

Environmental Pollution and Death Toll in Bonny Island: A Correlative Study of Ahmed Yerima's *Hard Ground* and the Nigerian Development in the 21st Century

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Abstract

Until recent time, Bonny Island has been witnessed with excruciating environmental pollutions caused by malicious gas explosion that has distinctively affected the fauna and flora of the ecological system of that environment. This malicious discharge has unequivocally left tones of people dead while many are struggling for survival in hospitals; seafoods are killed, while soil textures are destroyed. This has distinctively increased the issues of poverty, death, suffering, sickness, pain, and hunger of the people. This heinous dichotomy may maliciously increase the acts of terrorism, manifesting through kidnapping, oil bunkering, vandalism of pipeline installations, incessant killings, rape, armed robbery, assassination, and other forms of social vices that is prevalent in the region as portrayed in Ahmed Yerima's *Hard Ground*. The study therefore aims at interrogating the effect of environmental pollution in Bonny Island while drawing reference from Ahmed Yerima's *Hard Ground*. *Hard Ground* distinctively discusses the gargantuan effects of environmental degradation in the Niger Delta region. To achieve this, Social Behavioural and Change communication theory and Content Analysis and Descriptive Methodology are employed as guide. Amongst the major recommendations, the study therefore insists that environmental cleansing must be carried out on all affected areas on the Island as this will help contain the spread of the airborne disease. More so, environmental disease control centre and health centres must be established to contain any gaseous discharge that may spring up on the island.

Keywords: *Environmental Pollution, Death Toll, Bonny Island, Correlative Study, Hard Ground*

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Background to the Study

It is pertinent to deduce categorically that the issue of environmental pollution and degradation has posed as a major challenge besieging the Niger Delta region due to the malicious gas flaring as a result of the continuous crude exploration and exploitation activities in the region. More so, gas discharge has been witnessed in other oil nations of the world but pervasive in the Nigerian state where corruption, marginalization, nepotism, divides and rule system, and favouritism is the order of the day. Lucidly, Solomon et al (2016) in Leera, Okorite and Isetima (2017) avers that “environmental pollution could simply be defined as any undesirable change in physical, chemical, or biological characteristics of any component of the environment i.e., water and soil which can cause harmful effects on various forms of life or property. It is according to Leera, Okorite and Iserima as any substance causing harmful effects or uneasiness to the organisms.

Ukpere et al (2018) write, succumbing to Leera, Okorite and Iserima (2017) that Environmental pollution simply means the introduction, release or addition of any biological, chemical, physical or radiological substance into any of the component parts of the environment (air, water, land or soil) at a rate faster than the rate at which the environment can naturally accommodate it through the process of absorption, dispersion or decomposition (breaking down); and which threatens the life or survival of man, plants and animals or any biotic system of the environment. In other words, environmental pollution is any undesirable change in the biogeochemical processes of the earth that may pose potential danger on the health and survival of humans and other living organisms. That is, any alteration in the physical, chemical or biological characteristics of the air, water or land/soil and that will harmfully affect the survival or activities of man and other flora and fauna or any abiotic system can be viewed as pollution (Ukpere, 2017).

It is against this backdrop that Nnanyelugo and Godwin (2012) distinctively aver that “one of the greatest problems facing the Niger Delta region in Nigeria is that of environmental pollution which causes great damages to the earth”. They further noted that “environmental pollution takes place when the environment cannot process and neutralize harmful by-products of human activities in due course without any structural or functional damage to its system”. On the same note, they argue that “pollution occurs when the natural environment is unable to decompose the generated elements; and, on the other hand, when man fails to decompose these pollutants artificially”. According to them, this has negative impacts on crucial environmental services such as provision of clean water and arable land without which life on earth as we know it would be difficult”.

Vividly, Nnanyelugo and Godwin (2012), further insisted that “the environment is said to be polluted when there is substantial alteration in form and function of the components of the physical environment which in turn produces harmful effects on human beings”. The key word here according to them is “substantial”, which is used to show that no component of the physical environment can be considered to be polluted until it has been altered in form or function in such a way that it can immediately or potentially harm human beings directly or indirectly.

In Niger Delta region of Nigeria, one of the threatening environmental problems prevalent in the area is environmental pollution caused by oil exploration and related activities. As an oil producing region, oil spillage has continued to be one of the most outstanding causes of water and land or soil pollution while air pollution is mostly caused by gas flaring and industrial effluents. The direct impact of oil exploration in the region has been felt by everyone living in the area. Some of these issues include ecological degradation, environmental pollution, associated human rights abuses, high inflation and loss of livelihood (Nnanyelugo and Godwin, 2012). The popular argument is that it could only be fair if these groups of people are appropriately compensated.

According to Kadafa (2012), oil spillage is historically a global issue that has been occurring since the discovery of crude oil, which was part of the industrial revolution. Against this backdrop and in Niger Delta, Nigeria, specifically, Kadafa while quoting Onuoha (2008) and Anifowose (2008) writes that “in 1956, Shell British Petroleum (now Royal Dutch Shell) discovered crude oil at a village Oloibiri in Bayelsa state located within the Niger Delta of Nigeria and commercial production began in 1958”. Oil exploration and exploitation according to Kadafa has been on-going for several decades in the Niger Delta region. It has had disastrous impacts on the environment in the region and has adversely affected people inhabiting that region. The Niger Delta according to Kadafa is among the ten most important wetland and marine ecosystems in the world. The oil industry located within this region has contributed immensely to the growth and development of the country which is a fact that cannot be disputed but unsustainable oil exploration activities has rendered the Niger Delta region one of the five most severely petroleum damaged ecosystems in the world (Mark, 2015).

It is against this backdrop that Leera, Okorite and Isetima (2017) write that “the negative impact of these multi-national oil companies and allied oil related activities (e.g. bunkering and illegal refining of crude oil) on environmental media constitutes a serious threat to the entire Niger Delta environment and renders the entire ecosystem unsustainable. According to Leera, Okorite and Isetima, the word environment denotes everything that surrounds us, such as all living organisms as well as non-living things. These activities by people who are individuals and multi-national oil corporations operating in the region do not want to spend money on establishing proper treatment facilities and mitigation actions for their personal or financial gain.

The inability of the individuals and oil companies to provide these palliatives in the course of air and environmental pollution due to corruption, embezzlement, and greed, further aggravated the issues of death, sickness, suffering, pain, and anguish of the people and underdevelopment to the region. This has resulted or rather metamorphosed into oblivion and malicious acts associated to terrorism, such as kidnapping, illegal oil bunkering, vandalism of pipeline installations, armed robbery, rape, drug abuse, and other forms of social vices (Mark, 2015; Anasi, 2010), masterminded by youths in the region, of which Bonny Island, being an epicenter for industrial, gas and oil activities of the Nigerian state was a capital of violence.

Luckily, due to the provision of amnesty and other social rehabilitation programs in the Niger Delta region by President Umaru Musa Yara'dua's administration, the malicious tension in the Niger Delta was reduced (Amiriheobu, 2019). It is plausible to deduce that the malicious gas explosion in the Bonny Island which has culminated many deaths, sicknesses, and pain, may resurface the proactive agitation of vandalism of pipeline installation, kidnapping, incessant killings, youth restiveness, illegal oil bunkering, and other forms of social vices, if the government and the multinational oil companies located in the Bonny island did not provide compensational palliatives to the affected people in the Bonny local government area and other local government areas affected by the gas explosion. It is to the fact of interrogating the issue of the gas explosion that has affected the Bonny Island as portrayed in Ahmed Yerima's *Hard Ground*, which forms the crust of the study.

Concept of Environmental Pollution

By definition, environmental pollution is the unfavourable alteration of our surroundings, wholly or largely, as a byproduct of man's actions, through direct or indirect effects of the changes in the energy pattern, radiation levels, and chemical and physical constitution and abundance of organisms. It can as well mean the addition of contaminants into the natural environment that causes detrimental effects to nature, natural resources and mankind (Amiriheobu, 2019). Amiriheobu further noted that environmental pollution is any unnatural and negative changes in all the dimensions like chemical, physical, and biological characteristics of any component of the ecosystem i.e. air, water or soil which can cause harmful effects of various forms of life and property.

It is against this backdrop that Roya, (2015) stated that environmental pollutants have various adverse health effects from early life, some of which the most important harmful effects are prenatal disorders, infant mortality, respiratory disorders, allergy, malignancies, cardiovascular disorders, increase in stress oxidative, endothelial dysfunction, mental disorders, and various other harmful effects. Roya further noted that “though, short-term effects of environmental pollutants are usually highlighted, wide range of hazards of air pollution from early life and their possible implication on chronic non-communicable diseases of adulthood should be underscored”. More so, Roya averred that “numerous studies have exposed that environmental particulate exposure has been linked to increased risk of morbidity and mortality from many diseases, organ disturbances, cancers, and other chronic diseases”. Therefore, it is time to take action and control the pollution. Otherwise, the waste products from consumption, heating, agriculture, mining, manufacturing, transportation, and other human activities will degrade the environment.

Proposed Causes and effects of Disease Outbreak in Bonny Island

In an article written by Kelvin Ebiri on 24th May, 2020, Nyemso Ezenwo Wike, the Executive Governor of Rivers State, stated that “palpable fear has gripped bonny island, Rivers State, following the sudden death of eleven persons in the past two weeks. Seven persons died in Bonny this week and complaints of persons who lost sense of smell, taste, malaria, weakness, vomiting and defecating had heightened concerns about possible outbreak of covid-19 within the region. A Bonny community leader, who pleaded anonymity said in the past two weeks

that several persons had visited medical facilities, complaining of loss of taste and smell and other covid-19 related symptoms as death toll amounts, the guardian gathered doctors in Bonny on a Whatsapp group compared notes, observing that many treated in the past two weeks shared similar symptoms; so they became alarmed.

The source said NCDC officials had visited medical facilities, collecting samples from volunteers, to determine if it was covid-19 or not. It was also gathered that the sudden surge in sickness and death in Bonny might not be unconnected to a gas linkage in a multinational oil firm. Multiple sources in Bonny complained that the offensive gas linkage saturated the atmosphere since last week, forcing residents to flee. Meanwhile, in a statement, president, Bonny graduate's Forum (BGF) called for an investigation, as those affected were mostly adults.

In another study, Ignatius (2020) writes that “over 10 deaths of prominent persons have been reported in Bonny Island in Rivers State, provoking panic and fears. Fingers point to Covid-19, but malaria and typhoid have put up as causes of death”. According to him, residents sending distress alerts said the deaths have occurred within two days and could no longer be trusted to be caused by the popular malaria and typhoid. Wild speculations have left the malaria/typhoid zone to gas leaks in the city or the ravaging covid-19 pandemic. Health authority, according to Ignatius, said they have mounted investigations into the cause of the deaths and therefore wanted the citizens to remain calm and cautious.

According to Ignatius (2020), while alerting the people on the outbreak of the disease, Williams Ogbah Agwu, the Special Assistance on Media and Publicity to the Bonny chairman writes that “this is to inform the indigenous and residents of Bonny Local Government that the public concerns and expressions of discomfort over the sudden prevalence of malaria and typhoid, loss of taste and smells etc, on the island, is one that has called on the government's urgent attention. As a responsible government we use this medium to inform the citizens that government is thoroughly investigating the issue as well as other related concerns and in due time it will relate same to the public. However, it is advisable to observe all safety and hygienic measures at this period, and be rest assured that government is on top of the matter and will provide a positive solution to this effect.

Extensively, Pulse.com (2020) in their interview summary agrees with Ignatius (2020) that “some are saying that the loss of taste and smell is associated with Covid-19. Besides, the rate of pollution in Bonny has increased. In fact, you cannot drink our underground water because the pipes that enter the water have polluted the water”. A statement issued by Omoni Long John, the Secretary of the Bonny Local Government and Pafuro Tolofari, according to Pulse.com indicates that about 50 per cent of patients complained of dizziness and bitter taste in the mouth. They further noted that “there has been an increase in drug resistance malaria in the past two weeks on the island.

It is as a result of containing the wide spread of the disease in the Bonny outbreak that O&G Links (2020) affirmed that the House of Representatives had asked the Nigeria Centre for

Disease Control (NCDC) to immediately identify the cause of strange deaths in the Bonny Island of Rivers state with a view to curtailing the incident before it spread to other parts of the state and country. Adopting a motion of urgent public importance on the need to intervene in the mysterious deaths in the island, the house asked the National Emergency Management Agency to immediately provide necessary relief materials to the people of Bonny Island as an interim relief.

The motion was sponsored by Rep. Dagogo Doctor Farah and 12 other members of the Rivers caucus in the House of Representatives and presented by Rep. Awaji-InombekD. Abiante. Abiante according to O & G Links recalled that in the last week of March, there was incidence of large quantities of dead fishes around the Bonny-Andoni shores as well as several communities in the Niger Delta region, stretching up to Ondo and Akwa Ibom states, which was brought before the House for urgent attention. According to him, in less than six weeks, 13 persons were said to have mysteriously died within a few days in the island.

He disclosed that officials of the Rivers State Ministry of Health and NCDC have collected samples in Bonny Island for testing to determine what is responsible for the strange occurrence. To buttress the point, he averred that the symptoms of the condition include loss of the sense of smell, taste, fever, weakness, vomiting, and defecating. He stressed that these symptoms exhibited by victims are not exactly same as Covid-19 without any report of cough or respiratory issues. According to O & G Links, Awaji concluded by saying that “Bonny being home of Nigerian Liquefied Natural Gas (NLNG) Limited and various multinational oil companies, including Royal Dutch Shell, Mobile, Chevron, Agip, and Elf lack some basic health facilities despite being a major export for oil.

Social and Behavioral Change and Communication Theory

Social and Behavioral Change Communication Theories (SBCC) can help understand why people act the way they do and why behaviours change. This theory can also help direct attention on what or who to address for social change.

Crosby and Noar (2010) in Amiriheobu (2019) averred that SBCC helped in explaining behavioral change, and area of focus-the individual, their intention to change their behaviour or their surrounding environment. SBCC provides people with information and teachings and also guiding them on how they should behave which leads to desirable change in their response/behavior. However, when there is a supportive environment with information and communication then there is a desirable change in the behaviour of the targeted group. By definition, Amiriheobu (2019) quoting Crosby and Noar (2010) writes: Social and Behavioral Change Communication (SBCC) theory is an interactive process of any intervention with individuals, communities and/or societies to develop communication strategies and to promote positive environment which will enable people to initiate, sustain and maintain positive and desirable behavioral outcomes.

Methodology

This research work employs the Case Study and Content Analysis research approaches of the qualitative research method. It involves explaining the issue, describing, analyzing and

interpreting data on the bases of tribal sentiment as portrayed in Ahmed Yerima's *Hard Ground*. It is qualitative because it deals with the analysis by a notable Nigerian playwright, and descriptive because it involves the use of ideas to describe and analyze the issue of environmental pollution and death toll in Bonny Island within the play contexts. To achieve this, the study employs the primary and secondary sources. The primary source is the play text and the researchers' ideas concerning the issue of environmental pollution and death toll in Bonny Island, while the secondary source includes materials from the institutional publications, articles, journals, text books, internets, research materials, amongst others.

Synopsis of *Hard Ground*

The play *Hard Ground* revolves around Nimi, an eighteen-year-old school dropout who took to arms against the government agencies and the multinational oil companies. Due to his quest to alleviate poverty and suffering from his people as a result of the issue of environmental pollution that depredated the community, thereby increasing the issue of poverty, unemployment and underdevelopment, inflicting pain, suffering, hunger, anguish and death. Nimi decides to forfeit school in order to fight for his people. He joins and later becomes the head of a militant group that believes they are fighting for the survival of their people. On one of their major hits that targets at kidnapping some oil workers in the sea, Nimi and his gang are ambushed and raided by the government security agents.

Nimi is rescued and held hostage by family members of his dead gang members. His parents (Baba who later becomes The Don and Mama) pays a huge sum so as to avoid him being killed by the relatives of his dead colleagues who accuse him of being responsible for the killing of his gang members. Don, the leader of the militant group who is hardly seen is curious, wanting to kill Nimi, believing that Nimi sabotaged their operation, and therefore caused the death of his boys. Inyingifaa, Nimi's uncle, an arms dealer, is also touched by the sudden outbreak of tension in the rig, since his armed business is in ruined. He strives for the major cause of the sabotage as that is the only assurance of the return of peace to the creek. Mama tries to avoid Nimi meeting with the Don because she believes that the Don will end up killing Nimi the way he killed her younger brother.

Nimi later accuses Reverend Father Kinsley of revealing his secret to the police. He earlier confessed to Father Kinsley regarding their mission a day before the police raided him and his boys. Father Kinsley reminds Nimi how such act is against the oath he took as a Reverend Father. Father Kinsley tells Nimi that his girl Friend (Pikibo) is pregnant with his child.

Nimi is later poisoned by some Niger Delta Chiefs and people who came thanking him for his good work with different kinds of gifts; mama gets an epileptic attack at the same time, while trying to send them out of the compound. Inyingifaa comes in to inform Nimi that the Don has ordered the execution of his girlfriend, Pikibo, as it was later discovered that Pikibo is the one who revealed their secret that led to the execution of his boys by the police. Angered by this, Nimi decides to go back to the jungle to avenge the death of his girlfriend and his unborn child. Father Kinsley comes in to reveal the visit of the Don, as Mama brings out money which Baba gave to her for the preparation of the Don's visit since he will not be present to receive the

Don. Nimi declares Baba a failure and decides to kill the Don himself. Don comes in with his face covered in the dark; Nimi strikes him, only to discover that the Don is his father Baba. Nimi screams realizing this, while Mama Slumps as the play resolves.

Hard Ground and Theme of Environmental Pollution and Death Toll in Bonny Island

From the forgoing, it is pertinent to deduce that the prevalent issue of death toll in Bonny Island may have been caused by the proposed gas explosion in the multinational oil company situated in the Island. This is plausible because two weeks before the outbreak of sickness and death of the people in the Island, a lot of fishes were found dead in the shore of the Bonny Sea. While traced, it was believed that the previous gas explosion may have caused the huge death of the fishes and other sea foods insomuch as such occurrence never occurred in the history of the Island. This menace, ironically termed Covid-19 by the government, has brought pain, suffering, sickness, and death of the people and underdevelopment to the Island as the air, land, and sea are maliciously contaminated and means of livelihood is unequivocally tampered with.

In the play, it is revealed that the same issue that prompted Nimi, an eighteen-year-old boy to quit school and take to arm, agitating against the Federal agencies and the multinational companies that resulted to the raiding of his boys on the sea and the Don declaring that Nimi should be killed at sight is microcosm and prevalent in Bonny Island in the recent time. Ironically, most Bonny youths, having the same character delineation like Nimi, may likely go back to terrorism, manifesting through act of youth restiveness, vandalism of pipeline installation, illegal oil bunkering, kidnapping, assassinations, armed robbery, lethal car bombing, rape and other social disorders that they have left due to the amnesty and other social rehabilitation programs provided by the Umaru Musa Yaradua's administration, if the death toll, sickness, pain, and environmental pollution is not reminisced with equal social rehabilitation obligations, which negates corruption, nepotism, greed, embezzlement, and favouratism.

More so, the character of Chief Tony posses the major traits of corruption and deceit, thus representing the greedy and sleazy chiefs and leaders in the Bonny Island who may have egocentrically succumbed to the oblivion of the government and the oil company into convincing the Bonny people that the cause of the dreaded disease in the Island that has killed many people and set economic terrain into disorderliness, thus imposing death and sickness on the people, is the novel Corona virus that is presently ravaging the economic cum political system of the nations of the world in the recent time. This group of leaders, fathomed in the Island, both political, traditional and religion, choosing by the people to protect them in economic, political, and religious matters, sees their position as an avenue to exhibit their dubious and egocentric obligations in detriment of the people whom they are leading.

In the play, the resultant effect of this dichotomy is the manifestation of violence which Nimi and his fellow freedom fighters see as palatable mechanism towards attracting National and International attention. This unequivocally is the cause of the death of Nimi's boys, and the Don, threatening to kill Nimi, since he believes that for Nimi to be alive while his boys are dead

Nimi may have sabotaged the operation. Meanwhile, Nimi on so many occasions try to pass message to the invisible Don, through Reverend Father, his maternal Uncle that he is innocent of the accusation, even though the Don pledges to kill him. This issue as portrayed in the play may likely occur in the Bonny Island due to the fact that most Bonny youth may decide to take up arms against the government and the multinational oil companies situated in the Island, thereby using government properties as theatre of war; and thereafter end up like Nimi and his boys in the play.

In the end, Nimi finally kills the Don only to discover that the dreaded Don has for long being his loving father Baba. Nimi rues over his action and his involvement in militancy that rather increased his misfortune and left him perplexed. The change of fortune is visible when he discovers that the Don who he killed out of hatred is his father Baba, and his death brought about discovery, recognition and reversal. The change of fortune brought about reversal from good, which is the killing of the Don, to evil, which is the realization that the almighty Don is his father Baba. The actions themselves are probable consequences of what has taken place earlier in the play.

The change of fortune in the play that made Nimi discover that his major enemies in the creak are not the multinational oil companies and the government but the invisible Don and the corrupt Chiefs that brought about recognition and reversal, from good to bad, may be witnessed in the Bonny Island as the aggrieved youth may end up discovering that their major enemies may not be the multinational oil companies and the government but the leaders in all strata in the Island. This can only be fathomed after lots of damages may have occurred. Conclusively, the playwright obliges that the issue of militancy and terrorism in the Niger Delta region can be curtailed supposing the right of the people who suffering the direct impacts of environmental pollution and degradation are provided for.

Conclusion

From the foregoing, it is observed that violence, manifested through act of terrorism ranging from kidnapping, illegal oil bunkering, vandalism of oil installation, incessant killing, assassination, rape, armed robbery and other forms of social vices, those of which are some Niger Delta youths survival mechanisms, due to political corruption, greed, and embezzlement. It is also observed that these dichotomies may likely be avoided by the Niger Delta region, which serves as macrocosm to the microcosm of Bonny Island, if the issues of environmental pollution and degradation that has affected the fauna and flora of the ecological system of the region and caused by the exploration and exploitation activities of the multinational oil companies situated in the region is mitigated.

Recommendations

To prevent the issue of terrorism through act of social disorderliness in the Bonny Island as a result of the prevalent death toll and sickness, caused by the malicious gas explosion that has affected the Island, the following recommendations are established:

1. The study suggests that environmental cleansing must be carried out on all affected areas on the Bonny Island as this will help contain the spread of the airborne disease.

2. More so, environmental disease control centre and health centres must be established to contain any gaseous discharge that may spring up on the island.
3. The study also suggests that the inhabitants of the Bonny Island who may have been affected, one way or another, should be compensated, and job opportunities provided in the multinational oil companies that are situated in the Island.
4. Social rehabilitation programmes like scholarships, skill acquisitions, and trainings should be provided the people in the.

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