

## **Safety and Security Challenges along Inland Waterways of the Coastal Communities of the Niger Delta, Nigeria**

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**Abstract:** The study examined the safety and security challenges along inland waterways of the coastal communities of the Niger Delta. The study adopted a cross – sectional research design. Four hundred copies of questionnaire were administered to boat passengers of inland waterways and conducted oral interviews for ninety operators using simple random sampling technique in the 38 selected jetties. Descriptive tools such as percentage and frequency distribution charts were used for data analysis. Findings revealed that 21% of passengers and operators failed in complying with safety measures and regulations in the course of their operations, over speeding (6%), use of substandard safety jackets, and its inadequacy (cumulatively 34%), presence of sacks and sticks (14%), overloading (10%) and leaking of boats (5%). They all contributed to near (8%) to actual (2%) boat crashes. Further findings indicated that there was 25.8% low level of inadequate security patrol across the coastline of Niger Delta. 22.3% of inadequate check points along routes, armed robbery 2.3%, and snatching of boat engines recorded 28.3%. The study concluded that the non-compliance to safety and security measures has resulted to more harm than good, resulting to several losses of lives and property. The study recommended that all marine operators should be organized in order to enforce safety measures, the security agencies should effectively manned, survey, and patrol critical flash points of security threats.

**Keywords:** Safety, Security, Inland Waterways, Transportation.

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### **1. Introduction**

Transport is a significant factor for sustainable development. It plays a substantial role in the economy with its omnipresence throughout the production chain, at all geographic scales. (Dobranyte-Niskola, Perujo, & Pregl, 2007). There is no society or human settlement that can function effectively and efficiently without adequate, affordable, safe and reliable transport system regardless of its mode. Without marine transport, Nigeria would have been landlocked, and its economy would have been stagnant in different areas and as such marine transport is of significant importance to the growth and development of Nigeria economy.

A country like Nigeria with the natural gift of inland waterways transportation endowment across the Delta and its accruing benefits to include multiplication of the existing job opportunity in the sector, improve internally generated revenue (IGR)/income for both government and the private sector. Also improving means of commercial transportation, providing a veritable tool of expanding adequate trade and commerce in the country acting as impetus for stimulating regional development/interaction.

It is important to note that the developing inland waterways sector across the Niger Delta is confronted by several challenges and bottlenecks that hinder the growth of the sector. Some which includes safety lapses and over glaring security incidences ranging from armed robbery, kidnapping, piracy, boat engine snatching.

There have been high rate of insecurity in the Niger Delta and of course militancy activities, Nwogwugwu et al, (2012) opined that this can be attributed to several factors to include environmental degradation, marginalization of the people, bad governance, and inconsistent policy framework, and divide and rule policy of the oil companies. Kidnapping and hostage taking has been a major tactic of the militant groups with foreign and local workers of various oil companies as primary targets. Lawal (2012) also acknowledged the presence of ill-equipped marine police which constitute major part of the problem.

The implication of the kidnappings on Nigeria's economic development has been enormous as it succeeded in scaring away potential development partners and robbed the Nigerian State and particularly the Niger Delta of the benefit of such development alliances and opportunities. The state of insecurity has thus led to a reduced volume of investment and capital flow to the region (Akpan, 2010). As a result of these security challenges in the Delta, foreign direct investment is getting leaner/decreased, and international oil investors are diverting to cheaper/safer environment, thereby depriving the Niger Delta the chance for more investment that can provide job, improve infrastructure, and boost local economy, (Okah, 2010). Militancy in Niger Delta which can be linked to the combine activities of the oil producing companies and the government has created a state of insecurity in the entire region which has affected the Nigerian economy especially the inflow of local and foreign direct investment which is needed for social and economic development achievement. Also, bear in

mind that this little or no investment into the region has drastically affected infrastructural development of inland waterways transportation because of vast majority of this oil fields are located across the coastal communities of the Niger Delta states. More so, communities and tourist are scared to traverse through the waterways of the Niger Delta due to the fear of been kidnapped or robbed.

In many riverine/coastal communities where speed boats and other ferries are in operations, especially in the Niger Delta, safety measures are not at best for the operators who are majorly from the private sector. Most times, the boats used in these areas are not sea worthy and very risky for passengers. Despite the huge risk, passengers are left with no choice than to use them as provided by the operators. Fortunately, cases exist where safety jackets are not offered to passengers in addition to the poor state of the boats thereby increasing their safety risk, (Reconnaissance survey, 2018). This empirically revealed why accident and other boat mishap do take place frequently. Donatus (2013) revealed that human error accounted for more than 50% of these accident cases. It has never been as it is today in the history of inland waterways management in Nigeria, where emphasis is shifting towards the use of waterways as a means of public transportation. Despite the intensified safety campaign and awareness, boat mishaps and other safety issues do occur virtually every two months as acknowledged by Business & Maritime West Africa (2014), & Reconnaissance survey (2018).

In addition, boat accidents in the Niger Delta corridors occur frequently following reckless driving, collision with hard objects submerged in water or incoming traffic, night voyages/travelling and overloading as ascertain by the researcher experience, other reasons include over speeding and poor lighting, inadequate vessel-speed, and poor boat maintenance. Affia (1997) and Sumaila (2013) acknowledged that the inland waterways transport system lack functional and standard boatyards, and suffers greatly from several safety and security challenges. As a result of the above, there is immense difficulty of free movement of people, goods and other logistics services across the coastal communities of the Niger Delta.

## 2. Methodology

The Niger Delta region is located within the tropical rainforest climate zone lies between latitudes 4.15°N - 7.17°N and longitudes 5.05°E - 8.68°E, (Federal Republic of Nigeria, 2007). The region is situated in the southern part of Nigeria and bordered to the south by the Atlantic Ocean and to the East by Cameroon, occupies a surface area of about 112,110 square kilometres. The study adopted a cross – sectional research design. The primary data and secondary data sources were utilised. The sources of primary data obtained included a reconnaissance survey to determine the total number of operational jetties and their characteristics across the Niger Delta, oral interviews were held with the operators (in form of key informant questions), security operatives such as the Joint Task Force, and NAVAL Officers, boat drivers, passengers and National Inland Waterways Authority officials (Interviews were recorded and extracts presented in related themes). One set of questionnaire was administered to the users. While the secondary data for this study was obtained from relevant literature, and research reports published in academics journals. Data collection method was achieved by approaching the operators of the jetties, we inform them about the research and seek their permission to speak to passengers and administer questionnaire to them. The users' questionnaire was administered 30 minutes to departure time when the passengers were in the boat/terminal. The passengers were briefed on the nature and purpose of the survey, and the users' questionnaire (i.e., for the passengers) was classified into one sections, to examine the safety and security challenges of inland waterways transportation in the coastal communities of Niger Delta, Nigeria. The researcher's employed descriptive tools such as percentage and frequency distribution charts to analyse data generated from the field.

The Population used in this study comprises of 90 boat operators and 822,795 (passengers) users of inland waterways transportation across the Niger Delta (Author's field work, 2018). The selected jetties were done based on their economic viability of the jetties measured by volume of passengers' traffic generated, the population was further reduced to a manageable size using the Taro Yamane's formula. The simple random sampling technique was applied during the study survey.

Taro Yamane (1967) provides a simplified formula to determine the sample size.

$$n = \frac{N}{1 + N(e)^2}$$

Where: n = the sample size

N = the total population

e = the error of sampling/accepted error limits (0.05)

1 = the constant figure/level of precision

The Taro Yamane formula is applied to the above population to determine the sample size:

$$n = \frac{N}{1 + N(e)^2}$$
$$n = \frac{822795}{1 + 822795(0.05)^2}$$

$$1 + 822795 (0.05)^2$$

$$n = 399.8$$

Approximately 400.

The study instrument was adequately distributed to each jetty using a proportionate method of allocation derived by the author's from Bowley's (1926) & Oyegun (2003).

$$\text{Formula: } n = \frac{N_p \times n}{N}$$

Where  $N_p$  = number of passengers of each jetty

$n$  = sample size of the study

$N$  = total passengers population carried by all jetties.

### 3. Results and Discussion

Result from figure 1 clearly revealed that 21% of respondents agreed to the fact operators and passengers of inland waterways transportation across the Niger Delta often times failed in complying with safety measures and regulations in the course of their operations. Safety measures are processes and methods put in place to ensure the safety of persons, goods and other operational activities in transport and logistics services. The non-compliance to safety measures has resulted to more harm than good, in the case of failure to use safety life jacket which has killed so many passengers who lacked the basic swimming skills.

Over speeding (6%) has also been indicated as one of the recklessness of boat drivers, even at sharp bends/curves in creeks where they are supposed to slow down for necessary precautions. Other non-compliance safety measures includes; use of substandard safety jackets, and its inadequacy (cumulatively 34%). While Presence of sacks and sticks (14%), overloading (10%) and leaking of boats (5%). All these identified are major contributors to near (8%) to actual (2%) boat crashes that has been recorded off and in the Nigeria Media. The extent of safety challenges recorded in passenger speed boats operation across the coastal communities of Niger Delta over the years has been alarming including the recent boat mishaps in Rivers State in year 2018 claiming six (6) life's along IboramaBakana routes, and other numerous incidents not officially recorded across the coastal communities in the Niger Delta. The findings of this study is an established fact asserted earlier that there is no doubt that inadequate infrastructural facility is one of the conventional challenges to inland waterways transportation safety.

Despite the existence of the laws of operation and of course, the presence of government agencies, boats are generally overloaded. Passenger speed boats constantly develop engine faults due to poor maintenance culture, water also penetrate into the boats because of leakages, overweight and ultimately sink thereby drowning the passengers.

The extent of security challenges as obtained from the sampled respondents indicate that there is 25.8% low level of inadequate security patrol across the coastline of Niger Delta. 22.3% of the respondents attested that check points along inland waterways routes are inadequate, the level of touting 2.3%, Armed robbery attacks 2.3%, Piracy attacks recorded as low as 2%, Kidnapping/hostage taking 5.5%, Snatching of boat engines which is on the increase recorded 28.3%, while shooting & killing of drivers recorded 11.5%. The security aspect of inland waterways transportation assume that right from the jetty terminals where trips are originated from to destination points is devoid of security threats such as armed robbery, militancy activities, sea pirate attacks, among other unforeseen insecurity characteristics.

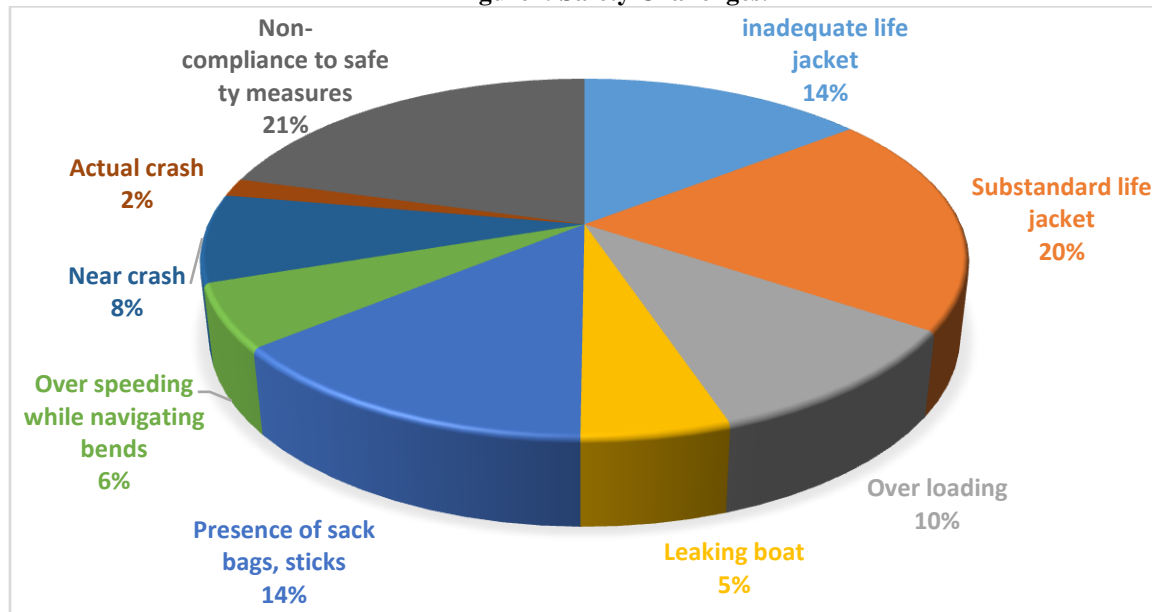
It is important to note that there are some common factors which contribute to safety and security challenges along the inland waterwaystransportation routes. These common elements are both human and technological, where boat drivers and operators are carefree about safety measures by allowing overloading or abuse in alcohol level consumption, poor maintenance of boats, engine and equipment failure and harsh weather condition affects sea-going, coastal and inland water boats. Also, the failure of maritime agencies and inland waterways transport operators in adopting the application of hard and soft technological systems including equipment and devices to man the operation of this sector has created more socio-economics losses than the gains.

Majority of boat mishaps recorded in the coastal waters of Niger Delta communities are generally caused by overloading, wrecks along the water channels, night trips without adequate light, absence of river marks, traffic signals and lack of enforcement of safety regulations by Government agencies and boat operators.

Despite the checkpoints, patrol and escort of oil vessels and other multinational equipment's by Nigerian Military tug-boats, they are supposed to ensure adequate monitoring, safety enforcement and compliance to passengers boat capacity limit at jetty terminals before trips, which increases the risk of capsizing. The only check for security threats at the middle of the rivers en-route to their various destinations.

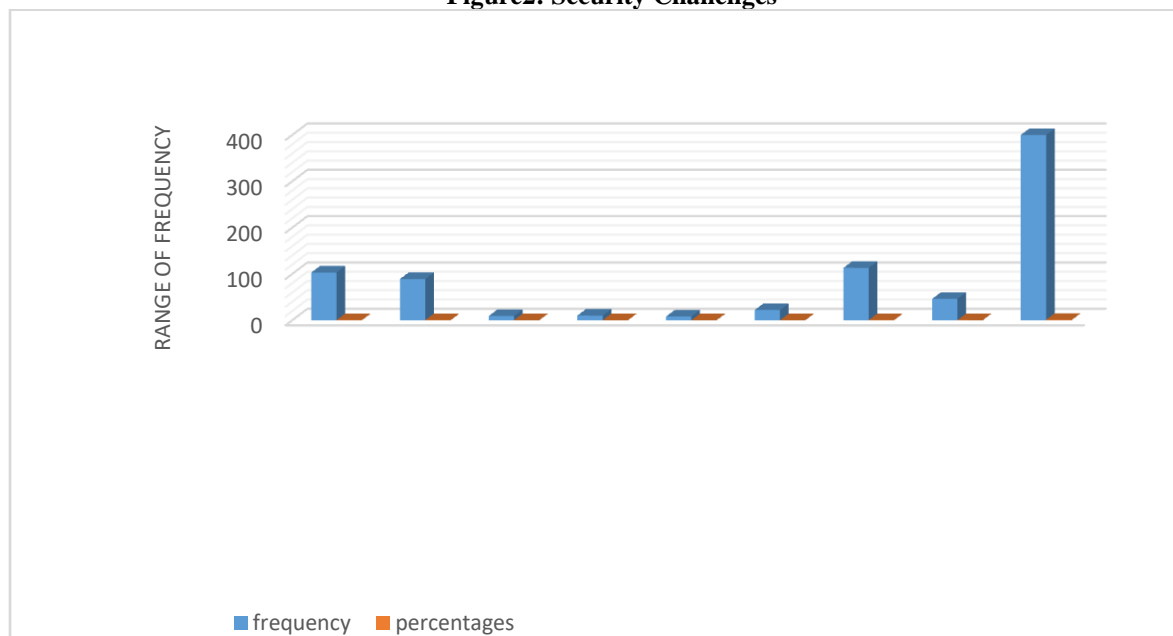
The study findings revealed that maritime security agencies (Nigerian Navy and National Inland Waterways Authority Joint Task Forces (NIWA) do not performadequate patrol, since the lack operational security boats, among other security apparatus which contributed to the increasing rate of security threat along the waterways.

**Figure1: Safety Challenges.**



Source: Author's work.

**Figure2: Security Challenges**



Source: Author's work.

#### 4. Conclusion

The non-compliance to safety and security measures has resulted to more harm than good, resulting to several losses of lives and property. It is important to note that there are some human and technological factors which contribute to safety and security challenges along the inland waterwaystransportation routes. Hence these challenges must be addressed to realize sustainable and efficient inland waterways transportation in the Niger Delta. The study recommends that the Federal and State Governments should mandate all marine

operators/community liaison officers to be organized in a union in order to ensure enforcement of safety measures as well as standard for boats building. Marine related government agencies (such as NIMASA, NIWA, Ministry of Transport, and Nigerian Ports Authority) and private jetty operators should establish an effective Search and Rescue team across the coastal communities. Thus ensuring regular awareness/sensitization campaign on modern safety measures. Also, the security agencies should effectively manned critical flash points of security threats (touting, armed robbery, piracy and militancy). They should also ensuring adequate patrol and surveillance along transportation routes.

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