Journal of Sustainable Development in Africa (Volume 12, No.5, 2010)

ISSN: 1520-5509

Clarion University of Pennsylvania, Clarion, Pennsylvania

THE IMPACT OF OIL EXPLOITATION ON THE SOCIO-ECONOMIC LIFE OF THE ILAJE-UGBO PEOPLE OF ONDO STATE, NIGERIA

Abosede Babatunde

**ABSTRACT** 

Oil wealth enriches Nigeria as a country, but it has not alleviated the poverty and deprivation in the oil-bearing areas of the Niger Delta. This study examined the effect of oil exploitation on the socio-economic life of the Ilaje-Ugbo people of Ondo State, Nigeria. Primary data were obtained through in-depth interviews, Focus Group Discussions (FGD), and a questionnaire. Oil exploitation, through environmental degradation, depleted the fishing and farming output, resulting in the subsequent loss of income base, thereby accentuating poverty, which in turn created divisive tendencies leading to endemic social conflict. Nigerian government top-down approach to the development of the oil-bearing areas has not been peoplecentered, participatory, and sustained. Any effort to eradicate poverty in the oil-bearing areas must seek to revive the traditional economic activities. Providing viable employment opportunities for the people and channelling their energies into the development of sustained livelihoods can reduce tensions and conflict in the Niger Delta region.

Key words: Oil exploitation, Socio-economic life, Sustainable livelihood, Oil-bearing Areas, Niger Delta, Nigeria.

INTRODUCTION

In the process of extracting oil in the past five decades, ecological devastation, on the one hand, and neglect arising from crude oil production, on the other hand, has left much of the Niger Delta desolate, uninhabitable, and poor. One fundamental problem that faces the oil producing areas today is the degradation of its environment. The fact is incontrovertible that the environment of the Niger Delta has been intensely polluted with tragic consequences for the economy of the people and the totality of the quality of life.

There has been no concerted and effective effort on the part of the Nigerian government and the multinational oil companies operating in these areas to control the environmental problem associated with oil exploitation. Rather, oil producing communities have been facing social and ecological risks which have found expression in the people's struggle and the violence that has characterized the region in recent times. Indeed, Okonta and Douglas (2001) observed that the oil companies operating in the areas have, through negligence and cynical indifference, orchestrated a vicious ecological war in which the victims are the hapless people of the region and the land and rivers on which they have lived and thrived for centuries. Observations, focus group discussion (FGD) sessions, and interviews have shown that oil companies, particularly Chevron, the major oil multinational operating in the study areas, have not complied with the Environmental Impact

61

Assessment (EIA) made in the oil producing areas before commencing operation to determine what potential harmful effects their extractive activities have on the areas, much less find ways of preventing or, at best minimizing, such impact. Further, the people are not adequately compensated for the developmental and environmental problems associated with oil exploitation.

Considering the Niger Delta region's sensitive and fragile ecosystem and in spite of the vast resource endowment, its immense potential for socio-economic growth, and its contributions to the overall development of Nigeria, the oil producing areas of the Niger Delta remain increasingly under threat from rapidly deteriorating economic and environmental conditions as well as social tension. The situation remains the same today, while some critics would say it has worsened (ANEEJ, 2004). The perception in the oil communities is that of government negligence, while valuable ecosystems, on which the people depend for their livelihood, are devastated until the situation degenerates into violence, which subsequently draws a disproportionate reaction from government that deepens the people's resentment and their alienation.

Oil exploitation has become a curse for the people of the Niger Delta. They have suffered environmental devastation, economic poverty, and constant conflict. To make matters worse, political consideration and greed on the part of a corrupt government has kept many of the earnings from these vast reserves from returning to the Niger Delta to help restore the region (Bisina, 2004). Therefore, as evidence indicated, oil exploitation has a serious implication on the immediate environment as it impoverishes both ecological and socio-economic environments causing land dereliction, deforestation, water and air pollution, and so on. These ill effects have reached a high tempo in the affected areas and, as a result, the quality of life is being eroded.

However, in spite of the damaging impact of oil exploitation on the environment and livelihood of the host communities, scientific data on the overall and long-term effects of oil exploitation on the area are only beginning to emerge (Human Rights Watch, 1999; Nwachukwu, 1999; Aluko, 1999; Okonta and Douglas, 2001;Onosode, 2003). Environmentalists and other experts have focused attention on the environmental degradation resulting from oil activities. A major bone of contention is the implication of the environmental impact on the livelihood of the people of the oil producing areas in the Niger Delta.

The importance of environmental sustainability cannot be overemphasized. This is fundamental to the people's welfare and development as their existence to a large extent relies on subsistence endeavours, which depends on natural resources. They perceived their well-being as tied to their environment in terms of livelihood, health, vulnerability, and the ability to control their lives.

In view of the foregoing, this study examines the effect of oil exploitation on the socio-economic life of the people of the study areas. How has oil industry activities affected the traditional means of livelihood of the people? What are the specific economic and social effects of oil exploitation on the people of the study area? It is highly imperative to examine the overall effect of oil exploitation on the local economy in order to determine the extent of the impact on the livelihood of the people

and proffer ways of achieving sustainable livelihood for the people. This will reduce the vicious cycle of poverty and prevent the endemic social conflict, which has pervaded the oil producing areas of the Niger Delta.

While there has been many intricate poverty strategies which have been designed and implemented in the Niger Delta region, and while all these schemes have their own validity, depending on the environment, the stark reality in the oil producing areas is that a decade of these schemes and programs have not mitigated the crucial problems of exclusion and human deprivation. Thus, the number of such deprived people seems not to be decreasing.

As a result, more germane to the survival of the indigenous people is the danger of oil exploitation obliterating their source of livelihood, since they rely solely on their immediate environment for their survival. Hence, anything that alters their environment threatens their very existence. Oil exploitation has created life-threatening ecological hazards and deterioration of health and social fabrics of the inhabitants of the oil communities. The implication is that the oil industry has exploited the ecosystems for resources beyond the level of sustainability (Ashton-Jones & Douglas, 1998). The ecological problem is a reality, which has to be tackled. Subsequent sections will examine the specific economic and social effects of oil exploitation on the study area. The analysis of these socio-economic effects was derived from survey questionnaires, interviews, FGDs sessions, and participant observations.

## ECONOMIC IMPACT OF OIL EXPLOITATION ON THE OIL-PRODUCING COMMUNITIES OF ILAJE-UGBO

Prior to the discovery of oil in the area, the rural economy of the oil producing areas was simple and generally met the needs of the people. The area was blessed with a long coastline, extensive brackish, and mangrove swamps supporting a wide range of fish species, such as Tilapia, Threadfins, Moon fish, Bony Tongue fish, Tiger fish, Catfish, Sea Catfish, Snappers, Cray fish, Sea Turtle, Lobsters, Sardines, West African Croakers, Mullets, Mackerels, Razor fish, and many others. A large proportion of these fishes are derived from artisanal fisheries involving peasant fishermen. Fish farming forms the most dominant economic activity in the study area. Field data, as indicated in table 1, shows that 80% of the sampled population are engaged in fishing, mostly using traditional methods.

**Table 1: Economic Activities of the Respondents** 

S/No	Economic Activities	Percent	Valid	Cumulative
			Percent	Percent
1.	Fisherman	80	80	80
2.	Farmer	6	6	86
3.	Civil Servant	4	4	90
4.	Trader	8	8	98
5.	Professional	1	1	99
6.	Staff/Employee in Public Sector	0	0	99
7.	Staff/Employee in Private Sector	1	1	100
8.	Others	0	0	100

Source: Author's Analysis, 2007

Most fishing is carried out on a small-scale basis by self-employed fishermen and women using wooden canoes and speedboats. However, commercial trawlers operate offshore. The people use nets and all kind of traps for fishing. Smoking of fish is the main preservation method. Surpluses of what they produced are carried through the numerous rivers to be sold at Igbokoda, which is the local government headquarters.

Other economic activities that are also income generating include forest products – timbers and non-timber forest products. The people harvest, process, transport, and market timber products to neighboring communities. Timber is used for canoe and paddle carving. Non-timber forest products, such as bamboo and raffia palm, are used for the production of fishing gears, basket, local gin, and wine. However, oil industry activities have led to the depletion in the population of aquatic animals and have thwarted the growth of timber and non-timber forest products. Fishing, the lifeline of most of the people, has been made impracticable and unprofitable as a result of incessant oil spillage, which pollutes streams and rivers. Oil spills became a perennial threat to the means of livelihood of the inhabitants of these areas. This has affected their capacity to sustain themselves.

Pollution of coastal corridors and wetlands are a recurrent disaster. The first victim of the oil activities of Chevron, the major oil company operating in Ilaje waterway, and the other oil companies are the fishing nets used in the creeks and stream. Oil spillage can destroys fishing nets worth several thousand of naira. The losses accompanying these are better imagined.

The fishes in the rivers and streams also received a lethal dose of oil, which effectively expels or destroys the fish population. Fishes can no longer be caught in the shallow waters and the creeks have been invaded by salt water. Tidal waves also help to spread the oil quickly through the mangrove, destroying forests and soil in their wake. Gas flaring has also become another major pollutant of the local oil producing communities. Oil spills and gas flaring can destroy whole fishing communities, reducing vital fishery resources, destroying fishing implements, and terrestrial animals (Okonta & Douglas, 2001). A key informant revealed that their tradition demanded that visitors should be welcomed with a cup of water and a fish dish. This

tradition is no longer applicable as a result of declining fishery output. Focus group discussions also showed that some species of fishes, such as *Aso, Opodo*, and *Eja Osan*, that were caught in the rivers and creeks, near the vicinity of gas flares, have become extinct, moving further into the sea. Further, shrimp and crabs affected by oil spills have become inedible, even when smoked. A woman leader in Ayetoro complained about the adverse effect of oil pollution on their economic activities. According to her, shrimps and crabs that have been affected by the oil spills could not be sold. Smoking the shrimps and crabs did not make them edible. This resulted in a huge economic loss to her. Further, she lost all the eleven cows reared by both her and the husband as a result of contaminated water drunk by these cows. The farm, which used to support the whole community, has been ravaged.

Findings indicated that the negative impact of oil exploitation has radically altered the economic lifeline of this once self-reliant oil producing areas, for the worse. The quality of life of the average person in these communities has diminished. The statistical analysis of the economic effect of oil exploitation on the oil producing areas was carried out using the Pearson chi-square statistic. Data generated from the survey questionnaire regarding the respondents' perception of the effect of oil exploitation on the economic activities were utilized. The analysis is carried out in order to test whether or not there is a statistically significant relationship between oil exploitation and economic activities in the oil producing areas. Table 2 shows the Pearson chi-square value ( $x^2$ ), 12.30, at the degrees of freedom (df), 1. The significant levels for 2-tails and 1-tail tests are 0.01 and 0.00, respectively, which is less than 0.05. Therefore, the chi-square value is significant because the value under the significant column is less than 0.05. The result indicates that oil exploitation has significantly affected the economic activities of the oil producing areas leading to the subsequent loss of a sustainable income base.

Table 2: Pearson Chi-Square Analysis for the Economic Effect

Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	
Pearson Chi-Square	12.298(b)	1	0.00			
<b>Continuity Correction(a)</b>	9.911	1	0.02			
Likelihood Ratio	16.181	1	0.00			
Fisher's Exact Test				0.01	0.00	
Linear-by-Linear Association	12.025	1	0.01			
N of Valid Cases	45					
a Computed only for a 2x2 table						
b 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.89.						

Source: Author's Analysis, 2007

The adverse effect on the local economy has increased the level of poverty in these communities. In consequence, the standard of living of the people is very low. An indicator of an improvement in the standard of living is an increase in real income of the people. However, as inferred from the survey questionnaire, the income of the people has not increased, rather it has decreased. The expected revenue from the fish sales would be affected, thereby, reducing the purchasing power of the artisanal fishermen. The implication is that economic activities, which are still on the subsistence level, have been adversely affected. Table 3 indicates the perception of the respondents on the effect of oil exploitation on their economic activities. The response to the question, "Do you have a stable source of income" elicited 138 (46%) positive response, 138 (46%) negative response, and 24 (8%) neutral response. The question on whether their source of income has improved considerably, at least in the last ten years, indicated the reverse. A significant 210 (70%) responded on the negative side, while only 60 (20%) answered in the affirmative. 30 (10%) did not respond at all. When asked to give a reason for the increase or decrease in the source of income, 180 (60%) of the respondents stated that oil exploitation is the cause of the decrease in their income, 60 (20%) claimed the increase was due to an increment in salary and promotion, and 60 (20%) said the decrease was the result of a lack of stable employment.

The table also shows that response to the question, "do you cultivate the cultivate the habit of saving part of your income", generated a 168 (56%) positive, 93 (31%) negative, and 39 (13%) neutral responses. When asked what percentage of the income is saved for future purposes, 198 (66%) saved less than 10%, 84 (28%) saved between 10 and 20%, while only 18 (6%) saved 30% and above. The poor saving culture is probably a result of the low income derived from economic activities, which is no longer profitable. Answers to questions on whether poverty is prevalent in these communities showed a preponderance of a 'Yes' answer. 228 (76%) of the respondents answered 'yes' while 72 (24%) answered 'No'. In answering the question on whether oil exploitation has affected the economic activities of the people, 240 (80%) of the respondents gave a 'yes' answer, while 60 (20%) stated otherwise.

Table 3: Economic effect on the Oil Producing Areas

S/No	Question/Response Category	Frequency	Percent				
1.	Do you have a stable source of income?						
	Yes	138	46				
	No	138	46				
	No answer	24	8				
2.	Has your source of income improved considerably at least in the last ten year?						
	Yes						
	No	60	20				
	No answer	210	70				
		30	10				
3.	Give reason for the increase or decrease in the source of income?						
	Oil exploitation activities (decrease)						
	Increment in salary and promotion (increase)	180	60				
	Lack of stable employment (decrease)	60	20				
		60	20				
4.	Do you cultivate the habit of saving part of your income?						
	Yes						
	No	168	56				
	No answer	93	31				
		39	13				
5.	What percentage of your income is saved for future purposes?						
	Less than 10%						
	Between 10 and 20%	198	66				
	30% and above	84	28				
		18	6				
6.	Is poverty is prevalent in this community?						
	Yes	228	76				
	No	72	24				
	No answer	-	-				
7.	Have oil exploitation activities affected the economic activities of the people?						
	Yes						
	No	240	80				
	No answer	60	20				
		-	-				

Source: Author's Analysis, 2007

Available data also proved that the economic activities of the people, which are largely on a subsistence basis, have been affected by oil exploitation, as shown in Table 4. The table indicates that the response to the first question confirmed the assertion as 180 (60%) claimed their trade have been affected, 66 (22%) indicated otherwise, while 54 (18%) left the question unattended. Question 2 on the cluster required respondents to value the capital worth of their trading. Responses, however, showed that 78 (26%) of the sampled did not respond, whereas 60 (30%) have invested N 100,000 and above, 66 (12%) have invested between N 50,000 and N 100,000, and 96 (22%) have invested less than N 50,000. Since the majority of the people

are fishermen and because of the capital intensive nature of commercial fishing and the high cost of craft outboard engine, which may cost as much as N 600,000 and above, the 30% of the respondents, probably sea fishermen, whose investment totalled N 150,000 and above is understandable.

However, the 26% who did not respond are probably those who are employed on a temporary basis by oil companies or in civil service. The 24% who invested below N 100,000 are those who cannot afford the speedboat and, therefore, use the canoe for fishing in the creeks and rivers. The women and children usually engage in canoe fishing. Response to the last question on the cluster was intended to elicit responses to regard the profitability or otherwise of the production enterprises, 72 (14%) did not respond, 108 (26%) felt that their trade is profitable, and 120 (60%) felt otherwise. The 60% negative response could be ascribed to the loss of revenue from economic activities.

Table 4: State of the Productive Enterprise

S/No	Question/Response Category	Frequency	Percent			
1.	Has oil exploitation affected your trade?					
	Yes	180	60			
	No	66	22			
	No answer	54	18			
2.	How much is your initial capital?					
	N100, 000 and above	60	20			
	Between N50, 000 and N100,000	66	22			
	Less than N50, 000	96	32			
	No answer	78	26			
3.	Is your trade is profitable?					
	Yes	108	36			
	No	120	40			
	No answer	72	24			

Source: Author's Analysis, 2007

Table 5 gives a summary of the fisheries output of Ondo State from 1976 to 2006, which was derived mainly from the Ilaje coastal communities. There was a decrease in output between 1976 and 1987 and an increase from 1988 to 2006. However, the field observation revealed that while the decrease from 1976 to 1987 can be attributed to the negative environmental impact of oil exploitation on the fisheries resources of the people, the gradual increase from 1988 to 2006 did not reflect the situation in the oil producing areas. The increase can be attributed to the commercial fish production by the government, who built a Fish Terminal at Igbokoda, the L.G.A headquarters, and affluent private individuals who practiced both artisanal fisheries and aquaculture. Fish production by the local people is largely on a subsistence level using traditional implementation. Fieldwork data revealed that captured fisheries by local fishermen have continued to decrease, although there is no statistical record of the actual rate of decline of fishery resources. Before the negative environmental impact of oil

extraction begins to manifest, the people claimed they were able to catch enough fishes to feed their household and still have surplus. They could even catch small fishes directly in front of their houses.

Table 5: Ondo State (Ilaje) Artisanal Fish Production, 1976-2006

Year	Fish Production M/Tons	Percentage	Percentage		
			Increase (%)	Decrease (%)	
1976	14,021	3.02	-	-	
1977	14,181	3.05	1.14	-	
1978	14,389	3.10	1.47	-	
1979	15,116	3.26	5.05	-	
1980	12,491	2.69	-	17.37	
1981	14,838	3.20	18.79	-	
1982	15,779	3.40	6.34	-	
1983	15,806	3.40	0.17	-	
1984	8,950	1.93	-	43.38	
1985	3,630	0.78	-	59.44	
1986	8,639	1.86	137.99	-	
1987	8,168	1.76	-	5.45	
1988	13,926	3.00	70.49	-	
1989	11,460	2.47	-	17.71	
1990	13,627	2.94	18.91	-	
1991	13,731	2.96	0.76	-	
1992	12,555	2.70	-	8.56	
1993	13,726	2.96	9.33	-	
1994	14,848	3.20	8.17	-	
1995	15,087.85	3.25	1.62	-	
1996	15,266.85	3.29	1.19	-	
1997	16,762.22	3.61	9.79	-	
1998	15,550.18	3.35	-	7.23	
1999	15,841.00	3.41	1.87	-	
2000	18,635.26	4.01	17.64	-	
2001	19,565.40	4.21	4.99	-	
2002	19,612.61	4.22	0.24	-	
2003	21,376.70	4.60	8.99	-	
2004	21,632.31	4.66	1.2	-	
2005	22,390.56	4.82	3.51	-	
2006	22,637.92	4.88	1.1	-	

Source: Federal Department of Fisheries, Abuja - 1994.

The dwindling catch of fishermen was also identified as a factor that might have accounted for the remarkable decline in the traditional economic base of the people in these communities. Key informants confirmed that the quality and quantity of the catch had continued to decline within the last ten years. Incessant oil spills, they complained, had either killed fish or forced them to migrate. This development was said to have discourage many fishermen who, in most cases, abandoned fishing and migrated to the city to seek better opportunities. Those who stayed back in the area have to move deep into the sea in search of a good catch. Youths migrated to the urban areas in search of other means of livelihood. Therefore, the alteration which the people experienced, within their productive enterprises, was responsible for other dysfunctional traits that ramified in the oil producing areas.

Although, there is paucity of research on the effect of hydrocarbon pollution on declining fishery resources, some studies have examined the specific impact of oil activities on aquatic species. One of such studies by Osuntokun (1999) noted that the pollutive impact of oil spills affects both water and land. This causes unquantifiable ecological devastation, destruction of marine life, and, consequently, leads to socio-economic paralysis. Oil spillage constitutes the greatest havoc to fishing operation; oil spills can kill a large number of fish in a small area. While spills in the open sea or in large creeks in tidal areas disperse fairly quickly, oil spilled in freshwater swamps or affecting fishponds in the forest areas is confined to a small area. The effect of a spill can destroy much of the livelihood of those affected in the freshwater swamp where fishing areas and fishponds belong to particular families. Another study by Snowden and Ekweozor (1987) have shown that the chronic occurrence of minor spills can have greater detrimental effects on the environment than the more visible, large-scale spillages associated with tanker accidents and blowouts.

Water pollution, soil, and land pollution, respectively, result in the death of most aquatic eggs and juvenile stages of life of fin-fish, shell-fish, and sensible animals (like oysters) on the one hand, while on the other hand, agricultural land contaminated with oil spills becomes dangerous for farming, even where they continue to produce any significant yields. The adverse effect of acid rain on rivers and surface waters is also significant. Fish and, in particular, their eggs and juvenile forms are especially susceptible to an increase in acidity, decreasing their population or wiping them off completely (Okonta & Douglas, 2001).

Various harmful and toxic organic compounds have been shown that when introduced into the natural environment during oil extraction, such as during seismic work, oil spills, gas flares, and several other forms of pollution, changes the geo-chemical composition of the rivers and other components of the environment. Oil producing communities complained about the effects of these effluents on fish stocks. All these changes combined to affect the economic activities of the people, leading to a drastic decline in output. The people are very reactive to these changes because of the unavailability of modern fishing techniques to meet the challenges of declining marine resources. Resource depletion has a far reaching multiplier effect and its importance is underscored by communal agitation and high national poverty statistics.

Other studies by the Niger Delta Environmental Survey have discovered that the toxic properties of hydrocarbon can lead to an immediate death of aquatic life and seabirds, lobsters, fish, and crab. Those that survive the spill would have ingested ample oil, which would make them taste oily when eaten. The medium and long run effect is that the means of sustenance of these communities become paralyzed. This implies that the contamination of rivers and creeks that form sources of water to fish farms, and even the flooding of the fish farms due to overflow of water bank and erosion, leads to massive killings of fish and shell fish. Where the contamination effect is sub-lethal, smelling and tainting of fishes that command low market values are produced. These problems frustrate the fish farmers out of business due to inability to pay back loans and the extra expenditure spent on cleaning up the oil.

Whittle (1978) noted that the interference of oil-related activities on fishing operation can be a more or less continuous feature. One of such interference occurs at an early stage in the development of oil fields, when seismic investigations are underway. The use of explosives in such work can cause ecological disturbances and, in the worst case, can kill fish. A second aspect of interference that probably creates the greatest frustration is the existence of oil-related debris. A great variety of items have been found, but the bulks consist of ropes, cables, chains, anchors, fenders, drum, and buoy. Some of these can float and endanger navigation, while others sink and damage fishing gear on the bottom.

Another effect of oil on fishery resources is tainting, a change in the characteristic smell or flavor. Tainting may be due to oil taken up by the tissues or contaminating the surface of the catch, and can be caused by crude oil, petroleum products, refinery effluents, and waste from petrochemical complex. Light oil and the middle boiling range of crude oil distillates are the most potent sources of taint, but all oil fractions, from petrol to heavy boiler fuels, can be implicated. The tainting problem is serious and, at its worst, it can bring severe financial hardship to individual fishermen. However, the most long-term effect of oil on fishery is the toxic effects. On the continental shelf in the more open water, large oil spills may cause egg and larva mortalities. The major impact is, however, it is felt on the shallow coastal and intertidal areas and this may last for years. The formation of a film of oil on water bodies effectively prevents natural aeration thereby resulting in the death of organisms trapped below the water surface. Fish may also ingest spilled oil directly or indirectly, becoming unpalatable or even poisonous.

Findings have proved that the inhabitants of the oil producing areas of Ilaje, who depend on the rivers and the outlying farmlands for their livelihood, suddenly found themselves trapped in a ravaged environment that could no longer provide them with succour. The fishes have died in the creeks and rivers because of the mixing of fresh and salt water and it takes fishermen two to three days to pull out to good fishing grounds. Crops have died and great stretches have become infertile due to water logging caused by the high muddy banks along the sides of the channel. The cost of living has soared in the area, and fish, an important part of daily nutrition in this part and obtained virtually for free in the once fertile rivers, is now sold at exorbitant prices. Some catfish can be sold for as high as N 1,000 each.

The ultimate effect of environmental impacts of oil production activities is to catalyze a reduction in the standard of living of the people in the area of primary activities. The overall economic effects are extensive and include the dislocation of traditional economic activities and associated livelihood pursuits as well as danger to human health. Expectedly, all the economic effects translate to pecuniary effects, which can be measured in terms of reduced income and the loss of alternative uses of resources consumed by oil communities.

Another major effect of oil exploitation with longer-term welfare implication is that each round of environment degrading activity tends not only to increase the incidence of poverty among vulnerable groups, such as farmers and fishermen and their dependants, but also involves intensified exploitation of existing natural resources, such as timber and non-timber forest resources. For example, pollution of major fishing waters leads to massive exploitation of marginal fishing waters. The pressure on land as a result of pollutive oil industry activities also leads to the exploitation of marginal farmlands, over-farming, and deforestation, all of which result in a new wave of environmental degradation. In this way, a kind of vicious circle relationship between environmental degradation and poverty incidence is created, particularly in the face of inappropriate compensation programs of oil companies, which do not provide for alternatives sources of livelihood for deprived fisher folks.

In the light of the foregoing, with the traditional economy constrained by environmental pollution and other negative oil industry related interventions, and with the modern economy closed to the youth on account of lack of access to employment and other economic activities within the oil industry, the people of the oil producing areas, particularly the youth, have encountered nothing but frustration. Their action to redeem themselves has only been described as restive.

#### SOCIAL IMPACT OF OIL EXPLOITATION ON THE OIL-PRODUCING COMMUNITIES OF ILAJE-UGBO

The result and discussion derived from the analysis of the social effect of oil-related activities on the oil producing areas prevailed in this section. Oil exploitation activities and the associated environmental effects have socio-economic effect as well, which serves as a background for specific protests and violent conflicts. The hypothesis is that oil exploitation has led to social dislocation in the oil producing areas. This hypothesis is tested by examining the social regime of the people. Direct observation of the reality in the study areas and field responses from the sampled population constituted the means of analysis.

The negative economic impact of oil exploitation has led to social and political unrest in the Niger Delta region. The oil producing areas is in a parlous state of development. Basic infrastructure of roads, housing, electricity, water, education, communication and health are very weakly developed relative to the wealth of the region. The people are without access to clean drinking water, sanitation services, and are at risk from water borne diseases. There is also very rapid decay and deterioration of physical infrastructure and social amenities. The pollution and increasing scarcity of renewable freshwater supplies also threatens human health and welfare. Another fallout from the negative environmental and economic effect is incessant intra and inter communal clashes, leading to a loss of lives and properties. These clashes are usually caused by competition over ownership of land where oil wells are located, claims to oil companies' compensation, and contracts. Further, the neglect of the oil producing communities have often angered them resulting in their militant youths, venting their anger on oil companies personnel.

Celestine (2003) raced the cause of the negative socio-economic effects of oil industry activities to the unequal exchange relationship between the state, the transnational companies, and the people. According to him, oil producing communities have remained grossly socio-economically underdeveloped and pauperized amidst the immense oil wealth owing to systematic disequilibrium in the production exchange relationship between the state, the transnational companies, and the people. Enormous money had been derived from oil export, but the area has been subjected to severe land and water degradation, socio-economic disorganization, increasing poverty, misery, military occupation, and bloody violence.

Oil, Owabukeruvele (2000) further averred, impacted most disastrously on the socio-physical environment of the oil producing areas, massively threatening the fragile subsistence peasant economy and biodiversity and hence their entire livelihood and very survival. In addition, oil producing communities have basically remained dependent and underdeveloped, persistently disempowered, socio-culturally marginalized, and psychologically alienated. The wealth derived from oil resources exploitation and export benefit directly only the operators of the oil industry and government. It has also ignited and exacerbated bitter and bloody conflicts between emerging interest groups within the oil producing areas.

Therefore, the safety, security of life and property, health and livelihood of the people of the oil producing areas, has been adversely affected by oil related activities. The ecological devastation contributes to social and economic deprivation, further complicating the development situation. Findings revealed that people are suffering from malnutrition, lack of quality education, substandard housing facilities, and a general shortage of infrastructural facilities, as shown in Table 6. Fieldwork observation showed that oil exploitation has a pervasive impact on social life in the area. The most visible expression of pauperization of life is the dwindling of social life because of the virtual lack of infrastructure, like roads, waterways, telecommunication, and utilities, like electricity, inadequate educational and medical facilities, paucity of skilled manpower, sparse industrial establishment, and so on (Omojola, 2000; Fadahunsi, 2001)/

Table 6: Social Characteristic of the Respondents

S/No	Social Characteristic	Percent	Valid	Cumulative
			Percent	Percent
1	HOUSING MATERIAL			
	Zinc house	6	6	6
	Plank house	68	68	74
	Block house	24	24	98
	Others	2	2	100
2	DRINKING WATER			
	Water from open well	2	2	2
	Water from closed well	10	10	12
	Pipe/Borehole water	10	10	22
	Surface water	48	48	80
	Tanker Truck	16	16	86
	Bottled/Pure water	4	4	90
	Others	10	10	100
3	TOILET FACILITIES			
	Flush toilet	14	14	14
	Pit toilet/Latrine	12	12	26
	Bush/Field	16	16	42
	River	58	58	100
4	FUEL FOR COOKING			
	Kerosene	46	46	46
	Charcoal	6	6	52
	Firewood Straw	48	48	100
	Gas	0	0	100
	Dung	0	0	100

Source: Author's Analysis, 2007

The oil producing areas lack access to safe drinking water, proper sanitation, and sewage systems. The drainage condition is very poor as the water covering the settlement at a level stage was stagnant. The water has a permanent sheen of waste oil on it with a generally brackish color. The source of potable water is the polluted river which also serves as sewage and waste disposal. It is no wonder that bad odor emits from the surface water. A respondent in one of the FGD sessions lamented on the health risk associated with the usage of the polluted water. According to him, the polluted water we drink results in sour throats and scratching of the body, especially after heavy rain, which accelerate the flow of wastes from nearby pits into the streams.

Pollution typical from oil spillage has contaminated the water, which people used for drinking, cooking, and bathing. The borehole, provided by development commission (NDDC) in the area, is not potable. World Bank (1996) reported that, healthwise, women and children in the oil producing areas are more susceptible to diseases than men. The death rate among the children is extremely high. When the air, sea, water, and farmland are polluted, there is bound to be an outbreak of diseases. In the Niger Delta, there has been an increased incidence of certain diseases, like bronchial, asthma, upper respiratory track diseases, gastro-enteristic cancer, and partial deafness, especially in children, due to the flaring of gas. Water pollution results in illness and death from water borne diseases. The most common water borne disease in the area is diarrhoea and worm infection. Therefore, overall life expectancy in the area is on the decline.

A study on the potential health impact of oil pollution on women living near oil fields, by Sebastian and Hurtig (2004), observed that such women exhibit symptoms, such as skin mycosis, tiredness, itchy nose, sore throat, headache, red eyes, ear pain, diarrhoea, and gastritis. Furthermore, the risk of spontaneous abortion was also high among these women. A higher incidence of cancer was discovered among males and females in areas where oil exploitation had been going on for at least 20 years. Significant elevated levels were observed for cancers of the stomach, rectum, skin melanoma, soft tissue, and kidney in men and for cancers of the cervix and lymph nodes in women. For children, an increase in hematopoietic cancers was observed. Many children also have distended bellies and light hair, which are evidence of kwashiorkor, a protein deficiency syndrome.

Pollution arising from oil spillage has contaminated the water, which people used for drinking, cooking and bathing. The borehole provided by government development agency, Niger Delta Development Commission (NDDC) in the area is not drinkable. However, the commissioner representing NDDC in Ondo State claimed that despite the difficult terrain and developmental challenges confronting the oil producing areas of Ilaje, NDDC was determined to improve the well being of the people of the areas. According to him, since its inception, NDDC has initiated 302 physical infrastructural projects in the area. The projects, as highlighted by him, included the building of roads, footbridges, and jetties, construction and renovation of classrooms, hostel blocks, staff quarters, health centers, hospitals, and doctor's quarters. NDDC has also undertaken electrification, erosion control, shore protection, and water projects in the area. In addition, NDDC has implemented various human development programs. These programs, designed for the welfare of the youth and people of the oil producing areas, included the computer literacy programme, skills acquisition programme, NDDC Assisted Mass Transit Scheme, NDDC Solid Waste Disposal Scheme, and NDDC Globacom self employment business scheme.

Another government development commission in Ilaje is the Ondo State Oil Producing Areas Development Commission (OSOPADEC), established by the Ondo State government in 2001 to cater for the development of the Ilaje oil-producing areas. Like the NDDC, most of OSOPADEC's interventions are in the area of infrastructural development of roads, water supply, walkways, wooden jetties, housing facilities, health care facilities, school classrooms, and staff quarters. OSOPADEC also developed a master plan for the development of Ilaje. The Chairman of OSOPADEC also stated that yearly bursary and scholarship awards were given to students of tertiary institutions who originate from the oil producing areas.

Grants and facilities, such as laboratory equipment and computer and generating sets, were also donated to secondary schools in the oil producing areas.

In the area of local empowerment programs, aquaculture development and artisanal fishing support scheme, through the provision of boats, granting of loans, and training in fish pond cultivation, were provided. Lastly, employment opportunities were provided for the people in the commission and some youths of the oil producing communities were sent to the Petroleum Training Institute (PTI) at Warri on an apprenticeship to acquire various skills, ranging from plumbing and pipe-fitting, wielding, and carpentry to joinery. The commission also targeted barbing, hairdressing, and sports development. However, empirical evidence indicated that the commission placed more emphasis on the provision of physical infrastructural development than human capacity development.

In general, participants at the focus group discussion sessions, communities' leaders, youth, and women leaders of the sampled communities interviewed were unanimous in their responses that NDDC and OSOPADEC have not made any significance impact on their communities. Their comments indicated that NDDC and OSOPADEC are viewed as a top-down approach to development planning and implementation. They have not made any positive impression on the people. It is quite revealing that officials of the commissions admitted that the projects they have executed cannot compensate for the negative effects of oil exploitation because the negative impact cannot be quantified in the sense that the whole of the National budget cannot compensate for it. The interviewee bitterly complained about the lack of appreciable development in their communities. Citing the example of a youth leader at Ogungbeje community, he declared:

Much of what NDDC and OSOPADEC claimed to have done are just on papers. They made various announcements of their achievement on newspaper and radio, which in reality are just fictitious. A tour around our communities will convince you that nothing has really been achieved by way of development (Personal Communication, 2007).

The available social development indicators in the Niger Delta region point to inadequate, unavailable, and poor quality infrastructure and social services, from water to telecommunication, the historical neglect of the region's development poses a steep barrier to attaining socio-economic transformation and poverty alleviation (UNDP, 2006). Direct observation of physical projects in these communities revealed that most of the projects have not been completed. Also, they are very few, in comparison to NDDC and OSOPADEC claims. These projects are scattered in these communities and not all of them have benefited from these commissions. Fieldwork data revealed that the government development commissions have made little progress in the oil producing areas. From the interviews conducted with community leaders, it was adduced that projects that are unsuitable to their needs were imposed on the people, and such projects were executed without input from the oil-producing communities. In the period under review, there was no evidence of NDDC spending on human development. However, OSOPADEC has made limited progress in terms of local empowerment programs through the award of scholarship and training program for the youth and aquaculture fishing support scheme for the fishermen. The development efforts of

OSOPADEC were generally acknowledged by the people, who explained that OSOPADEC has implemented more projects than NDDC.

Evidently, the oil producing areas do not have access to quality health care services despite the health hazard associated with oil exploitation. Only one health center was found in the eleven communities visited. This health clinic, located at Ilowo community, was not well equipped with adequate medical personnel and medical facilities. The health and well being of the local people has been directly threatened, depriving them of the capability to meet their basic needs for food, water, and shelter.

The oil producing communities lack virtually all basic infrastructural facilities that can make life meaningful. Electricity supply from the national grid is unavailable because most of these riverine and coastal areas are not connected to the grids, but depend on kerosene stoves and lamps, or private generators (for those that can afford it) for power. Also, the oil producing communities are littered with abandoned projects; secondary schools with uncompleted staff quarters, residential areas are grossly inadequate, and poor state of other infrastructural facilities. The visible lack of basic infrastructural facilities, particularly health care amenities, was vividly captured by the youth leader at Ayetoro:

There is no good hospital to give quality health care to the community. At a point in time, government brought medical personnel to treat the whole community for just three days, which was inadequate compared to the poor health conditions of the people (Personal Communication, 2007).

Focus group discussions at Ilepete also revealed that the people depended on patent medicine dealers in their community for medical treatment, and if the ailment is very serious, they have to travel to Igbokoda, the LGA headquarter, Okitipupa, and beyond. The Nigerian governments have not made any concrete effort to develop the area. With the enormous wealth derived from the place, government negligence is quite unwarranted. The oil producing communities have always been associated with poverty and underdevelopment, as well as classified as zones of high propensity for out-migration (Egunjobi, 2005). The high rate of unemployment in the area is linked to the erosion of the traditional means of livelihood of the people. Individuals displaced from their land and water resources, including their dependants, often migrate to the urban centers in the hope of securing paid employment in the oil industry or other sectors of the urban economy. Unfortunately, production in the oil industry is largely skill and technology intensive, thereby reducing the ability of oil companies to absorb the largely unskilled migrant labor from the rural oil producing communities. While the active labor force in rural oil producing communities are depleted, there arose population pressure on the urban areas, swelling the pool of the unemployed youth, many of whom are university graduates, frustrated with decades of extreme poverty, underdevelopment, and the lack of job opportunities. According to the community leader at Oroto,

We manage to send our children to school to acquire education. Upon the completion of their education, they are unable to get gainful employment. They are managing the fishing activities with us in order to sustain themselves (Personal Communication, 2007).

However, some of the youths of the area have been employed by the oil companies on a temporary basis. These youths have benefited from the oil companies practice of providing unskilled jobs for the local people in the oil industries. At the Opuekeba platform of Chevron in Ilaje, local men were seen working at the platform. They were hired to work in oil dredging, laying of oil pipes, security guards, and so on. When interviewed, this oil company's employee explained that these jobs generated high wages, even higher than the income of workers in the civil services. Some of these youths who are still in school upon getting a job with these oil companies drop out of school. The high rate of school drop out in the oil producing areas is not only attributed to these seasonal jobs the youths were able to get from oil companies, but also because the parents are unable to afford to send their children to school.

In addition, from the observation data, many women in these oil producing communities engaged in prostitution and other social vices as a means of livelihood or survival strategy. Motels were seen in some of the rural communities, like Ayetoro and Awoye, where these young girls engage in prostitution. The long-term implication is high vulnerability to sexually transmitted disease (STD) and HIV/AIDS. In the reckoning of the United Nations Development Program report on the Niger Delta (UNDP, 2006), the Niger Delta region has the highest rate of HIV/AIDS prevalence in Nigeria. Table 7 shows that the prevalence rates range from 2.3 percent in the Ilaje oil producing areas of Ondo to 12 percent in Cross River in 2003.

TABLE 7: HIV/AIDS Prevalence in the Niger Delta, 1999-2003

States	Prevalence rates per cent				
_	1999	2001	2003		
Abia	3.0	3.3	3.7		
Akwa Ibom	12.5	10.7	7.2		
Bayelsa	4.3	7.2	4.0		
Cross River	5.8	8.0	12.0		
Delta	4.2	5.8	5.0		
Edo	5.9	5.7	4.3		
Imo	7.8	4.3	3.1		
Ondo	2.9	6.7	2.3		
Rivers	3.3	7.7	6.6		
Niger Delta	5.5	6.6	5.4		
Nigeria	5.3	5.7	4.8		

Source: Technical Report, National HIV&AIDS Sentinel Survey, 2004 (UNDP, 2006).

The pre-field notion of the researcher was that the people, particularly the youth, had developed a general apathy towards viable productive enterprise. This notion was informed by the violent oil-induced communal conflict, the people's forceful agitation for resource control, and the series of kidnapping and hostage-taking for ransom witnessed in the Niger Delta region. This thinking informed one of the questions in the survey questionnaire, as shown in Table 8, which asked the respondent to state whether they consider themselves as hardworking. Responses, however, showed that 228 (76%) of the sampled claimed they are hardworking, while 72 (24%) gave a contrary answer. Based on interview conducted with both the youth and elders of the area, it could be inferred that the elders' attitude to work have not really changed, even with their dwindling economic fortune, whereas the youth are less receptive to the productive enterprise. Some 80% of the youths interviewed claimed they would prefer to be given monetary compensation, employment, and scholarship by oil companies and abandon their subsistence economic activities, than to continue to engage in the fishery occupation that is no longer lucrative. They alleged that their environment has been severely damaged beyond the level of restoration.

**Table 8: Attitude to Productive Enterprise** 

S/No	Question/Response Category	Frequency	Percent
1	Do you consider yourself as hardworking?		
	Yes		
	No	228	76
	No answer	72	24
		-	-

Source: Author's Analysis, 2007

Oil industry activities also created social tension due to inadequate compensation for environmental degradation, neglect, and deprivation. The crisis that has bedevilled the Niger Delta region since the 1990s has been closely associated with the environmental question (Orubu, 1991; 2001. World Bank (1996) showed that the current compensation program aggravates communal relations in the oil producing areas of the Niger Delta. The perception of the people is that the oil companies do not consider themselves accountable to the local people. Resentment of their marginalization, in contrast to the value of the oil reserves, has resulted in clashes with the oil company personnel, federal police, and military forces. Furthermore, the issues of compensation payment have also been a major cause of intra and inter communal or ethnic conflicts. Such conflicts are also a result of competition for employment opportunities with oil companies and over land, where oil wells are located. The youth of the oil producing areas are at the center of these conflicts. These conflicts, usually violent, have led to the destruction of lives and properties. The youth, radicalized by years of unfulfilled government promises and their inability to find gainful employment, have resorted to violence and armed struggle. In the last decades, there have been several violent demonstrations by youth in the Niger Delta as this seems to be the only language that the government understands. The development is not in any way desirable as the youth are now getting tutored and socialized in the culture of violence, rather than imbibing the culture of peace.

The result of the Pearson chi-square in Table 9 shows that there is a statistically significant relationship between oil exploitation and social regime of the people of the oil producing areas. Data generated from the survey questionnaire on the

perception of the respondents on the social effect of oil-related activities were utilized. The table indicates that the Pearson chi-square value ( $x^2$ ) is 21.67 at the degrees of freedom (df), 1, and the significance levels for 2-tails and 1-tail tests are 0.00 and 0.00, respectively. This implies that there is a significance difference in social life of the people as result of oil industry activities.

Table 9: Pearson Chi-Square Analysis for the Social effect

Chi-Square Tests						
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	
Pearson Chi-Square	21.677(b)	1	0.00			
Continuity Correction(a)	18.957	1	0.00			
Likelihood Ratio	24.117	1	0.00			
Fisher's Exact Test				0.00	0.00	
Linear-by-Linear Association	21.195	1	0.00			
N of Valid Cases	45					
a Computed only for a 2x2 table						
b 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.29.						

Source: Author's Analysis, 2007

Another dangerous trend in the oil producing areas is the collapse of traditional values, structures, and systems that have held the communities together for several years. In most of the oil producing areas of the Niger Delta, oil industry activities have led to the disintegration of societal values and loss of traditional authority. However, field observations indicate that traditional structure in the oil producing area is still viable, even if the awe and respect accorded the traditional rulers and elders have diminished. In comparison with other oil producing states of the Niger Delta, elders are still respected and they can control the youths.

## CONCLUSION AND RECOMMENDATION

The oil producing areas of the Niger Delta is the richest part of Nigeria, in terms of natural resources endowment. The area has a large oil and gas deposit, as well as extensive forests, good agricultural land, and abundant fish resources. However, the oil communities of Ilaje, like other Niger Delta communities, remain marginalized from the mainstream environmental, economic, social, and political activities in Nigeria. The government, both federal and state, failed to consider the interest and human rights of the grassroots producing areas. Rather, these arms of government continue to exclude the grassroots people or their voices in any processes to garner development for the country. The government lacked the political will to enact and enforce stringent environmental laws to regulate the environmental consequences of crude oil exploitation in the Niger Delta.

As a result of this grave negligence on the part of the government, oil producing companies continued with the wanton destruction of the ecosystem of the Niger Delta region.

The people's effort at economic and ecological sustainability is being severely threatened. They experience fear that they will have to move to another location or face extinction in a land so mangled by the oil companies, that it can no longer support them as it once supported their ancestors. In spite of the area that has been richly blessed in abundant natural resources, their potential for development, however, remains unfulfilled and threatened by environmental devastation and worsening economic, social, and political conditions. In these communities, poverty is severe and widespread. Poverty is prevalent among fishing communities, using only rudimentary equipment and, among farmers, cultivating food crops. These groups lack food security and are highly vulnerable to environmental shocks. While the economic base (fishing and agriculture) of the people has been ruined as a result of oil industry activities, it has also grossly endangered their safety and security.

In addition to income determination, environmental pollution and degradation, and lack of access to assets, including basic education, clean water, diversified economy, and healthcare delivery that hold keys to unlocking poverty's grips, are other forms of human deprivation. Therefore, in the Niger Delta, marginalization and exclusion from the ownership of assets and lack of access to social amenities define poverty. It is only when and if development strategies address these factors holistically that the possibility of impacting the poor and reducing vulnerability is guaranteed. Issues of environmental sustainability and poverty reduction must be tackled in the Niger Delta. There should be people-centered development agendas grounded in the region's natural and human capital.

The people of the oil producing areas can no longer endure the gross social and economic infrastructural neglect, poverty, ecological catastrophes, and other deprivation they are facing, despite their contribution to the development of Nigeria. Their responses to the apparent failure or inability of successive Nigerian governments to protect the land and people from the hazards of hydrocarbon activities, such as pollution, oil spillages, incessant gas flaring, human right violations, and subsequent economic deprivation and impoverishment, lies in the clamour for resource control. The people of the Niger Delta region strongly believe that the only way their developmental needs can be met is for them to regain ownership, control, and management of their oil resources.

Against this background, the special circumstances in which the people of the oil producing areas find themselves, require programs that recognize that poverty eradication and successful rural development depending on the involvement of local communities. There must be a strong focus on strengthening grassroots organizations and on making resources available for community development activities. The program for addressing rural poverty must identify and target the most vulnerable, empowering them to participate effectively in development activities.

In identifying impediments to development, the argument is that what the central government does or fails to do, in terms of human development and entitlements or in initiating programs that will move these various capacities to increasingly higher height, provide adequate access to quality education, affordable healthcare, and a reliable policy for environmental protection. In this context, where these are not guaranteed, poverty becomes a problem of injustice and undergirds inequality.

The government, in concert with oil producing communities and other stakeholders, should undertake a comprehensive environmental survey of the Niger Delta, establish the causes of ecological and socio-economic change over time, and induce corrective action by encouraging relevant stakeholders to address specific environmental and related socio-economic problems identified in the course of the survey, in order to improve the quality of life of the people and achieve development in the oil producing areas of the Niger Delta region.

### **REFERENCES:**

- Ajayi, J.F.A. & Crowder, M. (1971). History of West Africa. London: Longman. Vol. I.
- Akinwumi, O. (2004). Crises and Conflicts in Nigeria: A Political History since 1960s. Die Deutsche Bibliothek (e). LITVERLAG Munster.
- Akpobibibo, O. (2001). Sustainable Development as a Strategy for Paper I&11, University of Bradford, United Kingdom.

  Conflict Prevention: The case of the Niger Delta,
- Aluko, M.A.O. (1999), Social Dimension and Consequences of Environmental

  Degradation in the Niger Delta of Nigeria: Suggestions for the next Millennium: In Osuntokun A.ed. (1999)

  Environmental Problems of the Niger Delta. Lagos: Friedrich Ebert Foundation.
- ANEEJ. (2004). *Oil of Poverty in Niger Delta*. A publication of the African Network for Environment and Economic Justice.
- Atanda, J.A. (1973). The New Oyo Empire: Indirect Rule and Change in Western Nigeria 1894 -1934. London: Longman.
- Atanda, J. A. (1980). An Introduction to Yoruba History. Ibadan: Ibadan University Press.
- Ashton-Jones, N.S.A. & Douglas, O. (1998). *The Human Ecosystems of the Niger Delta*. An Era Handbook. Benin City: ERA.
- Bisina, J. (2004). Oil and Corporate Recklessness in Nigeria's Niger Delta Region. Journal of African Voices on Development and Social Justice.
- Celestine, A. (2003). Hydrocarbon Exploitation, Environmental Degradation and Poverty: The Niger Delta Experience. *Diffuse Pollution Conference*, Dublin.
- Constitutional Rights Project. (1999). Land, Oil and Human Rights in Nigeria 's Delta Region. Lagos: CRP.
- Curmen, R.J.M. (1937). Intelligence Report on Ilaje District of Okitipupa Division of the Ondo Province. Colonial Government Paper.
- Egunjobi, L. (2005). Nigerian Environmental Conflict Situation: A Review of Selected Cases. In: Albert, I.O. (2005). *Perspectives on Peace and Conflict in Africa*. Ibadan: John Archers.
- ERA. (1999). The Wicked Activities of Chevron in Ilaje-land. Environmental Testimonies, No 3, Benin.
- Fadahunsi, A. (2001). Economic Empowerment of Nigeria's Minority Nationalities. *A paper presented at a workshop organized by Eskor Toyo Centre for Rural Development*, Oron.
- Federal Department of Fisheries. (1994). Fisheries Statistics of Nigeria. Abuja, FCT, Nigeria. 3<sup>rd</sup> Edition.

- Human Rights Watch. (1999). The Price of Oil: Corporate Responsibility and Human Rights Violations in Nigeria's Oil Producing communities. London: HRW.
- Human Rights Watch. (2002). *The Niger Delta: No Democratic Dividend*. New York: HRW, 14(7).
- Ikporuko, C.O. (2001). Towards the Development of the Niger Delta Region. In: S.I. Abumere and S. Adedoyin, eds. (2001). *Development Policy and Analysis, Development Policy Centre*: Ibadan.
- Imobighe, T.M. (2004). Conflict in the Niger Delta. A Unique Case or a Model for Future

  Conflicts in other Oil Producing Countries? In: Rudolf Traub-Merz, ed (2004). Oil Policy in the Gulf of Guinea:

  Security and Conflict, Economic Growth, Social Development.

  Fredrich Ebert Stifting.
- Isiugo-Abanihe, U.C., Isamah, A.N., & Adesina, J.O. (2002). Currents and Perspective in Sociology. Lagos: Malthouse Press Limited.
- Nwachukwu, C.O. (1999). Environment, Food and Agriculture Dynamics: Development Policy Implications for Natural Resources Exploration and Exploitation in the Niger Delta Wetlands Wildlife and Biodiversity Region of Nigeria. In: Osuntokun A. ed. (1999). *Environmental Problems of the Niger Delta*. Lagos: Fredrich Ebet Foundation.
- Obi, C. (2002). Oil and the Minority Question. In: Abubakah Momoh. Ed. (2002), *The National Question in Nigeria: Comparative Perspectives*. Ashagate: Aldershot.
- Okonta, I. & Douglas, O. (2001). Where Cultures Feasts: Forty Years of Shell in the Niger Delta. Benin: ERA/FOEN.
- Ololajulo, B.O. (2006). Rural change and the impact of Development Intervention on Ilaje People in Ondo State, Nigeria. (Unpublished Ph. D thesis, University of Ibadan)
- Omojola, B. (2000). Design of the Blue Print for the Reconstruction of the Niger Delta. *A paper presented at a Workshop organized by Eskor Toyo Centre for Rural Development*, Oron, October 3-4.
- Omotola, S. (2006). The Next Gulf? Oil Politics, Environmental Apocalpse and Rising tension in the Niger Delta. *Accord*, 1(3).
- Onosode, G. (2003). Environmental Issues and the Challenges of the Niger Delta;

  Perspectives from the Niger Delta. Environmental Survey Process, Yaba: The CIBN Press Limited.
- Orubu, C.O. (1999)The Exploitation of Non-Timber Forest Resources in the Niger Delta:

  Problems and Perspectives. Technical paper, *Niger Delta Environmental Survey*, Port Harcourt.
- Orubu, C.O. (2001). Compensating for trampled surface rights in the Nigeria Petroleum Industry: Suggestion for a sustainable livelihood approach. *The Nigerian Economic and Financial Review*, 6(1).
- Osuntokun, A. (1999). Environmental Problems of the Niger Delta. Lagos: Friedrich Ebert Foundation.
- Owabukeruyele, W.S. (2000). *Hydrocarbon exploitation, environmental degradation and poverty in the Niger Delta Region of Nigeria*. Lund University, Lund: Sweden.
- Sebastian, M.S. & Hurtig, A.K. (2004). Oil exploitation in the Amazon basin of Ecuador: A Public health emergency. *Pan American Journal of Public Health*, Washington: D.C. U.S.A.
- Snowden, R.J and Ekweozor, I.K.E. (1987). "The impact of a Minor Oil Spillage in the Estuarine

- Niger Delta," Marine Pollution Bulletin vol. 18, no.11, November 1987.
- Ukeje, C. (2001). Youths Violence and the Collapse of Public Order in the Niger Delta of Nigeria. *Africa Development*, 26(1&2).
- Ukeje, C., Odebuyi, A., Sesay, A., & Aina, O. (2002). *Oil and Violent Conflicts in the Niger Delta*. CEDCOMS Monograph Series No 1, Ile-Ife: Centre for Development and Conflict Management Studies.
- UNDP. (2001). Human Development Report. Nigeria 2000/2001 Millennium Edition, UNDP Lagos.
- UNDP. (2006). Niger Delta Human Development Report Garki, Abuja: UN House.
- Whittle, K.J. (1978). Tainting in marine fish and shellfish with reference to the Mediterranean Sea. *In Data profiles for chemicals for the evaluation of their hazards to the environment of the Mediterranean Sea*, 3, 89-108, Geneva: U.N.E.P.
- World Bank. (1995). Defining an Environmental Development Strategy for the Niger Delta. Vol.2, Washington D.C.
- World Bank. (1996). Nigeria Poverty in the midst of Plenty: The Challenges of Growth with inclusion. May 31, Report No 14733-UN.

World Bank. (2000/2001). World Development Report. Washington D.C.

World Bank (2006), Poverty Net (<a href="http://web.worldbank.org">http://web.worldbank.org</a>).

# **ABOUT AUTHORS:**

Abosede Babatunde, Ph.D., Peace and Conflict Studies Programme, Institute of African Studies, University of Ibadan, Nigeria.