

Appraisal of the Impacts of the Interventionist Projects of the Niger Delta Development Commission (NDDC) on the Sustainable Livelihoods of Oil-bearing Communities of Abia State, Nigeria

David D. Eni Ifeanyichukwu K.Ibekwe* Eja E. Iwara

Department of Geography & Environmental Science, University of Calabar, Calabar, Nigeria

Abstract

The Niger Delta Development Commission (NDDC) was set up in 2000 by the Federal Government of Nigeria to execute interventionist projects intended to, among others, ensure the rapid socio-economic development of the oil-rich Niger Delta region. The projects were also intended to tackle the sustainable livelihood challenges, occasioned by oil and gas exploration and production activities, of households in the area. This study therefore, evaluates the impacts of these projects on the livelihoods of households in the oil-bearing communities of Abia State. A hypothesis to guide the study was formulated, thus: government interventionist projects have not contributed significantly to sustainable livelihoods of households in the oil-bearing communities. A combination of the survey and participatory research appraisal methods was used to collect the primary data analyzed. A total of 392 copies of the questionnaire were administered in Umuorie, Owaza, Umuokwor/Obiga and Uzuaku/Imo River communities in the Ukwa West Local Government Area of Abia State, Nigeria. The multiple regression technique was used in testing the hypothesis. The results show that government interventionist projects have contributed significantly to sustainable livelihoods in these communities by encouraging the diversification of livelihood options and through the construction of roads, educational and healthcare facilities, skill acquisition training, among others. However, these projects have failed to resolve the livelihood challenges of the people by ensuring that farming and fishing (the traditional livelihood options of the people of the area) remain sustainable. The study recommends an immediate clean-up and remediation of oil-impacted soil and the urgent cessation of gas flaring as the main vehicles for achieving the sustainability of livelihoods in the region.

Keywords: Niger Delta, interventionist projects, sustainable livelihoods

1. Introduction

The discovery, production and exportation of crude oil, including recently, natural gas, have brought about tremendous transformation of the socio-economic and environmental landscapes of the local communities where crude oil and gas hydrocarbons are found and exploited. These communities, including Owaza, Umuorie, Umuokwor and Uzuaku in Abia State, have grappled with livelihood challenges since oil production operations began in their domains in the mid- to late-1960s. Their environments have been negatively affected by oil and gas production operations; and, their livelihoods disrupted and disorganized (Osuji and Nwoye, 2007). For instance, the mangrove and rainforests which are prominent in this environment are gradually but steadily being decimated. There is equally contamination of both surface and underground water. These have combined to make life difficult for the peoples of these communities (Adekola and Mitchell, 2011). Thus, crude oil and gas exploration and production activities by transnational oil companies in Nigeria have brought about the impoverishment of host-communities in the study area due to the destruction of their livelihood resources and assets (United Nations Development Programme, UNDP, 2006; United Nations Environmental Programme, UNEP, 2011). Agricultural lands and water bodies, particularly, rivers, streams and ponds have been contaminated by frequent oil spills and gas flares (Ebenezer and Eremasi, 2012; Nodu and Ohimain, 2014).

Consequently, the yield from agriculture has fallen (Inoni, Omotor and Adun, 2006) and, fishing activities have become more difficult as a result of the clogging of the waterways by *Eichhornia crassipes* (water hyacinth), which thrive in contaminated waters. In otherwords, oil production operations have brought about negative effects on, not just the health conditions of the local people (Salako, Sholeye and Ayankoya, 2012) but also, on their livelihood systems. The impoverishment of households in the oil-bearing communities as a result of the destruction of their livelihood assets by oil production operations, in concert with, human right abuses and environmental degradation in the study area has resulted in agitations and restiveness by communities. The interventionist projects of the government through its agency, the NDDC, therefore, represent a response by the government of Nigeria to deal with these agitations. Also, they represent attempts by the government to deal with the sustainable livelihood challenges resulting from oil and gas production activities in the study area. The projects are intended to provide succor to the households and communities and to ensure the sustainable development of the area.

The paradox of concern in this study therefore, relates to the huge expenditure which the government and its agencies are making towards the alleviation of the livelihood challenges of households in the study area without commensurate achievement. That is, despite the huge investments in the interventionist projects of the

government, the people of the oil-bearing communities of Abia State still face sustainable livelihood challenges. This failure may be accounted for by the disarticulation between these projects and the people's livelihoods. The projects have concentrated on the accumulation of built artifacts without objective assessment of the people's traditional livelihood systems: how these have been affected by oil and gas production, the people's coping and adaptive strategies and therefore, the development interventions to adopt to obviate their impoverishment.

1.1 Study area

The study area covers oil- and gas-bearing communities in Ukwa West Local Government Area of Abia State, including: Owaza, Umuorie, Ozar, Umunteke, Umuokwor and Uzuaku/Imo River communities. The Ukwa West Local Government Area with headquarters at Okeikpe is one of the 17 local government areas in Abia State, Nigeria. The local government area lies approximately within Longitudes $7^{\circ} 11' 0''$ and $7^{\circ} 22' 0''$ East of the Greenwich meridian and Latitudes $4^{\circ} 52' 30''$ and $5^{\circ} 9' 0''$ North of the Equator. It has a total area of about 271 km² and is bounded to the east by Ugwunagbo Local Government Area and by Ukwa East Local Government Area to the south-east. It is also bounded to the north and north east by Aba North and Aba South Local Government Areas respectively. To the south and south west of the local government is Rivers State. The people of Ukwa West LGA are mainly of the Igbo ethnic origin with projected populations, based on the 2006 Nigerian census figures, of about 101, 619 persons in 2010 and 116, 610 in 2014 respectively. This is made up of about 52, 334 females (or 51.5 percent) and 49, 285 males (or 48.5 percent) in 2010; and about 60, 054 females and 56, 556 males in 2014 respectively. Fig. 1 shows the map of Ukwa West Local Government Area with the oil- and gas-bearing communities of Owaza, Umuorie, Umuokwor, Ozar and Imo River/Uzuaku, among others, clearly delineated. Inset is the map of Abia State showing Ukwa West LGA and that of Nigeria respectively.

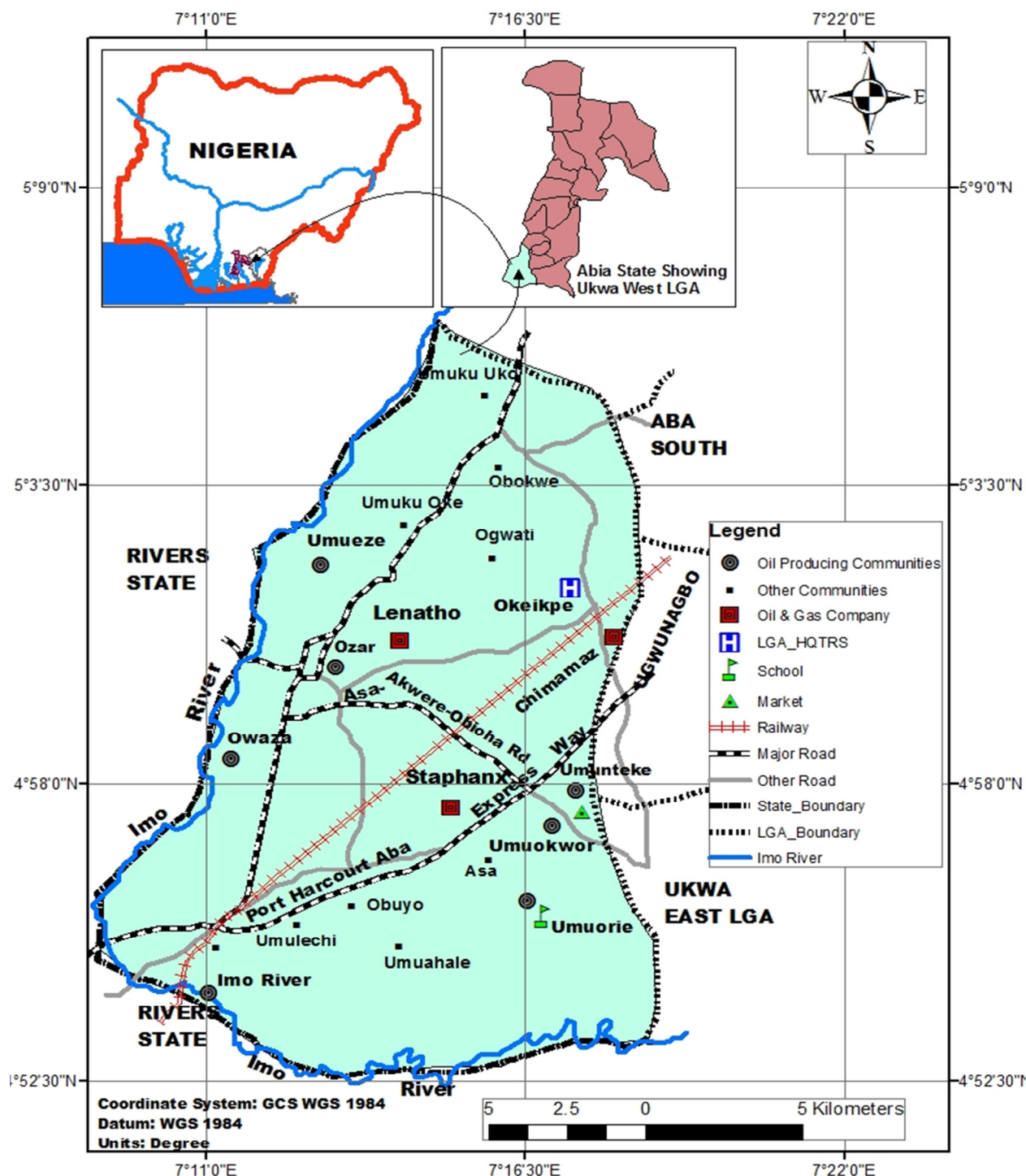
Fig. 1 shows the map of Ukwa West Local Government Area with the oil- and gas-bearing communities of Owaza, Umuorie, Umuokwor, Ozar and Imo River/Uzuaku, among others, clearly delineated. Inset is the map of Abia State showing Ukwa West LGA and that of Nigeria respectively.

2. Literature Review

Several attempts had been made in the past, beginning with the Henry Willinck Commission in 1958 through to the establishment of the Oil Mineral Producing Areas Development Commission (OMPADEC) in 1992, to bring about a process of genuine development of the Niger Delta area of Nigeria (FGN, 2000; Okumagba and Okereica, 2012). However, the NDDC represents the most ambitious, well-coordinated and serious efforts, to date, by the government of the Federal Republic of Nigeria to achieve the goal of ameliorating the plight of the oil-producing communities. Consequently, there is a large repertoire of scholarly work on the Niger Delta region generally including oil-bearing communities of the study area, and the NDDC, in particular.

For instance, Akinwale and Osabuohien (2009) studied the NDDC by focusing on an analytical examination of the NDDC Master Plan against the Commission's avowed objectives of employment generation, education, health and general sustainable development of the region. The study contended that the NDDC Master Plan is not markedly different from the already existing government development policies on the area. The authors argued that the implementation of the Plan, as presently structured, may aggravate the social conflicts which characterize life in the region. The study recommended active participation and involvement of the local people whose daily lives and livelihoods are affected by crude oil production operations in decision-making and execution of projects that are intended to improve their living conditions.

Adopting a human development paradigm, Akpomuvie (2011), appraised the contributions of the NDDC in resolving the Niger Delta paradox – why the abundant human and natural resources in the region have



Source: Adapted from Nigeria Census Shapefile (2006) & Google Earth Pro (2014)

FIG. 1: Map of Ukwa West Local Government Area showing the oil-bearing communities. made so little positive impact on the sustainable development of the region. The study argued that the case of the Niger Delta region is pathetic especially when compared with similar oil-producing regions in Kuwait, Saudi Arabia, Iraq, Indonesia, among others. The result of this study shows that the oil-producing communities are in deplorable living conditions with elevated levels of poverty. The environment is severely degraded resulting to the reduction of soil fertility with the concomitant fall in crop yield and the contamination of surface and underground water sources, to mention just this few. The study recommended a people-centered development paradigm based on a suggested nine-point agenda for the development of the region.

Wilson (2012) in a study of the Niger Delta Development Commission (NDDC) and the sustainable development of the Niger Delta region using Rivers State as a case study examined the impact of the

Commission's activities on the development of the State. The study findings indicated that the activities of the NDDC are good and salutary for the sustainable development of Rivers State but are grossly inadequate to catalyze the rapid sustainable development of the State. The study recommended modalities for the achievement of the goals of the Commission.

Similarly, Uche, Okoye and Uche (2014), carried out an examination of NDDC's community development projects in Abia State as a necessary component of the sustainable community development of the State. The study focused on a critical appraisal of the Commission's projects based on the people's perception of the projects and their contribution to sustainable community development. The sample for the study, which was purposively selected, consisted of 6 communities from 6 local government areas in the state. It adopted the participatory research appraisal techniques of focused group discussion (FGD) and interviews. The findings reveal that the NDDC has executed community development projects in the 6 communities, some of which have been successfully completed. The successful completion of these projects has positively impacted on the quality of life in the study communities. It noted that the participation of members of the communities in the execution of the projects has been low and argued that this had serious implications for the sustainability of the projects.

On their part, Isidiho and Sabran (2015) looked at the problems and challenges facing the NDDC as an interventionist agency and its array of projects in Imo State, in particular and the Niger Delta region, in general. The study was carried out in Ohaji/Egbema, Obowo and Oguta communities in Imo State. The findings indicate that the major challenge facing the NDDC in the execution of its projects and in pursuit of its mission objectives are more managerial than financial or technical. The scholars identified corruption, use of incompetent contractors, environmental problems, among others, as the major challenges facing the Commission. In addition, the findings show that NDDC projects in these communities have made tremendous positive impacts on the living conditions of households, and consequently, recommended an increase in the volume (quantity) and variety of the infrastructural projects executed by the NDDC in, not just the study communities but also in other communities of the Niger Delta region. Furthermore, there should be a complete overhaul of the Commission and the appointment of a Board consisting of people with integrity and competence in their chosen professional careers.

It is clear from the literature reviewed in this study that there is a gap in the literature that needs to be filled, hence this study. Specifically, there is the need to appraise the impact of the interventionist projects on the sustainable livelihoods (defined broadly to include the indices of crop yield, household income, health conditions, educational levels and employment opportunities) of households in the oil-bearing communities of Abia State. Studies so far, on the NDDC, have focused on such issues as the workability and or effectiveness of the Commission as a tool for the re-engineering of the socio-economic development of the Niger Delta region. Others have concentrated on the NDDC Master Plan as a vehicle for pacifying the restiveness and agitations of the peoples of the region. However, this study takes a critical look at the effects of these projects on the sustainability of the livelihoods of households.

3. Methodology

The Ex post facto research design is considered appropriate and adopted for this research because this research design, also known as 'after-the-fact' (Andrew-Essien, 2006) or 'causal comparative' (Simon and Goes, 2013) research design ensures that the researcher does not manipulate the variables under study or the relationship existing between the dependent and independent variables. Two types of data were collected for this study: discrete data (including data on government's interventionist projects such as schools built/renovated, roads/bridges constructed, among others) and continuous data (examples include data on crop yield, household incomes and so forth). The primary sources of data consisted mainly of data acquired through field survey using a questionnaire designed, instrumented and administered to elicit information on, among others, demographic characteristics of households in the study area including data on family size, educational levels of household members, income, age, gender and occupation. Additionally, published and unpublished secondary sources including publications by the Nigeria National Petroleum Corporation, NNPC, Central Bank of Nigeria, CBN, NDDC, UNEP, UNDP, among others, were also used to gather data for the study. Furthermore, the sustainable livelihood approach (SLA) was used to gather, supplement and or cross-check the authenticity of data collected through the use of the questionnaire.

The purposive sampling technique was adopted to select four oil- and gas-bearing communities in Ukwa West Local Government Area of Abia State. Thereafter, a simple random sampling technique was used to select respondents from each of these communities to include in the sample population for the purpose of the questionnaire administration. Based on the Taro Yamane (1967) formula, a sample size of 392 was determined which was subsequently distributed among the four study communities using the Bourley (1988) proportional allocation formula according to their respective populations.

The data gathered from the field was analyzed using mainly descriptive statistics, namely, tables, cross tabulations, frequencies, relative frequencies, charts, among others, generated using the Statistical Package for

the Social Sciences (SPSS). However, the Multiple Regression Technique (MRT) given as:

$$y = a + b_1x_1 + b_2x_2 + b_3x_3 \dots b_nx_n + e \quad (1)$$

where:

y = (sustainable livelihood: employment opportunities, health conditions, income, crop yield and educational opportunities).

a = regression constant (y intercept)

$b_1, b_2, b_3 \dots b_n$ = regression coefficients of the independent variables.

$x_1, x_2, x_3, \dots x_n$ = independent variables of job creation, award of scholarship, skill acquisition training, infrastructural development, healthcare facilities.

e = stochastic error

was used in testing the hypothesis which has been formulated, thus:

H₀: The interventionist projects of the Federal Government of Nigeria have not contributed significantly to sustainable livelihoods in the oil and gas bearing communities of Abia State, Nigeria.

The Snedecor's F-test was used to test the significance of the regression coefficients.

4. Data Presentation, Analysis and Discussion of Findings

The history of the intervention of the government of Nigeria in the Niger Delta area of Nigeria due to the deleterious effects of oil and gas exploration and production operations on, not just the environment but also on the livelihoods of the people can be traced back to the Henry Willink's Commission of 1958. This Commission was set up to review among others, the claims of neglect, domination and denial of viable development efforts by the peoples of the area, and, to propose a way of allaying their fears in the soon-to-be established one Nigeria. The government consequently set up the Niger Delta Development Board (NDDB) in 1960 to manage the development challenges of the area. The NDDB existed for 7 years and was replaced by a Presidential Task Force in 1980, the Oil Mineral Producing Areas Development Commission (OMPADEC) in 1992, and on December 21, 2000, by the Niger Delta Development Commission (NDDC) when the NDDC was set up by the Federal Government of Nigeria (FGN, 2000; Okumagba and Okereica, 2012).

The findings of this study confirm that the NDDC has embarked on and executed several interventionist projects intended to ameliorate the development and livelihood challenges of the oil- and gas-bearing communities including those in the study area. These projects include: Building projects (which encompass the health services sector and educational sector), Rural Electrification, Roads and Bridges, Water (Solar- and diesel-powered) and Erosion control projects. Special basic educational institutions such as the migrant farmers' and fishermen's schools have also been built in the study area by the Commission to meet the educational needs of the socially-excluded families in the study area.

There are also community and basic health clinics and centres within easy reach of households in the oil- and gas-bearing communities built or renovated and equipped by the NDDC. The NDDC has organized and funded free medical outreaches for the people during which drugs such as anti-malaria drugs and treated mosquito bed nets were given out free of charge to the people. In terms of human capacity development and skills acquisition, the Commission has awarded several scholarships for undergraduate and post-graduate degrees tenable in universities within and outside the country to members of the oil- and gas-bearing communities in the study area. The Commission has equally sponsored several members of the communities in the study area for training as artisans, entrepreneurs and so forth. Beneficiaries have been trained in such areas of specialization as auto mechanic, welding and metal fabrication, electrical installation, carpentry, fashion designing, hair dressing and in agricultural and expended in entrepreneurial skills in poultry farming, piggery, fish farming, snail-rearing, food processing, among others.

These programmes are intended to achieve the twin-objective of employment generation and poverty reduction. The goal is to ensure that beneficiaries are equipped with the skills needed not only for sustainable livelihood but also to manage the natural resources available in this area in a sustainable manner. Thus, the NDDC through these programmes has attempted to provide viable coping and adaptive strategies to households in these communities. These have enabled them to diversify into areas different from farming and fishing for sustainable livelihood. Thus, evidence from this study confirm that households in the study communities are diversifying to other livelihood sources as a result of the decline in agricultural productivity and fish catch due mainly to the impetus provided by the NDDC through several skills acquisition and training programmes.

Nonetheless, the analyses in this study have revealed that the Commission has failed abysmally in ensuring that the livelihoods of households in the study area are sustainably maintained. This is because the NDDC has not shown sufficient interests in the clean-up and remediation of contaminated soil to restore the fertility of such degraded soil. Consequently, the farmers and fishermen continue to experience falling crop yield and fish catch. This has resulted to the intensification of the poverty and livelihood challenges which characterize the day-to-day living experiences of these people.

Tables 1 – 4 describe the relationship between the total annual expenditure on interventionist projects

and the indices of sustainable livelihood used in this study in the four communities of study. These indices are: crop yield, job creation opportunities, and health conditions of household members as well as skills acquisition training and infrastructural development. For example, it is seen in Table 1, that a total of N538 million (Five Hundred and Thirty-eight Million Naira) was spent in the execution of various interventionist projects in Owaza in the period 2006 – 2014. These projects included the award of 25 scholarships to deserving household members of the community, provision of 442 job opportunities (direct and indirect), among others. It also shows a gradual but persistent decline in crop yield despite these projects.

A similar trend of declining crop yield is observed in Tables 2, 3 and 4 despite the huge expenditures in the execution of interventionist projects in Umuorie, Umuokwor/Obiga and Uzuaku/Imo River communities by the NDDC. The total sums of N483 million, N441 million and N472 million were expended in the execution of these projects in Umuorie, Umuokwor/Obiga and Uzuaku/Imo River communities respectively.

Despite the projects of the NDDC, oil spill incidents and the incessant gas flaring in the area are still going on unabatedly. The Commission has not recorded any success in the area of cessation of gas flaring and oil spillage – the two most difficult problems faced by households in the oil-bearing communities. Empirical evidence from several studies has confirmed that oil spillage has been largely responsible for the loss of soil fertility in the area (Inoni, Omotor and Adun, 2006). The implication of this is the gradual but persistent fall in crop yield from the farm and the concomitant loss of household incomes. And since about 66 percent of the people are farmers and fishermen by occupation, this means that the majority of the people are impoverished as a result of the loss of household incomes. In other-words, the livelihood challenges confronting households in the area remain largely and effectively unchallenged because the NDDC has done little in the area of cessation of gas flaring and oil spillage. The NDDC has also not taken serious action towards the clean-up of contaminated soil, soil remediation and re-composting to enhance soil fertility in the study area.

Thus, oil spill incidents and gas flaring remain serious challenges to sustainable livelihoods in the area. Consequently, farm crop yield and fish catch have remained depressed resulting in low household incomes, making life more difficult for the mass of the people of the oil- and gas-bearing communities.

Testing of the hypothesis

H₀: The interventionist projects of the Federal Government of Nigeria have not contributed significantly to sustainable livelihoods in the oil- and gas-bearing communities of Abia State, Nigeria.

H₁: The interventionist projects of the Federal Government of Nigeria have contributed significantly to sustainable livelihoods in the oil- and gas-bearing communities of Abia State, Nigeria.

This hypothesis was tested using multiple regression technique and with data found in Tables 1 – 4.

Tables 5 indicate that at 0.05 level of significance, under degrees of freedom 5 and 384, the critical F-ratio is 2.23. The calculated F-ratio is 10.551 ($p = 0.000 < 0.05$) and is greater than the critical F-ratio. The significance value is also less than 0.05 level used in the study. Therefore, the null hypothesis is rejected and the alternate hypothesis accepted, that is, the interventionist projects of the Federal Government of Nigeria have contributed significantly to sustainable livelihoods in the oil and gas bearing communities of Abia State, Nigeria. Table 6 shows that the model yielded a correlation coefficient, R, of 0.348 and coefficient of multiple determination, R² of 0.121 confirming that the five independent variables have a significant composite effect on sustainable livelihoods in the study area. In Table 8 is shown the relative contribution of each of the independent variables to the dependent. Skills acquisition training, healthcare facilities and job creation opportunities are seen to have significant positive contributions to the livelihoods of the people, with significant t-values of 3.038 ($p = 0.003 < 0.05$), 2.674 ($p = 0.008 < 0.05$) and 4.011 ($p = 0.000 < 0.05$) respectively. The award of scholarships and infrastructural development show insignificant contributions to the sustainable livelihoods of households in the study area.

Regression Equation

Based on Table 8, the regression model is therefore, given as:

$$y = 3.910 + 0.111x_1 - 0.148x_2 + 0.098x_3 - 0.007x_4 + 0.084x_5 + e \quad (2)$$

where,

- y = Sustainable livelihood
- x₁ = Skills acquisition training
- x₂ = Award of scholarships
- x₃ = Healthcare facilities
- x₄ = Infrastructural development
- x₅ = Job creation

It is seen from this model that government interventionists projects, namely: skills acquisition training, health facilities and job creation opportunities have positively impacted the livelihoods of households in the study area. Specifically, the introduction of skills acquisition programmes has contributed about 11.1 percent to sustainable development in the area while provision of health facilities and job creation opportunities have contributed 9.8 percent and 8.4 percent respectively. On the other hand, the awards of scholarships and infrastructural

development have not contributed, in any significant manner, to sustainable development in the study area.

5. Recommendations

- i. This study recommends an immediate cessation of gas flaring through the strict enforcement of the extant laws in respect of gas flaring in Nigeria. Gas flaring has been prohibited in Nigeria by the Associated Gas Reinjection Act, 1979 (as amended in 1984) and became operational in 1984. Section 3 allows companies to flare gas only if they have permission duly issued by the Minister of Petroleum Resources relating to specifically-mentioned oil field(s).
- ii. There should be an urgent and effective clean-up of contaminated and oil-impacted soils, not only in the study area but the whole of the Niger Delta region. A comprehensive and effective programme for soil remediation to restore soil fertility should be implemented by the NDDC.
- iii. The NDDC should ensure that environmental sensitivity index (ESI) mapping is prepared proactively for all the localities where the oil companies are in operation. More importantly, an ESI mapping should be timely and regularly prepared by oil companies whenever and wherever oil spillage occurs.
- iv. A water-sanitation-hygiene programme should be implemented in the study area by the NDDC. Such a programme should be patterned after the World Health Organization/United Nations International Children Emergency Fund (WHO/UNICEF) Water-Sanitation-Hygiene (WASH) programme and intended to reduce, if not eliminate, the challenges associated with the contamination of surface and underground water.

6. Conclusion

The NDDC as the agency of government charged with the responsibility of fast-tracking the socio-economic development of the oil-bearing communities as well as obviating their livelihood challenges has been active in the provision of built artifacts such as roads and bridges, schools, hospitals and primary health centres, among others. These have contributed to the alleviation of the sufferings of the people in the oil-bearing communities of Abia State, Nigeria. However, the projects have failed to ensure that the traditional livelihood options of the people (farming and fishing) remain sustainable. This is because the NDDC has not done much towards the clean-up of oil-inundated soils and the remediation of same to restore the fertility of degraded soils in the area. Moreover, serious and effective practical actions have not been taken to ensure the cessation of gas flaring in the area despite the existence of guidelines, regulations and policies to this effect.

Nonetheless, the interventionist projects of the Federal Government of Nigeria have contributed significantly to sustainable livelihoods in the oil- and gas-bearing communities of Abia State, Nigeria, in the area of skills acquisition training, job creation and healthcare facilities. These have enabled the people to diversify into other livelihood options since land and the resources on which the people depend to earn a living as farmers and fishermen have been degraded and decimated by oil exploration and production operations.

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Table 1: Government interventionist projects and livelihood indices in Owaza community of the study area

Community	Year	Govt. Interv.	Skills	Health				
		Projects N (Million)	Acquisition Training	Crop Yield (kg)	Job Creation	Facilities (Bedspace)	Scholarship Award	Infrastr Dev
Owaza	2006	38	42	315	53	0	3	7
	2007	41	45	315	51	0	2	9
	2008	69	39	300	49	0	4	8
	2009	68	45	300	48	0	3	9
	2010	72	40	270	52	0	2	10
	2011	79	41	270	53	0	0	9
	2012	67	40	240	51	6	5	8
	2013	61	31	225	46	0	3	4
	2014	43	27	225	39	0	3	3
Total		538	350	2460	442	6	25	67

Sources: (i) Author's Field Work and Calculations, 2015; (ii) NDDC's Corporate Affairs Department.

Table 2: Government interventionist projects and livelihood indices in Umuorie community of the study area

Community	Year	Govt. Interv.	Skills	Health				
		Projects N (Million)	Acquisition Training	Crop Yield (kg)	Job Creation	Facilities (Bedspace)	Scholarship Award	Infrastr Dev
Umuorie	2006	35	18	300	25	0	0	3
	2007	51	19	300	23	0	1	4
	2008	55	14	270	22	0	1	5
	2009	60	16	270	26	12	0	2
	2010	52	18	255	29	0	2	4
	2011	74	19	255	31	0	1	5
	2012	69	19	255	28	0	2	6
	2013	42	18	240	27	6	0	2
	2014	45	13	240	22	0	1	2
Total		483	154	2385	233	18	8	33

Sources: (i) Author's Field Work and Calculations, 2015; (ii) NDDC's Corporate Affairs Department.

Table 3: Government interventionist projects and livelihood indices in Umuokwor/Obiga communities of the study area

Community	Year	Govt. Interv.	Skills	Crop Yield (kg)	Job Creation	Health		Infrastr. Dev
		Projects N (Million)	Acquisition Training			Facilities (Bedspace)	Scholarship Award	
Umuokwor/	2006	32	6	300	11	0	1	1
Obiga	2007	37	4	300	9	8	0	1
	2008	41	9	270	16	0	0	3
	2009	53	10	285	18	0	1	2
	2010	60	7	285	12	6	1	3
	2011	68	5	240	7	0	0	3
	2012	63	6	240	7	0	0	2
	2013	45	5	225	8	0	0	2
	2014	42	6	225	4	0	1	0
Total		441	58	2370	92	14	4	17

Sources: (i) Author's Field Work and Calculations, 2015; (ii) NDDC's Corporate Affairs Department

Table 4: Government interventionist projects and livelihood indices in Uzuaku/Imo River communities of the study area

Community	Year	Govt. Interv.	Skills	Crop Yield (kg)	Job Creation	Health		Infrastr. Dev
		Projects N (Million)	Acquisition Training			Facilities (Bedspace)	Scholarship Award	
Uzuaku/	2006	40	39	330	50	0	2	5
Imo River	2007	40	41	315	52	12	4	8
	2008	55	44	300	56	0	1	7
	2009	61	35	300	42	0	5	6
	2010	68	35	270	41	0	2	8
	2011	81	36	270	49	6	0	6
	2012	45	35	240	40	0	4	5
	2013	43	43	240	54	0	2	3
	2014	39	39	240	43	6	3	2
Total		472	347	2505	427	24	23	50

Sources: (i) Author's Field Work and Calculations, 2015; (ii) NDDC's Corporate Affairs Department

Table 5: Multiple regression analysis of the contribution of government's interventionist projects to sustainable livelihoods in the oil- and gas-bearing communities of Abia State.

Sources of Variation	SS	df	MS	F	Sig.
Regression	13.094	5	2.619	10.551	0.000 ^b
Residual	95.309	384	0.248		
Total	108.403	389			

*p<0.05; df 5, 384; critical F = 2.23

a. Dependent Variable: Sustainable livelihoods

b. Predictors: (Constant), Job Creation, Award of Scholarship, Infrastructural Development, Skills Acquisition training, Healthcare facilities.

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	3.910	0.089		43.822	0.000 ^b
Skill Acquisition training	0.111	0.036	0.269	3.038	0.003
Award of Scholarship	-0.148	0.077	-0.121	-1.935	0.054
Healthcare Facilities	0.098	0.037	0.0345	2.674	0.008
Infrastructural Development	-0.007	0.034	-0.026	-0.211	0.833
Job Creation	0.084	0.021	0.308	4.011	0.000

*p<0.05

Dependent Variable: Sustainable Livelihoods

Table 6: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.348 ^a	0.121	0.109	0.4982

Predictors: (Constant) Job creation, Scholarship award, Infrastructural development, Skill acquisition training, Health condition.

Table 7: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	13.094	5	2.619	10.551	0.000 ^b
Residual	95.309	384	0.248		
Total	108.403	389			

a. Dependent Variable: Sustainable Livelihoods

b. Predictors: (Constant), Job Creation, Skills Acquisition Training, Award of Scholarship, Infrastructural Development, Healthcare Condition.

Table 8: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	3.910	0.089		43.822	0.000
Skill Acquisition Training	0.111	0.036	0.269	3.038	0.003
Award of scholarships	-0.148	0.077	-0.121	-1.935	0.054
Health care	0.098	0.037	0.345	2.674	0.008
Infrastructural developm.	-0.007	0.034	-0.026	-0.211	0.833
Job Creation	0.084	0.021	0.308	4.011	0.000

a. Dependent Variable: Sustainable Livelihoods.