

AKSU Journal of Social Sciences (AKSUJOSS)
ISSN: 2504 – 933X
Vol.5,No.1 (December) 2024,pp.146-164
DOI: https://doi.org/10.61090/aksujoss.2024.041
URL: htpp://www.aksujournal.com/vol.5.1

Received: **September 20, 2024**
Published online: **December 30, 2024**

Impact of Oil Exploration on the Socio-Economic Development of Rural Dwellers in Selected Coastal Areas of Akwa Ibom State, Nigeria

Michael Eugene Ekpo
Department of Political Science and Public Administration
University of Uyo, Uyo Akwa Ibom State, Nigeria.
ekpomichael@ymail.com

Ofonmbuk Etido Atakpa
Department of Public Administration
Akwa Ibom State University, Obio Akpa Campus, Nigeria.
ofonmbukatakpa@gmail.com

Nsikak Stephen Edet
Department of Political Science and Public Administration
University of Uyo, Uyo Akwa Ibom State, Nigeria.
nsikakstephen@yahoo.com

Sunday Samuel Ating
Department of General Studies, Maritime Academy of Nigeria.
Sunnymartins5@gmail.com

Abstract
The study examines the impact of oil exploration on the socio-economic development of rural dwellers in selected coastal areas of Eket, Esit Eket, Ibeno and Onna Local Government Areas in Akwa Ibom State (AKS). Three research questions were formulated to guide the study. Major variables were conceptualized to ascertain the cause – effect relationship among the dependent and independent variables of the study. Data were collected from primary and secondary sources using survey and descriptive research methods. The projected population of the study was 554,200 people affected by the activities of oil companies in selected LGAs in AKS (NBS, 2022). A 12 item structured questionnaire were administered on 381 respondents who constituted the sample size determined by Krejcie and Morgan table of 1970. Simple and Stratified Random Sampling Techniques were used for data collection while opinion poll, tabular chart and simple percentage were used to analyzed data. The study revealed among others that: Environmental pollution such as oil spillage, gas flaring, climate change as a result of oil exploration in coastal areas has direct negative effect on the health of rural dwellers in coastal areas in AKS; Oil exploration in the coastal areas contributed to biodiversity loss, low agricultural yield in crops/livestock which hindered farming as the main source of employment to the rural people; Oil exploration contributed to infrastructure decay and environmental degradation which caused decline in the living standard of the rural people in coastal areas of AKS. It recommended that government at

various levels should make laws to regulate the activities of oil companies to guarantee environmental sustainability; encouraged corporate social responsibility, payment of royalty,free medical care, employment,education scholarship and skills empowerment programmes to the host communities to reduce negative impact of oil exploration on the residents.

Keywords: Development, Oil Exploration, Rural Dweller, Socio-Economic Development

Introduction

Crude oil has been one of the main source of revenue to the AkwaIbom State economy and a foremost source of energy. In fact, oil exploration has several socio-economic and environmental implications on the lives and properties of the citizenry, the communities and the society at large.

Ordinioha and Brisibe, (2013 also cited in Twum, 2019) maintains the production of oil and gas in Nigeria became commercialize from 1958 after it was discovered by Shell British Petroleum in 1956 at Oloibiri village in Bayelsa State in the Niger-delta region. Consequently, Adeola, Akingboye, Ore, Oluwajana, Adewole, Olawade and Ogunyele (2022) clearly observed that oil resources supposed to be a source of income generation to the people, and should improve the living conditions of the population if properly harnessed and managed by oil companies operating in the areas in partnership with federal government. However, oil exploration in the coastal areas seems to increase the pains of the rural dwellers more than the gains as result of politics of exclusion, marginalization and neglect of the people of the oil producing areas by the Federal government and multi-national oil companies operating in the area.

On the other hand, socio-economic development entails the process of social and economic transformation in a society which embrace the various changes taking place in the socio-economic spheres of life mostly aimed at advancing the economic nature or living standard of man (Tom, Bassey, Ekpo and Ebong, 2021). For man to attain improved standard of living, the state through its leadership should be seen as central to economic and social development by providing the needed economic policies and enabling environment for economic growth and prosperity of the citizens (Eminue, 2009, cited in Ekpo, Umoh and Udoaka, 2023). According to World Bank report (2012), human development indicators of socio-economic development in a state include: Healthy life, education and decent standard of living which are far below average in AkwaIbom State.

Historically, the host communities have been excluded from having a fair share of the revenue and other benefits generated from resources extraction in their areas, thereby resulting in lack of compensation for, or reinvestment of oil resources in "host" communities. Most of the host communities of crude oil deposits areas suffer from lack of infrastructure, arable soils, unclean water, and their biodiversity spices are endangered/violated by crude oil exploratory activities, without adequate compensations or remedial actions taken by oil companies and the government to cushion the negative impact on lives and properties of residents.

Studies conducted by Nkem, Topp, Devine, Wen-Li, and Ogaji, (2022),Umar, Abdul, Khanan, Shiru, Ahmad and Baba (2021), Tom, Bassey, Ekpo and Ebong, (2021) and Effiong, Etuk and Iyamah (2023)shows the impact of oil exploration on the socio-economic development in Niger-Delta region and the results revealedthe denial of the people to the main means of livelihood through oil exploration which increases in the poverty rate among residents in the host communities. This paper observed lack scholarship schemesin host communities as corporate social responsibility which often impactindividuals, communities, organizations, and entire societal life. Hence, the continuous negligence of the well-being of the people by federal government and oil companies operating in coastal areas and this constitute a gap which necessitated this study to fill the gap. However, few studies have been carried out to determine the impacts of oil exploration on the community's social and economic activities, sustainable environmental management, and chemical composition of drilling but non examined impact of oil exploration/extraction on socio-economic development in the coastal areas in Akwa Ibom State. Therefore, this study aims at investigating impact of oil and gas exploration on the socio-economic development of the rural dwellers in areas such as health, agriculture and infrastructure.

Statement of the Problem

The coastal areas of Akwa Ibom State in Niger Delta region of Nigeria is one of the most underprivileged parts of Nigeria despite being the mainstay of the country's economy. The

problem of oil exploration in the coastal areas in Akwa Ibom manifest in form of total neglect, marginalization and abandonment of the host communities by oil companies operating in the oil rich communities, who often work in collaboration with the federal government of Nigeria to denied landowners, residents and people of the oil rich communities access to the abundant natural resources of the area. The main problem of exploration can be attributed to drilling operations, gas flaring and oil spillages/leaking of natural crude oil during the production of oil and gas also have effects on the environment worldwide. Additionally, there are numerous dangerous chemicals often released into the atmosphere during oil and gas production processes. The petroleum industry have been accused as global contributor to the increased rate of global warming by emitting greenhouse gases into the atmosphere during production. Oil extraction activities degrade the environment, reducing residents' ability to farm, fish and live in an unharmed environment. Hence, loss of livelihoods contributes to poverty, undermines residents' ability to send their children to school or participate in skills building, and further enhances lack of opportunities.

Therefore, this study identified problem of the environmental degradation as a result of oil exploration in the coastal areas in Akwa Ibom State, to this effect, their land is expose to constant erosion and biodiversity loss. In Ibeno terminal of Akwa Ibom State, the activities of oil companies in the area of oil and gas extraction is accompanied by routine gas flaring and oil spills, thereby leading to pollution of the area. Thus, vulnerability of host communities to climate change and the food crisis is also a major effect of oil exploration in the area. Other impacts of the oil extraction on the communities include flooding, coastal erosion, and sea level rise, among others. Recordshas shown several cases of oil pollution, environmental degradation and devastating abandonment of the people by the government and the companies operating in their terrain. The coastal communitiesare known for agriculture and fishing. Also, the coastal areas play host to Exxon/Mobil, Savanna energy, Frontier oil, Sterling global energy and many other oil companies with about 90 offshore platforms comprising of 300 producing wells at the capacity of producing about 550,000 barrels of oil daily (Osuagwu, 2018, Abraham et al, 2021).This study sought to investigate the various impacts of oil exploration on the socio-economic development of rural dwellers in selected coastal areas of Akwa Ibom State.

Objectives of the Study

The objectives of the study would be:

1. To find out whether, there is any significant relationship between oil exploration and socio-economic development of the rural dwellers of the selected coastal areas in Akwa Ibom State.
2. To assess environmental pollution such as oil spillage, gas flaring, climate change as a result of oil exploration affects the health of rural dwellers in coastal areas, whether oil explorations impact the environment in the coastal areas, and contributes to biodiversity loss, low agricultural yield in crops/livestock and hinders farming as the main source of employment to the rural people.
3. To establish whether oil exploration contributes to infrastructure decay, environmental degradation and caused decline in the living standard of the rural people in coastal areas.

Research Questions

The following questions were asked to guide the study:

1. What are the effects of oil exploration on environmental pollution and health of rural dwellers in coastal areas of Akwa Ibom State?
2. How does oil exploration in the coastal areas affect biodiversity loss, agricultural yield in crops/livestock, and hinders farming as the main source of employment to the rural dwellers?
3. What are the ways oil exploration contributes to infrastructure decay, environmental degradation and decline in the living standard of the rural dwellers in coastal areas of AkwaIbom State?

Conceptual/Theoretical Framework

Concept of Oil Exploration

Oil and gas exploration as the process and methods involves in locating potential sites for oil and gas drilling and extraction. It consist of three main phases namely: geophysical exploration with the geological interpretation of the processed data, drilling and production of oil and gas for commercial purposes (Twum, 2019). In exploiting oil and gas to meet global energy and economic needs extinct animals and causes loss of habitats; aquatic life and fishing as a profession become difficult; the destruction of the ecosystem and loss of biodiversity becomes inevitable. The impact eventually affects human health, people lose their means of livelihood and global warming keep increases. Therefore, sustaining a healthy environment is critical in improving the quality of life and a healthy life span. Hence, environmental health involves preventing or controlling disease, disability, and injury associated with interactions between the environment and humans (UN, 2015).

Concept of Development and Socio-Economic Development

Development refers to the general improvement in economic, social and political conditions of the whole society in terms of reduction or elimination of poverty, inequality, injustice, insecurity, ecological imbalance and unemployment within the context of a growing economy (Filani, 2000, cited in Ekpo et al, 2024). The process of social and economic transformation in a society, on the other hand, can be defined as socio-economic development as a byproduct of development. The term "socio-economic development" refers to a variety of changes occurring in the socio-economic sectors of life, most of which are intended to improve the economic nature of man (Tom, Bassey, Ekpo and Ebong, 2021).

Theoretical Framework

This study adopts System Theory (ST) and Community-Based Model (CBM)to the analysis of impact of oil exploration on the socio-economic development of rural dwellers in selected coastal areas of AkwaIbom State. Major contributors to the system theory are Herbert Simon, James March, Talcott Parsons, George Homans, David Easton, E. Wight Bakke, Kenneth Boulding and many others whose ideas led to the development of system theory of administration. These approaches were found suitable to the study because it consider environment as a system of interrelationships and inter-dependency by identifying the various social groups, their interests and integrate them into the community objectives. A system comprises of two or more interdependent parts or sub-systems which interact in some ways and can be distinguished from the environment in which it exist by some identifiable boundaries" (Eminue, 2009, cited in Ekpo et al, 2023). It deals with the complex interdependence between parts, components and processes policy making to affect the people and their environment. Thus, it provides a comprehensive and macro paradigm for studying social environment with details analysis of system components or parts of

environment, and extend discussion to cover human relations, technology and structural dimensions (Eminue, 2009, cited in Ekpo et al, 2023).

ST pursued scientific exploration, understanding, and controlling of systems for improve services to the people. It investigates the components of the phenomena, the interaction between the components, and the relation of components parts and a larger environment. Max Weber, F. Tailor and Fayolopined that for survival of any organization like the way living organism survives, such system should operate an open and not closed system. Also, elements of quality system include: Components/Sub-systems; Connection/interdependence; Structure; Interaction; Input – Output conversion process; System boundaries; Dynamic Equilibrium/ Steady State; Feedback Mechanism and Environment etc. (Eminue, 2009, cited in Ekpo et al, 2023). Adopting the System Theory enable application of the basic tenets on environmental management in reaction to changes in its competitive circumstances, structural design, and experiences in solving environmental, economic and administrative problems in the coastal areas of Akwa Ibom State, Nigeria.

Also, community-based approach was also used to compliment the system theory in analyzing ways of solving the problem of oil exploration and related environmental issues in coastal areas of Akwa Ibom State. Community-Based Model (CBM) enables involvement of the people of host communities in development projects in their areas; hence, it has been adjudged one of the workable methods in the process of socio-economic development in any environment, as this give a sense of participation and ownership of projects to the host communities. The objectives of CBM include to: Increase community knowledge/capacity in sustainable management and conservation in coastal areas; Enhance community participation in identification of social needs, projects, and ownership of the various projects in their respective communities; Restore degraded ecology and establish wildlife game reserve area using community participatory approach; Reduce pressure on natural environmentin coastal areas.

Empirical Review

Abraham *et al.* (2021) investigated the ecological problems prevalent in the Southern part of AkwaIbom State and its associated implications. Seven Local Government Areas within the region were selected for the study. Two (2) villages in each Local Government were further sampled making a total of 14 villages. The study employed both descriptive and quantitative method of data analysis. Twenty-eight (28) structured questionnaires were distributed to 392 respondents from Fourteen (14) communities, together with personal interview conducted at the sampled communities. SPSS manipulation using multiple regression analysis revealed that the Southern AkwaIbom State is heavily endowed with natural resources and in the quest of harnessing the resources, a wide variety of ecological problems emerged such as oil spill, forest destruction, gas flaring, water pollution, air pollution, open defecation, ground water contamination, soil acidity and biodiversity loss.

The study further noted that, given the ever-increasing ecological degradation, the livelihood and socio-economic status of the region have been modified, jeopardized or absolutely destabilized with poor crop yield, fishery loss, soil infertility and land contaminant. It recommended that an impact prediction and proper assessment of anthropogenic activities including mineral and non-mineral exploitation within the area be carried out and such include sand dredging, deforestation, gas flaring as well as oil spill which subsequently impact upon agricultural productivity and environmental resources in the region. The study recommended stakeholders in the various companies operating within the region including oil and gas industry

should inject some funds and re-direct their attention toward effective ecosystem management for improved livelihood sustainability.

Effiong, Etuk & Iyamah (2023) studied the fundamental problem associated with agricultural production in Ibeno Local Government Area of Akwa Ibom State, Nigeria. The study aimed at determining the perceived causes of oil spillage on agricultural lands in Ibeno. Purposive sampling technique was used to select four (4) agricultural cells for the study. Forty respondents were selected from each of the localities making a total of 120 respondents for the study. Data were collected using questionnaires and analysed using frequency, mean scores and ranks. The results showed that majority of the respondents were aged between 26 and 35 years, 71% were males, 41% had secondary level of education. About 58% of the respondents were engaged in fish farming activities. Equipment failure (x=4.56), pipeline corrosion (x=4.05) and pipeline sabotage (x=3.01) ranked 1st and 2nd respectively were perceived as the major causes of oil spillage on agricultural lands in the study area. Also, relationship between host communities and oil companies (x=4.30), economic activities in the communities (x=4.19) and unrest in the communities (x=3.84) ranked 1st, 2nd and 3rd were the major influence of oil spillage on the socioeconomic wellbeing of the respondents. The study concludes that oil spills are caused by pipeline corrosion, equipment failure and sabotage. It recommended use of modern pipes made to withstand stress and strains to avoid oil spillage in the study area.

Ekpo, Atakpa & Umoh, (2024) examined the impact of political leadership on economic development in AkwaIbom State (AKS), anchored on the theoretical expositions of human capital and transformational leadership theories. The study adopted the survey research method, using a sample of 379, drawn from a population of 15,210 elected and appointed public officials from selected MDAs in Uyo, the simple random and stratified random sampling techniques were used to administer a 7-item questionnaire on the respondents. Simple percentages and tables were used to present and analyze the data, while the PPMCC was used to test hypotheses, The study revealed that though political leadership had a significant direct impact on economic development in the improvement of economic indicators in health, education and standard of living of the citizens, it was undermined by leadership corruption, which contributed to high rate of poverty, unemployment, hunger, inequality, political exclusion, instability and crime in Akwa Ibom State. The study recommended policy reforms to reduce economic mismanagement in MDAs; the diversification of economy from oil to agriculture, tourism, aviation, industrialization and entrepreneurship, the training and re-training of public officials to develop competence; the provision of infrastructures, industries and peaceful environment for domestic and foreign investment to enhance jobs/employment opportunities to curb unemployment and youth restiveness.

Methods and Material

The study adopts survey and descriptive research methods. The projected population of the study was 554,200 people affected by the activities of oil companies in above selected LGAs in AKS (NBS, 2022). A 12 item structured questionnaire were administered on 381 respondents who constituted the sample size determined by Krejcie and Morgan table of 1970. Simple and Stratified Random Sampling Techniques were used for data collection while opinion poll, tabular chart and simple percentage were used to analyzed data.

Table 1: Respondents' perception on the impact of oil exploration on the socio-economic development of rural dwellers in selected coastal areas of Akwa Ibom State.

S/N	Questions	Responses/Percentage (%)	
		Yes	No
1	Oil exploration causes environmental pollution and increase respiratory diseases among dwellers of host communities in the coastal areas of AkwaIbom state?	264 (70.6 %)	110 (29.4%)
2	Gas flare, oil spill and climate change are some of the negative impacts of oil exploration in the coastal areas of AkwaIbom state that causes serious threat to environment and health of the residents?	257 (68.7 %)	117 (31.3%)
3	Oil exploration contributes to environmental degradation, poor sanitation and unsafe water for drinking in the coastal areas of AkwaIbom state?	293 (78.3%)	81 (21.7%)
4	Oil companies operating in the coastal areas of AkwaIbom state often provide free medical care for the host communities?	162 (43.3%)	212 (56.7%)
5	The destruction of farmlands during oil spills affects Agriculture as the main source of livelihood and make live difficult in the coastal areas of AkwaIbom State?	200 (53.5%)	174 (46.5%)
6	Low yield in crops, livestock and high cost of living among residents and host communities are attributed to exploration/extraction of crude oil in the coastal areas in AkwaIbom State?	287 (76.7%)	87(23.3%)
7	Oil exploration in the coastal areas of AkwaIbom State has contributed to biodiversity loss, habitat loss and extermination of some species of fish, aquatic animals and crops in the area?	254 (67.9%)	120 (32.1%)
8	Farming, fishing and hunting as major sources of income and employment of the dwellers of the coastal areas in AkwaIbom State has been negatively affected by exploration activities of oil companies in the area?	308 (82.4%)	66 (17.6%)
9	High damages on roads, roof of peoples' houses, schools and hospitals in the coastal areas of AkwaIbom State are results of gas flare, emission of black shoot, acid rain and global warming caused by oil exploration in AKS?	234 (62.6%)	140 (37.4%)
10	Oil companies operating in the coastal areas often performs their corporate social responsibilities by providing infrastructure such as roads, electricity, schools, hospitals and potable water etc. to the host communities in AKS?	102 (27.3%)	272 (72.7%)
11	Poor implementation of environmental protection laws by government and oil companies in the coastal areas of AkwaIbom State contributes to infrastructure decay and environmental degradation?	290 (77.5%)	84 (22.5%)
12	The implementation of the Petroleum Industrial Act 2021 and other environmental protection laws in the coastal areas in AkwaIbom State will help to improve the socio-economic well-being of the residents in AKS?	312 (83.4%)	62 (16.6%)

Source: Field Survey, 2024.

Moreover, to achieve the objectives of the study relevant questions were asked, and survey method adopted to gather data for analysis as thus:

Response to Research Question One

In table 1, the perception of respondents to Q1- 4 provided answer to the effects of oil exploration on environmental pollution and health of rural dwellers in coastal areas of Akwa Ibom State, as 264 respondents which constitutes 70.6 % agreed that oil exploration causes environmental pollution and increase respiratory diseases among dwellers of host communities in the coastal areas of Akwa Ibom state while 110 respondents who represented 29.4% disagreed. Also, 257 respondents which represented 68.7 % agreed that gas flare, oil spill and climate change are some of the negative impacts of oil exploration in the coastal areas of Akwa Ibom state that causes serious threat to environment and health of the residents whereas 117 respondents, representing 31.3% disagreed. To determine whether oil exploration contributes to environmental degradation, poor sanitation and unsafe water for drinking in the coastal areas of Akwa Ibom state, 293 respondents which constitutes 78.3% said oil exploration contributes to environmental degradation, poor sanitation and unsafe water for drinking in the coastal areas of AKS while 81 respondents which represented 21.7% said it does not contributes to environmental degradation, poor sanitation and unsafe water for drinking in the coastal areas.

In addition, 162 respondents which constitute 43.3% agreed that oil companies operating in the coastal areas of Akwa Ibom state often provide free medical care for the host communities whereas 212 respondents representing 56.7% disagreed. The implication of the above data show that only few persons among the rural dwellers in the coastal areas enjoy free medical care while majority of the people do not have access to free medical care as corporate social responsibility provided by the oil companies. Therefore, data from the opinion poll shows about 68.7 % affirmed that environmental pollution such as oil spillage, gas flaring, and climate change as a result of oil exploration in coastal areas has direct negative effect on the health of rural dwellers in coastal areas in AKS.

Response to Research Question Two

The perception of respondents to Q 5 - 8 provides answer to the impact of oil exploration on biodiversity loss, low agricultural yield in crops/livestock, and hindrance to farming as the main source of employment to the rural dwellers in AkwaIbom State. In responding to the questionnaire, 200 respondents which represented 53.5% agreed that the destruction of farmlands during oil spills affects Agriculture as the main source of livelihood and make live difficult in the coastal areas of AKS while 174 respondents which made up 46.5% disagreed. Also, 287 respondents which made up 76.7% agreed low yield in crops, livestock and high cost of living among residents and host communities are attributed to exploration/extraction of crude oil in the coastal areas in AKS while 87 respondents which represented 23.3% disagreed. Concerning biodiversity loss and habitat loss, 254 respondents which represented 67.9% agreed that oil exploration in the coastal areas of Akwa Ibom State has contributed to biodiversity loss, habitat loss and extermination of some species of fish, aquatic animals and crops in the coastal areas in AKS while 120 respondents which made up 32.1% disagreed.

On the other hand, 308 respondents which represented 82.4% agreed that farming, fishing and hunting as major sources of income and employment of the dwellers of the coastal areas in Akwa Ibom State has been negatively affected by exploration activities of oil companies in the coastal areas in AKS whereas 66 respondents which made up 17.6% disagreed. Hence, the implication is that farming, fishing and hunting as major sources of income and employment has been adversely affected by oil exploration activities in the coastal areas in AKS. Drawing from the above analysis, data revealed oil exploration in the coastal areas contributed to biodiversity loss,

low agricultural yield in crops/livestock which hindered farming as the main source of employment to the rural people in AKS.

Response to Research Question Three

The perception of respondents to Q9 – 12 were used to assess the contributions of oil exploration to infrastructure decay, environmental degradation and decline in the living standard of the rural dwellers in coastal areas of AkwaIbom State. To this effect, 234 respondents which made up 62.6% maintained that high damages on roads, roof of peoples' houses, schools and hospitals in the coastal areas of AkwaIbom State are results of gas flare, emission of black shoot, acid rain and global warming caused by oil exploration in AKS whereas 140 respondents which constitutes 37.4% disagreed. Similarly, 102 respondents which constitutes 27.3% opined that oil companies operating in the coastal areas often performs their corporate social responsibilities by providing infrastructure such as roads, electricity, schools, hospitals and potable water etc. to the host communities in AKS while 272 respondents representing 72.7% did not agree. The implication of opinion poll is shows that the host communities are often neglected by oil companies operating in the area for not providing the needed social services and infrastructure to cushion effect of oil exploration on the well-being residents' of the oil producing areas.

In that same order, 290 respondents which constituting 77.5% agreed that poor implementation of environmental protection laws by government and oil companies in the coastal areas of Akwa Ibom State contributes to infrastructure decay and environmental degradation whereas 84 respondents representing 22.5% did not agree. In determining whether implementation of PIA can promote socio-economic well-being of the residents' and host communities, 312 respondents which represented 83.4% agreed that the implementation of the Petroleum Industrial Act 2021 and other environmental protection laws in the coastal areas will help to improve the socio-economic well-being of the residents in AKS whereas 62 respondents representing 16.6% disagreed. Going by the opinion poll, 62.6% agreed that high damages on roads, roof of peoples' houses, schools and hospitals in the coastal areas of AkwaIbom State are results of gas flare, emission of black shoot, acid rain and global warming caused by oil exploration in AKS. The implication of above data revealed that oil exploration contributed to infrastructure decay and environmental degradation which caused decline in the living standard of the rural people in coastal areas of AKS.

Analysis of the Impact of Oil Exploration on the Socio-economic Development of Rural Dwellers in Selected Coastal Areas of Akwa Ibom State

The positive impact of oil exploration according to Twum (2019), Nkem, Topp, Devine, Wen-Li, and Ogaji (2022) and Adeola et al (2022), include the followings. First, oil and gas are main source of revenue generation to government at the various levels such as federal, state and local government areas; second, it serve as an avenue for employment to the people by creating jobs directly or indirectly to the people and as well enhances business opportunities in the area; third, the presence of the oil companies such as Exxon-Mobil, Frontier Oil, Sterling Global, Seven Energy and Savanna Oil and Gas to mention but a few contribute through corporate social responsibilities to infrastructure development such as provision of potable water, electricity, construction of roads, building and equipping schools and hospitals with necessary facilities as well as markets in the coastal areas which help to improve the socio-economic wellbeing of the rural dwellers; fourth, provision of scholarship to students in various institutions and other empowerment programmes; fifth, provision of credit facilities to support livestock farming, aqua

culture development and fishing by giving them boats, granting loans to fishermen and training them on pond cultivation in order to boost their income; and sixth, contributes to the overall economic growth and development of the area and by extension the state by enhancing domestic production of gas for fuel, creating jobs and boosting government revenues which in turn affects the peoples' life in the state.

On the other hand, the exploration and exploitation of oil also have several negative implications on the socio-economic development of rural dwellers in selected coastal areas of Akwa Ibom State. First, it has been a major threat to health of the rural dwellers and most of the health challenges are attributed to the constant pollution on land, water and air caused by exploration and extraction of oil in the area. Second, the aspect of social exclusion by government and oil companies operating in the coastal areas is so pronounce to the extent that the host communities are deprived and marginalized; third, the increasing rate of environmental pollution arising from oil exploration calls for serious concern by the host communities, government and oil companies operating in the area; fourth, oil spill and gas flaring have contribute to water and land contamination and environmental degradation (Abraham et al , 2021); fifth, several infrastructure such as roads, schools, hospitals, houses etc. in the coastal areas are constantly expose to decay as a result of flare gas, oil spills, acid rain, climate change and other activities of oil companies in the area; sixth, extensive pollution accumulated over time ruined the environment and livelihoods of natural resources and standard of living of the people.

In considering the effects of the environmental changes on the standard of living of the people, the destruction of mangrove forest in coastal areas by oil spillage has led to the loss of their source of energy and fuel and building material (mangrove wood) (Chijioke et al., 2018). The environmental predicament has created social and economic deprivation such as income inequalities and poverty which is complicating the development situation in the region (Omohimoria et al., 2014;Amnesty International, 2009 all cited in UNDP, 2016), and this has gradually reduced their standard of living. Due to the economic stagnation, unemployment and poor quality of life (shortage of essential goods and facilities, and unhealthy environment spreading diseases and malnutrition), agricultural underdevelopment from soil infertility, and poverty has become their way of life. Without proper environmental management, the poor in the urban and rural areas suffer from insufficient livelihoods, poor health, and vulnerability which are the key dimensions of human poverty (UNDP, 2016). The economic dimension of social exclusion relates to daily livelihoods; poverty; unequal wealth sharing, low income, non-availability/accessibility of employment to the resource owners. As observed by scholars, foreigners and people outside coastal communities occupies key position while the local dwellers as exposed to menial jobs/contracts in relation to the economic dimension of social exclusion leading to loss of livelihood, loss of traditional occupation and low income due to the environmental effects of oil extraction, unfair oil wealth sharing, unemployment, and inadequate compensation (United Nations, 2015).

Furthermore, poverty has been conceptualized by many authors to mean material lack or multi-dimensional deprivation, and this conception point to the solutions in form of increased income, better health, high literacy (education) and security etc. (Ekpo et al, 2023). Data in BudgIT Research (2021, 2022; NBS Multi-Dimensional Poverty Index, 2022 cited in Okojie, 2023), revealed that Akwa Ibom State is still facing problems of high poverty rate which increased from 51% in 2021, to about 71% in 2023 out of the projected population of 4,979,400 million (NPC, 2022, as cited in NBS, 2022), and the state is ranked 2nd in poverty ratio in south-south after Cross Rivers with 75.5% and Rivers State with 62.4%, who made the 1st and 3rd position respectively.

Whereas AkwaIbom State unemployment rate was 37.7% in 2018, and it rose to 45.2% in 2020, and risen to 67.69% in 2022 which signify that about 1.26 million people are unemployed in AkwaIbom State while unemployment rate in Nigeria has also raised from 33.30% in 2020; to 37.7% in 2022 and it was projected at 40.6% in 2023 (Ekpo, Atakpa and Umoh, 2024).

Consequently, low income levels of most household, makes it difficult for their children to go to school. Poverty at household level discourage parents from enrolling their children in schools. Data shows that Akwa Ibom State recorded 581,800 out-of-school children and was ranked 2nd among states with the highest out-of-school children in the country (NBS, 2020; Federal Ministry of education, 2020 as cited Premium Times August 8, 2021; UN Sustainable Development Goals, 2022). Interestingly, quite insignificant number of people lives above the poverty line in Akwa Ibom in spite of the numerous resources in the state. Also, poverty has caused many families to struggle with malnutrition, illiteracy, diseases, infant mortality and short life span. However, the state government has made tremendous efforts to increase access to education through free and compulsory education policy, but the illiteracy rate of the state is still high. NBS (2022) viewed unemployed person as one who is part of labour force but do not have work for up to 40 hours per week within the reference week. The unemployment rate is the most popular way to quantify unemployment.To corroborate this assertion, the NBS (2021, BudgIT, 2021, all cited in Ekpo et al, 2024) reported increase in unemployment rate in AkwaIbom to about 67.69% and maintained that more than half of the AkwaIbom youths are unemployed and this seems to account for more reason for social crimes perpetrated by unemployed graduates and non-graduates alike in the State today. The accelerating level of prostitution, armed robbery, oil bunkering, cyber-crimes, drug addiction, trafficking, rape, kidnapping and other social vices can be largely attributed to the incidence of poverty and unemployment in the state.

Findings/Discussion of Findings

The major findings of the study include. Firstly, environmental pollution such as oil spillage, gas flaring, and climate change as a result of oil exploration in coastal areas has direct negative effect on the health of rural dwellers in coastal areas in AkwaIbom State. Secondly, oil exploration in the coastal areas contributed to biodiversity loss, low agricultural yield in crops/livestock which hindered farming as the main source of employment to the rural people in AKS. Thirdly, oil exploration contributed to infrastructure decay and environmental degradation which caused decline in the living standard of the rural people in coastal areas of Akwa Ibom State.

The first finding revealed that environmental pollution such as oil spillage, gas flaring, climate change as a result of oil exploration in coastal areas has direct negative effect on the health of rural dwellers in coastal areas in AKS, this finding is supported byAbraham, Evelyn, Eyo, Ibanga, Ebong, Jimmy Udo, and Umana (2021),Nkem, Topp, Devine, Wen-Li, and Ogaji (2022), as their studies revealed that oil exploration and extraction activities degrade the environment, reducing residents' ability to farm, fish and live in an unharmed environment.Diseases such as respiratory disorders, skin diseases, sore eyes and other health issues being experienced by the people are also linked to various environmental pollutions.

The second finding indicated that, oil exploration in the coastal areas contributed to biodiversity loss, low agricultural yield in crops/livestock which hindered farming as the main source of employment to the rural people in AKS and this is supported by studies conducted by Nkem et al, (2022) and Effiong, Etuk and Iyamah (2023) which revealed that oil exploration brought about biodiversity loss, poor plant germination and various kinds of pollution in the coastal areas. Also, oil exploration by oil companies has negative effects on their well-being of the people in

many ways ranging from - less farm outputs to loss of source of income, health, assets (building), migration andlabour diversification from farmingas supported by (Abraham et al, 2021).

The third finding revealed that,oil exploration contributed to infrastructure decay and environmental degradation which caused decline in the living standard of the rural people in coastal areas of AkwaIbom State and this is supported by studies conducted by UNDP (2016), Nkem et al (2022) and Adola et al (2022) revealing that the socioeconomic life of the people in terms of their standard of living, health, and occupation as analyzed in the studies showed that environmental damage from exploration of oil and gas to an extent have negatively impacted the infrastructure and socioeconomic life of the Coastalpeople.

Conclusion and Recommendations

The impact of oil exploration on the socio-economic and political development of the rural dwellers in the coastal areas of Onna, Eket, Esit Eket, Ibeno and by extension other oil producing communities in eastern Obolo and Ikot Abasi local government areas and indeed, Akwa Ibom State can never be underestimated. The study revealed among others that: Environmental pollution such as oil spillage, gas flaring, climate change as a result of oil exploration in coastal areas has direct negative effect on the health of rural dwellers in coastal areas in AkwaIbom State; Oil exploration in the coastal areas contributed to biodiversity loss, low agricultural yield in crops/livestock which hindered farming as the main source of employment to the rural people in Akwa Ibom State; Oil exploration contributed to infrastructure decay and environmental degradation which caused decline in the living standard of the rural people in coastal areas of Akwa Ibom State.

Based on the study findings, the following recommendations were made:

1. There is need to design and implement policy guidelines and development plan for the host communities using community based approach whereby community stakeholders' are inclusive in the government development plan. This statutory plan should include protection of community livelihood, compensation in cases of hazard occurrences, provision of live touching projects and employment to the host communities in accordance with a periodical reviewed Memoranda of Understanding (MoU) entered into by the oil companies and the host communities.
2. Promote research on natural resources management, environmental protection and environmental management laws. This research should involve a wide range of areas including fisheries, ecological protection in the petroleum sector, wildlife, forestry and water resources in the context of short and long term plans.
3. There is need for periodic ecological assessment of activities of oil companies in Coastal areas to ascertain the level of damages done to the environment and bio life; hence, adequate compensation should be given to the host communities to improve their well-being.
4. Community education on environmental control and preservation will help inform the community dwellers of the dangers of over exploiting natural resources. The education should be targeted at training and equipping community's stakeholders on how to hold the government and oil companies accountable in order to meet their legitimate demands and at the same time demand accountability from their community leaders.
5. A review of the Petroleum Industrial Act, 2021 to protect lives and properties of members of oil producing communities by making available above 15% as against 7% stated by PIA of

oil revenue to the development of the host communities as compensation for health hazard such as gas flaring, rotten house zinc, pollution, ecosystem loss etc. this entails enhancing access to healthcare services and health education in host communities, scholarship and employment to the residents and host communities by oil companies should be improved base on their Corporate Social Responsibilities (CSR) in order to meet the relevant socioeconomic needs of the people.

References

Abraham, C.M., Evelyn, P.A., Eyo, E.E., Ibanga, I.J., Ebong, M.S., Jimmy U.J., Udo, W.M. and Umana, S. U. (2021). Assessment of ecological degradation and associated implications in southern AkwaIbom State: Why actions need to be taken. *Journal of Economic and Natural Resources*, 5(2), 1–15. https://medwinpublishers.com/JENR/assessment-of-ecological-degradation-and-associated-implications-in-southern-akwa-ibom-state-why-actions-need-to-be-taken.pdf

Adeola, A. O., Akingboye, A.S., Ore, O. T., Oluwajana, O. A., Adewole, A. H, Olawade, D. B and Ogunyele, A. C. (2022). Crude oil exploration in Africa: Socio-economic implications, environmental impacts, and mitigation strategies. *Environmental System Decision* 42(1), 26-50. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8358551/

Anthony, L. (2024, daily Post July 3). Akwa Ibom community laments govt neglect, impact of oil spills. https://dailypost.ng/2024/07/03/akwa-ibom-community-laments-govt-neglect-impact-of-oil-spills/

Chijioke, O. B., Ebong, B. I., &Ufomba, H. (2018). The impact of oil exploration and environmental degradation in the Niger-Delta Region of Nigeria: A study of oil producing communities in AkwaIbom State. *Global Journal of Human-Social Science, Geo-Sciences, Environmental Disaster Management*, *18*(3), 55–70.

Echendu, A. J., Okafor, H. F., Iyiola, O. (2022). Air pollution, climate change and ecosystem health in the Niger Delta. *Journal of social Science*, 11(11), 525. https://www.mdpi.com/2076-0760/11/11/525

Effiong J.B., Etuk, E.A and Iyamah, D. A. (2023). Perceived determinants of oil spillage on agricultural lands in Ibeno local government area, AkwaIbom State, Nigeria. *African Journal of Food Agriculture and Natural Development*, 23(2). File:///C:/Users/User/Downloads/Ajol-File-Journals_110_Articles_244995_Submission_Proof_244995-1309-588078-1-10-20230402.Pdf

Ekpo, M. E., Umoh, U. E. and Utok, N. B. (2023). Social protection programmes and human capacity development in AkwaIbom State: A study of AkwaIbom Enterprises and Employment Scheme (AKEES). *Nigerian Journal of Public Sector Management (NJPSM)* 6(2): 169 – 186.

Ekpo, M. E., Atakpa, O. E. andUmoh, U. E. (2024). Political leadership and economic development in AkwaIbom State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 8(3), 2574-2589. https://rsisinternational.org/journals/ijriss/articles/political-leadership-and-economic-development-in-akwa-ibom-state-nigeria/

National Bureau of Statistics (2022). Nigeria multidimensional poverty index. Federal

Government of Nigeria's publication, Abuja.

National Bureau of Statistics (2024). Liquefied petroleum gas (cooking gas) price watch: Executive summary. https://nigerianstat.gov.ng/elibrary/read/1241492

Nkem, A. C., Topp, S. M. Devine, S. Wen-Li, W. and Ogaji (2022).The impact of oil industry-related social exclusion on community wellbeing and health in African countries. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9627145/

Okojie, K. (2023, July 26). Multidimensional poverty: AkwaIbom, Rivers lead South – South states with most poor people. *Business Day* online new. https://businessday.ng

Olawin, D. (2024, Punch News, 8th February). Nigeria flared $2bn gas in four years – Report. https://punchng.com/nigeria-flared-2bn-gas-in-four-years-report/

Osuagwu, E. S. (2018). Effects of oil spills on fish production in the Niger Delta. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6201865/

Policy Alert (2023). Women sign declaration for end to gas flare in AkwaIbom. A town hall meeting organized by Policy Alert in support of Global Green Grant funds strategies to end gas flare AkwaIbom State at Uyo, https://nationalambassadorngr.com/women-sign-a-declaration-for-end-to-gas-flare-in-akwa-ibom/

Terungwa, D. (2024). Oil spills from frontier oil's OML13 facility disrupts AkwaIbom community. https://www.majorwavesenergyreport.com/oil-spills-from-frontier-oils-oml13/

Tom, E. J., Bassey M. E., Ekpo, M. and Ebong, I. B. (2021). The politics of derivation principle and socio-economic development of the Niger-Delta region. *AKSU Journal of Social Sciences 1(1),* pp. 162 – 175.

Twum, A. (2019). Environmental impact of oil and gas exploration and production on the socio-economic life of Niger Delta. Thesis in African University of Science and Technology, Abuja.

Udi, A. (2024). NNPCL records 136 incidents of crude oil theft in one week. https://nairametrics.com/2024/03/27/nnpcl-records-136-incidents-of-crude-oil-theft-in-one-week/

Umar H. A., Abdul, M. F., Khanan, C. O., Shiru, M. S., Ahmad, A. and Baba, A. I. (2021). Environmental and socioeconomic impacts of pipeline transport interdiction in Niger Delta, Nigeria. *Science Direct,* 7(5). https://www.sciencedirect.com/science/article/pii/S2405844021011026

UNDP (2016). Human development report: Human development for everyone. http//:www.hdr.undp.org/sites/aii/themes/hdr_theme/country-notes?NgA.pdf

United Nations (2015). Sustainable development goals: United Nations framework convention on climate change. United Nations Department of Economic and Social Affairs.

United Nations (2022). *Sustainable development goals: Nigeria common country analysis*. Abuja, United Nations Nigeria publication. Pp. 1 – 140.