



## Promoting Human Development Index through Health and Education Expenditures in Ebonyi State Local Government Councils

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### ABSTRACT

The aim of this paper is to investigate the link between human development index and human infrastructural promotion in Ebonyi State Local Government Councils from 1999 to 2012. Ex-post facto research design and multiple regression model was used in the regression analysis. Findings indicate that Health Expenditure has significant positive effect on Human Development Index in Ebonyi State. Moreover, Education Expenditure was found to have significant positive relationship with Human Development Index. The implication of these findings is that increase in expenditures on health, and education, led to the increase in human development Index in Ebonyi State. Based on this, it was recommended for increased funding of these areas in Ebonyi State so as to boost human development index in the state.

**Keywords :** HDI Accounting, Health Expenditure, Education Expenditure

### Introduction

Ebonyi State was among the six states created on October 1, 1996 by the Sani Abacha military regime. Its thirteen local government structure was also a product of that military fiat as only two new local government councils of Ebonyi and Ivo were created to join the existing ones to form the thirteen local government structures which was announced then along with the newly created Ebonyi State.

Local government councils being the least of the three tiers of governance in Nigeria is closest to the residents at the rural areas and designed to provide goods and services needed by the people and also to bring development nearer to the people at the rural areas (Adeyemi, Akindele, Aluko and Agesin, 2012). These basic services which local government councils were expected to provide are articulated in the local government reforms of 1976 and are listed in the 4<sup>th</sup> schedule of 1999 Federal Government Constitution as amended (Jumare, 2006). Assignment of separate responsibilities to the three levels of government by the Constitution of the Federal Republic of Nigeria might be to reduce conflicts of interest and unnecessary frictions which would affect the smooth running of

each tier of government and to allow every layer of government, to enjoy a comparative advantage in the provision of services to the people. It is interesting to note that some responsibilities are assigned among the three levels of government where they have concurrent responsibilities like Education, Health, Agriculture etc, while responsibilities like defense and Railways for instances are in the exclusive legislative lists of the Federal Government Constitution where only the Federal government has power to legislate on. Awotokun, (2001) cited in Adeyemi Akindele *et al* (2012), states that the functions of local government shall include participation in the government of a state as regards the provision and maintenance of primary, adult and vocational education and the provision and maintenance of health services among others, this is why expenditures by local government on these sectors are crucial in determining human development index. Local Government Councils therefore superintend over these sectors because they are better positioned to render services at this level of governance being government that is closest to the door steps of the rural dwellers. Local Government therefore appropriate funds and embark on expenditures

majorly to improve the living conditions of her citizens.

However, the effect of local government spending on Human Development Index has become a hot topic of intense debate among scholars, civil society organizations and policy makers. The controversy stems from the allegation by rural dwellers and other critical stakeholders that expenditure by local government councils do not adequately address the decay in infrastructure which manifest in poor Human Development Index in the local government councils nationwide (Adeyemi *et al*, 2012). In Ebonyi state local government Councils rural health facilities, rural roads as well as educational infrastructure which are known to be drivers of human development do not seem to have fared well over the years judging from poor human development index as confirmed by United Nations Development Programme (UNDP) 2014 Human Development Report.

### **Review of Related Literature**

Local government has been recognised in Nigeria as the third tier of governance and as a concept and one of the subordinating entities within the Nigeria political configuration has attracted definitions of many scholars. However, there is no consensus among these scholars on the definition of local government. The differences in definitions of local government by different scholars and administrators reflect their perceptions on what they considered as the actual role of Local Government Council which differ from one environment to another. The Local Government Reform Handbook (1962) defines Local Government as:

*“government at the local level exercised through representative councils established by law to exercise specific powers within defined areas”*

From the above definition, three major operative words that are worthy of expatiating are that Local Government is the government at the local level. This tier of government is closest to the grass root as a local government is made up of communities and electoral wards which constitute governance at the local level. The activities at this level of governance are carried out through representative councils who are elected in accordance with established procedures to represent their people at

the grass root. The counselors who emerge to represent their various wards/communities do so through established laws. These laws are also enshrined in various bye laws of the local government and as provided for by state legislators who have powers to legislate over the local government councils.

The specific powers which the local government exercises are as provided for in the relevant sections of the Nigerian Constitution which the local councils exercise within a defined boundary. What this means is that local government must have a defined geographical boundary.

Oni (1993) captured the essence of local government when he described it “as the government which functions through representative created by law to apply within a defined area that has common social political and cultural affinity which gave local government councils institutional power to initiate and direct council to provide services, decide project to be implement so as to assist state government in the onerous task of rendering the needed services to the rural dwellers”. These functions which local governments perform to complement the functions of state governments are very crucial as they were provided for in the Constitution and local government being closest to the grass root is in a better position to provide. Such services include responsibilities for primary healthcare, primary Education rural road construction and rehabilitation and rural electrification among others.

Arising from the above definition is the fact that local government is a recognized organ of government at the local level and which has a specific location, population, formal structure and independent. Local government can come into being by an enactment by the upper levels of government but are allowed some degrees of freedom for initiative. The fact that the upper tier of government has powers to legislate and enact laws for the establishment of local government indirectly, usurped the autonomy that local government would have enjoyed. This very provision in the Constitution was exploited by many State governments including Ebonyi state to establish State/Local Government Joint Account Committee through which local government funds were managed.

As the lowest level of administration, local government makes bye laws, regulations which the residents are bound to obey and as such they subordinated themselves to the provisions of those laws. This implies that local government should share common social and cultural ties and should share geographical contiguity.

In Nigeria, there are three tiers of government i.e. the federal, the state and the local government. The local government is the third and lowest tier of governance which places it closest to the rural people at the grass root of local communities. Its closeness to the people enables it perform special function and services which hinges on the interest and aspiration of the rural communities.

### **Overview of Local Government System in Ebonyi State**

It is pertinent to briefly describe Ebonyi State and its thirteen local government structure to be able to clearly understand the *modus operandi* of Ebonyi Local Government System.

Ebonyi State came to limelight as a result of military creation on 1<sup>st</sup> October, 1996, along with five other states. Ebonyi as a state was carved out from Abakaliki Senatorial Zone of old Enugu State and from old Afikpo division. The state capital is located at Abakaliki and it prides itself as "salt of the nation" (Chukwuemeka, Enudu and Nwali, 2011).

Ebonyi State shares boundaries with Enugu State to the west, Benue State to the North, Cross River State to the East and Imo and Abia states to the south. Lying approximately within Longitude 7.3° and Latitude 5.40° and 6.45° North, Ebonyi State occupies an area of approximately 5,533km<sup>2</sup> and ranks 33<sup>rd</sup> in terms of land mass among other states in the country.

From the report of 2006 National population Census, the population of Ebonyi State is put at 2,176,947 people comprising of 1,064,156 males and 1,112,791 females. The people of Ebonyi State are majorly rural dwellers. Statistics has shown that 75% of the population of Ebonyi state is found in rural communities while about 25% are living in the urban areas. The National Bureau of Statistics (NBS, 2005) estimates that about 70.77% of more than 2 million Ebonyi people as at 2005 were engaged in Agricultural sector contrary to an average of 45% of the population employed in the same sector in other parts of South Eastern Geo-

political zone made up of Abia, Enugu and Anambra State (Chukwuemeka *et al*, 2011). This might explain why the people of Ebonyi State Local Government Councils are largely poor and lag behind others in the South East geo-political zone as their system of agriculture is subsistence. The incomes from agriculture been generally at subsistence level seem to be inadequate to cater for the ever growing population of the rural farmers. This might account for the persistent growth in poverty index as observed by 2014 Human Development Report.

Ebonyi State is inhabited by Igbos of contemporary Nigeria having about 9 (nine) primary major dialects including Ehugbo, Ezza, Izzi, Ngbo/Iziah, Kori, Mbembe Legbo and Oring. These languages are all sub-groups and have distinct dialects of Igbo Language except Kori which appears to be among the few other non-Igbo speaking groups found within the state (Otu 2012 cited in Chukwuemeka *et al*, 2011). Non-Igbo speaking kori people are found in Effium, Ohaukwu Local Government Council, Okpoto and Ntezi in Ishielu Local Government Council, Amuda and Okpomorokpo in Ezza North Local Government Council.

The 1999 constitution of the Federal Republic of Nigeria recognized local government as the lowest tier of government within the purview of the tripartite Federal arrangement which Nigeria operates. This country operates three tiers of governments which are Federal, State and Local Government. The federal and state governments occupy higher echelon and play the roles of funding and supervising the activities of the local council areas. Thus local council has been classified as a public sector organization and a tier of government with assigned function and responsibilities, administrative structures and financial management both for maintaining itself and rendering its statutory function to the citizens (Chukwuemeka *et al*, 2011). They note that among the underlining imperatives which gave impetus for coming into being of local councils is for effective and efficient administration of its location. They further note that among the developing countries of the world, Nigeria is one of the few that have largely decentralize the resources as well as the obligation for responsibilities for the delivery of basic amenities and services such as healthcare delivery, provision of rural roads, rural

electrification and education to local rural dwellers. The decentralization of Local Government Council have suffered a great set back starting from 1999 when Nigeria changed from Military rule to civilian administration (Chukwuemeka *et al*, 2011).

The thirteen local government councils and their Headquarters are given below (LGSC Annual Report, 2008 p. 16):

Table 1: Local Government Councils and their Headquarters in Ebonyi State

LOCAL GOVERNMENT COUNCIL	HEADQUARTERS
Abakaliki	Abakaliki
Afikpo North	Afikpo
Afikpo South	Nguzu Edda
Ebonyi	Ugbodo
Ezza North	Ebiaji
Ezza South	Onueke
Ikwo	Onuebonyi Echara
Ishielu	Ezillo
Izzi	Iboko
Ivo	Ishiaka
Ohaozara	Obiozara
Ohaukwu	Ezzamgbo
Onicha	Isu

Source: Researcher's compilations.

Each of the local government council is headed by an elected chairman and vice chairman as well as elected councilors representing each of the electoral wards in the local government council. Supervisory councilors are appointed and they serve in the capacity of commissioner's equivalent at the state and are in charge of specific Departments.

### Human Development Index

UNDP (2010) defines Human Development Index as a relative assessment of life expectancy at birth, literacy level and wellbeing of various countries worldwide. It is used to measure the average endowment of countries in three basic dimensions of health (life expectancy), literacy level and income index to assess if a country could be classified as developed, developing or underdeveloped. This yard stick of measurement which was introduced by UNDP in 1990 is considered a standard and more holistic measure of wellbeing or living index as it is based on three goals of development – Longevity, Knowledge and per capita income (Purchasing power parity expressed in US Dollars) (Todaro and Smith 2003). It takes on values between 0 and 1, with zero representing lowest level of human development and 1 representing the highest index.

According to Adewale (2010) Human Development Index (HDI) is a composite measure

of human development covering health, education and income. As noted by Adewale (2010) HDI was devised by a Pakistani economist Mahbub Ul Haq and an Indian economist Amartyam Sen (1990) -the first Human Development Report was published in 1990. Daleep (2010) also states that the index (Human Development Index) measures the average achievement in a country in three basic dimensions of human development as follows: a long and healthy life (Health), access to knowledge/Adult literacy (Education) and a decent standard of living (Income). He notes that it was introduced as an alternative to conventional measures of national development such as level of income and the rate of economic growth.

A knowledge driven worker is more productive as his skill can easily be upgraded for greater productivity. In this case the worker is likely to impact positively on other indicators, for instance, Hofcraft, McDona Riuste, (1984) find that mother's husband's education their work status and their type of residence are more or less associated with child survival. This might be because educated parents are likely to observe personal hygiene and could overcome prejudices associated with local believe that are inimical to child survival. Specifically mothers' level of education is also found to be closely associated with improved child survival in Nigeria (Caldwell, 1979) Costa Rica, Haine and Avery 1982 and in Nicaragua (Standiford, Casel, Montenegro and Sanchez, 1995) in Anyanwu and Erjihjakpor, (2007).

A study by Callan (2010) in Anyanwu and Erjihjakpor (2007) lends credence to the above when he posits that education especially female education reduces fertility. He argued that apart from the proposition which states that women's forgone earnings are the leading cost of children, if you raise woman's education, you raise their potential income, and you raise the cost of fertility Callan (2010) argues further that economist rarely notice that there are several other possible mechanisms for female education to reduce fertility reiterating that:

- i) Education changes values in an anti-natal direction
- ii) Education correlates with stricter self-imposed rules for parenting
- iii) Both education and fertility depend on foresight

For attainment of high standard of living-per capita income (purchasing power parity expressed in US Dollars) must be robust enough for the per capita income to be meaningful and this cannot be achieved in a situation where there is a population explosion occasioned by high female fertility. Perhaps to curb this explosion, many developing countries including Nigeria embarked on family planning to reduce the burden of population explosion on per capita income.

### **Theoretical Framework**

Certain assumptions are usually made to place a phenomenon in a proper perspective to help explain facts. This gave rise to postulation of theories which could be described as a set or a group of tested propositions generally held to be true that can be used to explain facts or events. In the same vein there are basic theories propounded by researchers and scholars used to support the effect of local government expenditure and HDI. The emergence of these theories gave impetus to a number of eminent researchers who gave conflicting results of the application of these theories to public sector expenditure.

hude and Chude (2013:pp67-68) briefly summarized various theories of public expenditure and Economic growth as follows:

#### **2.6.1 Wagner's Theory of Increasing State Activities**

Wagner's theory is a principle named after the German economist Adolph Wagner who propounded the theory in 1895. Wagner advanced his 'law of rising public expenditures' by analyzing trends in the growth of public expenditure and the size of public sector. Wagner's law postulates that:

(i) the extension of the functions of the states leads to an increase in public expenditure on administration and regulation of the economy; (ii) the development of modern industrial society would give rise to increasing political pressure for social progress and call for increased allowance for social consideration in the conduct of industry (iii) the increase in public expenditure will be more than proportional increase in the national income and will thus result in a relative expansion of the public sector. Musgrave and Musgrave (1988), in support of Wagner's law, opined that as progressive nations industrialize, the share of the public sector in the national economy grows continually. It was noted that expansion in government expenditures will

give rise to growth in employment and subsequently require government to spend extra fund to regulate the activities of the sector to protect the employees. Private sector establishment is usually profit motive oriented and could maltreat workers/contractors in absence of adequate regulation to protect them. This game rose to the establishment of laws and orders to enforce compliance.

### **Methodology**

#### **Research Design**

The study adopted ex -post facto research design. Ex-post facto research design is a design which has to do with the use of historical data. The essence of this is to use a design that will adequately explain the pattern of behaviour of each independent variable. This method is preferred because of its accuracy and reliability. The design is useful for hypothesis testing or relationship determination (Krishnaswamy, Appa and Mthirajan, 2008).

#### **Sources of Data**

Data for the analysis were secondary data extracted from the Audited Accounts of the thirteen Local Government Councils of Ebonyi State as follows:

- i) Local government expenditure on health from the Audited Accounts of the thirteen local government councils of Ebonyi State from 1999–2012.
- ii) Local government expenditure on Education extracted from the Audited Accounts of the thirteen local government councils of Ebonyi State from 1999–2012.
- iii) Local government expenditure on rural roads in Ebonyi State Local Government Councils extracted from the Audited Accounts of the thirteen local government councils from 1999 – 2012.
- iv) Local government expenditure on rural electrification extracted from the audited account of the thirteen local government councils in Ebonyi state from 1999 - 2012.
- v) HDI were extracted from UNDP HDR from 1999-2012

#### **The Regression Model**

Multiple regression models were used. These were adapted and modified from prior research works of (Razim, Absian and Mohammed 2012, and Yababar 2013) and are as follows: Human Development Index (HDI) which for the purpose of this study

serves as dependent variable and is expected to be a function of the various independent variables- health expenditures (HEXP), Education Expenditure (EEXP), Rural Road expenditure (RREXP) and Rural Electrification Expenditure (REEXP).

Mathematically, this can be expressed as:  
 $HDI = f(HEXP, EEXP, RREXP, REEXP)$  ..... 1

To put this in multiple regression form, we have,  
 $HDI = \alpha + \beta_1 HEXP + \beta_2 EEXP + \beta_3 RREXP + \beta_4 REEXP + \epsilon$  ..... 2

Where  $\alpha$  =the constant term  
 $\beta$  is the coefficient for the various variables (1,2,3,and 4) or  $\beta_1, \beta_2$  and  $\beta_3$  are the parameters while  $\epsilon$  is the error term.

Hypothesis 1 seeks to ascertain the extent to which Health expenditure affects Human development index in Ebonyi State Local Government Councils.

**Table 5: Regression Result of the Extent to which Health Expenditure (HEXP) affects Human Development Index (HDI) in Ebonyi State Local Government Councils.**

Variables	Coefficient	Std-Error	t-Statistics	P
Constant	2.996E8	2.389	76.407	0.000
HEXP	0.001	0.000	2.823	0.020
HDI	0.0183			
R <sup>2</sup>	0.760			
Durbin Watson	1.814			

Source: Regression analysis using SPSS 16.0

**Results of the Statistical Analysis:**

The result as presented in table 2, on the extent to which Health Expenditure (HEXP) affects Human Development Index (HDI) as obtained from a simple regression analysis of ordinary least square method, showed a coefficient of determination (R<sub>2</sub>) of 0.760. This implies that Health Expenditure (HEXP) had about 76% influences on Human Development Index (HDI) in Ebonyi State Local Government Council while 24.0 percent of the variation in Human development index is explained by other variables not included and investigated in the model. The coefficient of (HEXP) was observed to be positive at 0.0183, statistically Significant at 5% level and this positive PV of the coefficient showed that the a priori expectation of the study was met. This implies that increase in Health Expenditure (HEXP) by 1% will lead to a corresponding rise in HDI by 0.0183 within the

study area *cetris paribus*. From the analysis, 1.814 was obtained as the value of Durbin Watson which is below 2 and this implies that there is presence of autocorrelation within the models used which is not sufficient to affect the result.

**Decision:**

Since  $t - cal (2.823) > P$  value (0.020),  $H_{01}$  was rejected and  $H_{a1}$  accepted and therefore, concluded that Health Expenditure has significant effect on Human Development Index (HDI) in Ebonyi State local government Councils.

**Conclusion**

This study evaluated the effect of local government Expenditures on Health, Education Rural Roads and Rural Electrification on Human Development Index in Ebonyi State Local Government Councils between 1999 and 2012. It focused on three major parameters of Human Development Index determined as follows; Health (Life expectancy), Education (Literacy rate) Rural Roads and Rural Electrification (per capita income)

In the light of the findings and conclusions, of this research I hereby make the following recommendations:

- i. Since HDI is an index fashioned out of Education (literacy), health (life expectancy) and infrastructure,(per capita income) local government councils in Ebonyi State should increase their expenditure on these independent variables to achieve appreciable improvement in Human Development Index.
- ii. The result of the study has shown a strong link between provision of infrastructure and improvement in per capita income, local government should accelerate the growth of rural infrastructure by embarking on massive rural road construction to ensure easy evacuation of agricultural products from rural to urban centres.

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