

A CRITICAL APPAISAL OF THE GLOBAL BENCHMARKS FOR MEASURING POVERTY AND NEWLY SUGGESTED MEASURES

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ABSTRACT

Eradication of Poverty has now been established to transcend beyond Community, country or regional goal with its inclusion as part of Millennium Development Goals (MDG). This paper as the title suggests reviews the existing approaches for measuring poverty as well as a critique of the various approaches. At the background, the paper reviews the concept of poverty from the theoretical and poor people's point of view. It then highlights the features, structure and magnitude of poverty in Nigeria. The core part of the paper discusses critically the existing methodologies/approaches for measuring poverty, and the critique/limitations of such measures. Finally, it proposes new approaches/methods that may be more in line with the cultural and economic settings and conditions of third world countries like Nigeria.

Key words: Poverty, Poverty eradication, Millennium Development Goals, Absolute Poverty, Relative Poverty, Core or Abject Poverty, Head Count Index Measure, Quality of Life Index, Poverty Gap Measure, Human Development Index

I. INTRODUCTION

Given the sheer size of its land mass, forest resources sea and water resources and different soil types, Nigeria is placed at an advantageous positions vis a vis other countries of the world to be endowed with abundant mineral/natural/physical and material resources. These resources are still being explored and exploited. According to Africa Recovery Magazine (1998) Nigeria's wealth in Energy and Solid Mineral exceeds that of South Africa. Proving oil reserve is put at 25 billion barrels and further exploitation could increase the reserve to 40 billion barrels. Shell geologist estimated that Nigeria's untapped off-shore oil reserves at about 8 billion barrels.

Records have also placed Nigerian as the 7th largest exporter of oil in the world Proving reserves of natural gas deposits was also estimated at about 80 billion cubic feet. Experts have asserted that if these resources can be exploited continuously for domestics use and exports, it can last for over 100 years. However, it was documented that Nigeria is endowed with the 10th largest natural gas reserves in the world.

Nigeria is said to be the largest producer of columbite in the world and possesses large deposit of Tin, Iron Ore, Uranium, Limestone, Lead, Zinc, Gold and Coat.

In terms of earning from oil, Nigeria has earned also US\$280 billion exports since the early 1970s and this was equivalent to 90% of the total income or GNP of the whole countries in Sub-Saharan Africa and this trend has been on the increase.

Despite Nigeria's enormous wealth, it has also been a major recipient of Foreign Direct Investment (FDI), 80% of which goes to the oil sector. Available data suggest that FDI in Nigeria in the period 1997-2001 has on the average amounted to US\$1,184 million per year (CBN 2001). By 2010, FDI in Nigeria stood at \$5,133,303,000.00 (See the Table below).

Table 1: Foreign direct investment, net inflows (BoP, current US\$)

Year	Value
1977	\$440,514,200.00
1978	\$210,933,300.00
1979	\$304,632,000.00
1980	(\$738,870,000.00)
1981	\$542,327,300.00
1982	\$430,611,300.00
1983	\$364,434,600.00
1984	\$189,164,800.00
1985	\$485,581,300.00
1986	\$193,214,900.00
1987	\$610,552,100.00
1988	\$378,667,100.00
1989	\$1,884,250,000.00
1990	\$587,882,900.00
1991	\$712,373,400.00
1992	\$896,641,300.00
1993	\$1,345,369,000.00
1994	\$1,959,220,000.00

1995	\$1,079,272,000.00
1996	\$1,593,459,000.00
1997	\$1,539,446,000.00
1998	\$1,051,326,000.00
1999	\$1,004,917,000.00
2000	\$1,140,138,000.00
2001	\$1,190,632,000.00
2002	\$1,874,042,000.00
2003	\$2,005,390,000.00
2004	\$1,874,033,000.00
2005	\$4,967,899,000.00
2006	\$4,534,794,000.00
2007	\$5,167,441,000.00
2008	\$7,145,016,000.00
2009	\$7,029,701,000.00
2010	\$5,133,303,000.00

Source: Index Mundi (2013),
www.indexmundi.com/facts/nigeria/foreign-direct-investment

Despite all the aforementioned resource strength of Nigeria it was ranked among the 25th poorest countries in the world sometime in 1998. As far back as 1992 40% of Nigerians were poor. By 2010, the Harmonized Living Standard Survey by the National Bureau of Statistics indicated that 69.0% of Nigerians were poor (NBS, 2011).

Since then the figure has been rising. For instance, in 1996 Federal Office of Statistics (FOS) reported that 66% of Nigerians live below the poverty line. Africa recovery magazine of 1998 reported that 2/3 of Nigerians were poor. It is also reported that 80% of Nigerian poor were also said to be residing in rural areas. Women were also said to constitute the bulk of the poor. According to the 2012 Gender in Nigeria Report, 82.2 million women in Nigeria are poor, British Council Nigeria (BCN, 2012).

II. STRUCTURE AND MAGNITUDE OF POVERTY IN NIGERIA

Recent studies have indicated that universally, poverty is predominantly gender bias. For, instance several studies by World Bank showed that women earn only 10% of the world income and own less than 10% of the world's property. The studies also indicate that of the absolutely poor more than 70% are women.

The issue of poverty has for a very long time become a major concern at both the international and local levels. Because of the multidimensional nature of poverty and the threat it poses to human kind and societal development, many studies have been carried out at different times and in several countries on the structure and composition of poverty at different levels.

The world development report (1990), estimated that more than one billion people in the developing world were living under poverty. The World Bank estimated 1.29 billion people were living in absolute poverty in 2008. Of these, about 400 million people in absolute poverty lived in India and 173 million people in China. However, in terms of percentage of regional populations, sub-Saharan Africa at 47% had the highest incidence rate of absolute poverty in 2008. Between 1990 and 2010, about 663 million people moved above the absolute poverty level. Still, extreme poverty is a global challenge; it is observed in all parts of the world, including the developed economies (World Bank, 2010; 2012).

In a report on “Poverty and Human Development in Africa” the UNDP (1990) ranked Nigeria among the 35 poorest nations of 78 least developed countries of the world. Another report by UNDP (1996) ranked Nigeria within the global context as 137 out of a total of 174 member countries.

In the World Bank report of poverty assessment in Nigeria (1996), it was shown that non-poor households spend about four times more than poor households can afford. The report also indicates that poor households have more children than non-poor households.

Furthermore, the regional imbalance of poverty as analyzed by the World Bank report (1996), shows that while the north had only over one third of the total population, it has nearly half of the population of the poor and almost half of all those living in extreme poverty. In the proceedings of the 7th Annual Conference of the zonal research units of the CBN (1998), zonal studies were conducted on the situation of poverty in Nigeria. Thus in a study titled ‘a profile of regional/zonal poverty in Nigeria: the case of Ibadan zone’. It was deduced that poverty problem increased over a period of 1992 – 1997. In another survey conducted by CBN and assisted by the World Bank (1999), the incidence of poverty in Nigeria was assessed using the economic and living conditions of the poor as a base. Consequently, a nation – wide survey of household head count was conducted within the country. Using descriptive and deductive method of analysis, the survey indicated that poverty increased to 69.2% in 1997 up from 34.1% of 1992/93.

This was still the case in 2010 as shown by the World Bank 2010 Report (World Bank, 2010).

In an overview of the symptoms of poverty in the Nigerian rural sector, the World Bank report enumerated a number of factors, such as bad roads, small farm holding and poor credit facilities among others. It also posited that poor people could not afford decent housing and clothing. According to the World Bank Report, the regional Variation in Poverty is worsened by the largely “agricultural economy with a fragile agro-climatic environment and a different socio-economic history’.

Another recent study on the ‘poverty profile for Nigeria’ was conducted by the National Bureau of Statistics in 2010. The resulted is presented in Tables 2 and 3.

Table 2 Relative Poverty Headcount from 1980 – 2010.

Year	Poverty Incidence (%)	Estimated Population (Million)	Population in Poverty (million)
1980	27.2	65	17.1
1985	46.3	75	34.7
1992	42.7	91.5	39.2
1996	65.6	102.3	67.1
2004	54.4	126.3	68.7
2010	69.0	163	112.47

Source: NBS Harmonized Living Standard Survey, 2010.

Table 3: Relative Poverty: Non-Poor, Moderately Poor and Extremely Poor.

Year	Non-Poor	Moderately Poor	Extremely Poor
1980	72.8	21.0	6.2
1985	53.7	34.2	12.1
1992	57.3	28.9	13.9
1996	34.4	36.3	29.3
2004	43.3	32.4	22.0
2010	31.0	30.3	38.7

Source: NBS Harmonized Living Standard Survey, 2010.

Distributing the population into extremely poor, moderately poor and non-poor, the proportion of the extremely poor increased from 6.2 per cent in 1980 to 29.3 per cent in 1996 and then came down to 22.0 per cent in 2004 before reaching 38.7 per cent in 2010. For the moderately poor, the picture was quite different as the proportion rose between 1980 and 1985 from 21.0 per cent to 34.2 per cent. It went down between 1996 and 2004, from 36.3 per cent to 32.4 per cent, and even further in 2010 to 30.3 per cent. On the other hand, the proportion of non-poor was much higher in the country in 1980 (72.8 per cent) compared to 1992 (57.3 per cent). It dropped significantly in 1996 to 34.4 per cent, falling further in 2010 to 31 per cent.

III. THE CONCEPT OF POVERTY

The fact that poverty affects many aspects of the human conditions, including physical, moral and psychological, a concise and universally accepted definition of poverty is elusive. Different criteria have been used to conceptualize poverty. Most analysts follow the conventional view of poverty as the absence of sufficient income for securing basic goods and services.

Many other experts have conceptualized the poor as the portion of the populations that is unable to meet basic nutritional needs. Others view poverty, in part, as a function of education, health, life expectancy, and infant mortality. Musgrave and Ferber (1976) identify the poor, using the criteria of the level of consumption and expenditure. Poverty is related to entitlement (Sen, 1983), which are taken to be the various bundles of goods and services over which one has command, taking into cognizance the means by which such goods are acquired (e.g. Money, Coupons etc) and the availability of the needed goods. Yet, other experts see poverty in very broad terms, such as being unable to meet basic needs – physical (Food, health care, education, shelter etc) and non-physical (participation, identity etc) requirements of a meaningful life. In general term, scholars have classified poverty into three for purpose of analysis namely:

- **Absolute Poverty:** living below a certain minimum standard or level of income or consumption acceptable by a particular society or culture;
- **Relative Poverty:** An assessment that a person is only poor in relation to others;
- **Core or Object Poverty:** A description that goes beyond lack of minimum income and other resources to include serious deprivation in all aspects of a person's life.

Poor people's view of poverty

Professor Ukwu I. Ukwu in 2002 presented the outcome of a survey which he conducted in Enugu in 1997/1998 involving 4300 households drawn from communities in all the local government areas of the state.

Using interview and Focus Group Discussion (FGD) he found that Nigerian people perception of poverty is also wide ranging. Some of them termed it as haggardness and poor clothing. The elderly perceived it as

having no family. The urban artisan emphasized inability to pay rent. The urban elderly male stress inability to feed their family, joblessness and not having a big brother or important connections and in ability to meet community obligations such as levies. Rural female traditional crafts producers termed it as a condition of hopelessness. The urban street beggars defined poverty as lack of respect for people like them that are handicapped.

Response of a poor woman in Cambodia (1998):

“Poverty means working for more than 18 hours a day but still not earning enough to feed myself, my husband and two children”.

Response of a poor man in Kenya (1997):

“Don’t ask me what poverty is because you have met it outside my house. Look at the house and count the number of holes. Look at my utensils and the clothes I am wearing. Look at everything and write what you see. What you see is poverty”.

Response from another Kenyan called Larvia (1998):

“Poverty is humiliation, the sense of being dependent and of being forced to accept rudeness, insult and indifference when we seek help”.

IV. EXISTING APPROACHES FOR MEASURING POVERTY

The initial attempts to measure poverty were made more than a century ago by Booth, 1889, Rowntree, 1901 and Naoroji, 1901 (See Anyanwu 1997). While Booths and Rowntrees studies were focused on the urban cities of London and New York, Naorji’s was directed at estimating the extent of poverty. These initial attempts were intended to identify poverty lines, hence it was only later that poverty profiles and indicators were introduced. Also, the initial axiomatically based measure of poverty was not introduced into the debate until 1976 by Sen.

In quantifying Poverty and indentifying the poor, there are two obvious basic requirements. First the measure of the standard of living is used (consumption approach) in order to distinguish different individuals, households and countries from each other.

Second a ‘cut off point’ – the ‘poverty line’ is chosen which separates those identified as poor from non-poor (Ravallion and Huppi, 1991). The second requirement is how the degree of poverty relative to a particular poverty line is measured and how this is aggregated across those who are termed to be poor.

There are several kinds of absolute poverty measures: the headcount ratio/incidence of poverty, the poverty gap/income shortfall, disparity of income distribution, composite poverty measures the physical quality of life index (PQLI), the augmented physical quality of life index (APQLI), and the human development index (HDI).

First we must accept that most of the poverty we are experiencing in this country is as a result of wrong decision making, mismanagement of natural and human resources and underutilization of our natural skills and in born talent.

In general, all poverty measures have originated from Development literature and International Development Agencies such as the World Bank, UNDP, and affiliated organizations.

Poverty was also defined and measured in terms of economic growth, measured by GDP or income per capita. In this regard, the world is classified into high, medium and low income countries. The low income countries are classified as poor which suggests and confirms the assertion that poverty is a relative term.

At first instance, the universally accepted measure of poverty is income i.e. individual (income per capita) or community (GDP). The recognition of the dichotomy between economic growth and economic Development brought about an expansion of the measures of poverty to include consumption measures

emphasizing on calories intake, access to safe drinking water, access to basic health services, access to basic education, access to good sanitation and decent housing.

Other measures or indices include the rate or prevalence of infant mortality rate, under 5 mortality rate, literacy rate by gender, life expectancy rate, the degree of involvement of people in arriving at decisions that affect their lives and so on and so forth.

All the above measures were later systematized and analyzed to arrive at different measures of poverty some of which are explained below:-

- **INCOME PER CAPITA MEASURE** – where each country's GDP per capita is converted to American dollars at a given exchange rate that is prevailing. Then all countries are ranked and compared in terms of their deviation from what is called poverty line estimated to be US\$1 per day or approximately US\$360 per annum;
- **HEAD COUNT INDEX MEASURE** – this is an index that adds up the number of people who fall below the poverty line expressed as a proportion of the population;
- **QUALITY OF LIFE INDEX** – this is a measure which apart from considering income also considers measures such as the quality of education, health services and access to basic amenities such as portable water;
- **POVERTY GAP MEASURE** – this measures the transfer of income required to bring the income of every poor person up to the poverty line. In other words, it is measured as the aggregate income shortfall of the poor as a percentage of aggregate consumption i.e. transfer needed to leave everybody above the poverty line of US\$360 per annum;
- **CONSUMPTION INDEX OR FOOD ENERGY METHOD** – this tries to define a minimum internationally agreed calorie intake line and converting consumption bundles into calories intake using the nutritional values of consumption goods with non-food goods having a zero value.
- **HUMAN POVERTY INDEX (HPI)** – Another measure of poverty based on three (3) indices:-
 - i. Percentage of population not expected to survive up to the age of 40;
 - ii. Adult literacy rate;
 - iii. Deprivation rate – Measured in terms of percentage of the population without access to safe water, health services and the percentage of underweight children under 5 years.
- **HUMAN DEVELOPMENT INDEX (HDI)** – another measure of both well being and poverty based also on 3 variables:-
 - i. Life expectancy at birth;
 - ii. Educational attainment – measured by a combined primary, secondary and tertiary school enrolment ratios;
 - iii. Standard of living measured by real income per capita (PCY) at purchasing power parity;

V. CRITIQUE/LIMITATIONS OF THE EXISTING MEASURES/APPROACHES

As could be seen in what follows the existing approaches for measuring poverty suffer from a number of limitations:-

- i. In order for the World Bank and UN agencies to separate poor person from non-poor or a poor country from non-poor, it is necessary to establish an arbitrary income figure which may not be fair to all nations because of differences in income inequalities, human and natural resources, consumption habits, productive capacity, bodily activities which is a function of climate as well as the purchasing power of country's currency;

- ii. The consumption measure also possesses some limitation because inter-country difference exists in nutritional standards and requirements as well as in the nutritional values of the types of food they produce and consume;
- iii. Difficulties also exist in determining minimum standard of living;
- iv. The same level of income and expenditure in different countries may be associated with different levels of nutrition, life expectancy, infant mortality and schooling expenditure and so on and so forth;
- v. Consumers in different countries may also choose different combinations of food and other goods which then require different income to meet their nutritional requirements. Equally, what are regarded as necessities in some countries might be luxuries in others;
- vi. The headcount index also ignores the extent to which the poor falls below the poverty line so that crude comparisons between countries over time may be misleading.

VI NEWLY SUGGESTED APPROACHES/MEASURES

- (i) Given the cultural setting of third world countries like Nigeria poverty measures should incorporate and estimate quantitatively the extent of government subsidy on social services and build it on the income of people who are assessed as earning below the international established poverty line. It is a fact that third world countries where government has substantial ownership of societal resources, subsidy policies input exist in amenities such as water, health services, electricity and agricultural inputs. This suggests that international estimates of the percentage of the poor in third world countries on the basis of ascertaining minimum income might be exaggerated;
- (ii) Voluntary assistance in cash or in kind to the culture of kinship, extended family members and community/tribal/religious associations that are less privileged may also made some people who are assessed by international standard as falling below poverty line to actually be above the poverty line which leads to also an exaggeration of the number or percentage of poor in third world countries like Nigeria;
- (iii) The relative freedom enjoyed by third world dwellers to bush burning free or uncontrolled felling of trees for domestic and community use free hunting, free grazing and free fishing may also if given monetary value make the beneficiaries of those who undertake such activities to earn above the poverty line;
- (iv) The International measure of poverty which is based on per capita income may also overstate the number of people in poverty because incomes earned in the informal sector are not incorporated. Therefore new measures must account or approximate the portion of income likely to be earned from the informal sector;
- (v) People earning below poverty line in third world countries might also not reveal the income they earn from moonlighting activities. This should also be captured as it will make some difference in the determination of the percentage of people living below poverty line;
- (vi) Household heads either female or males that have grown-ups who are schooling and at the same time engaging in economic activities should also be properly assessed and the extra income they earn be built into their overall income for proper measurement of those who are really poor in third world countries;
- (vii) Male household's heads whose wives are working or engaging in craft or trading activities might in fact be above poverty line even if they are earning minimum wage because the wives may normally supplement some domestic expenditures, therefore indirectly raising their real income. Measures of poverty should also incorporate this aspect of our cultural settings.

VII CONCLUSION

In summary, what the paper did was to:

- (i) Establish the global concern for eradicating poverty;
- (ii) Highlight the paradox of abundance of resources in Nigeria and the increasing level of poverty;
- (iii) Discuss the structure, compositions and magnitude of poverty in Nigeria;
- (iv) Highlight the meaning of poverty in absolute and relative terms as well as from theoretical and people's point of view
- (v) Review and critique the existing measures of poverty, before making recommendations of approaches that will take cognizance of and be compatible with the economic, social and cultural realities of Third world countries, like Nigeria.

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