

Boat Accidents in Nigeria: General Trends and Risk Factors (June 2006-May 2015)

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Abstract

Boat mishaps are more endemic than ever before in Nigeria due to increased patronage of water transportation. This preference heralded a new era of immense pressure on boat operators and other water users and increased boat accidents cum fatalities. Data from Nigeria Watch showed that 1607 lives were lost in 180 boat accidents between June 2006 and May, 2015. Identified human related and natural causes of such fatal boat accidents included overloading, careless driving, political instability, piracy, militancy, negligence, turbulent weather and wreckages. Findings in the article showed that fatalities spread among government security personnel including the Nigerian Navy, Army, boat operators and passengers, barge captains, militia groups and pirates. Also, finding showed that the amnesty program initiated in 2009 in the Niger Delta area contributed to the decrease in the number of boat accident fatalities in 2010 but the dissatisfaction in the management of the program among the different armed groups led to a resurgent of boat accident especially in the Niger Delta waterways.

Keywords: Fatalities, Transportation, Boat accident, Militancy, Piracy, Amnesty, Water ways, Nigeria.

Introduction

With 8,600 km of inland waterways and extensive coastland of about 852 kilometers,[1] Nigeria boasts of the second longest waterways in Africa. The Niger River and the Benue River, the two longest rivers in Nigeria, run into each other at Lokoja and dissect the country into east, west, and north sections. These rivers and several others have been utilized for water transportation. As such, ocean, coastal water and inland water transports are regarded as three main components of water transportation in Nigeria. The coastal waterways stretch from Badagry through Warri to Calabar. Heavy traffic are moved through these coastal waterways especially where speed is less important than cost. Tonnes of agricultural products are transported from production areas to major industries in urban centers where they are processed through the waterways. This process incurs less cost and boosts the availability of commercial agricultural products in waterlogged areas.

Statistics from National Inland Waterways Authority (NIWA) show that 22 out of 36 states in Nigeria use water as a means of transport and over 296 Nigerians were lost as a result of boat mishaps in the year 2013.[2] This statistics proves that the water transportation has come to occupy a strategic place in the economy of the nation especially with the intricacies of road transportation. However, water transport still scores a distant second to road transport, with an average share of about 1.6 per cent of Nigeria's gross domestic product³ but slow and unsuitable for passenger movement, except for holiday and tourist traffic where time is not a constraint or where other forms of transport are not available.[3] To further reposition water transportation in Nigeria and make it more competitive and safer, the federal government embarked on several policy reformations and restructuring of the Inland Waterways Authority, a regulatory agency for water transportation in Nigeria.

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NIWA was mandated to seek assistance from private sectors in revitalizing the inland waterways. The regulatory agency, among other responsibilities, developed and maintained the inland waterway infrastructure; installed a Vessel Tracking System for the inland waterways and provided communication and navigational aids along the various routes of the inland waterways.

For several years, the problems associated with boat accidents have been under emphasized. Water transportation in Nigeria has suffered severe infrastructural and human capacity neglect, a situation that propelled boat mishaps and increased fatality rate all over the country. Agencies such as NIWA saddled with the responsibility of managing the water ways has been under funded and mismanaged. Equipments deployed to monitor such water ways are obsolete and staffs are unequipped with the requisite skills to man the facilities. As a result of the inefficiency in management and personnel, many people in their productive years have been lost to boat mishaps and many goods lost in recent times.

While the precarious nature of water transportation in Nigeria is not restricted to managerial inefficiency and manpower ineptitude, the ignorance of boat riders and passengers in safety measures has proven to be worse. Boat riders rely on their over-rated knowledge of the water channels to convey passengers and goods to different destinations without adequate training and certification in safety measures and navigational techniques. Boats are overloaded with goods and passengers, a situation that compounds incidents of boat mishap. The passengers on the other hand fail to heed to safety measure and mostly prefer not to use life jackets during journeys.

Militancy and piracy are well known to many in Nigeria but their immense contributions to the spate of boat mishaps have been underestimated. The incessant attacks on barges, fishing boats and passenger boats have resulted in an immeasurable loss of manpower and capital. Barges are attacked and tons of crude oil is redirected into the black by armed militants and pirates. In the events of oil spillage during crude transfer into unauthorized vessels or in events of barge sinking, water is polluted and aquatic lives are destroyed. Often times when fishing boats are attacked, their

operators are kidnapped and ransoms are paid for their release. Passenger boats are attacked and the occupants are either killed or robbed.

While the battle to grapple with boat accidents rages, the dearth of data on boat fatalities and poor mapping of incidents of boat mishaps have remained more worrisome. Near total neglect of the collation and management of data on lethal boat mishaps in the major waterways and creeks has hampered the effective prevention or management of boat accidents in Nigeria. This article therefore is designed to highlight the trend and patterns of fatal boat accidents in Nigeria between June 2006 and December 2014 using data from the Nigeria Watch;^{*} an online database and research project that monitors lethal violence, conflicts, and human security in Nigeria.

Methods and Materials

Data is collated from Nigeria Watch database which sources information from 10 daily Nigerian press corporations (Vanguard, Leadership, The Guardian, Sun, This Day, Daily Independence, Punch, Nigerian Tribune, The Nation and Daily Trust) as well as other human rights organizations. This study is restricted between June 2006 and May, 2015. This restriction was placed due to the availability of data within the period. Also, the restriction enabled the researchers verify the available data.

A vessel in this work is considered to be involved in a "boating accident" whenever a death occurs. Boat accident types, drawn from Recreational Boating Statistics[4] and used in this article include grounding, capsizing, sinking, or flooding/swamping; persons ejected from a vessel, fire or explosions that occur while underway and while anchored, moored or docked if the fire resulted from the vessel or vessel equipment. Others include water-skiing or other mishap involving a towable device; collision with another vessel or object, striking a submerged object, a person struck by a vessel, propeller, propulsion unit, or steering machinery; casualties where person falls off an anchored vessel and casualties that result when a person departs an anchored, disabled vessel to make repairs, such as unfouling an anchor or cleaning out the intake of a jet-propelled vessel. Results are presented in simple percentages and bar charts.

^{*}Nigeria Watch is a database and research project that monitors lethal violence, conflicts, and human security in Nigeria. It aims to set up a GIS (Geographic Information System) to localize dangerous spots and to assess the rise, decline or stabilization of violence in the country.

Results and Discussions

Trend of Boat Accident Fatalities in Nigeria by Year

Fatalities of boat mishaps are compared to highlight the risks associated with water-born transportation, which has emerged as an alternative means of transportation in Nigeria.

Figure 1 showed that at least 1607 lives were lost to 180 boat accidents between June 2006 and May, 2015. There was an upward trend of boat accident fatalities from 48 in June 2006 to 197 in 2007 and 241 in 2008 and a fatality drop in 2009 with 168 deaths and a record low of 20 in 2010. The year 2008 saw a large number of boat accidents possibly due to the fact the struggle by groups trying to have more shares of the oil resources from their region.

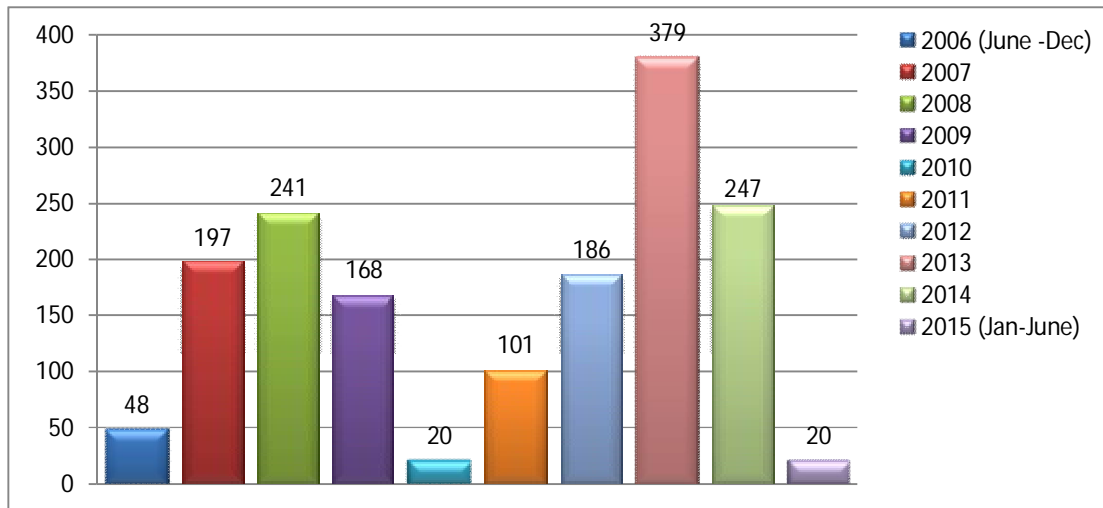


Figure 1. Boat Accidents Fatalities by Year (June 2006-May, 2015)

In response, the government initiated the Amnesty Program in order to assuage the grievances of such groups. In return, there was a sharp decline in such accidents especially in 2010. The Amnesty Program coupled with fact that the Niger Delta region produced the president could have helped reduce activities of the militant groups.

The sharp rise recorded in both 2013 could possibly be attributed to the activities of Niger Delta militants who went back to the creeks as a result of perceived handling of the Amnesty Program. Some militants who felt short changed by the program went back to their struggle against the state or individuals perceived to be sympathetic with the Nigerian state.

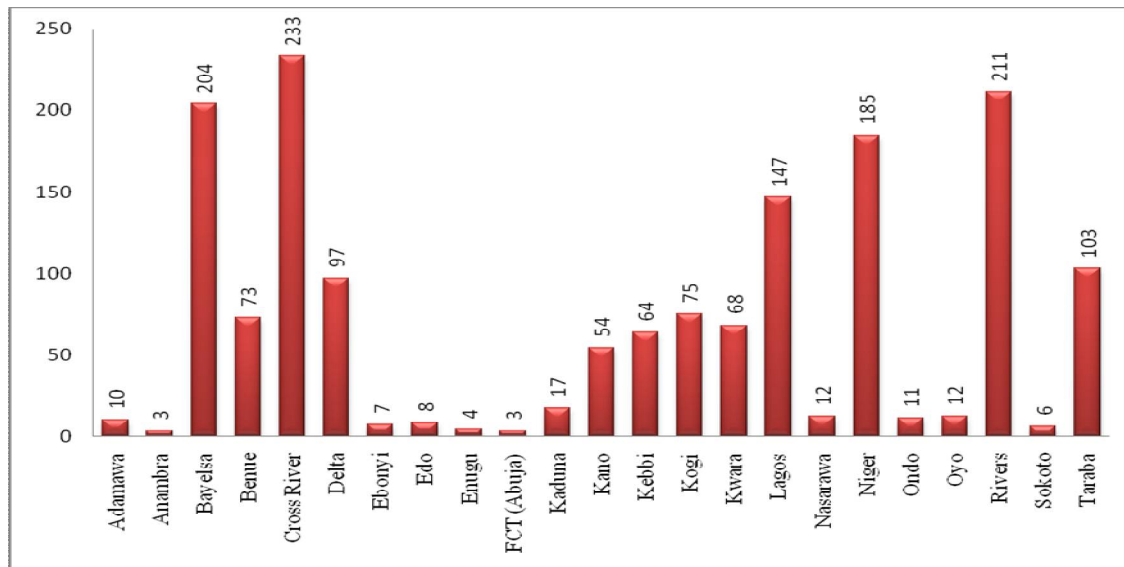


Figure 2. Boat Accidents Fatalities by State (June 2006-May, 2015)

Boat Accident Fatalities in Nigeria Trend by State

Boat accident fatalities varied by states as a result of discrepancies in the number and expanse in coastlines. Figure 2 showed five states with the highest boat accident fatalities to include Cross River (233 deaths), Rivers (211 deaths), Bayelsa (204 deaths), Niger (185 deaths) and Lagos (147 deaths). Fatalities in the most affected five states represent 60.1% of the overall boat accident fatalities in Nigeria within the period under review. The five states are heavy coastal states, most of which are found in the Nigeria Delta area. On the other hand, least fatal states include Anambra (3 deaths), Enugu (4 deaths), Sokoto (6 deaths), Ebonyi (7 deaths) and Edo (8 deaths). Most of these states are inland states.

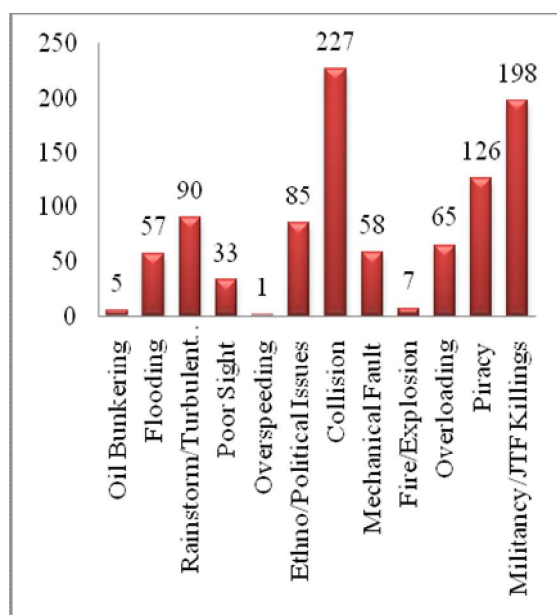


Figure 3. Specific Classification

Boat Accidents by Causes (June 2006-May, 2015)

From a broader perspective, the causes of boat accidents as shown in Fig. 4 above were categorized into Mechanical, human and natural factors. Statistics in the figure shows that about a third of the total causes of boat accident fatalities are human related. This meant that 490 people died as a result of over speeding, overloading, ethno-political crisis, oil bunkering, piracy, attacks and counter attacks by militants and National security forces. Further, about 147 lives representing 21% of the total boat accident fatalities were lost to natural

Causes of Boat Accidents in Nigeria (June 2006-May 2015)

Accidents generally do not happen without a cause. They are precipitated by some factors which are grouped into specific and broad categories. Figure 3 showed that collision caused the most boat accident deaths (227 deaths), seconded by militancy (198 deaths) and piracy (126 deaths). Other major causes include rainstorms/turbulent weather (90 deaths), ethno-political issues (85 deaths), overloading (65 deaths), boat developing mechanical faults (58 deaths) and flooding (57 deaths). On the contrary, over speeding, oil bunkering and fire/explosion caused the least fatalities within the period under review.

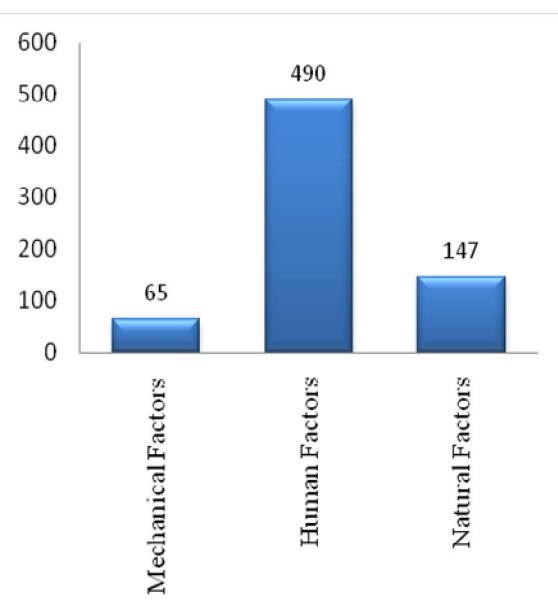


Figure 4. General Classification

incidents involving flooding, rainstorms, waves and turbulent weather. Contrary to the huge deaths that accrued from human factors, 65 deaths representing 9% of the total deaths were caused by mechanical faults comprising of brake failure and fire outbreaks that resulted in explosions.

Human Factors as major cause of Boat Accidents in Nigeria

Previous statistics show human factors as the leading cause of boat accidents in Nigeria. Such factors were further analyzed to establish how they drove incidents of boats mishaps.

Overloading

Overloading of boats, jetties, canoes or ferries was recognized as a major problem in Nigerian waterways. Having more people on board can cause accident and during an accident it can also lead to more injuries or deaths, putting pressure on limited rescue and law enforcement resources turning an accident scene into a triage situation.[5] Drive for more profit push boat operator to overload their boats with people and goods. On Boxing Day, about 47 persons died in a boat tragedy at River Buruku, Rivers State when the wooden boat conveying them across the river capsized at the middle of the river.[6] Most of the victims were drunken young fun seekers overloaded in the wooden boat against the advice of everyone including the driver that conveyed them. Also, a wooden vessel carrying 168 illegal immigrants who were being trafficked to Gabon capsized about 40 nautical miles (74 kilometers) off the coast of Calabar, the state capital of Nigeria's Cross River State.[7] Little was done to observe safety regulations in the overloaded vessel. Similar accidents had been reported in the region in the past. Such incidents were blamed on no safety regulations which allowed boats to be overloaded, poorly maintained and operate without reliable passenger lists.

Collision

Collision occurs when two boats/ ferries/ barges collide and causes fatalities. Statistics in previous figures identified collision as the highest cause of boat mishap fatalities in Nigeria within the period under review. About 227 lives were lost to boat collision. For instance, two ferry canoes sailing to from a border market in Lolo Village, Kebbi state collided and killed 46 people. Halfway through their journey, which was by torch lights, one of the engine-propelled canoe suspected to be carrying petrol brushed the other, some petrol sprinkled into the passengers' canoe where burning lanterns of traders caught fire and the canoe was set ablaze.[8] Similarly, a naval boat escorting a house boat belonging to an oil company along the Nun River at the Yenagoa water front rammed into a fiber passenger boat and drowned 13 people on board.[9] Several factors that account for such deaths include poor visibility, over speeding, careless driving, loss of control, inexperience and inattention among boat operators and passengers. Several factors ranging from poor visibility, over

speeding, careless driving, loss of control, inexperience to inattention among boat operators and passengers has been identified as factors that caused collision in the waterways.

Militancy

The agitation for Niger Delta resource control led to the formation of non-state armed groups such as the Niger Delta People's Volunteer Force (NDPVF) led by Mujahid Dokubo-Asari and the Niger Delta Vigilante (NDV) led by Ateke Tom.[10] After launching a mission to wipe out NDPVF, approved by President Olusegun Obasanjo in early September (which year), Mujahid Dokubo-Asari declared "all-out war" with the Nigerian state as well as the oil corporations and threatened to disrupt oil production activities through attacks on wells and pipelines. [10] One of the strategies adopted by armed militants is attacks on naval boats, oil barges and gunboats.

These activities resulted in incessant fights between militants and Nigerian navy. On several occasions, naval boats, passenger boats and vessels were either directly attacked and resulted into fatalities or high jacked and the occupants drowned.

To further drive home their demands for resource control, the Movement for the Emancipation of the Niger Delta (MEND), a major militant group in the Niger Delta region of Nigeria which claimed to expose exploitation and oppression a major militant group in the Niger Delta region of Nigeria claimed to expose exploitation and oppression of the Niger Delta people and degradation of the natural environment by public-private partnerships between the Federal Government of Nigeria and corporations involved in the production of oil in the Niger Delta and issued a warning to oil industries to steer clear of the Niger Delta in 2006. According to the email, MEND 'aimed to destroy the capacity of the Nigerian government to export oil'. [11] Further attacks were unleashed on police gunboats, oil barges and passenger boats. Statistics between June 2006 and May 2015, show that 198 deaths were recorded in attacks and counter attacks that involved militants and government security forces. [12] The victims comprised of boat operators, passengers, militants and security personnel. Bayelsa, Delta and Rivers states were the centre of attacks. See Fig. 5 below shows the categorization of boat accidents fatalities by status.

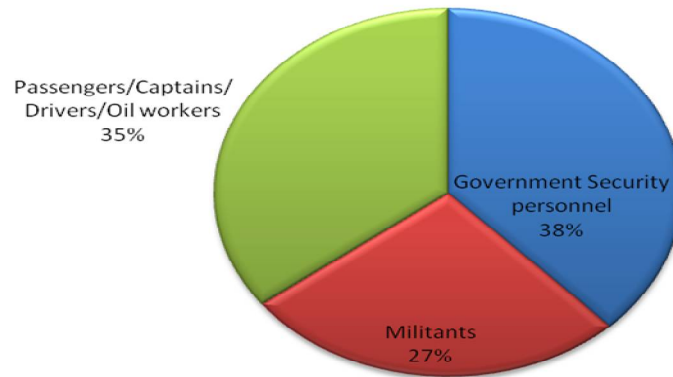


Figure 5. Boat Accident Fatalities by Status

Statistics in the above figure showed that government security personnel suffered the most fatalities in numerous boat attacks by the militants. About 75 (38%) officers died in separate attacks carried out by militants. For instance, militants bombed an off-shore platform of the Shell SPDC and sunk a military gun boat carrying between 20-23 soldiers[13] though the attack was denied by a Joint Task Force (JTF) spokesman. In a second event, 9 Nigerian navy personnel were killed in an attack that came a day after a member of the Nigerian navy was killed and four other Nigerian seamen injured when gunmen in two speedboats attacked a security vessel working for Addax, a Canadian petroleum company some 40 kilometers from the Nigerian coast. [14]

There were also high fatality rate among passengers, boat drivers, Captains and oil workers. About 70 (35%) of such people were killed during attacks masterminded by militants. On January 14, 2007, 12 traditional rulers, including the Kula people spokesman, were gunned down along Kula, at Shell pipeline area, near Abonnema Wharf by militants as they travelled on boat for a meeting in a Community. [15] The attack was linked to the sharing of money distributed by oil companies to communities. In 2008 May, militants attacked a passengers' boat and killed 12 passengers except the boat driver that was asked to take the corpses back to Bonny for burial. The militants were reportedly angry that boat operators and passengers were cooperating with JTF in order to avoid attacks. [15] However, the militants were not spared by security personnel during attacks as 53 (27%) of them died in separate attacks and counter attacks. For instance, JTF on naval routine patrol, sunk a militants' boat that opened fire on them and after warning shots, refused to beat a retreat. About 12 of the militants were killed in the attack.

[16] In another event, at least 8 Niger-Delta militants suspected to prepare an attack against AGIP oil flow station were killed by soldiers (JTF) patrolling the creeks after they were stopped at a checkpoint as they were travelling in a boat.[16] About 2 soldiers also died in the attack that MEND claimed people killed were simple civilians.

Piracy

Piracy in Nigeria especially in the Niger Delta is a growing concern. While many have seen their activities as intertwined with militancy, it has, however, been driven by illegal economic ambitions. Secondly, while Niger Delta militancy was premised on agitation for resource control or at least equitable distribution of their natural resources, piracy has remained unpopular among state and non-state actors in Niger Delta areas.

Within the period under review, there has been an upsurge in violent crimes along the creeks and waterways in Nigeria Delta especially in Bayelsa State. While suspected sea pirates terrorize commuters along the creeks and waterways, armed men take advantage of the parlous state of security in the far flung communities, many of which are not accessible by road except by water. [17] Findings in Fig. 6 showed that 79% of the pirate related boat accident fatalities occurred in 2013 while other years accounted for the remaining 21%. Among the 128 victims of pirate attacks which mostly occurred in the Niger Delta area, 4 were policemen, 117 passengers, 4 drivers/captains and 3 pirates. Most of the victims were either shot dead or drowned after their ferries/boats/barges were capsized. However, majority of the victims have been passengers especially traders and oil workers. On February 2nd, 2008, two sea pirates attempted to hijack a tug boat transporting 400 000 oil liters

belonging to SAIPEM but were killed by Nigerian Navy and one was arrested while two others jumped into the River.[18] These boat attacks led to

a recent protest by boat operators in Port Harcourt over the loss of no fewer than 10 of their members, passengers and engines to pirates.

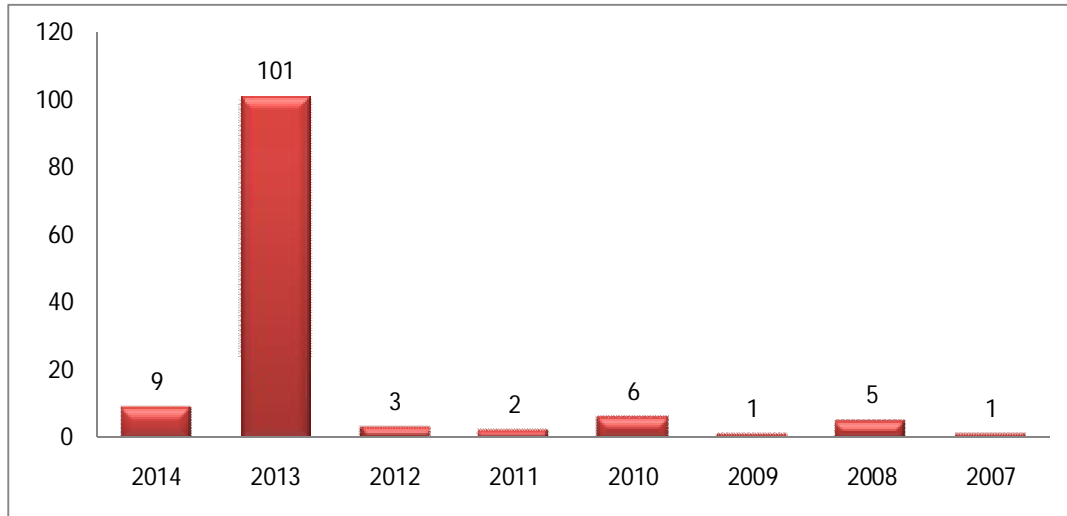


Figure 6. Pirate Related Boat Accident Fatalities by Year

Socio-economic and Cultural Implications of Boat Accidents in Nigeria

The implications of boat accidents on the victim's families and the nation have been enormous. The implications are viewed from the social, economic and cultural perspectives.

The spate of boat accidents on Nigeria waters, especially in major water ways has been a source of worry for many people especially victims' families. In recent times, death through boat and ferry accidents on the nation's waterways have become rampant as lives were being lost too frequently and it appears there is no end in sight. As boat accidents continue to escalate, the number of victims kept increasing as well. Scores of people have been reported dead while many were declared missing in different boat accidents across the country. However, most victims of boat mishaps are in their productive years and the breadwinners of their families. Their deaths leave trails of suffering among family and peers. Family circles suddenly become disjointed when breadwinners are lost. Furthermore, families of boat accident victims often face difficult task of retrieving the corpses of their loved ones. Such corpses are withheld for investigations, which often, takes a longer time to conclude. At other times, some family members of complain of no-information posture of the stakeholders who blame the delay or poor communication on investigation.

The tourism sector is seen as one of the fastest growing sectors in Nigeria. Major tourist attractions are located on Islands and beaches and therefore relies more on water transportation for easy access. Banana Island, Snake Island, Bar Beach, etc are major tourist destinations in Lagos. Activities in these beaches are affected due to the several boat accidents in the state and its environs. People look ahead of the fun at this tourist destination but consider the risks involved in accessing those centers. To this effect, one can conclude that boat accidents have seriously affected the tourism in Nigeria.

Militancy and piracy have negatively impacted on the frequency of boat accidents in Nigeria. Attacks on oil barges, fishing boats and passenger boats have had severe consequences on the economy of the nation. Until the fall in the international oil prices, Nigerian economy has depended on crude oil production and sales. However, the emergence of armed militant groups in the Niger Delta threatened smooth production, distribution and sale of oil. Most times, production faculties were attacked by heavily armed groups in the Niger Delta area; oil workers were kidnapped and ransom paid in exchange for their freedom. On several occasions, oil barges were attacked are diverted to unknown destinations where they were emptied. At other times, the barges were sunk by the militants. Thousands of barrels of crude oil were illegally sold to black marketers as raw crude or refined

products. The trend continued until the Federal government implemented the Amnesty Program implemented for demobilized Niger Delta armed youths. However, not all the armed groups embraced the Amnesty Program. They returned to the creeks where perpetually attack fishing boats and passenger boats, ripping them off their belongings and killing some. These incessant attacks hampered economic activities in the Niger Delta area and affected Federal government revenue generation. It also negatively affected several lives that had depended on economic activities via water ways.

Policies and Efforts towards bettering Water Transportation in Nigeria

On July 23rd, 2015, the Nigerian Maritime Administration and Safety Agency (NIMASA) assured stakeholders in the maritime sector of safety on Nigeria's waterways with the take-off of its 24-hour Satellite Surveillance Centre in Lagos, which will help curb piracy. The system would provide a safety net for corporate bodies and individuals who transact businesses within the Nigerian waterways detecting boats, ships and objects of predefined cross-section floating on water. The system also has abilities to set range rings and restrict areas for which when penetrated by an intruder, the system gives an alarm thereby alerting the operator or watch keeper. There was an immediate impact with the deployment of the system when a Ghanaian flagged vessel, which was hijacked by pirates off the coast of Ghana was rescued. As a part of the satellite integrated system, the Global Maritime Distress Safety System (GMDSS) equipped with VHF Radio, satellite phones and the IMARSAT was installed at Takwa Bay in Lagos which, when fully integrated with the satellite system. The target was to provide full domain awareness for Nigeria's waterways.

Furthermore, safety within the Nigerian sea shores through a vigorous compliance with the International Ship and Port Facility Security (ISPS) Code was installed on August 22, 2014. The installation facilitated the certification of port facilities in Nigeria in compliant with the ISPS Code.

Top boast human capacity in maritime activities, the Nigeria Maritime University (NMU) Okerenkoko, Delta State was established. The university would produce high level manpower for Nigeria's maritime and shipping sector on sustainable basis

and become a centre for excellence in innovative research for the maritime sector in the West and Central Africa sub-region. Other efforts implemented by the Nigerian government to better the lives of water users according to NIWA[19] include:

- Charting and buoying of Lower River Niger River (Lokoja-Onitsha);
- Satellite imagery of a section of River Niger;
- Charting and buoying of Upper Niger River (Zamare-Yelwa/Yauri-Nigeria/Benin border);
- Procurement of water weeds control equipment e.g. ("Water master Classic III");
- Clearing of aquatic weeds/water hyacinth in the inland navigable waterways of Lagos, Ondo, Ogun, Rivers, Borno, Benue, Baga, Yelwa- Yauri and Cross River States;
- Construction of booms for the control of water hyacinth and other aquatic weeds in Zamare-Rofia route, Kebbi State.
- Development of Onitsha Portland other water disasters in Rivers and Bayelsa waterways.[20]

Conclusion

This study critically examined the incessant occurrence of boat mishaps in different parts of Nigeria between June, 2006 and May, 2015. The occurrence of such mishaps has a wider coverage than one imagines. About 23 out of 36 states of the Federal have at least recorded a fatal boat accident within the period reviewed. Most affected coastal states include Rivers, Bayelsa, Delta, Cross River, Lagos and Taraba states. A further analysis revealed that boat accident fatalities were rampant in Niger Delta areas due to huge activities of Multinational oil companies and the large expanse of water channels. These factors encouraged piracy and militancy which often resulted in incessant attacks on oil barges, passenger boats and security gun boats. Results showed a steady rise in boat mishap fatalities from 2006 to 2009 and a break in 2010 but another rise between 2011 and 2014. It is therefore believe that the amnesty program in 2009 had impact on the low number of militancy related boat accidents in 2010. The further increase in piracy in 2014 was linked with the grumblings in the handling of the amnesty program among the former militants who returned to creeks and engaged in piracy. This article established the fact that overloading is a major risk factor to boat mishaps in Nigeria. While militancy and piracy were restricted to many Niger Delta creeks, overloading was seen

as national calamity that needs to be addressed if more lives are to be saved in Nigerian water ways.

Given the above, more concerted efforts should be geared towards aggressive sensitization by the National Inland Waterways Authority. Both boat drivers/ captains and commuters have been established to contribute to the high rate of boat accidents; therefore, they should be engaged to find possible ways to stemming the number of boat accidents recorded each year. Further, the government should as a matter of urgency engage the militants to find a lasting solution to the Niger Delta crisis in order to bring enduring peace to the region.

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Appendix

Abbreviations

JTF	Joint Task Force
NIWA	National Inland Waterways Authority
NDPVF	Niger Delta People's Volunteer Force
NDV	Niger Delta Vigilante
MEND	Movement for the Emancipation of the Niger Delta