



Oil spillage and artisanal fishing: A socio-psychological analysis of frustration-aggression and relative deprivation in Gbaramatu Kingdom of Niger Delta Region

Michael-Olomu, Oyintonyo¹ & Udeh, Promise Chukwuedozie²

¹Department of Sociology & Anthropology, Federal University Otuoke, Nigeria.

²Nigeria Maritime University, Okerenkoko, Delta State, Nigeria.

Email: tonyomic@gmail.com,

Abstract

This paper assessed oil spillage and artisanal fishing in Gbaramatu kingdom, Niger Delta Region. The study was geared to examine the socio-economic mainstay and characterization of the Gbaramatu community. To achieve this objective, the study relied on the use of content analysis technique for data collection and analysis. The frustration-aggression theory and relative deprivation theory by Robert K. Merton were adopted as theoretical frame work for the study. Based on this, the paper established that Oil spillage in Gbaramatu, a littoral fishing community in Delta State is responsible for environmental degradation and loss of income among artisanal fishers whose livelihood depends on fishing from Escravos River. The ensuing deprivation of livelihood increased frustration and communal aggression against Multinational Oil Corporations operating in the Niger Delta region. From the sequence of events in Gbaramatu community, the study concluded that there is the need for environmental cleanup of polluted areas, payment of reparations, adoption of oil spillage detecting technologies by MNCs, and implementation of effective corporate social responsibility strategies that will protect marine life and artisanal fishing in the oil rich Gbaramatu community.

Keywords: Artisanal Fishing, Niger Delta Region, Oil Spillage, Frustration-Aggression

Introduction

Over the years, industrialization and population growth have triggered different form of toxic contaminants in the environment. No doubt, the 19th century industrial revolution gave rise to technological advancements and large-scale conversion of raw materials into finished products yet, its activities increased pollutions with consequences on mankind and the environment. Pollution is the natural physic-chemical characteristics of an entity, medium or matter as a result of the presence of substances or compounds that are not supposed to be present in it or that are present in quantities and qualities that would alter the natural balance of the particular entity (Akankali and Elenwo, 2015). Pollution may be

chemical, noise, air, agrochemical, domestic or industrial. Chemical pollution is the prevalent type of pollution in the oil sector which the Niger Delta Region (NDR) suffers mostly from considering her terrain.

The discovery of crude oil from the Niger Delta Region (Oloibiri in 1956) that serves as a major foreign exchange earner and source of government revenue is meant to be a thing of blessing and relief to Nigeria economic system. Sadly, the aftermath of crude oil is gruesome and it has enormously contributed to environmental degradation. Crude oil contamination affects both aquatic(marine) and terrestrial ecosystems with serious environmental consequences on human health and aquatic life. Although, major

environmental contamination may occur due to accidental losses associated with extraction or transportation, or even intentional discharge by illegal refineries and illegal refinery wastewater (Vollaard, 2017)

Crude oil comprises of complex mixture that often contains organic pollutants that are hazardous to human and environmental health (Foroutan et al, 2018; Linan et al, 2018). Incidentally, since the commencement of crude oil exploration, the Niger Delta Region has become a subject of interest owing to pollution by Multinational oil Corporations (MNCs) as MNCs emit industrial wastes from crude oil explorations which threatens the livelihood of about 6.5 million people in the Niger Delta region of Nigeria (Kadafa, 2012; Ifesinachi, 2018).

However, the explorative activities of MNCs have increased the economic growth of Nigeria thereby making Nigeria the sixth largest oil producing country in the world with a production capacity of 1,481,000 barrel per day as at March 2021 (NNPC, 2021). Consequently, reducing the livelihood of mankind in the NDR and placing the region as ranking top five most degraded ecosystem in Nigeria. (Ifesinachi, 2018). Ugboma (2015) and Kadafa (2012) note that the production and transportation of crude oil and gas probably constitute the single most importation source of pollution in the industry coming mainly through oil spills and oil field flaring of associated gas. Prior to 1972 Stockholm's declaration on the environment, the potential dangers posed to the environment by oil and gas exploration and production have been recognized countries of crude oil production including Nigeria. Kadafa (2012) affirms that expended exploration programme aimed at increasing Nigeria's oil reserves increased the dangers of oil well blowouts and oil spills.

Several scholars have opined on environmental degradation and oil spillage in the NDR, (Martin, 2016; Onoyume, 2021), environmental degradation is a major source of the ensuing militancy in the Niger Delta region, Ekpenyong and Udofia (2015) studied the consequences of oil spill in sea food safety in littoral communities of Ibeno and Mbo oil producing areas of Akwa Ibom State and observed the presence of mean concentration of Total Petroleum Hydrocarbons (TPH) in various fish species. Iwegbue, Bassey, Agbozu, Agambi and Obi (2016) discovered high concentration of polycyclic aromatic hydrocarbons in smoked-cured fishes from Nigeria waters, while Ubiogoro and Adeyemo (2017) analyzed for heavy metals (lead, cadmium, manganese, copper, iron and nickel) levels and found their samples to be heavily concentrated in heavy metals. The presence of heavy metal pollution of aquatic systems in Delta State oil producing rivers of Egbokodo in Warri, Ethiope in Sapele, Urie in Igbide Isoko, Asaba-Ase Creek, Aragba in Abraka and Uzere Creek is dangerous to aquatic life and fish consumption (Ubiogoro and Adejumo, 2017). Therefore, it is against this background that this paper seeks to explore oil spillage and artisanal fishing, a socio-psychological analysis of frustration-aggression and relative deprivation of gbaramatu kingdom in the Niger Delta Region. The major objective is to examine the socio-economic mainstay and characterization of the gbaramatu community and how oil spillage by multinational cooperation's have succeeded in bringing about environmental degradation resulting to psychological frustration and community imbalance.

2. Literature Review

Conceptual Clarification

The paper is associated with two key concepts thus clarified as follows:

Oil Spillage: The term refers to the release of liquid petroleum hydrocarbon into the environment, particularly the marine ecosystem. It is a form of pollution attributed to aquatic spills, where oil is released into the ocean or coastal areas.

Artisanal Fishing: The term refers to small scale, low technology, low capital fishing practice undertaken by individual fishing households. It is fishing practice done along coastal areas.



Figure 1.1: Diagram of oil spillage with contaminated fishes.

Figure 1.2 . Diagram on artisanal fishing.

Theoretical Framework

The frustration-aggression theory and relative deprivation theory by Robert K. Merton (1910) shall be adopted for this study. Frustration-aggression theory was proposed by John Dollard, Neal Miller, Leonard Doo, Orval Mowrer, and Robert Sears in 1939. It was further expanded by Neal Miller in 1941 and Leonard Berkowitz in 1989. The theory holds that, frustration is not an emotional experience, but “an interference with the occurrence of an instigated goal-response” (Dollard et al, 1939: 7). In plain terms, the theory explains that aggressive behaviour is a result of attempts to block an individual or a group from realizing a goal which may be tangible or intangible. Anifowose (2011:6) captures the crux of frustration-aggression theory when he posits that:

Aggression is always the result of frustration, given that the requisite conditions an individual, whose basic desires are thwarted and who consequently, experiences profound sense of

dissatisfaction and anger is likely to react to his condition by directing aggressive behaviour at what is perceived as being responsible for thwarting those desires, or at a substitute.

Aggression does not only imply physical reactions against frustrating circumstances. Aggression may be overt or covert, physical or verbal. It may result in physical or psychological resentment to any person, organization or institution which the subjects believe as being responsible for preventing them to reach their political, social and economic goals. Smith and Bond (1998) believe that aggression is any behaviour which is harmful to others. Berkowitz (1962), hold that aggression is an intentional act meant to harm others, while Myers (1996) hold that, aggression is any physical or verbal behaviour, carried out with antagonistic intent, with the resolve to hurt someone. This implies that, whenever an individual's goal is hindered, an aggressive intent is induced to decimate the obstacle (object, person or institution) perceived as being responsible for causing the frustration.

Brown and Farber (1951) highlight that, for an event to qualify as frustrating, two requirements must be met in line with the definition of Dollard et al (1939). Firstly, the goal must be important to the subject. Secondly, the goal must be perceived as a possible outcome by the subject. In this context, the goal of artisanal fishery is sustainable output from their economic livelihood. Secondly, sustainable artisanal fishing is the expected outcome of quality marine ecosystem. Thus, by implication, a safe marine environment devoid of oil pollution is a must for the smooth operation of the artisanal fishing business else the end result will be expression of frustration and aggression which one can be linked to the emergence of militancy and sea piracy in the NDR. For instance, Martins (2016) reported that, Niger Delta militant group, Avengers, have continued to cripple national earning with coordinated attacks against oil pipelines, oil installations and kidnapping of oil workers. While women from Kokodiagbene, Okerenkoko and other

communities in Gbaramatu recently occupied the premises of a MNCs in protest against the effects of oil spill in their communities on March 29th, 2021 (Onoyume, 2021). Martin (2016) remarked that, oil spill results in environmental degradation and the halt of economic sustenance among fishers is the major reason for unabated militancy in Gbaramatu, as hundreds of armed youths, including artisanal fishers form splinter groups to express their frustrations against aggressive environmental practices and oil spillage.

Consequently, the frustration-aggression theory, failed in addressing the impact of oil spillage in the environment (gbaramatu community). Therefore, the relative deprivation theory as developed by Robert K. Merton (1910-1957) is espoused as the study hinges on it. Deprivation is the result of negative inconsistencies between genuine expectations and reality, where expectations are within reach and not just false hopes. Deprivation may be mental, political, economic, social or environmental. Environmental degradation is a major form of deprivation in the Niger Delta region. A society is deprived if people do not have access to opportunities needed to live above minimum standard. The theory explains that people who feel they are being deprived of social necessities such as money, rights, political voice, conducive environment and social status will establish or join social movements in order encourage disorderliness and express grievances against things of which they feel deprived.

Implicitly, disorderly acts are manifestations of people's grievances to resources which eludes them. Runciman (2009) outline four required conditions for relative deprivation:

1. A person does not have something.
2. That person knows other people who have the thing.
3. That person wants to have the thing.

4. That person believes they have a reasonable chance of getting the thing.

Depleting income is the first challenge that confronts deprived artisanal fishing households and the artisanal fishermen of the Gbaramatu kingdom are not exempted from these plight as outlined above; daily deprivation aggravates as fishing household loose income to environmental pollution. Low-income correlates to poverty, poverty leads to frustration and aggression against MNCs and their local agents. Distortion in livelihood is the basis for poverty and armed hostility in the Niger Delta region (Martin, 2016). Environmental deprivation increases tendency of aggressive local reactions such as kidnapping, mutilation and bombings of oil pipelines and violent protests against MNCs. However, aggression may be misplaced where frustration is directed towards individuals who may not have direct links with the interference of subjects. The strategic importance of Gbaramatu kingdom to the Nigerian maritime industry and oil exploration coupled with heightened local demands for federal government presence in the oil polluted region led to the establishment of Nigeria Maritime University, Okerenkoko in Gbaramatu kingdom. Despite this effort and few others, the Federal Government is plagued with numerous accusations of neglects arising from the explorative activities of oil companies (Martin, 2016).

Ekpenyong and Udofia (2015) concur that oil spills endanger fish hatcheries and contaminates the larger marine ecosystem. In one instance, the 2011 Bonga oilfield spillage at a facility owned by Shell Nigeria discharged about 40,000 barrels of crude oil which spread to about 185KM on the Atlantic Coast, forcing nearly 30,000 artisanal fishers to abandon their trade (Ifesinachi, 2018). The displacement of 30,000 fisher's household frustrates economic sustenance and enables

increased community aggression towards MNCs.

Despite the above challenges, demands for adequate compensation, basic infrastructure, community development projects, employment opportunities and payment of reparations for spillage have not received commensurate attention. The refusal of MNCs' to yield to communal demands have provoked clashes of interest between the profit motives of the MNCs and their host communities, and fuelled feelings of deprivation, alienation and aggression by artisanal fishers and other economic interests in the locality.

Spill Volume by Multinational Oil Corporations in The Niger Delta Region

Seismic data is used for determining potential accumulations of oil and gas which involves the use of explosives and other impact devices. Offshore, the devices pose danger by themselves and the impact affects aquatic population. Onshore, the discharge from the explosives, which are often planted in the soil, is often washed into underground water system. Drilling, which is the only way of proving the presence or absence of oil and gas from a potential accumulation identified on seismic instrument constitutes potential environmental hazards. Drilling rigs require large space that directly impact on the ecosystem, and waste from drilling operation is one of the major sources of pollution in the oil sector industry.

There is paucity of information on exact volume of spill in the Niger Delta region. However, available data from the National Oil Spill Detection Response Agency shows that, from 2019 to May 1, 2021 about 43,000 barrels of oil were lost in 881 cases of oil spillage (Akinpelu, 2021). 3,346.94 barrels of crude oil, an equivalent of 532,078 litres of oil and gas companies in Niger Delta was spilled from January to August 2020 (Energy Mix Report, 2020), while 77 percent of the spills occurred in Bayelsa, Delta and Rivers state (Akinpelu,

2021). Shell Petroleum Development Company had the highest spill volume at 1,335.05 in 17 incidents. ND Western spilled 1,280 barrels of crude oil in five incidents, Enageed Resources Limited spilled 15 barrels of crude oil in three incidents, First Hydrocarbon Nigeria spilled 62 barrels of crude oil in six incidents, Guaranteed Petroleum Limited spilled eight barrels in one incident, while Chevron Nigeria Limited recorded one barrel of crude oil spilled in three incidents (Energy Mix Report, 2020).

Oil Spillage and Artisanal Fishing in Gbaramatu Kingdom

Gbaramatu kingdom is among the oil rich Ijaw communities in Warri South-West Local Government Area of Delta State. It is predominantly an artisanal fishing community mostly carried out at the Escravos River. Escravos River stretches across numerous islands. The Escravos River is a tributary of the river Niger and stretches across a 35-mile (56 Kilometer) watercourse transverse zones of the mangrove swamps and coastal sand ridges before entering the Bight of Benin of the Gulf of Guinea and due to their relatively lightweight tonnages, only coastal tanker-vessels can transverse the waterways (Akhidenor, 2018). Escravos is linked to Warri, Forcados, Benin and Ethiopie Rivers. It is the only route for oceangoing vessels to Warri Ports and its' mouth is host to several Multinational Oil Corporations (MNCs), including Chevron oil station which serves a submarine oil field of 11 miles. The global fish production capacity reached about 179 million tons in 2018 with 156 (88%) million tons going for human consumption, while 22 (12%) million tons was for non-food purposes (FAO, 2020). The bulk of fishers primarily operate in the artisanal sector. Artisanal fishery industry is an informal labour sector. Informal labour includes all economic activities owned by non-statutory workers and economic units that are largely low-

income earners, with little or no division of labour and capital. The distinguishing factor is that informal workers do not have institutional recognition, neither are they covered by minimum wage laws and trade union organizations. As such, artisanal fishers, like other informal workers depend on the dictates of daily earnings.

Artisanal fishing covers the operation of small-scale canoe fisheries operating in coastal areas such as creeks, lagoons, inshore water and the inland rivers. Artisanal or 'small scale' fisheries are the largest employer of labour in the marine sector, with about 260 million people around the world (Sumaila, Khan, Teh, Watson, Tyedmers and Pully, 2010). The sector provides employment for about 30 million indigenous coastal dwellers which depends on the blue economy for survival and cultural practices (FAO, 2020). It is a major channel for the supply of fishes for consumption and industrial usage. In 2018, an estimated 59.9 million people were engaged in the primary sector of fisheries and aquaculture (FAO, 2020) Artisanal fishing sector operates on full-time, as well as part-time basis. Their fishing techniques are usually cheap, crude, destructive and subsistence. These fishers depend on the whims and caprices of sustainable marine ecosystem. However, the dwindling resources occasioned by oil pollution have frustrating effects on their earnings and household survival. FAO (2020) espoused that in spite of the Nigeria's potentials, domestic fish production still falls far below the total demand which was estimated to at 2.2 million metric tons in per year in 2008, as the country still imports about 60% of the fish consumed. The resultant effects of oil spillage reduce foreign exchange earnings, decimates job opportunities and exacerbates hostility and communal aggression against MNCs operating in the oil rich Niger Delta communities such as Gbaramatu.

3. Conclusion and Recommendations

Conclusion

This paper examined oil spillage and artisanal fishing in Gbaramatu kingdom. To do this, the paper argued that the emergence of crude oil in the Niger Delta Region and its exploration activities by multinational corporations has led to severe environmental degradation especially that of oil spillage in the NDR. However, it is the submission in this paper, that the high rate of oil spillage in the coastal areas have left the artisanal fishermen aggrieved and frustrated leaving the fishing business and delving into militancy, bunkering and other illegal refinery activities. It is the submission therefore, that the Inability of MNCs to adopt environmentally friendly explorative techniques that will meet the expectations of littoral communities is the bane of sustainable fishing in Gbaramatu. Overtime, incongruences arising from oil spill and sustainable environment have decreased fishing output and increased frustration in artisanal fishing communities. Generally, decreased fish output is a threat to the Nigerian economy and particularly distorts the survival of artisanal fishing households whose economic sustenance depends on a pollution free blue economy. With the increase in frustration arising from the pollution of Escravos waterways by MNCs, low fishing activities have deepened poverty, aggression and hostility against agencies which the locals regard as the source of their sufferings.

In the light of this, the paper concludes that aggressive responses to frustrating factors can be functional and non-detrimental as the rise in splinter violent groups will lead to social change through the emergence of social movements, which in extreme cases will attract genuine interest from relevant agencies and a new community based

political class that will sincerely engage environmental interest groups and MNCs for the advancement of Gbaramatu fishing communities and the Niger Delta region.

Recommendations

Based on the above, this seminar recommends that:

1. The federal government should implement an aggressive national oil spill contingency plan which includes the cleanup of polluted areas and payment of reparations to affected artisanal workers in Gbaramatu community as done for the Ogoni Kingdom.
2. Relevant environmental safety bodies should enlighten littoral communities on the negative effects of pipeline sabotage on human health and economic sustenance.
3. Strict utilization of oil spill detecting technologies by MNCs as a potent tool for detecting spills before it escalates into a catastrophic dimension.
4. MNCs and the Nigeria government should employ and train selected Gbaramatu community dwellers on oil spill management and emergency response.
5. MNCs should strengthen their corporate social responsibilities by creating and maintaining an open dialogue system between artisanal fishers and corporate players in the oil rich community.

References

- Akankali, J. A. and Elenwo, E. (2015). Sources of marine pollution on Nigerian coastal resources: An Overview. *Open Journal of Marine Sciences*, 5, 226-236. Doi:10.4236/ojms.2015.52018.
- Akhidenor, V. (2018). Dredging Escravos channel to boost Nigeria's economy. Retrieved from <https://m.guardian.ng/opinion/dredging-escravos-channel-to-boost-nigerias-economy>.



- Akinpelu, Y. (2021). Nigeria: 77 Percent of Oil Spills in Nigeria Occurred in Only Three States. Retrieved from: <https://allafrica.com/stories/202105150105.html>
- Anifowose, R. (2011). *Violence and Politics in Nigeria: The Tiv, Yoruba and Niger Delta experience*. Lagos: Sam Iroanusi
- Berkowitz, L. (1962). *Aggression: A social psychology analysis*. New York, NY; McGraw Hill.
- Brown, J. S. and Farber, I. E. (1951). Emotions conceptualized as intervening variables: with suggestions toward a theory of frustration. *Psychological Bulletin*, 48(6), 465-495. Doi:10.1037/h0058839.
- Dollard, J., Miller, N. E., Doob, L. W., Mowrer, O. H., and Sears, R. R. (1939). *Frustration and Aggression*. New Haven, CT: Yale University Press.
- Ekpenyong, N. S. and Udofia, U. S. (2015). Oil pollution and its impact on water quality in Ibeno Community. *Studies in Sociology of Science*. 6(1). Pp. 1-6.
- Energy Mix Report (2020). Oil firms in Niger Delta spill 3,346 barrels of crude oil in 8 months – Investigation. Retrieved from: <https://www.energymixreport.com/oil-firms-in-niger-delta-spill-3346-barrels-of-crude-oil-in-8-months-investigation/>
- Food and Agricultural Organization of the United Nations (FAO) (2020). The state of world fisheries and aquaculture. Retrieved from <http://www.fao.org/state-of-fisheries-and-aquaculture>.
- Foroutan, R., Zareipour, R. & Mohammadi, R. (2018). *Fast adsorption of chromium (VI) ions from synthetic sewage using bentonite and bentonite?biocoal composite: A comparative study, Materials Research Express, October:1-26*.
- Haner, C. F. and Brown, P. A. (1955). Clarification of the instigation to action concept in the frustration-aggression hypothesis. *Journal of Abnormal and Social Psychology*, 51(2) Pp. 2014-2016.
- Ifesinachi, O. (2018). Nigeria's depleting fish stocks may pose a threat to regional security. Retrieved from <https://theconversation.com/nigeria-s-depleting-fish-stocks-may-pose-a-threat-to-regional-security>.
- Iwegbue, C. M., Bassey, F. I., Agbozu, I., Aganbi, E. and Obi, G. (2016). Concentrations and risks of polycyclic aromatic hydrocarbons in smoked-cured fish products in Nigeria. *International Journal of Environmental Studies*. Vol. 3. Issue 5.
- Kadafa, A. A. (2012). "Oil exploration and spillage in the Niger Delta of Nigeria." *Journal of Civil and Environmental Research*, vol. 2.
- Martin, P. (2016). Why Nigeria's 'Avengers' are crippling the oil sector. Retrieved from <https://www.bbc.com/news/world-africa-36846114.amp>
- Myers, D. G. (1996). *Exploring social psychology*, 3rd Edn. Worth Publishers, New York.
- Nigerian National Petroleum Corporation (NNPC) (2021). Oil production. Retrieved from <https://www.nnpcgroup.com/NNPC-Business/upstream-ventures/pages/oil-production.aspx>
- Onoyume, J. (2021). Kokodiagbene, Okerenkoko, other communities protest over oil spill. Retrieved from <https://www.vanguardngr.com/2021/03/kokodiagbene-okerenkoko-other-communities-protest-over-oil-spill/amp/>



- Runciman, W. G. (2009). Problems of Research on Relative Deprivation. *European Journal of Sociology / Archives Européennes de Sociologie*, Vol. 2 Issue 2. Pp. 315-323.
- Sumaila, U. R., Khan, A., Teh, L., Watson, R., Tyedmers, and Pauly, D (2010). Subsidies to high seas bottom trawl fleets and the sustainability of deep-sea demersal fish stocks. *Marine Policy*. 34 (3). Pp. 495-497.
- Ubiogoro, O. E. and Adeyemo, O. K (2017). Heavy metal pollution of aquatic systems in oil producing communities of delta state, *Nigeria. Journal of Applied Biosciences*. 120: 11993-11998.
- Ugboma, P. P. (2015). "Environmental degradation in oil producing areas and Niger Delta region, Nigeria: The need for sustainable development." *International Journal of Science and Technology*, vol. 4 (2).
- Vollaard, B. (2017). Temporal displacement of environmental crime: evidence from marine oil pollution, *Journal of Environmental Economics and Management*, 82-168. <https://doi.org/10.1016/j.jeem.2016.11.001>