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Effects of Political Governance and Public Health Intervention on Food Security Among Small Scale Farmers in Adamawa North

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Abstract

The study assesses the impact of political governance and public health intervention on food security among small scale farmers in Adamawa North**.** The issue of food security has been a central concern for many decades. Food security is achieved when all individuals have consistent physical, government policy and economic access to sufficient, safe, and nutritious food that meets their dietary needs and preferences for an active and healthy life. The main objective of the study is to assess the impact of political governance and public health intervention on food security among small scale farmers in Adamawa North while the specific objectives are to describe the socio-economic characteristics of small-scale farmers in the study area and to identify the determinants of food security among the respondents in the study area. The study reviews related literature on good governance, public health intervention and food security while system theory is adopted as the theoretical framework. The main source of data for this study is primary. The study used inferential statistics such as frequency distribution and percentage for the socio-economic characteristics of the respondents and logit regression is used on the determinant of food security. The study discovered that there are no target programmes and policies to improve food production in Adamawa North. The study recommends that there should be targeted programs to provide small scale farmers with access to essential agricultural inputs such as seeds, fertilizers, and farming equipment.

Keywords: Political governance, public health intervention, food security, small-scale famers and Adamawa North

Introduction

Improved performance of small-scale farmers in every nation largely depends on good governance and conducive atmosphere created by government through public health intervention. It leads to an increase in people's living standards and socio-economic growth. It is through good governance that Development projects and programmes are realized in any nation. In a state where good governance is thrown overboard, accountability of governmental institutions and progress of such states are likely to be un-realistic. Food security, in its broadest sense, refers to the continuous availability of sufficient basic food products to meet rising consumption demands and stabilize fluctuations in production and prices. As per Maharjan and Chhetri (2006) food security is widely understood as ensuring that all individuals have access to enough food at all times for an active and healthy life. Conversely, food insecurity arises when households or individuals cannot maintain adequate consumption levels due to variations in production, prices, or income. Nationally, food security is achieved when all individuals have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and preferences for a healthy life. At the household level, food security involves having both

physical and economic access to food that is adequate in quantity, safety, and cultural relevance to meet each person's needs (Ingawa, 2002).

Food is universally recognized as a fundamental human need. Its significance at the household level is evident, as it is a primary means of sustenance. Consuming sufficient quality food is essential for a healthy and productive life. Helen (2002) emphasized that food plays a crucial role in maintaining political stability and ensuring peace among people, while food insecurity can lead to poor health and diminished performance, particularly in children. Shala and Stacey (2001) observed that many nations suffer from food insecurity, with inadequate food supplies failing to sustain their citizens' per capita consumption. They noted that sub-Saharan Africa is particularly vulnerable, with an average daily food availability of 1,300 calories per person, compared to the global average of 2,700 calories. The Food and Agriculture Organization (2004) concluded that Africa has more countries experiencing food insecurity than any other region.

According to Ingawa (2002), a nation can be considered food secure when its population no longer fears food shortages and when the most vulnerable groups, particularly women and children in marginal areas, have access to adequate and desired quality food. The World Bank (1986) defines food security as ensuring that each individual has access to sufficient food resources at all times for a healthy and active life. In Nigeria, food demand has generally outpaced both food production and total supply. The Central Bank of Nigeria (2001) reported that the annual increase in food production, at 2.5 percent, is insufficient to match the population growth rate of 2.8 percent per annum. The issue of food security has been a central concern in developmental sciences for many decades. Food security is achieved when all individuals have consistent physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and preferences for an active and healthy life (FAO, 2006). Four key components define food security: availability, accessibility, utilization, quality, and safety (Henneberry and Carrasco, 2014). Availability refers to the physical presence of adequate food, while utilization involves ensuring food sufficiency in both quantity and sustainability, meaning access must be continuous and not subject to loss (Omonona and Agoi, 2007).

Henneberry and Carrasco (2014) further explain that food access, a critical dimension of food security, is influenced by household income and purchasing power. Food access encompasses the ability of households and nations to secure the necessary food to maintain nutritional balance, including physical, economic, and sustainable access. Ayantoye et al. (2011) noted a connection between poverty levels in rural Nigeria and the state of food security, as well as its progression over time. The main objective of the study is to assess the impact of political governance and public health intervention on food security among small scale farmers in Adamawa North while the specific objectives are to describe the socio-economic characteristics of small-scale farmers in the study area and to identify the determinants of food security among the respondents in the study area.

Literature Review

Concept of Good Governance

The United Nations Development Programme (UNDP) defines good governance among other things as being is participatory, transparent, and accountable. It is also effective and equitable and promotes the Rule of Law. It ensures that the voices of poorest and the most vulnerable are heard in decision making over the allocation of development resources, and that political, social and economic priorities are based on broad consensus among the three stakeholders i.e. the states, private sector and civil society. According to African Development Bank (ADB), good governance is one that strengthens the capacity and capability of the state, mobilizes civil societies and energises the private sector. The World Bank named the exercise of power on

political authority, and the management of social and economic resources as governance, and defined good governance as effective administration, trustful legal system and responsible regime (World Bank 1989). The World Bank added the formulation of policies and implementation of them by the government and selected Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption as the main 6 governance indicators (World Bank 2009).

The United Nations (UN) focuses on democratic and political part of governance. The UN emphasises that decrease of corruption, civil participation and political institution reform through good governance improve the economy (UN 2007). The UN considers democracy as good governance and suggests following 8 characteristics: Consensus Oriented, Participatory, following the Rule of Law, Effective and Efficient, Accountable, Transparent, Responsive, Equitable and Inclusive (UN 2007). To expand the definition of governance, OECD defines good governance as management of political, economic and administrative authority and it has characteristics of Participation, Transparency, Accountability, Rule of law, Effectiveness and Equity (OECD 1997).

Also, overstressing democratic governance, it added free of abuse and corruption, and it analyse good governance based on various indicators, such as, Regulatory Quality Indicator, Central Government Debt, Citizen Relationship, General Government Account, Ethics Measures in Public Service and Human Resource Management Survey. Sharma, Sadana and Kaur (2013) observed that, good governance establishes the rule of law, enforces contracts and agreement between the individuals, maintains law and order, guarantees security to the people, economizes on cost and resources, protects the government and properly delivers services to the society. It also determines an optimal size of the government and makes best possible use of government resources.

Causes of Food Insecurity in Nigeria

According to Jacob (2013), food insecurity exists when people are undernourished as a result of the physical unavailability of food, their lack of social or economic access to adequate food. Food insecure people are those whose food intake falls below their minimum energy requirements as well as those who exhibit physical symptoms caused by energy and nutrient deficiencies resulting from an inadequate or unbalanced diet or from the body's inability to use food effectively because of infection or disease. According to FAO (2010) food insecurity refers to the consequences of inadequate consumption of nutritious food, considering the physiological use of food by the body as being within the domain of nutrition and health. Malnourishment also leads to poor health; hence individuals fail to provide food for their families. If left unaddressed, hunger sets in motion an array of outcomes that perpetuate malnutrition, reduce ability of adults to work and to give birth to healthy children and erode children's ability to learn and live productive, healthy and happy lives. This truncation of human development undermines a country's potential for economic development for generations to come.

Famine and hunger are both rooted in food insecurity. Food insecurity can be categorized as either chronic or transitory. Chronic food insecurity is a long time or persistent inability to meet minimum food consumption requirements while transitory food insecurity is a short-term or temporary food deficit. Chronic food insecurity translates into high degree of vulnerability to famine and hunger, ensuring food security presupposes the elimination of that vulnerability. While transitory food insecurity refers to changes in food security status – a sudden (often precipitous) decline in the ability to meet subsistence needs. Chronic insecurity is similar to undernourishment and is related to poverty existing mainly in poor countries. No problems can be solved unless its causes are known: therefore, knowing the causes of food insecurity will help

us to locate the solutions. Discussing the causes of food insecurity in Nigeria is a very difficult task; this is because most Nigerians develop apathy towards locally produced food and prefer imported food which they consider as superior to domestically produced ones. The emergence of oil sector and the substantial revenue accruing from the sector shifted emphasis from agriculture to the extent that even domestic food production is not given the desired requirement. The government felt that it was better to import food than to embark on local production, especially when oil money has changed the tastes of most Nigerians in favor of foreign imported goods. The above reasons notwithstanding, according to Jacob (2013), are the causes of food insecurity in Nigeria.

Problems of Food Security in Nigeria

According to Jacob (2013) the first essential component of social and economic justice is adequate food production. Even if a nation cannot send cosmonauts to the moon, it should be able to feed her population, only then can it occupy place of pride in the committee of nations. Nigeria is a country richly blessed with abundant natural and human resources that if properly harnessed can feed its people and export the surpluses to other countries, yet it is experiencing persistent food crisis both in terms of quantity and quality. Cases of malnutrition and under nutrition are growing by the day. The food intake requirements of majority of Nigerians have fallen far below the international standard. Past effort at improving food supply through agricultural production has not yielded successful results. The programmes that were introduced only helped to alienate the peasant farmers who are the major producers of food in Nigeria.

Theoretical framework

The study adopts system theory as the theoretical framework. A systems theory is hence a theoretical perspective that analyses a phenomenon seen as a whole and not as simply the sum of elementary parts. The focus is on the interactions and on the relationships between parts in order to understand an entity's organization, functioning and outcomes. In its broadest conception, a "system" may be described as a complex of interacting components together with the relationships among them that permit the identification of a boundary-maintaining entity or process. In the broadest conception, the term connotes a complex of interacting components together with the relationships among them that permit the identification of a boundary-maintaining entity or process. A system can be defined as an entity, which according to Mele and Polese (2010) is a coherent whole such that a boundary is perceived around it in order to distinguish internal and external elements and to identify input and output relating to and emerging from the entity. System theory allows for this synergy to be generated because of the communication channels that are open in a properly functioning system. Huseh, Smale and Devaney (2004) maintains that synergy is the combined effect of a system working together where the combined result is greater or more powerful than that of the individual components.

Methodology

The Study Area

Adamawa North Senatorial District as a geo-political area is comprised of five local government areas; Mubi north and Mubi south, Maiha, Madagali and Michika. Adamawa North.

Source of Data

The main source of data for this study is primary, which will be collected through the administration of questionnaire.

Method of Data Collection

Data for the study is collected from primary source with the aid of a well-structured questionnaire which is distributed to the respondents.

Sampling size and sampling techniques

For this study, four local government areas are selected out of five LGA while some selected wards will be identified from each of the selected local government in the Northern Adamawa zone, Michika (16), Maiha (10), Mubi North (11) and Mubi South (10). The study used the sample size of small-scale farmers in each of the selected ward.

Method of Data Analysis

The study used inferential statistics such as frequency distribution and percentage for the socio-economic characteristics of the respondents and logit regression is used on the determinant of food security.

The function is given as:

$Y = B0+B1X1+B2X2+B3X3+B4X4+B5X5+B6X6+B7X7+B8X8+B9X9+U$

Where Y= food security index

B0= Constant
B1-B2= Coefficients of the variables
X1= Age
X2= Marital statues
X3= Farming experience
X4= Level of Education
X5= Household size
X6= Household income
X7= Quantity of food consumed from own product
X8= Farm Size
X9= Cooperative membership of women small holders' farmers
U= Error term

Result And Discussion

Socio-Economic Characteristics of Respondents

Distribution of Respondents by Age

The distribution of respondents by age is presented in table 4.1 indicated that 24.10% of the respondents were between 20 and 29 years of age, while 31.25% were within the age range of 30 – 39 years, those that were within the age of 40 – 49 years are 35.71%, 50 – 59 years and 60 years accounted for 7.14% and 1.78% respectively. The mean age of the respondents is 37.63 years, an indication that the respondents are still very active to engage in agricultural production that will contribute towards household food security. The result is in line with the findings of Deacon and Krishnan (1996) and Yusuf et. al., (2015) who claimed that at the active working age, household heads adopt innovations that positively affect their productivity and income.

Table 1: Age of respondents

Age Range (yrs)	**Frequency**	**Percentage (%)**
20 – 29	27	24.10
30-39	35	31.25
40- 49	40	35.71
50 – 59	8	7.14
> 60	2	1.78
Total	112	100

Source: Field Survey, 2024

Marital status of Respondents

The study shows that majority (75.00%) of the respondents were married, while 9.8% were single, divorced and widows accounted for 4.46% and 10.71% respectively. This explains the significance of farming labour to agricultural production in a typical or normal rural community in Nigeria. Households where the respondents are married and both the spouses are working are expected to be more food secured than single households, widowed or divorced. Most rural farmers will prefer to marry in order to have cheap labour for agricultural activities to enable their household to be food secured (Kirwan and Maye, 2013).

Table 2 Marital status

Marital status	Frequency	Percentage (%)
Single	11	9.82
Married	84	75.00
Divorced	5	4.47
Widow	12	10.71
Total	112	100

Source: Field Survey, 2024

House hold size of respondents

The distribution of the respondents by household size shows that most (87.49%) of the respondents have household sizes of 1 – 9 persons, while about 12.40% have household size of 10 persons and above. The mean household size is about 6 persons. Larger household size can serve as source of family labour even though dependency ratio will be high. Larger household size tends to reduce per capita food expenditure of the household, thus increasing their likelihood of being food unsecured. Adebayo (2012) supported this assertion that the larger the family size the lesser the food availability to each person within the household and also nutritional status will be affected.

Table 3: House hold size

Household size	Frequency	Percentage (%)
1-4	41	36.60
5-9	57	50.89
10-14	10	8.92
> 15	4	3.57
Total	112	100

Source: Field Survey, 2024

Educational level of respondents

The educational distribution of the respondent in the table reveals that 27.67% of the respondents did not have any form of education. In essence, the majority (72.31%) had one form of formal education or the other. The result shows that majority of the respondents were literate and this can enhance their food security status. The level of education of household head is an important factor to improved farm production and management techniques. It also determines income earning capacity and food expenditure. Agreeing with Adebayo (2012) and Akarue and Bakporhe (2013) who opined that literate status can improve food security status and also the adoption of improved farm practices. Educated farmers adopt agricultural innovations easier, and this could improve their agricultural productivity and ensure food security.

Table 4: Educational level

Educational level	Frequency	Percentage (%)
Non formal education	31	27.67
Primary education	25	22.32
Secondary education	41	36.60
Tertiary education	15	13.39
Total	112	100

Source: Field Survey, 2024

Occupation of respondents

The occupational distribution of respondents as presented in the table indicates that 44.64% of the respondents had farming as their primary occupation, 26.78% were civil servants and 22.32% were traders, while artisans constituted 6.25% of the respondents. It is clear that agricultural sector is the highest employer of labour in the study area. The result is in agreement with the study carried out by Shehu et. al., (2012) who found out that farming constituted the major occupation of people in the rural areas in Nigeria.

Table 5: Occupation

Main occupation	Frequency	Percentage (%)
Farming	50	44.64
Civil servants	30	26.78
Trading	25	22.32
Artisan	7	6.25
Total	112	100

Source: Field Survey, 2024

Farm Size of Respondents

The distribution of the respondents according to farm size is presented in the table shows that 92.85% of the respondents had farm size of 1-5 hectares, while only 7.14% had farm size of 6 hectares and above. The mean farm size of the respondents is about 2.95 hectares. The finding revealed that food crop farmers in the study area are mainly small-scale farmers, hence food production is at subsistence level which could lead to diversification of income sources by farmers to be food secured. This finding corroborates with the finding of Arene and Anyaeji (2010) and Oyebanjo et. al., (2013) that majority of Nigerian farmers are small scale farmers who cultivate less than 5 hectares.

Table 6: Farm Size

Farm size	Frequency	Percentage (%)
< 1	18	16.07
1-5	86	76.78
6-1	8	7.14
Total	112	100

Source: Field Survey, 2024

Determinant of Household's Food Security

The factor influencing food security among farming households in the area were analysed using binary logistic model and the result presented in Table 7. The result shows that age, marital

status, farming experience, level of education, household size, household income and farm size were significant factors influencing food security status of farming households in the study area. The finding reveals that the coefficient of age (X_1) is negative and significant at 5% level. This implies that as respondents' age increase the likelihood of being food secured decrease. Young and energetic household heads are expected to cultivate larger farms compared to the older and weaker household heads. Also, older household heads may not have the ability to obtain off-farm jobs and income which younger household heads can. This is agreeing with Oluwatayo (2012) who identified age as a major determinant of food security among households. The result shows that marital status (X_2) has a positive coefficient and is significant at 10% level. This implies marital status increases the likelihood of household to be food secure impedes access to better job opportunities in the labour market and also hampers more profitable entrepreneurship (FAO, 2012).

The result also revealed that farm size is an important factor that influences food security status of households. The coefficient of farm size is positive and statistically significant at 5% level implying that the larger the farm size of the household, the higher the expected level of production. It is therefore expected of a household with more farm size to be more food secured than a household with smaller farm size. The result is in consonance with Okon *et. al.,* (2017) who reported that there is hope for increasing output by expanding farmland. Farming experience refers to the number of years household heads are engaged in farming. The coefficient of farming experience is positive and statistically significant at 10% level. An experienced household head is expected to have more insight and ability to diversify his production to minimize risks of food shortage. Also, an experienced farmer is expected to have adequate knowledge in pests and diseases management as well as good knowledge of weather. This agrees with the findings of Feleke *et. al.,* (2003) and Oluyole *et. al.,* (2009) who found a positive relationship between farming experience and food security status.

Cooperative membership of women small holders' farmers (X_9) has positive coefficient and statistically significant at 5%. Cooperative membership of women small holders' farmers has positive effect on food security status implying that the more gainfully employed a household head is, and he earns income the greater the chances of being food secure. Cooperative membership of women small holders' farmers is expected to increase households' production and access to more quantity and quality food. This agrees with Okwoche *et. al.,* (2012) who reported that an increase in income increases the likelihood of households being food secured.

Table 7: Summary Result of Logistic Regression Analysis

Variables	Coefficients(β)	Standard Error	Wald	Sig.	Exp (β)
Age (XI)	-0.093	0.055	4.740	0.040	0.911
Marital statues (X2)	0.087	0.045	2.036	0.058	1.091
Farming experience (X3)	0.090	0.127	5.093	0.033	1.094
Level of Education (X4)	1.096	0.581	2.021	0.057	2.992
Household size (X5)	-0.079	0.111	1.010	0.099	0.924
Credit Access (X6)	-0.494	0.477	1.090	0.059	0.610
Quantity of food consumed from own product (X7)	1.440	0.325	4.050	0.045	4.221
Farm Size (X8)	0.147	0.587	.000	1.000	1.158
Cooperative membership of women small holders' farmers (X9)	1.280	0.704	.000	0.040	3.597
Constant	4.501	2.106	6.160	0.021	90.107

Source: Computer Output from SPSS Version 20

*Significant at 10% level, **Significant at 5% level

Summary of Findings

i. There are no targeted programmes by government to provide essential agricultural inputs to small scale farmers.
ii. There is no educational/ modern extension service to small scale farmers.
iii. There are no enough government policies that allow farmers to access and cultivate larger plots of land could significantly improve food security

Conclusion and Recommendations

The study provides a comprehensive analysis of the food security status among rural households in Adamawa North. The high prevalence of food insecurity is attributed to a combination of factors, including small farm sizes, limited access to credit, inadequate agricultural inputs, and the ongoing insurgency in the region. These challenges have exacerbated the vulnerability of farmers, making it difficult for them to achieve food security for their households. The findings underscore the need for targeted interventions to address the unique challenges faced by small-scale farmers in the zone.

The following recommendations are proposed:

i. There should be targeted programs to provide small scale farmers with access to essential agricultural inputs such as seeds, fertilizers, and farming equipment. Additionally, improving access to credit through microfinance institutions or cooperatives could enhance their capacity to invest in their farms and increase productivity.
ii. Educational opportunities and agricultural training for farmers is crucial. This could include training on modern farming techniques, pest management, and climate-smart agriculture practices, which can improve their productivity and food security status.
iii. Encouraging policies that allow farmers to access and cultivate larger plots of land could significantly improve food security.
iv. Enhancing the effectiveness of cooperative societies by providing them with more resources and support can improve the collective bargaining power of women farmers, helping them access better market prices, agricultural inputs, and financial services.

References

Adebayo, A. A. (2004). *Mubi Region. A Geographic Synthesis*. Paraclete Publishers. Yola. Pp. 1737.

Adebayo, O.O. (2012). Effects of Family Size on Household Food Security in Nigeria. *Asian Journal of Agriculture and Rural Development. 2 (2), 136-141.*

Akarue, O.B. and Bakporhe, O.T. (2013). Food Insecurity and its Determinants In Rural Households in Ughelli North Local Government Area of Delta State. Nigeria. Department of Agricultural Science Education, College of Education, Warri, Nigeria. *International Journal of Innovative Agriculture and Biology Research 1 (2): 20-30, 2013. Seath Publications, 2013, ISSN: 2354-2934.*

Arene, C.J., and Anyaeji. J. (2010). Determinants of Food Security Among Households in Nsukka Metropolis of Enugu State. Nigeria. *Pakistan Journal of Social Sciences 30 (1): 9 – 16.*

Ayantoye, K., Yusuf, S.A., Omonona, B.T., and Amao, J.O. (2011). Food Insecurity Dynamics and its Correlates among Rural Households in South Western Nigeria. *International Journal of Agricultural Economics and Rural Development 4(1): 43-55.*

Central Bank of Nigeria (2001). Economic and Financial Review vol. 36 No. 1.

Dercon, S., and Krishnan, P. (1996). Income Portfolio in Rural Ethiopia and Tanzania: Choices and Constraints. *Journal of Development Studies. 32 (6): 850-75.*

Food and Agriculture Organization (2004). Food and Agricultural Organization of the United Nations. *The State of Food Insecurity in the World: Monitoring progress toward the world food summit and Millenium Development Goals.* Rome, F.A.O.

Food and Agriculture Organization (2006). the State of Food Insecurity in The World. Food and Agriculture Organization of the United Nations. Viale delle Terme di Caracalla, 00153 Rome, Italy.

Food and Agriculture Organization (2010*). Global Hunger Declining but Still Unacceptably High: International Hunger Targets Difficult to Reach*. Economic and Social Development Department September 2010. Rome: FAO.

Yusuf, S.A., Balogun, O.L., and Falegbe, O.E. (2015). *Effect of Urban Household Farming on Food Security Status in Ibadan Metropolis Oyo State. Nigeria.* Agricultural Sciences. 60 (1): 6175.

Food and Agriculture Organisation (2012). *The State of Food Insecurity in The World 2012: Economic Growth is Necessary but not sufficient to Accelerate Reduction of Hunger and Malnutrition*. FAO Inter- Departmental Working Group, Rome. Italy. ISBN-13:9789251073162, Pages: 60.

Feleke, S.T., Kilmer, R.L., and Gladwin, C.H. (2003). *Determinants of Food Security in Southern Ethiopia at the Household Level*. Agricultural Economics 33 (3): 351-363.

Helen, H. J. (2002): Food Insecurity and the food stamp Programme. *American* Journal *of Agricultural Economics*. Vol. 84 No. 5 Pp. 1215 – 1218.

Henneberry, S., and Carrasco, D. (2014). Global Food Security: Emerging Economics and Diverging Food Markets. Journal of Food Distribution Research 45(1).

Huseh, M.W. Smale, S. & Devaney, R.L. (2004). *Differential equations, dynamical system, and an introduction to chos,* New York; Academic Press.

Ingawa, S. A. (2002). Keynote address at the 8th Annual conference of the Agricultural Extension Society of Nigeria held in Benin City, 16 – 19 September, In Olowu T. A. (Ed). Proceedings of the Agricultural Extension Society of Nigeria.

Jacob, O.I. (2013). *Food Insecurity in Nigeria: Way Forward*. Department of Economics University of Jos, Plateau State, Nigeria. International Multi disciplinay Journal, Ethiopia. Vol. 7 (4). Serial No. 31, September, 2013. Pp. 26-35.

Kirwan, J., and Maye, D. (2013). Food Security Framings within the UK and The Intergration of Local Food Systems. *Journal of Rural Studies. 29, 91-100.*

Maharjan, K.L., and Chhetri, A.K. (2006*). Household Food Security in Rural Areas of Nepal: Relationship between socio-economic characteristics and food security status*. Paper Presented at the International Association of Agricultural Economists' Conference, Gold Coast. Australia. August 12-26.

Mele, C., Pels. J. & Polese, F. (2010). A brief review of system theories and their managerial applications retrieved from; http// pubs online. informs. org/doi/pdf/10.1287/serv.2.1-2.126

Omonona, B.T., and Agoi, G.A. (2007). An Analysis of Food Security Situation Among Nigeria Households: Evidence from Lagos State, Nigeria. *Journal of Central European Agriculture,* Vol. 8, No.3 Pp. 397-406.

OECD (1997b) Final Report of the Ad Hoc Working Group on Participatory Development and Good governance, Part2: Lessons from Experience in Selected Areas of Support for Participatory Development and Good Governance, OECD, Paris.

OECD (1997a) Final Report of the Ad Hoc Working Group on Participatory Development and Good governance, OECD, Paris.

Oyebanjo, O., Ambali, O. I., and Akerele, E.O. (2013*). Determinants of Food Security Status and Incidence of Food Insecurity among Rural Farming Households in Ijebu Division of Ogun State, Nigeria.* J. Agric. Sci. and Env., Vol. 13, pp.92 -100.

Oluwatayo, I.B. (2012). Gender Considerations in Decision Making in Rural Nigeria. Implications on Households Food Security in Ekiti State. *Multi disciplinary Journal of Empirical Research. 2 (1). Pp. 21-30.*

Okon, U.E., Frank, N.N., Etowa, E.B., and Nkeme, K.K. (2017). Household Level Food Security States and it's determinants among rural farmers in Akwa Ibom State, Nigeria. *Agricultural Science Journal Vol.7 (10): 297-303. October, 2017.*

Oluyole, K.A., Oni, O.A., Omonona, B.T., and Adenegan, K.O. (2009). Food Security among Cocoa Farming Households of Ondo State, Nigeria. *Journal of Agricultural and Biological Science. Vol.4. No.5, Pp. 7-13.*

Okwoche, V.A., Asogwa, B.C., Obinne, P.C. (2012). Evaluation of Agricultural Credit Utilization by Cooperative Farmers in Benue State of Nigeria. *European Journal of Economics, Finance and Administrative Sciences. April 2012.*

Shala, A., and Stacey, E. (2001). United States Department of Agriculture: Economic Research Service. *Food Security Assessment, Regional Overview Information Bulletin.*

United Nations Integrated Regional Information Network (2002): Food crises Aggravates spread of HIV.

Shehu, A.A., Maurice, D.C., Yohanna, I., and Stephen, F.S. (2012). Analysis of Resource – use Efficiency in Rice Production for Food Security among Farmers in Yola South Local Government Area of Adamawa State, Nigeria. *Savannah Journal of Agriculture. 7 (1). Pp. 104 – 109.*

United Nation Development Programme, UNDP (2002). Human Development Report. New York: Oxford University Press.

World Bank (1986). *Poverty and Hunger: Issues and Options for Food Security in Developing Countries*. Washington DC.

World Bank (1992): Good Governance and Development. Washington D.C www. documents worldbank.org.1992/04.

World Bank (1989) from crisis to sustainable growth - sub–Saharan Africa: a long-term perspective study. Washington, DC: The World Bank.