

**The African intellectual discourse in the Niger delta environmental crises
1990s – 2020**

Abejide, T.S.

Department of History & International Studies,
Al-Hikmah University, Ilorin-Nigeria

Abstract

The discussion on environmental issues in the world is no doubt very important given the rate of land degradation and pollution through human actors. It is also very germane to say that most intellectual discussions on climate change has been dominated by European scholars. Africa until the 1980s, have not really focused on environmental issues. Hence, this paper engages this important debate by echoing the African voice on environmental discourse with specific reference to the Niger Delta oil producing region of Nigeria. It argues that the discovery of crude oil of large commercial quantity in Oloibiri part of Niger Delta was expected to bring rapid socio-economic growth and development to the region. For critical analysis of data, this paper employed primary and secondary sources. It found that despite the agitations and peaceful protest of the people, the responses from both the government and the oil companies is yet to resolve their environmental challenges. It conclude that there is urgent need for a revisit of government responses, review of oil legislations and procedures for granting of license to oil corporations and payment of compensation to the affected oil-producing Niger Delta region which has continued to suffer the brunt of oil pollution.

Keywords: Africa, Voice, Environment, Pollution, Survival

Introduction

Environmental issues has become a subject of debate in many fora across the globe. Essentially, the decision of certain corps of scholars from Europe, America and then Africa has greatly influenced implementation of agreement toward the preservation of climate and human race. It is noted that Environmental history is a rather new discipline that came into being during the 1960's and 1970's and has become prevalent among Historians in other part of the world like Africa. It was a direct consequence of the growing awareness of worldwide environmental problems such as pollution of water and air by pesticides, depletion of the ozone layer and the enhanced greenhouse effect caused by human activity. Recently, historians started to look for the origins of the contemporary problems, drawing upon the knowledge of a whole field of scientific disciplines and specializations which had been developed



during the preceding century¹. Hence, the field of environmental history become very relevant in addressing this lingering issue.

The environment according to Gao, is a complex system of biotic and abiotic elements and physical and chemical phenomena that condition the life, development and activity of living organisms.² This may include the interaction of humans, flora, fauna, soil, water, climate, landscape, historical monument, mineral resources and other physical structure, that shows the interdependence among these organisms. Humankind's efforts to control and domesticate natural environment in turn has led to numerous environmental problems, and abuses that in turn caused widespread environmental degradation.³ The same is true for the Niger Delta where the exploitations of oil resources since the 1950s has led to widespread environmental problems in the oil producing communities.

It is noted that environmental problems associated with oil production in the Niger Delta include the erosion of nitrogen, phosphorous and sulfur useful for the preservation of soil nutrients and fertility, widespread air, water and soil pollution; the creation of waste that cannot be disposed off in the short time or recycled, and the depletion of resources that cannot be replenished.⁴ Also, to the United Nations Environmental Programme, in their study on the environmental impact of oil in the Niger Delta, all these environmental problems associated with oil production in the region resulted in the Niger Delta becoming a threat to the health of the global environment, especially through its contribution to climate change.⁵ In fact, living organisms like animals, plants, have been totally destroyed as a result of oil spills and flare by the oil producers in the Niger Delta region.

Over the years, the region had continued to attract international attention due both to the growing security threat it portends for the Nigerian state and, particularly, its impact on international oil prices. Although the Niger Delta problem has been around for several decades, the emergence of organized militant pressure groups in the 1990s had added a new dimension to the crisis in the region. In essence, environmental activism and militancy are a direct response to the impunity, human rights violations, and perceived neglect of the region by the Nigerian state on one hand and the sustained environmental hazards imposed on the Niger Delta communities as a result of the oil

¹Woster, D. 'Nature and Disorder of History', *Environmental Historical Review*, 18(1), 1994.

²Gao, Z. ed. *Environmental Regulation of Oil and Gas*, (London: Kluwer International Law, 1998), p 553

³ Human Rights Watch, *The Price of Oil, Corporate Responsibility and Human Rights Violation in Nigeria's Oil Producing Communities*, (New York, 1999), p 24; Joseph, F. D. "Criminal Enforcement of Environmental Laws", *Annals of the American Academy of Political and Social Science*, 525, (1993): p 134-140.

⁴Jike, V.T. "Environmental Degradation, Social Disequilibrium, and the Dilemma of Sustainable Development in the Niger Delta of Nigeria", *Journal of Black Studies*, 34 (5) (2004), p 686-701.

⁵UNEP(United Nations Environmental Programme) 2009; Environmental Resource Managers Ltd, Niger Delta (Environmental Survey Final Report Phase 1 2009), p 263.

production activities of multinational oil companies on the other. From contemporary global perspective, it is clear that, the dramatic upsurge in violent confrontation and protests against the state and oil multinationals in the 1990s coincided with the end of the Cold War and the de-emphasizing of 'high politics' for 'low politics'

More so, the raging crisis in the oil-producing communities of Niger Delta region in Nigeria has become an important subject of discussion among scholars, individuals, corporate and non-governmental organizations globally. The lingering socio-economic crisis associated with environmental oil pollution has continued unabated in the Niger Delta region. Taking this into consideration, this paper investigates how the Delta people have survived the environmental degradation of their socio-economic activities. It examines the deprivation of people that bear the burden of oil production which contributed more than 90% of total government revenue and annual budget. Scholars like Ashton, (1995), Frynas, (1998), Sanford (1974), Avwunudiogba (2003), Dibua(2006), and Aghalino, (2009) have expressed concern about the total neglect of the oil-producing communities by successive governments which has led to an ever-worsening environmental degradation impinging on the livelihood of Niger Delta people.⁶

Evidences of environmental pollution and degradation in the Niger Delta

According to environmental experts from the United Kingdom, the United States of America and Nigeria, the Niger Delta is rated as the most oil impacted environment and the most polluted area in the world.⁷ A major contributor to this state of affairs is the perennial flaring of associated gas during oil production by all the oil companies active in the Niger Delta. Gas flaring has impacted on the natural and human environment, making these areas a danger to local communities.⁸ It is noted that the United Nations Environmental Programme is now focus at reducing the effects of gas flaring in the World, particularly, it has undertaken measures in worlds environmental summit to end flaring of gas in the Niger Delta.

⁶Ashton, JN, *The Human Eco-System in the Niger Delta*, Benin City, ERA, 1998, pp.28, 40-50, Frynas, JG, 'Political Instability and Business Focus on Shell in Nigeria', *Third World Quarterly*, 19, 1998, Sanford, W.W. "Effects of Gas Flare on Vegetation in the Rivers State of Nigeria", *The African Studies*, 1, 1974, pp 33-8, Avwunudiogba, A, 'Adaptive Strategies of Small Fishermen to Environmental Degradation Induced by Oil Pollution in the Niger Delta: Implication for Rural Planning', Michael & Apollo, eds, *Human Impact on Environment and Sustainable Development*, England, Ashgate Publishing Limited, 2003. Dibua, J. I. "Citizenship and Resource Control in Nigeria: The Case of Minority Communities in the Niger Delta," *African Spectrum*, Vol. 78 (3), (2006), pp5-28 and Aghalino S.O. *Crude oil business in the western Niger Delta*, (Enugu: RhyceKerex Publishers, (2009), pp 89-90

⁷ As cited in Kia Mistilis. 'The Struggles for the Survival of 12 million People in the Niger Delta' 2009, Environmental experts from UK, US and Nigeria affirmed that the Delta is the most polluted area in the World. <http://nigerdeltasolidarity.wordpress.com> ; Cyril, O, "Globalised Images of Environmental Security in Africa", *Review of African Political Economy*, 27 (83), (2000), p 47-62.

⁸ Leslie, B. "Nigerian Communities Demand End to Gas Flaring", *Frontiers of Ecology and the Environment*, 3(6), (2005), p 299.

Flaring of associated gas by oil companies is a means of disposing of waste gases that is a natural by-product oil production.⁹ Flaring of gas occurs naturally during the processing of crude oil through the top of a pipe or stack where the burner and igniters are located.¹⁰ This illustrates that gas in the production process burn clean until oil enters into the flare pipelines through the operating machine, and had become a common practice by the oil producers in their area of operation.¹¹

It is noted that gas flaring was the best way the oil companies operating in Niger Delta area could use at the time oil production started in Oloibiri by 1958. Also, the lack of economic value and market for gas, pipeline or storage tank to preserve the associated gas encouraged flaring in the region.¹² Hence, the absence of infrastructures to capture the gas necessitated the consistent flaring in Niger Delta, particularly during the post-colonial Nigeria. Adding to this, the burning of gas at the time was wasteful to the country's revenue as well as destructive to the Niger Delta environment. A British Trade Commissioner in Nigeria by 1993, (J.S. Sadler), on the wasteful and loss of revenue through gas flaring posit that:

*"Shell's need to continue, probably indefinitely, to flare off a very large proportion of the associated gas they produce... it will be interesting to see the extent to which the oil companies feel it necessary to meet these criticism by spending money on uneconomic method of using gas"*¹³

His view clearly explained the reason why many oil companies in Nigeria had continued to flare gas in most Niger Delta oil fields.

Consequently, the constant gas flaring in the oil producing fields of the Niger Delta, the region was found to be the second largest flare sites in the World after Russia.¹⁴ World Bank report has revealed that over 150 million cubic meters of natural gas are flared or vented yearly in Nigeria, an amount worth up to \$30.6 billion dollars equivalent to 25 percent of US gas consumption or 30 percent of European Union (EU) gas used in a given year.¹⁵

⁹Omoweh, D.A. "Shell, Environmental Pollution, Culture and Health in Nigeria: The Sad Plight of Ughelli Oil Communities", *African Spectrum*, 30 (2), (1995), p 115.

¹⁰Aghalino, S.O. 'Petroleum Exploitation and the Agitation for Compensation by Oil Producing Communities in Nigeria, *Geo-Studies Forum*, 2002, p11-20; See also, Eweje, G. "Environmental Cost and Responsibilities Resulting from Oil Exploration in Developing Countries: The Case of the Niger Delta of Nigeria," *Journal of Business Ethics*, 69 (1), (2006), p 27-56.

¹¹Ikporukpo, C.O. "Sabotage and the Problem of Oil Spills Management in Nigeria", *Ambio*, 15 (5), (1986), p 306-310.

¹²Ockuko, T.O. 'Gas Flaring, and Power Plant in Nigeria: Socio-Economic and Environmental Impact on the people of Niger Delta" Being an Unpublished M.A Thesis in Environmental Management, Norway, 2011, p 23.

¹³ UK, National Archive, File 371/1671, 170' Development of oil reservoir in West Africa'1963,

¹⁴World Bank; World Bank GGFR Partners Unlock Values of Wasted Gas, (World Bank 14, Dec 2009).

¹⁵Ibid p 6,

Interestingly, Shell BP and Chevron has acknowledged that gas flaring was the main ecological problem facing the oil bearing states in the Niger Delta.¹⁶ Shell argued that since natural gas was produced as by product of oil, it was not possible to have one without the other.¹⁷ This implies that gas could not be re-injected back into the oil reservoir as a result of the low technological and industrial base for energy use in Nigeria.¹⁸ Although in retrospect, these companies had undertaken steps at reducing the cause of flaring in the affected communities. Shell BP claimed to be responsible for cleaning up the polluted area of Oloibiri oil site and have paid certain amount as compensation to the landowners.¹⁹

TABLE 1: gas produced and flared in the Niger Delta area between 1958/1994

YEAR	GAS PRODUCTION(mm3)	GAS FLARED(mm3)
1958	46	-
1959	140	-
1960	144	-
1961	310	-
1962	487	-
1963	626	-
1964	1,029	-
1965	2,250	-
1966	2,907	-
1967	2,634	-
1968	1,462	-
1969	4,126	-
1970	8,039	7,957
1971	12,975	12,700
1972	17,122	16,848
1973	21,882	2,487
1974	27,170	26,776
1975	18,656	18,333
1976	21,276	20,617
1977	21,924	20,952
1978	21,306	19,440
1979	27,618	26,073
1980	24,885	22,904
1981	17,202	14,612
1982	14,830	11,940
1983	15,207	11,948
1984	16,251	12,817

¹⁶ Environmental complex issue for Shell Nigeria, 2009 p3-29, <http://www.resource.online.nl>.

¹⁷ Moldoveanu, M. Royal Dutch/Shell in Nigeria (A), Harvard Business School Publication No, N9-399-12. (Cambridge: Harvard Business School, 1999), pp 7-9.

¹⁸ The Shell Petroleum Development Company of Nigeria Limited (Operators of the NNPC/Shell/Agip Joint Venture) 'Challenges of Gas Flares-Out in Nigeria.

¹⁹ Shell Petroleum Development Company (SPDC) 'People and the environment, (Annual Report 2003)..

1985	18,426	14,846
1986	15,580	12,291
1987	20,212	14,737
1989	26,300	18,730
1990	28,163	21,820
1991	31,587	25,934
1992	32,465	24,588
1993	33,445	25,406
1994	33,928	25,934

Source: Niger Delta Environmental Survey (NDES), 1996, VOL 1, Socio-Economic Characteristics Lagos: NDES

Based largely on the above, the production of natural gas had grown over the years in Nigeria. It has also explains the fact that in the 1970s, the total amount of gas produced was put at 8,039 and gas flare at about 7,957. The number of gas produced and flared increased maximally in 1994 approximated at 33, 929 and 25, 934, compared with that of 1970s. This significantly reveals the wanton devastation of the Niger Delta environment through gas production.²⁰ The environmental impact of gas flaring on the Niger Delta oil producing communities and its environment to some extent has been established through scientific evidence. Scientific research conducted on the vegetation of the flaring sites in Isoko, and Delta states revealed that the temperatures of those sites was as high as 1, 100⁰ c, whereas, temperature within an average of 40⁰ c distance of 43.8 meters from the flare site had impacted the vegetation growth, animal life and ecological balance of those sites.²¹

Similarly, scientific test conducted on the flare sites, such as Ebubu, Bomu, Elenlewe, and Ibigho north of the eastern Delta states to determine the impact of gas flared on their soil, climate and vegetation, reveals that the leaf temperature went up from 100 to 120 meter from the stacks, at a different of up to 6⁰ c. This illustrates the slight difference in temperature of the upper and lower surfaces of the leaf blade.²² The test conducted on the soil temperature of the above sites at the depth of 10cm further shows about 100⁰ c higher at 15m from the stack, and between 50⁰ c at 50m. This analysis explained the extent at which those sites were affected, and show approximates of 85 m in a single flare, or at 100m in a double flare. It reduces the atmospheric condition necessary for soil fertility and plant growth.²³

Brouwer, supporting the above evidence, content that any soil temperature over 30⁰ c decrease agricultural yields and the major impact of increase soil temperature within a flare sites was desiccation that may also affects the micro

²⁰ NAE , National Archive Enugu, War Prof,384/2004, Record on Mineral resources; Nigerian National Petroleum Corporation Act,1977, SS48&5(1)

²¹ Emoyan, O.O., Akpogorie, I A, and Akporhonor, E.E. "The Oil and Gas Industry and the Niger Delta: Implication for the Environment", *Journal of Applied Science Environmental Management*, 12(3),(2008), p 30-31.

²² Augustine, O. I and Sanford, W.W. "The effects of waste Gas Flare on the surface vegetations in South-Eastern Nigeria", *Journal of Applied Ecology*, 13, (1976), p 173.

²³ Ibid, p 8.

flora.²⁴ This shows the lack of air quality required for vegetation and other micro climate surface and ground water, as a result of the high concentration of volatile oxides or carbon nitrogen, sulphur oxide and total particulates that exceeded the standard set by Federal Environmental Protection Agency (FEPA) in 1991.²⁵ Nitrogen dioxide reacts with water from rain to form nitric acid (HNO₃), the high temperature from gas flares in the Delta environment is susceptible to contain high nitric oxide and nitrogen oxide, as well as acidic rain forming from wet deposition of nitric acid.²⁶ Evidence has further revealed that, the impact of gas flaring is very harmful to human health and the environment such as the acid rain. This occurred in the atmosphere to form sulphur trioxide, and dissolves in atmosphere, water vapour to form sulphuric acid that lead to acid rain.²⁷ Acid rain causes acidification of major drinking water reservoir, corrosion of metals, damage to crops and Delta forest. As a result of this excessive carbon-monoxide (odourless gas) that formed combustion of carbon materials that took place in the presence of insufficient air,²⁸ it has had serious health impact on the Ijaw people and animals, by attacking the red blood cells (haemoglobin) and prevented them from taking in oxygen required to survive.²⁹ World Health Organization (WHO), claimed that flaring of gas has contributed on a global scales about 2.5 million deaths each year through gaseous emission in rural and urban areas in the developing world (Like the Niger Delta rural and urban communities where oil is found) which represented 4-5% of the 50-60 million global death that occurred in a year.³⁰

World Bank had also reported that gas flaring in the Delta has contributed more emission to the greenhouse gases than all other oil producing countries in sub-saharan Africa.³¹ This explains that the energy lost through gas flaring was equal to more than half of the power generation used in the most African thermal stations.³² Similarly, oil spills is a common phenomenon in Nigeria oil producing states since the discovery of crude oil in Oloibiri by 1956. Spills have occurred at different time in the oil fields of the Ijaw and the Delta communities, particularly between the 1976 and 1990s. A total of 4,647 spills that wasted about 2,369,470 barrels of oil into the Delta environment were recorded.³³

²⁴Brouwer, R. "Nutritive Influences on the distribution of dry matter in the plant", *Netherland Journal of Agric Science*, 10, (1971), p 361-76. Sanford, W.W. "Effects of Gas Flare on Vegetation in the Rivers State of Nigeria", *The African Studies*, 1, 1974, pp 33-8

²⁵Federal Environmental Protection Agency (FEPA), National Policy on the Environment' (The Presidency, Abuja Nigeria, 1991), p 43.

²⁶ <http://www.elmhurst.edu/~chm/on/course/chm/10/ontime/nitorgencycycle.htm/>.

²⁷Turco, R.P. *Earth Under Siege*, (New York: Oxford University Press, 2002), p 43.

²⁸ UNEP (2005), Urban Air Quality Management Tool Box, (UNEP, Nairobi, 2005), p 55.

²⁹Omofunmwan, S.I and Osa, G.I. "The Challenges of Environmental problems in Nigeria", *Journal of Human Ecology*, 23 (1), (2008), p 53; Micheal, Watt, "Economic of Violence, More Blood," *Economic and Political Weekly*, 38 (48), (2003), p5091

³⁰WHO(World Health Organization), The Health Effects of Industry Air Pollution Exposure in Developing Countries' (Published by WHO, Geneva, Switzerland, 2002).

³¹ World Bank: Memorandum of the President of the IDA and the IFC to the executive directors on an interim strategy update for the Federal Republic of Nigeria, (New York, 13th Feb, 2002).

³² Ibid, p 10.

³³Nwilo, P.C and Badejo, O.T. "Oil Spills Problem and Management in the Niger Delta International Oil Spills," (Conference Monitoring, 2005), p 2.

Hence, oil spills has continued unabated in the oil producing areas of Niger Delta in the 21st millennium.

The Department of Petroleum Resources (DPR), reported that between 1976 and 1996, about 4,835 barrels of oil per year was spilled into the Delta environment.³⁴ This illustrates the 7,350 barrels spilled per year through the operations of Shell-BP in the Ijaw and Delta oil fields between 1989 and 1994.³⁵

TABLE 2 Summary of oil spills in the Niger Delta 1979-1998

July 1979	Forcados Terminal oil spillage	Rivers	570,000
Jan 1980	Funiwa No 5, well blow out	Rivers	400,000
May 1980	Oyakama oil spillage	Rivers	10,000
Nov 1982	System 2c Warri Kaduna pipeline rupture at Abudu	Edo	18,000
Aug 1983	Oskika oil spills	Rivers	10,000
Jan 1998	Idoho oil spills	Akwabom	40,000
Jan 1998	Jones Creeks oil spills	Delta	21,548
Oct 1998	Jesse oil spills	Delta	10,000

Source: Guardian Newspaper Report 1999, Nov 5, p40

The above table has vividly shown the situation of the oil bearing states in the Delta as a result of the oil spills that occurred by blow out. This was the case of the Forcados, Funiwa, Oyakama, Oskika oil spills between 1979 and 1983. Their environment were contaminated and became unproductive as a result of oil blow out through ruptured pipelines. More importantly, the incidences of spilled in the Ijaw villages of Idoho, Jones' and Jesses' between January and October 1998, when about 40,000 (Idoho), 21,548 (Jones') and 10,000 (Jesse) barrels of oil were spilt through oil pipeline blow out. These three villages became decimated and degraded as they had to bear an ever-worsening environmental condition impinging on their survival.³⁶

Table 3 Numbers of spills reported in the eastern Niger Delta 1987-96

Year	No of Spills	%of total spilled
1987	105	6.4
1988	102	6.3
1989	113	6.9

³⁴NAI National Archive Ibadan, Government gazette 26/29603, 89-90, Oil Pipeline Act CAP 338, Law of the Federation of Nigeria, Sec 11 and 20.

³⁵ Interview with Shell production marketing manager (Anonymous), Warri, 21/11/2020.

³⁶ Amnesty International, Nigeria ; Petroleum, Pollution and Poverty in the Niger Delta, (London: Amnesty Int Publications, 2009), pp 65-79; Human Right Watch, The Price of Oil, Corporate Responsibility and Human Rights Violation in Nigeria's Oil Producing Communities, (New York, 1999); see also, Tell Magazine (Weekly) in Nigeria Reign of Undue Process, Nov 17, 2008 pp 50- 58.

1990	125	7.7
1991	126	7.7
1992	157	9.6
1993	166	10.2
1994	203	12.3
1995	263	16.3
1996	269	16.5
Total	1629	100.0

Source: NNPC Inspectorate Division; OMPADEC River State Petroleum Department and Community Development Committee (CDC).

This table illustrates the number of spills recorded in the entire oil producing communities of the eastern Delta. It shows the increasing level of the spills from the 1980s up till 1996, which meant that spills control and management system was not enforced by the government, particularly by the oil companies.

TABLE 4 Oil spill data in Nigeria between 1976 and 1995

Year	Number of spills	Quantity spilled (barrels)	Quantity recovered	Net volume lost to the environment (barrels)
1976	128	26,157.00	7,135.00	19,021.50
1977	104	32,879.25	1,703.01	31,176.75
1978	151	489,294.75	391,445.00	97,849.75
1979	157	694,117.13	63,481.20	630,635.93
1980	241	600,511.02	42,11.03	558,094.19
1981	238	42,722.50	5,470.20	37,252.30
1982	257	44,2841.00	2,171.10	41,7669.60
1983	17.1	48,351.30	6,355.90	41,995.40
1984	51	40,209.00	1,644.81	38,564.20
1985	187	11,876.00	1,719.30	10,157.30
1986	155	12,905.00	552.00	12,358.00
1987	129	31,866.00	6,109.00	25,757.00
1988	208	9,172.00	1,955.00	7,207.00
1989	255	5,956.00	2,153.00	3,803.00
1990	166	14,150.35	2,092.55	12,057.80
1991	258	108,367.01	2,785.90	105,912.05
1992	378	51,187.90	1,476.70	47,711.20
1993	453	8,105.32	2,937.93	6632.11
1994	195	135,123.71	2,335.93	32,787.78
1995	417	63,677.17	3,110.02	60,568.15
Total	4489	2329566.4	547876.58	36899450

Sources: Department of Petroleum Resources

The above table illustrates the increasing volume of spills that occurred in the Niger Delta oil fields, particularly in 1978, 1980s and 1982 into the environment of oil village communities in Ijaw land. The Funiwa Blow out of the 1980(Owned by Texaco Oil Company), was associated with lack of adequate

environmental legislation to control and enforce spills management in the country at the time.

Government responses to oil pollution and agitations in Niger Delta

Oil related problems in the Niger Delta communities has brought to the fora of climate discourse among scholars, particularly the attitude of the federal government and the oil corporations. It is noted that the responses of both (federal government and oil companies) has really exacerbated local agitations and demands for compensations. Invariably, the problems associated with non-performances of government agencies in the Niger Delta has become very controversial among scholars, individuals, states and non-governmental organizations. That the ineptitude of these agencies has continuously impacted the infrastructure development of the oil-producing communities in Niger Delta is not in doubt. Again, that internal division among the Delta people, corruption and bureaucratic influences by coordinators of these agencies impeded their performances is very glaring. The establishment of the Niger Delta Development Board (NDDB) by the government has partly failed as a result of poor funding and mismanagement of the available fund by its coordinators, especially the executive influences on its policies. Just like its predecessor, Oil Mineral Producing Area of Development Commission (OMPADEC) never achieved its primary assignment in the oil-producing area of Niger Delta. This has been attributed to pervasive corruption and unfinished projects were recorded and its failure significantly increased tension and agitation among the Ijaw and Ogoni people by late 1998.

A more challenging issue raised and addressed in this paper is the fact that the Nigerian government's environmental management strategy in the oil-producing area could only be achieved when its agencies started giving constructive attention to all matters relating to management of the environment. In particular, the institutional aspect lacked strength both at the state, local and federal levels, since their task required an uncompromising enforcement of the existing petroleum laws in the oil producing communities. Evidence found that the relationship between the oil-rich zones in Niger Delta, government and oil multinationals had become worse than when oil was first discovered, because the promises made by the government were only on paper and not in practice.

A solution oriented discourse

1. Combination of Jobs

Having to deal with polluted rivers, streams and swamps on which their livelihood depend, the Niger Delta people resorted to a combination of jobs for more income. They farmed and fished, surviving on the proceeds to meet family needs. Avwunudiogba (2003:54-57) and Ashton (1995: 23-24) claim that the wanton destruction of their main occupation through the extraction and production of oil polluted the waters and streams, and the land lost its nutrients. The farmers and fishers abandoned their traditional jobs and turned to other occupations to make a living. In fact. Most of them left their local communities sought for better living condition elsewhere outside Delta.

2. Migration to Habitable Environment

The migration of many local people to more habitable areas in the Niger Delta and some urban centres such as Warri, Port Harcourt, Ughelli and Sapele is traceable to the dire circumstances and conditions that they faced. It is noted that oil pollution and gas flaring were instrumental to many of the farmers and fishers moving to those centres, taking to menial jobs as means of survival.³⁷ The pressure of livelihood to a large extent encouraged most farmers and fishermen to migrate from their home to the rural-urban or rural-rural settlement within and outside Niger Delta (Opukri, 2008:189). Rather than attributing this to lack of education required for employment in the oil companies, since it is not possible for everyone to be educated the same level and at the same time in any given society, the farmers voluntarily migrated to the urban centres for survival.³⁸

3. Scooping of Fuel from Leaking Pipelines

In another perspectives, it has also been observed that some local people adopted the strategy of scooping fuel or oil from leaking pipeline in their communities. A woman in Oloibiri stated that *"If we don't scoop fuel from here, hunger will kill us, if we die from explosion here, it is still death out of want. We might as well stay here, scoop and hope to survive"* (This Day, 2007).

The *New African Publication* (2009:22) reported that "Here we see children scooping crude oil from the ground on their family's farm after a ruptured oil pipeline exploded, damaging 300 hectares of community lands." These people were so desperate that they were even willing to face the danger of being injured by fire or explosion as they attempted to collect or scoop fuel (Onuoha). This is another example of the drastic means they was adopted by the local people as a survival means.

4. Litigation for Indemnity

It is noted that the Nigerian environmental legislation provides no specific statutory laws that addressed the rights of wronged citizens for compensation payment brought by oil pollution on their property or in their environment. The adoption of British common law on tort liability (negligence, nuisance and trespass) in the English cases of *Donoghue v Stevenson*, *Ryland and Fletcher*, were being used as a basis for making claims in the Nigerian courts.³⁹ This created the opportunity for oil producing communities to exercise their rights to compensation payment as another means of survival. Scientific evidence shows that gas flaring affected the vegetation, soil and climate of the Niger Delta region, and also constituted a health hazard, with corrosion of metals and acidic rain, particularly in the oil-producing communities (Lawanson, 1971:69;

³⁷Ukiwo, U. "From Pirate to Militant: A Historical perspectives on Anti-state and Anti-oil company mobilization among the Ijaw oil of Warri western Niger Delta", *Journal of African Affairs*, (2007), p 106. See also, Dibua, J. I. "Citizenship and Resource Control in Nigeria: The Case of Minority Communities in the Niger Delta," *African Spectrum*, Vol. 78 (3), (2006), pp5-28.

³⁸Aghalino, S.O. *Crude oil business in the western Niger Delta*, (Enugu: RhyceKerex Publishers, 2009), pp 89-90

³⁹Mwalimu, C, *The Nigerian Legal system* (Volume 2):Private Law, (New York: Peter Lang, 2009), pp 108-113

Sanford, 1974:1).⁴⁰ Oil spills were found to have contaminated their water courses, and even caused death in several oil producing communities.

Nonetheless, in some cases, the survival strategies used by the Delta people were counter-productive. Their strategies impeded the growth and development of the area, not only leading to a shortfall in income that accrued to them (Ezomon, 1999:34-36), but also frightening away prospective foreign investors who would have brought economic and infrastructural development to Niger Delta.

Conclusion

This study has examined the impact of African scholars, on the environmental discourse, particularly the experiences of the oil producing communities of Niger Delta region. It explained the fact that though research discussion on environmental issues began earlier in Europe, United States of America, likewise, African scholars have adequately engaged in the discourse thus far. It is noted that many scholars from Africa have been involved in research discussion on climate change and preservation of our environment toward social and economic development of the continent. Hence, the environmental problems associated with oil production and their means of survival in Niger Delta region has provided a vivid example of Africa's experiences. It was found that migration to a safe environment by the displaced people did not resolve their problems, because, those who moved to settle in urban centres such as Warri, Port Harcourt, Sapele and Lagos encountered more problems than they expected. Overpopulation, unemployment and housing challenges, among other factors, prevented them from achieving the purpose of migration to urban centres in Southern and Western Nigeria.

The scooping of fuel from the damaged oil pipelines transporting crude to the terminal was employed by the Delta as a means of survival, since they could no longer engage in fishing and farming as a result of pollution and gas flaring. The adoption of law suits by individuals and communities against the oil companies, particularly *Shell Nigeria*, was another strategy adopted by the aggrieved Delta to raise more money to meet their basic needs. The burden of proof that required an expert services (scientist), and the huge amount involved, to a large extent constrained environmental justice for most oil-producing communities in Niger Delta.

It is noted that the means of survival adopted by the local people had impacted on the inhabitants, the government and the oil industry. The vandalism of oil pipelines had caused fire disasters in Jesse and Jones creeks which reduced revenue that accrued to government and the oil companies while it also hampered the process of development and transformation of Niger Delta. This paper therefore recommends that the plights of the oil-producing communities in Niger Delta at large should be addressed by both the federal government and the oil companies. There is urgent need for a redirection of government policy

⁴⁰Lawanson, S.O. "Effects of Prior Heat Stress on Proto-chlorophyll and Chlorophyll Formation in Seedlings," *Colonythis Citrillus*, 2, *Phanzenphysiol*, (1971), p 69; see also, Sanford, W. W. Effects of Gas Flares on Vegetation in the River State of Nigeria, *Journal of African Studies*, 1. (1974).

that would ensure adequate compensation of polluted land and water in order to enhance peace and stability, socio-economic growth and development of Niger Delta and Nigeria.

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