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Food insecurity in Nigeria and the need for effectual mitigating measures

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ABSTRACT

The downward slide in Nigeria's food production has gradually led the country into becoming a food-deficit, food importing Nation because of the discovery of petroleum. Nigeria has degenerated into a significant food importing nation because the government neglected the agricultural sector for petroleum which is seen as a much viable resource income. As a consequence, the country is plunged into food insecurity because of rising prices of imported foods. Presently, Nigeria faces food shortage challenges and hunger. Before we can adequately address the underlying problems plaguing the food security system, we need to address the factors influencing agricultural development and sustainability in the economy with a view to improving on food security. Any policy design to tackle this should include inputs supply channels, technology improvement avenues and, credits and subsidies that are not cumbersome and needed. Until we see food insecurity as a gross abuse of human right, the paradigm shift advocated may never be attained.

Keywords:

Food insecurity, Nigeria, effectual mitigating measures

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Introduction

The state of food security in Nigeria has taken a worrisome dimension, especially if weighed against a fast increasing population. The downward slide in food production has gradually lead Nigeria into becoming a food-deficit country with a rapidly escalating food import bills (Igbatayo et al 2018). Because of the discovery of petroleum, Nigeria degenerated into a significant food importing nation because the government neglected the agricultural sector for petroleum which is seen as a much more viable resource for economic development. As a consequence, the country plunged into food insecurity because of rising prices of imported foods (Isa, 2017). Presently, Nigeria faces food shortage challenges and hunger. About 70 percent of the population subsist on less than N 100 (US\$ 0.70) per day. This is in spite of its reputation as a major petroleum producer and exporter and an agrarian economy with about 60% to 70% of the population actively engaged in farming. It should be noted that both crop and livestock productions remain below natural potentials because of inefficient production systems. The population is therefore dependent on imported food staples to augment shortfalls (Nwajiuba, 2013).

According to Matemilola (2017) one in four persons in Sub-Sahara Africa lack access to adequate food and from the World Food Conference of 1974, food security was seen as a situation where all people, at all times, have both physical and economic access to adequate, safe and nutrient rich food that meet their dietary needs and preferences for active and healthy life. This did set and identified four components of food security: availability of food, access to it, its utilization and stability. All four components must be accomplished

simultaneously for the objectives of food security to be met and accordingly, food security is top of the list of Millennium Development Goals (MDGs). Many countries made significant progress at meeting the MDG target of reducing the population of food insecure people by half before 2015, but, food security remained a great challenge in sub-Sahara Africa.

Dahlberg (1998) identified four global threats with implications in the quest to actualise food security; two of these are of great interest considering the Nigeria situation. First, he noted population explosions which is staring us in the face presently. Second, there is global warming which will create a state of uncertainty; the effect of this is also becoming apparent. These should make the quest to tackle food security issues a first order priority of the Nigerian government (Ojo et al, 2012). Events however seem to suggest that food insecurity in Nigeria will grow as her population grows. Presently, she is unable to adequately feed her population. Food production must expand to keep pace with population growth. The urban population may soon outweigh that of the rural at the present rate of rural-urban migration and, the drift to urban centres will put additional pressure on food supply worsening or exacerbating an already precarious situation as the urban population is disconnected from food production relying on the market for food supplies. Many scholars think that retaining the youths that make up the higher percentage of the rural-urban migrants in the rural areas through educating and employing them at the rural areas may produce the next generation of farmers to salvage the situation. Nwajiuba (2013) believes that the once dominant subsistence agriculture economy may not cope with food demand because of the land tenure we practice, insufficiency of funds and credit

and limited farm labour. This will further cripple the food producing sector.

An essential part of social and economic justice is sufficient food production. Every nation should be able to feed her population. That is what can guarantee it a place of pride among other nations. Nigeria is richly blessed with natural and human resources yet, it is having regular food crisis. Cases of malnutrition and under nutrition are rife. The food intake requirements of majority of Nigerians are below the international standard (Otaha, 2013). Though improvements in global agricultural productivity have mitigated food shortages around the world, food availability has remained largely lopsided, with serious shortages in some developing world like Nigeria. Over 800 million people in developing nations suffer food deprivation, and another 24 million in developed countries thus making food security a global challenge to policy makers throughout the world (FAO, 2000).

To make food security and good nutrition effective priorities as well as strengthening access to adequate food and sustainable agriculture, Nigeria must see food security as an integral part of its national security policy. When access to adequate food is denied, food insecurity can result to social unrest. Conflict coupled with food scarcity as is evident now in Nigeria because of civil unrest especially in the north-east in addition to the broadening drought resulting from climate change and resource mismanagement, population displacement, and refugee crises have all impacted our agriculture and food security. The challenge evidently is great. According to the International Food Security Assessment, the number of food insecure individuals may increase to 868 million by 2023. Food security will tame social unrest

and advance the national security goals (Vasterndig, 2014).

Food Insecurity: The Principal Suspects

The agriculture sector began to slide down when oil was discovered in 1956. As exportation began in 1958, interest in agriculture dipped. The effect of this decline was gradual and steady triggering a rise in the cost of food items (Matemilola, 2017). Sustainably developing the economy will be difficult without food security. Failing on this will result in many social ills and civil unrest (Matemilola, 2017). Behnassi et al (2013) intimates that food insecurity is strongly correlated to global issues like population growth, increases in energy demand, and competition for land and water resources.

Before the contemporary petroleum dependent economy, agriculture drove the economy and was the main source of foreign exchange earnings. However, government development plan favoured the urban non-agricultural sectors. This depleted labour and investment from agriculture. The agricultural sector has to be sustainably managed and socially inclusive, to reduce rural poverty and food insecurity. Agriculture has to be run as a business to benefit the rural farmers. Government policies must also aim at agri-business to enhance production for domestic consumption and navigate the country out of food import dependency. In designing the policy, it is necessary attention that population growth and climate change be put into consideration. Any such policy design should include inputs supply channels, technology improvement avenues and, credits and subsidies that may be needed.

Before we can adequately address the underlying problems plaguing the food security system, we need to address the factors

influencing agricultural transformation in the economy with a view to improving on food security. Some of these factors include the vulnerability of the economy to the unstable international crude oil market. Nigeria's economy is significantly dependent on the petroleum sector. In spite of this significance, the oil sector could not spur economic growth, and the accruing wealth is distributed amongst a few. A paradigm shift in policy framework will be needed to diversify Nigeria's economy from been petroleum based to agriculture.

Rural economy has been reasonably dependent on smallholders, whose scope primarily is household subsistence and in spite of being the focus group of National Accelerated Food Production Programme (NAFP) and several other programmes in times past have consistently produced little marketable surplus. The contemporary food crisis provides opportunities to inaugurate policies and strategies towards making the agricultural sector resource use efficient and economically inclusive and move towards commercialisation to counter the limitations of subsistence. This should involve sustainable agricultural practices that use fewer external inputs such as agro-chemicals, mineral fertilizers, pesticides, herbicides etc so that it can be easily adaptable by our largely illiterate farmers (Nwajiuba, 2013)

Food security is also a multidimensional programme that include; economic, environmental and social factors. A reasonable population of the undernourished is in the developing countries like Nigeria and statistics show that 18 out of 23 nations where undernourishment is high are from Africa (Matemilola, 2017). In the coming years it is evident that changing climate, growing population, rising food prices and environmental stressors will significantly impact

food security. This then calls for the adaptation of strategies and policy responses that should including handling of agricultural land use patterns, post-harvest food processing, food prices, agricultural technologies and food storage. These policy responses will improve the productivity of farmers generally (IFPRI 2015). From 2012, the Feed the Future Initiatives of the USA has assisted about 3.6 million farmers have access to new agricultural technologies. This has helped create room for agricultural growth and development by raising the skills of policy analysts (USAID, 2018).

Food crises in Nigeria and most part of Africa are caused by several factors. The most prominent causes of food insecurity identified by Harvest Help (2012) include:

Drought and extreme weather events: food crises results after drought or extreme weather events. These lead to poor or failed harvests which in consequence lead to food scarcity and high prices of the available food materials.

Pests and livestock diseases and poor agricultural technology: outside extreme weather events, failed harvests in many African countries were caused by pests such as locust, animal diseases, uncontrolled erosion, poor soil management and the resulting soil infertility etc. These contribute to food insecurity.

Climate change: Some scholars suggest drought and extreme weather have contributed to food crises in recent times and point to climate change, especially in parts of West and East Africa (Nigeria inclusive) which have had problems with recurrent extreme droughts.

Military conflicts and political instability: Military conflicts and political instability have worsened food insecurity in Nigeria and parts of African as is obtainable presently in the North-Eastern Nigeria. They are not only directly responsible for food crises but have also

exacerbated scarcity of food and often, have prevented aid workers from reaching the very food insecure.

Lack of emergency plans: many countries fail to prepare for moments of scarcity and therefore cannot adequately handle cases of food crises without external aid that may not be available immediately when needed.

Corruption and political instability: In many instances, food aids never reach the target and vulnerable populations due to evident corruption. A very recent case is events in the North-eastern Nigeria among the Internally Displaced Camps. Past regimes introduced policies and strategies aimed at improving food security standard through the restoration of agriculture to its pre-oil boom status and reduce food insecurity. These policies encouraged food importation rather than comprehensive and inclusive agricultural policy. Summarily, despite the comprehensiveness of these programs and policies, effective implementation was hardly achieved because of governance inadequacies and corruption. It was the civilian government in 1999 that gave the needed attention to agriculture and food production through the initiation of a number of food security initiatives such as, Special Program for Food Security (SPFS), Root and Tuber Expansion Program, Fadama Development Project, Community-based agricultural and rural development schemes, Provision of infrastructures.

Rapid population growth: Nigeria has one of the fastest growing populations which if not checked and the agricultural sector not well equipped to handle the upsurge in food demand may trigger a devastating consequence. Many poor African countries have very high population growth rate which have puts them at a risk of food crises (Harvest Help, 2012)

Food security may not be achieved by increasing the production of food. Food may be sufficiently available though, however, people may still remain food insecure if they cannot afford to buy it. Hence food must be availability, accessibility, utilizable and stable. Combating food insecurity will require making food available and also ensuring that people are able to afford it. Matemilola, (2017) classified the panacea to food insecurity and maintains that they lie in upgrading agricultural productivity; building up farmers' agricultural capacities and all these must be capped with good governance amongst others. Strategies to achieving food security were categorized by the report into the followings:

Food Insecurity: Mitigating Measures

Until we see food insecurity as a gross abuse of human right, the paradigm shift advocated may never be attained. Otaha(2013) consents to this opinion acknowledging that the number one component of social and economic justice should be adequate food production and a nation can occupy its place of pride among other nations when it is able to feed her population. It is mockery to inform a person he or she has the right to food when nobody is available to provide the food. If Nigeria is ever to achieve the goal of been food secure, she must think out of the box. She must consider a redesign of her food policies to be more collaborative and impactful. She must create incentives for the smallholder farmers to have greater access to finance and technology.

A recent perception in extant literature on food security bothers on the link between the concept and human rights and food sufficiency. According to the proclamations of the United Nations General Assembly about Human Rights which it called a 'common standard of

achievement for all peoples and all nations' on the 10th of December 1948, the right to adequate food and freedom from hunger, which is set in the Universal Declaration (Article 25) is a necessity. International human rights law firmly recognises that individuals have right to adequate food and freedom from hunger; these rights are not globally enjoyed however (Ojo et al 2012). To set a functional food and nutrition priorities, strengthen access to nutritious foods and ensure a sustainable agriculture, Nigeria must see food security as a part of national security and work effectively towards that. According to USAID, food security involves having at all times physical and economic access to adequate food to meet dietary needs for a healthy life. When this is not possible, food insecurity can catalyse social unrest. In contemporary times, this is evident in the cataclysm in the political scene in the Middle East (Vasterngid, 2014).

According to Forman et al (2016) Food security is a national security priority. Recent conflicts in some nations, they posit, are encouraged by food insecurity and worsening famines from ongoing fighting. Most a times Aids are made available to the warring parties; but, focusing on food security as a long long-term goal will help ensure hunger does not trigger new conflicts especially with the rising population despite the conflicts. It is glaring that food security in Nigeria can be reduced if these factors are tackled headlong. Matemilola, (2017) citing Ojo et al (2012) reported that food insecurity has been on the rise in Africa, Asia and Latin America because of the demand for food by the fast growing populations. Therefore, there is the need for mechanized agriculture in these regions and in Nigeria in particular to boost food production. Large scale farmers may have been using mechanised farming, the bulk of the food consumed in these climes is produced by

the small-holder farmers hence the need to promote mechanized farming among them. This will encourage inclusive agriculture. Mechanization if supported by the government will highlight the need to engage public and private corporations. Another aspect of technology that is worthy of note is biotechnology. Despite the negative perceptions of Agricultural biotechnology which involves genetically modifying foods, it however remains a significant success in the quest to fight food insecurity and reducing global food security challenges (Matemilola, 2017). It may not be advised now but should be gradually introduced after serious campaigns on its significance and benefits.

The formulation and implementation of bad policies must be handled. There is undue emphasis on urban infrastructural development at the expense of the rural agricultural areas. Resource flow from rural to urban centres has worsened the impoverished conditions of the rural areas with serious consequences in food production. Furthermore, the agricultural sector has witnessed significant absence of adequate technology over the years. New innovations and technologies that enhanced agricultural productivity in other climes are absent in our agricultural sector. Accessing hybrid seeds and seedlings, fertilizers and other agro-chemicals that are needed to improve farm output and productivity is frost with difficulty. The sector has witnessed the existence of dysfunctional institutions; effective institutions will play vital roles in making resources available to the agricultural sector. Another constraint is the marginal investment capital in the sector. Nigeria's agricultural sector has suffered under-investment from both the public and private sectors. all the nation's agriculture output is handled by low-income, small scale farmers that have limited access to investment capital,

This is a binding constraint in the quest for food security. The banking sector is averse to lending to the agricultural because of the high risks associated with the sector (Igbatayo et al 2017)

Off-season agricultural activities along floodplains and fishing activities will boost food production and availability in Nigeria; however, it is rarely practiced even in the Niger Delta that is surrounded by large water bodies. Government support for dry season agricultural activities such as access to funding and other inputs, import restriction policies that will boost local agricultural production will lead to increased farmer participation during dry seasons, increasing food output. Also in areas where dry season cultivation along floodplains like the Rivers Niger, Benue plains, Komadugu in Yobe plains, Hadejia in Jamaare, Sokoto-Rima; the dry season activities if supported by the government will increase because of inputs provision especially through the "Anchor Borrowers Program" across the states (FEWS NET, 2016)

Islam et al. (2006) reported that industrial effluents impacted plants and the soil in Bangladesh and significantly reduced the nutrient content of the soil which also reduced the yield and nutrition of agricultural produce. In the Niger Delta, oil exploration, gas flaring and industrial effluents have also been scourges to the agricultural sector as the same scenario reported by Islam et al (2006) in Bangladesh are repeating in the Niger Delta, reducing agricultural productivity. There should be a strict enforcement of Environmental Impact Assessment reports and Management Plans to ameliorate these impacts on agricultural productivity. Also, the use and application of inorganic fertilizers have been abused especially by the illiterate farmers. The Regulation of the use of inorganic fertilizers and

other agro-chemicals must be taken seriously because they have associated environmental consequences. When nitrogen from inorganic fertilizers wash into water bodies it kills some aquatic lives, Phosphorus causes algae to accumulate in water bodies and deprive fishes of oxygen resulting in their death and affects the availability of fish for human consumption. Crop rotation is advised and where land is still in abundance bush fallowing is suggested as alternative measures to the use of fertilizers. These alternatives improve soil.

Conclusion

Nigeria is blessed with fertile land for agriculture and the needed human resource and should not be a victim of food insecurity. Food security can be restored if the factors militating against its restoration are adequately handled. The enabling environment that will promote employment in the agricultural and subsidiary non-farm sectors that are linked to agriculture as well as making credit facilities available for the farmers to cope with the contemporary economic realities particularly in the rural areas will be a welcome development. Environmental degradation through oil spillage and other industrial effluents especially in the Niger Delta which constitute a significant pollution of the soil and water and other components of the environment that have impacting reducing agricultural productivity must be tackled. There should be a monitoring mechanism to control indiscriminate discharge of effluent into the environment. Finally, science and technologies must be adopted in farming in order to facilitate agricultural productivity.

Recommendations

1. It is recommended that the government provide input support for all farmers in the

federating states to increase and diversify food production

2. agri-business should be encouraged by the various tiers of government to increase food availability for the growing urban population. This will offer continued support to smallholder farmers as it will help in alleviating poverty because whatever they produce can be easily marketed and needed inputs can also be easily sourced.

3. The agricultural sector is one that is well impacted by the changing climate; expert advice should be sought on how to mitigate it particularly by the government.

4. Appropriate technological and management innovations should be adopted to improve productivity and reduce post-harvest losses and local processing should also be encouraged as this will increase the profit margin of the farmers and act as a niche market boosting farmers' earnings and potentially foreign exchange.

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