

The Place of Extension Services in the Implementation of Third National Fadama Development Programme in Anambra State Nigeria 2008-2017

Nduka, Christopher Ndidi¹ And Emma E.O. Chukwuemeka²

Department of Public Administration, Nnamdi Azikiwe University Awka

E-mail chrisndnduka@gmail.com¹, ee.chukwuemeka@unizik.edu.ng²

Abstract: *This study was carried out to investigate the place of extension services and implementation of third National Fadama Development Programme Anambra State, Nigeria. The study was conceived out of the perennial food shortage in Anambra State and Nigeria at large. The non-purposive sampling technique was used for the study. Survey research method was adopted and questionnaires were administered to 396 Fadama beneficiaries and Fadama staff in the Ministry of Agricultural and Rural Development, Awka. Data obtained was analyzed using simple percentage, mean, standard deviation while ANOVA and regression analysis were used for hypotheses testing. The study revealed that lack of skilled manpower for extension services have significant effect on the implementation of the FADAMA programme. In the light of the foregoing findings, the researchers recommend the skilled technical staff should be recruited and monitored to ensure the implementation of the FADAMA programme achieve the intended objectives.*

Keywords: Extension services, agriculture, technical staff, policy implementation

1.1 Introduction

With the discovery of crude oil in Nigeria and the subsequent oil boom in the 1970s, far less attention was given to agricultural sector which hitherto had been the foreign main income earner for Nigeria. With the resultant decline in agricultural production, Nigeria became a net importer of both food items and agro-allied raw materials. The cumulative effect of this situation is that the agricultural sector failed to perform its traditional functions effectively. To meet up with the crisis, both the federal and state governments formulated several policies and embarked on a variety of agricultural programmes aimed at improving the capacity of the agricultural sector. This new interest is demonstrated by the establishment of the Operation Feed the Nation, Green Revolution, the Directorate of Food, Road and Rural Infrastructure, the River Basin and Rural Development Authorities and the World Bank assisted Agricultural Development Programme and current Fadama programme (ADP) (Okereke, 2000)

The 1st National Fadama Development Programme (Fadama1) sponsored by the World Bank was introduced on February 23, 1993 and closed on March 31, 1999. The second National Fadama Development Programme became effective in 2004 and had wound up following the full take off of third National Fadama Development Programme (Fadama111) in 2008. Fadama means “a land that is capable of being irrigated”. Usually, it refers to low-level plains located by water-bearing rocks, also known as aquifers. Fadama is typically water logged during the rainy season. The areas are considered to have potential for economic development through appropriate investments in infrastructure, household assets and technical assistance (Nwachukwu, Agwu, Ezech & Kamalu, 2008). Fadama is a Hausa word meaning *a valley-bottom, flood plain or a low land around a river*. Fadama usually flood naturally but the term also applies to areas where people have channeled or pumped water for their farms or other purposes. Fadama means irrigable land usually low-lying plains underlay by shallow aquifers found along Nigeria’s major river systems. Such lands are especially for irrigated production, feed and water for livestock. The enormous land is only partially developed (Fadama. net.). Fadama Programme is a World Bank Assisted Poverty Reduction Programme involving agricultural diversification.

The programme development objective is to sustainably increase the income of Fadama users or beneficiaries, i.e., those who depend directly or indirectly on Fadama resources. The target beneficiaries include:

1. The rural poor engaged in economic activities (crop farmers, livestock farmers, fishermen or fish farmers, traders, processors, hunters, gatherers, artisans etc.).
2. The disadvantaged groups (women, widows, the physically challenged, sick, elderly, People Living with HIV& Aids (PLWHA), and other vulnerable groups).
3. Service providers (Government agencies, private operators, professional/semi-professional associations). The strategy is demand-driven approach (bottom-up approach) whereby all users of Fadama resources would be encouraged and

assisted to develop a participatory and socially inclusive local development plans (LDPs). The LDPs are the only bases for support under the programme (Fadama 111, Anambra state, 2009).

1.2 Statement of the Problem

Despite many development programmes which past governments had initiated and implemented by 1999 when the civilian government of President Obasanjo came to power, a World Bank Report indicated that Nigeria's Human Development Index (HDI) was only 0.416 and that about 70 percent of the population was vegetating below the bread line (NAPEP, 2010). In 2008, the Human Development Index (HDI) was still as low as 0.481 (low human development index) (Abdu, 2017). These alarming indicators prompted the Federal Government to review the existing National Fadama Development Programme. In 2008, the third National Fadama Development Programme (Fadama 111) was established being the third phase of the programme. It is now about ten years since the establishment of the third National Fadama Development Programme in Anambra State. And the human development index still remained as low as 0.527 by 2016 and 70 percent of Nigerians live below the poverty line (Ajulor, 2018). It is not yet clear, if the objectives for the establishment of Fadama as a policy have been fulfilled due to implementation problems. The content of fadama programme has many objectives to achieve at the same time. This really constitutes obstacles in the implementation of the programme. The programme started with numerous goals to achieve at the same time which affected the implementation of the programme, doubts still exist whether the programme has bettered the life of the people. Various governments in Nigeria have the obvious tendencies of pursuing multiple goals that in most cases are complicated and policy goals often lack clarity and consistency with demands of the people (Ahmed & Dantata, 2016).

There are worries that the context (environment) in which administrative action was pursued affected the implementation of third National Fadama Development Programme as a public policy (i.e. decision-making units, implementing units, disposition of implementers, complexity in policy characteristics and regime characteristics). There are many decision-making units which are involved in the implementation of the programme. These are World Bank representatives, Minister of Agriculture, National and State coordinators, and Bureaucratic implementers at national and state level. More worrisome to the various challenges of the state government in ensuring development of Anambra State is that the state government through Fadama programme loaned improved rice seeds and other agro allied chemicals to Fadama farmers or beneficiaries, but unfortunately, they failed to pay their counterpart funds which scuttled the implementation of the programme for the development of Anambra State.

In addition to the above challenges of Fadama programme is lack of skilled technical staff for extension services. The Fadama programme has no single qualified extension personnel that would have trained and educated the Fadama famers on how to use modern farming technology or techniques for modern farming (Nwankwo, 2018: Head Implementation and Evaluation Department (I&E)), but facilitators were appointed to act as extension agents. The number of farmers or farm families which the extension agent (EA) is capable of reaching at a particular time and period in all the states in Nigeria is limited, and the number varies between 1 Extension Agent (EA) to 800 Farmers and 1 EA to 1200 farmers (Ajuka, Anyim & Ijioma, 2015). These problems identified above in this study are among the major challenges affecting the implementation of Fadama 111 Programme for the development of Anambra State.

1.3 Objectives of the Study

- i. To examine the extent of relationship between lack of skilled technical staff for extension services for implementation of third National Fadama Development Programme and the development of Anambra State.
- ii To proffer solution to the which will help to reposition the FADAMA programme in Anambra State Nigeria.

1.4 Hypothesis

- i. : There is significant relationship between lack of skilled technical staff for extension services for implementation of third National Fadama Development Programme (Fadama 111) and the development of Anambra State.

2.0 Literature Review

2.1 Concept of policy implementation and Nigerian development

Ajulor (2018) states that policy implementation is the process of changing a formulated policy into reality. It provides the operational area of function in carrying out public policy declared by competent authority. In the execution of public policy, the combination of human, material, machine, and money is highly necessary.

To Yusuf, Salako, Adedina, Ogunbayo and Oni (2017) citing (Ijeoma) public policy refers to government decisions designed to deal with various social problems like unemployment, crime, environmental protection, foreign policy etc. Yusuf et.al, (2017) propose that a policy is a definite course or method of action selected from and in the light of given conditions to guide and usually determine present and future decisions.

According to them, policy implementation involves series of activities that are directed towards putting programmes to the necessary personnel, logistic support and funds which will enhance the actualization of the policy objectives.

Yusuf et.al, 2017 maintain that successful implementation of a policy depends on the following:

1. Its policy must be effectively communicated e.g. from the government to the relevant body that has the power to enact and implement it.
2. The policy must be clearly communicated and easy to interpret if it is to be implemented effectively. Too much ambiguity can truncate the implementation of the policy.
3. Finally, the resource applied to implementation must be integrated into the existing processes and agencies. This is the point where adopted policy model plays significant roles in the successful implementation of the policy. Public policy is very critical since it is the spring board to development (Yusuf et.al 2017). In the opinion of Yusuf et.al, in the Nigerian context, policy making is easily made but the issue of proper implementation to achieve the developmental objectives is the problem that needs attention. They conclude that the problem with Nigeria is not policy formulation but that of implementation.

Obodo (2016) quoting Clark defines public policy as “a series of steps taken by a government to solve problems, make decision, and allocate resources or implement various policies and in general to do the things expected of them by their constituencies.

Iyanda and Bello (2016) citing Egonmwan view implementation as the process of converting inputs financial, information, materials, technical, human, demand and support etc into outputs-“goods and services”.

Neera, Yufang, Yao, Liyum and Yongpin (2017) define policy as the laws, ordinances, and rules, as well as the government (or other) support to implement projects on the ground. According to them, the definition of policy can be described as the ability to apply control over the issue being addressed in a defined geographical area (village group, administrative village, township) in relation to specific social groups (domestic water users, agriculture water users, village groups), instrument (government funds, private sector support), actors (village group leaders, village leaders, township water managers) and mechanisms (projects, infrastructure, and technologies) for successful operation.

According to Chukwuemeka (2013) the term “policy is government/public oriented. Individuals do not make policy, but make decision. Chukwuemeka defines public policy as pronouncements of government intentions by people in positions of public trust, demanding negative or positive response from the majority of the members of a given society. Public policy is a statement about future events. Henry (2013) asserts that Public Policy is a course of action adopted and pursued by government. According to Chukwuemeka (2013), Implementation of policy refers to those activities directed towards putting a project into effect. The process involves organizing the bureaucracy, marshalling out resources, assigning duties and responsibilities and also making interim decisions. It is usually at the policy implementation stage that interested groups and individuals become aware of the assistance of a new policy and usually try to push for either its modification or total rejection. Henry (2013) defines implementation as the execution and delivery of public policy by organizations or arrangements among organizations.

In the view of Vedanta and Kamruddian (2015), policy can be broadly defined as a proposed course of action of an individual, a group, an institution or government to realize a specific objective or purpose within a given environment. They further posit that public policies are government decision, and are actually the result of activities which the government undertakes in pursuance of certain goals and objectives. They maintained that public policy formulation and implementation involves a well-planned patterns or course of activity. It also requires a thorough close-knit relation and interaction between the important governmental agencies viz: the political executive, legislature, bureaucracy and judiciary. The objective of public policy is always and for all times the betterment of the entire society. Public policy is the chief instrument of a politically organized community.

According to them, the following will make the nature of public policy clearer:

- i. Public policies are goal oriented. Public policies are formulated and implemented in order to attain the objectives which the government has in view for the ultimate benefit of the masses in general. Those policies clearly spell out the programme of the government.
- ii. Public policy is what the government actually decides or chooses to do. It is the relationship of government units to the specific field of political environment in a given administrative system. It can take a variety of forms like law, ordinances, court decisions, executive orders, decision etc.
- iii. Public policy is positive in the sense that it depicts the concern of the government and involves its action to a particular problem on which the policy is made. It has the sanction of law and authority behind it. Negatively, it involves a decision by the government officials regarding not taking any action on a particular issue (Vedanthan & Kamruddian, 2015).

Onah (2013) refers to public policy as any plan programme or project embarked upon by the government to achieve specific goals or objectives. She maintained that in Nigeria, public policies include government plans and programmes in agriculture, health, industry and pension.

Ezeani (2006) defines public policy as a proposed course of action which the government intends to implement in response to a given problem or situation confronting it. It is statement of what government wants to do or what it will not do.

In a similar pragmatic approach, Anderson (2003) defines policy as a relatively stable, purposive course of action followed by an actor or set of actors in dealing with a problem or matter of concern. He maintains that this definition focuses on what is actually done instead of what is only proposed or intended, differentiates a policy from a decision, which is essentially a specific choice among alternatives; and views policy as something that unfolds over time. According to him, public policies are those developed by governmental bodies and officials. (Non- governmental actors and factors may of course influence public development).

The special characteristics of public policies stem from their being formulated by what a political scientist, David Easton, has called the “authorities in a political system, namely: “elder, paramount chiefs, executives, legislators, judges, administrators, councilors, monarchs, and the like” (Anderson, 2003). These authorities are, the persons who “engage in all daily affairs of a political system” and are “recognized by most members of the system as having responsibility for these matters,” and take actions that are “accepted as binding most of the time by most of the members so long as they act within the limits of their roles as quoted by (Anderson 2003). Anderson further said that public policies are those produced by government officials and agencies. They also usually affect substantial number of people.

2.2 Concept of Development

Ahmed and Dantata (2016) define development as multi-faceted phenomena that are concerned with total transformation of the political, economic, social and cultural aspects of the society that require commitment and structure conducive for the implementation of development programmes.

According to Okoye (2014) in his “Tradition Economic Measure of Development”, the term development means the capacity of a national economy, whose initial economic condition has been more or less static for a long time, to generate and sustain an annual increase in its gross national product at rates of perhaps five to seven percent or more. According to him, Economic view of Development in this perspective is defined in terms of the reduction or elimination of poverty, inequality and unemployment within the context of a growing economy. But, beyond narrow economic criteria, development must be conceived of as a multidimensional process involving major changes in social structures, popular attitudes and national institutions, as well as the acceleration of economic growth, the reduction of inequality and eradication of poverty (Okoye, 2014).

Okoye (2014) asserts that development is the sustained evaluation of an entire “human life. For clarity, at least three basic components or core “values” should serve as a conceptual basis and practical guideline for understanding the “inner” meaning of development. These core values are life sustenance, self-esteem and freedom from servitude. These core values represent common goals sought by all individuals and societies. They also relate to the fundamental human needs which find their expression in almost all societies and cultures, at all times.

Ewuim (2012) states that development is a multidimensional and sectoral process which involves the total re-organizational and re-orientation of the entire economic, social, physical and infrastructural systems. She further defines development as the means of efficient and effective utilization of the available resources (Men, material and money) in such a way that the entire

populace will have equal opportunity to meet the basic needs of food, shelter, and clothing, plus good governance and the right to work now and in the future.

Ewuim also says in the views of the United Nations, development means capacity building and empowerment. According to the body, it is only when people are empowered that they would be able to receive the benefits of development. In other words, people play important roles in the course of development. This is because they are not only the target of developmental programmes, but they are also the instrument of development. This underscores the fact that people are the human resources, the physical labour and also constitute the technical and professional skills. Therefore, people are labour in the classical categorization of labour and capital as the prime movers of social and economic development.

Nze (2010) says that development is multidimensional process involving the reorganization and reorientation of the entire social and economic system. It involves a radical change in institutional, social and administrative structures. It also involves the reorganization of the political structure, attitudes, customs and beliefs. Therefore, we have to see development in systematic teams, social, economic, political administrative and cultural systems, and their reorientation for better human condition, that is, reduction of inequality and eradication of poverty (Nze, 2010).

Finally, development also means making sure that the future is sustainable (Nze, 2010). Sustainable development means meeting the needs of the present generation without compromising the needs of future generation (Jhingan, 2011).

2.3 Policy Thrust of Third National Fadama Development Programme

The programme development objective is to sustainably increase the income of Fadama users or beneficiaries, i.e., those who depend directly or indirectly on Fadama resources. The target beneficiaries include:

1. The rural poor engaged in economic activities (crop farmers, livestock farmers, fishermen or fish farmers, traders, processors, hunters, gatherers, artisans etc.).
2. The disadvantaged groups (women, widows, the physically challenged, sick, elderly, People Living with HIV& Aids (PLWHA), and other vulnerable groups).
3. Service providers (Government agencies, private operators, professional/semi-professional associations). The strategy is demand-driven approach (bottom-up approach) whereby all users of Fadama resources would be encouraged and assisted to develop a participatory and socially inclusive local development plans (LDPs). The LDPs are the only bases for support under the programme (Fadama III, Anambra State, 2009).

According to Adesina (2012), the National Economic Management Team has unveiled an Agricultural Transformation Agenda Policy for the development of the country. The focus is to assure food security, reduce expenditure of foreign exchange on food imports, diversity the economy, generate foreign exchange and create jobs. The agenda is focused on major policy reforms to eliminate corruption in the seed and fertilizer sectors through E-Wallet System, improve the functioning of market institutions, establish stable crop processing zones to attract private sectors into areas of high production, to reduce post-harvest losses, add value to locally produced crops and foster rural economic growth. And also, to treat agricultural endeavour as an investment which must generate return like any other viable business and using bottom-top approach to engender accountability and delivery of results in the entire programme.

In addition, the agenda includes improvement in rural infrastructure and access of farmers to financial services and markets. The transformation agenda sets out to create over 3.5 million jobs in the agricultural sector from rice, cassava, sorghum, cocoa, tomato, cotton, maize, soybean, oil palm, cassava livestock, and fisheries with many more jobs to come from other value chains under implementation. Adesina, the former minister for Agriculture and Rural Development further stated that between 1980 and 2010, the federal and state governments had spent over N873 billion on fertilizers subsidies. And out of this amount, Nigeria has lost N776 billion to corruption and fertilizer racketeering within the period. The transformation from rustic farming to mechanized agriculture which requires empowering local farmers to adopt modern and cost-effective technologies is now vigorously pursued (Adesina, 2012).

In 2013, the Federal Government approached the World Bank with Agricultural Transformation Agenda (ATA) Policy for additional support fund, and this fitted into the development programme of the World Bank. The World Bank-Federal Government Fadama 111 Programme entered into a new phase tagged Fadama 111-Additional Financing (AF). This new phase began in February, 2014 and ended in December 31st, 2017. The principal aim of Fadama 111 AF was to align with the activities of the agricultural transformation Agenda (ATA) of the Federal Ministry of Agriculture and Rural Development focusing on production and linkage to market. Six states, namely: Anambra, Enugu, Lagos, Niger, Kogi and Kano were

selected as core states for implementation of Fadama 111-AF. Selected crops of intervention were rice in Badagi in Niger state, cassava in Alape in Kogi state, tomatoes, rice and sorghum in Kano state, rice in Ketu Eregun Epe, Lagos; rice in Adani in Enugu state and rice in Omor, Anambra state. (Fadama 111 AF News, 2014).

3.1 Methodology

The study adopted survey research design. Questionnaire, focus group discussion guide, observation and face to face interview were the main data collection tools used. Data analysis tools includes simple percentages, mean, and standard deviation for descriptive analysis, while ANOVA and regression analysis were used for inferential analysis and testing of hypothesis.

In this chapter, we presented and analyzed the data generated from the empirical investigation carried out on the Implementation of Fadama III in Anambra State. The purpose of the empirical investigation was to generate the data needed to solve the problem raised in chapter one as well as to provide adequate information to test the three hypotheses formulated also in chapter one.

4.1 Data Analysis, findings and recommendations

4.2 Lack of Skilled technical staff for Extension Services

The Table 4.2 reveals that the majority (68.4%) of the respondents either agree or strongly agree (Mean = 3.89, Standard deviation = 0.714) that irregular visit and supervision of Fadama farmers by extension agents/ Facilitators affected their large-scale production. Almost 75% of the respondents either agree or strongly agree 0.735 that Fadama farmers don't know how to apply fertilizers due to lack of extension education. The Grand mean = 3.72 and standard deviation = 0.494 indicating that overall, the respondents agree that there is significant impact of lack of Manpower cum extension personnel.

Table 4.2 Lack of Skilled Manpower for Extension Services

		Percentage of Respondent%					Mean	Standard deviation	Decision
		SA	A	U	D	SD	Mean	Standard deviation	Decision
	Variable: Lack of manpower. No of items = 8. Valid Response = 392.								
1	The fadama farmers' poor understanding and application of technologies affected their large-scale production.	24.5	51.3	24.2	0.0	0.0	4.00	0.699	Agree
2	Irregular visit and supervision of fadama farmers by extension agents affected their large-scale production.	20.4	48.0	31.6	0.0	0.0	3.89	0.714	Agree
3	Fadama farmers don't know how to use pesticides due to lack of extension workers' training.	25.3	49.7	25.0	0.0	0.0	4.00	0.710	Agree
4	Fadama farmers don't know how to apply fertilizers because of lack of extension training.	23.5	51.3	23.5	1.8	0.0	3.96	0.735	Agree
5	Fadama farmers don't know how to use irrigation method of farming due to lack of extension education.	24.0	46.9	25.0	4.1	0.0	3.91	0.804	Agree

6	Fadama farmers are unable to embrace mechanization because of lack of extension training.	23.2	48.7	25.0	3.1	0.0	3.92	0.775	Agree
7	Agricultural extension contributes to increase agricultural production in quantity and quality.	21.2	50.3	26.8	1.8	0.0	3.91	0.778	Agree
8	Fadama farmers don't need extension training and education.	0.8	8.7	15.8	52.0	22.7	2.13	0.887	Disagree
	Variable (Grand) Mean and standard deviation						3.72	0.494	Agree

Source: Field survey 2018

4.3 Hypothesis testing

There is significant relationship between the use of skilled technical staff for extension services and Fadama development in Anambra

$$\text{Development} = \beta_0 + \beta_1 \text{fund} + \sum_1$$

$$H_0: \beta_1 = 0 \text{ vs } H_1: \beta_1 \neq 0$$

Variable	Beta Coefficient	Std. Error	t-statistic	Prob. (sig)
Constant	2.472	0.222	11.145	0.000
Funds	0.022	0.060	0.385	0.700
R ²	0.000409			
F. statistic	0.160			
Durbin-Watson (DW)	1.71			

Source: SPSS Version 20, E-views

From table 4.3 the beta coefficient corresponding to recruitment of skilled technical staff for extension services is positive (0.022), suggesting a positive relationship between the dependent and independent variable. However, the t-statistic is too low and its associated probability is well above 0.05 ($t = 0.385$, $p = 0.700$), indicating the relationship between the use of skilled technical staff and implementation of Fadama 111 and the development of Anambra State is not significant. The table also indicates that the regression line is very poorly fitted ($R^2 = 0.000409$) and positive autocorrelation ($DW < 2$) may be present in the model. The null hypothesis is therefore not rejected.

5.1 Summary of Findings

The findings revealed ($t = -1.257$, $p > 0.1$), indicating the relationship between content of the policy on the implementation of third National Fadama Development Programme and the development of Anambra State. This shows that the content of the policy has significant effect on the implementation of third National Fadama Development Programme and the development of Anambra State.

The study equally revealed ($t=0.0227$, $p>0.05$), indicating the relationship between lack of skilled manpower for extension services for the implementation of the third National Fadama Development Programme and the development of Anambra State. This shows that there is significant relationship between lack of skilled extension services for the implementation of third National Fadama Development Programme and the development of Anambra State.

The study discovered ($t=0.385$, $p>0.050$) which shows the relationship between the non-payment of counterpart funds for the implementation of the third National Fadama Development Programme and the development of Anambra State. This therefore indicated that there is significant relationship between the non-payment of counterpart fund by beneficiaries for implementation of Fadama 111 and the development of Anambra State.

5.2 Conclusion

The intended objective of Federal government for establishing the third National Fadama Development Programme is to develop Nigeria by increasing local production of agricultural items like: rice, cassava, tomatoes, wheat, soya, maize, poultry and livestock in order to achieve food security and self-sufficiency and become net exporters of rice in 2018, tomato paste in 2016, and wheat in 2019.

The study concludes that implementation of third National Fadama Development Programme was established to better the lives of the Nigeria citizens. This is obvious, if the fadama beneficiaries adequately pay their counterpart funds, and skilled manpower for extension services equally made available.

5.3. Recommendations

The third National Fadama Development Programme (Fadama 111) has many objectives or targets in its content. These have effect on the implementation of the Fadama III programme. We therefore recommend as follows:

1. The skilled manpower for extension services should be made more relevant to beneficiaries through the use of well trained, adequate and staffing. The use of participatory extension approach under stable policy and sustainable institutional arrangement should be practiced. More so, there should be training workshops on internet and communication technology (ICT) usage, and computer appreciation should be organized for all extension agents or facilitators. This would bring the extension agents/facilitators, irrespective of their education status up to date on the use and application of ICT for improved extension service delivery in Anambra State.
2. The government should apply strict measures and punishment against Fadama beneficiaries who fail to pay their counterpart funds. With this, they would buckle up and pay their counterpart funds so that the programme will continue to flourish for proper development of Anambra State.

References

- Abdu, M. (2017). Human development index: a paradox for the Nigeria economy. *International journal of advanced studies in business strategies and management*, 5 (2), 1-11.
- Adama, J. C. (2014). Economic viability of using crawler tractor bulldozer as agricultural bush clearing machinery in the derived savannah zone of Nigeria. *Journal of Applied Agricultural Research*, 6 (2), 39-45.
- Aderinola, E.A. (2010). Land-tenure systems and the Future of food production in Nigeria. In F.C Nze (ed.). *Development and public policy in Nigeria futurist scenarios*. Zaria: Tamaza publishing.
- Adewunmi T. (2018, April 30), Fadama 111 AF: Bridging the Gaps in Food Security, Providing jobs in South East, Aljahirah Nigeria. Retrieved from aljahirahnews.com/fadama-111-of-bridging-the-gap.
- Adewunmi, T. (2014) 1st Word Bank Federal Government of Nigeria Fadama 111. Retrieved from <http://www.ajo/info/index.php.njbas/index>.
- Agbam, J. U (2002). Agricultural research extension-farmers linkages in Japan: Policy issues for sustainable agricultural development in developing countries. *International Journal of Social Sciences and Policy Issues*, 1 (1), 25-26
- Agbarevo, M. M. B & Okwoche, A. V. (2014). Evaluation of Effect of the third National Fadama Development Programme (Fadama 111 on food production among farmers in Kwande Local Government Area of Benue State, Nigeria. *European Journal of Agriculture and Forestry Research*, 2 (2), 27-32.
- Agunloye, T.O., Fasina, O.O & Akinnagbe, O.M. (2017). Effects of National Fadama 111 Programme on scope and scale of beneficiaries Farming activities in South West, Nigeria. *Journal of Agricultural Extension*, 21(2), 21-34.
- Ahamefule, B.A; Offor, E.I & OKafor, U.A. (2017) Determinants of poultry farmers decision to utilize credit: A case study of Abia State. *The Nigeria Agricultural Journal*, 48(1), 159 -166.
- Ahmed, I.K. & Dantata, B. S. (2016). Problems and challenges of policy implementation for national development. *Journal of Research and Humanities and social sciences*, 6(15), 60-65

- Aishwarya, B. (2017). Retrieved from: <https://borgenproject.org/national-fadama-development-project>.
- Ajayi, O. (2015, February 1). The Goodluck Jonathan Agriculture Revolution. *Vanguard*. Retrieved from <https://www.vanguardngr.com/2015/02/goodluck-jonathan/revolution>.
- Chukwemeka, E.E.O. (2013). *The substance of public administration in Nigeria*. Enugu: A professor's press
- Chukwemeka, E.E.O. (2002). *Research methods and thesis writing A multi-disciplinary Approach*. Enugu: HRV Publishers.
- Cooper, D. R. & Schndler, P. S. (2011). *Business research methods*. M.C Graw Hill/IVWIN: New York, CA.
- Ekpere, J.A & Durant, Jr; T.J (1999). Agricultural extension and rural sociology. In Anthony Youdeowei, F.O.C Ezedinma & O. C. Onazi (eds). *Introduction to tropical agriculture*. England: Longman press.
- Ekwe, K. C., Ukpai, K. & Ahumihe, P. O. (2017). Small scale processors' engagement incassava post-harvest and households' food provision in Imo State, Nigeria. *Nigeria Agricultural Journal*, 48(1), 152 – 158.
- Ewuim, N.C (2012). *Urban administration and development: Theory and practice*. Nimo: Rex Charles and Patrick.
- Ezeani, E.O. (2006). *Fundamentals of public administration*. Enugu: Ziks-Chuks Publishers.
- Federal Ministry of Agriculture and Rural Development. (2014). Fadama 111 af news Abuja, Nigeria: Author.
- Federal Ministry of Agriculture and Rural Development. (nd). Fadama 111 AF: National fadama coordination office. Retrieved from <https://fadamaaf.net>
- Henry, N. (2013). *Public Administration and public Affair*. New Jersey: Pearson Prentice Hall.
- Igbozurike, M. (2010). Extending the research of socio-economic opportunities in rural Nigeria, policy ideas for the future. In F.C. Nze (ed.) *Development and public policy in Nigeria: Futuristic scenarios*. Zaria: Tamaza Publishing.
- Ingram, H. (1990). Implementation: A review and suggested framework. In Naomi Lynn & Aaron Wildavesky (eds.) *Public Administration: The state of the Discipline*. New Jersey, CA: Chatham House Publishers.
- Iwena, O.A (2015). *Essential agricultural science for senior secondary schools*. Ibafo: Tonad publishers.
- Jhingan, M.L. (2011). *The Economics of development and planning*. India: Vrinda Publication
- Johnson, D. T. (1990). *The business of farming: A guide to farm business management in the Tropics*. London: Macmillan education.
- Kanu, R.U., Obioma, O.N. & Mazza M. (2011). Comparison of youth farmers utilization of agricultural farm land in Benue and Abia States, Nigeria. *The Nigerian Agricultural Journal*, 48(1) 90 -95.
- Makinde, T. (2005). Problems of policy implementation in developing nations: The Nigerian experience. *Journal of Social Science*, 11 (11): 63 – 69.
- Mazza, M., Agbarevo, M.N.B. & Ifenkwe, G.E. (2017). Effect of national special programme on food security on the productivity on small-holder cassava farmers in South-Eastern, Nigeria. *Agricultural Journal*, 48 (1), 59-65.
- Mazza, M., Ekumankama, O. O. & Okezie, A. (2015). Effect of second national fadama development programme on farmers productivity in Imo State, Nigeria. *Journal of National Sciences Research*, 5 (3), 69-74.
- Mohan, P. C. (2002). The national fadama development project, Africa Region: Finds and good practice. Washington D. C, CA: World Bank
- Mohd, A. (2013). Efficient policy in India. *Journal of Public Administration and Policy Research*, 5 (6), 141-144.
- Muhammad, H. U., Umar, B.F., Abubakar, B. Z. & Abdullahi, A. S. (2011). Assessment of factors influencing beneficiary participation in fadama 11 project in Niger State. *Nigerian Journal of Basic and Applied Science*, 19 (2), 248-252.
- Mulogony, K & Merckx R. (1993). *Soil O organic matter dynamics and sustainability of tropical agriculture*. United Kingdom: John Willey
- National Poverty Eradication Poverty. (2010). *A blue print for the schemes*. Abuja, Nigeria: Government printers.
- Neera, S. P., Yufang, F. Liyum, Z. & Yongpin, Y. (2017). Analyzing the effectiveness of policy implementation: A case study of management of the drought in Yunnan Province, China: 2009-2010. *International Journal of Disaster Risk Science*, 8 (1), 64-77.
- Nigerian Bureau of Statistics. (2010). Household and micro enterprise: Retrieved from <https://tradingeconomics.com>
- Nigerian Bureau of Statistics. (2016). Demographic statistics bulletin. Retrieved from <https://nigerianstat.gov.ng>
- Nigerian Bureau of Statistics. (2018). Nigerian Gross Domestic Product Report, Q2 2018: Retrieved from <https://www.indexmundi.com>
- Nwachukwu, I. N., Nnanna, M., Ezech, C. I., Mbanasor, J. A., Onyenweaku, C. O. & Kamalu, C. E. (2012). Retrieved from <https://www-research-gate-net-publication/123805209-evaluation-of-second-national-fadama-development-project-in-Nigeria-A>.
- Nwachukwu, I.N., Agwu, N.M; Kamalu, C.E. & Ezech, C. I. (2008). Evaluation of second national fadama development project in Nigeria: A rapid policy appraisal. Retrieved from <https://www.researching.net/publication/23805209-evaluation-of-second-national-fadama-development-project-in-Nigeria-a-rapid-policy-appraisal>.
- Nwokocha, I.N., Onuekwusi, G.C. & Asumugha, G.N. (2017). Assessment of food crop farmers participation and performance in West African agricultural productivity programme in Abia State, Nigeria. *Nigerian Agricultural Journal*, 48 (172-79).
- Nwosu, C. S., Onyenekwe, R.U., Onoh P.A & Ekechukwu, E.C. (2015). Analysis of the role and level of job performance among extension agents in technology delivery in Imo State, Nigeria. *Nigerian Agricultural Journal* 46(1 &2), 146-173.

- Nze, F.C. (1982). Agricultural Development Policy in Nigeria (1975 - 1980). Goals, objectives and performance. *Philippine Journal of Public Administration*, (XXVI)1, 35-57.
- Nze, F.C. (2010). *Public policy analysis*. M.sc. lesson note, Awka, Nigeria: Nnamdi Azikiwe University.
- Obodo, N.A. (2016). Challenges of policy implementation in Nigeria: A case of monetization policy. *International Journal of Social Sciences and Management Research*, 2(1), 57-67.
- Okeke, T. C., Olise, M.C and Eze, G.A (2014). *Research methods in business resources and management sciences*. Enugu, Nigeria: Goder ventures.
- Osualla, E.C (2001). Introduction to research methodology. Onitsha, Nigeria: Africana First Publishers Ltd.
- Philips, A.O., Tunji, T.S. & Akande, S.O. eds. (1998). *Crop production trends and variability in Nigeria: 1990 – 1995*. Ibadan, Nigeria: Nigerian Institute of Social and Economic Research.
- Political Line (2013). Top-down and Bottom-up Approaches within implementation. Retrieved from <https://politicalpipeline.wordpress.com/2013/02/21/top-down-and-bottom-up-approached-within-implementation/>
- Pongthon, P., Masahiro Y. & Kenji, H. (2014). Factors affecting the implementation of good agricultural practices among coffee farmers in Chumphon Province, Thailand. *American Journal of Rural Development*, 2 (2), 34-39.
- Progress Report : President Goodluck Jonathan's administration (Brochure). (2012). Retrieved from <https://www.premiumtimes.ng.com/docs/download/president>.
- Sahay, J. (2004). *Elements of Agricultural Engineering*. Delhi, India: Standard Publishers.
- Simonyan, J.B. (2015). Differentials in returns and adoption of improved cassava varieties by farmers in Umunneochi Area of Abia State, Nigeria. *Nigeria Agricultural Journal*, (46)2, 23-38
- Taiwo, A. O., Agbasi, O. E., Udunze, U. & Okafor, I. P. (2014). Enhancing rural income in Nigeria through agriculture: A Study of farmers multipurpose Cooperative Societies in Orumba South Local Government Area of Anambra state. *Review of Public Administration and Management*, 3 (6), 214-224.
- Todaro, M.P & Smith S.C. (2011). *Economic Development*. England: Pearson Education.
- Twum, E (2013). Can policy adoption and transfer lead to policy implementation? Environmental financial assurance policy in Ghana. *Journal of Public Administration and Policy Research*, 5(6), 61-75.
- Udah, S.C., Nwachukwu, I.N. & Akpan, S.B. (2015). Appraisal of agricultural sub sectors growth in various policy regimes in Nigeria. *Nigerian Agricultural Journal*, (46)2, 45-59.
- Udude, C. (2013). Impact of poverty alleviation on the Nigerian economic growth. *Review of Public Administration and Management*, (22)4, 157-168.
- Ugwuonah, G. E., Odoemena, B. & Odo, F. O. (2009). Assessment of the impact of improved agronomic practices on rice productivity in Ebonyi State of Nigeria. *Nigerian Journal of Development Studies*, 7 (1), 1-16.
- Umeh, O.J., Igwe, K.C. & Anyim, A. (2018). Farmers knowledge of the role of extension services in Akwa –Ibom state, Nigeria. *Journal of Agricultural Extension*, 22(3). Retrieved from <https://dx.doi.org/10.4314/jae.v22i3.9>
- Vmallika, V. & Shaik, K. (2015). Good governance and public policy in India. *International Journal of Social Sciences*, 1 (1), 878-889.
- Yusuf, S.A., Salako, M.A., Adedina, L.O., Ogunbayo, T.O. & Oni, K.A, (2017). Erratic policy making, implementation and adoption of incremental model: Nigeria experience. *Global Journal of Arts, humanities and Social Sciences*, 5(1), 1-11.
- Zevbige, E. (2017, February 2). Nigeria fadama a 111 empowers 4,128 farmers in Edo. *DailyTrust*, Retrieved from <https://allafrica.com/stories/20170202050024.htm/>.