



## **Social Impact of Environmental Change on Rural Communities: A Case Study of the Niger Delta Region, Nigeria**

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### **ABSTRACT**

*The study examined the social impact of environmental changes on selected rural communities in Nigeria Niger-Delta. The data were generated from literature materials and oral interview of respondents over a period of 18 months. This touches on social and cultural dislocations, political and ethnic conflicts, as a result of environmental degradation occasioned by oil exploitation and exploration. It concludes that broadening and strengthening rural livelihood as well as concerted efforts by all stakeholders at environmental reclamation and sustainable use of the environment, will go a long way in the social and economic stability of the region in general and the rural communities in particular.*

**Keywords:** *environmental change, social impact, rural communities, Niger-Delta; Nigeria*

### **INTRODUCTION**

The livelihood activities in the Niger-Delta of Nigeria have generated substantial uncertainty for over two decades as a result of oil exploration and subsequent environmental changes. The management of natural resources and institutions like land and water, system of marriage and family settings, ways of organizing political, social and economic, as well as religious units, have all been associated with indigenous economic livelihood. Modifications or destruction in these institutions are bound to lead to changes in the social and livelihood structure of the community. Eteng (1998) observed that oil bearing Niger-delta communities have remained grossly socio-economically dependent and underdeveloped, persistently disempowered, socio-economically marginalized and psychologically alienated despite its abundant natural and human resources. According to Suberu (1996), the difficulties and deprivations of the oil producing communities in the Niger-delta have invariably brought them into direct confrontation with the oil prospecting companies in the region and the government. Thus, the communities have challenged the 'environmental recklessness' of the oil companies that have led to the dislocation of their indigenous economic means of livelihood.

## **OBJECTIVES OF THE STUDY**

The Niger-Delta has for some years been the site of major confrontations between the people who live there and the Nigerian government's security forces, resulting in extra-judicial executions, hostage taking, arbitrary detentions, and draconian restrictions on the rights to freedom of expression, association and assembly. The study examines how tension occasioned by modification and destruction of socio-economic systems of indigenous livelihood due to environmental changes have impacted on the lives of the indigenous people in rural communities of the Niger-delta. Specifically, the study:

- a. Identifies changes in environmental condition of the region;
- b. Identifies specific social changes that have occurred in the region;
- c. Determined the link between environmental changes and social changes;
- d. Make recommendations on the way forward.

## **RESEARCH METHODOLOGY**

### **The Study Area**

The Federal Republic of Nigeria covers an area of 923, 7685 km<sup>2</sup> on the shores of the Gulf of Guinea. It has Benin on its Western side, Niger on the North, Chad to the North-East and Cameroon to the East and South-East. It has the largest population of any African country, although there have been wide discrepancies in estimates of the total. The United Nations' (UN) estimate of the 2000 population is 116.9m, with a growth rate of 2.6%, while the World Bank estimate for 2000 is 126.9m with a growth rate of 2.4%. The provisional 2006 population estimate is 140m people. Its population is extremely diverse with well over 250 ethnic groups, some numbering fewer than 10,000 people. Ten ethnic groups including Hausa -Fulani, Yoruba, Ibo, Kanuri, Tiv, Edo, Nupe, Ibibio and Ijaw account for nearly 80% of the total population.

### **The Niger-Delta Region**

The Niger-Delta as the low lying actuate deltaic plain with a Northern apex a little South of Onitsha at Aboh, a Western Apex by the estuary of Benin River and an Eastern apex at Imo River estuary. The southern most part is believed to be at palm point, South of Akasa at the Nun River (World Bank, 1995). The temperature ranges from 20°C at night and 30°C in the day. Niger -Delta covers about 105,000 km<sup>2</sup>, which is about 11% of the total area of Nigeria. It is the largest Delta in Africa (Osuntokun, 2000) and the average population growth rate of the area is 2.7% as against 2.4% from the rest of the country, with life expectancy of 45 years compared to Nigeria's national life expectancy rate of 57 years (Okecha, 1995). It has a total surface water of approximately 264 X 109m<sup>3</sup> (Gbadegesin, 1998). About 32% of Nigeria's 31 States make up the region. The study however, focuses primarily on the oil rich states of Akwa Ibom, Bayelsa, Cross River, Delta and Rivers.

## **SAMPLING AND ANALYTICAL METHODS**

The study was conducted using historical perspective, literature materials as well as direct interview with respondents using the focus group interview guide and structured interview schedules. Two classes of focus groups were used based on age and key informants were interviewed. The target population included adults from 35 – 59 years of age, and elders from 60 years and above. Statistical tools such as frequencies and percentages, and qualitative analysis were used for data analysis and interpretation.

## RESULTS AND DISCUSSION

### Environmental changes in the Niger-Delta

Okecha (2000) reported that between 1979 and 1990, the oil companies operating in the Niger-Delta reported about 3000 incidents of oil spills. Within this period, over 2 million barrels of oil spilled into Nigeria's terrestrial, coastal and offshore marine environment. Between 1990 and 2006, several incidents of oil spills have also been reported in the region. The in-depth interviews and review of materials from the print media reveal that there have been about 1000 incidents of oil spills between 1990 and 2006. Oil spillage results in the contamination of rivers and other inland waters that serve as sources of drinking water. Heavy contamination results in the death of fish and when spilled oil is ingested by fish, it becomes unpalatable and poisonous. Mangrove swamps that provide nurseries and feeding ground for many commercially important species of fish and crustaceans are destroyed by spillage. Thus, petroleum production activities have resulted in the rapid reduction of aquatic life in the Niger Delta. The ground water resources are also contaminated as shown by the rise in the Maximum Permissible Concentration (MPC) of crude oil found in the ground water in the Delta region. For instance, the Port Harcourt (in Rivers state) area has an MPC of 1.8 milligram per liter as against 0.1 milligram per liter recommended by the World Health Organization (Akingbade, 1991). The air is also densely polluted due to continuous gas flaring and the release of other injurious petrochemicals into the atmosphere.



A 72-year-old Chairman of Oloibiri Council of Chiefs who was 19 years old in August 1953, when Shell D' Arcy (as SPDC was then called) moved to the community for exploration has this to say:

*Shell started pumping crude oil from the wells, through pipelines to Port-Harcourt, the Rivers State capital in 1958 and shipped to the Western civilized world. You cannot fathom the destruction, the devastation, the pollution and environmental degradation we have suffered and will continue to suffer. There is nothing to show for having crude oil in the last 50 years. We cannot count the number of times oil spills have polluted our rivers and farmland, with gas flaring polluting the environment.*

An Emeritus Professor of History and an indigene of Bayelsa State in the Niger Delta assert that:

*Oloibiri (the community with the first oil well in the region) is marked by one abandoned oilrig and the entire surrounding countryside shows no evidence of its historic impact on the Nigerian national economy and politics. The oil industry has simply moved on and out of Oloibiri, leaving it to the wilderness and to Oblivion. Oloibiri (2006), fifty years after its historic place in the Nigerian Sun, is a reflection of what is likely to happen to the rest of the Niger Delta, in probably less than fifty years.*

It is instructive to note that about 75% of the indigenous people of the area engage in farming and fishing using traditional methods. The land is therefore crucial to the survival of the people of the Niger-Delta. The same is true of the rivers where the people do their fishing (Osuntokun, 2000).

### **Social Changes in the Niger-Delta**

High rate of migration from the region: Madubuike (2005) opined that between 1987 and 1995, 70% of palm wine tappers and 65% of fishermen had migrated to neighbouring states or countries to seek alternate means of survival as a result of the devastating impact of oil spills on the object of land, water and labour.

Reduction in Life expectancy: The region is host to two of Nigeria's three refineries, one petro-chemical plant, numerous oil wells and oil fields located on individual and communal lands, rivers and creeks, as well as oil pipelines criss-crossing the landscape. Also, there are over four gas flaring stations that have been burning continuously for twenty-four hours and seven days a week for the past 35 years, at very close proximity to human habitation. The atmosphere is therefore, highly polluted with hydrocarbons and other cancergenic substances. This, in addition to extreme poverty, accounts for the life expectancy of 45 years compared to Nigeria's national life expectancy rate of 57 years (Okecha, 1995). A high infant mortality rate and prevalence in water-borne diseases due to inadequate access to safe drinking water further compounds the health hazards and also affects the attitudes of the people towards death.

Change in livelihood activities: Apart from the serious health issues raised by the high level of pollution, there is the issue of the dislocation of indigenous labour from traditional livelihood activities like farming, fishing, canoe making and palm wine tapping, to oil wage labour such as office cleaners, drivers, messengers, cooks and stewards, etc, which are not in sufficient supply. The large gap between the demand and supply of wage labour and the high level of poverty in the region due to traditional livelihood dislocation has given rise to a high number of hungry, angry and frustrated citizenry in the region. Kidnapping for ransom is now a booming business in the region, and foreign oil workers are no longer the only targets. Abductors now go after rich natives, local professionals, top members of the ruling class, and anybody perceived to be rich enough to pay the ransom.

Intra-communal conflicts: The study reveals an intricate psychological interdependence between indigenous economic livelihood dislocation and intra-communal conflicts in the region. Bassey (2002) observes that the psycho-cultural dispositions of indigenous economic livelihood determine the overall level of conflict in a society in terms of 'shared assumptions, perceptions and images about what people in the society value, their definition of friends and foes.' The study shows that 70% of respondents consider the intra-communal conflicts as oil motivated, 25% view it as a result of land dispute, while 5% think it is a colonial mentality.

No longer hospitable to certain categories of visitors: The British imposed their rule on the Niger Delta by fraud and treachery (many of the Chiefdoms, City, State, Kingdoms and autonomous communities of the Niger Delta had, following the Berlin treaty of 1855, been cajoled into signing a so-called treaty of protection and friendship with British agents (Naanen, 2001). The treaties did not take away the sovereignty of the Niger Delta entities involved. The treaties operated very much the same way embassies

and High Commissions function in contemporary world. Britain however, was to use these seemingly innocuous treaties between sovereign equals as the basis for the annexation of the signatory States. In a petition based on these facts of history sent to the British Government in 1956, the Conference of Rivers Chiefs and people stated that: ‘by the terms of those instruments neither Her Majesty the Queen nor our forbears, both parties to those treaties, had any the least intention that our Rivers country, our markets and our entire territory should be ruled by a Government which has its headquarters at Enugu or Ibadan or Lagos. Sir, your Excellency knows more than we do that in the context of the Constitutional Laws of the Empire the Rivers State that came under British protection by those Treaties, as distinct and different from some other parts of Nigeria that were conquered, ceded or occupied for the mere asking, are not part of the British Empire. They are protected States within the Empire and really are still foreign territories in the tenets of international law’. This agreement, warmth and hospitality of the people were abused by the government and oil explorers who forcibly took over the governance of the region and its resources, and in the process dislocate the people from their indigenous means of livelihood and survival, without an alternative. This has made the people of the region, especially the youths to become suspicious of every overture of the government, the oil companies and their agents.

**High rate of prostitution:** The below national average life expectancy rate in the region is further enforced by the high rate of prostitution in the region, with the resultant highest HIV/AIDS prevalence level in the country. Colonialism and subsequent oil exploration in the Niger - Delta deconstructed traditional values, social relations and means of subsistence livelihood in the region, without providing suitable alternative models. The management of natural resources and institutions like land and water, system of marriage and family settings, ways of organizing political, social and economic, as well as religious units, have all been associated with indigenous economic livelihood. Modifications or destruction in these institutions are bound to lead to changes in the social and livelihood structure of the community. This makes a lot of young and beautiful girls in the region to have extra marital relationships with oil workers for monetary gains, with expatriates being most preferred. This of course, also contributes to the tension in the region as the young men see male oil workers as rivals.

**Insecurity and high rate of other criminal activities:** The security agencies have not been successful in ensuring the security of life and property in the region despite the huge budgetary allocation for security every year. ‘It is a matter of concern that the security agencies have been totally helpless in securing the release of kidnapped victims’ (Arowolo, 2008). The rampant ‘criminality’ is an indication that security in the region has almost collapsed.

### **Relationship between Environmental Changes and Social Changes**

Firstly, changes in the environmental conditions of the Niger-Delta region has led to structural changes in their livelihood activities. The indigenous livelihood activities of the indigenous people of the Niger Delta included: Fishing, farming, Canoe carving, pottery, and salt making, arts and crafts, as well as wine and gin distillation. These indigenous livelihood activities have been dislocated. The dislocation of these indigenous livelihood activities due to oil exploration and production and subsequent environmental degradation, has affected the economic conditions of those whose livelihoods were dependent on their existence and functional values.

The waters for fishing and salt making are polluted, forcing fisher folks and salt makers out of work, frequent oil spillage render farm-land useless for agricultural purposes forcing farmers out of work, canoe carvers cannot continue their trade without the fisher folks, the clay used for pottery is also affected by oil spillage, also forcing potters into the job market. Since crops can no longer be grown, the few economic trees are used-up by carvers without replacement, forcing them into the job market as well and a ban by the government on the distillation of local gin also sends gin makers into the job market.

This results in a large population of economically dislocated indigenous people who are poor, unskilled and illiterate, with a large household size that can barely fend for themselves let alone pay to send their children to school, surrounded by affluence displayed by the oil companies, their staff, government officials and their cronies.

Put differently, Naanen (1995) argues that Ogoni land (a community in the region) and by extension the entire region, graphically typifies the paradox of ‘pervasive underdevelopment’ and ‘pauperization’ amidst immense oil wealth, owing to systematic disequilibrium in these relationships.

Historically, the people of the Niger-delta were known for their hospitality to visitors. It was in this sense that their forefathers signed an accord for mutual protection with the British colonial government which was later abused and used as a reason to colonize the region. However, gross degradation in the environment due to oil production and the failure of various governments and agencies to provide complementary or alternatives to loss economic livelihood activities have forced individuals, groups and communities to resort to conflict as a means of survival.

Secondly, the religious beliefs of the people in pre-oil exploration era were tied to their livelihood strategies which were believed to have originated from their ancestral gods. This belief system provided the necessary channel by which the people oriented themselves to the environment in ways they find satisfying and also help to explain their actions or inactions. Some of these ancestral gods were believed to dwell in the water, land, forest and air. To the adherents, the pollution of these places by oil exploration and production has desecrated the abode of their ancestral gods which results in wrath against the adherents if left unchallenged. According to 95 years old Chief Kiebel from Ogoni land, Beka (goddess) possesses the power of life and death which made every Ogoni to pay homage to her during farming and fishing season. Changes in livelihood activities occasioned by environmental degradation and influence of Christianity which came with colonization have reduced the number of her adherents drastically, thereby, changing the religious life of her people.

Changes in the livelihood activities of the people due to environmental changes have therefore ripple effects on the religion, social capital, tradition and the entire socio-cultural nexus of the people of the region. This touches on social and cultural dislocations, political and ethnic conflicts. All the respondents (100%) in the FGD group unanimously agreed that their indigenous livelihood activities have been dislocated. About 68% agreed that the British colonial influence in the region, which started in 1900, initiated the process of dislocation, while 22% believe that oil exploration is responsible for the dislocation. The present rural livelihood situation in the region is pathetic and violence and hostage taking seems to be an alternative livelihood strategy.

Of all the forty items of the FGD guide, 100% of the respondents agreed that oil spills and oil activities were major factors in post-colonial dislocation of indigenous rural livelihood in the region. It was generally agreed that colonization started the process of livelihood dislocation while oil exploration and production are completing it.

Also, there is an important interface between livelihood and intra-communal conflicts which ensues among competing interests over resources available in the region. For instance, all the organizations competing for control of resources like oil, in spite of their differences unanimously agree that the motivating factor in the intra-communal conflicts in the area is premised on the perceived dislocation of indigenous economic livelihood caused by oil exploration and production activities in the area. The dislocation of the indigenous livelihood of the study population and the consequent underdevelopment of its resources and cultural values has led to violent conflicts within communities and among communities in the Niger Delta. It was generally agreed that the extent to which a person or group of persons get involved in conflict is directly linked to livelihood and survival. This gives a general understanding of the

forces behind ethnic militias in the region and hostage taking. This leads to further dislocation and conflicts. In an answer to a question on causes of livelihood dislocation and intra-communal conflict, a 45-year-old respondent from Ogoniland has this to say ...“dislocation of indigenous economic livelihood is a colonial mentality which started in Ogoniland in 1900 through British invasion and subsequent crude oil exploitation and its pernicious effects on land and water. All these led to intra-communal conflict in Ogoniland”. Becmene, a 40-year-old fisherman claims the conflicts in the region are because “we don’t see land to farm and fish to catch in our water again. The fish has run away because of oil spillage on our waters. So our people fight because of these”.

## **SUMMARY OF MAJOR FINDINGS**

Oil exploration, production and gas flaring in the Niger-Delta have degraded the environment and have a ripple effect on other aspects of community life in the region.

All the respondents agreed that their indigenous economic livelihood has been dislocated due to environmental degradation occasioned by oil exploration.

Dislocation of indigenous economic livelihood has caused outward migration of indigenous labour force.

In spite of the dislocation of indigenous livelihood activities, activities like farming, fishing, canoe carving, palm wine tapping and distillation of gin are still cherished and desired.

The desire to hold on to their indigenous economic livelihood enhances conflicts when individual, family, kindred or community ownership rights of land and water are threatened.

Oil spills on farm land and fishing waters often instigate and intensify bloody inter and intra- communal conflicts among various interest groups over compensation benefits.

## **RECOMMENDATIONS**

The prolong conflicts in the region is connected with the people’s psychological attachment to their indigenous economic livelihood and a fear of a future after oil exploration, with nothing to show for the oil, because of the degree of environmental degradation and pollution. To facilitate peace in the region, there have been series of developmental strategies such as Niger Delta Development Board (NDDDB) which was established in 1961, Oil Mineral Producing and Development Commission (OMPADEC) in 1992, Petroleum Trust and Development Fund (PTDF) in 1973 and of recent, the Niger Delta Development Commission (NDDC), consultations, dialogue and consensus building. To contain the growing criminality, the Federal Government has also strengthened the military operations by the Joint Task Force in the region. All these have however, failed to meet the developmental needs and aspirations of the people and restore peace because they are mere palliative.

At the heart of the escalating crisis in the creeks is the chaotic struggle between the people of Niger Delta and the Federal Government to control the region’s rich oil resources (subsistence struggle). A workable alternative to foster peace and development in the region may therefore entail ensuring that Nigeria is a true federation, with strong federating units and a weak centre, dislocation of the economic interest built by external forces by allowing resource control, implementation of the indigenization policy of the Nigerian government and the restoration of the indigenous economic livelihood of the people or the provision of acceptable alternative models.

Also, the oil companies must be made to observe international standards in their operations and adequate compensation paid whenever there are incidents of oil spillage.

Cultural identity formation by the indigenous people will enhance their ability to speak as one and reduce conflicts occasioned by conflicting individual and communal interest.

Indigenous social institutions like the family, religion and the traditional political system should also be strengthened as these are all agents of social control and will assist in the enforcement of cultural values. The oil companies had often adopted the tactics of divide and rule and this has always back-fired. Oke (1996) emphasized the need to live in harmony with the natural environment in a give-and-take relationship. In other words, any form of threat to indigenous economic livelihood of the people is a threat to peaceful coexistence in the area. The oil companies should live up to their social responsibilities to the region, observe international standards in oil exploration and check environmental degradation.

A free and fair democratic process cannot be compromised in the volatile region with a lot of people with vested interest vying for positions in government because it is the easiest way to have access to the oil wealth. Ensuring that the people of the Niger delta are allowed to choose their leaders and representatives at all levels will also enhance adequate representation of the people, peace and development.

## CONCLUSION

The study was carried out in the Niger Delta region of Nigeria, using historical perspective, oral interview and review of literature materials. It examined how tension occasioned by modification and destruction of socio-economic systems of indigenous livelihood due to environmental changes have impacted on the lives of the indigenous people. The indigenous livelihood activities of the people include fishing, farming, palm wine tapping, canoe making, etc. These have been dislocated giving rise to conflicts and other social changes. These trend can however, be stemmed by broadening and strengthening rural livelihood activities. This could be by cultural identity formation by the people and strengthening of rural social institutions, as well as the constitution of a proper representative forum to monitor development activities in the region by bringing stakeholders together at regular intervals, resource control and a free and fair democratic process where people at the grass roots are allowed to choose their representatives at all levels.

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