

The Oil Advantaged States: Does Poverty Exist In The Oil Driven Economy Of Ondo State, Nigeria?

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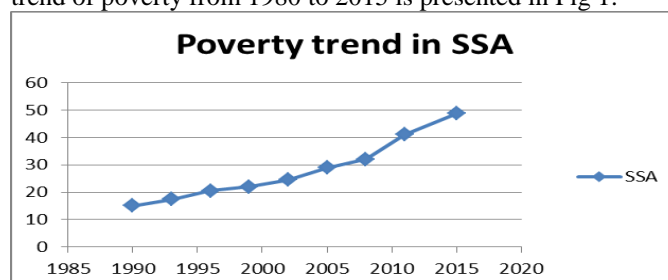
Abstract: Globally, poverty remain a challenge to most developing countries. In order to estimate economic variables that influence poverty and to achieve targeted social security net for the poor, it is crucial for policy makers to assess the comprehensive picture of exclusion arising from income inequality. This current study is to evaluate poverty in Ondo State, Nigeria. Specifically, the study determines poverty indices, gap and severity across the state. It adopts Foster, Greer and Thorbecke model, gini coefficient and geographical information system (GIS) using Arc-view software package to map out the concentration of poverty. The outcome of the analysis shows that poverty is concentrated in the rural areas which is consistent with previous findings. Though poverty is found at the rural areas, the GIS analysis indicate that Ikare Akoko, as urban city and commercial centre of the state, fall on poverty region. Also, Akure the capital city of the State is found with higher poverty incidence and more severe than other four categorized urban cities in the study. As a matter of policy, the poverty of the state would keep on increasing if government and policy makers do not redirect attention to appropriate social security nets (SSN). Through the SSN, a redistribution of economic wealth would be made possible. Review of housing scheme and land tenure in favour of the low-income earners would be an exercise in the right direction.

Keywords: Poverty, income inequality, poverty map, oil driven economy, Ondo State.

I. INTRODUCTION

Globally, poverty remain a challenge to most developing countries. The 2000 Millennium Development Goal 1 (MDG1) aimed at reducing global extreme poverty. Despite foreign intervention to eliminate poverty, the life of the affected households in poverty has little change for better over the years. In 1999, 22% of the Sub-Sahara Africa (SSA) population were poor in which Nigeria has largest share of the poverty (Oshewolo, 2011; Olorunfemi, 2007). It increased to 48.8% in 2015 (World Bank, 2016). According to the available Poverty and Equity Databank and PovcalNet for the SSA countries, 415.8 million people are living below poverty line of \$1.25 in 2011 (World Bank 2015). The growth of poverty remains the same in the SSA than other world regions demonstrating poor achievement in MDG1 (Oshewolo, 2012).

The World Bank estimate indicates that there is more than double of the extreme poor living in SSA in 2011 (415.8million) than there were in 1981 (205 million). The trend of poverty from 1980 to 2015 is presented in Fig 1.



Source: Author's Computation from World Bank Database (2016)

Figure 1: Poverty Trend in Sub-Sahara Africa

In Africa, the rich are getting richer, the poor are struggling in want. The trend is predictable to harm the economic growth ever achieved in the continent. For example, Ostry, Berg, and Tsangarides (2014), opined that inequality can undermine progress in health and education, cause investment – reducing, political and economic instability. The benefits of economic growth have been skewed and unequally shared thereby increase poverty level for larger population. Notably, a small group of less than 5% do grasp a substantial proportion of the income and wealth in Africa. As such, the Africa income and wealth are revolving in the circle of the political capitalist (Oshewolo, 2012). This formed a new international intra-Africa national capitalist class that capture the major proceeds of growth as against the principle of fair sharing.

In west Africa, Nigeria is the most populous country with highest poverty headcount. It is not unconnected to over reliance on oil boom discovered in 1970s that has impact on country's path of non-diversification. The concentration of crude oil in Nigeria is located at the Niger Delta region. This comprises of Abia, Akwa Ibom, Ondo, Rivers, Delta, Edo, Imo and Bayelsa. These states are given 13% derivation from the national revenue in addition to statutory allocation. This oil derivation share was meant to promote the welfare of the people of the region. Since inception of the derivation share, poverty level of the region is uncompromised. It is reported by the Punch Newspaper (2017) that 2.1 million Nigerians lost their job in 2016 alone which would increase the chances of falling into poverty region faster (Wu, Zhang, & Zhang, 2008). In analyzing the poverty level in Nigeria, its somewhat paradoxical. The country is rich in natural resources but ranked as one of the poorest countries in the world (Chukwuemeka, 2009; Oshewolo 2011). In order to achieve remarkable reduction in poverty, a lot of poverty reduction programmes were put in place by the government such as Poverty Alleviation Programme (PAP).

Further, Ondo state is one of these oils producing states receiving different income share packages from the Federal Account Allocation Committee (FAAC) and with its huge amount of revenue from internally generated revenue (IGR). The selected data on FAAC share to Ondo State are presented in Table 1 below.

Month	Gross Statutory Allocation	13% Derivation	Total
January 2015	2,744,742,747.60	1,835,582,610.02	4,580,325,357.62
February 2015	2,419,894,324.68	1,327,252,704.84	3,747,147,029.52
March 2015	2,323,442,705.66	1,318,842,253.11	3,642,284,958.76
April 2015	1,823,934,860.32	847,996,926.60	2,671,931,786.92
December 2015	1,736,972,816.27	1,129,008,996.24	2,865,981,812.51
December 2016	1,218,937,536.23	82,981,1647.29	2088749183.52
Total	12,267,924,990.76	7,288,495,138.10	19,596,420,128.85

Source: Federal Ministry of Finance

Table 1: Ondo State Statutory Allocation and 13% Derivation

In the selected six months of the FAAC data, though the oil shock made the revenue to dwindle, the sum of over 19.5 billion naira were received by Ondo State Government. In the recent development, the State received from the Federal

Government the sum of \$185,527,107.67 (FGN, 2017), a share of the Paris Club. In consequence of this huge amount accrued to the Ondo State government, the state government has the obligation to improve people living standard. However, there are acute and persistent nonpayment of salary to workers which has multiplier effect on redistribution of income within the state. This complicates people living standard and increases income inequality across the state. So, this current study stands to evaluate the level of poverty in Ondo State, Nigeria. Specifically, we attempt to investigate the concentration of poverty, determine the severity and aversion in the State. Hence, the study is sub-divided into five sections. Section two deals with literature review, section three explains the methodology, while sections four and five present empirical results and conclusion respectively.

II. LITERATURE REVIEW

The controversial debate about poverty is found in the Lewis theory of poverty. The theory stipulates that poverty exists because of the ineptitude of the poor to utilize different opportunities opened to him. This line of argument is typically blaming poverty condition of the poor on the poor themselves. Due to the poor ineptitude, the condition results to recycling poverty among generations (Lewis, 1966). However, the theory is controversial among the scholars (Gajdosikienė, 2004). Rather than blaming the poor, the opposing argument is that the poor people are being deprived of having access to economic resources available in the society. Due to the deprivation imposed on this group, their income becomes insufficient to secure minimum basic needs required for survival (Ansoms & Geene, 2012). As such, Sen (2000) argues that this condition is a deliberate attempt of capability deprivation.

Generally, society comprises of haves and the have nots. The have nots are the poor. So, poverty represents a condition in which a set of the population are worse-off than the rest of the population. There are two kinds of poverty. – the relative and absolute poverty. The two concepts are not exclusive (Bourgignon, 1999). However, relative poverty differs such that a household is not able to be like others. This is social deprivation or poverty. On the other hand, absolute poverty is about survival (Walker & Walker, 1999). It is inability of household to buy food and meet up with some basic physical needs essential for life (Adeleye, Alimi & Ashomolowo 2002; Bourgignon, 1999, Ansoms & Geene, 2012). With international measurement of poverty line, the absolute poverty is the category of household that fall below the poverty line of \$1.25/day. Being that said, we present empirical findings on poverty analysis in Nigeria.

An expert in poverty analysis, Aigbokhan (2008) conducted a research on the poverty profile in Nigeria using national household income survey to determine the extent of poverty across households. It was found out that poverty is concentrated in the rural areas than the urban centers. Also, the gender analysis of poverty was found to be more acute in male headed household while it is fair better in the female headed households. The results proved that poverty has strong face out in the northern part of Nigeria, Edo State, Delta State

and Akwa Ibom. Notwithstanding of the efforts of government, poverty clearly manifest in Nigeria. However, the study used insufficient data for female headed household compare to men households' data. In Oshewolo (2011), the setup of his research is on constructivist philosophy wherein a qualitative research design was applied. The findings indicate that rural areas of the country and northern part of the country have an acute poverty level. In tackling the problem, the efforts of government demonstrate a snail pace achievement indicating a poor management of MDG intervention and national poverty programmes. The acute poverty in Nigeria is blamed on poor budgeting, crazy governance, incapacity of the poverty officials and reluctance of the legislative arm to focus on poverty reduction laws. These are structural poverty indicators rather than blaming the poor themselves (Lewis, 1966). However, these studies do not clearly state how poverty in the country is concentrated through economic-geographical mapping. Poverty aversion and severity with FGT methodology to evaluate the spread of poverty are not embedded in these analyses.

III. METHODOLOGY

The current study is a descriptive research design. Hence, a serious challenge arises from issue of poverty data particularly in the Sub-Sahara Africa countries. Due to limited time series data, the study proceeds to use cross sectional survey data. The study area, Ondo State, Nigeria, is divided into three strata - the state three geopolitical zones which include Ondo North, Ondo Central and Ondo South. In each of the zone, we randomly selected cities and villages which are classified into rural and urban. Thereafter, the study used simple random sampling to select the sample for the rural and the urban. For the sample size, Krejcie and Morgan (1970) was used to select the optimum sample size of 600. The instrument was validated with face and content validity techniques. The instrument captured household socioeconomic and demographic characteristics.

The method of analysis is money-metric approach rather than multidimensional approach to measure poverty indices in Ondo State. As such, Foster, Greer and Thorbecke (1984) index (FGT index) is specified to determine poverty gap, severity and aversion in the State. The model is stated as:

$$P_{\alpha} = \frac{1}{N} \sum_{i=1}^q \frac{(Z - y_i)^{\alpha}}{Z} \quad 1$$

Where Z is the poverty line, y_i is the i th household income $i = (1, 2, 3, \dots, n)$ living below the poverty line, q is the population living below the poverty line, N is the total number of sampled population and α is the parameter estimate which takes the value of 0, 1 and 2 subject to the degree of concern of poverty. The parameter occupies P_0, P_1 and P_2 for poverty indices or proportion, poverty depth and poverty severity respectively. The P_2 explains the degree of inequality below the poverty line. In that respect, poverty line is generated for each urban cities and rural areas.

Estimating economic variables that influence poverty and to achieve targeted social security net for the poor, it is crucial for policy makers to assess the comprehensive picture of exclusion arising from income inequality (Muddiman, 2000). Hence, the concentration of poverty in Ondo State is obtained through poverty mapping technique. Poverty map does not necessarily mean maps in geography but an instrument for targeting pro-poor areas. Hence, an Arc view software being used in geographical Information System (GIS) is used in the mapping process. As earlier said, the study area is classified into urban and rural representing five major urban cities in the state and ten rural villages across the three geopolitical zones, totaling fifteen sample urban and rural of the State. The fifteen urban cities and rural villages are digitized to detect poverty areas. Using the analog digital conversion, various data are attracted to the attribute table. The dependent variable is the household income while independent variable is family size. Further, a spatial analysis operations is used to probe the linear regression equation in order to identify those areas that fell into poverty and non-poverty regions. The administrative map for sampled rural and urban areas for the study are presented in Figure 2 and 3 below



Figure 2: Administrative Map of Sampled Rural Areas of Ondo State



Figure 3: Administrative map for urban sampled of Ondo State

The urban and rural inequality is determined with the use of gini coefficient. It is specified as:

$$Inqgini = \frac{2cov(Y, F)}{\bar{Y}} \quad 2$$

Where Y represents household income, F is the rank of the individual occupying in the income distribution. This takes

a value between 0 for perfect equality and 1 for perfect inequality. The \bar{Y} is the mean income of the total sample.

IV. EMPIRICAL RESULTS

First, we present the descriptive results of the respondents in the Table 1 below, basically on sex, age, marital status, educational attainment, respondent's apartment profiles and health care services. The descriptive result delves into multidimensional approach, which Sen (2000) refer to as non-material dimension to assess poverty in the state. The result shows that 65.51% percent are below 45 years of age, 67.24% and 32.76% represents male and female respectively, 37.89% are the respondents who are dependent and 27.64% are illiterate while 44% attended primary or secondary schooling and 27.99% attended polytechnic or university education. only 18% and 7.18% live in a flat or personal houses in urban and rural in that order. Most of the rural houses are built with mud block without plastering and physically dilapidated, dangerous for human habitation. The detail results are presented in Table 1 below.

Age Composition	Age Range	Urban %	Rural %	Total %
	15-25	5.23	8.36	13.59
	26-35	13.59	14.29	27.88
	36-45	10.80	13.24	24.04
	46-55	13.59	11.50	25.09
	56 and above	5.92	3.48	9.00
Sex composition	Sex	Urban %	Rural %	Total %
	Male	32.42	34.82	67.24
	Female	17.74	15.02	32.76
Married status	Item	Urban %	Rural %	Total %
	Married	29.35	32.76	62.11
	Single	11.26	10.24	21.50
	Divorced	5.12	2.05	7.17
	Separated	1.37	2.05	3.42
	Widow	3.07	2.73	5.80
Educational Attainment	Item	Urban %	Rural %	Total %
	No Education	8.53	19.11	27.64
	Primary	7.17	7.17	14.34
	Secondary	16.38	13.65	30.03
	NCE/OND	9.89	6.48	16.37
	B.Sc/HND	8.19	3.43	11.62
Respondent Apartment	Item	Urban %	Rural %	Total %
	Flat/personal	18.77	7.18	25.95
	2 rooms and parlour	8.19	9.90	18.09
	3 rooms and parlour	-	3.07	3.07
	1 rooms and parlour	8.87	8.53	17.40
	1 room only	14.33	21.16	35.49
Toilet facility	Item	Urban %	Rural %	Total %
	Water closet	22.53	3.75	26.28
	Pit toilet	26.62	13.32	39.94
	Bush/short-put	1.02	32.76	33.78
Bathroom facility	Item	Urban %	Rural %	Total %
	Inner bathroom	28.33	15.02	43.35
	Outside bathroom	21.84	31.40	53.24
	No bathroom	-	3.41	3.41
Health care services Access	Item	Urban %	Rural %	Total %
	Have access (HCS)	45.39	32.04	77.47

Treatment	Have no access (HCS)	4.78	17.75	22.53
	Govt hospital/clinic	19.87	14.38	34.25
	Private hospital/clinic	9.59	7.76	17.35
	Pharmacy/chemist shop	6.85	13.01	19.86
	Local herbs	9.13	19.41	28.54

Source: Author's computation

Table 2: Descriptive Statistics Result

Second, we present the result of urban poverty indices in Table 2 below

Urban cities	P0	P1	P2	Z
Akure	.60	.25	.14	3094.26
Owo	.47	.16	.11	3633.58
Ikare	.53	.21	.11	4920.49
Ondo	.50	.21	.12	4046.17
Okitipupa	.40	.15	.09	4090.59

Z = estimated poverty line for each city

Source: Author's computation

Table 3: Ondo State Urban Poverty Indices

The urban poverty incidence (P_0) in Ondo state is more severe in Akure, the state capital with 60% than the rest urban cities. Other P-alphas are Ikare, ondo, Owo and Okitipupa with 53%, 47%, 50% and 40% respectively. For poverty gap and severity (P_1 and P_2), the results demonstrate similar behavior. Since the poverty gap accounts for the distance which separates the poor from the poverty line, to eradicate poverty in each urban centres would require a cash transfer of 25%, 16%, 21%, 21% and 15% in Akure, Owo, Ikare, Ondo and Okitipupa respectively to the urban poor.

Furthermore, the result of the rural poverty is presented in Table 3 below

Rural Villages	P0	P1	P2	Z
Iju	.47	.20	.10	1653.41
Ipele	.53	.22	.11	1859.44
Ibuji	.53	.27	.15	1492.47
Asewele Oja	.33	.21	.15	2328.18
Uso	.60	.22	.11	1211.91
Epinmi Akoko	.47	.13	.05	1451.85
Ode Erinje	.40	.25	.16	2709.28
Ijare	.27	.11	.04	1236.76
Ilututun	.27	.20	.15	2343.92
Igasi	.53	.25	.12	2476.35

Z = Poverty Line Estimated for each village

Source: Author's Computation

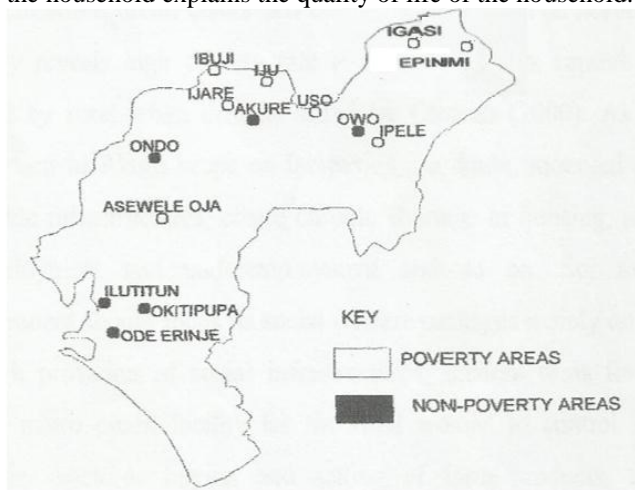
Table 4: Ondo State Rural Poverty Indices

The rural poverty indices (P_0) show that poverty is high in Uso with 60%, Ipele (53%), Ibuji (53%) and Igasi (53%). While the lowest poverty indices is Ijare and Ilutuntun. Further, accounting for the poverty gap and severity (P_1 and P_2), the results explain that a cash transfer of 20%, 22%, 27%, 21%, 22%, 13%, 25%, 11%, 20% and 25% for Iju, Ipele, Ibuji, Asewele Oja, Uso, Epinmi Akoko, Ode Erinje, Ijare, Ilutuntun and Igasi respectively.

The severity of poverty is felt in Akure and Ondo for the urban cities with 14% and 12% in that order. For the rural sector, it is more severe in Ode Erinje, Ibuji Asewele Oja and Ilutuntun 16%, 15%, 15% and 15% in that order. Comparing

the urban and rural poverty, though the poverty incidence for the rural has slight difference from urban, it was found that poverty for rural areas is more akin (53%) in the state than the urban areas (52%). However, the severity (P_2) is more felt in the urban (13%) than the rural (12%). A higher cash transfer is required for the urban than the rural sector. Across the household in the urban, the income inequality is found to be 56% demonstrating high inequality of urban areas of Ondo state. Similarly, the income inequality for the rural indicates 59% showing similar high inequality across rural households.

Measuring the concentration of poverty in the state, the map results of Arc-view are displayed below. The result of GIS identifying poverty areas of the state is presented in Figure 4. The basic variables of the mapping are household income and family size. This is because the per capita income of the household explains the quality of life of the household.



Source: Authors' computation

Figure 4: Result of GIS Identification of poverty concentration, Ondo State

From figure 4 above, the result of GIS explaining poverty concentration in Ondo State demonstrates that poverty is concentrated in the rural areas. The result is consistent with previous findings (Aigbokhan, 2008; Oshowele, 2011). However, in the urban cities of the state, Ikare Akoko, categorized as urban city and commercial area, indisputably falls on the poverty region. On the other hand, Ilutuntun and Ode Erinje in Ikale Local government, classified as rural towns, fall on non-poverty region. This could reflect on the settlement beside the riverine area that has access to seaport and large scale fish farming. The poverty map of Figure 4 explains that 60% of the state mapped out are identified as poverty areas of the state.

V. CONCLUSION

We have carefully evaluated poverty in Ondo State, Nigeria in this study. This is achieved with the FGT method, gini coefficient and arc-view in GIS. Despite that Ondo State is oil driven of her economy, poverty exists largely in the state economy. Our result is consistent with the previous findings that poverty often concentrates in the rural areas (Aigbokhan, 2008, Oshewolo, 2011). Another significant aspect of the

result is our contribution in the use of arc-view to examine concentration of poverty in the state. It is found that an urban city and known for its commercial capability in the state, Ikare Akoko, fall on the poverty region. The poverty indices show that Akure the capital city has an extreme poverty level and severity than other urban centres of the state. This could be responsible by rural-urban drift to the main capital (Olotuah, 2000). As the number of population of Akure keeps increasing, no doubt, would increase the demand for social amenities such as infrastructures, housing, transport and urban labour surplus that are required for good living (Olotua & Adeniji, 2004; Sen, 1999). In consequence, it is imperative for the Ondo State government and policy makers to redirect policy attention to efficient social security net (SSN) for the upliftment of people's living standard. This include, among others, provision of social infrastructures for the rural sector (electricity, good road, good health centre facility and personnel) and provide enabling environment for economic activity to thrive thereby improving household income. Through the SSN, there will be redistribution of the state economic wealth across households. In view of dilapidated houses in the rural and some urban cities of the state, housing policy makers should collaborate with government housing scheme to restructure the sector in favour of low-cost building and review land decrees in favour of the low-income earners.

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