Impact of the Strategy Adopted in the Implementation of Sustainable Development Goals on Food Security in Nasarawa State

Maiwada Muktar, Prof. Abdullahi Muhammad Yamma & Cannice Erunke, PhD

Department of Political Science, Faculty of Social Sciences, Nasarawa State University, Keffi. Email: muktarmaiwada@gmail.com

Abstract

This paper examines Impact of the strategy adopted in the implementation of Sustainable Development Goals of food security in Nasarawa State. It is over a year that 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 integrated development model was utilized to explain the strategy adopted in the implementation of sustainable development goals programmes on food security in Nasarawa State. In carrying out this study, both primary and secondary data were used. Primary data involves obtaining information by means of interviews and questionnaire to gauge the opinions of stakeholders, as to the success of the policy. On the other hand, secondary data involves the collection and examination of recorded data already in existence. They include relevant textbooks, journals and periodicals, seminar papers, reports, magazines and internet. The various findings revealed that the strategies adopted by SDGs and state government have linked up positively with the outcome of food security for Nasarawa State citizens. Although, some beneficiaries indicated that the role of government would have been more in keeping the prices stable. To be sure that the SDGs programmes on food security can be achieved by 2030, the study recommends that Government should sit and build mechanisms/strategies that would bring farm implement to farmers in early time such as fertilizer, seed, and built roads linking to the farmland to both the rural and urban, so that it would improve development of food production and reduce the risk of spoilage of agricultural products within the state. Also, SDGS/Government should reinvigorate the Nasarawa State Ministry of Agriculture and Integrated Rural Development Programme (IRD) which encompasses agricultural activities.

Keywords: Food Security, Rural Development, Strategy and SDGs

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 depend 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).

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).

It is in view of the foregoing that attainment of food security is imperative in any country. This is why all developed and developing countries make considerable efforts to increase their food production capacity. But hunger, defined here as a situation in which there is an inadequate quantity of available food; and malnutrition which is indicative of intake of unbalanced diets, have been ravaging most developing countries, severely menacing poor families Abdulahi (2019). Meanwhile, Nigeria is one of the food-deficit countries in sub-Saharan Africa although it is arguably better in terms of production than the others. It has also not suffered any major catastrophe that could precipitate scourges of famine, mass hunger and therefore food crisis. This does not in any way prevent public policy makers from being conscious of avoiding the debilitating impact of food shortages in neighbouring countries which has however made food security become a first order priority of the present Nigerian government (Atinmo & Adeniran, 2018).

In Nasarawa State, efforts at attaining food security have engaged various administrations of the state since its inception in February 1996. However, the provision of adequate food for the people of Nasarawa State is an objective which the state administration set for itself. It is believed that in order to maintain a secured and conducive environment for the delivery of democratic dividends, the population needed to be well fed so as to turn the wheel of the economy for progress and prosperity (Bash, 2018).

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 (Bash, 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 (Bash, 2019).

Although, governments have initiated some Agricultural development programmes, they have failed woefully in limiting the developmental imbalance that exists between rural and urban areas in most States in Nigeria. It is against this background that this study centred on the strategies adopted in implementing sustainable development goals on food security in Nasarawa State, Nigeria.

Research Questions

To successfully collect the needed data for the study, the following questions were used as guides:

- i. What has been the extent of the implementation of sustainable development goals strategies on food security in Nasarawa State?
- ii. What are the difficulties faced by the state government in implementing sustainable development goals strategies on food security in Nasarawa State?

Objectives of the Study

The purpose of this study is to examine the strategies adopted for the implementation of sustainable development goal on food security in Nasarawa State. Specifically, the study seeks to achieve the following objectives:

- i. To determine the extent to which strategies for sustainable development goal on food security are implemented by the government of Nasarawa State;
- ii. To find out the challenges faced by the state government in implementing sustainable development strategies on food security in Nasarawa State.

Conceptual Clarification

Sustainable Development Goals

Sustainable Development Goals is a United Nations effort aimed at achieving 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 farfetched 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 longterm 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 and it was 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 reality: 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.

Strategies Adopted in the Implementation of Sustainable Development Goals of Food Security in Nigeria.

Plan implementation is said to include; the assessment of plans contribution to development process; the extent of consultation among government offices as well as between states and private interest during the formulation stage of a plan. In addition, it involves a cooperation and participation of the various groups/stakeholders namely planners, policy makers and the society at large (Abdullahi, 2019).

The world summit on planning for sustainable development adopted the following strategies for the implementation of its objectives; adequate funding of the MDGs through significant increased flow of financial resource to less developed countries in particular capacity-building and information for decision making and scientific capabilities; facilitate greater flow of foreign direct investment so as to support sustainable development activities; including the development of infrastructures of developing countries and enhance the benefits that foreign direct investments provide, recognition that a substantial increase in official development assistance and other resource will be required in less economic developed countries (LEDCs); making full and effective use of assisting financial mechanism and institutions; reduction as debt burden, debt cancellation and other effective mechanism geared to solving debt problems; promotion of public/private partnership to mobilize resources; Build the capacity of commodity dependent countries to diversify export through financial, technical and international assistance for economic diversification and sustainable resource management (Liwenga, 2003).

Other strategies include:— promote mutual support evens between multilateral trading system and the multilateral environmental agreements; take concerted action against international terrorism; support publicly funded research and development in strategic alliance for the purpose of enhancing research and development to achieve cleaner production and production technologies; provide a wide range of formal and informal continuing education opportunities; integrate

sustainable development into education system at all levels of education in order to promote education as key agent for change; Enhance and Accelerate human, instructional and infrastructure capacity in response to specific reeds in LEDCs; Elimination of gender disparity; Encourage further work on indicators for development and strengthen information and statistical and analytical services relevant for sustainable development policies and programmes at all levels (Liwenga, 2003).

Strategy Adopted in Attaining High Level of Food Security in Nasarawa State

The vision of the strategic policy is that by the year 2024 Nasarawa State will become the best agriculturally driven economy in Nigeria. It will be fair, open and welcoming with an economy that is both prosperous and sustainable and all our inhabitant, citizens and communities will be successful.

This policy strategy is therefore a statement of intent about the opportunities and priorities the state will pursue to deliver growth and get Nasarawa state working to its fullest capacity. The policy is concerned about making sure that growth translates into real benefits for people, improving their quality of life whatever their age and background. In addition, contribute to growth and the jobs that are associated with a successful economy for the benefit of our residents.

However, the growth cannot come at any cost, we will still minimize the impact on our sector apart from agriculture, trade and light manufacturing industries, to ensure that growth is for the benefit of people who depends on other sector of the economy, and not to their detriment.

Therefore, the strategy includes traditional economic development action that will attract jobs and investment but also focuses on new activity around micro, small and medium enterprises that will help reduce inequality. Nasarawa state has had a long and proud history as a successful state. In recent years, it has quickened its pace in delivering beneficial change for many of its residents. The economy's diversity across sectors remains strong and this continues to serve the state well. This becomes even more apparent at times of economic recession. Hitherto, Nasarawa State also has immense growth opportunities in key sectors where the State assets and advantages shine through. The policy strategy combines this strength in depth with timely opportunities for the State to further develop new areas of leadership and excellence in its key sectors in the North central region, and the entire Nigeria. Hence, it is a formula of resilience plus brilliance. Although in many ways Nasarawa State is a big diverse State, like other core States across Nigeria, it also has its unique selling points.

- It is one of the most cost-effective office locations in the whole of Nigeria and West Africa.
- It has the one of the fastest rates of population growth of any major Nigeria city.
- Huge human resources capacity.
- It has the longest coastline in Nigeria.
- It is a high forest zone with luxuriant vegetation and high forest (Rain forest).
- It has suitable land for cultivating agricultural produce.
- It is located strategically between Abuja (FCT) to the North-west, North West, and Enugu State to the East.
- It has a moderate population and surface area. (Abdullahi, 2019)
 These advantages are critical to protecting and strengthening the State competitive edge.

Strategic Policy

Policies of the Nasarawa State government is focused on ensuring the people of the state have better quality of life and means of livelihood, and also geared towards developing the national economy. This policy strategy is an agriculture base policy, which will be driven by the grassroots rural agricultural communities, and complemented by the urban enterprising communities. The local government will be immensely engaged to mobilize towards the implementation of the economy policy. The policy will have a central coordination station in Lafia, the state capital and networked to all the 13-local government in the state.

Theoretical Framework

This study was hinged on the 'the integrated development model' which was later redefined as the integrated-local-endogenous development model formulated by Christofakis (2001) due to the organization of production, its interconnection with research and technological development, distribution, vocational training processes, development of new relations between corporations and local organizations, and the networking of sectors. The integrated -local- endogenous development model has a rural application. The model assumes that rural development strategies should focus more on ways of integrating urban and rural economy. Christofakis and Papadaskalopoulos (2011) argued that with the integrated model, settlements and dynamic cities would function in synergy to be able to focus and capture the growth and competitiveness as well as the prosperity desired for a region or the country at large. This model is considered relevant to this study on the effect of the strategy adopted in the implementation of sustainable development goals of food security in Nasarawa State, owing to the fact that the policy trust of rural famers will be beneficial to the present generation, without limiting such benefits to the future generation at the same time ensuring that the environment is protected requires that both areas should be the focus of government.

Methodology

This study used a mixed research design which entails both qualitative and quantitative approaches. The population of the study is 12,191 people comprising registered farmers in (Nasarawa, Kokona, Keana, Awe, Wamba and Akwanga as well as SDGs officials). The sample size of the study is 400 (Table 1). It was determined using Rakesh formula of (2013). In addition, responses from selected interviewees using purposive sampling technique were used to supplement data from questionnaire.

Table 1. Sample size of the study

| Senatorial District | Local Gov't Area | Target Population | |
|---------------------|------------------|-------------------|--|
| South | Nasarawa | 1,265 | |
| | Kokona | 850 | |
| North | Wamba | 2,600 | |
| | Akwanga | 2,950 | |
| West | Awe | 2,000 | |
| | Keana | 2,500 | |
| | SGDs officials | 26 | |
| Total | | 12,191 | |

Source: NFA & SGD office, (2021)

Apart from the questionnaire, the study collected data qualitatively through indepth interview from 15 key respondents who were purposively selected from the State SDG office and selected local governments within the study area. This include SDGs state office (3) and two (2) interviewees from the six local government areas selected for this study.

Four hundred (400) copies of the questionnaire were distributed to 400 respondents and 379 copies were filled and retrieved. Analysis was therefore, done based the 379 copies of the questionnaire retrieved. 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 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 2: Responses on the Strategies Used by SDGs and Nasarawa State Government in Bringing Food Availability in the Right Quantity Within the State

| Responses | Frequency | Percentage |
|---------------------------------------------------------|-----------|------------|
| Adequate Funding | 95 | 25.3 |
| Facilitate Greater Flow of Foreign Direct Investment | 17 | 4.5 |
| Development of Infrastructures of Developing Countries | 12 | 3.2 |
| Substantial Increase in Official Development Assistance | | 2.4 |
| Effective use of Financial Mechanism and Institutions | 55 | 14.5 |
| Debt Burden Cancellation | - | - |
| Promotion of Public/Private Partnership | 7 | 1.8 |
| Technical and International Assistance for Economic | | |
| Diversification and Sustainable Resource Management | 15 | 3.9 |
| Integrate Sustainable Development into Education | | |
| System at all Levels of Education | 152 | 40.1 |
| Elimination of Gender Disparity | 15 | 3.9 |
| Total | 379 | 100 |

Source: Field survey January, (2023)

Table 2 above shows respondents reaction with regard to food available in the required quantity as a result of the strategies adopted by SDGs and government in Nasarawa State. It revealed that 25.3% of the respondents said adequate funding is the strategy use by SGDs and Government to make food available in the required quantity in the State, 4.5% viewed greater flow of foreign direct investment, 3.2% identified development of infrastructures of developing countries, 2.4% identified substantial increase in official development assistance, 14.5 took side with effective use of financial mechanism and institutions, 1.8% agreed with promotion of public/private partnership, 3.9% viewed technical and international assistance for economic diversification and sustainable resource management, 40.1 idenified integrating sustainable development into education system at all levels of education while 3.9% of the respondent pointed at elimination of gender disparity. Based on data in Table 2, interview outcome on the same subject showed a prevalence of 80% responses as positive, particularly, the responses from officials that recorded total acceptance of availability of food aa a result of the strategy been used. For example, Mallam Saidu said that: The strategies implemented by SDGs in Nasarawa State has yielded positive result since we witness improvement of yields among farmers." Before now instance literature shows that there have been

rural food shortages in Nasarawa state which results largely from low productivity, agricultural shocks and decreasing purchasing power (Aminu, 2019). This can be seen in the table below.

Table 1: Showing the Level of Food Production from 2016-2022

| Year | Food Production in Tones (000) | Population in Millions |
|------|--------------------------------|------------------------|
| 2016 | 50 | 100 |
| 2017 | 65 | 115 |
| 2018 | 75 | 125 |
| 2019 | 100 | 140 |
| 2020 | 105 | 160 |
| 2021 | 115 | 168 |
| 2022 | 125 | 175 |

Source: NBS 2022.

Table 3: Approach use by the SDGs and Nasarawa State Government in addressing Food Security in your area

| Responses | Frequency | Percentage | |
|-------------------------------------------|------------------|------------|--|
| Traditional Economic Development | 13 | 3.4 | |
| Provision of farm inputs | 125 | 33.1 | |
| Provision of farm mechanism | 16 | 4.2 | |
| Small and Medium Enterprises | 13 | 3.4 | |
| Grassroots Rural Agricultural Communities | 3 | 0.8 | |
| Engaged Local Government Towards Mobiliz | e the Implementa | tion | |
| of the Economy Policy | $\dot{7}$ | 1.8 | |
| Provision of loan facilities | 25 | 6.6 | |
| Extension services | 112 | 29.5 | |
| Land clearing | 65 | 17.2 | |
| All of the above | - | - | |
| Total | 379 | 100 | |

Source: Field survey January, (2023)

From Table 3 above, respondents exposed their view on what specific area approach use by the SDGs and state government in bringing food security in the state. The following responses were made. 3.4% of the respondents view traditional economic development as the approach used by SGDs and state government in bringing food to their area, 33.1% of the respondents sees provisions of farm inputs as the approach used by SGDs and state government in bringing food to their area, 4.2% of the respondents said provision of farm machines, 3.4% of the respondents sees small and medium enterprises, 0.8% of the respondents said Grassroots Rural Agricultural Communities, 1.8% of the respondent view Engaged Local Government, 6.6% of the respondents sees Provision of loan facilities, 29.5% of the respondents view Extension services, while 17.2 respondent sees land clearing.

On the side of SDGs all of the above methods were used as claimed by the respondents. This range from the traditional economic development, provisions of farm input, grassroots rural agricultural communities, engaged Local Government towards mobilize the implementation of the economy policy, extension services, loan facilities and land clearing. However, other interview conducted in some remote villages revealed that government effort can only be seen in those villages that are at the main road. Infact remote villages do not even know whether SDGs exist in Nasarawa state. In an interview one of the villagers in Jan-Gargari area of Awe L.G narrated thus:

I am aware of the activities of SDGs, the government officials come here to assist us with farm inputs and extension services. Some time we find it very difficult to get fertilizer early enough but we do get eventually and we also use local manure to supplement the fertilizers from government. Malam Ibrahim (on 20 Jan. 2023)

Table 4. Responses on the Impact of the Strategies Adopted by SDGs and Nasarawa State Government on Food Security

| Responses | Frequency | Percentage | |
|-------------------|-----------|------------|--|
| Strongly Agree | 21 | 5.5 | |
| Agree | 71 | 18.7 | |
| Strongly Disagree | 112 | 29.5 | |
| Disagree | 175 | 46.2 | |
| Undecided | = | - | |
| Total | 379 | 100 | |

Source: Field survey January, (2023)

From Table 4 above the respondent expressed their view on the impact of the strategy adopted by SDGs and State Government on food security in Nasarawa State. The responses by the respondents in the state 5.5% of the respondent strongly agree that the strategy adopted by SDGs and Nasarawa State Government has yielded positive result in term of providing enough food to the masses, 18.7% of the respondents agreed, 29.5% strongly disagreed that the strategy adopted by SDGs and Nasarawa State Government has not yield positive result in term of providing enough food to the common man in the state, while 46.2% also disagree.

Along the same line, the interview frequency revealed that the strategy put in place by SDGs and state government has not helped in bringing food available and affordable in the state. For example, the statement credited to Mallam Saidu indicated that the strategies implemented by SDGs in Nasarawa State has not yielded positive result since we witness poor improvement of yields among farmers."

Conclusion

This study has examined the impact of the strategy adopted in the implementation of sustainable development goals programmes in Nasarawa State. The findings from the empirical analysis revealed that the strategies have linked up positively with the outcome of food security for Nasarawa State citizens. Although, some beneficiaries indicated that the role of government would have been more in keeping the prices stable. Finally, the alternative strategies which the SGDs and Nasarawa State government needs to implement to help the situation of food crisis in Nasarawa State and that these interventions must come in early before the farming season. Different approaches are expected to be used by SDGs and State government in bringing food security in the State. The approaches range from traditional economic development, provisions of farm input, grassroots rural agricultural communities, engaging Local Government towards mobilizing for the implementation of the economic policy, extension services, loan facilities and land clearing

The study concluded that strategies adopted for the implementation of sustainable development Goals on Food security in Nasarawa State have been effectively designed but not duly implemented in time, due to the fact that most of the policies did not come in early before the farming season and also the emphasis has always been on agriculture alone.

Recommendations

Based on the findings of the study, the following recommendations are made:

- i. SDGS/Government should reinvigorate the Nasarawa State Ministry of Agriculture and Integrated Rural Development Programme (IRD) which encompasses agricultural activities. The Ministry and IRD comprises agricultural and other projects, whose main objective is to raise the level of agricultural production and rural income and in the process reduces the level of food insecurity in Nasarawa State.
- ii. Government should site and build mechanism/strategies that would bring farm implement to farmers in early time such as fertilizer, seed, and built roads linking to the farmland to both the rural and urban, so that it would wider development of food production and to reduce the risk of spoilage agricultural products within the state.
- iii. The 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.
- iv. 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.
- v. Government/SDGs should 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 SGDs programmes when duly implemented.
- vi. And lastly, all stakeholders and especially government should come together to enact laws and regulations as regard the use of land for agricultural production in Nasarawa State.

References

- Abdullahi, M.A. (2019). Agricultural Reforms and the Challenges of Food Security in Nasarawa State Nigeria, 1999-2015, Unpublished PhD Thesis, Submitted to the Department of Political Science, Faculty of Social Sciences, Nasarawa State University Keffi, Nigeria.
- Atinmo, T. & Adeniran, U. (2018). Towards Achieving Food Security in Nigeria: The Economic Strains and Strategies for Way Forward: *Published in online Global Journal of Economics and Finance www.gjefnet.com Vol. 2 No.* (1);
- Awojobi, A. (2014). Self-help as a Strategy for Rural Development; A bottom- up Approach. *Journal of Perspective in Social Science*, 2(1), 88-111
- Bash, A. (2018). Assessment of Rural Household Poverty; Evidence from South Western Nigeria. American-Eurosia Journal of Agriculture and Environment Science, 3(6),900-905.
- Bash, A. (2019). Socio-Economic Characteristics and food Security Status of farming Households

- in Kwara state, North-central Nigeria. Pakistan Journal of Nutrition 6(1): 49-59.
- Christofakis, M. (2001). "Local development and regional policy". Athens: Papazisis Herman E.D. (2017) Trump's Growrhism: Its roots in neoclassical economics theory. Retrieved from https:// prndopopulus.com/blog/trums-grothism-its-roots-in-neoclassical —e economic-theory/ on 12/11/2020
- Christofakis, M. & Papadaskalopoulos, A. (2011). *The growth poles strategy in regional planning: The recent experience of Greece:* Theoretical and Empirical Researches in Urban Management, 6(2),5-7.
- Emas, U. (2015). *Demand for Institutional Credit of the Nigerian Agricultural and Cooperative Bank:* Unpublished M.Sc Thesis, Federal University of Technology, Owerri, Nigeria.
- Flint, O. (2013). Appropriate Agricultural Technology for Resource Poor Farmers: *A Publication of the Nigerian National Farming System Research Network*.
- Liwenga, E.T. (2003). *Food Insecurity and Coping Strategies in Semiarid Areas*. Stockholm. Published in Tockholm University Press.
- Sustainable Development Goals (SDGs) Indicators Baseline Report 2016.
- Tollens, F. (2000). Food Security: Incidence and Causes of Food Insecurity among Vulnerable Groups and Coping Strategies, In, CTA (2000) Food Insecurity in ACP Countries, Proceedings of a CTA Seminar.
- Tollent, S. (2000). Sustainable Development: A Critical Review on World Development (1991): Plan of Implementation of the World Summit on Sustainable Development at the United Nation" *Conference; WWW. UN. Org/.../WSSD_PlanImpl- pdf*
- United Nations General Assembly (2005). *The Millennium Development Goals Report: Time for Global Action for People and Planet.* United Nations: New York.
- United Nations Organization. Sustainable Development Goals: 17 Goals to Transform our World.

 Available at http://www.un.org/sustainabledevelopment/hunger/
- World Bank (1992). Proceedings of the 8th Annual Conference of the Agricultural Extension society of Nigeria, *held in Benin City*, 16 19. United Nations Integrated Regional Information Network (2002). Food crisis Aggregates speed of HIV.