

RURAL HOUSEHOLDS PERCEPTION OF THE IMPACT OF CRUDE OIL EXPLORATION IN OGBA/EGBEMA/NDONI LOCAL GOVERNMENT AREA OF RIVERS STATE, NIGERIA

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ABSTRACT

Ogba/Egbema/Ndoni local government area of Rivers State, Nigeria is one of the largest reservoirs of crude oil in Nigeria and has experienced oil exploration and exploitation activities for many decades. This study assesses rural households' perception of the impact of these activities on their environment, health and socio-economic lives. Findings revealed that oil exploitation and its attendant pollution had impacted negatively on the socio-economic activities of respondents compelling them to combine farming activities and fishing with trading as alternative survival strategy. Oil exploitation was linked to pollution of the air, soils, waters and the moral fabric of the communities. About 42% of the inhabitants were engaged in farming prior to oil exploration, 38.09% in fishing while 19.05% were engaged in hunting but currently 19.05% were engaged in farming, 14.29% were engaged in fishing and 11.00% in hunting, while 26.00% now combine fishing with trading and 28.57% combine farming with trading. The high cases of sexual promiscuity, prostitution, sexually transmitted diseases, high rate of school dropouts, broken homes and unwanted pregnancies among others in the area were linked to activities in the area. About 38% of the habitants reported fever due to heat generated by gas flares, while 23.81% and 19.05% indicated various gastrointestinal disorders contacted by drinking rain water, water from polluted rivers and streams or the consumption of fish from polluted water bodies. Another 19.05% suffer from various respiratory ailments such as bronchitis, asthma, cough asphyxiation as well as ocular diseases (4.76%). This study indicates that from the perspective of the rural farmers, the negative impacts of oil exploitation activities greatly outweigh the benefits derived.

Key words: rural households, perception, impact of crude oil exploration

INTRODUCTION

The earth's renewable resources are perhaps the only sound basis on which to build hopes for future prosperity. For example, over-exploitation of limited inshore fisheries and destruction of vast areas of tropical forests to extract valuable hardwoods have proved to be short-lived and shortsighted policies. Similarly, the effects of crude oil exploration and exploitation that involved the shooting of dynamite cause seismic waves, which in turn damage buildings, crops and other landed properties of oil bearing communities. The effects on buildings result in residual stress, which further deteriorates the property or infrastructure. The transverse lines on lands destroy vegetation, food, plants of medicinal values, economic crops as well as shrines and ponds. The exploration of crude oil in Nigeria is a major industrial development but its negative consequences concern the destruction of delicate ecology, which is a main source of livelihood in the oil-bearing communities. In the process of oil exploration, lands are acquired where pipeline terminals and platforms are sited. When land is cleared for the laying of pipes for example, agricultural lands and ponds are usually destroyed. The effects of these may completely change the social, economic and cultural life of the communities where oil exploitation is taking place.

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Oil pollution according to IPS (1990) is a result of the alteration in soil/water natural composition as a result of contamination by crude oil or a sudden change in natural soil/water processes with concomitant net detrimental effects on soil biota, composition, quality, fertility and crop performance. If spillage is within tolerable threshold of most soils, such soil and environment cannot however be regarded as polluted. Omuta (1985), on investigating the land use pattern and environmental decay in Isoko Local Government Area (LGA) of Bendel State, observed that the most visible way in which petroleum production has affected the environment is through vegetal destruction via the construction of camp sites, flare sites, drilling rigs, flow stations, saver pits, the laying of pipelines etc. Vegetal re-growth problem also exist due to the effect of cement left in the soil as a result of the cementing of the oil well site during exploration and exploitation. In the same vain, the ecosystem and the aesthetics of the environment are destroyed during the laying of the pipelines.

The effect of oil in aquatic system is perilous. It distorts the beach aesthetics and depletes fisheries potentials. It also impacts on water productivity and human health. Like in terrestrial oil pollution, initial impact of oil on aquatic system manifests in the suffocation of native biotic communities due to the body of the oil covering water surfaces in such a way that primary producers and higher species in the food chain become impacted (Nelson–Smith, 1979). Massive exploration of crude oil generated gas is continuously burnt in the environment as flares due to pure technology. Flaring can be described as wasteful burning of crude oil associated gases, which in turn produces enormous quantity of greenhouse gases that contribute immensely to increase the global warming, causes severe economic and ecological impacts on the immediate oil producing communities. Isichei and Stanford (1976) noted that plant growth is generally suppressed due to effects of gas flares, which diminishes the value of agricultural productivity. Omuta (1985) in the same vain noticed that flares generate tremendous heat, which makes plant growth and man's activity inconducive in areas where it is carried out. Odu (1989) observed that the noise that gas flaring generates impairs hearing and causes skin burn. According to him, visible effects of gas flaring in Egi in Ogba/Egbema/Ndoni LGA of Rivers state causes severe corrosion of corrugated sheets used in building and other metals due to acid rain.

Odu (1992), argued that exploration and exploitation of oil resources, however valuable to the nation, have adverse effects on values of landed properties and farmlands. For example, oil spillage can destroy farmland and sometimes where fire occurs may completely destroy lives and properties. Idoniboye–Obu (1992) noted that the disturbance of the ecosystem by pollution leads to poisoning of myriad of food chains that bring about genetic mutations like cancer. Commenting on the relationship between the oil company workers and young girls in their area of operation (FeeFegha, 1992), noted that when oil workers arrive to prospect for oil, in a community they lure the young girls and married women into illicit sexual relationships. This romance have always resulted in high rates of prostitution, outbreak of sexually transmitted diseases, high rate of teenage girls school dropout to practice the stock in trade and several cases of unwanted pregnancies. This study assesses the rural people perceptions of the impacts of oil exploitations in Ogba/Egbema/Ndoni Local Government Area of Rivers state, Nigeria.

METHODOLOGY

The study was conducted in Omoku in Ogba/Egbema/Ndoni (ONELGA) LGA of Rivers State, Nigeria with a land area of 1216 square kilometer. According to the 1991 National Population census, this town harbours 80, 000 people out of the total of 225, 000 people in the whole LGA. It is made up of four villagers. It is bound in the north by Anambra State, in the

south by Ahoada, in the east by Egbema in Imo state and in the west by Sagbama in Bayelsa State. The occupation of the people of this area is predominantly farming and fishing. Their soil is endowed with abundant mineral resources like crude oil and gas. They are the highest oil producing community in the country with 21-23% of the Nation's gas reserves.

Forty two structured questionnaires were administered to the rural people (chiefs, village heads, youth leaders, individuals). On the whole the 42 respondents were distributed, Egi 12(92.31%), Igburu 10(84.62%), Obagi 10 (79.92%), Obiricom 9(69.23%). all in Omoku (ONELGA LGA), However due to high level of illiteracy of the people most families were just interviewed. The oil workers who were handy in their make-shift camps were also interviewed. The administered questionnaires were collected and analyzed using simple descriptive statistics.

RESULTS AND DISCUSSION

Table 1 showed that 42.86% of the inhabitants were engaged in farming prior to oil exploration, 38.09% in fishing while 19.05% were engaged in hunting while currently 19.05% inhabitants are farmers, 14.29% fishermen and 11.00% are still just have hunting as their job while 26.00% inhabitants now combine fishing with trading and 28.57% now combine farming with trading to be able to make ends meet.

Farming, Fishing and hunting which were the basic occupation of the people of Omoku in Ogba/Egbema/Ndoni L.G.A (ONELGA), has been partially abandoned as a result of dispossession of their lands by the oil companies, which explore oil on these areas. Farming activities have been seriously affected and because of the destruction and despoliation of the soil ecology, there is a shift in the occupation of the people who now combine farming with other professions to eke out a living. As a result of oil exploration and exploitation, hunting and fishing have also bee combined with other menial jobs as most of the forests have been stripped of their natural resources (plants depleted and animals migrated to different ecological zones). Equally the people cannot fish effectively because the water bodies are polluted and in most cases does not support aquatic life.

The perception and belief of the people was that the land is no more fertile due to oil spill and gas flaring, the hunters believe that animals ran away due to noise produced by the exploitation activities of the oil companies while the fishers claimed that they left fishing because of dearth of fishes in the water bodies either due to pollution of the streams by oil spills, noise generated by the electric boats used by the oil companies or thermal heat from gas flaring. The other inhabitants who went into other trades said they did so in order to sustain themselves and family economically.

Table 1: Impact of oil exploitation on occupation

Occupation	Prior to Oil Present exploration %	during exploration %
Farming	18 (42.86)	8 (19.05)
Fishing	16(38.09)	6 (14.29)
Hunting	8 (10.05)	5 (11.00)
Fishing / Trading	0 (0.00)	11(26.00)
Farming / Trading	0 (0.00)	12(28.57)
Total	42	42

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Table 2 showed that 57.14% of the inhabitant responded that gas flaring and acidity in the soil reduced crop yield while 42.86% of the respondents indicated ignorance of the consequence of such activities.

Table 2: Perception of farmers on crop yield

Measures	No of respondents	Percentage
Reduced crop yield	24	57.14
Ignorant	18	42.86
Total	42	100.00

Table 3 showed the various impacts of oil exploitation on health of the inhabitants with 38.10% of the habitants reporting that they were affected by fever due to heat generated by gas flare and pollution of their environment including their waters 23.81% and 19.05% of them indicated that they suffer from various gastro-enteric disorders contacted by drinking rain water, water from polluted rivers and streams or the consumption of fish from polluted water bodies. Another 19.05% complained that they suffer from various respiratory ailments such as bronchitis, asthma, and cough asphyxiation. Ocular diseases accounted to 4.76%.

Table 3: Health effects of crude oil exploration

Diseases	People perception No infected	Percentages
Fever	16	38.10
Gastroenteritis	10	23.81
Respiratory disorder	8	19.05
Cancer	2	4.76
Death	2	4.76
Total	42	100.00

Gas flaring results in many health problems, among which are respiratory disorders, headache, cardiac arrests, cancer, eye disorders and death. The poisonous gases usually emitted by incomplete combustion of hydrocarbons like carbon monoxide is a serious asphyxiant, which normally suppresses the supply of oxygen in the environment. The carbon monoxide when inhaled enters into the blood stream and displaces the blood oxygen by combining with blood hemoglobin to form a deadly compound known as oxy-hemoglobin which may choke up cells and cause organ malfunction (Idoniboye-Obu, 1992; Odu, 1989).

Table 4 shows that 66.67% of the respondents indicated that oil company workers sexually harass the young girls in the study communities while 33.33% indicated contrarily.

Table 4: Impact of oil exploitation on Sexual harassment

Response	No of Respondents	Percentages
Yes	28	66.6%
No	14	33.33%
Total	42	100.00

The advent of crude oil has caused a lot of havoc to the general social and moral life standards especially of the youths from these oil producing communities. The oil company workers entice the young teenagers and married women with money to have illicit sex with them. This has resulted in sexual promiscuity, prostitution, high incidence of sexually

transmitted diseases, high rate of school dropouts, several broken homes, unwanted pregnancies and death (Feefegha, 1992).

Table 5 showed the few developmental benefits of oil exploitation recognized by the respondents. About 23% mentioned road as benefits from oil companies, 21.43% mentioned electricity, 19.05 mentioned education, 11.91% mentioned water provision, while 7.14 could not indicate any specific benefits

Table 5: Developmental benefits of oil exploitation in the study area

Benefits	No of respondents	Percentages
Roads	10	23.81
Water Scheme	5	11.91
Electricity	9	21.43
Employment	3	7.14
Education	8	19.05
Others	4	9.52
Non	3	7.14
Total	42	100.00

CONCLUSION AND RECOMMENDATIONS

This research has shown that the negative impacts of oil exploitation activities in the research area greatly outweigh the benefits derived. The enormous exploration and exploitation of petroleum resources in the Niger Delta and especially in Ogba/Egbema/Ndoni Local Government Area of Rivers State have imposed severe social, economic and health costs on the people therefore this research recommends that oil companies operating in this area must be encouraged to give employment opportunities to indigenes to reduce the rate of crime and social ills caused by unemployment, skill acquisition centers should be set up to educate and train the youths for self employment, well equipped Health care units should be built in these areas to monitor and control the health hazards caused by oil pollution, there should also be improved compensation scheme for oil spills and other damages to reflect the ever changing economic conditions obtainable in the present Nigeria.

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