuals that are involved in the daily operations and management of these ports. Their involvements in the various activities in the port eventually provides the answer to the reasons of why port concessioning is the hay to solving various questions of core objectives of privatisation of the Nigerian ports.

The level of compliance of the concessionaires to the concessions objectives in the nation seaports could only be explained by the various stakeholders and the port users. The various perceptions holding by the port users formed the underlying factors that had aided in achiving the results of the research work. They includes; Terminal operators (Concessionaires), Nigerian Ports Authority (NPA), Freight Forwarders (Customs licensed Agents) Shipping Agents, Carriers, Importers/ Shippers and Stevedoring workers (Labor). Others includes Nigeria Customs Service (NCS), Authorized government agencies, Academia, Transporters, Authorized banks etc.



	Port users/	AP Moller	Onne	Warri	Total
S/N	Stakeholders	Terminal (APMT)	Port	Port	Questionnaires
1	Terminal Operators (concessionaries)	10	6	4	20
2	NPA	10	6	4	20
3	Freight Forwarders (Customs Licensed (Agents)	40	25	25	90
4	Importers/Shippers	15	15	10	40
5	Carriers	7	7	7	21
6	Shipping Agents	6	5	4	15
7	Stevedoring Workers	5	5	5	15
8	Nigeria Customs service	5	5	5	15
	Total	98	74	64	236

Table 1:	Distribution of (	Questionnaire to selected	l seaports of study.
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Source: Author's Fieldwork, 2019

The duration considered for data collected in this paper covered the periods from 1994 - 2019, totalling 25 years, and tagged as the pre – concession era, 1994 - 2005 and concession era, 2006 - 2019 respectively.

Importantly the sampled population was randomly selected from the stake holders and port users of each selected terminal of study. This selection was not done by equal numbers of each group of the population, but based on certain criteria such as geographical spread of the container port/ terminals, Port / terminal size, age, type of cargo (homogenous cargoes, containerized) and economic viability of the ports of study.

This paper utilized primary data collected with the aid of a well-structured questionnaire to generate data about the opinions and perceptions of users of port facilities on post concession with respect to performance. The reason being that it is the most common method of data collection in survey research because it assures the anonymity of respondents and enables them to respond more freely at their convenience (Bryman & Bell, 2007).

This paper then used the questionnaire to stimulate respondents' perception regarding the pre and post concession of Nigerian seaports. It was divided into five elements; Perceptions on the needs and expectations from the users about the performance of the ports, Perception on the increase in customers' satisfaction, perception on the dwell time/operational delays in the release/exiting of cargoes, provision of adequate manpower/labour (stevedoring/dock workers) and Provisions of infrastructures/equipment.

# **RESULTS AND DISCUSSIONS**

This section showed information on the post concession and the performance of seaports in Nigeria based on demographic characteristics gathered from the survey administered to stakeholders at the selected seaports in Nigeria. The distribution of responses to the questionnaire survey were presented according to



the demographic profile for age, sex, educational background, marital status, response method to the questionnaire, workplace/organisation and duration of the position in the organisation.

As presented in Table 2, the results showed that 22% (5) of the respondents are between the age group 18-25 years, while 7.8% (18) of the respondents are between the age group 26-35 years, while 17.8% (41) and 35.7% (82) of the respondents are between the age group 36-41 years and 41-49 years respectively. However, the percentage of respondents whose ages are 50 years and above was 36.5% (84). This is an indication that majority of the respondents are 50 years and above.

This paper revealed that a larger proportion of the respondents are Male taking 67.9% (148) of the entire respondents while the remaining respondents 32.1% (70) are Females. The majority 35.9% (74) of the participants had completed their bachelor's degree, while 16% (33) are Master's degree holder, with 5% (1) of the respondents had a PhD. However, 24.3% (50) and 17% (35) of the respondents are HND and OND holders respectively with 6.3% (13) of the respondents having SSCE. The paper also showed the marital status of the respondents. Majority of the respondents i.e. 87.7% (200) are married, while 12.3% (28) of the respondents are simple.

The paper revealed that 12.4% (28) of the respondents work as Terminal Operator, while majority of the respondents are Freight Forwarders with 22.1% (50), Furthermore, 14.6% (33) are Shippers or Importers, while 10.6% (24) and 13.7% (31) are Shipping Agents and Carriers respectively. It also revealed that 9.7% (22) and 13.7% (31) of the respondents are NPA and NCS respectively while 3.1% (7) are others.

Age Group	Frequency	Per cent
18-25	5	2.2
26-35	18	7.8
36-41	41	17.8
41-49	82	35.7
50yrs and above	84	36.5
Total	230	100
Sex of the respondent		
Male	148	67.9
Female	70	32.1
Total	218	100
Educational Level		
SSCE	13	6.3
OND	35	17
HND	50	24.3
BSC	74	35.9
MSC	33	16
PHD	1	5
Total	206	100
Marital Status		
Single	28	12.3
Married	200	87.7
Total	228	100

 Table 2: Distribution of Responses According to Background information



Workplace/Organisation		
Terminal Operator	28	12.4
Freight Forwarder	50	22.1
Shipper/Importer	33	14.6
Shipping Agents	24	10.6
Carriers	31	13.7
NPA	22	9.7
NCS	31	13.7
Others	7	3.1
Total	226	100
Position in the organisation		
Valid	47	20.1
Director	48	20.5
Manager	45	19.2
Accountant	16	6.8
Field Officer	57	24.4
Others	21	9
Total	234	100

#### Source: Field Survey, (2019)

#### Measurement of users' perceptions of the pre and post concession of seaport performance

This section examined the users' perception of the pre and post concession of the three selected ports in Nigeria. The results were summarized in Tables 3, 4, 5, 6and 7. From Table 3, it was found that port users in Onne poorly rated their satisfaction of the port services at Pre concession (mean =1.86) while they rated their satisfaction at Post concession as good (mean = 3.12). At Pre concession, port users in Onne poorly graded the clearance of cargoes and the provision of adequate & modern critical infrastructures and equipment (mean =1.90 and 1.66) but were rated good at Post concession (mean = 3.18 and 3.56). They further perceived the managerial competency of the terminal operators as fair (Mean = 2.08) and poorly rated the relevance of ICT in cargo clearance at Pre concession(Mean = 1.53) but both were rated good at the post concession (mean = 3.43 and 3.80).

Port users' perception of the performances of Onne port in Nigeria at Pre concession was poor (mean = 1.84) while it was graded good at Post concession (mean = 3.49). Meanwhile the level of corruption at the pre concession was rated low (mean = 1.69) to that of the post concession which high (2.96). Generally the perception of port users in Onne at concession was good compare to the pre concession. The Users rated relevance of ICT in cargo clearance as most perceived good while the assess the levels of corruption at Pre & Post concession at Nigerian seaports was perceived as least at concession in Onne.

# Table 3: Distributions of respondents on users' perceptions of the pre and post concession of Onne port

Statement on Pre and Post Perception of Port Users in Onne	Mean	Ν	Std.	Rank	Remark
Ole Herry do you get a the set infection of the next services at Dro & Dest concession?	1.86	76	.667	3	Poor
Q2a: How do you rate the satisfaction of the port services at Pre & Post concession?		76	.864	F	Good
22b: How do you grade the clearance of cargoes in the Nigerian seaports at Pre &		77	.680	2	Poor
Post Concession?		77	.702	E	Good



Oto How do you contrathe manifold of adapted to the dam aritical infrastructures	1.66	77	.528	6	Poor
2c: How do you rank the provision of adequate & modern critical infrastructures nd equipment at Pre & Post concession?		77	.659	В	Very Good
Old How do you assess the managerial competency of the terminal operator and the	2.08	77	.703	1	Good
Q2d: How do you assess the managerial competency of the terminal operator and the Nigerian ports at Pre & Post concession?		77	.715	D	Very Good
22e: How do you rate the relevance of ICT in cargo clearance at Pre & Post	1.53	76	.599	7	Poor
	3.80	76	.566	A	Very Good
Of How do you grade the performances of the secondarts in Nigeria at Dro. & Dest	1.84	75	.594	4	Poor
Q2f: How do you grade the performances of the seaports in Nigeria at Pre & Post concession?		75	.724	С	Very Good
Q2g: How do you assess the levels of corruption at Pre & Post concession at Nigerian	1.69	77	.591	4	Poor
seaports?	2.96	77	1.081	G	Good

**Source:** Field Survey (2019). **Mean Rank:** Excellent = 4.21-5.00, Very Good = 3.41-4.20, Good =2.61-3.4, Fair = 1.81-2.6, Poor = 1=1.8

In Table 4, it can be deduced that port users in Apapa port poorly rated their satisfaction of port services at Pre concession (mean = 1.53), while they perceived their satisfaction at Post concession as good (mean = 2.70). At Pre concession Port users in Apapa port poorly perceived the clearance of cargoes, the managerial competency of the terminal operators as well as the provision of adequate & modern critical infrastructure (mean = 1.93, 1.83 and 1.40) while they were rated fair at Post concession (Mean = 2.82, 2.87 and 3.36).

The result showed that the relevance of ICT in cargo clearance at Pre concession was perceived as poor (mean = 1.73) but was rated good at post concession (mean = 3.64). Port Users in Apapa port perceived the level of corruption better at the pre concession (mean = 1.54) than the post concession where perceived a fair level of corruption (mean = 2.83).Port users Perceived the performances of Apapa port at Pre concession as poor (mean = 1.88) while it was perceived as good at Post concession (mean = 3.11). Generally the perception of port users in Apapa port at concession was good compare to the pre concession. The Users rated relevance of ICT in cargo clearance as most perceived good while the levels of corruption was perceived as least at concession

Table 4: Distributions of respondents on users' perceptions of the pre and post concession of Apapa port

Statement on Pre and Post Perception of Port Users in Apapa	Mean		Std. Deviation	Rank	Remark
Q2a: How do you rate the satisfaction of the port services at Pre & Post	1.53	98	.645	5	Poor
concession?		98	.911		Good
Q2b: How do you grade the clearance of cargoes in the Nigerian seaports at Pre & Post Concession?		98	.876	1	Fair
		98	.889	F	Good
Q2c: How do you rank the provision of adequate & modern critical	1.40	98	.685	6	Poor
infrastructures and equipment at Pre & Post concession?	3.36	98	.790	В	Good
Q2d: How do you assess the managerial competency of the terminal	1.83	98	.746	2	Fair
operator and the Nigerian ports at Pre & Post concession?		98	.970	D	Good
Q2e: How do you rate the relevance of ICT in cargo clearance at Pre &	1.73	98	.892	3	Poor
Post concession?	3.64	98	1.086	А	Good



Q2f: How do you grade the performances of the seaports in Nigeria at Pre & Post	1.8898.900 1 Fair
concession?	3.11981.024CGood
Q2g: How do you assess the levels of corruption at Pre & Post concession at Nigerian	1.5498.852 4 Poor
seaports?	2.83 98 1.324 E Good

**Source:** Field Survey, (2019).**Mean Rank:** Excellent = 4.21-5.00, Very Good = 3.41-4.20, Good =2.61-3.4, Fair = 1.81-2.6, Poor = 1=1.8

Table 5, also showed that port users poorly rated their satisfaction of port services at Pre concession in Warri (mean = 1.78), while they perceived their satisfaction at Post concession as fair (mean = 2.34). At Pre concession Port users in Warri port poorly perceived the clearance of cargoes as well as the provision of adequate & modern critical infrastructure while the managerial competency of the terminal operator were perceived as fair (mean = 1.63, 1.60 and 3.27) but in the post concession they were all rated as fair (Mean = 2.55, 3.36 and 2.05). The result showed that the relevance of ICT in cargo clearance at Pre concession was perceived as poor (mean = 1.88) but was rated good at post concession (mean = 3.42). Port Users in Warri port also perceived level of corruption better at the pre concession (mean = 1.75) than the post concession where they perceived a fair level of corruption (mean = 2.57). Port users Perceived the performances of Warri port at Pre concession as poor (mean = 1.75), while it was perceived good at Post concession (mean = 3.09).

Generally the perception of port users in Warri at concession was good compare to the pre concession. The Users rated relevance of ICT in cargo clearance as most perceived good while the levels of corruption was perceived as least at concession

Statement on Pre and Post Perception of Port Users in Warri	Mean	N	Std. Deviation	Rank	Remark
Q2a: How do you rate the satisfaction of the port services at	1.78	58	.879	3	Poor
Pre & Post concession?		58	.849	G	Fair
Q2b: How do you grade the clearance of cargoes in the Nigerian seaports at Pre & Post Concession?		56	.822	6	Poor
		56	.829	F	Fair
Q2c: How do you rank the provision of adequate & modern critical infrastructures and equipment at Pre & Post	1.60	55	.784	7	Poor
concession?	3.27	55	1.130	В	Good
Q2d: How do you assess the managerial competency of the terminal operator and the Nigerian ports at Pre & Post concession?	2.05	57	.811	1	Fair
	3.18	57	1.071	С	Good
Q2e: How do you rate the relevance of ICT in cargo	1.88	57	1.019	2	Fair
clearance at Pre & Post concession?	3.42	57	.944	А	Good
Q2f: How do you grade the performances of the seaports in	1.75	56	.769	4	Poor
Nigeria at Pre & Post concession?	3.09	56	1.066	D	Good
Q2g: How do you assess the levels of corruption at Pre &	1.75	56	.792	4	Poor
Post concession at Nigerian seaports?	2.57	56	1.346	Е	Fair
Grand Mean	1.78				Poor
	2.92				Good

Table 5: Responses on users' perceptions of the pre and post concession of Warri Port

**Source:** Field Survey, (2019).**Mean Rank:** Excellent = 4.21-5.00, Very Good = 3.41-4.20, Good = 2.61- 3.4, Fair = 1.81-2.6, Poor = 1=1.8



Table 6, examined the combined perception of port users in all the selected ports. The Table showed that port users poorly rated their satisfaction of port services at Pre concession in all the ports (mean = 1.70), while they perceived their satisfaction at Post concession as fair (mean = 2.75). Also at Pre concession, Port users in all the ports poorly perceived the clearance of cargoes and the managerial competency of the terminal operators as well as the provision of adequate & modern critical infrastructure (mean = 1.84, 1.53 and 1.97). In the post concession the clearance of cargoes were rated as fair while the managerial competency of the terminal operator as well as the provision of adequate & modern critical infrastructure they were rated as good (Mean = 2.87, 3.40 and 3.13). The result showed that the relevance of ICT in cargo clearance at Pre concession was perceived as poor in all the ports (mean = 1.70) but was rated good at post concession (mean = 3.64). Port Users in all the ports perceived level of corruption lower at the pre concession (mean = 1.64) than the post concession where they perceived it as higher (mean = 2.87).

Port users in all the ports selected showed the performances of all ports at Pre concession was poor (mean = 1.83) while it was perceived good at Post concession (mean = 3.23)

Generally the perception of port users in all the selected ports at concession was good compare to the pre concession. The Users rated relevance of ICT in cargo clearance as most perceived good while the satisfaction of the port services was perceived least at concession

Statement on Pre and Post Perception of Port Users in All the Ports	Mean	N	Std. Deviation	Rank	Remark
Q2a: How do you rate the satisfaction of the port services	1.70	232	.729	4	Fair
at Pre & Post concession?		232	.925	G	Good
Q2b: How do you grade the clearance of cargoes in the	1.84	231	.809	2	Fair
Nigerian seaports at Pre & Post Concession?		231	.848	E	Good
Q2c: How do you rank the provision of adequate & modern critical infrastructures and equipment at Pre &	1.53	230	.671	7	Poor
Post concession?	3.40	230	.850	В	Good
Q2d: How do you assess the managerial competency of the terminal operator and the Nigerian ports at Pre & Post	1.97	232	.755	1	Fair
the terminal operator and the Nigerian ports at Pre & Post concession?	3.13	232	.949	D	Good
Q2e: How do you rate the relevance of ICT in cargo	1.70	231	.851	4	Poor
clearance at Pre & Post concession?	3.64	231	.916	А	Very Good
Q2f: How do you grade the performances of the seaports	1.83	229	.777	3	Fair
in Nigeria at Pre & Post concession?	3.23	229	.961	С	Good
Q2g: How do you assess the levels of corruption at Pre &	1.64	231	.761	6	Poor
Post concession at Nigerian seaports?		231	1.257	F	Good
Grand Mean	1.74				Fair
	3.12				Good

# Table 6: Distribution of respondents on users' perceptions of the pre and post concession in all the Ports

**Source:** Field Survey, (2019).**Mean Rank:** Excellent = 4.21-5.00, Very Good = 3.41-4.20, Good =2.61-3.4, Fair = 1.81-2.6, Poor = 1=1.8



Table 7, examined the paired sample test of port user's perceptions of the pre and post concession in all the selected seaports. The pair sample 't'- test was used to test the difference between the sample means for the pre concession era and the post concession era to validate if there exists any statistically significant contribution of the concession policy. The test showed that concessions of seaports in Nigeria were positive and significant to all the ports examined. It showed that there was an improvement in the provision of adequate & modern critical infrastructures and equipment at concession. The relevance of ICT in cargo clearance and showed that there was an showed that there was an improvement in the provision of adequate & modern critical infrastructures and equipment at concession. The relevance of ICT in cargo clearance of cargoes in the Nigerian seaports improved at concession. The managerial competency of the terminal operator and the satisfaction of the port services also improved. However at the period of this study, assess to levels of corruption was found to be positive and significant at concession. This is in line with several studies (Victor et.al, 2015; Anagor, 2014; Santos, et al.,2012; Tongzon, 2005) that concluded within reasonable limits of accuracy that ports concession impacts positively on ports operations, this serving as a boost to the economy through revenue generation, reduction in cost of importation, as well as in employment generation.

 Table 7: Paired sample test of port user's perceptions of the pre and post concession in all the selected seaports

		Paired Differences	Т	Df	Sig. (2- tailed)
Pair 1	How do you rate the satisfaction of the port services at Pre & Post concession?	916	-15.236	231	.000
Pair 2	How do you grade the clearance of cargoes in the Nigerian seaports at Pre & Post Concession	900	-15.565	230	.000
	How do you rank the provision of adequate & modern critical infrastructures and equipment at Pre & Post concession?	-1.733	-27.024	229	.000
Pair 4	How do you assess the managerial competency of the terminal operator and the Nigerian ports at Pre & Post concession?t	-1.021	-16.107	231	.000
Pair 5	How do you rate the relevance of ICT in cargo clearance at Pre & Post concession	-1.772	-22.838	230	.000
Pair 6	How do you grade the performances of the seaports in Nigeria at Pre & Post concession	-1.260	-20.081	228	.000
Pair 7	How do you assess the levels of corruption at Pre & Post concession at Nigerian seaports	-1.013	-14.777	230	.000

**Source:** Field Survey, (2019)

# CONCLUSION

From the result of the study, it was found that concession have been beneficial to all the ports and the economy by improving the cargo throughput in the ports, drop in the berth occupancy rates, Improved vessel and cargo turnaround time due to modern cargo handling equipment, Increase in ship traffic and vessel ships sizes too. The paper concluded that port concession in Nigeria with the objectives of reducing cost of transit, enhancing quality services, encouraging cheap and users' friendly ports, increasing healthy competition between ports among others; needs to be enforced. Although, terminal operators complied with concession objectives at the period of this study, it was clear that respondents were not too satisfied with the effectiveness of customs clearance services poorly graded and the current



performances of the seaports. There was uniformity in low performance of seaports operations in all the ports and the average performance of selected Ports dwindled across the years after concession.

The satisfaction of the port services, the provision of adequate & modern critical infrastructures and equipment, the relevance of ICT in cargo clearance at the Post concession were fairly better than the pre concessions, meanwhile the level of corruption at concession still remains a mirage in the Nigerian seaports. The performances of seaport in Nigeria between 2006 and 2019 were determined by the Berth Occupancy Rates (BOR) and the low Average turnaround time in days at the ports.

The average value of the quality of services provided at the real time (QSPRT) was fair at the time of this study followed by port users (consumers) satisfaction of port products (PUSPP) and the accessibility of port users to the port environment (APUPE). Technical infrastructure (PTI) has strong and positive relationship with average turnaround time (ATRT), the Berth occupancy Rates (BOR) and the cargo throughput of all the seaports. Generally the study concluded that there was a positive but weak relationship between concession and the performance indicators of all the seaports in Nigeria.

This is an indication that port reforms as a result of concession of the nation's seaports have not succeeded in easing the bottlenecks to port development, thereby not attracting more cargoes to Nigerian ports as expected, increase congestion, and generally not enhancing productivity and efficiency in the ports operations.

Considering the perceptions of the port users at pre and post concession in the study and judging from the annual throughput /quantity of cargoes that has passed through the ports since the inception of the concession Programme, the study concluded that the level of seaport performance in terms of the operational services regarding ship traffic, Berth occupancy, ship turnaround time and so on need to be reinforced. The study also concluded that Nigerian seaports at concession still demonstrates inefficiencies that is characterized with low turnaround time for vessels, increase container dwell time, unsecured cargo (pilfering, theft), excessive port related charges, government policy inconsistency and poor port management among others.

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