



## Philosophy, artisanal refining and the habitat in Bayelsa State

Azibalua Onyagholo<sup>1</sup>, Richman Ebimo Marlon<sup>2</sup>

Ph.D, Department of Philosophy, Faculty of Arts, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria

Department of Philosophy, Faculty of Arts, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria

### Abstract

This study examines the activities of artisanal refining popularly called “Kpo Fire” in the Bayelsa State. It adopts textual and expository analysis. The findings of the study discovered that artisanal refining has caused monumental damage to the ecosystem, both aquatic and terrestrial life. This adverse effect on the ecosystem has broken the chain of natural interdependence of man and its existence. This is because the inhabitants of Bayelsa State depend on fishing and farming as its major means of livelihood. Therefore it concluded that government should embark on aggressive enlightenment and re-orientation of the practitioners of artisanal refining and the general public on the moral principles of the values of the ecosystem and the sustainers of the environment on the livelihood of the people of the area. Government should encourage practitioners of artisanal refining in various skill acquisition to discourage them from this practice as the practice of artisanal refining is suicidal as it sometimes causes explosions and death. It also recommends that multinational oil companies should engage the practitioners in meaningful ventures for the benefit of the people.

**Keywords:** philosophy, artisanal refining, habitat

### Introduction

Man is endowed by nature with a lot of natural resources. These resources which are in our environment contribute natural to the survival and sustenance of man in the world. This resource from nature has now made man to depend on it for its survival. The survival of man depends solely on these living things in the environment. These living things could be classified to living and non-living things. For living this we have animals of different species that live on both land, water and the air. That is Terrestrial, Aquatic, Amphibians and Aboreal. Then we have a plant which includes terrestrial plants which includes terrestrial plants and aquatic plants.

Both living and non-living things composed the environment and the surroundings of man. The existence of living and non-living things also led to the interdependence of these organisms for its survival in the habitat which is referred to as the ecosystem. This natural ecosystem now creates a balance between man and the environment on one hand. And the environment and man on the other hand, man has to depend on the trees, fishes, animals, birds etc. as well as their by-products like oxygen from plants, some plants for medicine, and food. Also man depends on the animals for game etc for its survival and sustenance. While plants needs carbon-dioxide it a by-product of man for its survival etc. however, if there is a disruption of the ecosystem and the interdependence of man and the trees, animals, air etc. in the habitat by man’s activities through its quest for survival in the world lead to a catastrophic damage to the climate, ecosystem and man in general. This damage could be natural processes or human processes.

This study tries to investigate the practice of artisanal refining and its short and long term damage to the environment, of man the ecosystem, climate change and the habitat in the Bayelsa state of Nigeria. Here we all attempt to explain the major concepts used in this study.

### Location and Environment of Bayelsa State

#### Location

Bayelsa State is in the heart of the Niger Delta and is located within Latitudes 4<sup>0</sup>151 North and 5<sup>0</sup>231 South and Longitudes 5<sup>0</sup>221 West and 6<sup>0</sup>451 East. The state is one of the six oil and gas producing states in the South-South geopolitical zones of Nigeria and is the cradle of commercial crude oil exploitation. (Ibaba, Isibiri and Barikor, 2) The state has a common shore line on the coast of the Atlantic Ocean as its Southern frontier. The North-West frontier is bounded by the Niger. Forcados and Ramos Rivers, and the Bomadi Creek which marks the western boundary with Delta State. The North-East frontier is bounded by the Ahoada West Local Government Area of Rivers State. While the eastern frontier is bounded by Akuku-Toru local government area, also of Rivers as a demarcated by the St. Bartholomew River through the Brass creek to the Santa Barbara estuary. Bayelsa State is the Southernmost state in the country and the Southern shores are less than five degrees of latitude north of the equator.

The state is Criss-Crossed by several lakes, Rivers and Creeks, which in addition to the swampy terrain constitutes about 75percent of its land mass covering an area of about 11,109 square kilometers Rainfall is heavy and is more persistent between April and November. The temperature ranges between 20 and 30 degrees centigrade. Its physical features can be categorized into three belts namely; fresh water swamp are, sandy beach ridges, and salt water swamp area. It is also characterized by annual seasonal floods which last between July and November.

Bayelsa is faced with both oil and non-oil-related environmental problems. The oil related environmental problems are largely made of oil spills, gas flare and artisanal refining. Resulting from the operations of oil exploration and production, oil industry in Nigeria is associated with operational and equipments failures that results in oil spillages.

These oil spills have destroyed farmlands, marine life, crops, economic trees and nutrients value of impacted soils.

As a consequence of these effects, agricultural output has declined and the local economies have been destroyed, leading to occupational displacements and the exacerbation of poverty. Similarly, gas flaring, and artisanal refining which is very massive in Nigeria has contributed to ecological devastation and productivity loosed on the other hand, human activities such as tree felling, erosion, use of chemicals for fishing, bush burning, among others have contributed to environmental pollution and unsustainable exploitation of resources that now puts the environment at risk.

### Artisanal Refining

It is believed that artisanal refining in Nigeria started around 1966 during the Nigerian-Biafra civil war. When the war broke out and economic sanctions and blockade were imposed on it Biafra territories, the people of the region as a way of sustaining itself and maintaining its image, the engineers of the war ravaged territory of Biafra produced locally made salts, petroleum, bombs etc. This means that it was the economic sanctions and blockade imposed on Biafra republic that led to artisanal refining in Nigeria as a way to reducing the hardship imposed on the citizens as a result of the war.

However crude oil was first discovered in commercial quantities in at Itokopiri near Oloibiri in Kilo Creek in 1956 in Ogbia local government area of Bayelsa State and at Umuechem in Rivers State in 1958. But before then agriculture was the main vocation or occupation of the peoples of the Niger Delta particularly Bayelsa State.

Since the discovery of crude oil in Bayelsa State, the area had barely witnessed growth and development rather abject poverty, the environment degradations, pollution and destruction of the ecosystem etc by the oil companies in its exploration and exploitation activities to the extent that the means of livelihood of the inhabitants are threatened. This trend is mostly necessitated by several government legislations especially the Petroleum Act of 1969 which alienates the residents of oil bearing communities from the control of oil resources in their locality. This law vest control of resources especially mineral resources on the federal government of Nigeria and not even the state government and estranges the right of oil bearing communities in the petrol-dollar business. (Ogele and Egobueze, 16)

Following from the above oil exploration and exploitation in Bayelsa State are carried out by oil prospecting and servicing companies in a manner that falls short of international standards for environment protection and justice because of lack of effective control and supervision by the regulators on one hand and the obnoxious laws that alienated the oil bearing communities on the other hand. In the supervision of the activities of the MNOC that destroyed and devastate their environment.

However, the second wave of artisanal refining brew up during the Niger Delta agitations including Bayelsa state who host all the crude oil and oil prospecting and servicing countries for fair treatment in the proceeds of the golden egg that is discovered in their land. This crude oil discovered in the Niger Delta provides Nigeria for almost 95 percent of its foreign exchange earning and this proceeds from the crude oil is not felt by the oil producing communities and region in Nigeira. In 2004, the Niger Delta People's Volunteer Force (NDPVF) led by Asari Dokubo and other leaders of the groups in the Niger Delta involved in the agitation for the local refining of crude oil once again. This artisanal refining was noticeable sponsored by Asari Dokubo that is

why the refines petrol from the artisanal refinery is called "Asari Fuel".

Ikelegbe as cited in the New, 19 October, 2004 states the opinion of the leader of Niger Delta People's Volunteer Force (NDPVF) thus:

The NDPVF is involved in mini-refining production of fuel and sales to the Niger Delta people in the revering areas and creeks of the Eastern axis. The processed fuel was sold at between NGN 10 and NGN 15 at a point when it was being sold by oil marketing companies at NGN 45. The NDPVF sees this as part of the struggle for resource control. It is giving back to Ijaws which naturally belongs to them and providing a good that is (exorbitant) priced in the creeks at low cost (Ikelegbe, 226)

Artisanal refining according to a study carried out by Stakeholder Democracy Network (SDN) in 2013, revealed in its report that artisanal refining of crude oil is the manifestation of historical antecedents in Nigeria which is anchored on corruption. (Ogele and Egobueze, 19) Today, artisanal refining and marketing of crude oil is no longer for everybody; it has migrated from local subsidiary enterprise to global elites-business. Those who are interested in the business are required to register with union's set-up and compradois overlords and the local communities at exorbitant prices. Even national security operatives deployed by the federal government to curb and contain this phenomenon which government perceived as economic sabotage are caught engaged in this business of artisanal refining. The latest was the divisional police officer who personally owns artisanal refineries in rivers states caught by the Rivers State government in January, 2022. Continuing from the above argument, Obenade and Amangabara states thus:

Artisanal refiners operate local moral economy ---. They have the social license in from of moral support by the communities to operate in the same way the officials of the oil industry who operate in the oil bearing communities' result of the oil spill and environmental pollution without receiving compensation for the damages. The social lost of the impact of environmental degradation is immeasurable, hence the local communities fact that the illegal oil refining should be given moral support. (Obenade and Amanagabra, cited by Ogele and Egobueze 18)

From Artisanal refining, the financial gain from the business, most youths of school age have abandoned education in favour of the business. They engage in the business as local security guards, job men or helps, skilled operators or refiners, product marketers, transported, among others.

The neglect and relative deprivation of petrodollar benefits necessitated the inhabitants of the state and Niger Delta region to establish illegal refineries for the artisanal refining of crude oil in some of the communities in Bayelsa State. These individuals or group of individuals engage in siphoning crude oil from the oil pipes, refine it into other petroleum products such as diesel and kerosene for local markets to earn their living which is contrary to the Hydrocarbon oil Refineries Act of 1965, which states that "no Refinery shall be operated or constructed in Nigeria without a license granted by the Nigeria minister in charge of petroleum. Contributing on this position, Obenade and Amangabara states thus:

On average, the typical artisanal refinery produces about forty to sixty drums of diesel a day. Sites vary in size and reflect different levels of investments, small scale sites tend to attract women and people with very low levels of capital to invest, whilst larger scale sites involve entrepreneurs who

own relatively large pro-action sites (Obenade and Amangabra, 26)

It is necessary to note that some residents of oil bearing communities are part of the business due to its inherent boom. The process of artisanal refining of crude oil starts with tapping or siphoning the crude oil from the oil pipes. Sadly, most times, the process of siphoning the crude oil ignites fire and the entire mangrove is burnt down which increases the movement of carbon dioxide in the atmosphere.

The refining involves the constant burning of firewood that is used in boiling the crude oil in a drum(s) to get other products like kerosene, diesel etc. the process of refining the crude oil in the bush and usually close to a river/creek in the forest or mangrove is popularly called "KPO-FIRE." While the production of the refined products of the crude oil and the marketing of it is commonly referred to as OIL BUNKERING. And the petrol, diesel, kerosene etc got from the artisanal refining is called Asari Fuel or Asari Diesel or Asari Kerosene etc.

### **Artisanal Refining Activities and the Habitat**

Since Artisanal refining involves constant burning of firewood that is used in boiling the crude oil in drums siphoned from oil pipes, the firewood produces smoke/carbon into the atmosphere. And this increases the circulation of carbon-dioxide into the atmosphere which is inimical to the health of man. In the process of even siphoning the crude oil it might even ignite fire and the entire mangrove burnt down. That is the activities of artisanal refining bring a lot of harm to the environment and the habitat that man relies for a sustaining living and existence because there is interdependence between the habitat – ecosystem and man for its existence. It makes the natural vegetation overrun by carbon emitted through the activities of refiners by making the oil tough to breathe.

The mangrove which gives man oxygen is being affected by artisanal refining. The loss of mangrove forest products is not only limited or degraded to plants and animals but also to humans because mangrove products are another or critical source of revenue to the inhabitants (Egele and Egobueze, 19). In other words, artisanal refining pollutes the atmosphere like the gas flare by the oil companies.

The impact of artisanal refining of crude oil is devastating to the atmosphere. It emits carbon dioxide methane among others, that depletes the ozone layer that protects the earth from direct sun ray. Since the process is unprofessional (artisanal refining), sometimes it generates into a large spill in the environment causing damage to plants, soil aquatic lives among others. Some of these plants are medicinal to man's existence, the soil is made infertile and aquatic lives namely aquatic animals are killed which are the main source of livelihood of the oil bearing countries inhabiting the area. The inhabitants who are majorly fishermen and subsistence farmers no more caught fish for survival and existence while the land is no more fertile for planting crops.

The people plant crops like cassava, plantain, cocoyam, palm oil, sweet potatoes etc, while in terms of fish like Bonga fish, Croaker Catfish, Sharks, Barracuda as well as Periwinkles etc. the Bayelsa people also have arable land for farming since they are traditional farmers. With the activities of artisanal refining, the food security of Bayelsa state is threatened thereby by witnessing food scarcity. This is a form of food insecurity in the state.

Summatively, artisanal refining has impacted greatly on the habitat and the ecosystem in Bayelsa due to its activities. A point of note is the high rate of wording species loss in the

originally contiguous luxuriant rain forest ecosystem. The present physiognomy is woody tree species with island of derived savanna colonizing the rain forest ecosystem. Also, the derived woody tree species now become *Anthonotha macrophylla* and *Albizia adianthifolia*. Thus shows a loss in the woody trees species which characterize the rain forest ecosystem (S.I. Efe, 166).

The activities of artisanal refining in Bayelsa State cause acid rain, which impacts soil fertilizing as explain above. And is associated with reduced crops yield, causing hunger in the state where fish population already has declined due to pollution by artisanal refiners. Also, there is thermal pollution of air, land and water. There is also an increase in the concentration of greenhouse gases in the states as well as atmospheric pollution of combustion contaminants. There is the creation of artificial haze and soot in the night and day respectively.

Also, there is loss of source of livelihood and most important as the subject of this study, the destruction of marine life and pollution of surface water by the deposition of some particular incident by wind. However, upon the consumption of the aquatic animals by man and the consumption of some medicinal plants and crops, it leads to some terminal diseases suffered by man because of the deposition of harmful materials produced during the refining of the crude oil by the artisanal refiners.

Summing up the effects of artisanal refining on the habitat and the ecosystem in Bayelsa state according to the UNEP (2011) report in Ogohi land, it observed that:

The impact of each illegal refinery are small, the cumulative effect risks an environmental catastrophe, the cost of which would far outweigh the short-term economic benefits derived unless artisanal refining of crude oil is brought to a swift end through effective regulatory action in conjunction with development and educational initiatives, it has the capacity to cause further serious damage to the ecosystem and the livelihoods of the coastal communities in Ogoni land and beyond. (UNEP, n.p)

Artisanal refining activities has caused and still causing a lot of damage to the ecosystem and natural habitat which gives man the source of his survival and sustenance. It is the natural habitat and the ecosystem that the interdependence of man and nature lies. This interdependence is maintained by the chain created by nature between man and its environment to man's survival. The reliance of man for its survival and existence is disrupted and damaged by man through the activities of artisanal refining. This now makes man to be on the edge of hazardous living survival and threat to possible extinction.

Artisanal refining has caused monumental damage to the ecosystem both aquatic and terrestrial life. This adverse effect on the ecosystem and the natural habitat has broken the food chain of nature and the natural interdependence of man and its surroundings for its existence. This is because the inhabitants of Bayelsa state and the Niger Delta region in general depend on fishing and farming as its major means of livelihood. But with philosophy as a discipline that is all-embracing and all-encompassing, we can have a respite with its tool in the area of environmental ethics.

With the application of environment ethics, some nonmetal principles/moral principles that pertain to the sustenance and survival of the environmental particularly the ecosystem and the natural habitats has to be applied by government and the non-governmental agencies both national and international to embark on an aggressive enlightenment and a re-orientation of the practitioners/refiners and marketers of artisanal refinery and its products and the general public on

the moral principles of the values of the ecosystem and the sustenance of the environment on the livelihood of the people of the area. And to make sure that man protects the environment, its ecosystem and the natural habitat for man's survival and existence.

Kenya: United Nations Environmental Programme Pub., 2011.

### Conclusion

Artisanal refining was introduced in the Niger Delta particularly Bayelsa state as a result of the neglect by the multinational oil companies who operates in the area and the federal government in the development of the area from the proceeds of the all crude oil drilled in their area. The oil which gives Nigeria 95 percent of its foreign exchange earning is not felt by the oil bearing countries.

This practice of the local refining of crude oil though is of huge economic benefits to the refined and marketers. It is directly and indirectly harmful and dangerous to the people of the area. Its effects the ecosystem and the natural habitat by inflicting huge damage to it. It destroys the interdependent of man for its survival and sustenance. And also it destroys the aquatic and terrestrial life of the environment. And as such the polluted aquatic and terrestrial life which kills the animals and as well the deposited chemical used by the living and non-living things caused a lot of health damage to man thereby shorting his life span as well.

However, with the introduction of philosophy particular environment ethics and its principles man will be causing on the activities of artisanal refiners to the value of life on the ecosystem and the habitat in the environment for its survival.

### References

1. Efe SI. Effects of gas flaring on the Niger Delta Environment: A Climatological purview in Niger Delta Research Digest. Journal of the Centre for Niger Delta Studies/Niger Delta University Wilberforce Island, Bayelsa State, Nigeria, 2012;6(1):166.
2. Egobueze T, Williams I. (n.d.). The Oil Economy, Environmental Pollution and Conflict in the Niger Delta: Implications for National Security. In Sharma, P. (Eds) Research Trends in Environmental Science. India. AkiNik Pub., 1.
3. Ikelegbe A. The Economy of Conflict in the Oil Rich Niger Delta Region of Nigeria. Nordic Journal of African Studies, 2005;14(2):208-234. Retrieved on 2019/04/20 from: <http://www.njas.helsinki.fi>
4. Obenade M, Amangabara G. Perspective: The Environmental Implications of Oil Theft and Artisanal Refining in the Niger Delta Region. Asian Review of Environmental and Earth Sciences, 2014;1(2):25-29. Retrieved on 2019/04/16 from: <http://www.asianonlinejournals.com/index.php/AREES>
5. Saro-Wiwa K. Genocide in Nigeria: The Ogoni Tragedy. London: Saros International Pub., 1992.
6. Stakeholder Democracy Network (SDN). Communities Not Criminals: Illegal oil refining in the Niger Delta. Port Harcourt, Nigeria. Stakeholder Democracy Network Pub., 2013.
7. The Sun Newspaper editorial. The N2.6 trillion losses to crude oil theft. The Sun online newspaper, 2018. August 9<sup>th</sup>. Retrieved on 2019/04/16 from: <https://www.sunnewsonline.com/n2-6trillion-loss-crude-oil-theft/>
8. United Nations Environmental Programme (UNEP) Environmental Assessment of Ogoniland, Nairaobi.