

Artisanal Refining Of Crude Oil and Its Increase Implication on the Youths of Niger Delta Region of Nigeria

Deedam Dorka Godbless PhD

Department of Sociology, Faculty of Social Sciences, Ignatius Ajuru University of Education, Rumuolumeni, P.M.B. 5047, Port Harcourt, Nigeria.

Keywords

Artisanal Refineries,
Oil Theft,
Pipeline Vandalism,
Environmental
Degredation,
Criminality.

Abstract

This paper examines the implication of artisanal refining of crude oil on the people of Niger Delta Region of Nigeria. This paper thoroughly explores the activities of illegal refiners and discovered that and unfathomable negative effects on the people and the entire environment. The study reveals that the economy of Nigeria and the local economy of the people were adversely affected due to oil vandalisation oil theft and illegal refining of crude oil. It was also revealed that there is a correlation between artisanal refining of crude oil and the health of the inhabitants of the region. In the region, dangerous gases are constantly emitted into the environment, and it causes so many cardio-vascular diseases that led to early death. It was also revealed that artisanal refining increases criminality and reduces the number of students in school in the region. It was therefore, recommended that the federal government should establish modular refineries in the region so that some of these youths can be employed.

I. Introduction

Niger Delta Region of Nigeria is situated in the South/South geo-political zone in Nigeria. It is characterised by numerous creeks, rivers, oceans, swamps, mangroves and evergreen foliage the region experiences high rain fall annually between April and September. It comprises of six states, namely, Rivers, Akwa-Ibom, Cross River, Bayelsa, Delta and Edo State.

According to the Niger Delta Development Commission (2006) cited in Dagogo (2023) the Niger Delta Region of Nigeria is one of the world's largest mangrove forest in Africa. Its biological diversity is of global significance within the extremely valuable ecosystem. Deedam (2023) posits that it is an obvious fact that before oil was discovered in commercial quantities in the 1950s in the Niger Delta Region, agriculture was the main stay of Nigeria economy.

Crude oil was first discovered in Oloibiri in Bayelsa State in 1956, before it was discovered in 1958 in Bomu in Ogoni. Zoranem (2023) posits that the crude oil from the Niger Delta Region are of two types; light and comparatively heavy. He emphasized that since 1957, the oil and gas sector has emerged as the mainstay of Nigeria's economy. The oil

resource which is found in Rivers State and across the Niger Delta has yielded several billions of dollars. However, despite the huge economic contribution to the state and by extension the region has remained poor, neglected and its environment severely polluted. Describing this aforementioned phenomenon, Naanem (2014) posits that crude oil has contributed 98.6% of foreign exchange earnings, 60.5% of national income and 37% of Gross Domestic Product (GDP) at current basic prices in the year 2012 alone.

Several studies have been carried out on artisanal refining and its impact on the environment such researches include Naanem and Tolani (2014), Obenade and Amangabara 2011, as well as Ogele and Egobueze (2020). These studies have shown that oil and gas exploration, production and refining of consumer fuels have given rise to massive ecological destruction, impacting negatively on aquatics, ecosystem and macro-economic activities in Rivers State and the entire Niger Delta. These in turn have exacerbated poverty, food insecurity, hunger, unemployment, criminality and communal conflicts across Niger Delta Region (Naanem, 2012).

Okoko, Nna and Ibaba (2006) assert that given the enormous wealth generated by the oil companies, the communities had expected that their wretched state of living will be transformed, they thought their communities will experience development and poverty will be eradicated. Paradoxically, their state of wretchedness worsens: as their local economics collapsed, poverty was exacerbated and unemployment jumped to rooftops.

It is against this backdrop of severe environmental degradation, unemployment and abysmal poverty that resulted to deplorable condition that forced the youths of Niger Delta Region of Nigeria to engage in oil bunkering and other social vices just to make ends meet.

So many jobless youths, both educated and uneducated have engaged in this illegal business for the past two decades in the Niger Delta. The artisanal refineries were developed to satisfy local demand for energy due to the failure of the national grid, high cost and sporadic scarcity of consumer fuels. According to Okeowe, Akani, Akiribode, (2019) this form of refining involves boiling the crude oil in makeshift drums in the creeks and mangroves of the Niger Delta to produce low-grade diesel and other fuels for local market.

The youths that engaged in artisanal refineries invested parts of their profits on importation of different kinds of weapons (guns) and formed themselves into several militia cult groups, so as to withstand the intimidation, harassment and arrest from the Nigeria Security and Civil Defence Corps (NSCDC) Nigeria Police, Nigeria Army, Nigeria Navy and other local voluntary security outfits in the Niger Delta. This has increased the rate of insecurity in the Niger Delta Region. The youths that are involved in this illegal business are well armed and are prepared to fight to ensure the sustainability of their source of income.

II. Definition of Concepts

Artisanal Refining

This refers to as small scale or subsistent distillation of crude petroleum over a specific range of boiling points, to produce useable products such as kerosene, fuel (petrol) and diesel.

Pipeline Vandalism

This refers to the destruction of pipelines carrying crude oil to and fro from oil and gas multinational company's facilities and use the crude oil for their artisanal refineries or just to waste it for the purpose of reducing the revenue of the federal government as well as reducing the profits of the multinational oil companies.

Multinational Oil Companies

These are large scale companies that are operating and exploring oil in more than one country with huge financial base and the headquarters are located in foreign countries.

Crude Oil

It is refers to a mixture of hydrocarbon derived from decayed biogenic debris buried deep down the earth crust in the long course of time. Crude oil are complex mix with hydrocarbons, carbon, hydrosulphur, nitrogen, oxygen and metal formed millions of years ago from animal and plant remains deposited in sand and silt, and pressured by layers of sedimentary rock.

Crime

Crime refers to actions and behaviours that are contrary to laid down laws and regulation. Therefore, those who refused to conform to rules or norms are referred to as criminals.

Artisanal Refinery

Artisanal refineries have been established in different villages where pipelines were laid in the Niger Delta Region. These local refineries are mostly found in Rivers State, Delta State, Bayelsa State and Akwa-Ibom State. The youths in this region engaged in this dangerous business because they have been deprived access to the benefits generated by oil. Exploration of oil enhances the poverty of the inhabitants as all their sources of livelihood were threatened or have collapsed Ogele and Egobueze (2020) posit that the neglect and relative deprivation of petrodollar benefits propelled the inhabitants to establish illegal refineries for the artisanal refining of crude oil in some of the communities in the Niger Delta.

Artisanal refining is a small scale or subsistent distillation of crude petroleum over a specific range of boiling points to produce useable products such as kerosine, fuel and diesel (social action 2017).

So many people who engaged in this act of sabotage belonged to one group of cult or the other. These armed groups siphoned crude oil from the oil pipes, refine it into petroleum products for local and international consumption. This activity is contrary to the Refinery Act of 1965, which states that no refinery shall be operatal or constructed in Nigeria without a license granted by the Minister. Obenade and Amangabara (2014) posit that on average, the typical artisanal refinery produces about forty to sixty drums of diesel in a day. Although, they noted that sites vary in size and reflect different levels of investment. Small scale sites tend to attract women and people with very low levels of capital to invest, while larger scale sites involve entrepreneurs, who own relatively large production sites.

They buttressed that artisanal refining is the process of procuring stolen crude oil and refining them in the so called ‘bush’ refineries with the use of local resources and skills drawing on the indigenous technology used to distill locally made gin-(ogogoro or khaikai). They emphasized that the basic materials typically involves rudimentary illegal skills, metal pipes and drums. Welded together in which crude oil is boiled and the resultant fumes are collected, cooled and condensed in tanks to be used locally for lighting energy or transport.

Artisanal refining of crude oil has absorbed so many unemployed youths including some of them that were engaged in other economic ventures, because it is highly lucrative. several sources of livelihood such as farming, fishing, trading, welding, barbing, fabrication, capentary, motor mechanics, electrical works including civil service work have been abandoned and neglected because of artisanal refining, which generated so much revenue and has also transformed a lot of people from poverty.

According to Ebiri (2019) the Rivers State Commissioner for Environment Prof. Roseline Konya, said the failure to address crude oil theft was the primary reason why those involved in illegal artisanal refining of petroleum products have continued to flourish and wrecking unfathomable environmental havoc in the region. The Niger Delta Region can be seen as a region with all the endo and exo variables of oil politics, underdevelopment, and unemployment. Death of basic infrastructure, environmental degradation and resultant health consequences and increasingly decreasing life expectancy.

The Impacts of Artisanal Refining on the Economy of the Nation

Artisanal refining of oil and oil theft is now a way of life in the Niger Delta and it has adverse effects on the economy and development of the nation. According to Obenade and Amangabara (2011) extract from Nigeria extractive industries transparency initiative physical and process report 2009-2011 oil and gas audit indicate that the total volume of crude oil lost by SPDC, chevron and NAOC from theft and sabotage between 2009-2011 was 136, 409, 573 bbls about \$11.billion (N1.737 trillion) and if the losses are shared according to the joint venture equity holdings then the federal government lost \$4.1 billion from 2007 to 2011 in SPDC operations , \$1.1 billion in chevron operations and \$1.billion in NAOC (Nigeria Agip Oil Company) operation. This is a total loss to the federation of \$6.3 billion. This constitutes a huge loss to the oil multination companies and the nation.

According to Ajayi, Osusan and Adediyani (2022) posits that with about 4,000.000 barrels of crude oil said to be stolen daily, the rate of oil theft in the country has been described by many persons and organizations as economic sabotage, given the way it erodes the country’s revenue from crude oil export.

He further buttressed that owing to this menace, Nigeria has been unable to meet its quota as allocated by the organization of petroleum exporting countries; organization of petroleum exporting countries increased the country’s crude oil output quota from 1.799 million barrels per day in July 2022 to 1.826 million barrels per day in August from a peak of 2.4 million barrels per day previously, the country’s oil production dropped from 1,083.899 barrels per day in July to 972.394 barrels per day in August (Zoranem, 2023).

According to Olorok (2022) the Executive Secretary, Nigeria Extractive Industries Transparency Initiative, Dr. Orji Ogbonnaya says that Nigeria lost about \$2billion worth of crude oil in recent past due to the activities of informed modular refinery operators.

Etim (2022) asserts that crude oil theft has become biggest organized crime in Nigeria's history, leading to huge loss of revenue to the government. He pointed out that the country lost \$1billion in revenue in the first quarter of this year. In similar vein, Aro (2022) avers that there is an unusual level of theft estimated at daily average of 103,000 barrels which was recorded in 2021, had grown to 120,000 barrels in the first quarter of 2022. The daily average production in 2021 stood at 1.5million barrels while the national production advised by the commission was 2.2million barrels. He also re-iterated that the amount of oil received at the terminals indicates that over one million barrels of oil are lost to crude oil theft, amounting to a loss of \$1billion in the first quarter of 2022. Anofi (2013) cited in Dagogo (2013) noted that at the height of the Niger Delta conflict, oil production dropped from 2.6million barrels per day to a mere 700,000 barrel per day because of oil theft and production shortage.

Zoranem (2023) posits that if producers inject 239,000 barrels of crude oil into either the Trans-Niger Pipeline or the Nembe Creek Trunk Line, one would only receive 3,000 barrels, making it uneconomically sustainable to pump crude into the lines and a force majeure was declared. He emphasized that in 2021, a similar trend was observed in January of that year, out of about 239,000 barrels per day pumped into the trans-Niger pipeline, only 190,000 bpd was recovered, putting the loss at 19,000 bpd. The rate of oil theft kept increasing as the price of crude oil rose in the market until March 2022 when there were zero recoveries from all the volumes that were pumped into the line.

Oil theft in Nigeria is estimated at about 400,000 barrels per day, costing the country up to us \$1.billion per month.

The above analysis reveals that the federal government of Nigeria has lost trillion of dollars to oil theft, artisanal refineries and vandalism of oil pipes by hoodlumps and cultists who specialized in illegal refineries as their main source of livelihood. For the past ten years, since the emergence of General Mohammadu Buhari's administration several trillion of Naira had been borrowed to run the day to day administration of Nigeria because of sabotage emanating from artisanal refineries and vandalism.

In addition to the above, even the local economy of the Niger Delta people had been adversely affected due to constant oil spillages and flaring of gases which destroyed their sources of livelihood.

The Impact of Artisanal Refinery on the Health of the Inhabitants of the People of Niger Delta

It is an obvious fact that artisanal refinery has contributed immensely to environmental degradation of the entire Niger Delta environment. Foundation for partnership initiatives in the Niger Delta (PIND) (2022) asserts that illegal oil bunkering and artisanal refining are major causes of water and air pollution as well as soil contamination in the area, with harmful impacts on human health, aquatic life and the entire ecological system.

Deedam (2023) posits that since oil was discovered in the Niger Delta region of Nigeria, there has been constant flaring of dangerous gases such as methane, sort, and carbon-mono oxide close to human habitation. Oil spillage and environmental degradation are common features of the Niger Delta environment. All living creatures are exposed to danger as their natural habitats have been destroyed by the activities of the multinational oil companies. The rural farmers have been adversely affected.

Fishing activities grounded and aquatic life destroyed as a result of the after effects of oil exploration. He further buttressed that most fishes have been killed by incessant oil spills; even the crops planted as well as other terrestrial animals were destroyed.

Nwankwoalu, Harry, Amangabara and Warmate (2017) succinctly state after conducting research on the impact of artisanal refining of crude oil on the soil and water quality in parts of Okrika and Ogu-Bolo Local Government Areas of Rivers State in Niger Delta, that the soil and water have been polluted. The research revealed that the physio-chemical analysis of soil and water, unveiled the poor water and soil. The result of their findings revealed that there was high concentration of Iron (Fe) and Zinc (Zn) which made the water unsuitable for drinking.

On the other hand, Ogunjobi (2022) revealed that benzene, a known carcinogen was detected in all air samples at concentration ranging from 0.155 to 48.2pg1.m3 approximately 10 percent of detected benzene concentration in Ogoni land were higher than the concentration in any part of the world.

The high concentration of iron, zinc and benzene in the water has been responsible to a lot of death and sicknesses in the Niger Delta. All these have increased cardio-vascular diseases and other diseases such as cancer of the skin which has affected a lot of people in the Niger Delta region as a result of incessant flaring of dangerous gases such as methane, carbon-mono-oxide, sooth etc and the activities of the illegal oil refiners. This is at its climax and its so alarming as more and more people are dieing on daily basis at early age. This implies that life-expectancy has also reduced.

It has been discovered that oil spillage contaminates and adversely affected the ecosystem that provides support to human beings. This streams, mangroves, rivers, swamps, vegetations have been polluted and destroyed. Naanen (2019) asserts that the activities of the local crude oil refiners in the Niger Delta have left the mangrove vegetation, rivers, swamps, and estuaries heavily polluted. He buttressed further that dark sludge (waste) is discharged into the environment covering large areas and creating a wilderness effect.

It is confirmed that regular emission of these dangerous and poisonous gases into the environment as well as constant oil spillage affected the crops, animals, trees, soil, rivers and even man. The inhabitants of the area depended solely on these vegetations, streams, rivers and crops for their survival. Their health problems increased because they keep eating these poisonous crops, fruits and fishes.

To worsen the deplorable condition and the health hazard of the inhabitants of the region, the remediation or clean up exercise are not always done properly and timely. Hence, the peasants that depended on the streams and rivers ended up drinking

contaminated water which resulted to different kinds of diseases that paved way for early death. In similar way, emission of dangerous gases such as methane, carbon-monoxide, polycyclic hydro-carbon, soot etc are responsible for diseases such as skin rashes, cancer, respiratory diseases, gastro intestinal disorder, Muscula skeletal disorder, circulatory blood diseases, and alteration of DNA etc.

The statistics from the hospitals in the area shows that these diseases are widespread and common among the inhabitants of the Niger Delta.

Artisanal Refining and Increase in Criminality in the Niger Delta Region

Apart from the negative effects it has on the health, economy and environment of the Niger Delta Region, it has also increased the rate of criminality in the region. In the first place, oil bunkering and vandalisation of oil pipes are considered to be criminal offences in Nigeria. So the local oil refiners have increased the level of criminality in the area. The local oil refiners have engaged in the following crimes, piracy, drug trafficking, cultism which led to proliferation of arms. They purchased sophisticated guns and weapons such as Ak 45, grenades, pump action, dynamites etc.

These weapons are used to defend themselves against any attack by the law enforcement agencies. Studies have shown that several policemen, Nigeria Army and the Nigeria Security and Civil Defence Corps (NSCDC) have lost their lives in the process of protecting pipelines. Some of the security agencies have also been kidnapped in these villages where the illegal refining are taking place.

The local oil refiners also constitute threat to the inhabitants of the villages where their business are located. Infact, they have succeeded in initiating so many youths from these communities into their business. Parents and some members of the council of chiefs including the chiefs are benefiting from illegal refining of oil because their children have engaged in the business. It's lucrative but it is very dangerous. There have been several fire outbreaks that consumed so many youths, women and men that were at the sites. Fire outbreak occurred in Ibaa community in Emuhua Local Government Area of Rivers State, Okugbe in Ahonda West, other communities where artisanal refining of oil are taking place are as follows. Abonnema, Bille, Ogbakiri, Rumuolumeni water front, Ogbogoro, Ndele, Emuhua, Kula.

The involvement of innocent youths in illegal refining of oil exposed them to criminal acts, and enhances the development and growth of different militia groups. Infact, it has been confirmed that different milita (cult) groups control each local factory in a community.

From 2010-2020, there was increase in the rate of piracy and other criminal activities like oil pipes and oil facilities vandalism as well as kidnapping. Most of the expatriates that were working in these oil multinational companies relocated from the Niger Delta because of insecurity. So many youths have embraced and engaged in artisanal refining as a way to earn their living and are no longer interested to go to school, because education cannot give them the kind of money earned from artisanal refining in short run so presently, there is increase in the rate of students dropping out from school while so many are not even interested to go tertiary institution anymore. In other to stop artisanal refining of oil, the

Formal Governor of Rivers State, Barr. Nyesom Wike embarked on rigorous campaign against local refineries. He declared the 19 kingpins or leaders of this illegal business wanted. The Governor and security agencies destroyed several locations where local refining of oil was taking place in Rivers State. After the destruction of the sites, black soot reduced drastically in Rivers State.

III. Conclusion

This study focuses on artisanal oil refining and its implication on the youths of the Niger Delta region of Nigeria. This paper carried out an indepth study of local crude oil refiners and discovered that the people of the region have suffered tremendously as a result of their illegal activities. It was revealed that constant flaring of gases into the atmosphere close to human habitation increased health hazard. Their water, soil and the entire ecosystem is poisoned and destroyed. People's sources of livelihood have been destroyed, crops, fishes, rivers, soil contaminated.

It was also revealed that the federal government revenue from crude oil was grossly affected. This day news paper of December 30, 2021 reports that Nigeria had 193 million barrels of crude oil deficit in 11 months. This when translated into money estimate amount to \$3.5billion of revenue lost to crude oil theft alone? That is about 10% of the country's foreign reserve. It was also revealed that the rate of dropout from school is increasing. Infact, artisanal refining of oil has more negative consequences on the nation but the actors are smiling to the banks.

IV. Recommendations

The following recommendations were proffered as solutions to the problems associated with artisanal refining in the Niger Delta Region of Nigeria.

The federal government should deploy trackers and specialized drones along the crude oil trunk pipelines in the Niger Delta. These scientific devices will go a long way to check oil sabotage and identified spots or positions where local oil refining is taking place.

The federal government should introduce deliberate programmes that will generate employment in the region, so that most of the youths will be employed.

The youths from these Host communities should be involved in surveillance and the security of the pipelines to check illegal refining of crude oil.

A combine team of all the security agencies should be inaugurated and charge with the responsibility of securing, the pipelines and arresting perpetrators.

Another monitoring group made up of security personnels should also be formed to check the security agencies that were deployed to protect oil facilities. Their duty is to ensure that there is no compromise among the security agencies.

The federal government should encourage the establishment of modular refineries, so that some of these youths can be employed.

Both the federal and state government should embark on skill acquisition programme for these youths, so that they will be self reliance

Above all, scholar ship should be given to students in the tertiary institutions. This will give hope to the hopeless, and their behaviour will be changed.

References

- Deedam D.G. (2023). Oil exploration and its implication on the rural farmers in the Niger Delta region of Nigeria. In *international journal of arts, humanities and social sciences*. Vol. 7, issue: 3 Sept, 2023 pp. 43-52.
- Naanem, B. & Tolani, P. (2014). *Private gain public disaster social context of illegal oil bunkering and artisanal refining in the Niger Delta*. Niger Delta environmental and relief foundation (NIDEREF). University of Port Harcourt Press.
- Okoko, K. Nna, J.N. and Ibaba, S.I. (2006). *The politics of oil and the development of underdevelopment in the Niger Delta*. Published by University of Port Harcourt Press.
- Ogele, P.E. & Egobueze, A. (2020). The artisanal refining and socio-economic development in Rivers State, from 2007-2017. *International Journal of Research and Innovation in Social Sciences (IJRISS)*, 4 (4).
- Okeowo, A. Akani, A.O. Akinbode, A.N. & Akein, A (2019). *Inside Niger's Local refineries, policy brief budget*, 1-18.
- Social action (2017). *National Conference on oil theft and artisanal refineries in Nigeria, social development integrated center*.
- Obenade, M. & Amangabara, G. (2012). The socio-economic implications of oil theft and artisanal refining in the Niger Delta Region of Nigeria. *International Journal of Science and Research, (IJSR)* 3 (7), 2230-2236.
- Ebiri, K. (2019). *Unchecked crude oil theft fuels illegal artisanal refining*.
- Ajayi, A. Osusan, O. & Adediran, I. (2022). *Nigerian oil and gas update (quarterly News letter) 12, 2022, 9th August, 2022*.
- Olorok, F. (2022). *Illegal refineries: Amnesty office, others warn as Nigeria loses \$2billion*. Punch. An online newspaper 23rd March, 2022.
- Etim, E. (2022) *who is stealing our crude oil? Business Day, an online Newspaper, July 26, 2022*.
- Aro, B. (2022). *Oil theft: Nigeria lost \$1billion in Q1 2022, says NUPRC*. Petrobarometer. The cable news and views unlimited, June 30, 2022.
- Zoranem, T.K. (2023). *Tackling crude oil theft and artisanal refining: A perception study of the role of modular refinery programme in Rivers State*. A Ph.D Thesis submitted to the Department of Sociology. Ignatius Ajuru University of Education, Port Harcourt, Nigeria.
- Nwankwoala, H.O. Henry, M.T. Amangabara, G.T. & Warmate, T. (2017). *Impacts of artisanal refining activities on soil and water quality in parts of Okrika and Ogu-Bolo areas of Rivers State*, *Journal of Environment Animal & Toxicology* 7(5), 503-508.
- Ogunjobi, G. (2022). *In Nigeria refining oil costs more than human lives (part none)*. The nation, July 17, 2022.
- Naanem, B. (2019). *When extractive governance fails; oil theft as resistance in Nigeria*. An article, research gate University of Port Harcourt Press.