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*Research Article*

# INCESSANT BOAT MISHAPS ON NIGERIAN INLAND WATERWAYS- ADVISORY WAY FORWARD ANALYSIS

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## Abstract

The Nigerian inland waterways cannot be said to be safe as a result of incessant boat accidents especially during the raining season. The necessity to develop this paper stemmed from avoidable accidents of boats on Nigerian Inland Waterways. This paper presented the challenges of boat accidents or crashes in Nigeria with a view to provide relevant solutions to the identified problems. Retrieved data from literatures were used to present boat accidents across littoral states in Nigeria. The secondary data collected was upgraded to capture the recent incidents of boat mishaps across all the States involved in Nigeria. Descriptive statistics was used to showcase the percentages of the accidents across the States and the advisory way forward to cushion the incessant unfortunate incidents were suggested. It is believed that, each Nigerian littoral state will be proactive to utilize the suggested measures to curb the rate of boat and maritime accidents on our inland waterways.

***Keywords:*** inland waterways, boat, mishaps, accidents, Nigeria

## 1.1 Introduction

Nigeria is a country blessed with ocean and waterways in her territory which has facilitated international trade and local fishing. Trans-loading from bigger vessels with the use of barges has enhanced distribution of goods across River Niger, Benue and Hadejia. Lakes and rivers in Lagos, Sokoto, Cross River, Idah, Lokoja, Imo, Ogun, Oguta among others are responsible for daily means of livelihood of the residents as fishermen. According to Taaffee, Morrill and Gould (1963, Ogunsnaya and Olawepo, 2004), there are about 100 small ports or jetties across Nigerian waters. Apart from the benefit of using water for production activities, it has aided exploration and distribution of mineral and organic resources. It is a major means of transportation in places like Akwa Ibom, Calabar, Ondo, Bayelsa and Delta States in Nigeria. Ondo State's crude oil

exploration is possible because of the presence of the inland waterways. Communities along these places make their means of livelihood through fishing, bunkering and extraction of other water mineral resources. Exchange of agricultural produce is possible through inland waterways and Niger Delta part of Nigeria which comprises Akwa Ibom, Rivers, Cross River, Delta and Bayelsa States are very rich in terms of Cray fish, different kinds of fishes, palm wine, palm oil among other agricultural produce (Adeyanju and Adepoju, 2021).

Carriage of passengers and goods in most cases around littoral States can be best routed through boat for easy accessibility and most importantly to boycott grid locks and safe time. However, in spite of the benefits derived from using boats for carriage of goods and passengers in Nigeria, there are avoidable cases of incessant mishaps in our inland waterways.

Over the past two years, at different locations in Nigeria's inland waterways, incidents of boat capsize, insecurity of passenger speed boat, inability to wear safety jackets and issues related to unregulated practices among boat operators, piracy, sea robbery had led to loss of lives and fear of using this medium for either transportation or means of livelihood (Ukoji and Ukoji, 2015). There are many unreported cases of boat mishaps in Nigeria apart from those announced by national newspapers. According to NIWA about 290 Nigerians were lost by boat mishaps in 2013. Parts of the problems of Nigerian waterways are the wrecks, obsolete equipment and inadequate human capacity development. Boat mishaps as captured by the U.S Department of Home Security (2013) can be categorized into grounding, sinking, fire on board while the boat is on course, tow or moored. Resultant effects of boat mishaps include loss of lives, equipment, injury, damages to facilities and irredeemable loss of goods and cost.

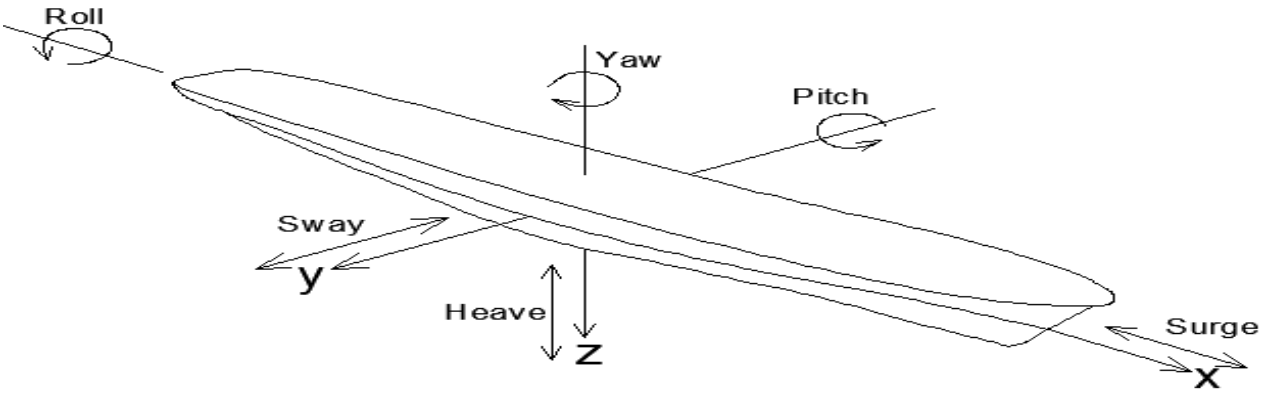
## 2.0 Review of Nigerian Inland waterways

Visiting creeks and Nigerian jetties for the purpose of carrying out evaluations and mini-research of reasons for some of these mishaps provided an insight into the problems. First is the issue of overloading. It was observed that, during rush hours and for the purpose of profit maximization, boats are often loaded above permissible load-weight which used to put the vehicle in danger of stability. Each designed boat or vessel has its permissible load line which if exceeded will pose danger to the safety of all onboard the vessel. Ari (2009) posited that, characteristics of hull, weight distribution and how the boat is being operated are major issues in boat stability. Across all the visited places in Apapa, Marina, Ikoyi, Delta, Onisha, Benue and Bayelsa, the temptation to refrain from carrying above load line could not be managed. Most passengers are desperate to the extent that, they are ready to offer above required price just to meet up at a particular time. The overloading of goods without proper stability check used to result in accident on Nigerian inland waterways. Stability of vessels or boat must be maintained even when it is carrying lesser goods as it may require ballasting especially in turbulent waters. Secondly, speed applied by boat operators used to result in collision and applying brakes suddenly cannot immediately stop the moving boat. Dogarawa (2012) explained various factors causing boat accidents in Nigeria by interviewing boat drivers, maritime union workers among others. They explained that, debris along

the waterways, lack of patrol, overloading, training and enforcement are the critical factors identified.

This speed is often generated as a result of over confidence of boat riders and enthusiasm that comes with it. Speed either on land or on water in transportation generally must be controlled in case of any unforeseen circumstance. Competency of the boat drivers is another factor in Nigerian inland waterways boat mishaps. As much as it is understandable that, nobody can drive a boat unless he has been trained or been practicing driving of the craft, the truth is that, there are few former training institutions for boat drivers in Nigeria. Boarding different boats across Nigerian inland waterways will give you an impression of "try and error" as most drivers just develop interest to make a living without proper training. Boat driving requires skills because it takes knowledge of boat driving to react to waves, current and tides. Sometimes, waters of different sources converge and there is a level of understanding to drive through which requires experience and knowledge. For instance, how to maintain a lane, create a route and avoid collisions are all through training and experience. It can be observed that, while a boat is on a path or course, creating ripples and waves; another boat must not follow the same path at close range and ripple effects will affect the stability of the boat behind.

The fourth one is boat repair and maintenance. It is disheartening to see how lives are put in danger as a result of using rickety and paddled-canoe for the carriage of goods and passengers. Boats are to be serviced and in most cases routine checks and surveys must be carried out for seaworthiness of the crafts. The forces combating boats as a result of pressure from the loads and buoyancy used to cause "hogging and sagging". Hence, if vessels are not properly maintained or serviced it might have been thwarted as a result of hogging and sagging. According to Hasanudin and Jeng; Adepoju, *et al* (2021) forces combating a boat or ship can cause it to roll, yaw, pitch, sway, heave or surge as depicted in Figure 1. A boat or ship as the case may be must be prepared and loaded against all these forces to forestall any unwarranted mishap.




Source: Adepoju *et al* (2021)

Mostly, though modern crafts are made with synthetic fibers; there used to be rust of metal properties as the craft perpetually resides in water. This can actually cause boats not to withstand

pressure and reason for double hulls of boats and ships. Seams are to be observed and closed as any leakage will cause the boat to sink. Ingress may occur as a result of loosed or improperly closed hatches, valves and other leaks that must be observed. There are challenges faced by boat operators in Nigeria which include non-availability of spare parts for some modern boats and there are situations where the engines will require repairs and those components to be replaced though not so much but rendered the boat useless. Rainfall and morning dew impair visibility of boat drivers and often cause drifting to unknown route and collision mishaps. Sea wing and other environmental hazards can occur on water, it may be out rightly difficult to maneuver such issues but with proper understanding of waterways such circumstances can be predicted, avoided and managed. Price regulation often plays a significant role in type of boat to be boarded by passengers, the discrimination in price between covered and uncovered boat is critical in the operation. Weighing safety against price and trade-off cost for live should be discouraged. While it may be cheaper to board or carry goods on uncovered boats, the risk is high and modalities to restrict it use to fishing boat only should be encouraged. In the assessment carried out by Maritime NewZealand (2011) it was observed that, gear of fishing trawlers can cause instability of boat if not properly used. A shift in an attempt to catch fishes to port or starboard side may result in instability of the boat. It is very important to understand how to maintain a centerline while loading on boat as the principle of metric centre suggests in shipbuilding or load line management. Bebeiteihoh and Poku (2016) factored the causes of marine accidents can be summarized into human factor, technical or environmental factors.

Ship chandelling is another aspect that must be critically assessed in Nigerian inland waterways. The supply of fuel and all other necessities onboard bigger or smaller vessels as may be required must be properly guided with utmost precautions. All activities related to cargo stowage, ballast water discharge and ship to ship transfer must be properly handled with safety and international regulatory procedures. Maritime NewZealand (2011) also pointed out that, towing of vessels and critical safety operations are not maintained mostly on inland waterways. This has led to disastrous situations with irreversible damages to ship, crew and investors. According to Punch (2022) no fewer than 701 persons have died in about 53 boat accidents across places in Nigeria between year 2020 and 2022. Most of the incidents did not follow International Maritime Organization IMO procedure requiring all vessels navigating inland waterways to have lifesaving appliances, life jackets and survival crafts. A boat splitting apart drowned about 180 people in Patigi area of Kwara State and also about 15 children with 25 others missing in Sokoto when boat capsized in Nigeria (CBS news, 2023). Ogwu et al (2021) described the statistics of lives lost across places in Nigeria through boat accidents on the waterways. There was boat mishap in Bagwai Local Governent of Kano State which claimed lives of about 50 people in a locally manufactured boat including the children of certain school. Warrah village in Kebbi State recorded over 150 deaths in 2021 along its river between Warrah and Tsihuwan Ngaski in the State. Only one erson died in Water Channel along Badagry in Lagos State while over 30 persons lost their lives in Niger through Tijana River. Two persons lost their lives in Ondo Iyansan river and another at Idiogba in Ilaje also through boat accident. Taraba State, Jigawa and Delta States recorded various degrees of loss of lives along

their waterways. Jetties at different places including Baro, Oguta, Onisha, Burutu, Yenegoa, Igbokoda, Ndoni, Patigi, Degema, Owerrinta, Ndoni and Lokoja have been abandoned for possible rescue stations if activities were active across these locations.

## 3. Methodology

This research made use of data from the literature and added the recent boat accident data to determine the rate of boat accidents in Nigerian waterways. While it is believed that there are many unreported cases of accidents by boat on Nigerian waterways, this research relied on the verified and reported cases through the secondary data and national newspaper reports. Descriptive statistics was adopted to analyze the percentages of each represented states in Nigeria.

## 4. Results and Discussion

In the research conducted by Ukoji and Ukoji (2015) with data set from various Nigerian Newspapers; it can be observed that littoral states are prone to boat mishaps and all efforts must be made to curb the incidents. Figure 1 shows the descriptive statistics of boat accident fatalities in Nigerian States by their percentages.

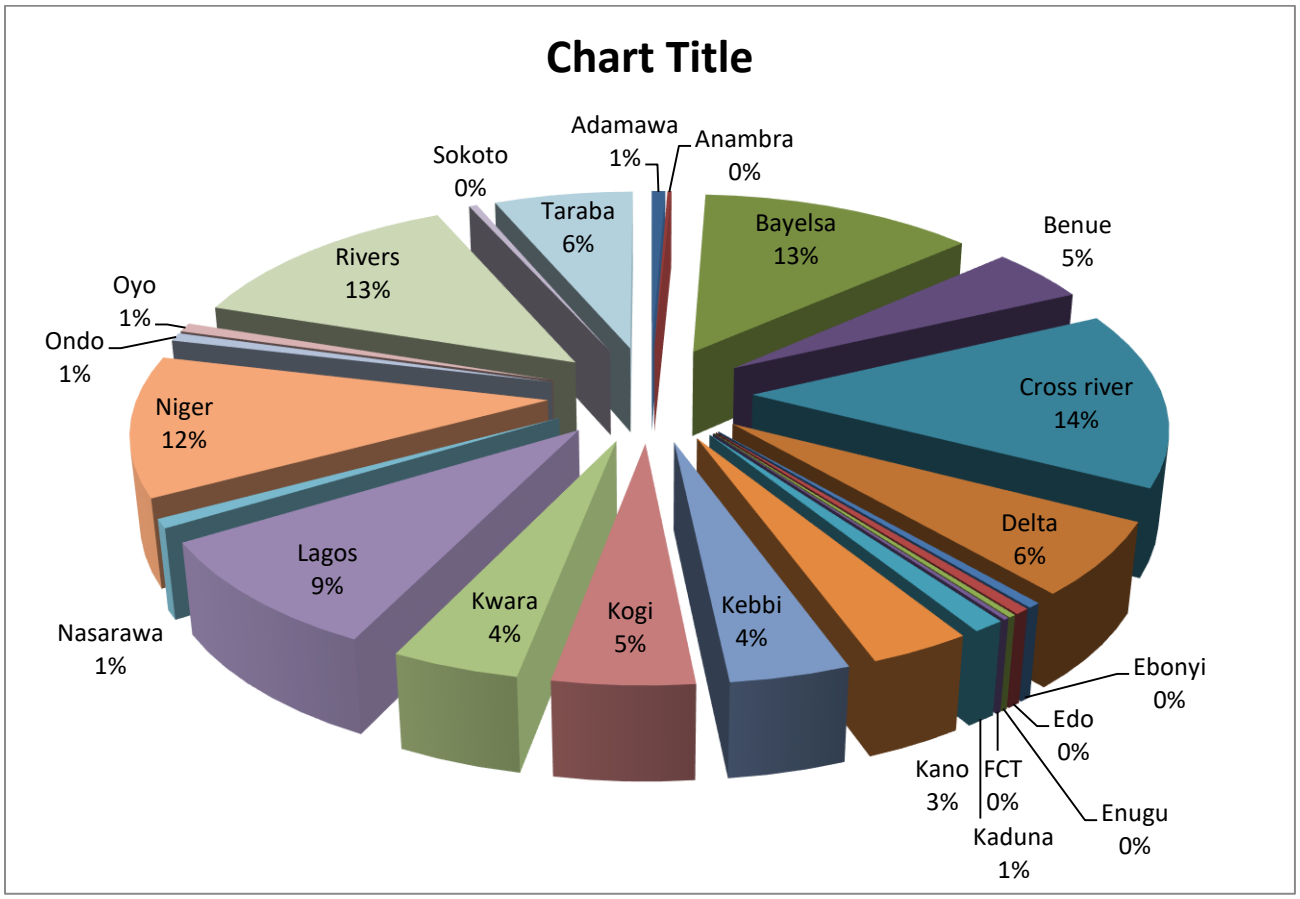



Figure 1: Boat Accident fatalities in Nigeria Source: Ukoji and Ukoji (2015)

The Figure 1 depicts the statistics in percentages of accidents by boats in Nigeria with Cross River leading with14% followed by Rivers, Bayelsa with their respective 13% and Niger 12% and Lagos 9%. Taraba and Delta have same percentages of 6% and Kogi and Benue alsso have 5% respectively. Kwara and Kebbi have the same percentage of 4% respectively and others have below 4%. Looking at the statistics gives an impression that, Cross River, Bayelsa, Rivers and Niger States must strategize on the boat operations not foreclosing other states like Lagos and the rest.

Putting all necessary precautions of safety in place is one step to cushioning or curbing the incessant boat mishaps, also of importance is proactive steps taken when boat accidents occur. By this, it means what are the facilities put in place to rescue victims of boat mishaps? Are there trained personnel to practice rescue operations at strategic places on Nigerian inland waterways? How often are the operators or drivers trained or retrained?

There are techniques in search and rescue operations that cannot be learnt theoretically. The practice of search and rescue in our inland waterways is weak. And the salvage placed on this must be properly structure to attract salvor in embarking on such voyage. A situation where the salvor lost his lives and his dependents were to be taken care of and were neglected is a discouragement to others. This study will assist Nigeria and agencies in charge of inland waterways to objectively strengthen all areas of boat operations with a view to reducing the mishaps in Nigeria. The skepticism about the use of waterways will be reduced with standardized procedures occasioned by this study. There is possibility of rejuvenating the skill and training of boat operators for a standardized practice for the purpose of sustainable development. In case of boat accident, this study will showcase how search and rescue operations are to be practiced through the help from all relevant agencies in charge of inland waterways in Nigeria.
The followings are the suggested way forward to reducing the menace of incessant boat mishaps in Nigeria:

1. There is need to regulate, coordinate and provide a policy guide if not in existence for licensing boat drivers in Nigeria
2. There is need for issuance of certificate of seaworthiness per specific time for boat operators in Nigeria. Effort should be made by the relevant authority to see to the fact that, operators do not buy their way into circumventing the exercise
3. While it can be observed that, all operators make use of safety jackets in particular; this should be continued as a safety practice.
4. There is need for strategic rescue operation centres to be managed by the relevant authority like Nigerian Inland Waterways Authority (NIWA and NIMASA)
5. The operation centres in (4) should be equipped with communication facilities and possibly the communication centres can be strategically placed along with the security centres.
6. Double engines are to be used mostly on routes above 30 minutes journey
7. Safety and Rescue operation officials are to arrest, impound and fine as may be determined by the relevant authority any boat violating speed and overloading safety rule.

8. There is need to see how insurance can come into operations of boat operators with flexible and soft leverage scheme that will not jeopardize their activities through stringent insurance policy.

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