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The Socio-Economic Implications of Oil Theft and Artisanal Refining in the Niger Delta Region of Nigeria

Obenade, Moses[1, 2], Amangabara, Gordon T[3]

[1]Department of Geography and Environmental Science, University of Calabar, Nigeria

[2]National Centre for Technology Management (NACETEM), South-South Office, Bayelsa State, Nigeria

[3]Department of Environmental Technology, Federal University of Technology, Owerri, Nigeria

Abstract: ***Frustrated by perceived lack of benefits from oil production, communities have targeted the operations of energy companies, demanding better public services and a greater share of government revenues. The unrest has turned into worrying criminal movements, which feeds on massive thefts of crude oil known as Illegal oil bunkering. It is estimated that between 200,000 and 300,000 barrels of oil is lost daily to theft. The majority of the stolen crude is taken to large ocean-going tankers waiting offshore, which export the oil to refineries outside the country the rest of the stolen oil goes into artisanal refining which is the processing of the stolen crude in makeshift individual facilities into low quality petroleum products. The economic impact of artisanal refining on the oil industry is said to be variable. Some oil industry participants at a round table discussion on oil theft in the Niger Delta (UK Niger Delta Working Group, 2013) argued that artisanal refining had a very limited economic impact on their operations. They primarily emphasized the negative environmental impact, health and safety issues and downplayed the economic. The argument of this paper is that there is significant economic cost of both artisanal refining and highly organized oil theft, the link is that forced pipeline shutdowns created by small-scale tapping created a vicious circle, that facilitate large scale oil theft, because depressurising pipelines to ensure pipeline integrity made it easier for more taps to be inserted, this is reflected in the continued decline of pipeline product and government revenue.***

Keywords: Artisanal refining, Oil theft, Crude oil, environment, barrels, economics

1. Introduction

Many years of oil and gas operations in the Niger Delta have generated billion of dollars in revenue for government but the majority of the 30 million people living there remain poor and unemployed, this has led to Unrest in the region. Frustrated by perceived lack of benefits from oil production, communities have targeted the operations of energy companies, demanding better public services and a greater share of government revenues. The unrest has turned into worrying criminal movements, which feeds on massive thefts of crude oil. Heavily armed and well-organized groups attack oil and gas facilities in the region, shut down operations, kidnap staff and sabotage pipelines. Rival gangs and ethnic groups have clashed violently in several of the delta's towns. Barges take stolen oil to tankers waiting offshore for export. All this has reduced the amount of oil produced, created environmental problems from oil spills and reduced government revenue that could be used to develop infrastructure and services (Shell, 2010). The objective of this review is to examine the social and economic impacts of oil theft and artisanal refining against the back drop of the seeming social and economic advantages that it brings to host communities and locals and the argument that artisanal refining actually represents an opportunity which could be harnessed by the government to enhance economic and social opportunities in an environment of high unemployment and poverty.

2. The Driving forces

At a recent roundtable discussion in London on Oil theft and illegal 'artisanal' refining in the Niger Delta, the UK Niger Delta Working Group (2012) reports that participants at the Conference agreed that oil theft and artisanal refining had expanded over the last decade - particularly over the last three years with an estimated 150,000 barrels of crude oil stolen every day in Nigeria causing unimaginable environmental and economic devastation. The United Nations Environmental Program (UNEP) Environment Assessment of Ogoniland highlighted that in addition to poor pipeline maintenance by international oil companies, illegal oil refining in the Niger Delta is a major cause of environmental degradation. Whole communities have lost their traditional livelihoods as fishers and farmers; as the effects of illegal bunkering and artisanal refining, compounded by equipment failure, pollutes their water and land and the refining process posing serious health risks. However, oil thieves and operators of artisanal refineries do not share the above sentiments. Many describe illegal oil refining as an entrepreneurial, free market response to local economic dysfunction, socio-economic pressures, the Niger Delta's chronic fuel shortages and government's failure to deliver basic public services (SDN, 2013; UK Niger Delta Working Group, 2013; IIPELP, 2011). The set up costs of these artisanal refineries are so low and returns so high that within weeks illegal refiners start up new camps.

The argument put forward for illegal bunkering activities/artisanal refinery for example, hinged on the perceived industry unwillingness and government inability to do something to ameliorate the deplorable conditions of

the oil producing communities of the Niger Delta; this perception has been expressed over time across Niger Delta communities providing strong local justification for illegal oil refining being a community right. key areas of complaints anchor on pollution of farmlands and creeks, lack of job and access to affordable Medical care – (*health profile is reported to be miserable with only half the population having access to safe drinking water, life expectancy about 47 years, patients can travel an average of 52 miles to see a doctor, 1 in 5 children die before their fifth birthday and student-teacher ratios can be over 100:12*). Inevitably these injustices, mixed with conspicuous consumption by elites, have fueled grassroots unrest and have created an interdependent relationship between oil thieves and local communities. The scarcity and high cost of diesel and kerosene throughout the Niger Delta is also widely believed to have created local market conditions creating a demand for cheap supplies of locally refined fuels.

Illegal oil bunkers and refiners have also posited that their activities have generated a burgeoning economy for the Niger Delta as it creates a well developed supply chain of which includes trained engineers (who weld valves to high pressure pipelines, returning each night to siphon oil), Boat yards help construct and supply barges to the thieves to transport crude oil around the creeks, women and young adult supply labour (refiners/marketers/security guards etc) and materials (firewood, food stuffs etc) to workers in the camps (Atah, 2012) However, there is a complex combination of economic and environmental complications that far outweighs the general good of the region.

3. The Social Implications

Granted artisanal refiners form part of a local 'moral economy' and are accorded a social license to operate by communities in much the same way as the official oil industry, resulting oil spills from broken pipes and wastes from tens of thousands of makeshift refineries combine to produce enormous environmental pollution on land and in the creeks, the social costs are also very high and have started hunting most of these communities. Artisanal refining is no longer a community "all comers affairs", intending refiners and investors are required to register with unions at prohibitive prices, youths engaged in this business have become community overlords, rival gangs have sprang up to challenge their structures leading to arms proliferation.

There is also a reported drop in school enrolment as most youths are now engaged as refiners, security guards, product marketers or transporters etc. The vast extent of fire damage around the camps, storage facilities in the communities and as well as the use of poorly refined kerosene is evidence enough of how highly explosive the practice can be. The quality of products obtained varies widely. To address this, refiners sometimes purify diesel by mixing it with kerosene to reach a large refining standard and these practice have in the long run affected consumers who spend huge resources in fixing vehicles and machinery as a result of using products from artisanal refineries. Other societal ills poised by illegal bunkering and artisanal refining are prostitution in communities where bush refineries exist. There is also an increased in arm robbery and sea piracy on the waterways (SDN, 2013) causing serious threat to life and property travelling on the water ways.

Illegal oil refining also carries significant health risks. The handling and heating of the crude oil pollutes the air. The camps have a toxic feel and the health impacts of those working there are unknown. Communities are constantly exposed to inhalation of poisonous gases, causing coughing and breathing problems (UNEP, 2011). These symptoms as shown above are actually self reinforcing. e.g. environmental damage, creates an economic wasteland rendering both aquatic life and land uninhabitable. In addition, remediation would require huge expenditures in order to reclaim the land.

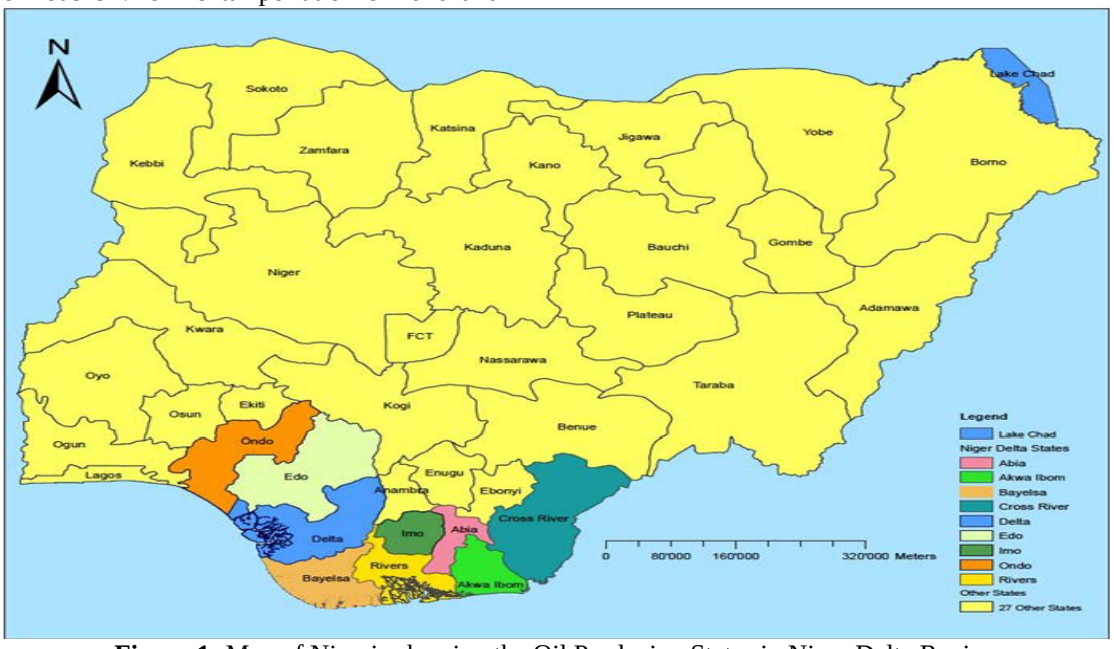


Figure 1: Map of Nigeria showing the Oil Producing States in Niger Delta Region

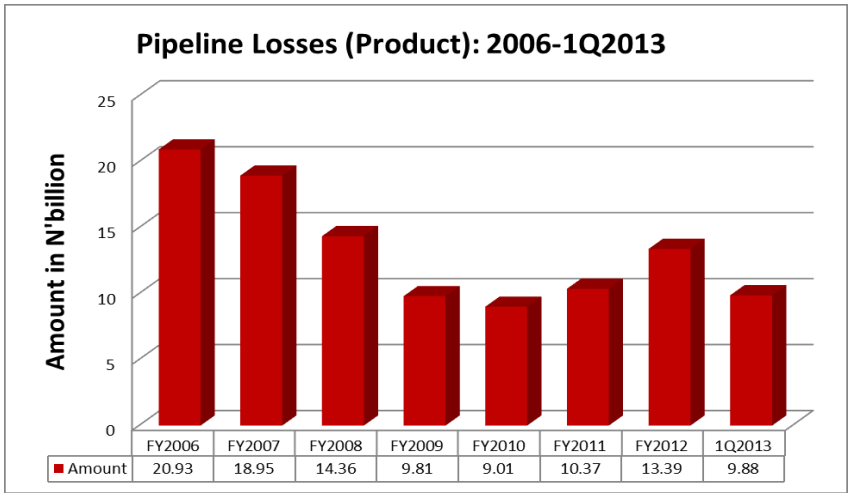
Source: Ite, 2013

Figure 2: Site of Fire Explosion at an Illegal Crude Oil Loading Bay.
Source: (left-IIPELP, 2011)

4. Understanding the Economic Implications

The economic impact of artisanal refining on the oil industry is said to be variable. Some oil industry participants at a round table discussion on oil theft in the Niger Delta (UK Niger Delta Working Group, 2013) argued that artisanal refining had a very limited economic impact on their operations. They primarily emphasized the negative environmental impact, health and safety issues and downplayed the economic. The argument of this paper is that there is significant economic cost of both artisanal refining and highly organized oil theft, the link is that forced pipeline shutdowns created by small-scale tapping created a vicious circle, that facilitate large scale oil theft, because depressurising pipelines to ensure pipeline integrity made it easier for more taps to be inserted.

Fig 3 shows pipeline product and crude oil losses for the financial year 2006 – Quarter one of 2013 while Table 1 is an estimated crude oil Production and revenue generated in Nigeria between 1958 and 2007. The table showed that there is a steady decline in production and volume of oil with the country losing more than US$10 billion annually (Cole, 2014). Extract from Nigeria Extractive Industries Transparency Initiative, physical and process report: 2009 – 2011 Oil & Gas audit indicate that the total volume of crude oil lost by SPDC, Chevron and NAOC from theft and sabotage between 2009 - 2011 was 136,409,573bbls, 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 2009 to 2011 in SPDC operations, $1.1 billion in Chevron operations and $1 billion in NAOC operations. This is a total loss to the Federation of $6.3 billion. This is a huge and significant economic impact.



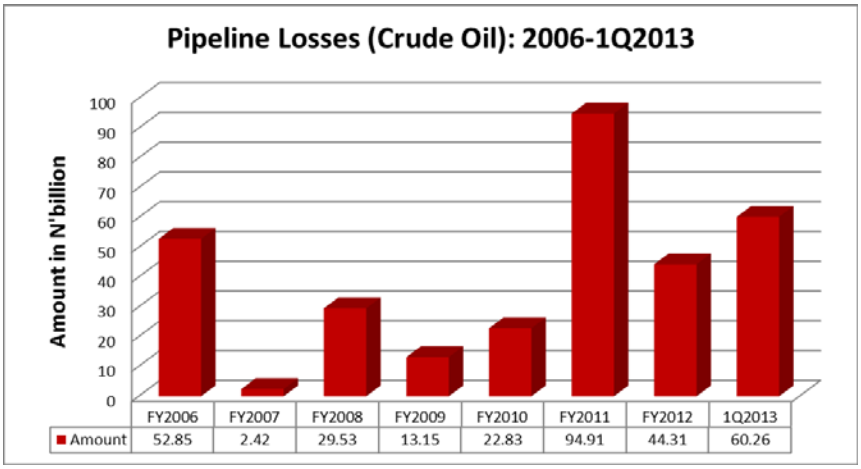


Figure 3: Pipeline losses
Source: International Institute for Petroleum, Energy Law and Policy (IIPELP, 2011)

Table 1: Estimated Crude Oil Production and Revenue in Nigeria, 1958-2007

Year	Production (million barrels)	Revenue (N million)
1958	1.9	0.2
1959	4.1	3.4
1960	6.4	2.4
1961	16.8	17.0
1962	24.6	17.0
1963	27.9	10.0
1964	44.0	16.0
1965	99.4	29.2
1966	152.4	45.0
1967	116.6	29.6
1968	51.9	Not available
1969	196.3	75.4
1970	395.8	167
1971	558.7	510
1972	655.3	764
1973	719.4	1,016
1974	823.3	3,724
1975	660.1	4,272
1976	758.1	5,365
1977	766.1	6,081
1978	696.3	4,556
1979	845.5	8,881
1980	760.1	12,354
1981	525.5	8,564
1982	470.6	7,815
1983	450.9	7,253
1984	507.5	2,269
1985	547.1	10,915
1986	535.9	8,107
1987	482.9	19,027
1988	529.0	20,934
1989	626.7	39,131
1990	660.6	55,216
1991	689.9	60,316
1992	711.3	115,392
1993	695.4	106,192
1994	696.2	160,192
1995	715.4	324,548
1996	681.9	369,190
1997	855	416,811
1998	806.4	289,532
1999	774.7	500,000
2000	828.3	1,340,000
2001	859.6	1,707,600
2002	725.9	1,230,900
2003	844.4	2,074,300
2004	900.0	3,354,800
2005	923.5	4,762.400
2006	814.0	6,109,000
2007	880	6,700,000
Total	27,119.6	25,090,702

Sources: (i) TELL Magazine, Special Edition, February 18, 2008. (ii) Petroleum Inspectorate, NNPC (iii) CBN Annual Report and Statement of Accounts, various issues (iv) Annual Abstract of Statistics, 2006.

According to Aaron (2005), the ecological devastation associated with the activities of multinational oil companies have adversely impacted upon the original occupations of the inhabitants of Niger Delta. For example, petroleum contamination has negatively impacted on agricultural productivity and some people, who originally engaged in farming and fishing, are facing loss of livelihoods through contaminated land and marine environment. This is scenario has become compounded with illegal bunkering and the proliferation of artisanal illegal refineries, environmental damage, creates an economic wasteland rendering both aquatic life and land uninhabitable. In addition, remediation would require huge expenditures in order to reclaim the impacted land.

5. The Way forward

Crude oil theft and artisanal refining poses serious challenges to the Nigerian nation such that State function is being subsumed by pecuniary interest. The illicit business has hampered the development of a modern economy; enhances conflict and insurgency in the Niger Delta and with the current international dimension undermines regional security efforts in the Gulf of Guinea; and creates instability in the oil market that reacts to incidents in the Niger Delta especially Force Majeure events often declared by multinational oil firms (IIPELP, 2011).

Therefore, it is clear from all indications that addressing oil theft and illegal refining is multi-dimensional and requires multilateralism. From the complex web of players to the sophistication of the tools required to tackle the problems and the international dimensions that exploiting resources such as oil engenders, what is required is a concerted focused and multilateral approach to the resolution. It will be important to adopt soft tools of economic development to address some of the root causes in the Delta itself that allow this international trade to flourish. That means development aid to boost economic growth in the delta and create alternative and sustainable livelihoods to tackle poverty and unemployment.

Government at all tiers must embark on high-impact projects capable of transforming the lives and livelihoods of people in the urban and rural areas who bear the brunt and consequences of these illegal activities rather than the rhetorical exercise and unnecessary politicking that have pervaded the entire political landscape. Government also needs to raise awareness of the people on the inherent dangers in oil theft and artisanal refining to the environment and the economy

It also requires substantial investment in the power and refining sectors to ensure there is enough electricity and fuel to knock out demand for the illegally refined fuel for power generators. In turn, that requires legislative reform in Nigeria to create attractive investment conditions and commercial returns to encourage the private sector to invest the tens of billions of dollars needed.

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