

**EFFECT OF NIGER DELTA DEVELOPMENT COMMISSION
(NDDC) INTERVENTION PROJECTS ON THE GROWTH OF THE
OIL PRODUCING COMMUNITIES OF ABIA STATE (2001 – 2017)**

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ABSTRACT: This research work investigated the effects of the Niger Delta Development Commission (NDDC) intervention projects on the growth of the oil producing communities of Abia state for the period 2001 to 2017. The NDDC is the fifth interventionist agency in the Niger Delta established to implement a programme for sustainable prosperity and peace in the region. Despite the commission's intervention projects, various researches have shown that the oil producing communities appear to be economically under-developed. The NDDC's intervention expenditures in the areas of education and health, energy and water, roads and bridges and agricultural entrepreneurial development were sourced from the NDDC Abia State Budget office and used as the independent variables while the Gross State Domestic Product (GSDP) for Abia State was used as the dependent variable. The Unit root test showed that the data were integrated at order one i.e., I(1) while the long run relationship amongst the variables was confirmed using the Johansen cointegration test. Estimates of the Error Correction Model showed that the NDDC intervention projects on Education and health (EDH), Energy and Water (EWS) and Agric/fisheries (AFGEDS) have positive relationship with economic growth of the oil producing communities of Abia state with only intervention in education and health having significant impact on growth of the communities. The NDDC's intervention in Roads and Bridges construction was found to be negative and this is significantly felt in the communities. The joint test of significance revealed that the NDDC intervention projects have joint impact on the economic growth of the oil producing communities. Based on the findings, we concluded that the NDDC has contributed to the improvement and enhancement of education and health infrastructures in the local communities; even though the Commission's interventions in energy (electricity), water supply and agric development have contributed positively to the development of the communities, it still has not significantly affected the generality of the people in terms of economic growth and development. We therefore recommended that the NDDC must, as an interventionist agency, engage more in the construction of rural roads, water supply, employment creation and attraction of international support in the oil producing communities.

Keywords: *Niger Delta Development Commission (NDDC), Intervention Projects, Error Correction Model, Oil Producing Communities, Gross State Domestic Product.*

INTRODUCTION

The Niger Delta Development Commission (NDDC) was established by an Act of National Assembly known as NDDC Act of 2000 to replace the former Oil Mineral Producing Development Commission (OMPADEC). Like the latter, NDDC was established to tackle and

ameliorate the devastating conditions of the oil producing communities occasioned by the oil exploration and exploitation activities in the nine States of the Niger Delta Region of Nigeria. The States are Abia, Akwa Ibom, Bayelsa , Cross River, Delta, Edo, Imo, Ondo and Rivers States (NDRDMP, 2006 and NDDC, 2000).

NDDC on inception in 2000 embarked on what it tagged “an Interim Action Plan” (IAP), an action taken to complete all the abandoned projects by the defunct OMPADEC in the region to douse the prevalent regional tension at the time. (Timi-Alaibe, 2007). Between 2001 and 2005 the Commission embarked on several projects in all the oil producing communities of the nine states of its operation such as Roads and Bridges, water scheme projects to make drinking water available for the oil producing communities and beyond. Other projects include the electrification, construction and rehabilitations of classroom blocks with offices, stones, V.I.P toilets and laboratories for both primary and post primary institutions in these communities, Erosion control projects, construction, rehabilitations and equipment of health centres and the provision of transformers to communities at rates of ₦86,743,576 on expenditures on education, ₦113,475,700 on provision of drinking water, ₦145,560,700 on energy/power, ₦27,610,000 on health facilities, ₦665,900,000 on roads/bridges, ₦89,654,312 on governance and social services, ₦18,450,000 on entrepreneurial development scheme and ₦64,800,000 on agriculture and fisheries in those oil producing communities.

From 2006 to 2017, the Commission embarked on the development of more new roads and bridges that linked up both communities, towns, local government areas and states as well as more water schemes, health facilities, classroom blocks for schools, electrification and provision of transformers, etc to the communities and states of the NDDC also at the rates of ₦130,000,000 on education, ₦135,000,000 on water, ₦265,500,000 on energy/power, ₦37,500,000 on health facilities, ₦1,060,400,138 on roads and bridges, ₦366,107,348 on governance and social services, ₦12,581,481 on entrepreneurial development schemes and ₦66,000,000 on agriculture and fisheries in the Oil Producing Communities and States of NDDC. It is important to note that most of these projects are also felt by the non-oil producing communities of the States.

Generally, NDDC, since its inception in 2000 has undertaken a total of 6,375 projects as intervention measures in different areas of both oil producing and non-oil producing communities of the Niger Delta Region (NDDC Newsletter, 2010); these projects are on agriculture, roads and bridge development and rehabilitation, electrification, water scheme development, canalization and flood control and protection, provision of health facilities and services, construction and rehabilitation of model classroom blocks, etc. 2,776 of these projects have been completed and commissioned while 3,599 are at different levels of completion, which have gulped over 1.2 trillion Naira.

Abia State oil producing communities in particular and Abia State in general benefitted from these NDDC intervention projects especially in the areas of roads, electricity, water, health and education facilities. According to statistics from NDDC, the Commission’s intervention expenditures in Abia state over the period 2001 to 2017 were N2.58 billion for Education and

health, N4.55 billion for Energy and Water supply, N14.05 billion for Roads and bridges development and N5.85 billion for Agriculture/Fisheries/Governance/Entrepreneurial schemes.

Despite the commission's numerous intervention Projects, Timi-Alaibe (2007) and many other commentators have opined that the oil producing communities are still deeply stricken with poverty and are economically under-developed. Whereas, NDDC believes that it has done much to lift the economy of the Oil Producing Communities, the people of these communities think otherwise. The effect of these intervention projects on the growth of the economy of the state still remains unclear due to the paucity of a thorough academic research in this area. This study intends to clear this doubt. The objective of the study, therefore, is to determine to what extent the NDDC intervention projects on Education and Health, Energy and Water Supply, Roads and Bridges Development, Agriculture & Fisheries, Governance, Social Services and Entrepreneurship Development Schemes have helped to grow the economy of the oil producing communities of Abia state. Findings of this research will hopefully, enable the federal government improve the implementation and intervention needs of the oil producing communities not only of Abia state but of the entire region of the Niger Delta.

LITERATURE REVIEW

Conceptual Framework

Lloyd-Odgers (2005) defines intervention as a combination of program elements or strategies designed to produce behaviour changes or improve the overall status among individuals or an entire population. This definition was corroborated by Herd (2016) as a combination of projects which may be implemented in different settings including communities, schools, health care, organizations etc. Evidence has shown that interventions create change by influencing individuals, increasing social support and creating supportive environments and growth of the economy of an area.

In line with the true meaning of interventions, the federal government of Nigeria established the Niger Delta Development Commission (NDDC) in the year 2000 to cater for the oil producing communities of the South East and South-South regions of the country.

The Commission was charged with the following under-mentioned mandates thus:

- a. To formulate policies and guidelines for the development of the Niger Delta Region.
- b. To conceive and implement plans based on the set rules and regulations of projects and programmes for sustainable development of the Niger Delta Region in the areas of transportation – which includes roads, Jetties and water ways, health, employment, industrialization, agriculture and fisheries, housing and urban development, water supply, electricity and telecommunications.

- c. To survey the Niger Delta Region so as to know the measures required to promote its physical and socio - economic development.
- d. To prepare Master Plans and schemes designed to promote the physical development of the Niger Delta Region and the estimation of the member states of the commission.
- e. To implement all the measures approved for the development of the Niger Delta Region by the Federal Government and member states of the Commission.
- f. To identify factors inhibiting the development of the Niger Delta Region and to assist member states in the formulation and implementation of policies to ensure sound and efficient management of the resources of the region.
- g. To assess and report on any project being funded or carried out in the region by Oil and Gas Companies and any other company including non-Governmental Organizations and also to ensure that funds released for such projects are properly utilized.
- h. To tackle ecological and environmental problems that may arise from the exploration of oil mineral in the Niger Delta Region and advise the Federal Government as well as the member states on the prevention and control of oil spillages, gas flaring and environmental pollution.
- i. To liaise with the various oil mineral and gas prospecting and producing companies on all matters of pollutions, prevention and control.
- j. To execute such other works and perform such other functions which in the opinion of the commission are required for the sustainable development of the Niger Delta Region and its people. (NDDC at a Glance, 2010).

These responsibilities summed up into a “mission to facilitate the rapid, even and sustainable Development of the Niger Delta into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful” and further embodied into goals or what may be described as targets to be pursued and achieved.

Development Intervention Projects: According to Ellen (1980), Karagiannis (2001) and Von Mises (ed.) (1998) economic intervention is an action taken by a government or international institution in a Market Economy in an effort to impact on the economy beyond the basic regulation of fraud and enforcement of contracts and provision of public goods. Economic intervention could be aimed at variety of political or economic objectives such as promotion of economic growth, increasing employment, raising wages, raising or reducing prices, promoting income equality, managing the money supply and interest rates, increasing profits or addressing market failures.

According to Catherine (2012), the term ‘intervention’ assumed a philosophical level which the state and economy should be inherently differentiated from each other and is typically used by the advocates of laissez faire and free market. (Von-Mises, 1998; Brown, 2011). Economic development is a policy intervention projected for improving the economic, political and social well-being of the people.

Development policies have always generally remained instruments for the provision of infrastructure such as roads, railways, sanitation, water, electricity and the like-state aid. State-aid-based industrialization and inward investment strategies proposed to support and attract large firms to territories with weak industrial fabric have been as popular a strategy as infrastructure investment. (Barca, McCann & Rodriguez-Pose, 2012). Development intervention at both the national and regional levels remained strongly attached to Solow’s, Myrdal’s, Hirschman’s and Rostow’s thinking, paying little attention and often no more than lip service to the recent transformations in the theories of development and growth instead a narrow concept such as the economic model have remained the norm in development intervention. All the reports on face value tackled similar analytical and policy issues. According to Nweze (2015) the strength of every economy lies on its ability to broaden the scope of development financing activities to boost living standard of the citizens.

Development Intervention Projects means those projects which government intervened on as a measure to bring about succour in an economy which in turn strengthens the unfair conditions at a point in time be it economic, political and or social. Such intervention projects as roads, electricity, clean drinking water, sanitations, as well as intervention measures against poverty like Poverty Alleviation measures - in effect enhance the economic positions of the people.

These Development intervention projects assist these communities have a face lift of both their environmental and economic well being and have also sought to empower both individuals and groups of people with skills they need to effect changes within themselves and the communities. NDDC Development Intervention projects are on roads, electricity, education, portable water, health facilities, skill acquisitions, entrepreneurship scheme, agricultural and other economic advancing programmes.

According to PIND, economic development programme starts to work with actors to build sustainable market systems which produce widespread and long-term opportunities for the poor rather than depending on donor funding: and these market systems focused on what they described as value chain development (agricultural, manufacturing or service) to drive increased private sector-led economic growth within the region and greater employment, infrastructure development to generate employment applying technologies required for high labour intensity businesses – enterprise development to enhance capacity and business linkages for local firms, to pursue opportunities from large companies and governments. Further, they offer programmes that promote opportunities for pro-poor markets to identify sectors and market systems relevant to significant number of poor or disadvantaged people where they are currently not achieving their potentials to offer them growth potentials, and a facilitative approach that provides commercial incentives for market actors to invest in economic opportunities that will benefit the poor in every sector adopted to achieve these.

Again, they offer projects that focus on poverty reduction by applying a market development approach and each project seeks to create more accessible and inclusive market systems thereby increasing the economic opportunities for large number of the poor thereby providing a path for them to escape poverty. These projects are expected to help widen access to local markets while improving farmer's agronomics, harvesting and processing practices. Also, relations between large and small firms were improved, increased availability of supporting functions such as agricultural inputs, technology, skills development, improved access to finance and financial services, improved regulations strengthen coordination and reform procurements processes. (Pindfoundation.org/economic development)

Theoretical Framework

Unbalanced Growth Theory: According to Hirschman in Jhingan (2002) investment in strategically selected industries or sectors of an economy leads to new investment opportunities that create way for more economic development. He maintained that development has of course proceeded through this with growth being communicated from the leading sectors of the economy to another, from one firm to another. He thus regards development as a "chain of disequilibria" which must keep alive rather than eliminate the disequilibria which profits and losses are symptoms of in a competitive economy. According to Hirschman, development policy maintains tensions disproportions and disequilibria when the economy is to be kept ahead. He also opined that if new projects are started they appropriate external economies created by previous projects and create new external economy which can be exploited by subsequent ones.

Some projects appropriate more external economies than they create which Hirschman calls convergent series of investments. He also described them as induced investments as they are net beneficiaries of the external economies. Other projects create more external economies than they appropriate. These are characterized as divergent series of investment. In the view of the economy the latter may have a greater social desirability than private profitability while the induced investments are less desirable from the social view.

Development policy in practice should aim at (a) the prevention of convergent series of investments that appropriate more external economies than they create (b) promote divergent series where more economies are created than are appropriated. Hirschman insisted that development can only be induced by unbalancing the economy which is either by investing in Social Overhead Capitals (SOC) or Directly Productive Activities (DPA). The former creates external economies while the latter appropriates external economies.

Unbalancing the Economy with Social Overhead Capitals (SOCs): Social overhead capital defined as "comprising those basic services without which primary, secondary and tertiary productive activities cannot take place. Investments such as education, public health, communications, transportation and conventional public utilities like light, water, power, irrigation and drainage scheme, etc are included in social overhead capital. A large investment in SOC enables private investment in directly productive activities (DPA). Cheaper supply of electric power, for instance, can encourage the establishment of small industries. Investment in SOC indirectly subsidizes agriculture, industry or commerce by reducing cost of various inputs

they use or by reducing their costs. Except investments in SOC offer cheap or improved services, private investment in DPA will not be attractive. So, the SOC approach to economic development is to ‘unbalance’ the economy so that subsequently investments in DPA are stimulated.

Hirschman further opined that “investment in SOC is advocated not because of direct effect on final output but because it permits and invites DPA to come in... some SOC investment is needed as a prerequisite for DPA investments.

Unbalancing the Economy with Directly Productive Activities (DPA): An imbalance can also be created when investments are made in DPA. Government can directly or indirectly invest in DPA instead of investing in SOC. If DPA investment is embarked on first, the shortage of SOC facilities will likely raise production costs greatly. With time, political pressure might stimulate investments in SOC also. Investment sequences are generated by profit expectations and political pressures. Profit expectations generate sequence from SOC to DPA while political pressure from DPA to SOC.

NDDC intervention on the social overhead capitals in the oil producing communities enables the commission not only realize its mandates of transforming to facilitate the rapid even and sustainable development of the Niger Delta into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful with all the development programmes of the commission. (NDDC at a Glance and NDRDMP, 2006).

Development of infrastructures or what is otherwise called the social overhead capitals are described as the basis for any socio – economic development to be attracted into any area, as absence of these will discourage any economic development efforts, but the commission’s vision on these aspects of development is indeed a boost and a key to the development goals of these oil producing communities. Intervention on those projects will also help to create opportunities for small and medium scale enterprises, the artisans, as well as the cottage industrialists that will form linkages with other economic development outfits and firms. As noted by Myrdal in his theory of circular causation in Jhingan (2002) “that because development is accompanied by improving transportations, communication, higher levels of education and a more dynamic communion of ideas and values which tend to strengthen the forces for the centrifugal spread of economic expansions or to remove the obstacles for its operations. So the numerous intervention measures embarked on in these communities by the Commission would ensure the spread of numerous activities which would benefit the generality given what Hirschman stated in Jhingan (2002) that with investment in social overhead capitals there will be boom for investments even in the direct productive activities.

Empirical Framework

Several researchers have studied community intervention projects and their impact on the growth of rural economies. Njoku (2016) investigated Community Driven Development Initiative and Poverty Reduction in Abia State by adopting Logistics Regression Model. His study revealed

seven areas of interventions – education, health, water, sanitation, electricity, transportation, market and skills acquisition. His logistic regression equation is of the form $Y = f(X)$ where he described ‘X’ as Poverty predictors/variables. He adopted descriptive statistics – mean, frequency, and percentage techniques to analyse the data obtained via questionnaires. He found that community and social development projects using community development driven approach have significant impact and have improved the quality of life of the beneficiaries. The study further revealed a predominance of males in all communities with marital status showing the existence of family bonds which ensures social stability vis-a-vis development.

Okonkwo, Obidike and Ogwuru (2014) examined the issues and challenges of non provision of adequate infrastructure in rural Nigeria. They adopted a broad approach – the political economy approach in their study as being approximate since they argued that it recognized the importance of non economic factors which exert tremendous effects on the subject matter. They employed a discussion approach; accordingly, they opined that infrastructural development in Nigeria was characterized as unsteady and uneven and totally dilapidated in nature and almost absent mostly in our rural communities. They further argued with facts and figures that government has invested a lot of funds on education, health and power but despite this, there has been a collapse of infrastructural facilities and services hindering the growth and development of the rural areas. Corruption and low maintenance culture were identified by the researchers as key reasons for the infrastructural problems of Nigeria.

Closely related to community intervention schemes is the work of Nosike and Dike (2010) who investigated the effect of good governance on human resources development on economic growth and poverty reduction in Nigeria. They adopted a theoretical frame work and described governance as the exercise of authority to manage the nation’s economic, political and administrative affairs at all levels. They argued that a well developed and trained workforce is a prerequisite for economic development thereby upholding the need for community intervention in the areas of man-power and human capital development. In order, therefore, to achieve adequate human resources development, economic growth and poverty reduction, adequate resources should be provided for qualitative education as well as ensuring their efficient use.

METHODOLOGY

This research work adopted the causal research design in order to know the effect of variations in the independent variables on the dependent variable. Data on NDDC’s intervention expenditures on Education and Health, Energy, Water supply, Roads and Bridges construction and Agriculture and Entrepreneurial development schemes were sourced from the NDDC Abia State Budget (2001-2017 eds) while the Gross State Domestic Product for Abia State was derived by the researchers using proportional contribution of each state to the national GDP for each year. The data were converted to quarterly series using linear conversion method on Eviews9 and the analysis follows econometric procedures.

In order to purge the data of spurious results, the Augmented Dickey Fuller Unit root test was conducted and the result necessitated the test for long run relationship amongst the variables (cointegration) using the Johansen Cointegration test approach as specified in Granger and Newbold (1977). The model coefficients were estimated using the Error Correction Model technique.

Model Specification

In order to effectively analyze the relationships between NDDC intervention projects and economic development of the oil producing communities in Abia State, we adopted and modified the model of Njoku (2016). The model specifies that NDDC interventions in the areas of education and health, energy and water, roads and bridges and agricultural entrepreneurial development are the major determinants of economic growth of the oil producing communities of Abia state (i.e. Gross State Domestic Product). The argument here is that the NDDCs intervention projects affect the economy of the oil producing communities of the state, and also trickles down to the generality of the state thereby contributing not only to the development of the local communities but also the whole state's growth.

In functional form, we write the model as:

$$\text{Econ Growth} = f(\text{EH}, \text{EWS}, \text{RBD}, \text{AFGEDS}) \quad \dots (1)$$

Where Econ Growth represents the economic growth of the oil producing communities of Abia state. The latter is proxied by the Gross State Domestic Product (GSDP). Thus we have:

$$\text{GSDP} = f(\text{EH}, \text{EWS}, \text{RBD}, \text{AFGEDS}) \quad \dots (2)$$

Where:

GSDP = Gross State Domestic Product of the oil producing communities of Abia State

EH = NDDC Intervention Expenditure on Education and Health Infrastructure in the oil producing communities of Abia state

EWS = NDDC Intervention Expenditure on Energy and Water Supply in the oil producing communities of Abia state

RBD = NDDC Intervention Expenditures on Roads and Bridge Development in the oil producing communities of Abia state

AFGEDS = NDDC Intervention Expenditures on Agriculture and fisheries, Governance and Social Services and Entrepreneurial Development Schemes in the oil producing communities of Abia state.

Assuming a linear relationship between the variables for simplicity, the econometric form of the model is given as:

$$\text{GSDP} = b_0 + b_1\text{EH} + b_2\text{EWS} + b_3\text{RBD} + b_4\text{AFGEDS} + U_t \quad \dots(3)$$

The Error Correction Model represents the short run model estimates and the equation is

specified thus:

$$\Delta(\text{GSDP})_{t-1} = \beta_0 + \beta_1\Delta(\text{EH})_{t-1} + \beta_2\Delta(\text{EWS})_{t-1} + \beta_3\Delta(\text{RBD})_{t-1} + \beta_4\Delta(\text{AFGEDS})_{t-1} + \text{ECM}(-1) \dots(4)$$

Where “ Δ ” represents the first difference operation of the variables, $\text{ECM}(-1)$ is the one period lag of the model residual and U_t is the disturbance or error term. The parameters β_1 to β_4 are the short run coefficients of the model while the coefficient of $\text{ECM}(-1)$ is the long run speed of adjustment of the model. The sign of the coefficient of $\text{ECM}(-1)$ should be negative and significant as well for holding the long run equilibrium (Dhungal, 2014).

Since we specified a growth model, the variables are standardized by taking their natural logarithms. The apriori expectations are b_1, b_2, b_3, b_4 and $b_5 > 0$ i.e. the coefficients of the model are all expected to be positive.

RESULTS AND DISCUSSION

Unit Root Test: The unit root test result is summarized below

Table 1: Unit Root Test at Level and First Difference

Variables	ADF Statistic Level	test @	ADF Statistic First Difference	test @	Decision Rule	Order of Integration
LnGSDP	-1.364576		-3.658854		Stationary Difference	@First I(1)
LnEDH	-2.367669		-5.357954		Stationary Difference	@First I(1)
LnEWS	-2.403866		-5.094118		Stationary Difference	@First I(1)
LnRBD	-1.982715		-7.294333		Stationary Difference	@First I(1)
LnAFGEDS	0.154225		-6.092907		Stationary Difference	@First I(1)
5% critical value @level = -2.906210						
5% critical value @1st difference = -2.908420						

The Unit root tests at level and at first difference are summarized in table 4.1 above. It can be seen that GSDP, Education and Health (EDH), Energy and Water Supply (EWS), Roads and Bridges Development (RBD) and Agric/Fisheries and Entrepreneurial (AFGEDS) are all stationary at first difference and are therefore integrated of order I(1). Since none of the variables are integrated of order I(0), and since the order of integration of the variables are not of mixed order [i.e. not I(1) and I(0)], we test for the existence of long run relationship amongst the variables using the Johansen cointegration test.

Johansen Cointegration Test

Table 2: Johansen Cointegration Test Result

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.284946	35.85468	29.79707	0.0089
At most 1*	0.242094	40.30149	27.85613	0.0219
At most 2	0.167834	22.28373	29.79707	0.2830
At most 3	0.124474	10.34173	15.49471	0.2553
At most 4	0.025834	1.701265	3.841466	0.1921

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None*	0.284946	28.98275	13.87687	0.0178
At most 1*	0.242094	18.01776	12.58434	0.0437
At most 2	0.167834	11.94200	21.13162	0.5534
At most 3	0.124474	8.640462	14.26460	0.3173
At most 4	0.025834	1.701265	3.841466	0.1921

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

Table 4.2 above shows the cointegration test result. The Trace statistic and the Max-Eigen statistic both indicate 2 cointegrating equations at 5% level. The existence of at least 2 cointegrating equations confirms that there is a long run relationship amongst the variables. Therefore, this leads to the estimation of the model parameters using the Error Correction Model (ECM).

Error Correction Model (ECM) Estimation

The result of the Error Correction Model (ECM) is summarized in Table 4.3 below. The tests are conducted at 5% level of significance.

Table 3: Error Correction Model Result

Error Correction Model				
Included observations: 62 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.040790	0.004984	-8.183510	0.0000
D(LNEDH)	0.104011	0.019888	5.229837	0.0274
D(LNEWS)	0.062941	0.046199	1.362383	0.1785
D(LNRBD)	-0.081298	0.017037	-4.771895	0.0000
D(LNAFGEDS)	0.011121	0.048114	0.231149	0.8180
ECM(-1)	-0.350920	0.061359	-5.719128	0.0156
R-squared	0.799742	Mean dependent var		0.042226
Adjusted R-squared	0.646148	S.D. dependent var		0.045607
F-statistic	7.458645	Akaike info criterion		-3.670612
Durbin-Watson stat	1.752607	Schwarz criterion		-3.464760

Findings and Discussion:

A cursory examination of the Error Correction Model estimates above shows that the short run coefficients of Education and health (EDH), Energy and Water (EWS) and Agric/fisheries (AFGEDS) are positive while that of Roads and Bridges (RBD) is negative.

The positive and significant coefficient of NDDC intervention projects in Education and Health (EDH) means that for every unit increase in NDDC’s intervention expenditure on health and education, economic growth of the oil producing communities of Abia state increases significantly by 0.104011 units annually. This implies that NDDC’s intervention in education and health helped significantly to grow the economy and well-being of the oil producing communities of Abia state.

Again, the coefficient of Energy and Water supply shows that a unit increase in NDDC’s intervention projects in Energy and Water supply (EWS) increases the economic growth of the oil producing communities by 0.062941 units. This shows a direct relationship between NDDC intervention in Energy and Water Supply and economic growth of the oil producing communities of Abia state for the period reviewed. However, this direct relationship was not found to be significant in growing the communities’ economy.

Furthermore, NDDC’s intervention in Agric/Fisheries/Entrepreneurial scheme increases growth of the oil producing communities of Abia state by 0.011121 units but is not significant. However, NDDC intervention in Roads and Bridges Development (RBD) shows a negative relationship with economic growth of the oil producing communities of Abia state decreasing it by 0.081298

units. NDDC intervention was not felt despite the importance of roads and bridges link-ups in creating an open market for free flow of goods and services amongst the communities. Based on the result obtained, it means that the commission has not allocated enough resources to the development of roads and bridges in the oil producing communities of Abia state.

The joint test of hypothesis revealed that the NDDC intervention projects have joint significant effect on the economic growth of the oil producing communities of Abia state.

The intercept of the model confirms the importance and relevance of the NDDC's intervention projects in the oil producing communities of Abia state and its effect on the overall growth of the state's economy; the absence of which decreases the economic growth of the state.

The result shows that the ECM(-1) is negative and significant. The Error Correction Coefficient of -0.3509 is the speed of adjustment of the model from the short run equilibrium to long run equilibrium. This implies that 35% of the error is corrected in each time period. The speed of adjustment implies that it will take about three years to correct all errors/deviations and bring the economy of the oil producing communities in Abia state back to equilibrium.

The adjusted coefficient of determination of 0.6461 implies that about 65% of the economic growth of the oil producing communities of Abia state is accounted for by NDDC intervention projects. This represents a fairly good fit.

Conclusion and Recommendations

Agekameh (2010) in his article in "The Capitol" (published in NDDC bulletin, 2015) explained that in the "Niger Delta, socio-economic injustices walk on four legs", leading to violent agitations by the people and it is these injustices that the intervention projects of NDDC strive to eradicate. NDDC as stated by Okolo (2014) "is the fifth interventionist agency in the Niger Delta established to implement a programme for sustainable prosperity and peace to the region."

Our study of the NDDC's interventions in the oil producing communities in Abia state led to the formulation of a model using secondary data obtained from the NDDC. Based on the analysis, we can conclude that the NDDC have contributed to the improvement and enhancement of education and health infrastructures in the state as well as reducing wide-spread poverty and engendering rural development in the local communities. Even though the Commission's interventions in energy (electricity), water supply and agric development have contributed positively to the development of the communities, it still has not significantly affected the generality of the people in terms of economic growth and development.

Based on the findings and conclusions drawn there-from, the following recommendations are made:

1. The core mandate of the Niger Delta Development Commission (NDDC) is to "facilitate the rapid, even and sustainable development of the Niger Delta region into a region that is

economically prosperous, socially stable, ecologically regenerative and politically peaceful”. It therefore follows that the NDDC must, as an interventionist agency, engage more in the construction of rural roads in the region and link-up bridges that will facilitate the production and movement of goods and people within and outside the oil producing communities of Abia state.

2. The Commission should devote more resources in the provision of water supply especially in the very rural areas located in the oil producing communities of Abia state.
3. The place of skilled man-power in sustaining the employment generation drive of the government cannot be over-emphasized. The NDDC should engage the youths of the communities more in modern skills and trade that will help them to create employment and employ labour and by so doing, the trickle-down effect of this area of intervention will be felt in the rural communities of the oil producing areas of Abia state and the state generally.
4. In addition to the recommendation made in (3) above, the Commission should endeavor to practicalize and make the Entrepreneurship Development Scheme a realizable scheme. The Entrepreneurial Development Scheme of NDDC should not be by paper and theory, it should be demonstrated by actually encouraging the people of these Communities into the scheme. More so, the people should be properly trained on how to become good entrepreneurs by establishing an entrepreneurship training centre which will help develop personnel and entrepreneurs on the scheme.
5. The Agric sector requires the most intervention by the NDDC to at least, support food security and job creation. The commission should collaborate more with the states in the Niger Delta region to boost access to credit facilities and ensure availability of land for farming purposes to enable farmlands to be used as economic instruments and means of employment generation.
6. The NDDC can help to improve the overall development of the rural oil producing communities in Abia state and Niger Delta generally by attracting international support and developmental projects to the region and engaging in massive rural electrification, road construction, and further improving their poverty reduction strategies.

REFERENCES

- Agekameh D. (2010) *The New Face of Niger Delta*. The Capitol Vol. 4 Number 5 Igando, Lagos Nigeria.
- Barca, Fabrizio, McCann, Philip and Rodriguez – Pose, Andres (2012): The Case for Regional Development Intervention: Place – Based versus Place – Neutral approaches. <http://oloi.org/10.1111/j.1467-1787.2011.00756.x>
- Barca, Fabrizio (2009) “An Agenda for Reformed Cohesion Policy: A Place-Based Approach to meeting European Union Challenges and Expectations” Independent Report, Prepared all the Request of the European Commissioner for Regional Policy, Danuta Hubner, European Commission, Brussels.
- Brown, Douglas (2011): *Towards a Radical Democracy (Routledge Revivals): The Political economy of the Budapest school*. Routledge. PP.10-11 ISBN 978-0415608974.

- Collins Nwaeze: CBN Intervention for economic Development: The Nations Newspaper, June 10, 2015.
- Egbulonu, K.G. (2005): Basic Econometric Methods Owerri, Nigeria Peace – Publishers.
- Ellen, F. P. (1980): Laissez Faire in Nineteenth Century Britain; Facts or Myth, Literature of Liberty. Iii(4); 5-38. Retrieved 5/2/2012
- Fabrizio Barca, Philip Macann, Andres Rodriguez – Pose (2012). The Case for Regional Development Intervention: Placed – Based Versus Placed – Neutral Approaches <https://doi.org/10.1111/1.1467.9787.2011.00756.x>; Retrieved 10/04/2018
- Granger, C.N.J and P. Newbold (1977): Spurious Regressions in Econometrics <https://wolfeb.unr.edu>zal>STAT758>. Retrieval 14/5/2018.
- Jhingan, M.L. (2007): The Economics of Development and Planning: 35th Revised and Enlarged Edition: Viranda Publicatins (P) LTD: B-5 Ashish Complex (Opp. Ahloon Public School), Mayur Vihar, Phase 1 Delhi- 110091
- Karagiannis Nikolaos (2001): “Key Economic and Politico – Institutional Elements of Modern Interventionism “Social and Economic Studies. 50(314):17-47, JCTOR 27865245
- Lloyd – Odgers, J. (2005). How are the concepts of social capital primary health care and health promotion relevant to the goals and activities of child and family health nurses? Nuritinga 6, 1-10.
- Lu Catherine (2012) “Intervention”. Encyclopedias of Political Theory. SALIE, Retrieval 5/2/2012
- NDDC (2010): Niger Delta Regional Developmental Master plan Port Harcourt, Rivers state.
- “NDDC and A New Development Agenda For the Niger Delta” Retrieved April 6, 2018 from <https://www.nddc.gov.ng/news/a /5e.php>
- NDDC Monthly Newsletter February, June and October. 2010.
- NEEDS (2004) National Economic Empowerment and Development strategy, Abuja, National Planning Commission.
- Niger Delta Development Commission, NDDC, (2017) Niger Delta at a Glance, Published by Corporate Affairs Dept. NDDC, Port-Harcourt.
- Niger Delta Regional Development Master Plan (2006). Federal Republic of Nigeria.

Okolo O. Philip (2014). *NDDC, Conflict, Peace-Building And Community Development, In The Niger Delta Region*. Global Journal of Political Science and Administration Vol.2, No.1, pp.36-54.

Okonkwo, O. N, Obidike P.C and Ogwuru, H.O (2014): Issues and Challenges of Non- Provision of Adeqaute Infrastructure in Rural Nigeria: Journal of Economic Growth and Transformation: Vol. 2: No. 2, September, 2014. A Publication of the Institute of Economists of Nigeria PP. 11-25 ISBN 2250 - 9283

Pesaran, M. H and Smith, R. J (2001): Bound Testing Approaches to the Analysis of Level Relationships: Journal of Applied Econometrics 16, PP. 289 – 326

Timi Alaibe (2007, Nov. 23) Sustainable Development and the challenge of Good governance in the Niger Delta Region: A convocation lecture, at Igbinedion University, Okada.

Todaro Michael P. and Stephen C. Smith (2011): “Economic Development (11th ed.) Pearson Education and Addison – Wesley”

Von Mises, Ludwig (Ed. 1998): Interventionism: An Economic Analysis (Pdf): New York: The Foundation For Economic Education, Inc. PP.10-12. Check date value in:1 date= (help).