

## PROMOTING FOOD SECURITY AND ADEQUATE NUTRITION TOWARDS SOCIO-ECONOMIC TRANSFORMATION IN NIGERIA

BY

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### Abstract

Food security and adequate nutrition are critical issues facing Nigeria, a country with a rapidly growing population and diverse agricultural landscape. Despite efforts to address these challenges through government policies and initiatives, persistent issues of poverty, climate change, and socio-cultural barriers continue to undermine food security and nutrition outcomes. However, addressing food insecurity and malnutrition in Nigeria requires a multifaceted and holistic approach that encompasses policy interventions, agricultural development initiatives, nutrition education programmes, and social protection measures. While significant progress has been made through government policies and initiatives such as the National Food Security Policy (NFSP), Home-Grown School Feeding Programme (HGSFP), and National Social Investment Programme (NSIP), challenges persist, including poverty, climate change, and socio-cultural barriers. Moving forward, sustained political commitment, increased investment in agriculture and nutrition, strengthened partnerships with stakeholders, and improved governance and accountability mechanisms are essential for achieving sustainable food security and nutrition outcomes in Nigeria. By prioritizing the needs of vulnerable populations, empowering smallholder farmers, promoting dietary diversity, and ensuring equitable access to food and nutrition, Nigeria can build a more resilient, inclusive, and prosperous future for all its citizens.

**Keywords:** Food security, adequate nutrition, Socio-economic, Transformation, Promoting

### Introduction

Food security and adequate nutrition are fundamental pillars for achieving sustainable development and socio-economic transformation in any society. Food and Agriculture Organization (FAO) defined food security as situation that exist when all people at all times have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 1996). Adequate nutrition, on the other hand, goes beyond mere caloric intake, encompassing a balanced diet that provides essential nutrients required for optimal health and well-being. In the context of Nigeria, a country with a burgeoning population and diverse agricultural landscape, the issue of food security and nutrition holds critical significance. Despite being endowed with vast arable land and abundant natural resources, Nigeria continues to grapple with persistent challenges of food insecurity and malnutrition. According to recent data from the World Food Programme (WFP), an estimated 20% of the Nigerian population, equivalent to over 40 million people, are undernourished, while various forms of malnutrition, including stunting, wasting, and micronutrient deficiencies, afflict a significant portion of the population, particularly children under five years of age (WFP, 2023).

The implications of food insecurity and malnutrition extend far beyond individual health outcomes, permeating through various facets of socio-economic development. Persistent hunger and malnutrition hinder human capital development, impair cognitive abilities, and diminish productivity, thereby perpetuating cycles of poverty and underdevelopment. Furthermore, food insecurity exacerbates social inequalities, disproportionately affecting vulnerable groups such as women, children, and rural communities, and contributing to social unrest and instability. Recognizing the multifaceted nature of the challenges at hand, the Nigerian government, in collaboration

with international organizations, non-governmental organizations (NGOs), and other stakeholders, has initiated various policies and programs aimed at addressing food insecurity and malnutrition. These initiatives encompass a spectrum of interventions, ranging from agricultural development and food production to health and nutrition education, aimed at enhancing food access, improving dietary diversity, and promoting sustainable food systems. However, despite concerted efforts, numerous challenges persist, including inadequate infrastructure, limited access to markets, climate change-induced disruptions, and socio-cultural barriers. Moreover, the complex interplay of factors contributing to food insecurity necessitates a holistic and multi-sectoral approach that goes beyond mere agricultural production to encompass broader issues of poverty alleviation, gender empowerment, and environmental sustainability. Against this backdrop, this paper aims to critically examine promoting Food Security and Adequate Nutrition towards Socio-economic transformation in Nigeria.

### **Food Insecurity and Malnutrition**

The scale of food insecurity and malnutrition in Nigeria is staggering, with significant implications for the health, well-being, and socio-economic development of its population. According to recent data from the World Food Programme (WFP), approximately 20% of the Nigerian population, equivalent to over 40 million people, are classified as undernourished, lacking access to sufficient and nutritious food (WFP, 2023). This statistic underscores the pervasive nature of food insecurity across the country, affecting individuals and households from diverse socio-economic backgrounds. Furthermore, various forms of malnutrition pose significant challenges to public health in Nigeria. Among children under five years of age, malnutrition manifests in multiple forms, including stunting, wasting, and micronutrient deficiencies. According to the Nigeria Demographic and Health Survey (NDHS), the prevalence of stunting among children under five is alarmingly high, with approximately 37% of children affected (NDHS, 2020). Similarly, wasting, indicative of acute malnutrition, affects nearly 7% of children under five, highlighting the acute nature of the problem (NDHS, 2020).

Moreover, micronutrient deficiencies, often referred to as hidden hunger, are widespread in Nigeria, posing significant health risks and developmental challenges. Iron deficiency anaemia, for instance, affects a substantial proportion of the population, particularly women and children, with prevalence rates exceeding 40% in some regions (NDHS, 2020). Similarly, vitamin A deficiency remains a significant public health concern, contributing to increased susceptibility to infectious diseases and impaired immune function (NDHS, 2020). The consequences of food insecurity and malnutrition extend beyond individual health outcomes, permeating through various dimensions of socio-economic development. Persistent hunger and malnutrition hinder human capital development, impair cognitive abilities, and diminish productivity, thereby perpetuating cycles of poverty and underdevelopment. Furthermore, malnutrition exacerbates social inequalities, disproportionately affecting vulnerable groups such as women, children, and rural communities, and contributing to social unrest and instability. Given the magnitude of the challenges at hand, addressing food insecurity and malnutrition in Nigeria requires concerted efforts and multi-sectoral interventions. Effective strategies must encompass not only improvements in agricultural productivity and food distribution but also investments in health and nutrition education, poverty alleviation, gender empowerment, and environmental sustainability.

### **Factors Contributing to Food Insecurity and Malnutrition**

Several interconnected factors contribute to the persistent challenges of food insecurity and malnutrition in Nigeria, spanning across socio-economic, environmental, and institutional domains. Understanding these underlying factors is crucial for developing effective interventions and policies aimed at addressing the root causes of the problem.

- **Poverty and Income Inequality:** Poverty remains a significant driver of food insecurity in Nigeria, with millions of people lacking the financial means to access an adequate and nutritious diet. Income inequality exacerbates the problem, as marginalized and disadvantaged groups face greater barriers to food access and availability (FAO, 2018).

- **Limited Access to Markets and Infrastructure:** Inadequate transportation networks, storage facilities, and market infrastructure impede the efficient distribution of food across the country. Rural areas, in particular, often face challenges in accessing markets, resulting in limited food availability and higher prices (IFPRI, 2019).
- **Climate Change and Environmental Degradation:** Nigeria's agricultural sector is vulnerable to the adverse impacts of climate change, including erratic rainfall patterns, droughts, and extreme weather events. These environmental stressors disrupt agricultural production, reduce crop yields, and exacerbate food insecurity, particularly among smallholder farmers (FAO, 2020).
- **Conflict and Insecurity:** Persistent conflicts, both internal and external, pose significant challenges to food security in Nigeria. Displacement of populations, destruction of farmland and livestock, and disruptions to trade routes exacerbate food insecurity and malnutrition, particularly in conflict-affected regions such as the North-East (WFP, 2022).
- **Poor Infrastructure and Agricultural Productivity:** Limited access to agricultural inputs, such as seeds, fertilizers, and irrigation systems, hinders agricultural productivity and reduces the resilience of farming communities to external shocks. Inefficient farming practices, land degradation, and soil erosion further undermine food production (IFAD, 2017).
- **Lack of Nutrition Education and Awareness:** Inadequate knowledge about nutrition and dietary practices contributes to the prevalence of malnutrition in Nigeria. Many individuals, particularly in rural areas, lack awareness about the importance of a balanced diet, leading to unhealthy eating habits and micronutrient deficiencies (UNICEF, 2021).
- **Weak Governance and Institutional Capacity:** Governance challenges, including corruption, mismanagement of resources, and weak enforcement of regulations, undermine efforts to address food insecurity and malnutrition. Inadequate investment in social welfare programs and healthcare infrastructure further exacerbates the problem (World Bank, 2019). Addressing these underlying factors requires a comprehensive and multi-sectoral approach, encompassing improvements in agricultural productivity, infrastructure development, poverty alleviation, climate change adaptation, nutrition education, and governance reform. By addressing the root causes of food insecurity and malnutrition, Nigeria can work towards building a more resilient and sustainable food system that ensures access to nutritious food for all its citizens.

### Impact of Food Insecurity on Socio-economic Development

Food insecurity exerts profound and far-reaching impacts on socio-economic development, undermining efforts to alleviate poverty, promote health, and achieve sustainable growth. These impacts reverberate across various sectors of society, affecting individuals, communities, and nations as a whole.

- **Impaired Human Capital Development:** Chronic food insecurity and malnutrition hinder human capital development by depriving individuals of essential nutrients necessary for physical and cognitive growth. Inadequate nutrition during critical periods of development, such as pregnancy and early childhood, can lead to stunting, wasting, and cognitive impairments, limiting individuals' potential to thrive and contribute to the economy (FAO, 2019).
- **Reduced Productivity and Economic Output:** Malnutrition diminishes productivity and economic output by weakening the physical and mental capacities of individuals. Undernourished workers are more prone to illness, fatigue, and reduced cognitive function, resulting in decreased productivity levels and lower earning potential. Moreover, the intergenerational effects of malnutrition perpetuate cycles of poverty, as malnourished children are more likely to experience poor health and educational outcomes in adulthood (World Bank, 2017).
- **Increased Healthcare Expenditure:** Food insecurity contributes to a higher burden of disease and healthcare costs, as malnourished individuals are more susceptible to infections, chronic illnesses, and other health

complications. The treatment of malnutrition-related diseases strains healthcare systems and diverts resources away from preventive measures and essential health services, perpetuating a cycle of poverty and ill health (FAO, 2019).

- **Social Instability and Conflict:** Food insecurity exacerbates social inequalities and can fuel social unrest and conflict, particularly in regions where access to food is limited and livelihoods are heavily dependent on agriculture. Competition for scarce resources, such as land and water, can escalate tensions and lead to violent conflicts, displacement, and migration. Moreover, food price volatility and shortages can trigger civil unrest and political instability, further hindering socio-economic development (WFP, 2020).
- **Impact on Education:** Food insecurity compromises educational outcomes by affecting children's ability to learn and concentrate in school. Malnutrition, hunger, and micronutrient deficiencies impair cognitive development and academic performance, leading to lower educational attainment and reduced earning potential in adulthood. Moreover, children from food-insecure households are more likely to miss school due to illness or the need to engage in income-generating activities, perpetuating the cycle of poverty (UNICEF, 2021).
- **Exacerbation of Gender Inequalities:** Women and girls are disproportionately affected by food insecurity due to socio-cultural norms, unequal access to resources, and caregiving responsibilities. In food-insecure households, women often bear the brunt of food shortages, sacrificing their own nutritional needs to prioritize their families. Moreover, malnutrition during pregnancy can have intergenerational effects, perpetuating cycles of malnutrition and poverty (FAO, 2018).

Addressing food insecurity and malnutrition is therefore essential for achieving sustainable development and promoting inclusive growth. By investing in nutrition-sensitive interventions, social protection programs, agricultural development, and poverty alleviation initiatives, governments and stakeholders can mitigate the adverse impacts of food insecurity on socio-economic development and create a more equitable and prosperous future for all.

### **Agricultural Development and Food Production**

Agricultural development and food production play a pivotal role in addressing food insecurity and malnutrition in Nigeria. By enhancing agricultural productivity, promoting sustainable farming practices, and improving access to markets, countries can strengthen food systems and ensure the availability of nutritious food for all citizens. Increasing agricultural productivity is essential for meeting the growing demand for food in Nigeria's rapidly expanding population. This involves investing in modern agricultural technologies, such as improved seeds, fertilizers, and irrigation systems, to boost crop yields and enhance resilience to climate change (FAO, 2021).

Also, promoting the adoption of climate-smart agricultural practices, such as conservation agriculture and agroforestry, can improve soil health, water management, and biodiversity conservation, contributing to long-term food security (IFAD, 2020). Encouraging diversification of agricultural production beyond staple crops, such as cassava, maize, and rice, can enhance dietary diversity and nutritional outcomes. Promoting the cultivation of nutritious crops, such as fruits, vegetables, and legumes, can address micro-nutrient deficiencies and improve overall dietary quality (IFPRI, 2018). Furthermore, supporting value addition and agro-processing activities can create employment opportunities, generate income for smallholder farmers, and enhance the marketability of agricultural products (World Bank, 2019). Access to agricultural inputs, such as seeds, fertilizers, and mechanization services, is crucial for smallholder farmers to increase their productivity and incomes. Governments and development partners can support farmers by providing subsidized inputs, establishing input supply chains, and strengthening agricultural extension services to disseminate best practices and technologies (IFAD, 2019). Moreover, investing in rural infrastructure, such as roads, storage facilities, and market linkages, can facilitate the efficient flow of agricultural goods from farm to market, reducing post-harvest losses and improving farmers' access to markets (IFPRI, 2020).

Smallholder farmers constitute the majority of agricultural producers in Nigeria and play a vital role in ensuring food security and rural livelihoods. Empowering smallholder farmers through access to credit, land tenure security, and capacity-building initiatives can enhance their resilience to shocks and improve their bargaining power in agricultural value chains (IFAD, 2017). Moreover, promoting inclusive agricultural policies that prioritize the needs of smallholder farmers, women, and youth can foster equitable and sustainable agricultural development (FAO, 2020). Investing in agricultural research and innovation is essential for developing climate-resilient crops, improving livestock breeds, and enhancing agricultural productivity in Nigeria. Collaborative research partnerships between governments, research institutions, and the private sector can facilitate the development and dissemination of new technologies and practices tailored to local contexts (CGIAR, 2021). Additionally, promoting farmer-led innovation and participatory research approaches can ensure that agricultural interventions are context-specific and responsive to the needs of farmers (IFPRI, 2019).

### **Access to Food and Nutrition**

Access to adequate and nutritious food is a fundamental human right and a key determinant of health and well-being. In Nigeria, ensuring equitable access to food and nutrition is essential for addressing food insecurity and improving the overall quality of life for all citizens. Several factors influence access to food and nutrition, ranging from physical availability and affordability to socio-cultural and institutional barriers.

- **Physical Availability:** The physical availability of food refers to the presence of a diverse range of nutritious foods in local markets and communities. In Nigeria, disparities in food availability exist between urban and rural areas, with urban centers often having greater access to a variety of food options due to better market infrastructure and transportation networks (FAO, 2018). Rural communities, on the other hand, may face challenges in accessing fresh produce and perishable goods, particularly in remote or marginalized regions.
- **Affordability:** The affordability of food is a critical determinant of access, particularly for low-income households. In Nigeria, many families struggle to afford an adequate and nutritious diet due to high food prices, low wages, and limited economic opportunities (World Bank, 2019). Moreover, seasonal fluctuations in food prices and income instability can further exacerbate food insecurity, pushing vulnerable households into poverty and hunger.
- **Socio-cultural Factors:** Socio-cultural factors, including dietary preferences, food taboos, and traditional food practices, shape food consumption patterns and dietary choices in Nigeria. Cultural beliefs and norms regarding food preparation, mealtime practices, and food sharing influence individuals' access to certain foods and their nutritional intake (UNICEF, 2021). Moreover, gender roles and household dynamics may affect women's access to food and their ability to make decisions about food allocation within the household.
- **Institutional and Policy Factors:** Institutional and policy factors, including government interventions, social protection programs, and food assistance initiatives, play a crucial role in ensuring equitable access to food and nutrition. In Nigeria, various government programs, such as the National Social Investment Program (NSIP) and the Home-Grown School Feeding Program (HGSFP), aim to improve food access and nutrition outcomes for vulnerable populations, including children, pregnant women, and the elderly (Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development, 2020). Additionally, policies that support agricultural development, market regulation, and food safety standards can enhance food availability, affordability, and quality for all citizens.
- **Nutrition Education and Awareness:** Nutrition education and awareness programs are essential for empowering individuals to make informed choices about their diets and lifestyles. By providing information on healthy eating practices, balanced diets, and the importance of micronutrients, nutrition education initiatives can promote dietary diversity, prevent malnutrition, and improve overall health outcomes (FAO, 2021). Moreover, targeting vulnerable populations, such as pregnant women, breastfeeding mothers, and

young children, with tailored nutrition interventions can have significant impacts on reducing malnutrition and improving maternal and child health (UNICEF, 2021). Ensuring equitable access to food and nutrition requires a comprehensive approach that addresses the multiple dimensions of food insecurity and malnutrition. By addressing barriers related to food availability, affordability, socio-cultural norms, institutional support, and nutrition education, Nigeria can work towards building a more inclusive and sustainable food system that promotes the health and well-being of all its citizens.

### **Strategic Approach in Promoting Food Security and Adequate Nutrition for Socio-Economic Development**

The following strategic according to Federal Ministry of Agriculture and Rural Development (2016) are as follows:

- 1. Government Policies and Initiatives:** Government policies and initiatives play a crucial role in addressing food insecurity and malnutrition in Nigeria. By implementing targeted interventions, regulations, and programs, governments can enhance food access, improve nutritional outcomes, and promote sustainable food systems. Several key policies and initiatives are underway in Nigeria to tackle the challenges of food insecurity and malnutrition.
- 2. National Food Security Policy:** The National Food Security Policy provides a comprehensive framework for addressing food insecurity and promoting agricultural development in Nigeria. Adopted by the federal government, this policy aims to enhance food production, improve food distribution systems, and strengthen food security governance (Federal Ministry of Agriculture and Rural Development, 2016).
- 3. National Strategic Grain Reserve:** The National Strategic Grain Reserve is a government initiative aimed at ensuring food security by maintaining strategic stockpiles of grains, such as maize, rice, and wheat, to mitigate the impact of food shortages and price volatility. Managed by the Federal Ministry of Agriculture and Rural Development, the strategic grain reserve serves as a buffer against supply disruptions and emergencies (Federal Ministry of Agriculture and Rural Development, 2016).
- 4. Home-Grown School Feeding Program (HGSFP):** The Home-Grown School Feeding Program is a social intervention program launched by the Nigerian government to provide free meals to primary school children across the country. By sourcing food items from local farmers and food producers, the HGSFP aims to boost agricultural productivity, improve nutrition outcomes, and enhance school enrolment and attendance rates (Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development, 2020).
- 5. National Nutrition Policy and Strategic Plan:** The National Nutrition Policy and Strategic Plan provide a framework for addressing malnutrition and promoting optimal nutrition outcomes in Nigeria. These policies prioritize nutrition-sensitive interventions, such as breastfeeding promotion, micronutrient supplementation, and nutrition education, to improve maternal and child health and reduce the burden of malnutrition (Federal Ministry of Health, 2020).
- 6. Agricultural Transformation Agenda (ATA):** The Agricultural Transformation Agenda is a comprehensive strategy developed by the Nigerian government to modernize and transform the agricultural sector. Through targeted interventions in areas such as crop production, livestock development, and agribusiness promotion, the ATA aims to enhance agricultural productivity, increase food security, and stimulate economic growth in rural areas (Federal Ministry of Agriculture and Rural Development, 2016).
- 7. National Social Investment Program (NSIP):** The National Social Investment Program is a flagship social intervention program launched by the Nigerian government to address poverty and inequality. The NSIP includes various initiatives, such as the National Home-Grown School Feeding Program, Conditional Cash Transfer Program, and Government Enterprise and Empowerment Program, aimed at improving access to food, healthcare, education, and economic opportunities for vulnerable populations (Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development, 2020). These government policies and

initiatives represent important steps towards addressing food insecurity and malnutrition in Nigeria. By implementing evidence-based interventions, fostering partnerships with stakeholders, and ensuring effective governance and accountability, governments can contribute to building a more resilient, inclusive and sustainable food system for all Nigerians.

### **Conclusion**

In conclusion, addressing food insecurity and malnutrition in Nigeria requires a multifaceted and holistic approach that encompasses policy interventions, agricultural development initiatives, nutrition education programs, and social protection measures. While significant progress has been made through government policies and initiatives such as the National Food Security Policy, Home-Grown School Feeding Program, and National Social Investment Program, challenges persist, including poverty, climate change, and socio-cultural barriers. Moving forward, sustained political commitment, increased investment in agriculture and nutrition, strengthened partnerships with stakeholders, and improved governance and accountability mechanisms are essential for achieving sustainable food security and nutrition outcomes in Nigeria. By prioritizing the needs of vulnerable populations, empowering smallholder farmers, promoting dietary diversity, and ensuring equitable access to food and nutrition, Nigeria can build a more resilient, inclusive, and prosperous future for all its citizens.

### **Recommendations**

1. Government should invest in modern agricultural technologies, extension services, and infrastructure to improve crop yields, promote sustainable farming practices, and enhance resilience to climate change.
2. Government should encourage diversification of agricultural production beyond staple crops to include nutritious foods such as fruits, vegetables, and legumes. Support value addition and agro-processing activities to create employment opportunities and increase the marketability of agricultural products.
3. Government should expand and strengthen social protection programs such as the National Social Investment Program (NSIP) to provide targeted assistance to vulnerable populations, including children, pregnant women, and the elderly. Ensure that these programs are effectively implemented, transparent, and accessible to those in need.
4. Government should invest in rural infrastructure, including roads, storage facilities, and market linkages, to facilitate the efficient movement of agricultural goods from farm to market. Enhance access to credit, inputs, and extension services for smallholder farmers to improve their productivity and incomes.
5. Government should Implement nutrition education programs targeting households, schools, and communities to raise awareness about the importance of balanced diets, healthy eating practices, and maternal and child nutrition. Empower women and caregivers with knowledge and skills to make informed decisions about food choices and preparation.

### **References**

- CGIAR. (2021), *Research Program on Agriculture for Nutrition and Health (ANH)*. Retrieved from <https://a4nh.cgiar.org/>
- Federal Ministry of Agriculture and Rural Development. (2016). *National Food Security Policy*. Abuja, Nigeria.
- Federal Ministry of Health. (2014). *National Policy on Food and Nutrition in Nigeria*. Abuja, Nigeria
- Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development (FMHADMSD) (2020). *National social investment programme*. Retrieved from <https://www.humanitarianaffairs.gov.ng/nsip>
- Food and Agriculture Organization (FAO). (1996). *Rome Declaration on World Food Security*. Retrieved from <http://www.fao.org/3/w3613e/w3613e00.htm>
- Food and Agriculture Organization (FAO). (2018). *The state of food security and nutrition in the world*. Retrieved from <http://www.fao.org/state-of-food-security-nutrition/en/>

- Food and Agriculture Organization (FAO). (2019). *Food security and nutrition in the world: taking stock of where we stand on the path to zero hunger*. Retrieved from <http://www.fao.org/3/ca5162en/CA5162EN.pdf>
- Food and Agriculture Organization (FAO). (2020). *Climate change and food security in Nigeria*. Retrieved from <http://www.fao.org/climate-change-nigeria/en/>
- Food and Agriculture Organization (FAO). (2021). *Nigeria: Country programming framework 2018-2022*. Retrieved from <http://www.fao.org/3/CA8753EN/ca8753en.pdf>
- International Food Policy Research Institute (IFPRI). (2018). *Nigeria strategy support programme (NSSP)*.Lagos,Nigeria
- International Food Policy Research Institute (IFPRI). (2019). *Global food policy report: Building Inclusive Food Systems*.Lagos,Nigeria
- International Food Policy Research Institute (IFPRI). (2020). *Nigerian Agricultural policy: opportunities for growth and development*.Abuja,Nigeria
- International Fund for Agricultural Development (IFAD). (2019). *Rural poverty in Nigeria: drivers and policy responses*.Ibadan,Nigeria
- Nigeria Demographic and Health Survey (NDHS). (2020). *Key indicators report*. Retrieved from <https://www.dhsprogram.com/pubs/pdf/PR122/PR122.pdf>
- UNICEF. (2021). *Nigeria: nutrition*. Retrieved from <https://www.unicef.org/nigeria/nutrition>
- UNICEF. (2021). *The state of the world's children 2021: children, food and nutrition*. Retrieved from <https://www.unicef.org/media/95071/file/SOWC-2021.pdf>
- World Bank. (2017). *Ending extreme poverty and sharing prosperity: progress and policies*.Abuja,Nigeria
- World Bank. (2019). *Nigeria economic update: macro-economic policy questions*.Abuja,Nigeria
- World Bank. (2019). *Nigeria: Country partnership framework FY 2018-2021*.Abuja,Nigeria
- World Food Programme (WFP). (2020). *Food security and conflict: combating hunger in conflict-affected countries*.USA
- World Food Programme (WFP). (2022). *Nigeria: situation report*. Retrieved from <https://www.wfp.org/countries/nigeria/summary>
- World Food Programme (WFP). (2023). *Nigeria: food security and nutrition dashboard*. Retrieved from <https://www.wfp.org/countries/nigeria>