



The nexus between insurgency, environment and agricultural livelihoods in Nigeria

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ABSTRACT

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Against the backdrop of rising trend of insurgency, internally displaced persons, poverty and hunger in Nigeria in a receding economy, the study reviewed the linkages between insurgency, environment and agricultural livelihood activities in Nigeria. The study specifically reviewed the theoretical linkages between environment, insecurity and agricultural livelihoods; (ii) x-rayed the trend and nature of insurgency in Nigeria lately; (iii) identified the empirical linkages between environment, insecurity and agricultural livelihoods in Nigeria. The study anchored on Homer-Dixon's theory of eco-violence. It was observed that there are new modes of insurgency in the country over time, spanning from the Niger Delta militancy started by Isaac Boro to Avengers era in the Niger Delta and the current Boko Haram menacing insurgencies in South-South and North-East Nigeria. Empirical and theoretical data affirmed the complexity and inter connectivity between the problems in focus. The interacting tripartite problems have led to poor yield of crops and livestock, unemployment, migration, flood, increased IDPs, food insecurity, loss of farm assets, human lives, pollution and rising poverty, most of which reinforced each other. The policy responses by the Nigerian government were articulated. It is therefore recommended that the recently signed Petroleum Industry Bill (PIB) by the present administration be fully implemented; constructive and diplomatic engagement between the government and leaders of insurgent groups needs to be consolidated; government should increase efforts in tackling the problems of desert encroachment and Lake Chad shrinking; the United Nations Environment Programme (UNEP) report on Ogoniland be fully implemented and applied in other areas of the Niger Delta region. Government and donor agencies should consider more realistic programmes that will support farmers and agribusinesses owners regarding supply of farm inputs and conducive environment for agribusinesses operation. Grazing lands should be established to settle the herdsmen.

Introduction

The world is presenting experiencing insecurity problems in various forms ranging from insurgency, militancy, food shortages, etc. This has serious negative implications in the economy of nations across the globe. In recent time, several groups have emerged and are engaged in one form of agitation or other all over the world. The terrorist groups like the Islamic State and Boko Haram have been dominating the headlines of news since 2013 (Nett and Rüttinger, 2016). According to them, these groups have gained international notoriety for their ruthless brutality and their increase and expansion in crime related

activities is posing new challenges for national, regional and international security. The non-state armed groups (NSAG) in other words appear not to be new in their operations. Nett and Rüttinger, (2016) observed that, the landscape of these violent actors is multiplying in complexity with a range of hybrid organisational structures, different agendas and different levels of engagement with society that set them apart from 'traditional' non-state actors and in new patterns of violence.



The increase in the level of insecurity in Nigeria has made national security threat a major issue for the government. This had prompted huge allocations of the national budget to security (Achumba, Ighomereho and Akpor-Robaro, 2013). The Federal Government of Nigeria in attempt to tackle the insecurity issues in the country embarked on criminalization of terrorism by passing the Anti-Terrorism Act in 2011, installation of Computer-based Closed Circuit Television Cameras (CCTV) in some parts of the country. The government also made efforts to enhance surveillance as well as investigation of criminal related offences. They also tried heightening the physical security measures around the country which was aimed at deterring or disrupting potential attacks, strengthening of security agencies through the provision of security facilities and the development and broadcast of security tips in mass media (Azazi, 2011). He emphasized that despite these efforts by the government to improve the security of the citizens, the level of insecurity in the country is still high. In addition, Nigeria has consistently ranked low in the Global Peace Index (GPI) in 2012, signifying a worsened state of insecurity in the country. Insecurity challenges during this period is not in isolation, it is worth noting that, many nations of the world is trying to cope with several other contending and complex issues like the challenges posed by changes in the climate. Climate change challenges are associated with the alteration of environmental factors which appear to trigger insecurity challenges. According to Onoh, (2014), a large chunk of the insecurity around the world can be directly or indirectly linked to environmental issues such as pollution and desert encroachment. Majekodunmi, (2014) confirmed that one of the major causes of insecurity in Nigeria, and indeed in other African countries, is environmental degradation. He explained that climate change and unabated deforestation have caused the desert to move relentlessly and take over villages especially in northern Nigeria. One of the obvious implications is the lost of farm lands and

other natural resources that could support food production activities. It was argued that environmental pollution affects farmlands and water supply, and erodes the people's sources of livelihood, which in turn makes them susceptible to violence. This violence are manifested in form of insurgency leading to low farm productivity and subsequently contributing to food insecurity which is worsen by rising food prices as presently experiencing in the country. Not much engagements have been done on the interactions of these tripartite issues of insecurity (especially insurgency), environmental degradation and agricultural livelihood in Nigeria. A study of this nature is required to fill up this research gap so also to be able to inform policies that will address food security and farm households livelihoods in Nigeria. It is against this backdrop that this paper is designed to review the link between insurgency, environment and food production livelihood activities in Nigeria. The specific objectives of the study are to (i) review the theoretical linkages between environment, insecurity and agricultural livelihoods; (ii) x-ray the trend and nature of insurgency in Nigeria lately; (iii) identify the empirical linkages between environment, insecurity and agricultural livelihoods in Nigeria with a view of discussing the policy implications of such interactions.

(ii) Conceptual Framework

Nexus between Insurgency, Environment and Agricultural Livelihoods

The conceptual approach in examining the nexus between insurgency, environment and agricultural livelihoods explains that sustainable food production activities must be carried out in a secured environment devoid of threat to both human and material resources. This perspective provides a framework to assess critically sustainable livelihood by looking at the adequate stocks of flows of food and income to meet basic needs of all the household members (Chambers 1995). Livelihood is assumed to be sustainable when it can cope or recover from stresses and



shocks, maintain or enhance its capabilities and asset, while the natural resource base are not undermined (Apata, 2010). This assertion was supported by Brundtland (1984) which explained that people's livelihood security is based more or less exclusively on the use of natural resources. According to Apata (2010) a rural farmer is faced with a set of livelihood resources that can influence its outcome. These include: (1.) Human resources e.g. skills, knowledge and ability to labour for successful different livelihood strategies; (2.) Financial resources e.g. cash, credit and other economic assets such as farming and fishing equipment that are essential for pursuit of any livelihood strategy. (3) Natural resources e.g. land, wetlands, forests and water from which resource and services useful for viable livelihoods flow; and (4). Social resources e.g. social networks upon which the farmers draw, when pursuing different livelihood strategies.

It is important here to consider the state of the environment where all factors of the production will be carried out. Environment in this sense encompasses the interaction of all living species, climate, weather, and natural resources that affect human survival and economic activity. Environmental degradation in other words is the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems; habitat destruction; the extinction of wildlife; and pollution. Therefore, the need to have a secured environment for production livelihood activities especially in agriculture is very eminent. In the absence of conducive environment required for proper functions of economic activities in a given state, the experience would likely be distortion in the flow of production activities. Security in this context refers to the situation that exists as a result of the establishment of measures for the protection of persons, information and property against hostile persons, influences and actions (Akin, 2008). It is the existence of conditions

within which people in a society can go about their normal daily activities without any threats to their lives or properties. It embraces all measures designed to protect and safeguard the citizenry and the resources of individuals, groups, businesses and the nation against sabotage or violent occurrence (Ogunleye, et al, 2011). Insecurity in other hand is seen as the state of being exposed to risk or anxiety, where anxiety is a vague unpleasant emotion that is experienced in anticipation of some misfortune.

Insurgency is a condition of revolt against a government that is less than an organized revolution and that is not recognized as belligerency (Merriam Webster Dictionary). Insurgency is a form of insecurity. The different descriptions commonly give reference to a state of vulnerability to harm and loss of life, property or livelihood. Insecurity in a broad sense is likened as a breach of peace and security, whether historical, religious, ethno-regional, civil, social, economic, and political that contributes to recurring conflicts, and leads to wanton destruction of lives and property (Ewetan and Urhie, 2014). Therefore, protection of the environment, lives and property in this context is considered the most important element required for the sustainable production activities in agriculture to take place.

Theoretical frameworks

Several scholars in the past, including Percival and Homer-Dixon (1998), Homer-Dixon (1999) and Gleditsch (2001) had theorized about the links between environmental resources and conflicts. Based on these schools of thoughts, Homer-Dixon articulated the theory of eco-violence on which we can anchor our discussion in this paper following Onuoha (2008). Homer-Dixon and Blitt (1998) argued that large populations in many developing countries are highly dependent on four key environmental resources that are very fundamental to crop



production: fresh water, crop land, fish and forests. Scarcity of these resources resulting from misuse, over-use or degradation under certain circumstances will trigger off conflicts. Homer-Dixon (1999) maintained that decreases both in quality and quantity of renewable natural resources, population increase, and inequitable access to resources can act singly or in diverse combinations to amplify the scarcity, for some population groups, of crop land, water, fish and forests. This in turn can reduce economic productivity, both for the local groups experiencing the scarcity and for the larger regional and national economies. The victims may migrate or be expelled to new lands. Migrating people in groups often cause ethnic conflicts when they move to new areas, while dwindling wealth can cause deprivation and conflicts. The basic theoretical assumption of this theory is that resource scarcity is the product of an insufficient supply, excessive demand or an uneven distribution of a resource that forces some sector of a society into poverty.

On the other hand, these three sources of scarcity are in turn caused by factors such as population expansion, economic development and environmental pollution. Thus, environmental resource scarcity will restrict agricultural and economic productivity, further inducing the disruption of economic livelihoods (farming inclusive), poverty and migration. Migration can

occur either as a result of environmental quality of a habitat that has become inhabitable or, more commonly, because the migrant's economic outcome is probably going to be better in areas with greater resource endowment. So, both restricted productivity and migration are likely to reinforce the segmentation around already existing religious, class, ethnic or linguistic cleavages in a society thus precipitating conflicts. In this regard, Homer-Dixon presents his notion of environmental (or resource) scarcity with a pie metaphor: qualitative degradation or quantitative depletion which reduces the total size of the pie. A higher number of people sharing the pie simply mean that each share of the pie will shrink. Then, finally, if the pie is distributed in pieces of unequal proportions, some may be too dismal for people to survive on. Within the context of Nigerian ecological regions, the eco-violence theory is analytically fruitful to capture, if not explain, the intricate linkages that can develop between environmental resource scarcity, livelihoods such as farming or agricultural livelihoods, and conflicts. For instance, Onuoha (2008) noted that the Lake Chad area where rapid population growth and converging environmental trends contributed to the retreat of the Lake, conflicts in the basin are likely to deteriorate greatly as resource scarcities act together with, or aggravate other conflict-related social factors.

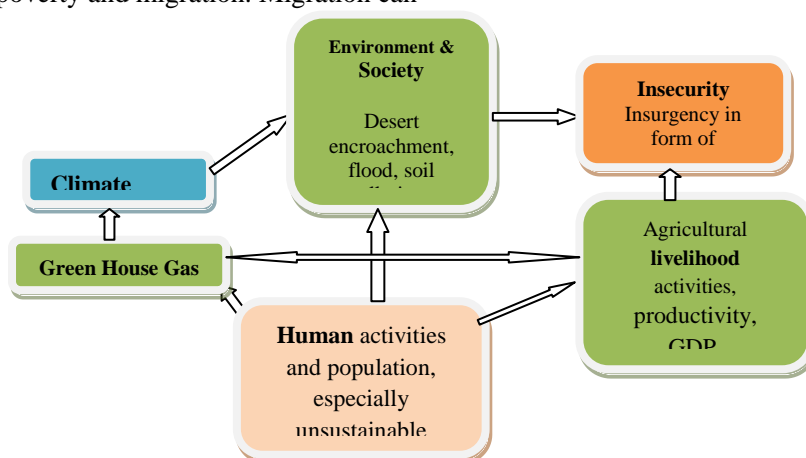


Figure 1: Nexus between insurgency, environmental degradation and agriculture livelihood activities (Source: Authors, 2017)



According to Hendrix and Brickman (2013), whereas food insecurity may be a source of grievances that induce conflict, severe food insecurity has a dampening effect on conflict behaviour. There is a higher propensity for communal conflicts to occur in chronically food-insecure environments, though the effects of rapid, inter-temporal changes in food access are less clear. With respect to urban unrest, it is clearer to explain: higher consumer prices, particularly for food and fuel, correlate with increases in urban protest and rioting, which can have adverse effects on institutions and influence policy decisions that affect the whole country. However, these relationships need to be understood in proper context, as collective action paradigms, political institutions, and market structures can either alleviate or magnify the effects of food insecurity on conflict. Besides, conflict itself is a significant source of reduced agricultural productivity and food insecurity, as it disrupts production and distribution networks of food and marketing of agricultural inputs and products.

Trends in Insurgency and Impact on Agricultural Livelihoods in Nigeria

In an attempt to trace the origin of insurgency as experienced all over the world today, Kaldor (1999) was of the view that the nature of armed conflicts changed from predominantly interstate to civil wars and armed conflicts within states following the end of the Cold War. According to him, at that time, the new type of armed conflict and non-conventional armed violence dominated conflict settings in the post-Cold War era was often referred to as “new wars”. There were a number of shifts and changes:

- ✚ A shift from regular armed forces to non-state actors, illicit networks, paramilitaries, and warlords;
- ✚ A change of motives from geopolitical to identity politics;
- ✚ A shift of methods to asymmetric warfare and emergence of new war

economies including illicit activities, smuggling, and human trafficking instead of state finance (Kaldor 2013). Violence in non-conflict settings is equally directed against the state and the civilian population (Nett and Rüttinger, 2016). They noted that, it became a serious problem in states with poor governance, inefficient state institutions, and dysfunctional rule of law, as they lack the capacity to respond to high levels of violence (Small Arms Survey, 2013). They emphasized that state fragility combined with livelihood insecurity often give rise to violence linked to “alienated, frustrated, or excluded populations, particularly associated with younger men” (Moser and Rodgers, 2005) in the form of gang violence, identity conflict, or gender-based violence.

The number of non-state armed groups involved in civil conflicts has increased fourfold as since 2004 as observed by (McQuinn and Oliva, 2014). They emphasised that the changes continued to shape violence and war; there have also been important new developments and changes in patterns of violence and the actor landscape in the last decade. Institute for Economics and Peace (IEP), (2015) identified another trend in violence which was described as the increasing presence of violent extremism, manifesting itself in an almost tenfold increase in the number of fatalities from terrorism between 2000 and 2014. In the opinion of Powell and Griffin, (2014) terrorism itself is not a new phenomenon, although it is increasingly brutal and regionally networked across borders, and strives in some cases for territorial control. The terrorist groups increasingly recruits foreign fighters and targets private citizens, as opposed to religious, military, government, or business actors (IEP, 2014).

Insurgency in Nigeria

The first known insurgency or terrorism attempt in Nigeria may be credited to the movement to



liberate the Niger Delta people led by Major Isaac Jasper Adaka Boro (Muzan, 2014). Muzan reported that the major complaint was against the exploitation of the oil and gas resources of the Niger Delta by both the Federal and regional governments in total disregard of the citizens of the area. This made him formed the Niger Delta Volunteer Force (NDVF), an armed military group composed of 150 of his kinsmen. He firmly believed that the people of the Niger Delta deserved a more equitable share of the wealth which accrued from oil. To press the point, on 23 February 1966, the NDVF declared the Niger Delta Republic. The Republic lasted for only 12 days before the federal military forces crushed the insurgency and arrested Boro. He and his followers were charged, tried and imprisoned for treason.

More than 30 years after the demise of Major AdakaBoro, there was a resurgence of the armed protest against the federal government and the multi-national companies engaged in the oil industry in Niger Delta. Most of the armed groups were made up of raggedy, ill-equipped, restive youths, who are spread across the length and breadth of the delta region (Muzam, 2014). At its inception, this resurgence seemed to be decidedly unfocused as to who the target should be, whether it should focus on the oil companies, the government, or the chieftains and their middlemen as the primary culprits in the perceived scheme of denials of benefits from oil operations and from the associated injuries to the people and their environment. Initially, there was great infighting among these armed youths. This came to a head in the late 1990s, as the main communities in Warri, Delta State, went into an all-out armed conflict, one tribe against the other. Muzam, (2014) noted that the war was centred on who should control the oil benefits coming to the region. The Ijaws, Itshekiris and the Urhobos fought a destructive war for more than five years, but somehow the realisation that the common enemy was the federal government and its foreign company partners changed the

campaign focus from an internecine fratricide to a major campaign against the government.

It is noteworthy that the causative factors in this insurgency are still very much visible in the entire Niger Delta region (Muzam, 2014), namely,

- ✓ extreme poverty in the midst of levels requiring concerted humanitarian intervention,
- ✓ discriminatory public policies resulting in political alienation of the human population, unsustainable extractive economies and,
- ✓ finally, the absence of environmental remediation policies and activities.

All these, and maybe more, are likely to fuel discontent and exacerbate future conflicts and insurgent tendencies.

There were several other groups who were involved in one agitation or the other. But, when Ken Saro-Wiwa, a non-violent environmental activist of the Movement for the Survival of the Ogoni People (MOSOP), was executed by the Nigerian government, his execution fuelled an insurgency across the Niger Delta. At the height of the Niger Delta insurgency, some of the groups had a very sophisticated arsenal that would have been the boast of any group in the history of guerilla warfare (Muzam, 2014). This period also saw the emergence of the group known as the Movement for the Emancipation of the Niger Delta (MEND). MEND considers itself to be an umbrella group, co-ordinating a large number of groups of various sizes and lethal capacity that spread the entire length and breadth of the Niger Delta region, from the creeks of Ondo State in the west, to the mouth of the Cross River in the extreme east of Nigeria's Atlantic coast and up north to the point of primary bifurcation of the river Niger, in that triangular fashion. The tactics used by MEND and its Niger Delta insurgent groups are largely those of guerrilla warfare. Using speed



boats and highly sophisticated weapons, they often quickly out-manoeuvre and overrun elite security operatives hired to guard the oil operations in the creeks, swamps and offshore areas. The insurgents completely shut down operational systems, and they also kill, maim and take hostages, demanding large sums of money in foreign currency for their release. The latest insurgency from the Niger Delta came in the name of Avengers, an insurgency group that emerged in the wake of the new All People's

Congress (APC) Federal government in Nigeria. The group destroyed several oil installations in the Niger Delta causing oil spillages, reduced output of Nigerian oil exports as well as foreign exchange (exacerbating the already receding economy in the country). With the attendant oil spillage a lot of aquatic resources such as fishing grounds which provide sources of livelihoods to Niger Delta farmers were affected by environmental pollution. Economic recession that followed the oil glut in the international markets in the face of declining oil output as Multinational Oil Companies closed down their facilities and sacked many of their workers took its toll on households in Nigeria including farm households in different parts of the country as poverty became endemic.

The latest upheaval in the northern Nigeria is Boko Haram which has, without a doubt, the character of an insurgency. Boko Haram (meaning 'Western education is sinful') has brought about heightened tension, anxiety and a sense of insecurity hitherto unknown in any part of Nigeria except the Niger Delta region.

The Islamic terrorist's sect called the Boko Haram (BH), began in 2002, by Mohammed Yusuf (Awodola and Oboshi, 2015). Their activities are characterized with the mindless and heinous attacks on innocent citizen which have left many dead, traumatized, many properties destroyed including farm lands, loss

of barns of harvested food as well as able bodied men and women to farm the abandoned lands. According to Allan & Associates (2017) the North-East Nigeria Recovery and Peace Building Assessment estimated the total costs, including peace building efforts and infrastructure reconstruction, to amount to over USD6.6 billion. The bulk of those costs were identified in private housing, health, education, and agriculture. However, it noted that most economic activity in north-eastern Nigeria is focused around subsistence farming, which employed over 70 per cent of the local population before the insurgency started. The World Bank has pledged to provide interest-free loans amounting to USD2.1 billion over ten years to finance the infrastructure reconstruction in the north-east.

There are several dimensions to the causes and reasons for the insecurity problems of 'insurgency' in Nigeria. Some scholars are of the view that insurgency in the northern Nigeria could be traced to the issues in Lake Chad basin while in the Southern Nigeria the militancy was viewed to emerge as a result of crude oil exploration and exploitation. This is confirmed by Majekodunmi (2016) who stated that the insecurity situation in Nigeria is concentrated in the Niger Delta and the North Eastern areas. Mekonnen, (2016) observed that the Lake Chad Basin is one of the poorest and drought-prone regions of the world. World Bank described it as "a productive yet poor and vulnerable socio-ecosystem," A dynamic region, which is home to some 50 million inhabitants, the lake's waters, banks, and islands serve as major sources of livelihoods for fishing, farming, and livestock rearing. Hence the Basin is a major food-exporting hub, which typically accounts for the food security of about 13 million people in the hinterland of the Basin (Mekonnen, 2016). Unfortunately the ability for the Lake and its productive systems to satisfy regional food security needs has been increasingly



compromised by environmental challenges, as well as the recent onset of crisis erupting at the interface context of systemic development problems and unmanaged environmental disaster, which compounded over time to cumulate social unrest and violence, eventually spreading civil conflict and insecurity throughout the region.

According to World Food Programme, WFP (2016), humanitarian crisis of the Lake Chad Basin region is characterized by massive displacements, food insecurity, and incidents of civil conflict. In communities hosting IDPs, refugees, and returnees, the presence of additional families is straining local resources and exacerbating food, relief commodity, shelter, livelihood, and protection needs, among others (USAID, 2016).

According to Eme2011 in Umaru, Pate, and Haruna, (2015) while assessing impact of insecurity in Nigeria stated that, checklist of the impact of conflicts and insecurity include;

- Social dislocation and population displacement
- Social tensions and new pattern of settlements which encourages Muslims/Christians or members of an ethnic group moving to Muslim/Christian dominated enclaves.
- Heightens citizenship question and encourages hostility between “indigenes” and “settlers”.
- Dislocation and disruption of family and communal life.
- General atmosphere of mistrust, fear, anxiety and frenzy
- Dishumanization of women, children, and men especially in areas where

rape, child abuse and neglect are used as instruments of war.

- Deepening of hunger and poverty
- Atmosphere of political insecurity and instability including declining confidence in the political leadership and apprehension about the system (Ibrahim and Igbuzor, 2002 in Umaru et al, 2015).

The reported further revealed that poverty is the root cause of insecurity because it can lead to frustration which in turn may translate into violence. The problem of insecurity as identified in this paper as the outcome of frustrated expectations which breed aggression and concluded that insecurity and poverty had negative impact on economic growth in Nigeria.

Insurgency and Environmental Degradation in Nigeria: Any link?

Environmental activists and experts are of the view that deliberate efforts to tackle environmental challenges in Nigeria will help to check the wave of insecurity in the country (Onoh, 2014). Nett and Rüttinger, (2016) asserted that as the climate is changing, so too are the conditions within which NSAGs operate. They further stressed that Lake Chad climate change contributes to resource scarcities that increase local competition for land and water. This competition in turn often fuels social tensions and even violent conflict. At the same time, this resource scarcity erodes the livelihoods of many people, aggravates poverty and unemployment, and leads to population displacement. Non-state armed groups, in particular Boko Haram, thrive in this fragile environment. Boko Haram can operate more easily and engage not only in acts of violence but also in transnational organized crime. At the same time, as climate change affects yields from agriculture, cattle rearing and fisheries, many people are left unemployed, with few economic opportunities and low levels of education. This makes them extremely vulnerable not only to



negative climate impacts but also to recruitment from terrorist groups such as Boko Haram.

Nett and Rüttinger,(2016) concluded that climate change is interacting with non-state armed groups in three major ways: (1) contributing to fragility, mainly by exacerbating conflicts surrounding natural resources and livelihood insecurity (2) having increasingly negative impacts on livelihoods in many countries and regions, e.g. through food insecurity making affected population groups more vulnerable not only to negative climate impacts but also to recruitment by NSAGs.(3) increasing use of natural resources as a weapon of war. The scarcer resources become, the more power is given to those who control them.

The increasing impacts of climate change do not automatically lead to more fragility and conflict. Rather, climate change acts as a threat multiplier. Rüttinger et al (2015) report commissioned by the G7 Foreign Ministries, identified seven compound climate-fragility risks that pose a serious threat to the stability of states and societies: (i) local resource competition implies that as the pressure on natural resources increases, competition can lead to instability and even violent conflict in the absence of effective dispute resolution; (ii) Livelihood insecurity and migration: Climate change will increase the human insecurity of people who depend on natural resources for their livelihoods, which could push them to migrate or turn to more informal or illegal sources of income; (iii) extreme weather events and disasters will exacerbate fragility challenges and can increase people's vulnerability and grievances, especially in conflict-affected situations; (iv) Volatile food prices and provision which are likely to disrupt food production in many regions, increasing prices and market volatility, and heightening the risk of protests, rioting, and civil conflict; (v) Trans-boundary water management is frequently a source of tension; as demand grows and climate impacts affect availability and quality,

competition over water use will likely increase the pressure on existing governance structures; (vi) Rising sea levels will threaten the viability of low-lying areas even before they are submerged, leading to social disruption, displacement, and migration, while disagreements over maritime boundaries and ocean resources may increase; and (vi) Unintended effects of climate policies means risks of unintended negative effects particularly in fragile contexts will also increase. Most of these risks are closely linked to food, water, and energy security, natural resources and ecosystems. They are therefore not isolated from each other and are affected by the same drivers and pressures such as climate change, increasing population and resource demand, mismanagement of resources, and environmental degradation.

Majekodunmi, (2014) noted that protesting youths in the Niger Delta expressed their grievances for blowing up oil pipelines and kidnapping of oil workers over the environmental pollution which was caused by oil exploration and exploitation. This is an indication of how environmental issues fuel insecurity in Niger Delta Nigeria. Also the recurrent problems between the Fulani herdsmen and Plateau people where the Fulani herdsmen are looking for grasses to feed their animals, because their areas 'far north' has been taken over by the desert. The attempt by Plateau State residents to resist them (the Fulanis) has led to several fights, killing many people and destroying property in Benue, Plateau and Enugu States. It is not no longer news that killings and destruction of human and material wealth in the middle belt of Nigeria has aggravated food insecurity crisis in Nigeria. Also agricultural practices which are critical for poverty reduction (Haggblade et al., 2007) have been severely stifled in the Niger Delta due to impacts of soil degradation. Apart from coastal erosion, flood in general has



impacted negatively the livelihood of many communities in the region.

The contamination of water due to blanket dumping of drilling wastes, drill cutting and used water; soil contamination by oil spills is common in the Niger Delta Nigeria. Decades of exploration and spills has polluted the farmlands and fish stocks in the maze of creeks around Port Harcourt and across the Niger Delta region. Theft of crude oil from pipelines or “bunkering” sees raw fuel regularly diverted to illegal refineries set up in the bush for conversion into petrol and diesel.

Apart from the above issues, there is a more recent issue in Port Harcourt, the Black Soot incidence. Experts have observed that burning of tyres for scrap copper and illegal oil refineries have both been blamed for the residue.

The emission of Black Soot was reported in November, 2016 in Port Harcourt (Ajayi, 2017). Particles from soot constitute air pollution which is defined by World Health Organization (WHO) as contamination of the index or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmospheres. Ordinioha and Brisibe (2013) observed that the proportion of households with food insecurity in the rural community of Rivers State where oil drilling takes place substantively. In this area, a single crude oil spill in the region is capable of reducing household food security by as much as 60% (Ordinioha and Sawyer, 2008).

They noted that an average of 300 such crude oil spills is reported in the region each year. It was concluded that the environmental degradation might have forced several persons in the rural community out of the traditional occupation of farming as only 48.04% of them indicated that they were farmers.

In north-eastern Nigeria, the region closest to Lake Chad and where Boko Haram is strongest,

71.5 percent of the population live in poverty and more than 50 percent are malnourished (UNSSC 2014). The National Bureau of Statistics report (as cited by Omoyibo and Akpomera, 2013) indicated that since the intensification of violence and Boko Haram’s insurgency, poverty rates in Nigeria have deteriorated from 55 percent in 2004 to 61 percent in 2010. Nigeria’s unemployment rate increased to 23.9 percent in 2011 compared with 21.1 per cent in 2010 and 19.7 per cent in 2009.

It was reported by WFP (2016) that in August 2015, there was 2.15 million internally displaced persons (IDPs) in Nigeria. With the onset of armed conflict, related displacements have amounted to over 4.7 million people across the region. As people flee escalating violence, individuals and families leave behind their productive assets, which disrupt agricultural production.

Awodola and Oboshi (2015) argued that the agricultural sector is experiencing low productivity as many farmers have abandoned their farms for fear of attack on their farm lands, which may translate to low yield. Awodola and Oboshi, (2015) reported that, BH has found markets as fertile grounds of confrontation with military authorities. Productive activities, including agriculture, fishing, livestock rearing, and the trade of the respective products, have been interrupted by episodes of Boko Haram’s insurgency and systemic violence. Also, community assets and food reserves were destroyed, which contributed to already severe problems of food security and prevalence of Global Acute Malnutrition. The transportation of goods and means of production like fertilizers and seeds has become more risky, commodity prices in northern Nigeria have sharply increased (Nett and Rüttinger, 2016). FEWSNET (2016) observed that the activities of cattle’s herdsman and hustlers emanating from the movement from desert threaten areas to the green land areas for the search of pastures for



their livestock is also impacting negatively on the farming in those regions.

Fisheries value chains are also being impacted, as Boko Haram is using the lake's wetlands for shelter to launch attacks. Both livestock and fish processors suffer from restricted and unpredictable access to markets (Kimenyi et al. 2014).

It was also observed that food insecurity is still at extremely high levels due to a lack of access to seeds, farming tools, land and water among other factors. A FAO Seeds Security System Assessment has indicated that the insurgency has negatively impacted on both the formal and informal seed system in the northeast states. Also in the Food Security Sector, agriculture-based livelihoods remain weakly funded. By missing the current dry season, many IDPs, returnees and vulnerable host communities will continue to rely on expensive food assistance. Lack of economic and employment opportunities, and possible harmful consequences including youth radicalization and enrolment in armed groups, resulting in continued civil unrest.

Boko Haram has resorted to using natural resources as a weapon and part of their strategy of violence. They have poisoned water sources such as wells and streams in areas where they were dislodged by state troops, making water use dangerous for both humans and livestock (NAIJ.Com2015).

The state of the economy too has a role to play in insurgency in the country. Onuchuku (2016) noted that the economy was growing without employment ie the growth recorded within the period was not inclusive. The report further showed that the GDP growth declined to a very low level of 2.11% in 2015, the lowest ever within the period under review. This decline according to him was due to a fall in oil production and prices in 2015. This may have contributed to high insecurity witnessed in the

Niger Delta region during the period. According to him, poverty reduction rate within the period was very slow, with a reduction rate of -2.1%. The poverty rate in the south-south during the period was 27.70% and 24.40% respectively with a reduction rate of -3.30%. Higher poverty rate is accompanied with crime of different kinds which is high associated with insecurity witnessed during the period.

Between 2010 and 2015, Nigeria's GDP grew at an average rate of 4.8% a year on the back of the non-oil sector, which grew 6.2% a year while the oil and gas sector declined by 4.5%. Ministry of Budget and National Planning (2017). Growth in most sectors has since slowed considerably, contributing to the onset of the economic recession in mid- 2016. The oil sector accounts for only 10% of Nigeria's GDP although it remains a large contributor to export earnings and government revenues. The largest contributors were services (53.2% of GDP, including retail and wholesale trade), agriculture (23.1% of GDP), manufacturing (13.3% of GDP) and construction and real estate (3.9% of GDP) Federal ministry of Budget and Planning (2017). Given their historical growth rates, these sectors have great potential to restore growth and diversify the economy, while generating foreign exchange and increasing the resilience of the economy to external shocks, especially in the oil and gas sector.

In 2015, agriculture accounted for 23.1% of GDP and employed 38% of the working population. Agriculture can be divided into four sub-sectors: crop production (89% of agricultural GDP; 4.1% growth in 2010-2015), livestock (8%; 3.3% growth), fishing (2%; 7.5% growth), and forestry (1%; 4.3% growth).

Policy Responses to tides of insurgency, environmental degradation and decline in agricultural production in Nigerian vulnerable regions



The following Federal Government policies are some responses to the identified problems of insurgency, environmental degradation and decline in agricultural production in Nigeria.

Policies on food production and economic growth in Nigeria

Successive Nigerian governments have launched various renewals or recovery plans aimed at boosting or reforming the economy over the past decade. The President Umar Yar'Ádua administration initiated numerous plans and programmes ranging from the 7-point agenda (2007) of Umar Musa Yar'Ádua administration, through the Vision 20-20. National Industrial Revolution Plan 2014 and the Nigeria Integrated Infrastructure Master Plan (2014) of the Goodluck Jonathan administration, all the way to the Muhammadu Buhari government's Strategic Implementation Plan for the Budget for Change 2016. The present government in its effort to address the challenges of food insecurity has launched developmental programmes, some of which are:

A. The Green Alternative

The Federal Government's Agriculture Promotion Policy, the Green Alternative, which intended to build on the gains made by the Agricultural Transformation Agenda aimed to work with key stakeholders to build an agribusiness economy that would deliver sustained prosperity by meeting domestic food security goals, generating exports, and supporting sustainable income and job growth.

The objectives were focused on three areas:

- Enhancing productivity by improving access to land, information, knowledge, and inputs, soil fertility, production management, storage, processing, marketing and trade.
- Crowding in private sector investment by offering access to finance and developing agribusiness investment.

- Realigning the Federal Ministry of Agriculture and Rural Development to include institutional setting and roles, youth and women, infrastructure, climate smart agriculture, research and innovation, and food, consumption and nutrition security.

B. Presidential Initiative on Fertilizer

The Presidential initiative on fertiliser is another agricultural promotion policy of the current administration. It is a Public Private Partnership (PPP-type) initiative to improve crop production and yields by making fertiliser available to farmers at significantly reduced prices, by leveraging private sector support for the Administration's priorities.

The current administration in 2017 launched another plan, a comprehensive economic intervention plan tagged the Economic Recovery and Growth Plan "ERGP" or the "Plan". The ERGP, which came on the heels of Nigeria's slump into recession when there was a sharp fall in oil prices from high price of about \$112 a barrel in 2014 to below \$50 in 2016, was targeted at propelling Nigeria back to sustainable, accelerated development and restoring economic growth in the medium term 2017 to 2020. Despite robust provisions of the Plan, there is significant uncertainty in many circles over the prospects of a successful implementation of the Plan, particularly in the absence of clear strategies for the full implementation of the initiatives contained as in the Plan.

Highlights of the key objectives of the ERGP

Firstly, the ERGP aims to restore growth, macroeconomic stability and engender economic diversification. The Plan intends to drive fiscal stimulus (through increased government spending), ensure monetary stability, improve the balance of trade and focus on key sectors driving and enabling growth



(such as agriculture, energy, Micro, Small and Medium Enterprises (MSMEs), manufacturing and services). The Plan also seeks to achieve the above by, inter alia, leveraging on information technology. This policy can help create employment and reduce insurgency.

Secondly, the Plan aims to invest in the Nigerian people by continuing to provide support for the economically-disadvantaged, create jobs, improve accessibility, affordability and quality of healthcare across the country and guarantee improved human capital (through access to basic quality education for all).

Finally, the ERGP aims to significantly increase investment in infrastructure through robust Public Private Partnership arrangements.

The Plan proposes to prioritize food security as a fundamental national objective with the goal of achieving self-sufficiency in rice and wheat by 2018 and 2019/2020 respectively. The ERGP proposes to build on the Strategic Implementation Plan (SIP) similar to the former initiatives encouraging private sector investment in agriculture.

Agriculture faces four big challenges: limited access to financing and inputs for farmers; serious threat of climate change on yield; limited access of agricultural outputs to the national and international markets; and security threats to agricultural investment including cattle rustling, kidnapping, and destruction of farmlands by herdsmen. Most farmers struggle to obtain financing to modernize or expand their farms, invest in productive assets or buy inputs. To address these issues, the Federal Government launched the Growth Enhancement Support (GES) scheme in 2012 to supply subsidized inputs to smallholder farmers

Conclusion

The nexus between insurgency, environmental degradation and food insecurity is glaring in Nigeria. Agricultural livelihood has been

identified as the dominant activities in the rural economy and growth in agriculture is considered as a major determinant in improving rural economy. The agricultural livelihood productive activities are negatively affected by degradation of the environment and insurgency actions in the country. The landscape of the violent actors is multiplying in complexity with a range of hybrid organisational structures, with different agenda and different levels of engagement with society that set them apart from 'traditional' non-state actors and in new patterns of violence. The number of non-state armed groups involved in civil conflicts has increased fourfold since 2004.

The violence although connecting all parts of the country appeared to be more concentrated in the North-eastern and Niger Delta Nigeria. The insurgency in the northern Nigeria could be traced to the issues in Lake Chad basin while in the Southern Nigeria the militancy was viewed to emerge as a result of crude oil exploration and exploitation. Other causative factors include, extreme poverty in the midst of levels requiring concerted humanitarian intervention, discriminatory public policies resulting in political alienation of the human population, unsustainable extractive economies, economic recession and, finally, the absence of environmental remediation policies and activities. Environmental degradation factors such as gas flaring, oil pollution, illegal oil refining activities, climate change effects such as shrinking of Lake Chad, erosion, flooding, desert encroachment etc are increasing aiding the fast deterioration of the agriculture production resources.

In the view of complexity and inter connectivity between insurgency, environment agriculture livelihood in Nigeria, it is indeed necessary for the government to tackle the problem of environmental degradation, insurgency and food insecurity holistically. The signing into law of the Petroleum Industry Bill (PIB) by the present administration is a welcome development in



addressing some issues related to environment and insurgency in Niger Delta. It is recommended that the PIB be given full support it deserves to enable its objectives to be realized.

The insurgency in form of militancy in the southern Nigeria should be addressed by ensuring that oil drilling companies adhere strictly to the international standards in carrying out their activities.

There should be engagement between the government and leaders of agitators or insurgent groups for peace and offer of amnesty to repentant youths.

The government should be more proactive in tackling the problems of desert encroachment and shrinking of Lake Chad by reviewing the environmental regulation and policies especially with regards to the Lake Chad basin.

Government should facilitate the full implementation of the United Nations Environment Programme (UNEP) report on Ogoni land especially as regarding the cleaning up of the Ogoni land and should apply same in the other areas of the Niger Delta region experiencing environmental issues due to oil exploration and exploitation.

Government and donor agencies should consider more realistic programmes that will support farmers and agribusinesses owners in terms of provision of farm inputs and conducive environment for the operation of businesses.

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