

Akpan, Uduak; Isihak, Salisu

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The geography of poverty in Nigeria

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A G D I Working Paper

WP/20/035

The Geography of Poverty in Nigeria ¹

Uduak Akpan^{a+} and Salisu Isihak^a

*^aSustainability, Policy, and Innovative Development Research (SPIDER) Solutions Nigeria, 15
EtimUmana Street, Uyo, Akwa Ibom State, Nigeria.*

¹ This working paper also appears in the Development Bank of Nigeria Working Paper Series.

⁺Corresponding author's contact: u.akpan@spidersolutionsnigeria.com , uduaksakpan@gmail.com

Research Department

The Geography of Poverty in Nigeria**Uduak Akpan and Salisu Isihak**

January 2020

Abstract

As the 2030 target year for achieving the Sustainable Development Goals (SDGs) draws closer, development practitioners are increasing their activities in regions where poverty is predominant. In 2018, Nigeria attained an unenviable position of being the country with the highest number of persons living in extreme poverty in terms of poverty count, overtaking India. However, aggregate national level data often hide the huge disparity in the poverty rates at the sub-national (state) level. This study intends to demonstrate the geographic aspects of poverty in Nigeria alongside the underlying factors that contribute to entrenching the cycle of poverty in some states in Nigeria. By highlighting these factors, the study hopes to draw the attention of policy makers and development practitioners to the fact that unless there are strong, coordinated and sustained efforts to change these underlying factors, it may be difficult for Nigeria to meet the SDGs in 2030.

Keywords: *Geography of poverty, multi-dimensional poverty, SDGs, Nigeria.*

1 Background

As the 2030 target year for achieving the Sustainable Development Goals (SDGs) draws closer, the challenge of reducing extreme poverty in all its forms has once again been placed in the forefront of global development discourse, policies, and actions. Over the years, the concept of poverty as well as the methods by which poverty can be measured has been rationalized from different perspectives. There is no universal definition of poverty but there is a general understanding that poverty means the lack of income to meet, or access to, basic human needs which includes food, clothing, shelter, basic education, healthcare, electricity, etc.(Omotola, 2008). Poverty has been classified differently by different authors depending on what they focus

on and the context of the study. For example, poverty may be divided into “absolute” and “relative” poverty; “chronic” and “transient” poverty; “regional” and “individual” poverty; “urban” and “rural” poverty; etc. (Zhou & Liu, 2019). Absolute poverty tends to set a benchmark such that persons who cannot attain the benchmark are considered to be poor and vice versa, while relative poverty tends to look at the acceptable standard of living within an environment and whether a household meets this standard of living (Yakubu & Abbass, 2010). Chronic poverty refers to a situation where an individual or household is perpetually poor while transient refers to a phase where an individual becomes poor but has not always been poor and can cease being poor. In terms of measurement, the level of poverty in a country has been estimated using a direct or indirect method. A direct method of measuring poverty assesses the extent to which people can meet a set of basic needs while an income method measures whether households’ income meet a defined threshold set as a poverty line (Alkire & Santos, 2014). The challenges of using the income approach have been debated (Alkire & Santos, 2014) and this led to the development of the multidimensional poverty index which is an attempt to measure poverty using the direct approach (Alkire & Foster, 2011; Alkire & Santos, 2014). Furthermore, Bradshaw (2007) notes that theories of poverty are rooted in narratives such as the deficiencies of individuals, the traditional and/or cultural belief systems that entrench certain practices, the distortions in the political-economic system, the disparities in geography or the combination of all these.

The problem of poverty has been in the Nigerian society for a long time and over the years there has been lots of efforts by government of Nigeria to address the problem. For example, there was the National Poverty Eradication Programme (NAPEP) in 2001 which was designed to address different underlying causes of poverty in Nigeria. NAPEP was implemented around four central themes: youth employment scheme (which focused on the acquisition of technical skills and provision of employment opportunities for youths); rural infrastructure development scheme (which focused on the provision of rural infrastructure such as irrigation, transport, and energy to support rural economic growth); social welfare service scheme (which focused on provision of social services and micro-credits); and natural resources development and conservation scheme (which focused on harnessing natural resources to promote economic growth) (Omotola, 2008).

The National Economic Empowerment and Development Strategy (NEEDS) was a medium term development planning strategy to ensure economic development through investments in economic and social infrastructure and services (National Planning Commission, 2004). Furthermore, Nigeria made efforts in meeting the development goals under the Millennium Development Goals Framework. In addition, multilateral development agencies have funded several projects whose objectives include, amongst others, the reduction of poverty or improvement in incomes. In spite of all these efforts to increase inclusive growth and reduce poverty in Nigeria, the results seem to be weak. Studies that have evaluated the impact of NAPEP and NEEDS have scored them low (Yakubu & Abbass, 2010; Ugoani, 2017; Marcellus, 2009). The end-point report for the Millennium Development Goals shows that Nigeria was able to meet only Goal 8 (i.e. Develop a global partnership for development) United Nations Development Programme,(UNDP, 2015). This shows the persistence of the different dimensions of poverty in Nigeria. In 2018, Nigeria attained an unenviable position of being the country with the highest number of persons living in extreme poverty in terms of poverty count, overtaking India². To put this in context, India has a population of about 1.3billion (data from World Bank) and below 2.7% of the population is said to live in extreme poverty. In contrast, Nigeria has a population of about 191million (data from World Bank) and about 49% or 97million live in extreme poverty.

Geography, i.e. the totality of the environment where a person lives, plays an important role in understanding the dynamics of poverty (Cohen *et al.*, 2019). People who reside in some countries are more likely to be poor than people who reside in other countries. Within a country, people who reside in a particular region may have less opportunities than those who reside in other regions. The geography of poverty (GOP) may be viewed as a “branch of human geography, which studies the geographical patterns, distribution characteristics, areal types and evolution mechanism of poverty and the relationship with geographical environment as well as antipoverty measures” (Zhou & Liu, 2019). By considering the larger geography, researchers seek to understand the spatial pattern of poverty across a region. This is useful especially in a federation like Nigeria where some of the underlying factors contributing to poverty may be

² This is based on data from the World Poverty Clock: <https://worldpoverty.io/> (accessed on 15th November, 2019). The methodology used in generating the data is published as (Cuarema *et al.*, 2018)

managed or influenced by the states or the environment in a state, local actors, customs and traditions.

This study intends to demonstrate the geographic aspects of poverty in Nigeria alongside the underlying factors that contribute to entrenching the cycle of poverty in some states. By highlighting these factors, the study hopes to draw the attention of policy makers and development practitioners to the fact that unless there are strong, coordinated and sustained efforts to change these underlying factors, it may be difficult for Nigeria to meet the SDGs in 2030. It is hoped that by understanding the magnitude of the problem and possible implications, governments at the state level will be more responsive and serious in addressing the problem. This will be useful in developing state-specific programmes in order to “leave no one behind”.

2 Overview Geography of Poverty in Nigeria

As mentioned earlier, Nigeria currently has the unenviable status of being the country with the highest number of persons living in absolute poverty and these persons constitute about 48% of the population (i.e. about 98 million people). However, looking at the poverty rates at the national level does not really reveal the pattern of the problem of poverty. By unbundling the aggregate poverty rate in Nigeria to examine the spatial distribution at the state level, one can see that there is a remarkable difference in poverty levels across the different states (see Fig. 1³). The multidimensional poverty index⁴(Fig. 2) for the states also reveals a similar pattern. We can observe from Figs 1&2 that the problem of poverty in Nigeria tend to have a distinctive geographic component, i.e. is concentrated mainly in the northern part of the country and in some specific states. The states in this region may be regarded as “poverty hotspots” (Cohen *et al.*, 2019).

³Choropleth maps are used throughout this study to represent the spatial distribution of indicators. Darker shades represent higher (or more intense) values of any indicator.

⁴Since the introduction of multi-dimensional poverty by (Alkire & Foster, 2011), there have been different other approaches used in estimating MPI. Aguilar & Sumner(2020) compares some of these methods. In spite of the method used, they all capture key social indicators relating to health, education, and standard of living.

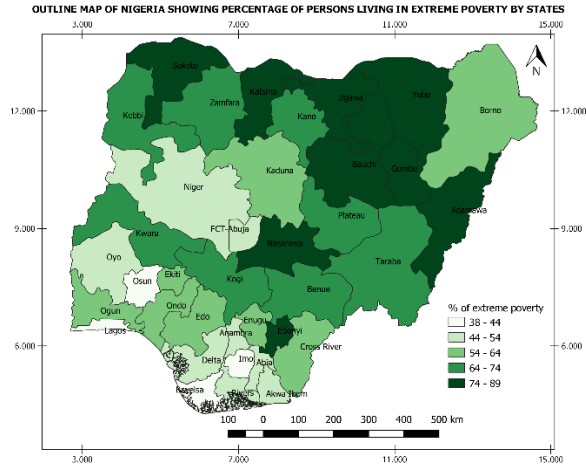


Figure 1: State-level head count per capita poverty measure (%) 2009/2010

Source of data: (NBS, 2010)

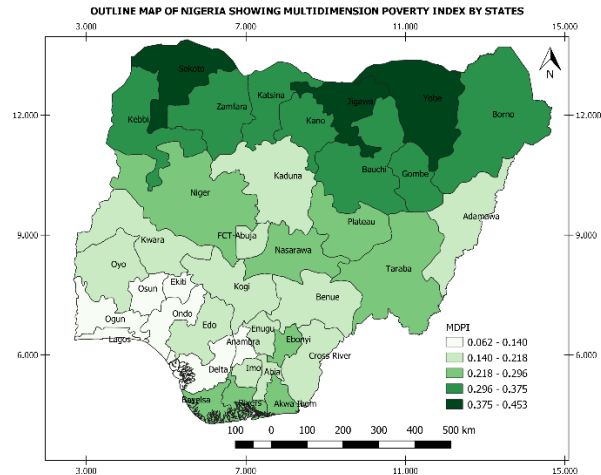


Figure 2: Multi-dimensional Poverty Index by states

Source of data: (UNDP, 2018)

We further demonstrate the geographic dimension to poverty in Nigeria by looking at the performance of the different states with respect to different indicators used in tracking progress attaining the sustainable development goals⁵. We focus on indicators that may be applicable at the state level and note that data available is a general problem in Nigeria therefore we rely on data from the recently released (i.e. in October, 2019) Nigeria Demographic and Health Survey (National Population Commission, 2019).

2.1 Education

Education is regarded as one of the central components of human development and is built into the computation of the UNDP human development index as well as the multidimensional poverty index. The lack of education has been strongly associated with poverty and seems to be one of the causes and consequences of poverty which tends to further entrench the cycle of poverty (Kambon & Busby, 2000). Education plays a significant role in the process of socialization and becoming aware of the workings, norms, and practices in any society. Providing access to qualitative education has been identified as one the effective means to help a

⁵We use the global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, 2019

child escape poverty (Camilli *et al.*, 2010; UNICEF, 2015). Data on net school attendance ratio⁶ (defined as percentage of school age population that attend school) for Nigeria stands at 60.5% (62.2% for male and 58.8% for female) for primary school and 49.4% (52.1% for male and 46.6% for female) for secondary school. At the state level, net school attendance ratio range from 26.4% in Kebbi State to 85.1% in Anambra State for primary school; and from 14.4% in Sokoto State to 80.1% in Anambra State (National Population Commission, 2019). The magnitude of this is appreciated better by noting that about 46% of Nigeria’s population is below 15 years (National Population Commission, 2019). (See Figs. 3 and 4)

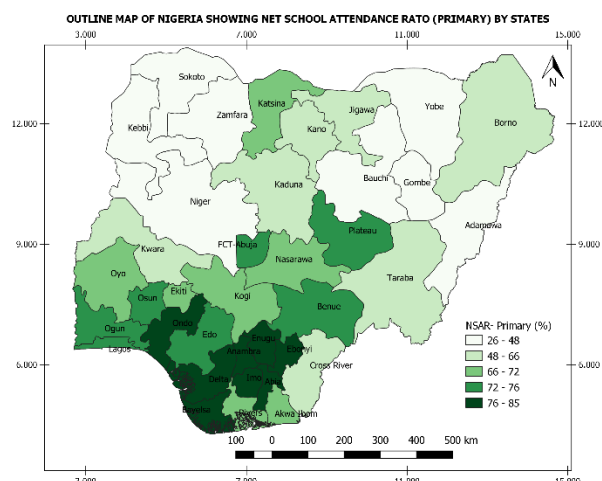


Figure 3: Outline map of Nigeria showing net school attendance ratio (Primary) by states
Source of data: (National Population Commission, 2019)

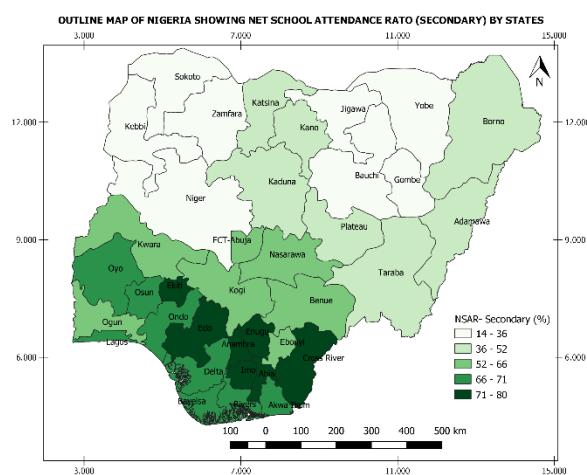


Figure 4: Outline map of Nigeria showing net school attendance ratio (Secondary) by states
Source of data: (National Population Commission, 2019)

2.2 Nutrition and Health care

The health and wellbeing of people are crucial to supporting economic activities and one of the determinants of good health care is the level of nutrition. Goal 2 of the SDGs aims to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” while Goal 3 aims to “ensure healthy lives and promote well-being for all at all ages”. We examine the performance of the different states in Nigeria with respect to these goals using two indicators listed in the global indicator framework for assessing SGDs and where data are available for all

⁶ Data are available for other indicators such as educational attainment of the male household population and educational attainment of the female household population. We choose the Net School Attendance Ratios because we consider them to be more comprehensive.

the states in Nigeria. Specifically, we use the prevalence of stunting (height for age < -2 standard deviation from the median) and under-5 mortality rate. The national rate for under-5 mortality is 132 deaths per 1,000 (National Population Commission, 2019, p. 163) and 37% of children in Nigeria below 5 years are stunted (National Population Commission, 2019, p. 257). We observe from Figs 5 and 6 that the northern part of Nigeria continues to perform very poorly. Specifically, the under-5 years mortality rate in Kebbi and Jigawa States are 252 and 213 per 1000 births respectively, whereas it is 30 per 1000 birth in Ogun. Similarly, 66% of children in Kebbi experience stunting in contract to 14% of children in Anambra. Indeed, the data for other available indicators for nutrition and health which are linked to poverty show similar patterns.

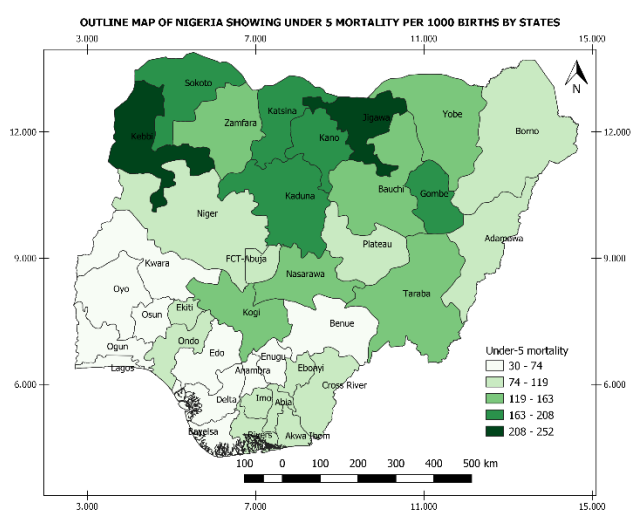


Figure 5: Outline map of Nigeria showing under 5 child mortality per 1000 births by states
Source of data: National Population Commission(2019)

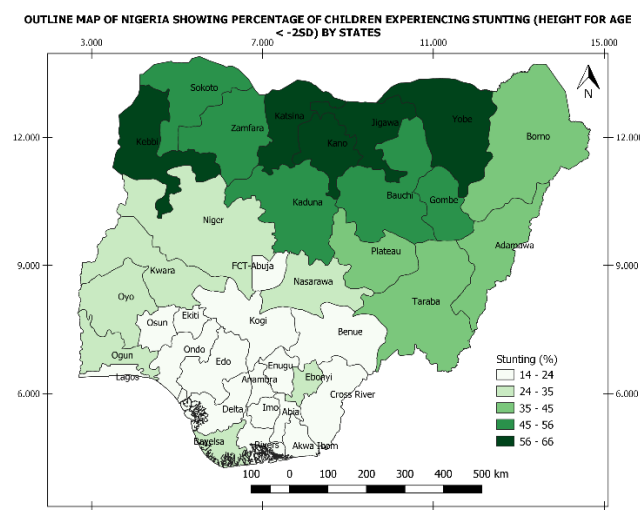


Figure 6: Outline map of Nigeria showing percentage of children experiencing stunting (height for age $< -2SD$) by states
Source of data: National Population Commission(2019)

2.3 Electricity access

Access to modern energy services, especially electricity, plays an important role in reducing poverty and ensuring rural socio-economic transformation (Kanagawa & Nakata, 2007, 2008; Sokona *et al.*, 2012). In line with this, it is included as one of the sustainable development goals. Specifically, goal 7 aims to “ensure access to affordable, reliable, sustainable and modern energy for all”. The electricity access rate in Nigeria has been estimated at 59% (83% in urban and 39% in rural areas). (National Population Commission, 2019). However, there is very huge discrepancy in the electricity access rate across the different states in Nigeria. States in the southern part of Nigeria have higher electricity access rates than states in the northern part of the

country (Fig. 7). Electricity access rate is below 20% in Taraba and Yobe, but above 80% in Lagos, Anambra, Abia, etc. The rationale for this is that states in the southern part of Nigeria have much higher population density and nucleated settlement patterns while the reverse is the case in the states in the northern part. Also, over 70% of electricity generation facilities in Nigeria are powered by hydrocarbons and are located in the southern part of the country where there are hydrocarbon reserves. The result of this is that the coverage of the transmission network in the southern states is higher because this reduces the unit cost of transmitting and distributing electricity (Akpan, 2015).

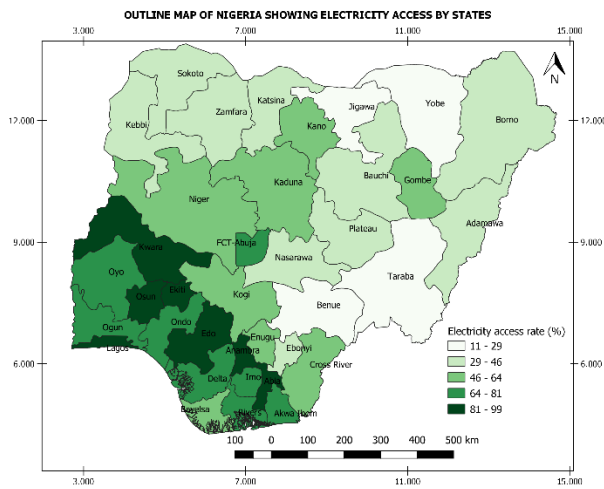


Figure 7: Outline map of Nigeria showing electricity access rates by states
Source of data: (National Population Commission, 2014)

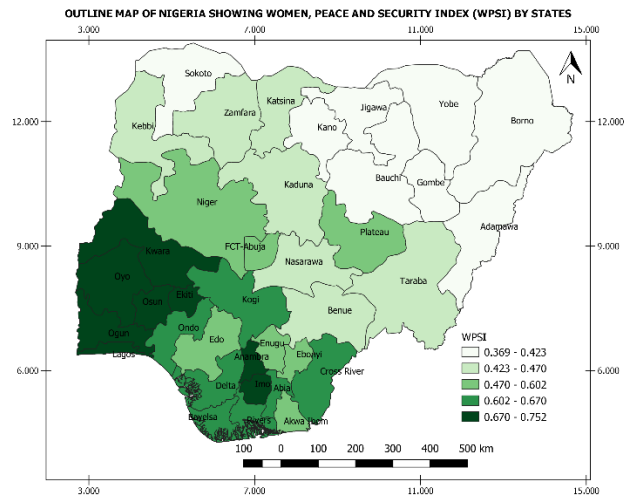


Figure 8: Outline map of Nigeria showing Women, Peace, and Security index by states.
Source of data: (GIWPS, 2019b)⁷

2.4 Gender

In recent years, promoting gender equity has been identified as one of the ways of achieving sustainable socio-economic development. Goal 5 of the SDGs is dedicated to gender equity and aims to “achieve gender equality and empower all women and girls”. In line with this, the Georgetown Institute for Women, Peace and Security and the Peace Research Institute Oslo

⁷This composite index takes into consideration the following indicators: percentage of females with age greater than 25 years with at least a secondary education; percentage of females who have account in a financial institution; percentage of females between 15 and 49 years who are currently employed; percentage of females with age greater than 15 years who own mobile phones; seats held by women in a house of representatives election; percentage of women between 15 and 49 years currently married who make decisions on themselves or jointly with their husbands; etc.

(PRIO) conducted a study to examine the level of wellbeing of women across countries in the world. The study develops an index called Women, Peace and Security(WPS) Index which incorporates three dimensions of women's wellbeing: inclusion economic, social and political; justice (formal laws and informal discrimination) and security (at family and community levels) (GIWPS, 2019a). Thus, the WPS Index provides a useful tool for assessing the level of gender equity or parity in different countries. The index is between 0 and 1 and higher values represent better performance. It ranks Nigeria at 145 out of 167 countries. Further, the 2019 report provides state-level data for Nigeria which shows that there are significant disparities in the performance of the different states: the best and worst performing states (i.e. Ekiti and Yobe) have scores of 0.752 and 0.369 respectively. This disparity within Nigeria is equivalent to the difference in WPS Index scores between Mauritius which scored 0.752 and ranked 60 and Afghanistan which scored 0.373 and ranked 166, but within a single country(GIWPS, 2019a, p. 23).We note that Afghanistan is the penultimate country in the ranking. The WPS Index of the states as presented in Fig. 8 shows that states in the southern and south-western parts of Nigeria perform much better than those in the northern, especially the north-eastern part of the country.

3 Contributors to spatial poverty in Nigeria

The causes of absolute poverty in any country are usually multifarious, complex and interwoven. The concentration of poverty in these places may be attributed to a combination of several factors that makes escaping from poverty very difficult. These factors include historical levels of poverty, lack of education, health services, and basic economic infrastructure. These are exacerbated by prolonged conflicts which deprives residence of even the basic necessities that existed (UNDP, 2018). Further, desertification in some states in northern Nigeria (Oladipo, 1993; Hassan, et al., 2019; Oloukoi *et al.*, 2018) has reduced the area of productive land available for agriculture with attendant negative effect on agricultural productivity and food security (Obioha, 2009). We explain these factors that have contributed to the precarious poverty situation in the states in the northern part of Nigeria.

3.1 Fiscal/Economic

Prior to the discovery of oil, the mainstay of the Nigerian economy was agriculture and all parts of the country produced and exported different agricultural commodities. The northern part of the country was renowned for commodities such as groundnut and cotton. This provided

employment and income for millions of households in the region. With the discovery of crude, the attention of government gradually shifted from agriculture to crude oil. Over time, other sectors in the economy were neglected by government due to easy economic rents from the export of crude oil thereby manifesting the “resource curse” or “Dutch disease” syndrome (Otaha, 2012; Idemudia, 2012). Attempts by successive governments to reverse the structural imbalance have not yielded the desired result and earnings from export of crude oil is still the primary source of revenue for government (Central Bank of Nigeria, 2019)⁸. The neglect of other productive sectors, such as agriculture and manufacturing, affects the entire economy of Nigeria, but affects the states in different degrees. Since oil is explored in the Niger Delta part of Nigeria, states in this region get a 13% derivation from the proceeds of oil which places them in a better fiscal position than most states in the Northern part. Moreover, the different states have different capacity to generate funds internally. The revenue per capita of the different states in 2018 as presented in Fig. 9 clearly shows that most states in the southern part of Nigeria have more revenue per capita than their northern counterparts. The result is that many states in the northern part of Nigeria are unable to make investment in key social and economic sectors nor create an environment that stimulates the establishment of micro and small enterprises to create more viable local economies and generate employment. As shown in Fig. 10, states in the southern part of Nigeria tend to have higher micro, small, and medium scale enterprises (MSMEs) per 1000 persons than those in the northern part of the country. In summary, the lack of financial resources leads to the inability of states to invest in social and economic infrastructure which leads to low performance in education and health indicators and high barriers to establishing and running MSMEs. This creates more unemployment and further reduction in the potential for raising funds through taxes. The cycle continues and entrenches the cycle of poverty.

⁸Between 1980 and 2018, oil revenue has been the primary source of revenue for government, with the exception of 2016 where non-oil revenue surpassed oil revenue mainly because of the drop in crude oil price to less than USD45/barrel

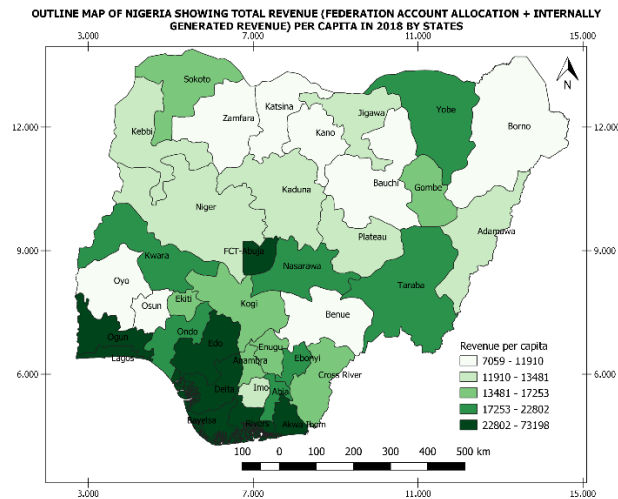


Figure 9: Outline map of Nigeria showing revenue per capita states
Source of data: NBS, Nigeria⁹

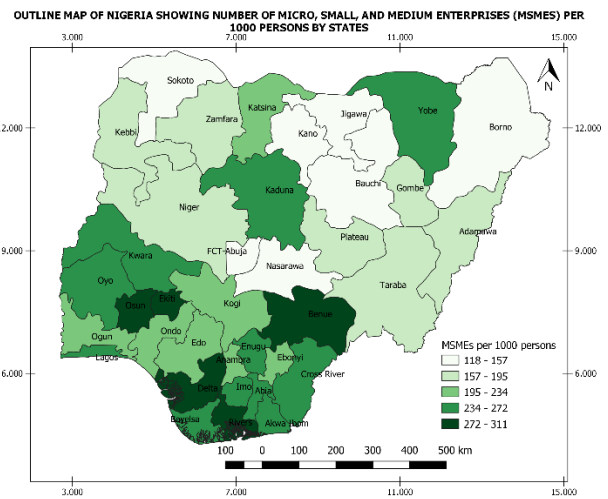


Figure 10: Outline map of Nigeria showing number of micro, small, and medium enterprises per 1000 persons by states
Source of data: NBS (2018)

3.2 Cultural

There are several entrenched cultural factors that contribute to the persistent level of poverty. The prevailing cultural norm in most states in northern Nigeria places preference on male children to the detriment of females. Girls are sometimes viewed as means for reproduction who should be restricted to discharging domestic responsibilities. This leads to early marriage for girls: it is common for girls to marry by 15 years (UNDP, 2018, p. 90) and in some cases, by 13 years (Wolf *et al.*, 2008, p. 18). Boys also marry early, often before 21 years (Wolf *et al.*, 2008, p. 18). Early marriage increases the reproductive lifespan of couples. Also, polygamy is prevalent – in some states, over 20% of married men aged between 15 and 49 years have two or more wives (UNDP, 2018, pp. 80, 87). Due to the preference of male children to female, wives sometimes compete to have the highest number of children, especially male children, so as to guarantee a larger share of inheritance of the husband’s properties (Wolf *et al.*, 2008, p. 18). This scenario has resulted in household sizes and population growth rate being higher in the northern parts of Nigeria than in southern states. Indeed, it is not uncommon to see households with sizes up to 20!¹⁰ This is in spite of the unfavorable economic condition in the region. The high population growth rate coupled with the limited economic opportunities in the region results in higher levels

⁹Revenue data are obtained from NBS (2019) while population data are obtained from Population Projections (2007-2016). 2016 population projections are used.

¹⁰For example, on Thursday 30th January 2020 a member of national parliament stated during plenary in the parliament that he has four wives and 27 children! (<https://www.olisa.tv/trending-video-i-have-4-wives-27-children-and-still-counting-house-leader-doguwa-boasts/>) (Visited on 2nd February, 2020)

of unemployment and deprivations which contributes to the persistent poverty in the region. This has also contributed to the prevalence of street children popularly referred to as *almajiris*¹¹ which in-turn has been a recruitment ground for terrorism(Aghedo & Eke, 2013; Hansen, *et al.*, 2016; Gomment & Esomchi, 2017).

3.3 Changes in Physical Environment

Agriculture plays a substantial role in the economies of most states in Nigeria and people depend on agriculture and other land resources for their survival. Agriculture is responsible for about 60% of jobs in the northern parts of Nigeria (World Bank, 2015). However, most states in the region fall within the Sudan and Sahel savanna agro-ecological zones where desertification has been a major cause of loss of arable land (Oladipo, 1993; Medugu *et al.*, 2011). About 300,000 hectares of land is being lost to desertification every year in the region (International Fund for Agricultural Development, IFAD, 2016, p. 15). This has led to an increase in the occurrence of soil erosion, rendered fertile lands unproductive thereby causing food insecurity, and increased propensity of households to end up in poverty. Another impact of the changes in the physical environment may be found in the Lake Chad region. Studies have noted that the reduction in the size of Lake Chad had resulted in the loss of livelihood and increased competition for available water resources and this has contributed to high level of unemployment in north-east Nigeria. This in-turn has made young persons more susceptible to being recruited by terror groups in the region(UNDP, 2018). Furthermore, a large percentage of persons in states in northern Nigeria rely on traditional biomass to meet energy needs due to the low level of electricity access (see Fig. x.) which further impacts on the environment leading to deforestation and loss of forest and land resources. This in-turn further exacerbates the incidence of poverty in the region,

¹¹*Almajiri* is said to be derived from the Arabic word "al-Muhajirun" which literally means a migrant but was used contextually to refer to persons, particularly children, who were sent by their parents/guardians to receive Islamic knowledge under the guidance of an Islamic Teacher. It has been a popular practice in Northern Nigeria since the 19th century and up till independence (Magashi, 2015). Due to the deteriorating economic situation in northern Nigeria, the system became unable to cater to the needs of the children and they ended up on the street begging for food. Overtime, they may become involved in substance abuse (Abdulmalik *et al.*, 2009) and metamorphose into street urchins (Salaam, 2011) with attendant social vices.

3.4 Political

The importance of political leadership cannot be over emphasized in efforts to reduce the incidence of absolute poverty. The failure in leadership is a common factor that runs across all parts of Nigeria but seems to be direr in the northern part of the country. This is manifested in the inability of the leadership of the state to address the gargantuan socio-economic problems facing the states. For example, even though desertification has an impact on the productivity of arable land, improvements in agricultural science, engineering, and agronomy may be used to compensate the loss of land thereby improving yield of crops in addition to the use of irrigation farming. There seem to be limited efforts (or results) in this area. Furthermore, the general environment to support micro and small enterprises seem to be lacking as shown in the result of the survey on micro, small, and medium enterprise in Nigeria (see Fig. 10). The nature of the local politics, especially in Borno state has been identified as one of the contributors to the rise of the terrorist group *Boko Haram* (Iyekekpolo, 2016, 2018).

3.5 Terrorism

The aforementioned problems have contributed to the initiation, entrenchment, and escalation of terrorism and criminality in the northern parts of Nigeria (Akinola, 2015; Adenrele, 2012) (UNDP, 2018). Several studies have noted that street children (popularly known as *almajiri*) have been useful tools to carry out terrorism (Aghedo & Eke, 2013; Hansen *et al.*, 2016; Gomment & Esomchi, 2017). This is in addition to several other local and external factors such as: rise in local Islamic fundamentalism in the region (Iyekekpolo, 2016, 2018); the fall of the regime of Col. Muammar Gaddafi in Libya which increased the proliferation of light weapons throughout the entire Sahel Savanna region; and the rise in Islamic State in the Middle East which acts as an inspiration to the domestic terrorist organization *Boko Haram*¹². Terrorism in the north-eastern part of Nigeria has multifarious and long-lasting impacts on the economy of the states that suffer most from these attacks. For example, the United Nations refugee agency (UNHCR) estimates that over 2.4 million people have been displaced in the Lake Chad region due to *Boko Haram* terrorism of which over 2 million are in Nigeria as at October 2019¹³. The destruction of the health and education facilities further reduces the accessibility and prospects of

¹²*Boko Haram* is a Jihadist terrorist organization which operates in the Lake Chad region of Nigeria and also active in territories of Chad, Niger, and Cameroun bordering the Lake Chad.

¹³<https://www.unhcr.org/uk/nigeria-emergency.html> (Visited on 3rd February, 2020)

improving health and educational outcomes while the destruction of economic infrastructure like roads and bridges cuts of communities, reduces mobility, increases the cost of basic items, and increases the barriers to setting up micro-enterprises. The general atmosphere of insecurity implies that government priority and expenditure are now focused on improving the security of lives and properties and there is reduced focus on social and economic sectors, etc. The financial burden of managing refugees is also significant. The long term impact of all these will be increased poverty in the region.

The summary of how these factors contribute to the persistency of poverty in the states in northern Nigeria is presented in Fig. 11.

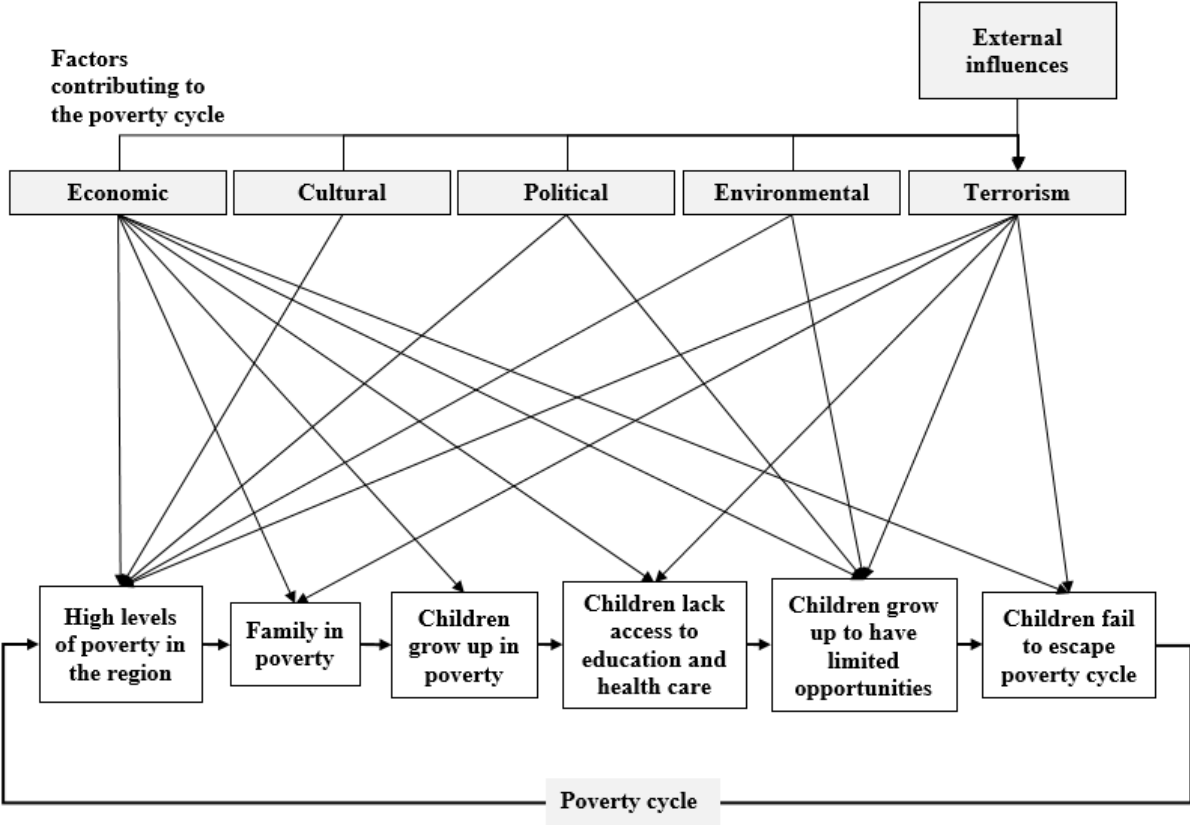


Figure 11: Schematic diagram showing the factors that contribute to poverty cycle in states in Northern Nigeria. \

Source: Author

4 Conclusion

The geography of poverty (GOP) studies the geographical patterns of poverty and the relationship between geographic environment and prevalence of poverty. This study shows that national-level data on the poverty rates in Nigeria hides the disparity of poverty at the state level and that there is a pattern of poverty across the different states in Nigeria. States in the northern part of Nigeria tend to have higher poverty rates and also perform less in virtually all indicators that may be used to track progress towards attaining the SDGs. We have also highlighted some of the factors that contribute to this situation. The endemic nature of poverty in the northern part of Nigeria implies that leaders and policy makers have a huge work to do to have improvement in these region. Unless these problems are addressed at the state level, Nigeria may not meet the SDGs. This is because Nigeria can only achieve the SDGs by ensuring that SDG targets have been met at the state level. The efforts at the state level needs to be strong, coordinated and sustained to be able to change these underlying factors. These factors have to be addressed simultaneously and there is need to involve other non-state actors who wield significant influence in the region. For example, traditional rulers and religious leaders have to be involved in reforming the cultural practices of early marriages and having large household sizes. Given the overarching role of political leadership in transforming societies, the process of selecting political leaders has to also be improved to enable persons with the capability of driving transformation occupy leadership positions. The government at the federal level has to be more proactive in curbing the expansion and reversing the trend of terrorism because meaningful and sustainable development can only be achieved in an environment of peace and security.

Competing interests

The authors declare that they have no competing interests.

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