

IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOALS PROGRAMMES ON FOOD SECURITY IN NASARAWA STATE: ISSUES AND CHALLENGES

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ABSTRACT

One cardinal aim of every government is to improve the living standard of its citizens through the reduction of food insecurity to its bearest minimum. It is against this background that this research work set out to examine the implementation of Sustainable Development Goals programmes on food security in Nasarawa State. The key objective of the study is to analyze challenges of implementing Sustainable Development Goals Programmes of Food Security in Nasarawa State. The method utilized for this investigation is basically mixed research design which intel both qualitative and quantitative method, while sustainable intensification analytical framework was adopted as its theoretical framework of analysis. The findings revealed that corruption and lack of political will are the major problem facing the Implementation of Sustainable Development Goals of food security in Nasarawa State. The study recommend that Government should come up with strong policies that would help in boosting food production and strategy that would avail communal conflict, SGD should assist Agricultural research institute with funds (money) and other resources so as to complement government in promoting food security, also Government/SDGs should also come up with strategies that would curtail corruptions which is the other of the day,. Lastly, all stakeholders and especially the government should come together to enact laws and regulations as regard the use of land for agricultural production in Nasarawa State.

INTRODUCTION

Sustainable development, according to the United Nations (UN), is the organizing principle for meeting human development needs while at the same time sustaining the ability of natural systems to provide the natural resources and ecosystems services upon which the economy and society depends for future generation. The desirable end result of this is a state of society where living conditions and resource use continue to meet human needs without undermining the integrity and stability of the natural systems. Sustainable development is that development that meets our present needs without compromising the ability of future generations to meet their own needs (SDGs Indicators Baseline Report, 2016).

The SDGs came into effect in January, 2016 and it is a (United Nations Development Programme (UNDP) policy guideline and funding programme for the next fifteen years. The goals are to be accomplished by all member nations (189 countries) by 2030. The Sustainable Development Goals (SDGs) also known as the Global Goals (CGs) are structured to end poverty, protect the environment and ensure that all people enjoy peace and prosperity. The goals, 17 in number are fashioned out from the earlier Millennium Development Goals (MDGs).

According to the United Nations, the components that work together, to produce sustainable development are economic development, social development and environmental projection (UN General Assembly, 2005). These three must be conceptualized together, planned together and implemented together by a government to achieve the desired results. So, sustainable development in a way has a moral dimension that demands a great sense of responsibility from the leader (government) and the follower (citizen).

The Nigeria was blessed with abundant agro ecological resources and diversity, and this has made Nigeria one of the largest food importers in sub-Saharan Africa Idachaba (2009). The above statement by Nigeria's renowned agricultural economist epitomizes the central argument that Nigeria's food situation is not good

enough. Any system where food demand is not sufficiently matched by supply is no doubt one with looming food crisis. Despite pretensions to the contrary, Nigeria is far from being completely food secured. At the global level, it has been recorded that a child dies of hunger every five seconds, although the planet has more than enough food for all (Idachaba, 2009). The former United Nations (UN) Secretary General, Ban Kimoon, laid out these sobering statistics as he kicked off a three-day summit on world food security in Rome. "Today, more than one billion people are hungry", he told the assembly leaders. Six million children die of hunger every year, 17,000 every day. Ban Kimoon added that in 2050, the world will need to feed two billion more mouths 9.1 billion in all (Nigerian Compass, November, 18, 2018).

Food security has to do with having at all times an adequate level of food and food products to meet the increasing consumption demand to mitigate fluctuation in output and price (Idrisa, 2008). In the same vein the World Bank Policy Study (2006) defined food security as access to enough food for active healthy living by all people at all times. On the other hand, food insecurity according to Food and Agricultural Organization (2010) refers to the consequences of inadequate consumption of nutritious food, considering the psychological use of food by the body as being within the domain of nutrition and health. Furthermore, malnourishment also leads to poor health; hence individuals fail to provide for their families. If left unaddressed, hunger will set in motion, and an array of outcomes that perpetuate malnutrition which reduce the ability of adults to work and give birth to healthy children this also will erode children's ability to learn and lead productive healthy and happy lives. This truncation of human development undermines a country's, potentials for economic development for generations to come (Otaha, 2013).

In recent year 2017, most farm lands had been deserted due to some illegal activities in Nigeria such as kidnapping, banditry, robbery and herder's clashes which have created fear to farmers Abdullahi (2019). If this menace is unchecked, farmers will prefer to stay at home in fear, while hunger and poverty have its way into homes of helpless farmers. Any country that fails to prepare or plan for its future, by making provision for the needed resources, food inclusive for development, that country is bound to remain in perpetual conflict in particular social, emotional as well as economic conflict Masara (2019).

The survival and development of any nation in any aspect of life is associated with the strength and ability of that nation to handle issues and challenges with much ease, and this can only be achieved when food is available and accessible not on how much weapons of destruction available. Nasarawa State has a viable agricultural potential such as abundant arable land, good weather, several water sources and a vibrant human resource base. About 80% of the people in the state are mainly involved in agriculture and agriculture related businesses in the state (BAS, 2019). The majority of these are however engaged in subsistence farming which is characterized by small acreages, low technological input, low productivity and limited access to markets and farm loans (BAS, 2019).

The promotion of modern agriculture and agro-business forms an important component of the socio-economic transformation programme of the state government. The main goal is to improve food security, self-sufficiency, create opportunities for gainful employment, generate income, and reduce poverty and the need to contribute to the diversification of the economy (BAS, 2019). This research focuses on the challenges of implementation of Sustainable Development Goals Programmes on Food Security in Nasarawa State.

Statement of the Problem

Food insecurity has been on the increase in most rural areas of Nasarawa State (Aminu, 2019). Rural food shortages in Nasarawa state results largely from low productivity, agricultural shocks and decreasing purchasing power (Aminu, 2019). This problem is being exacerbated by many dynamics, such as population explosion, government policies and climate change (Cruz, 2010). Between 2007 and 2021, farmland have been confronted with problems of fast land grabbing by retire generals, capitalist adventures in the Awe, Doma and Wamba local government axis which makes food crop farm shortage and also exacerbate the lively hood of rural

communities. This resulted to competing economic use of agricultural land and have resulted in reduced land to man ratio, reduced fallow periods and intensification of land use.

Nasarawa state has an annual population growth rate of 2.9% (UNFPA, 2021). This has prompted changes in land tenure systems with increasing land fragmentation with intra and inter land competition resulting in reduced farm yield and income and expenditure levels, as well as unmanageable use of productive capacity of the land resource base. In recent years, farmers in the State have also been faced with the problems of inappropriate government policy, higher cost of farm input which is over and above the capacity of rural farmers leading low yield arising from the unenthusiastic attitude of the government during the farm season. In addition, incidences of pests and diseases have also aggravated the farmers' losses, which consequently increase the incidence of poverty and malnutrition in the state (Baban'umma, 2019).

Arisen from the above achieving food security is still a challenge in Nasarawa state due to the global approach being employed instead of formulating and applying solutions based on specific locations with an understanding of the social system and livelihood activities eg. (sustainable development goal). In fact, bearing this global policy in mind which does not see food insecurity as a failure of government to strategically and coherently articulate policies on the basis of peculiarities of the environment and socio-economic realities of the state to produce sufficient food at the national level (Babanumma,2019).

By and large, majority of the recent research works that have been done so far on issues related to food security are relatively broad and considers the problem from national or regional point of view such as (Fiona, 2014, Adewuyi and Hayatu,2011; Ayantoye,2021; Asogwa and Umeh 2012, Adeniyi and Ojo, 2013, Adamu, 2019 and Baban'umma 2020). However, despite the increasing global and national concern of improving food security, the nexus between sustainable development goal on food security in Nasarawa state is not well documented. Therefore, in order to formulate effective policies for promoting food security, it is imperative to analyze the challenges of implementing Sustainable Development Goal Programmes on food security in Nasarawa state, Nigeria.

Research Propositions

- i. Government policies and environmental degradation are the resounding factors affecting food Security and the introduction of Sustainable Development Goals in Nasarawa State.
- ii. There are numerous challenges hindering the implementation of Sustainable Development Goals for improved food security in Nasarawa State.

Conceptual Clarification

Sustainable Development Goals

Sustainable Development Goals is a United Nations effort aimed at improving development for all communities in every country. The programme is planned to bring governments, aid organizations, foundations and NGOs together to solve basic global problems.

It is obvious that there is no single unanimous definition of the concept of "sustainable development". The reason for this is not far-fetched from the fact that, the concept covers a variety of scopes. Therefore, different institutions, organisations and scholars alike perceive the concept according to those areas they expected the scope to cover, as well as their professional backgrounds.

The UN General Assembly (1987), for instance, defines sustainable development as type of development that meets the needs of the present without compromising the ability of future generations to meet their own needs. To the World Bank (1992), sustainable development is continuous and accelerated, human and economic development, which will in turn bring about improve environmental conditions. In other words, sustainable development to the World Bank is development that continues (World Development, 1992). A further comprehensive definition that corroborates the World Bank's position on the concept is the one offered by the

Rio de Janeiro Declaration on Environment and Development of 1992. According to the Declaration, sustainable development is a continuous development of the society in order to satisfy peoples present and future needs, through judicious management and utilisation of natural resources. To Ciegis, Ramanauskiene, and Martinkus (2009), sustainable development embraces economic, environmental, and social developments, which they described as “interrelated and complementary. The overall goal of sustainable development according to Emas (2015) is for long-term stability of the economy and environment; which could only be achieved through a proactive governmental decision. Flint (2013) perceives sustainable development as a programme of action developed from the consequences of past exploitation, and from scientific demonstration of the long-term harm inflicted on environmental and social capital”. In their study, Strange and Bayley (2008) see sustainable development as a development that benefits the populace of diverse categories. They are of the opinion, that whenever developmental policies are being planned, the planners should take into consideration its effect on people and the society.

Arising from the foregoing, sustainable development can thus be seen as, the execution of policies and programmes that are of immense economic benefits which will meet the present needs of the populace, without compromising their future needs. Such needs should be centered on development, which in turn will bring about improvements in the quality of human lives. Put differently, such needs should tend toward ensuring dignified living conditions, equal opportunities, respect of human rights and maintaining the principle of fairness that will endure.

Food Security

The idea of food security was presented for the first time at the World Food Conference in 1974 viewed solely from the perspective of having adequate availability of food on a national scale. Today, it is a condition in which all people have access at all times to enough food of an adequate nutritional quality for a healthy and active life (World Bank, 1986 as cited in Tollens, 2000). There are four dimensions to this: (i) availability of sufficient amount of food which is a function of food production (ii) stability of supply over time which depends on the ability to preserve/store produced food and supplement available food through imports if necessary (iii) access to the available food which depends on income levels and its distribution and (iv) food utilization which encompasses procurement, ingestion and digestion all of which are dependent on nutritional quality, education and health (Tollens, 2000). This paper agrees with the definition of (Tollen, 2000), because his definition points to at least two parts of today complex: access to available food and adequate nutrient consumption for sustainable healthiness. It is a multifaceted and complicated task to formulate a one-size-fits-all set of food security target.

Empirical Review

Emmanuel and Peter (2012) in their work title Food Security in Nigeria: An Overview. No doubt, food is life; hence, food has become an instrument of national power. It is within that imperatival need for food that this study takes a cursory look at the issue in all its ramifications. The study with a comprehensive review of Nigeria's agricultural policy noted that much still needs to be done if the crisis in the sector will not escalate more so, in a supposedly democratic dispensation which expectedly should promote the value of welfarism. The study infers that Nigeria needs to come up with food policy weather local or foreign which for now it lacks. What public policy makers pursue is merely an agricultural policy that still suffers enormously from a wide gap between intent and actual practices.

Amaka et al. (2016) in their work title Achieving Sustainable Food Security in Nigeria: Challenges and Way Forward: One of the goals of Nigeria's agricultural development policy is to ensure that the nation produces enough food and less dependent on importation so as to ensure adequate and affordable food for all. Using descriptive statistics, this study is an attempt to evaluate food security situation in Nigeria from 1991 to 2015. The study shows that there is a shortfall in domestically produced food in Nigeria because the growth in the population of Nigeria is at the rate of 3.2% while the growth in food production has been less than one. This

shows that demand for food (population) is greater than the supply (agricultural production) because of factors such as inconsistent government policies, environmental degradation and non-sustainable agricultural production. The paper also shows that Nigeria depends so much on food importation. To achieve sustainable food security in Nigeria, the paper recommends an improvement in environmental management in order to increase agricultural productivity.

Musah and Bah (2018); in their work title: Environmental Science Education: Implication for Achieving Sustainable Development Goals in Nigeria; affirm that, the concept of sustainable development has gained global recognition. Early 20th century, the term 'sustainable development' has been used widely and often times incorrectly. The term began to gain popularity and credibility, when it became increasingly acceptable to use it as a way of responding to global environmental concerns, biophysical issues, fairness, equity and distribution of resources. Bearing this in mind, the Millennium Development Goals (MDGs) were put up to address and include the issue of sustainability in development. In essence, this article was written with a view to enhance the understanding about the analytical content of sustainable development as well as sensitizing the Nigerian economy to key into the current wave of sustaining the global economy. In the light of some environmental as well as socio-economic challenges permeating the Nigerian economy, it is therefore required that the Nigerian government concentrates on key areas that can help boost and sustain its developmental objectives, among which includes creation of employment opportunities, strengthening the institution of governance and provision of basic social and essential resources among others.

(UNDP 2016) in their publication title: Sustainable Development Goals (SDGs) Indicators Baseline Report opine that; Like every other Member State of the United Nations, Nigeria adopted the UN 2030 Agenda for Sustainable Development as a vehicle for freeing humanity from poverty, securing a healthy planet for future generations, and building a peaceful, inclusive society as a foundation for ensuring a life of dignity for all. This global momentum has at its heart a promise to leave no one behind. In effect, the 2030 Agenda is both ambitious and transformational, with a set of 17 integrated and indivisible Sustainable Development Goals (SDGs) broken down to measurable targets and indicators. Essentially, the Agenda is a shared plan to transform the world by looking after the welfare of the people within a period of fifteen years.

Oyemike, Emmanuel, Charis & Elizabeth (2016), in their paper titled; "Priorities and Challenges of Actualizing Sustainable Development Goals: Perspectives of Library and Information Professionals in Owerri, Nigeria" Purpose: This study set out to investigate areas of priorities and challenges of actualizing sustainable development goals (SDGs). Methodology: A survey research design was adopted with questionnaire developed in line with the three objectives used as data collection instrument. The population of the study comprises of library and information professionals (LIPs) in Imo State, Nigeria. A total of 62 library and information professionals available during the Imo State Chapter of Nigerian Library Association (NLA) meeting were used as sample size. Findings: Findings show that sustainable development goals (SDGs) numbers 1, 2, 3, 4, 5, 8, 16 and 17 should be prioritized among LIPs. Constraints to effective contribution of LIPs towards realization of SDGs include lack of reliable and accurate data, negligence of LICs by governments, poor perceptions of the library profession, low level of private sector interest in library services, poor lobbying and advocacy skills amongst LIPs, paying lip services to library development programmes by government and low level of partnership drive among librarians. Practical Implications: Creating awareness/sensitizing the citizens, equipping of library information centres (LICs) to support research, provision of educational information to improve quality of education, provision of funds to revive LICs, use of talks, shows/exhibitions in creating awareness and reviving of public libraries in Nigeria amongst others, were identified as strategies that LIPs can adopt to contribute towards realization of SDGs.

Originality/ value of contribution: The originality of this work lies in the fact that it has unlocked areas of priorities for library and information professionals. It has laid the foundation for actualization of the much-heralded sustainable development goals for LIPs in Nigeria. The study concludes that library and information

professionals occupy a central position in national development and can play significant role towards the full realization of SDGs in Nigeria.

Joseph & Bassey (2017) in his work title *Security Tensions and the Achievement of Sustainable Development Goals in Nigeria*. It is over a year now when world leaders proposed a 17-goal agenda known as the Sustainable Development Goals (SDGs). The goal has 69 components aimed at ending poverty, protecting the planet, as well as ensuring prosperity for all. The United Nations (UN) described these goals as those that will “transform our world” within the next 15 years, which lapses in 2030. The policy is a continuation of the Millennium Development Goals (MDGs). Recent studies have shown that most countries, especially African countries could not achieve the MDGs due to several challenges. For Nigeria, the problem has largely been that of security. No meaningful development policy can be achieved without a peaceful political, social and economic environment. The current ethnic, social, political and economic security challenges in the country pose a threat to the achievement of the SDGs. This work examines this truth and identifies measures of reducing rising security tensions in the country. Using a descriptive research design, data are drawn mainly from secondary sources as such; the study adopts the content analysis of issues. To be sure that the SDGs can be achieved by 2030, the study recommends the adoption of dialogue and inclusive mechanism as a way of addressing security tensions in the country.

Fidelis & Izu (2017) in their work titled “Problems and Prospects of the Sustainable Development Goals (SDGs) in Africa: A Focus on Nigeria: are of the view that when the Millennium Development Goals' (MDGs) life-span was drawing to a close prior to 2015 which was the termination year and the situations for which the scheme was introduced had not been completely eliminated while in some places like Northeast Nigeria the little achievements had even been eroded there was material uncertainty in less developed countries (LDCs) especially those in Africa. So, the eventual launching of the Sustainable Development Goals (SDGs) on 25th September, 2015 as the successor to the MDGs, marked a huge relief to these countries. Characterized by 17 goals and 169 targets, the SDGs aim to bring to the barest minimum basic but general socio-economic realities that currently endanger comfortable or humane living conditions in the LDCs. From health to education, food security to social security, sanitation to gender equality, and from poverty eradication to decent work, etc, the SDGs has become a beacon of hope to millions of hopeless and destitute citizens of these impoverished nations. It is in light of these expectations that this study seeks to do a prognostication into the feasibility of the SDGs attaining its goals and targets, carefully looking at its problems and prospects. The work adopts the Sustainable Development Theory and secondary sources of data collection to operationalize its intent. At the end, it was able to establish that as laudable as the SDGs could be if the twin evils of insecurity and official corruption are not dealt with first, its goals and targets might as well end up 'developing' the personal pockets and purses of individuals in the target-countries without necessarily achieving its ultimate aim. The paper recommends among others that the clout of neo-patrimonialism, nepotism and prebendalism which often characterize appointments, secondment cutting of corners, favouritism and deployments in the public service should not be allowed to influence the SDGs units' operations.

Anthony (2018) in his work titled: “Towards Better Performance in Achieving Sustainable Development Goals in Nigeria”. There are many challenges affecting how we can better achieve the sustainable development goals (SDGs). Since the factors that affected our poor performance during the MDGs which include unmanageable population, pervasive poverty, ignorance and superstition, religious dogmatism, corruption and economic mismanagement, lack of political will, authenticity of collected data are still largely with us in Nigeria. Apart from those issues pertaining to Nigeria, we need to be able to manage some existing global threats to sustainable development. These threats include the continuous advancement towards finding or making more potent biological, chemical, nuclear, cyber and other weapons of mass destruction. United Nations need to improve on legislation to prevent these proliferations and also improve on how to coordinate scientific efforts towards better achievement of the Sustainable Development goals. Finally, the importance of education in its entire ramification was identified as key to achieving the SD goals better.

A Second Voluntary National Review (2020) in their book titled Nigeria integration of Sustainable Development Goals in to National Development Planning are off the view that following the adoption of the 2030 Agenda, Nigeria began to implement the SDGs almost immediately. First, it established institutional frameworks at the national and sub-national levels to support effective implementation. With this early head start, several strategic initiatives were implemented between 2016 and now, while others are still ongoing.

Nevertheless, just as Nigeria commenced the 'Decade of Action' for the SDGs in January 2020, the outbreak of COVID-19 took place, thus challenging the prospects of achieving the SDGs in Nigeria. This Report examines the impact of COVID-19 on specific SDGs. It would be recalled that Nigeria recorded its first index case on 27 February 2020. Despite measures taken by the federal and state governments to curtail the spread of the pandemic across the country, its adverse impact on socio-economic development and other consequences will last beyond 2020. Expectedly, the most significant impacts of COVID-19 have been on the Nigerian economy and the health system. Pre-COVID-19, in 2019, the health sector received only 25 per cent of its funding requirements, putting a strain on the coping capacity of the 'country's health systems (WHO Nigeria: 2019). Funding is now shifting towards COVID-19, leaving other healthcare needs to suffer a further reduction in funding allocation. Federal and state governments, as well as development partners and organized private sector, have stepped up efforts to increase the financing of the health sector. The inauguration of the Presidential Task Force on COVID-19 and the establishment of the fiscal stimulus package are steps in the right direction. The Federal government has secured life insurance for all frontline health workers participating in the ongoing fight against the spread of COVID-19 in Nigeria and cash transfers have been extended to over 10-million Nigerians, using the existing database within the National Social Investment Office (NSIO). Meanwhile, the socio-economic uncertainties and disruptions come at a substantial cost to an economy that is mainly dependent on oil and gas revenues, which have plummeted. Some of the most effective 'social vaccines' against COVID-19 are restrictive suppression response interventions, such as lockdowns, which however disproportionately impact on the poor and their livelihoods. The provision of timely and adequate palliatives to the poor and vulnerable members of the society will ease tension and prevent social unrest while the country is locked down to overcome the virus.

A review of the food security and food production in Nasarawa State is associated with sector- wide challenges and commodity specific challenges Jerome, (2012). These include poor agricultural policies in Nasarawa State, low fertilizers use, low access to agricultural credit, and land tenure insecurity, law degradation poverty and gender issues, low and unstable investment in agricultural research, poor market access and market efficiency, staple crops variety poor resistance to drought, pests and diseases, high farm cost in agro-chemicals and poor storage facilities.

Other recent works by USAID Report (2004), The Federal Department of Agriculture and National Food Reserve Agency (NERA), Jerome (2012) have revealed other challenges of food security and food production in Nasarawa State and Nigeria inclusive to include poor conceptualization and inefficient implementation of programmes, early cessation of rain fall after several interruption during the season which causes significant crop losses and reduced yields, poor rural roads and attendant high transportation cost, the increasing unattractiveness of the agricultural and rural sector to the youths who rather flock to cities for white collar jobs. The continued dependence on subsistence farming, the cultural structure of communal living and interdependence which causes unwholesome burden to working populace, ethnic and communal conflicts, farmers misplaced priorities of investable funds to unproductive areas like offsetting debts, the HIV/AIDS pandemic which is ravaging and depleting the number of working class, building more houses, marrying more Wives, the complete disregard of farmers by government in the formulation of agricultural policies, farmers educational low profile, the devastating effect of avian influenza (Bird flu) on poultry industry which led to a drastic fall in demand of poultry products prompted to decline in the production of maize and bad governance been at the fulcrum of all.

Jerome (2012) and World Bank (2008), observed that many policies are needed to fully realize the potentials of food security and food production, access to land, water and human capital are required for the poor, the poor need to be able to use facilities for saving and earning credit. They also need natural resource management to cope with the many natural disasters they face in the less favoured areas they live in.

Olukunle (2013) identified one of the major challenges of agriculture in the state as the peasant nature of production system with its low productivity, poor response to technology adoption, strategies and poor returns on investment. It recognized that agricultural commercialization and investment are the key strategies for promoting accelerated modernization, sustainable growth and development and hence food security in the sector. The development of market information in the country is still primitive, improved storage techniques that have been developed by relevant research institutes have remained unadopted and sometime unknown to farmers (Olukunle, 2013).

Existing Gap in the Literature

As seen from the review of related literatures, several studies has been undertaken on the Sustainable development goals and food security in Nigeria for example, the study undertaken by (Akinloye, I.A 2018), in his work title Towards the implementation of sustainable development goals in Nigeria: Maximizing the influence of religious leaders, used literature review and analysis of surveys and reports, while the study by (Fidelis & Izu (2017) in their work titled "Problems and Prospects of the Sustainable Development Goals (SDGS) in Africa: A Focus on Nigeria", without the use of any statistical tool for analysis. (Olagoke Alamu 2017) Study was based on secondary data (i.e. no form of primary source of data was use or tested statistically). To the best of this study, there is no study that was undertaken to examine the Implementation of Sustainable Development Goals Programmes (SDGs) on Food Security in Nasarawa State Nigeria: Issues and Challenges. As such, this study will be filling this gap by using both primary and secondary data taking into cognizance measures of making the state to be food secure.

Theoretical Framework (Sustainable Intensification Analytical Framework)

The concept of Sustainable Intensification (SI) originated in the 1990s focusing on how to achieve improved yields over the long-term in fragile environments of Africa (Musumba, et al., 2017). Productivity in Africa at that time was largely low and there was huge concern about the degradation of natural resources in the continent.

Sustainable Intensification is premised on the assumption that rapid rising demand coupled with supply-side stressors threats would cause an increase in food prices to levels where hunger and malnutrition might trigger political-economic disruption. Sustainable Intensification protagonists believe that the world is facing the challenge of feeding the increasing world population, and the situation is worsened by limited resources. Arising from this backdrop, the framework tends to proffer solutions on how to balance the environmental, economic, and social objectives of agriculture. The idea behind Sustainable Intensification is not to provide a set of food production practices rather create pathways to sustainable food production that vary by location and scale based on prevailing realities of the producing area. It is an approach based on accommodating varying agro-ecological zone, farming systems, cultural preferences of farmers, institutions, policies, as well as other factors (Pender, 1999).

The advocates of Sustainable Intensification believe that the starting point in meeting food security is to increase output levels per unit input per unit time, and at the same time mitigate against negative environmental impacts. They are aware that the large share of the anticipated production increase is coming from existing agricultural land and the question of sustaining productivity need to be addressed. Finally, they advocated for the employment of a broad range of tools and production methods to achieve these goals. At the initial stage Sustainable Intensification is narrowly conceived as the production of more food on the same piece of land

while reducing the negative environmental impacts, and at the same time increasing the contributions to the natural capital flow of environmental services (Zurek 2015). However, this perception of Sustainable Intensification blossomed to include non-environmental aspects such as social issues, economics, and the human condition (Loos 2014).

Implicit in the above definitions is that Sustainable Intensification has to do with productivity (crop yields, animal production & variability of production), economic (profitability, the variability of profits, labor requirement), environmental (biodiversity, water quality & soil quality), human (nutrition, food sustainability, health), and social (equity/gender, social cohesion & collective participation). From the nature and aspiration intent of Sustainable Intensification, the study divides into two components of Sustainable Intensification, namely: Techno-ecology, Dependency, and the world-system.

(a) The techno-ecology approach is driven by the conviction that technology and human ingenuity are the greatest resources available to sustain food production. Techno-ecologists believe that through human action and technology yields can be increased while reducing environmental harm. To them, future global food challenges can be met by adapting agricultural methods to produce enough food. For example, the use of fertilizer and intensification of agriculture are associated with human adaptation. (Boserup, 1965). This example is one of the driving forces behind the philosophy of the “Green Revolution”. Their argument is that the perceived disturbing fears for the planet are oversimplified because with human actions those apprehensions can be conquered. Do they want to provide answers to questions like what sorts of technologies will make sense to rural farmers in Africa? What are the appropriate mechanisms to control pests, drought, and flooding? Other associated issues like making a choice between mechanical and conservative techniques, and the need for improved genetics through traditional plant breeding or by extra genetics. Therefore, policies and practices intended to increase food production to feed the global population should consider the need to reduce environmental impact.

(b) Dependency and world system approach, food security is a phenomenon with global implications. In the sense that the food security situation in one country is organically linked with world food order. One must, therefore, consider international factors affecting global hunger (McMichael, 1994). Due to the negative consequences of food security as a global phenomenon, they drew attention to the issue relating to a country's pattern of social change and how it correlates with accomplishing development goals. To them evaluating these issues in individual countries would assist in understanding global food security needs. For instance, what is the trade patterns of food products between the developing and developed countries? What is the impact of IMF and World Bank imposed conditionality on debtor nations' agricultural policies? To what extent have these policies improve food production? What about the issue of food aid and its tendencies to disrupt indigenous markets by deflating prices? And the issue of how the global economy has transformed self-sufficient, subsistence agriculture to export-driven production characterizing the international capitalist order (Lappe, Collins, & Rosset, 1998).

Relevance of the Theory

The basic assumptions of the theory of Sustainable Intensification clearly explain the problems facing food security in Nasarawa state and how to overcome these problems. Food insecurity has been on the increase in most rural areas of Nasarawa State and this results largely from low productivity, agricultural shocks and decreasing purchasing power. Therefore, these characteristics form the bases for the development of the theory by Pender (1999) and its concern on how to achieve improved yields over the long-term in fragile environments most especially in rural communities in African countries.

However, the theory is also relevance to the study in the sense that it is premised on the assumption that rapid rising demand coupled with supply-side stressors threats would cause an increase in food prices to levels where hunger and malnutrition might trigger political-economic disruption and this is true in the last two decades to

presently where farmland have been confronted with problems of fast land grabbing by retire generals, capitalist adventures in the Awe, Doma and Wamba local government axis which makes food crop farm shortage and also exacerbate the lively hood of rural communities and the situation is worsened by limited resources.

Nevertheless, the idea behind Sustainable Intensification is not to provide a set of food production practices rather create pathways to sustainable food production that vary by location and scale based on prevailing realities of the producing area. Therefore, Sustainable Intensification has to do with productivity (crop yields, animal production & variability of production), economic (profitability, the variability of profits, labor requirement), environmental (biodiversity, water quality & soil quality), human (nutrition, food sustainability, health), and social (equity/gender, social cohesion & collective participation). The theory concludes that when these are in place, food security in Nasarawa state would be sustained.

METHODOLOGY

To achieve the proposed research questions, this study used a mixed research design which entails both qualitative and quantitative approaches. The population of the study is 12,191 people comprising inhabitants in (Nasarawa, Kokona, Keana, Awe, Wamba and Akwanga as well as SDGs officials). The sample size of the study is 400 determined using Rakesh formula of (2013). In addition, responses from selected interviewees using purposive sampling technique were used to supplement result from questionnaire analysis. Four hundred (400) copies of the questionnaire were distributed to 400 respondents and 379 copies were filled and retrieved. Analysis was therefore, done based on how the questionnaire items helped to achieve the research questions. Descriptive statistics was used to analyze the data obtained through questionnaire while content analysis was used to analyzed information from interview and secondary sources. The Statistical Package for Social Sciences (SPSS) version 20.0 was used to carry out analysis. Data were analyzed using 5-point Likert scale in descending order of SA, A, D, SD and U to determine the level of responses.

Data Analysis and Interpretation of Results

The data were analyzed using simple percentage technique. The process requires placing each sun of the number of questionnaires administered on the respondents against the total population.

Table 1: Responses on the Factors Affecting Food Security in Nasarawa State

Responses	Frequency	Percentage
Environmental Degradation	37	9.8%
Non-Sustainable Agricultural Production	23	6.1%
Inconsistent Government Policy	79	20.8%
Communal Conflict	240	63.3%
Total	379	100

Source: Field survey January, (2023)

From table 1 above the respondent expressed their view on the factor affecting food security in Nasarawa State. The responses by the respondents in the state varied 9.8% of the respondent sees environmental degradation as the factor affecting food security in the state, 6.1% of the respondents view non-sustainable agricultural production, 20.8% said inconsistent government policy while 63.3% sees communal conflict as the factor that affect food security in Nasarawa State.

The above analysis implies that the key factors that affect food security are shortfall in domestically produced food in Nigeria because the growth in the population of Nigeria is at the rate of 3.2% while the growth in food production has been less than one. This shows that demand for food (population) is greater than the supply (agricultural production) because of factors such as inconsistent government policies, environmental degradation and non-sustainable agricultural production. The study also shows that Nigeria depends so much on food importation.

Table 4.2: Responses on the Challenge of Implementing Sustainable Development Goals of Food Security in Nasarawa State

Responses	Frequency	Percentage
Poor Road infrastructure	37	9.8%
Ignorance and Superstition	13	3.4%
Security Challenges	59	15.6%
Corruption	157	41.4%
Lack of political will	113	29.8
Total	379	100

Source: Field Survey January, (2023)

Table 4.2 above shows that responses decided during the field work. The respondents gave varying opinion on the challenges facing the implementation of sustainable development goals of food security in Nasarawa State, out of 379 respondents, 9.8% of them claimed that poor road infrastructure is the challenges that affects the implementation of sustainable development goals of food security in Nasarawa State, 3.4% of the respondents said ignorance and superstition, 15.6% of the respondents view security challenges, 41.1% of the respondents sees corruption while 29.8 of the respondents said lack of political will is the challenge facing the Implementation of Sustainable Development Goals in Nasarawa State

Similarly, interviewed conducted with SDGs official and Ministry of Agriculture Nasarawa State stating thus: The factors that hinder the Implementation of Sustainable Development Goals Programmes in Nasarawa State is corruption and lack of political will, and this challenge has seriously affected the attainment of food security within the state. Alh. Musa Abdullahi (interview on 2nd January 2023).

Constraints to effective contribution of state ministry of agriculture and stakeholder towards realization of SDGs include lack of reliable and accurate data, negligence of governments, poor perceptions of the farmers profession, low level of private sector interest in farming services, poor lobbying and advocacy skills amongst farmers, paying lip services to agricultural development programmes by government and low level of partnership drive among farmers. Practical Implications: Creating awareness/sensitizing the citizens, equipping of farmers information centres (FICs) to support research, provision of educational information to improve quality of farming, provision of funds to revive farming's, use of talks, shows/exhibitions in creating awareness, were identified as strategies that government and state holders can adopt to contribute towards realization of SDGs.

Table 4.18: Responses on the Measures to Overcome the Challenge of Implementing Sustainable Development Goals of Food Security in Nasarawa State

Responses	Frequency	Percentage
Construction of good road	37	9.8%
Early inputs provision to farmers	135	35.6%
Regular extension service	39	10.3%
Effective infrastructure provision	68	17.9%
Provision of storage facilities	55	14.5
State, purchase of food produce for food stabilization/storage	45	11.9
Total	379	100

Source: Field survey January, (2023)

Table 18 above shows that responses decided during the field work. The respondents gave varying opinion on the measures to taking to tackle challenge of implementing sustainable development goals of food security in Nasarawa State, out of 379 respondents, 9.8% of them claimed construction of good road, 35.6 of the respondents sees early inputs provision to farmers as the measure of tackling challenge of implementation sustainable development goals of food security in Nasarawa State. 10.3 view regular extension services, 17.9 sees effective infrastructure as the measure of tackling challenge of implementation sustainable development goals of food security in Nasarawa State, 14.5% of the respondents said provision of storage facilities while 11.9 sees state purchase of food produce for food stabilization/storage.

SUMMARY OF FINDINGS

The study revealed that inconsistent government policy and communal conflict are the major factor affecting food security in Nasarawa State. The study further finds out that corruption and lack of political will are the major problem facing the Implementation of Sustainable Development Goals of food security in Nasarawa State.

CONCLUSION

This research examined implementation of sustainable development goals programmes on food security in Nasarawa State. The findings from the empirical analysis revealed that, lack of purchasing power of the people making it difficult for them to acquire their daily minimum requirement of food. Other factors that hinder the smooth implementation of SDGs Prpgrammes of food security are corruption, environmental factor, inconsistent policy pronouncement, unsustainable agricultural productivity and underdevelopment of infrastructural facilities, the situation is not undefeatable. The study concludes that inconsistent government policy, communal conflict, corruption and lack of political will are the major problem hindering the Implementation of Sustainable Development Goals of food security in Nasarawa State.

RECOMMENDATIONS

In light of the findings of this research, the following are hereby recommended in accordance with the research objectives

- i. Recommendation according to objective one: Government should come up with strong policies that would help in boosting food production and strategy that would avail communal conflict, SGD should assist Agricultural research institute with funds (money) and other resources so as to complement government in promoting food security. Also, subsidies should be granted to farmers especially in the area of crops production this will not only boost production but will also improve farmer's income in Nasarawa State.
- ii. Recommendation according to objective two: Thus, upon the identification of the challenges that hinder the implementation of SDGs programmes in Nasarawa State, it is recommended that Government/SDGs should also come up with strategies that would curtail corruptions which is the other of the day, government should also enlighten the farmers and general public on the benefit of SDGs programmes when duly implemented. Lastly, all stakeholders and especially the government should come together to enact laws and regulations as regard the use of land for agricultural production in Nasarawa State.

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