

# IMPACTS OF OIL POLLUTION ON LIVELIHOODS IN NIGERIA<sup>1</sup>

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## INTRODUCTION

*"The number of registered oil spillages is increasing...Depending on the area, oil pollution could cause adverse impact on people (water quality), vegetation (smothering mangrove trees, crops, shore vegetation and fauna (fish, shellfish, soil fauna). This is demonstrated in several post impact studies on the recent or old spill sites. The 25 year old 'mystery spill' of the trunkline in the Ejama-Ebubu caused during the Civil War is a well-known – but not sufficiently studied yet – example".*

SPDC, Nigeria (1993)

I, deliberately, chose to start with the above excerpts from Shell Petroleum Development Company of Nigeria (SPDC) Handbook of 1993 because, qualitatively, it highlights to some extent, the degree of disempowerment and frustrations that oil production had and is still causing the peoples of oil and gas-rich Niger Delta region of Nigeria. Above all, it exposes the extent of corporate negligence being perpetrated by the oil and gas based multinational corporations who delight in neglecting their primary social and corporate responsibilities towards the host communities. After thirty-nine (39) years since the Ebubu-Ejama (located at Eleme in the Ogoni speaking area of Rivers State, Nigeria) oil spill incident, the spill site still remains a very sorry sight to behold, inadequately studied, and incredibly unclean.

Available records indicate that, the Niger Delta region of Nigeria experiences on the average 273 oil spills resulting to about 115,000 barrels of crude oil worth US\$5.64 million (valid the current rate of US\$49 per barrel) spilled annually from 1976-2001, making the region most vulnerable to oil spill than anywhere else in the world. These spills and other environmental threats associated with oil production in the region, tremendously, impact on the fundamental rights to existence of local communities. This is, especially, so when we consider the fact that their normal sources of sustainable livelihoods are continually being disrupted by these structures coupled with the lack of the relevant legislative backings required to protect them from these man-made

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environmental destructions and degradations with their associated social exclusion.

This paper discusses the magnitude of oil pollution and oil-related environmental damages in the Niger Delta. Attempt is also made herein to highlight the nexus between oil production and rights violations, and how accumulated years of oil-induced frustrations and neglects have deepened insecurity and crises in the oil-rich Niger Delta. Ultimately, it challenges the European Union (member countries) to evolve deliberate schemes for stricter monitoring of their Trans-National Oil Corporations (TNCs) operating in Nigeria with regard to environment friendly operations and best practices as is applicable in the industry elsewhere around the global community. Thus, provision of platforms that will enable communities whose rights have been violated to have access to justice, through the EU Countries' arguably fairer justice system is a minimum demand passionately recommended.

### **OIL PRODUCTION IN NIGERIA**

It is no news that Nigeria is one of the leading oil producers in the World (the 9<sup>th</sup>), and that the fragile Niger Delta region is the seat bench (or hub) of oil and gas production of the country. Presently, 90% of Nigeria's gross domestic product (GDP) comes from revenues accruing from crude oil sales. The country operates a joint venture with the TNCs. The government, through the Nigerian National Petroleum Corporation (NNPC), owns 55% share in the Joint Venture; SPDC 30%, ELF Petroleum Nigeria Limited (a subsidiary of TotalFina) 10% and Agip 5%. Table 1 below shows the physical presence of the oil industry in the Niger Delta. As at 2005, Nigeria's daily production of crude oil reached 2.2 million barrels (b.p.d.) and was still on the increase. In recent times, however, production rates keep fluctuating due to insecurity occasioned by threats of local militias in the delta.

**Table 1:** The physical presence of the oil industry in Nigeria.

1) Land area within which the networks of pipelines are located	31,000 km <sup>2</sup>
2) Number of oil wells drilled	5,284
3) Number of flow-stations	257
4) Length of main oil and gas pipelines in the region (flowlines between oil wells and flow-stations not included)	7,000km
5.) Number of export terminals	10
6). Number of communities hosting oil/gas facilities	1,500

*Source:* After Steiner (2008)

### **NIGER DELTANS: WHAT DO THEY LIVE ON?**

The rich alluvial soil of the delta coupled with copious web of fresh and salt-water bodies provide the necessary incentives for the people who are, predominantly, farmers and fishers. Loubser (1995) defined livelihood as the totality of means by which people secure a living, have or acquire in one way or another, the requirements for survival and the satisfaction of needs as defined by the people themselves in all aspects of their lives. According to the UNDP (2006) Niger Delta Human Development report, the environment is very important for the Niger Delta people where 60% of the population depends on the natural environment – living and non-living – for livelihoods. The degree of dependency upon one livelihood structure or the other will be a determining factor for how a household is affected when the proceeds from that activity are blocked. Regardless of the conditions that tend to limit the socio-economic opportunities available to a large proportion of the population, people will, out of necessity, look for means to ensure their survival needs are met (Olawoye, 2000).

### **FREQUENCY OF OIL SPILLAGE IN NIGERIA**

According to Steiner (2008), oil spills in the Niger Delta have been extensive, difficult to assess (?) and often under-reported. In my opinion, one uncomplimentary value shared by the bulk of oil companies operating in Nigeria is the deliberate under-reporting of the actual environmental impacts of such oil spills, especially those resulting from equipment failures, in terms of volume of crude oil spilled into the already fragile and over-stretched ecosystem. Government and the operating companies maintain their own data on spills but these cannot be considered reliable as both the government and operators seek to limit their legal liability for commensurate claims and compensations from oil spill damage (Steiner, 2008). In worst cases, oil spillages in the

delta are never reported or merely branded minor without minimum post-spill containment, recovery and remediation responses.

Records between 1976 and 2001 alone indicate that 6,817 oil spills occurred in Nigeria resulting in the loss of approximately three million barrels of oil (UNDP, 2006). This represents an average of 273 oil spills and 115,000 barrels/year spilled in the Niger Delta during the aforementioned period. However, Shell's report for the period 1990-2007 has it that a total volume of 284,000 barrels of oil were spilled or about 28,000 barrels were spilled/year. In a related report by IUCN/CEESP (2006), it was shown that between 9 and 13 million barrels of oil were spilled into the Niger Delta ecosystem over the past 50 years. Some notable oil spills recorded in Nigeria include Bomu 11 oil well blowout (1970), GOCON's Escravos spill (1978), Forcados Terminal Spillage (1980), Oyakama pipelines spill (1980), Texaco Funiwa 5 blow out in (1980), Abudu Pipeline Spill (1982), Ikata Pipeline Spill (1984), Okoma Pipeline Spillage (1985) and Oshika Pipeline Spill (1993), the massive Oloibiri Well 14 oil spill (2004), and very recently, Bodo oil spills (August 2008 and February 2009) and K. Dere spill (April 2009) – *I chose to refer to the latter spill as SPDC 'Easter Gift' to the Ogonis because while others were celebrating Easter this year, the Ogoni people of K. Dere were running helter skelter to escape the deadly flame from Bomu flow station which exploded on Easter eve.*

### **OTHER SOURCES OF OIL CONTAMINATION IN NIGERIA**

1. Discharges from nearshore operations.
2. Urban and industrial effluents discharge.
3. Ballast water from oil tankers.
4. Accidental spills during loading.
5. Equipment failure at loading sites.

### **OIL POLLUTION IN NIGERIA: DOES IT REALLY MATTER GLOBALLY?**

Situating country-specific oil pollution within the context of global concerns, I have noticed an unfortunate trend of lopsided priorities. Apparently, it seems the rate of attention given to oil spills on the global scale depends greatly on the place of occurrence. For instance, Exxon Valdez Spill (260,000 barrels) of 1989 is highly referenced, probably, because it occurred in the United States, whereas there are numerous spills of higher magnitude than the said Exxon Valdez oil spill (that is, in terms of volume spilled, sensitivity of impacted ecosystem, etc), that

had occurred in underdeveloped countries but are, rarely, considered as bench marks. Cases in point for Nigeria include the GOCON Escravos spill of 1978 (300,000 barrels), Forcados Terminal tank failure of 1978 (580,000 barrels) and the Texaco Funiwa 5 blowout of 1980 (400,000 barrels) yet, with such untold devastation to plants, birds, fisheries resources and ultimately livelihoods of the people no serious attention was paid to their impacts till date.

## **IMPACT OF THE OIL INDUSTRY ON THE ENVIRONMENT**

The Niger Delta is densely populated by about 20 million people. The density in the region continues to expand as oil operators recklessly occupy available lands, and as people, often times, are forced to migrate when hitherto residential areas become uninhabitable due to industrial mess. Oil exploration by seismic companies involves surveying, clearing of seismic lines and massive dynamiting for geological excavation (seismic testing). A thorough review of the environmental impacts of the oil industry in Nigeria would take up an entire book! This is because, virtually, every aspect of oil exploration and exploitation has deleterious effects on ecosystem stability and local biodiversity – which the peoples' livelihoods depend upon (Zabbey, 2005). Thus, UNEP (2006) summed the impacts of Oil spill in the Niger Delta as follows:

1. High mortality of aquatic animals
2. Impairment of human health
3. Loss of biodiversity in breeding grounds
4. Vegetation hazards
5. Loss of portable and industrial water resources
6. Reduction in fishing and farming activity
7. Poverty, rural underdevelopment and bitterness

Extensive mangrove area in the delta have been converted for one form of oil facility or the other, or degraded by oil pollution. The Niger Delta boasts of the largest mangrove belt in Africa and the fourth largest on the world scale. Mangroves provide coastal communities 46 ecosystem goods (seafood, fuel wood, dye, stakes, etc) and 9 ecological services to other productive ecosystems (such as coral reef) in the seascape, and for man. No doubts, mangroves are a strong livelihood support-base of the delta inhabitants, and I have argued elsewhere (Zabbey, 2008) that mangroves are to the local communities what taxes are to national governments! Studies have shown that 60% of fishes in the Gulf of

Guinea breed in the mangroves of the Niger Delta. A cursory look at the area of mangrove converted in Rivers and Bayelsa States alone for oil development illustrates the depth of erosion of communal livelihoods that have taken place (Table 2).

**Table 2:** Mangrove conversion in Rivers and Bayelsa States of Nigeria by SPDC alone.

<b>Activity</b>	<b>Area covered</b>
1) Seismic line	66,000km
2) Drilling	349 sites
3) Flowline	700km
4) Pipeline	400km
5) Flowstation	22 sites
6) Terminal	1 site

*Source:* World Bank report (1995)

Scientific and socio-economic data abound that accord to UNEP (2006) observations above. The explosion of dynamites in water bodies produces narcotic effects and, readily, outright mortality of fish and other fauna. Mortal damages arising from dynamite shooting is non-selective, killing all stages of fishes and other edible and non-edible living materials within the system. Powell (1998) studied impacts of the GENECO barge, Ikata, Okoma and oshika oil spillages on fish and fisheries. He reported 50% reduction in fish abundance, total loss of species lacking accessory air-breathing organs and major loss of species without any obvious physiological pattern. Moreover, oil buried in sediments due to tidal pumping undergoes resurfacing, having long-term sublethal impacts on growth, reproduction, predator-prey behaviour, diseases outbreak, etc on biological communities including potential seafoods. Studies on Water quality, species composition and abundance of phytoplankton indicated that the condition of Ejamah-Ebubu Swampland polluted in 1970 had not improved significantly (Hart *et al.*, 2006).

In a study on the impact of gas flaring on the environment by Okezie and Ekeke (1987), it was found that about 100% loss in yield of all crops cultivated occurred 200 metres away from Izombe flow station;

45% loss in yield of crops planted 600 metres away, and 10% loss for those cultivated one kilometer away from the flare point. And to know that most inhabitants in the rural areas where most of the oil facilities are located are farmers and fisher folks makes the scenario even more worrisome as there are significant losses in their livelihoods even as far as one kilometer away from the source of the pollution. In a recent study, Anyanwu and Tanee (2008) observed dramatic reductions in Cassava yield parameters (growth, fresh weight of shoot and tubers, total fresh weight, etc) in the Niger Delta due to oil pollution.

### **JUSTICE FOR IMPACTED COMMUNITIES: CAN THE EUROPEAN UNION ASSIST?**

Recently, the Nigerian judiciary receives encomium for appreciable improvement in terms of independence and quick dispensation of justice, especially compared to the pre-1999 military era. The applauded upgrading notwithstanding, it seems judicial mechanisms in Nigeria are still under the recalcitrant grip and manipulation of a few individuals (within and outside the corridors of power) and some corporate entities. This has resulted in wide-spread distrust in the judicial system. Granted, the prevalence of discontent and lack of confidence amongst Nigerians as to the viability of the supposedly temple of justice (the Court) to guarantee them fairness account for the current rising trend in the number of people seeking justice outside the country. Four Niger Delta communities have dragged Shell to the Dutch Court over oil pollution. Similarly, the families of the nine Ogoni martyrs (Ken Saro-Wiwa and 8 others) just sued Shell in the US. This latter legal battle may start few days from today if the ongoing out-of-court dialogues between both parties crash.

It must be emphasized again that the government's lack of political will to implement court decisions, is to say the least, very worrisome too. For example on 14<sup>th</sup> November 2005, Justice V. C. Nwokorie delivered a landmark judgment in Suit No. FHC/CS/153/2005 between Mr. Jonah Gbemre (for himself and as representing Iwherekan Community in Delta State, Nigeria and SPDC, NNPC and Attorney General of the Federal Republic of Nigeria. The judgment proclaimed that gas flaring was both illegal and an abridgement of human rights. Four years afterwards, the judgment has not been implemented.

Desperate problems require desperate solutions! Thus, EU countries whose companies operate in the Nigeria's oil industry should respond

speedily to the cries for justice by the impacted communities of the delta. There are two ways, in my opinion, that the EU can ensure justice for the delta Communities: 1) by strengthening the capacity and independence of the Nigerian Judicial system, and (2) by creating platforms for holding operators accountable in their home countries where justice delivery is, arguably, fairer.

More so, analyses of past and ongoing violations of community rights by oil companies with impunity reveal over-dependence of EU countries on subverted social and corporate responsibility data supplied by the TNCs. My candid opinion is that reasonable difference from the unjust and filthy *status quo* could be achieved if the EU can commission independent monitors that will provide it with on-site information pertaining to TNCs practices in Nigeria.

I surmise, therefore, that unless the EU takes urgent steps to correcting the monstrous ills committed by the TNCs, the moral burden of immeasurable sufferings in the Niger Delta will continue to seat heavily on the conscience of her member states, and the respect for fundamental rights which the organization professes will remain questionable!!!

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