



Effect of Sustainable Development Projects of Total Exploration and Production Nigerian Limited on Rural Livelihoods in Rivers State

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ABSTRACT

The study assessed the effect of sustainable development projects of Total Exploration and Production Nigeria Limited (TEPNL) on rural livelihoods of host communities in Rivers State, Nigeria. The specific objectives were to: describe the socio-economic characteristics of the respondents, identify the livelihood activities of the host communities in the study area and assess the extent of effect of TEPNL sustainable development projects on the wellbeing of the recipients. Primary and secondary data were used to elicit information necessary for the study. The primary data for the study were obtained using a structured questionnaire. Multistage sampling techniques was adopted from which 250 respondents were selected for the study. Descriptive and inferential statistics such as percentages, mean scores, multiple regression were used for data analysis. It was revealed that men were more in number. The respondents were within the age range of 50-59yrs. Majority of the respondents were farmers who also engaged in other livelihood activities. The study further revealed that the sustainable development projects of TEPNL had 'no great effect' on the wellbeing of the respondents. However, there was a significant relationship between effect of the sustainable development projects of TEPNL and the wellbeing of the respondents. Thus, the study recommended among others the need for the benefactor to target their sustainable development projects at developing the sources of livelihood of the host community members.

Keywords- : Development, Livelihoods, Rural, Sustainable.

INTRODUCTION

Sustainable Development (SD) implies economic growth together with the protection of environmental quality, each reinforcing the other. Sustainable Development is maintaining a balance between the need to improve human lifestyles and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which the present and future generations depend (Gilberto, 2013). The author further stated that sustainable development is all about improving the quality of life, while living within the carrying capacity of ecosystems. Thus, Sustainable Development does not focus solely on environmental issues. More broadly, it encompasses the three general policy areas, namely, economy, environment, and society.

The term livelihood on the other hand is misconstrued to mean one's occupation. Occupation refers to a single activity through which all needs are met. In developing nation like Nigeria, it will be unrealistic for a single economic activity to provide all the needs of the individual that engage in it. Nnodim (2012) quoting Olawoye (2011) argued that the term 'occupation' is not appropriate in developing countries especially in rural areas where many activities are carried out simultaneously to secure the goods and services that are required by the household. The authors, therefore, concluded that livelihoods would be the most appropriate term.

In Nigeria, Ekong (2010) reported that most rural people, especially women, engaged in activities such as land preparation for farming, crop planting, weeding, harvesting and processing of food crops, storage and marketing. He further reported that those living in the riverine communities do shallow water fishing, processing, and marketing of sea foods, while a good number of them are

engaged in homestead animal husbandry, which provides stock for consumption or for sales. A common feature of all societies is the need for food, clothing, and shelter, as well as social and self-actualization for themselves and the members of their families. Making a living is done through a portfolio of activities so that households and individuals are flexible and can adapt to a wide range of misfortunes and external shocks (Oluwatayo, 2009). Livelihood activities can be conceptualized as that activity which an individual engages in, in order to support /sustain or maintain himself and his family. Often, livelihood activities are considered mainly as income-generating activities. In any case, there are also wide ranges of other activities such as health, political, educational, social and faith-based. These livelihood activities can be gained in a variety of ways from different types of jobs, all of which coincide together to form or create a totality of means by which people secure a living in a sustainable way (Loubster 1995; Sanderson, 2000; Olawoye, 2011).

Livelihood activities, therefore, become inevitable activities among the host Communities of the oil producing companies and cannot be excused due to the conditions in which they find themselves and most especially as the efforts of Government and their benefactors are not commensurate to the services given them in form of social corporate responsibility.

Total Exploration and Production Nigerian Limited is the world's fourth-largest oil and gas company, with operation in more than 130 countries including Nigeria, spanning all aspects of the petroleum industry including upstream operations (oil and gas exploration, development and production LNG) and downstream operations (refining, marketing and

trading and shipping of crude oil and petroleum products) (CSRC, 2011). The application of Community development efforts by TEPNL has evolved over time. In the past, the industry -wide effort were geared towards the traditional agreement of Community leaders, through various forms of company's discretionary payments and assistance programmes e.g. surveillance jobs, burial assistance, scholarship, skill training, etc. and thereafter, as time went by to provision of basic infrastructure, such as construction of classroom blocks, market stalls, health and civic centres, jetties, electricity, pipe-borne water, etc. which did not result from Community consultation and were mostly contract-driven (Corporate Social Responsibility Report, 2009).

This conventional approach could not be sustained as the host communities were not consulted with such programmes, resulting in a refusal to assume ownership of such projects that ended up either abandoned or debauched. This in turn led to resentment and aggression towards the company and her business interest since full satisfaction could not be achieved among the Community stakeholders, and the company was not getting commensurate value of expenses on its initiated projects. This now called for a paradigm shift in the delivery and implementation of sustainable development project to her host communities in Rivers State. The new shift is premised on the Total E&P concept of sustainable development which emphasizes that the highest form of sustainability is attained when the communities run majority of their programmes through institutions and enterprises set up by themselves with TEPNL (Benefactor) as partner (Udoetok and Osuji, 2008). In recognition of this, therefore, TEPNL initiated Sustainable Development Programmes in their host communities which include skill

development programmes, agricultural and micro-credit programmes, community business initiative and talent trading programmes, health care delivery programmes educational development programmes, infrastructural development programmes

If all these programmes are already in place as claimed by the service provider (TEPNL) in the study are; to what extent has it affected the wellbeing of her host community members? Is the project effecting the desired changes in the wellbeing of the people and the future generations? Why are the host communities accusing the company of paying lip services to them? Why are there problems of *town-gong* conflicts between the benefactors and the host communities? Because there was no empirical data backing these claims by the benefactors and the recipients necessitated the need for the study.

OBJECTIVES OF THE STUDY

The broad objective of the study was to determine the Effect of Sustainable Development Projects of Total Exploration and Production Nigerian Limited on the livelihoods of her host community members in Rivers State. The specific objectives are to:

1. describe the socio-economic characteristics of the respondents
2. identify the livelihood activities of the host community members in the study area;
3. assess the effect of sustainable development projects of TEPNL on the wellbeing of the host community members.

HYPOTHESIS OF THE STUDY

There is no significant relationship between the effect of sustainable development projects of TEPNL and the wellbeing of the recipients.

METHODOLOGY

The study was carried out in Rivers State, one of the thirty six (36) states located in the Niger Delta region of the Federal Republic of Nigeria. It lies approximately between latitude 4^{0N} and 6^{0N} , and longitude 6^{0E} and 7^{0E} . With enormous reserves of crude oil and natural gas, the State accounts for more than 40% of Nigeria crude oil production and also houses the largest gas plant in West Africa. The people are predominately farmers and fishermen as determined by availability of land and body of fresh and salt water. Multi-stage sampling technique was adopted. At the first stage, purposive sampling technique was used to select five (5) core TEPNL operational Local Government Areas in Rivers State. The LGAs include Ogba-Egbema-Ndoni, Emohua, Ikwerre, Ahoada West, and Ahoada East Local Government Areas. At the second stage, two communities from each of the five local government areas where TEPNL operates were, also, purposively selected, giving a total of ten communities. At the third stage, a simple random sampling technique was employed to select twenty five respondents from each of the host communities. This gave a total sample size of two hundred and fifty (250) respondents for the study. Data were analysed using descriptive and inferential statistics such as percentages, frequency distribution, mean and multiple regression.

RESULTS AND DISCUSSIONS

Socio-economic characteristics of the respondents

The result of the analysis on sex as shown in Table 1 revealed that 71.6 per cent of the respondents were males, while 28.4 per cent were females. This result suggests that men are more interested in community development issues than their female counterparts and will always play domineering role over women. This is in agreement with the study of Hassan (2012) on ecosystem approach on impact of oil

industries on the people of Niger Delta. The researcher posited that unless data are desegregated by sex and gender mainstreamed into policies and programmes, women in most cases may continue to suffer without their voices and opinions been heard due to male dominance of our society.

Table 1 shows that the modal age group of the respondents was between 50 – 59 years. Mean age was however, 55 years. This result implied that most of the respondents were still in their active working age and can participate actively in community development issues bothering the welfare of their communities. This finding also corroborates with the earlier findings of Okwoche, *et al* (2010) that respondents within the age range of 31-60years are within their middle age range and are the work force of the economy, hence, they will be able to support poverty alleviation programmes.

Data in Table 1 further shows that majority (80.4%) of the respondents were married, while 15.6 percent were single, and 0.4 percent were separated from their marriage. In rural communities of Nigeria, marriage is symbolic in the society. It is also counted on married person, the right to participate in community development activities with a greater sense of belonging. This result corroborates with Ibeagwa (2011) who posited that marriage confers some amount of stability on the individual and household and puts them in a better position to practice their occupation and also involve in other community responsibilities.

Educational attainment of household members is very important because it helps the community to reposition her felt-needs and propensity to participate in community development issues. The highest proportion (29.6%) completed their secondary education, followed by those who have completed their primary school, 23.2 per cent. First degree holders recorded 15.2%, while those that have obtained OND and NCE certificate were

14.8%. Data in Table 1 further shows that 13.2 per cent had no formal education, while 2.4 per cent had obtained their post graduate degrees. 1.6 per cent were into one programme or the other

Table 1 revealed that 94.4 per cent of the respondents were Christians, while 4.8 per cent of the respondents were believers in the traditional religion. Islamic religion recorded 0.8%.

That Christians were in the majority is probably due to the fact that the area is generally dominated by different denominational churches.

Table 1 shows that the major occupation of the respondents was farming which recorded the highest percentage of 36 per cent. This result corroborates with the findings of Ravallionet *al.*, (2007) that majority of *ruralites* engaged in farming activities and other related activities to earn a living. Table 1 revealed that respondents into trading recorded 22.0 per cent, while 12.8 per cent were self-employed. Civil servants recorded 15.6 percent. This agrees with the report of Oluwatayo (2009) who stated that rural economy is usually not based solely on agriculture, but rather on a diverse array of activities and enterprises. The author further reported that, though farming remains important, rural people look for diverse opportunities to increase and stabilize their income.

Table 1 further revealed that 42.4 per cent, were within the income range of ₦10, 000 - ₦20, 999 income per month, those that earned between ₦41, 000 – ₦50, 999 per

month recorded 16.4 per cent. Those who earned between ₦51, 000 - ₦60, 999 were 12 per cent while those who earned between ₦21 - ₦30, 999 recorded 11.6 per cent. Those that earn ₦61, 000 and above were 8 per cent while those that earn ₦31, 000 - ₦40, 999 monthly income were 5.6 per cent. Table 1 further revealed that 4 per cent were recorded for the respondents who earn below ₦10, 000 as their monthly income. The mean monthly income of the respondents was estimated at approximately ₦15, 000 which is below the minimum wage of civil servants nation-wide.

The highest proportion (30.8 per cent) of the respondents were of household size of 6-7 as shown in Table1. Household size of 7 and above recorded 27.2 per cent, while household size of 4-5 recorded 26.8 per cent. Table 1 further revealed that household size of 2-3 were 12.4 per cent while household size of 0-1 recorded 2.8 per cent. The mean household size is estimated at 7 persons per household in the study area. One reason for high percentage in household size may be due to polygamous system of marriage that is allowed in the area. The household size is an indication of the pressure on income of household members. The findings provided data that have policy implications on family health programme and developmental issues such as child spacing, housing and provision of basic social amenities by service providers (NPC, 2006).

Table-1: Socioeconomic characteristics of the respondents

Variables	Frequency	Percentage (%)
Sex		
Male	179	71.6
Female	71	28.4
Age		

<20yrs	4	1.6
20-29yrs	37	14.8
30-39yrs	62	24.8
40-49yrs	51	20.4
50-59yrs	68	27.2
60yrs & above	28	11.2
Marital status		
Married	201	80.4
Single	39	15.6
Separated	1	0.4
Widow/Widower	9	3.6
Educational attainment		
No formal education	33	13.2
FSLC	58	23.2
SSCE/WASC	74	29.6
OND/NCE	37	14.8
B.Sc/ B.Ed	38	15.2
Post-graduate degree	6	2.4
Others	4	1.6
Religion		
Christianity	236	94.4
Islam	2	0.8
Traditional	12	4.8
Occupation		
Farming	90	36.0
Trading	55	22.0

Civil service	39	15.6
Public service	10	4.0
Self employed	32	12.8
Applicant	17	6.8
Others	7	2.8
Monthly income (₦)		
<10,000	10	4.0
10,000-20,999	106	42.4
21,000-30,999	29	11.6
31,000-40,999	14	5.6
41,000-50,999	41	16.4
51,000-60,999	30	12.0
61,000 & above	20	8.0
Household size		
< 2	7	2.8
2-3	31	12.4
4-5	67	26.8
6-7	77	30.8
7 & above	68	27.2

Source: Field survey, 2014

Livelihood activities

Table 2 shows the livelihood activities of the respondents. Responses on fishing and farming recorded the highest mean score of 3.24. Other livelihood activities as indicated by the respondents in Table 2 included, fashion and design with mean score of 3.04, tailoring recorded mean score of 2.85, petty trading ($x = 2.66$), and carpentry ($x = 2.56$). These findings are in

agreement with Oluwatayo (2009) who found out from his study on poverty and income diversification among households in rural Nigeria, that rural economy is not based solely on agriculture, but rather on diverse activities and enterprises.

This result also corroborates with the findings of Anriquez and Stamoulis (2007)

and Ravallion *et al.*, (2007) whose studies showed that 75% of rural lives were dependent on agriculture, fisheries, forestry and related activities for survival. The finding is also in agreement with Ige

(2000) who stated that man depended on land for his food, raw materials, clothing and shelter, and that land is the only original unargumentable, indestructible gift of nature.

Table-2: Mean response on sources of livelihoods

Livelihood activities	Mean (\bar{x})	SD	Remarks
Fishing & farming	3.24	0.87	Agree
Soap making	2.24	1.37	Disagree
Carpentry	2.56	1.32	Agree
Black-smitten	2.41	1.27	Disagree
Cane weaving	1.36	0.71	Disagree
Petting trade	2.66	1.34	Agree
Juice making	2.40	1.31	Disagree
Clothing and textiles	1.49	0.79	Disagree
Production of local lotion	1.62	0.91	Disagree
Wood carving	1.74	1.11	Disagree
Shoe making	2.35	1.24	Disagree
Hat making	2.22	1.10	Disagree
Production of herbal medicine	1.87	1.08	Disagree
Tailoring	2.85	1.21	Agree
Production of local gin	2.09	1.01	Disagree
Hair weaving	2.42	1.25	Disagree
Fashion and design	3.04	1.24	Agree
Bead making	2.38	1.16	Disagree

Masonry	2.34	1.23	Disagree
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Source: Field survey: 2014

*Multiple responses

Effect of sustainable development projects of TEPNL on wellbeing

Data in Table 3 shows that all the factors relating to wellbeing were rated ‘not great’ by the respondents. Specifically, responding whether the sustainable development projects of TEPNL has brought improvement on livelihood activities of host community members, Table 3 revealed a mean score of 1.88 which implies “not great”. On whether the

projects have brought increment of monthly income to host communities, a mean score of 1.89 was recorded. On whether it provided and sustained a comfortable house where the recipients live, a mean score of 1.96 was recorded. Response on whether the sustainable development projects have ensured conducive environment for prosperity among community members recorded a mean score of 1.86.

Table-3: Mean scores on effect of sustainable development projects of TEPNL on wellbeing

Factors related to wellbeing	Mean (\bar{x})	SD	Remarks
Improvement on your livelihood activities	1.88	0.99	Not great
Your monthly income has increased	1.89	0.89	Not great
Providing/ sustaining comfortable house where you live	1.96	0.91	Not great
Improvement of your health status	1.86	0.92	Not great
Provided happiness with your household members	1.88	0.99	Not great
Ensuring a conducive environment for prosperity of life among your community members	1.89	0.89	Not great
Improve the general welfare of your people	1.96	0.91	Not great
Solved some health related issues to your household members	1.86	0.92	Not great
Reduced your spending on health care of your household members	1.88	0.99	Not great

Source: Field survey, 2014

This result corroborates with findings of Ekenam (2012) who reported that 40% of her respondents affirmed that the impact of agricultural interventions of SPDC on their wellbeing did not exceed 39.9% which she rated low. The findings also corroborates with the result obtained by Abosede (2009) who reported that the vast revenues from oil and corporate responsibility services (CRS) have not made any appreciable impact on the oil- producing areas of the Niger Delta states. Rather, the people experience micro-level paradox of penury amid immense oil wealth. Abject poverty, environmental degradation, marginalization, endemic conflict and social deprivation have taken a toll. The cumulative effects of these are anger in the land and easy predisposition of the population especially, the youths, to violence. The author further reported that the situation in the Niger Delta states has been at the core of extensive debate at the

local, national, regional and international level.

Test of Hypothesis of the study

There is no significant relationship between the effect of sustainable development projects of TEPNL and the wellbeing of the recipients

Four functional forms of equations were tried, which included semi, linear, double, and exponential log. The lead equation as shown in Table 4 was the semi log equation based on the highest value of coefficient of multiple determination ($R^2 = 0.311$) and the number of significant variables. The coefficient of skill development projects of TEPNL was significant at 5% alpha level and correlated positively with the wellbeing of the recipients ($t = 3.466$)*. This implies that positive effect of skill development projects of TEPNL will yield an improve in wellbeing of the recipients which also, will bring happiness, and prosperity.

Table 4: Multiple regression of effect of sustainable development projects of TEPNL and the wellbeing of the respondents

Variables	Semi Log	Linear	Double Log	Exponential
Constant	29.247 (8.428)	20.868 (11.75)	2.002 (9.667)	1.589 (15.017)
Skill devpt. projects	0.022 (3.466)*	0.715 (3.220)*	0.314 (2.961)*	10.212 (2.744)*
Agricultural programmes	3.251 (1.226)	0.190 (1.015)	0.060 (0.378)	0.002 (0.199)
Com/business	-13.382	-1.248	-0.786	-0,074

initiatives proj.	(-3.174)*	(-3.100)*	(-3.122)*	(-3.071)*
Health care programmes	-17.694 (-5.344)*	-1.616 (-5.348)*	-0.958 (-4.848)*	-0.088 (-4.869)*
Educational programmes	3.897 (1.710)	0.378 (1.494)	0.216 (1.586)	0.020 (1.335)
Infrastructural projects	-15.493 (-3.885)*	-0.511 (-3.619)*	-0.880 (-3.699)*	-0.029 (-3.457)*
R ²	0.311	0.308	0.282	0.282
F- value	18.270	18.005	15.932	15.869
N	250	250	250	250

Source: Field Survey, 2014

Values in parentheses are t-value

t- ratios *significant at 0.05 level

The null hypothesis which states that there is no significant relationship between the effect of sustainable development projects of TEPNL and the wellbeing of the recipients was therefore rejected.

This finding is in line with earlier result of the study of Andrew and Withey (1976) that wellbeing includes the presence of positive emotions, and mood such as contentment and happiness. This further implies that if there is a positive effect of skill development projects (an integral part of the sustainable development projects of TEPNL), it will bring happiness and positive emotions to the host community members thereby creating a cordial relationship.

The coefficient of agricultural development projects of TEPNL correlated positively with the wellbeing of the recipients but was not significant at 5% alpha level.

This agrees with the *apriori* expectation and implies that positive effect of agricultural development projects will positively improve the wellbeing of the recipients.

The coefficient of community business initiative and talent trading projects correlated negatively with the wellbeing of the respondents and was significant at 5% alpha level. This implies an inverse relationship with the wellbeing of the recipients which negates the *apriori* expectation that positive effect of community business initiative and talent trading projects will bring about an improvement in wellbeing of the recipients. This could also be attributed to the fact that the host community members

may not really be interested in talent trading hunt such as music or may be inexperienced in developing small scale businesses.

The coefficient of health care programmes correlated negatively with the wellbeing of the recipients but was significant at 5% alpha level. The result also corroborates with the earlier study of Hassan (2012) that negative relationships exist between the health care programmes provided by oil industries as social corporate responsibility and their utilization by the recipients. This disagrees with the *apriori* expectation that improvement in health care programmes will lead to a healthy living and prosperity. The coefficient of the educational programmes of TEPNL correlated positively with wellbeing, but was not significant at 5% alpha level. This implies that the educational programmes of TEPNL may not be a criteria to improved wellbeing of the recipients. This disagrees with the result of earlier study of Urang (2014) that the more educated the people are, the more likely they will be able to utilize health care facilities thereby improve their wellbeing.

The coefficient of the infrastructural development programmes correlated negatively with wellbeing and was significant at 5% alpha level. This implies an inverse relationship between effect of infrastructural development programmes of TEPNL and wellbeing of the recipients. This also negates the *apriori* expectation that positive effect of infrastructural development project will yield improve in wellbeing of the recipients, vice versa. The findings in Table 4 therefore showed that significant relationship existed between skill development programmes, community business initiatives and talent trading, health care programmes, infrastructural development projects and the wellbeing of the recipients. The null hypothesis which states that there is no

significant relationship between effect of sustainable development projects of TEPNL and the wellbeing of the recipients was therefore, rejected. The F- value of 18.270 which was significant at 0.05 probability level and the multiple R² of 0.311 also confirm the significant relationship.

CONCLUSION AND RECOMMENDATIONS

The study assessed the effect of sustainable development projects of TEPNL on rural livelihoods of host community members in Rivers State. The study discovered that men were substantially involved in deliberating issues that bothers on community development more than their female counterparts

Diversified sources of livelihood activities by the oil bearing communities was recorded. Specifically, apart from fishing and farming, the respondents also, engaged in fashion and design, petty trading, tailoring and carpentry. The study further concluded that the sustainable development projects of TEPNL had 'no great effect' on the wellbeing of the respondents. However, there was a significant relationship between effect of the sustainable development projects of TEPNL and the wellbeing of the respondents. Based on the findings, the following recommendations were made:

1. Segregation of sex should be carried out on issues of community development to create room for women's voice to be heard
2. Sustainable development projects should be targeted at developing the sources of livelihood of the host community members; this will create room for rural empowerment, improve in wellbeing and enhancement of rural livelihoods.

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