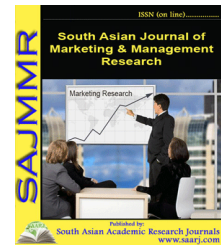


# South Asian Journal of Marketing & Management Research (SAJMMR)

(Double Blind Refereed & Peer Reviewed International Journal)



DOI: **10.5958/2249-877X.2021.00031.X**

## FADAMA III USER GROUPS; ANALYSIS OF ECONOMIC INTEREST ACTIVITIES IN RIVERS STATE, NIGERIA

**Abraham Anthony\***

\*PhD,

Department of Economics  
Federal University, Otuoke Bayelsa State,  
NIGERIA

### ABSTRACT

*Fadama was conceived on the idea of adoption and transfer of technology to achieve self-employment and improve qualitative agricultural productivity. This paper conducted an evaluation of Fadama activities in Rivers State. Information and materials were sourced from the Rivers State Fadama Coordinating Office, State Ministry of Agriculture, published articles and in-depth discussions. Descriptive statistics of frequency, percentages, bar graphs and pie chart were adopted to analyse the data. Findings show that in Rivers South East senatorial zone, thirty-seven aggregated economic interest activities were implemented. In Rivers West, thirty-four sets of fadama user groups' economic interest activities disaggregated into two-hundred and ninety-eight sub-set projects were found. Rivers East had thirty-seven sets of economic activities disaggregated into four-hundred and seventy sub-set projects. While Overall numbers of one-thousand, one-hundred and thirteen sub-projects were implemented in Rivers State under the Fadama III user groups economic interest activities. In the programme, the highest percentage activities were implemented on Rivers East. The rest percentages were implemented in Rivers South East and Rivers West respectively. The paper recommended that Fadma III programme should be extended to attract more economic interest activities to local governments that could not participate in during the third phase. Veterinary service centers and pet shops should be included in future agricultural programmes to reduce the cost of treating ailing livestock and create jobs for interested participants. Finally, government should expand the scope of rural infrastructure provision to boost participation in agriculture.*

**KEYWORDS:** *Analysis, Fadama III, User Group, Economic, Interest, Activities*

## INTRODUCTION

The emergence of fadama in Nigeria since 1993 was borne out of the pressure on Nigerians from the scorching unaffordability of agricultural produce and re-occurring famine that plagued the country before 1988 which forced the country to introduce the Structural Adjustment Programme (SAP). The diversification programme was not holistically pursued as it focused more on exchange rate earning economic activities and ignored the rural masses that were immersed in excruciating pains and poverty. The sustained increased food prices and employment called for both internal and external solutions, hence eventual adoption of the World Bank fadama programme. It is believed that the introduction of fadama phase 1 in the few states that implemented it reflected a success story (Ugwumba & Okechukwu, 2014). Fadama became a household name as its activities spread beyond the shores of implemented states. This singular fact gave rise to the acceptance of the second phase of fadama and consequently the third phase in 2009 which lasted till 2014, a period of five years.

Main content of Fadama programme lie in FUGs economic activities as an embodiment of agricultural productivity, self-employment and rural income generation. It is the spring board of fadama end-product. As a key to actualizing fadama objectives, it is organized to be all-inclusive in which both the physically challenged and other disadvantaged individuals were given opportunities to choose the type of economic activities to engage, spanning from rentals, artisanal, shoe-making, processing, to cultivation of wide range of farm produce. Fadama User Group (FUG) was designed to enable fadama beneficiaries who may not be related in fadama resources to come together. Such group encompasses both farming and non-farm economic activities. Upon formation, these groups decide on the area of Economic Interest Group activities (EIG) they may venture into wide range of agricultural activities available. Such productive agriculture may be cassava, palm oil processing, poultry, garden egg, vegetables and others.

The adoption of principles of good lending and credit have been considered as the major reason many borrowers found it difficult in accessing funds from banks (Ezirim & Emenyonu, 1998). In confirmation, Akinlo, (2011) aptly stated out as challenges, that “rural financing has remained a daunting task by banks due to resounding issues of lack of collateral, high transaction cost, illiteracy, credit information and others. Federal government being aware of the roles agriculture play in terms of rural income generation, food productivity and self-employment, and existing difficulties faced by rural dweller in accessing credit, decided to adopt an indirect measure in developing the rural areas by financing farmers in their chosen areas of economic interests and at the same time, provide rural infrastructure (mostly agriculture aiding infrastructure). In an attempt to actualize the above, fadama programme was considered as the most viable channel through which farmers in the rural areas can access funds to improve farming activities. Vividly observed are the good studies conducted by Izuogu & Tasi (2015): Nwachukwu, Okafor, Ogechukwu & Olabisi (2016) which looked at the incomes of fadama beneficiaries. However, these studies failed to; (i) consider the expenditure by fadama in realizing the objective of rural income generation of the beneficiaries, (ii) the studies did not show disaggregated positions of participants in terms of their areas of economic interest activities. It became obvious that for fadama beneficiary to be income sustained, government must be financially committed to the programme and registered farmers actively involved in chosen areas of farming. The inability of the cited studies to incorporate expenditure made by fadama in order to realize the rural income earning in fadama activities and clearly show their levels of participation created the gap for this study. To confirm the fulfillment of one of the objectives of fadama on self-employment and

agricultural participation of the rural dwellers, this study analyses the level of economic interest group activities carried out through Fadama III User Group (FUG) in Rivers State.

### **Study Objective**

This paper specifically addressed the following: (i) confirm the number of farming activities implemented by Fadama User Groups in Rivers State, (ii) investigate the expenditures on each type of FUG farming activity in Rivers State and (iii) identify the gross expenditure on FUG economic activities by senatorial zones. The study presents an elaborate presentation of Fadama III User Group activities in Rivers State by inquiring into the expenditure implications of realizing effective FUG activities. It revealed the number of economic activities and the type of activities beneficiaries engaged in, which created value for fadama program in Rivers State and Nigeria in general.

The study is restricted to what transpired within Fadama User Group activities in the three senatorial zone of Rivers State in order using available observations and information gathered. It brings to reality, federal, state and local government efforts in ensuring successful implementation of FUG aspect of fadama III programme. Fadama III was implemented based on the activities of two major areas; Fadama User Groups and Fadama Community Associations.

This paper is divided into three conspicuous sections. The first section introduced the paper with the background of the work stated; the paper gave a synopsis of fadama and its activities, disclosing the two major components; Fadama User Group (FUG) and Fadama Corporative Association (FCA). Issues that led to the study were highlighted and questions generated from the topic were stated. The main trust of the paper was stated and the areas where the study treated with limitations were explained. Theories that conform to the subject of discuss and literatures on related studies were discussed. The second section stated the study methodology and the analytical procedures. Results were analyzed and discussed. The third section summarized the work. The study was concluded and recommendations made as possible remedies to challenges discovered by the study.

### **Implemented Fadama User Groups (FUGs) Interest Economic Activity**

As stated earlier, Fadama User Group (FUG) is an apex organisation of economic interest groups, which derive their livelihood from the shared natural resources of the Fadama land. Fadama Users Groups (FUGs)/Economic Interest Groups (EIG's) are groups of persons (Fadama farmers), average of (20) persons who share common economic interest usually operating in a given area. Pertinent to note that Fadama Community Association (FCAs) are the apex associations of FUGs. These associations; FUG and FCA are two major platforms adopted for effective implementation of fadama programmes/activities. Each FCA designs and oversees the implementation of a Local Development Plan (LDP) which is the blueprint of the Fadama II's development project. This is true considering the fact that besides the FCA projects, which aids activities of farmers ranging from farming (depending on the type) to harvesting, processing and distribution, fadama III activities focus on both farming and non-farm economic activities for employment generation and increased food sustainability. For instance, tricycle found among the Fadama User Group (FUG) activities could empower the youths (transportation and distribution business) and also be used to evacuate farm produce to communities and markets.

## LITERATURE REVIEW

### Conceptual Clarification

Fadama Users Groups (FUGs)/Economic Interest Groups (EIG's) are groups of persons (Fadama farmers), average of (20) persons who share common economic interest usually operating in a given area. Every registered group of FUG is issued a certificate according to the area of farming activity they have indicated interest. No group is expected to operate outside her area for which certificate was issued. However, there are economic interest areas that may cover more than one type of farming. For instance, groups that obtained certificate for livestock farming can go into poultry, piggery and goatry.

In terms of eligibility criteria and participation, World Bank spelt out guidelines for any state to participate. The guideline stated that state was eligible to participate if government of that state had written a letter indicating interest and commitment for payment of counterpart fund and that recruitment into the programme must be through a competitive and transparent process. Such state must have demonstrated evidence of good counterpart funding on similar past or ongoing Project in the state. Key officials of State Fadama Development Office (SFDO) include; State Project Co-coordinator (SPC), monitoring and Evaluation Officer, Procurement Officer etc.

For the Local Government Areas, the local government council was to provide office space in their council area, assign two staffs of the local government council on secondment as desk officers to the project. In addition, the council shall provide two million naira annually for the operational expenses of the local office. Farmers who want to participate in the programme shall organize themselves into Fadama Community Associations (FCAs) and register it along their line of farming interest such as; yam, cassava farming, poultry, fishery, processors marketers etc. The group shall open a bank account in any commercial bank, and elect officers (Presidents, Secretaries, and Treasurers etc.) to run their affairs, prepare and submit a Local Development Plan/Project Proposal to the Local Fadama Desk Officers in their respective local Government headquarters and finally, upon the approval of their plans, each co-operative shall pay 30 - 20 per cent of the project cost or 10 per cent in the case of rural infrastructure into respective bank accounts.

### Theoretical Framework

This paper is predicated on "high-pay off inputs model" formulated by Schutz (1964) to explain why traditional agriculture is characterized by low incomes and low productivity despite its highly competitive structure. The model assigns a strategic role to new high yielding input varieties and educated labour. According to Schutz, "in this model, farmers in traditional agriculture are seen as rational, and positive in response to price incentives". In addition, they are efficient resource allocators under the constraints imposed by static technology and the existing factor endowments. In spite of all this, however, farmers in traditional agriculture remain poor because they have exhausted all of the profitable opportunities to invest in the factors at their disposal.

The assumption of the theory is that "economic growth from the agricultural sector of a country depends predominantly upon the availability and price of modern high-pay off inputs. When the providers succeed in providing the agricultural factors such as fertilizers, credit facilities, improved variety seeds and seedlings, human resources, technology and others, it is then that agricultural investment becomes lucrative and generates profits. The model suggests that

agricultural transformation lies on commitments in various aiding investments by providing modern high-pay off inputs to farmers with proper supervisions and trainings. This is one of the objectives of fadama III for encouraging the formation of Fadama User Groups. The model further explained that high agricultural productivity must acknowledge but not limited to; “development of new technical Knowledge through agricultural experiments, production and marketing of new technical inputs by the industrial sector and farmers’ capacity to effectively utilize modern agricultural factors.

The model gained its strength and prominence from the fact that it was able to contribute effectively to modern high-yielding grains in continents in the tropical areas of Philippines and Mexico in the early 1960s, and rapid diffusion of the improved varieties in other parts of the world; Latin America, Africa, Asia and others. It is therefore believed that policies based on this model are capable of creating sufficiency of high rate of growth in agriculture and bridge the income inequality gap. However, the salient point remains that the indispensable part played by agriculture in the economy must be considered in resource allocation to different sectors of the economy.

### **Empirical Review**

Scholarly studies have accepted the impact of fadama programme on productivity, income generation, farmers’ participation and many more. Prominent among these works are studies conducted by Adeola, (2004): Agwu & Edim, (2007) who have laid credence to the importance of fadama user Groups economic interest activities as essential conditions for actualizing one of the fadama objectives. This is buttressed by the work of Ugwumba & Okechukwu, (2014), which looked at the “performance of ‘Fadama III User Groups crop farmers in South East Nigeria”. The adoption of multi-stage random sampling provided adequate data for the study which was descriptively analyzed through the use of multiple regressions. Result revealed that farmers earned more income after their participation in the programme which popularized fadama activities in the area. Most farmers had the challenges of distance to market to sale their produce while other potential farmers were not given opportunity to participate as a result of non-payment of counterpart funds by their local government councils. The paper recommended for prompt release of funds for effective and timely service delivery to the people.

Another study conducted in Cross Rivers State on “mid-term assessment of the activities of Fadama III development project by Effiong & Asikong, (2012) tried to unravel challenging issues to effective achievements of the programme and beneficiaries’ perceptions in the state. Adopting a content analysis, the paper reviewed that the agency also drew funds from state enterprises for the appreciable records made. Further results showed that beneficiaries were adequately trained while overall achievements were recorded mostly in agricultural produce and income generation by participants. The work suggested for proper sensitization, early payment of counterpart contributions and effective monitoring and supervisions of the programme activities in the state.

Laying more credence to Fadama User Groups economic interest activities in Nigeria, Shimayohol, (2010) worked on influencing characteristics of Fadama User Groups on performance of fadama II in six state of Nigeria using “frequency, mean, percentages and logic regression.” It was discovered that groups had low interactions and discrimination among themselves which adversely affected service delivery of the programme facilitators. The paper

pointed out that success of facilities depends on good economic disposition of FUGs in the formation of fadama groups.

In line with this, an “assessment of poverty profile of Fadama III participants was carried out in Imo State by Ehrim, Rhaji, Oguoma & Onyeagocga, (2016) using “Tobit regression model” in their estimation of beneficiaries’ participation, poverty headcount while severity gap was estimated using “Foster-Greer Thorbeck. It was discovered that the critical point of poverty was as a result of large households and low level of education. The study further revealed reduction of participation with increase in poverty while funding and social capital increased. The study suggested for the use of farmers with experience, young in age and poverty intervention with low sizes of household. It was further suggested that government programmes should focus on reducing poverty to foster potential beneficiaries’ participation.

In a further study on “Fadama III impact on the socio-economy of beneficiaries in Taraba State” by Danjuma, Oruonye & Ahmed (2016), using Student T-test to investigate their annual farm output and level of income generation, revealed domination of participation by male folks mostly middle aged individuals with formal education certificate. Greater mean output and income was in favour of Fadama III beneficiaries. It also found that there were problems of untimely disbursement of funds, inputs and capital inadequacy militated against effective service delivery of the community officers and service providers to the programme. The study recommended for effective supervisions of Fadama activities mostly on rural infrastructural provision and fund disbursements.

Studying the productivity and income impact of Fadama users in agricultural zones of Okigwe, Imo State, Nigeria by Izuogu & Atasi (2015), adopting descriptive statistics approach, found that higher cassava harvests were in favour of Fadama users when compared to non-participants. However, the agricultural productivity experienced huge challenges of inadequate technical-know-how, capital, capacity utilization, infrastructural base, acquisition of farm land space and constraints in manpower. The recommendation was that government should wade into land acquisition for agriculture to encourage more participation into similar programmes in future.

## **METHODOLOGY**

This study was conducted in Rivers State. It adopted content and descriptive approach in carefully extracting relevant data from gathered materials to show the number of local government areas that participated in Fadama III programme in the three senatorial zones of Rivers State. Our sources of information were the Rivers State Fadama Coordinating Office, State Ministry of Agriculture and published articles. In-depth discussions with Programme Coordinator and other management staffs aided our authentic information extractions. Extracted data were subjected to analyses using descriptive statistics of frequency, percentages, bar graphs and pie chart were adopted to explain the number and type of economic interest activities (sub-projects) implemented in each of the local government areas that participated in the programme.

### **Analytical Procedures**

Gathered oral information and secondary data were carefully studied using our ‘Best of judgement’ on the approach to tabulate our data for easy understanding. First, the data were further aggregated to capture all the sub-projects (economic interest activities) implemented in the state. The data were disaggregated into the three senatorial zones in Rivers State. Secondly, all economic interest activities were assembled according to the local government areas that

participated in the programme. The local governments were later divided according to their senatorial zones. Finally, under each senatorial zone where the participated local governments, the number and types of economic interest activities implemented, and their percentages calculated from the overall number of sub-projects.

### Data Analysis and Discussion

This section explained the number of economic activities (sub-projects) implemented by Fadama III under fadama user groups. These activities involved the areas of farming and other economic activities in which registered farmers/beneficiaries participated in the Rivers State. This section is divided into three zones comprised of the three senatorial zones in Rivers State as shown below;

**TABLE 1: FADAMA USER GROUP (FUG) ECONOMIC INTEREST ACTIVITIES (SUB-PROJECTS) IMPLEMENTED RIVERS SOUTH EAST**

RIVERS SOUTH EAST											
Local Govt. Area	Number of FUG Sub-projects and Local Government Area										
	Eleme		Gokana		Khana		Oyigbo		Tai		
Economic Activity	No	(%)	No	(%)	No	(%)	No	(%)	No	(%)	
1. Cassava Farm	8	12.6	15	12.2	14	18.1	11	13.4			
2. Goatry Farm	5	7.9	7	5.7	5	6.4	4	4.8			
3. Fish Farm	10	15.8	32	26.2	13	16.8	20	24.3			
4. Snail Farm	5	7.9	4	3.2	1	1.2	4	4.8			
5. Poultry Farm	5	7.9	20	16.3	2	2.5	8	9.7			
6. Plantain Farm	6	9.5	6	4.9	3	3.8	2	2.4			
7. Cassava Processing	2	3.1	2	1.6			2	2.4			
8. Vegetable Farm	9	14.2	8	6.5	8	10.3	3	3.6	1	100	
9. Yam Farm	3	4.7	17	13.9	2	2.5	6	7.3			
10. Oil Palm Processing			2	1.6	8	10.3	9	10.9			
11. Piggery			1	0.8	3	3.8	6	7.3			
12. Tricycle	8	12.6	1	0.8	1	1.2					
13. Okro					1	1.2	1	1.2			
14. Maize					1	1.2	1	1.2			
15. Grass Cutters			2	1.6	1	1.2					
16. Cocoa Yam			1	0.8							
17. Pineapple Farm	2	3.1					1	1.2			
18. Corn Processing			2	1.6							
19. Pepper Farm			1	0.8							
20. Rabbitry			1	0.8							
21. Livestock Farm					2	2.5					
22. Garden Egg							1	1.2			
23. Artisanal							4	4.8			
24. Soap Making					1	1.2					
25. Palm Kernel Processi					1	1.2					

<b>Total = (345)</b>	63	122	77	82	1
<b>Percentage (%)</b>	(18.5)	(35.3)	(22.3)	(23.7)	(0.2)

**Source:** Author's Compilation, 2021.

Table 1 showed extracted numbers of farming (economic) activities that were established by farmers through Fadama User Group (FUG) in Rivers South East. It revealed that out of a total number of three hundred and forty-five (345) sub-projects were implemented while beneficiaries from the zone participated in twenty-six (26) different types of farming activities. Comparing the activities in different local governments, the highest economic interest activity was in Gokana with thirty-two (32) fish farms representing 26.2 percent. This is followed by twenty (20) fish farms in Oyigbo and twenty (20) poultry farms in Gokana local government area representing 24.3 per cents and 16.3 per cents respectively. The number of yam farm sub-projects in Gokana was seventeen (17) which reflected 13.9 per cents and was followed by fifteen (15) for cassava farm sub-projects representing 12.2 per cents all in Gokana local government. Khana and Oyigbo local governments had fourteen (14) and eleven (11) sub-projects on cassava farming showing 18.1 and 13.4 per cents respectively. In Eleme, ten (10) fish farm sub-projects were implemented. This reflected 15.8 per cents of the entire sub-projects in the local government. The least number of sub-projects were found in several local government areas in most economic activities such as pepper, okro, maize and others. Pertinent to note is the involvement of beneficiaries in non-farm agricultural sub-projects such as artisanal, soap making, tricycle and others. In fact, fadama III is involved in the agricultural value chain which created opportunities for venerable members of the group to engage in areas they could participate to earn incomes and improve on their lives.

**TABLE 2: FADAMA USER GROUP (FUG) ECONOMIC INTEREST ACTIVITIES (SUB-PROJECTS) IMPLEMENTED RIVERS WEST.**

Local Govt. Area	RIVERS WEST									
	Number of FUG Sub-projects and Local Government Area									
	Ahoada West		Akulga		Ahoada East		Degema		Onelga	
Economic Activity	No	(%)	No	(%)	No	(%)	No	(%)	No	(%)
<b>1. Fish Farm</b>	33	30.0	10	34.4	11	24.4	6	15.3	16	21.3
<b>2. Cassava Farm</b>	14	12.7	1	3.4	9	20.0	6	15.3	7	9.3
<b>3. Vegetable</b>	7	6.3	1	3.4	1	2.2	5	12.8	7	9.3
<b>4. Piggery</b>	3	2.7	1	3.4	3	6.6	1	2.5	4	5.3
<b>5. Cassava Processing</b>	4	3.6			2	4.4	2	4.4	2	2.6
<b>6. Oil Palm Processing</b>	4	3.6			3	6.6	1	2.5	5	6.6
<b>7. Goatry Farm</b>	5	4.5			3	6.6	3	7.6	2	2.6
<b>8. Poultry Farm</b>	16	14.5			5	11.1	3	7.6	8	10.6
<b>9. Plantain</b>	14	12.7			4	8.8	4	10.2	7	9.3



<b>10. Livestock</b>	3	2.7	1	3.4		1	2.5		
<b>11. Snail Farm</b>	5	4.5	1	3.4				2	2.6
<b>12. Yam Farm</b>					2	4.4	2	4.4	3
<b>13. Periwinkle Gathering</b>			1	3.4			1	2.5	1
<b>14. Fish Processing</b>			1	3.4			1	2.5	1
<b>15. Cocoa Yam Farm</b>	1	0.9							
<b>16. Rentals</b>	1	0.9							
<b>17. Hat Beading</b>							1	2.5	
<b>18. Artisanal</b>			12	41.3			1	2.5	
<b>19. Pineapple</b>					1	2.2	1	2.5	
<b>20. Grass Cutter</b>					1	2.2			
<b>21. Tricycle</b>								9	12.0
<b>22. Agro Processing</b>								1	1.3
<b>Total = (298)</b>	110		29	45			39	75	
<b>Percentage (%)</b>	(36.9)		(9.7)	(15.1)			(13.0)	(25.1)	

Source: Author's Compilation, 2021.

In table 2, Fadama User Groups economic activities in Rivers West revealed that beneficiaries participated in twenty-three (23) different activities (farm and non-farm economic activities). The highest participation by beneficiaries was in fish farm in Ahoada West with thirty-three (33) sub-projects reflecting 30.0 per cent. Fish farm for Onelga and poultry farm for Ahoada West revealed sixteen (16) projects with 21.3 and 14.5 per cents respectively. Again, in Ahoada West, both cassava farm and livestock showed both economic activities had fourteen (14) projects representing 12.7 per cents on both sub-projects. Fish farm sub-project in Ahoada East was eleven (11) showing 24.4 per cents. Akulga had twelve (12) pineapple sub-projects implemented which was 41.3 per cents of the entire sub-projects implemented in local government. Beside Pineapple, in Akulga, cassava, vegetable, piggery, livestock, snail farm, rental and fish processing all had one (1) sub-projects uniquely reflecting 3.4 per cents respectively.

Also, in Onelga, plantain, cassava and vegetable showed that each had seven (7) sub-projects of 9.3 per cents. Grass cutter was nine (9) sub-projects of 12.0 per cents. Processing activities were three (3); oil palm, fish and agro processing in the zone. Non-farm cultivation activities such as periwinkle gathering one (1) each for Akulga, Degema and Onelga reflected 3.4 per cent respectively. Other non-farm cultivation economic activities such as rentals, hat beading, artisanal, tricycle and others were implemented to accommodate the physically challenged and vulnerable in the society to find opportunities in fadama programm. Evidently from the table is that more sub-projects were implemented in most local governments than others which showed the ability of the FUGs to meet set fadama criteria for projects request approvals.

**TABLE 3: FADAMA USER GROUP (FUG) ECONOMIC INTEREST ACTIVITIES (SUB-PROJECTS) IMPLEMENTED RIVERS EAST.**

Local Govt. Area	RIVERS EAST											
	Number of FUG Sub-projects and Local Government Area											
	Etche		Emohua		Ikwerre		Okirika		Obio/Akpor		Omuma	
Economic Activity	No	(%)	No	(%)	No	(%)	No	(%)	No	(%)	No	(%)
1. Cassava Farm	34	25.7	20	18.0					4	8.1	14	21.8
2. Cassava Processing	3	2.2			2	1.9			4	8.1		
3. Fish Farm	27	20.4	20	18.0	7	6.7			7	14.2	9	14.0
4. Grass Cutter	2	1.5	3	2.7	3	2.8	2	18.1				
5. Poultry Farm	13	9.8	18	16.2	14	13.4			11	22.4	13	20.3
6. Goatry Farm	8	6.0	2	1.8	2	1.9					2	3.1
7. Oil Palm Processing	11	8.3	11	9.9	14	13.4			3	6.1	1	1.5
8. Plantain Farm	10	7.5	2	1.8	11	10.5	1	9.0	5	10.2	5	7.8
9. Vegetable	5	3.7	10	9.0	3	2.8			4	8.1	8	12.5
10. Yam Farm	4	3.0	7	6.3	11	10.5			3	6.1		
11. Pineapple	6	4.4	2	1.8	8	7.6					1	1.5
12. Snail Farm	1	0.7	2	1.8	2	1.9	2	18.0	5	10.5	3	4.6
13. Maize	4	3.0	4	3.6	2	1.8						
14. Livestock Farm	1	0.7	2	1.8					1	2.0		
15. Piggery	8	6.0			6	5.6					2	3.0
16. Feed Mill	1	1.4										
17. Rice Farm	1	0.7										
18. Rental	1	0.7										
19. Banana Farm	1	0.7										
20. Feed Processing			1	0.9								
21. Tricycle			4	3.6	1	0.9						
22. Garden Egg			2	1.8							8	12.5
23. Groundnut			2	1.8							1	1.5
24. Okro Farm			1	0.9								
25. Cucumber			1	0.9								

<b>26. Moringa Farm</b>			3	2.8		1	2.0
<b>27. Food Processing</b>						1	2.0
<b>28. Spice Processing</b>				2	18.	1	2.0
<b>29. Artisanal</b>			4		36.	1	2.0
					3		
<b>Total = (470)</b>	132	111	104	11		49	64
<b>Percentage (%)</b>	(28.0)	(23.6)	(22.1)	(2.1)		10.4	(13.6)

**Source:** Author's Compilation, 2021.

Fadama User Groups economic activities in Rivers East as reflected in table 3 showed diverse participation than other senatorial zones. This stems from the fact that twenty-two (22) different types of farm sub-projects were implemented, indicating greater activities when compared to other senatorial zones. In Etche local government, implemented cassava farm sub-projects revealed a total of thirty-four (34) which is 25.7 per cents. It shows that the people of Etche cultivate cassava more than any other farm economic activities. This is followed by fish and cassava farming, all in Emohua local government that showed twenty (20) cassava farms and twenty (20) for fish farms presenting 18.0 respectively. The results in Etche and Emohua agrees with the work of Izuogu & Atasie (2015) in agricultural zones of Okigwe which found that higher cassava harvests were in favour of fadama users when compared to non-participants. A total number of eighteen poultry farms were implemented in Emohua local government area revealing 16.2 per cents of the entire sub-projects for the local government.

Etche and Obio/Akpor local government had eleven (11) oil palm processing and eleven (11) numbers of poultry farms implemented, representing 8.3 and 22.4 per cents respectively. This is also applicable to Ikwerre local government with eleven (11) yam farms and eleven (11) plantain farms sub-projects showing 10.5 per cents respectively. In Omuma, nine (9) cassava processing center were built which represented 14.0 per cent. Most salient economic activities such as spice processing, banana, rice, garden egg, moringa and cucumber farming were implemented in the zone. Non-farm agricultural activities implemented to accommodate vulnerable persons in the zone are tricycle, artisanal, spice processing and rentals. The highest number of sub-projects was implemented in Etche local government representing 28.0 per cent. The greater number of participation in Rivers East confirms the work of Ugwumba & Okechukwu, (2014) which found which found that farmers earned more income after their participation in the programme that popularized fadama activities in the area.

### **Summary of Fadama User Groups (FUGs) Sub-projects and Expenditure**

Table 10 and figure 2 below showed that fadama III management team prudently utilized a total of one-hundred and eighty five million, six-hundred and forty-eight thousand, one-hundred and seventy-seven (N185,648,177.00) naira, reflecting 31.3 per cents to implement three hundred and forty-five (345) economic activity sub-projects, representing 30.9 per cent in Rivers South East.

In Rivers West, a total of two-hundred and ninety eight (298) sub-projects were implemented representing 26.7 per cents, at a total cost of one-hundred and fifty-nine million, eighty-hundred

and sixty-seven thousand, two-hundred and sixteen (N159,867,216.00) naira, showing 26.9 per cents.

For Rivers East, a total of four-hundred and seventy (470) sub-projects which showed 42.2 per cent of the entire FUG sub-projects in the state were implemented at a total cost of two-hundred and forty-six million, nine-hundred and eight thousand, nine-hundred and twenty-four (N246,908,924.00) naira, representing 41.6 per cents.

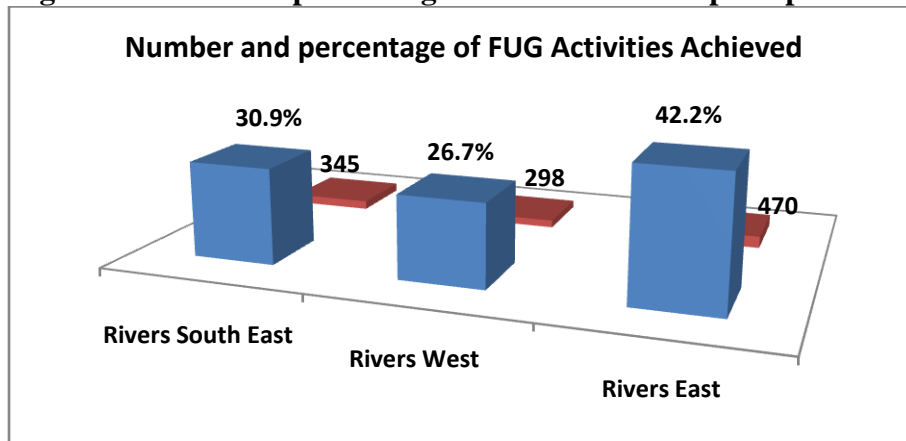
In all, it was observed that a great achievement on sub-project implementation was recorded by fadama III through a reflection of one thousand, one-hundred and thirteen (1,113) different disaggregated economic activities under Fadama User Groups (FUGs) sub-projects in Rivers State. A gross expenditure of five-hundred and ninety-two million, four-hundred and twenty-four thousand, three-hundred and seventeen (N592, 424,317.00) naira only, reflecting 78.7 per cent of the gross expenditure on both FUGs and FCAs sub-projects was spent in Rivers State.

**TABLE 4: SUMMARIZED FUG SUB-PROJECTS**

S/n	Senatorial Zone	No. FUG projects (Econ Activities)	Sub-Interest	(%)	Amount (₦)	(%)
1.	Rivers South East	345		30.9	185,648,177.00	31.3
2.	Rivers West	298		26.7	159,867,216.00	26.9
3.	Rivers East	470		42.2	246,908,924.00	41.6
<b>Total =</b>		<b>1,113</b>		<b>100</b>	<b>592,424,317.00</b>	<b>100</b>

Source: Author's Compilation, 2021.

**Fig. 1: Bar Chart Representing Fadama User Groups Expenditure**



Source: Author's Desk Research, 2021.

#### Summary of Sub-projects (Economic Interest Activities) by Type

**TABLE 5: AGGREGATED FUGS' ECONOMIC INTEREST ACTIVITIES IMPLEMENTED IN RIVERS STATE**

Sub-project	No.	(%)	Sub-project	No.	(%)
1. Artisanal	22	1.9	20. Maize	7	0.6
2. Agro Processing	1	0.08	21. Okro	3	0.2

3. Banana Farm	1	0.08	22. Poultry	134	12.0
4. Cassava Farm	157	14.1	23. Plantain	83	7.4
5. Cocoa Yam	2	0.1	24. Piggery	30	2.6
6. Cucumber	1	0.08	25. Pineapple	14	1.2
7. Corn Processing	2	0.1	26. Palm Kernel Processing	1	0.08
8. Cassava Processing	28	2.5	27. Periwinkle Gathering	3	0.2
9. Feed Mill	2	0.1	28. Pepper Farm	1	0.08
10. Fish Farm	247	22.1	29. Rice Farm	1	0.08
11. Food Processing	3	0.2	30. Rentals	2	0.1
12. Goatry	48	4.3	31. Rabbitry	1	0.08
13. Groundnut	3	0.2	32. Snail Farm	35	3.1
14. Garden Egg	10	0.8	33. Soap Making	1	0.08
15. Grass Cutter	14	1.2	34. Spice Processing	3	0.2
16. Hat Beading	1	0.08	35. Tricycle	24	2.1
17. Livestock Farm	11	0.9	36. Vegetable	81	7.2
18. Moringa	4	0.3	37. Yam Farm	60	5.3
19. Oil Palm Processing	72	6.4			
<b>Total number of Sub-projects</b>			<b>1,113</b>	<b>100</b>	
=					

**Source:** Author's Compilation, 2021.

From table 5, when aggregated, Fadama III implemented 37 different types of sub-projects in Rivers State. It should be noted that in most of the sub-projects were other projects which operated with a single issued certificate. Invariably, on a disaggregated level, type of projects implemented in Rivers State is higher than the stated 37 sub-projects. For instance, under livestock, a group issued a certificate for livestock economic activities were entitled to operate piggery, poultry, goatry farms and others. However, no group was permitted to operate an economic interest activity outside that for which it was issued certificate.

## CONCLUSION

Targeting poverty eradication is achievable through agricultural commitment by the three tiers of government and potential farmers. Increasing income generation motivated the different shades fadama usergroups' economic activities. The disaggregation of fadama user groups' economic interest activities was for better understanding of the achievements of fadama iii in River State. Findings show that in Rivers South East senatorial zone, twenty five (25) sets of economic activities disaggregated into three-hundred and forty-five (345) sub-set projects were implemented. In Rivers West, twenty-two (22) sets of fadama user groups' economic interest activities disaggregated into two-hundred and ninety-eight (298) sub-set projects were found. Rivers East had twenty-nine (29) sets of economic activities disaggregated into four-hundred and seventy (470) sub-set projects. While Overall number of one-thousand, one-hundred and thirteen (1,113) sub-projects were implemented in Rivers State under the Fadama iii user groups economic interest activities. In the programme, the highest 42.2 per cent activities were implemented in Rivers East. The rest 30.9 and 26.7 per cents were implemented in Rivers south East and Rivers West respectively.

## Recommendations

Important recommendations not limited to the following are considered necessary;

- i. Government policies towards improving income and food supply in the state should be targeted in the development of agriculture as a sure sector that involves and gets to the rural populations.
- ii. Fadama III programme should be extended to attract more economic interest activities to local governments and rural communities that could not participate during the third phase.
- iii. Veterinary service centers and pet shops should be included in future agricultural programmes to reduce the cost of treating ailing livestock and create job for interested participants.
- iv. Expansion of the scope of rural infrastructure provision should be adopted by the government to aid existing agriculture aiding facilities implemented by fadama iii.

## Contribution to Knowledge

The study has shown that Fadama III is the only single agricultural program that provided one-thousand, one hundred and thirteen economic activities sub-projects and eighty-six rural infrastructures in Rivers State within five years.

## REFERENCES

- Akinlo, A. E. (2011). Policy Choices and Challenges in Expanding Access to Finance for Growth in Rural Nigeria. Central Bank of Nigeria (CBN) Economic and Financial Review. 49(4), 77-89.
- Adeolu, B. A., & Taiwo, A. (2004). The impact of national Fadama facility in alleviating rural poverty and enhancing agricultural development in south – western Nigeria. Journal of Social Science, 9(3), 157-161.
- Agwu, A.E. and Edum, O.A. (2007). ‘Influence of Farmers’ Development Characteristics on Knowledge Gap of Recommended Fadama Technologies in Iloro Agricultural Zone of Ogun State, Nigeria.’ Journal of Agricultural, Food, Environment, and Extension. 6 (2) 52-60.
- Danjuma, I. A., Oruonye, E. D. & Ahmed, Y. M. (2016). The Socio-Economic Impact of Fadama III Project in Taraba State: A Case Study of Jalingo Local Government Area.
- Ezirim, C. B. & Emenyeonu, E. N. (1998). Bank Lending and Credit Administration. Markowitz Centre for Research and Development.
- Egwu, E. W., (2015). Knowledge, Attitude, and Participation of Fadama Users Group Towards Fadama III Project Activities in Ebonyi State, Nigeria. Asian Journal of Agriculture and Rural Development. 5(10), 225-229. DOI:1018488/journal.1005.2015.5.10/1005.10.225.229.
- Ehrim. N. C., Rhaji, M. A. Y., Oguoma, N. N. O. & Onyeagocha, S. U. O. (2016). Assessment of Poverty Profile of Fadama III Participants in Imo State, Nigeria. Asian Journal of Agricultural Extension, Economics & Sociology. 15(4): 1-13, 2017.
- Effiong, J. B. & Asikong, A. B. (2013). Mid-Term Assessment of the Activities of Fadama III Development Project in Cross River State. Global Journal of Agricultural Sciences. 12(1), 31-35. DOI: <http://Dx.Doi.Org/10.4314/Gjass.V12i1.5>

Echeme II, Nwachukwu CC; An investigation of Fadama 11 Project implementation in Imo State. American Journal of Scientific and Industrial Research. 2010; 1(3):532-538.

Izuogu, C. U. & Atasie, C. (2015). Impact of Fadama Project on Income and Productivity of Fadama Users in Okigwe Agricultural Zone of Imo State, Nigeria. Developing Country Studies. 5(11), 47-51.

Izuogu, C. U. & Onumadu, F. N. (2015). Challenges Militating against FADAMA Users and Factors Affecting their Productivity in Okigwe Agricultural Zone of Imo State, Nigeria. Journal of Applied Research and Technology. 4(6), 14-19.

Nwachukwu, O. F., Okafor, I. P., Ogechukwu, O. & Olabisi, T. A. (2016). Effects of Fadama III User Groups Participation on Farmers' Income: A Study of Selected Crop Farmers in Agricultural Zones and Blocks of Anambra State, Nigeria. International Journal of Community and Cooperative Studies. 4(1), 1-13.

Shimayohol, D. (2010). Fadama User Group Characteristics that Influence Facilitators' Role Performance Effectiveness in the Second National Fadama Development Projects in Nigeria. Journal of Research in Forestry, Wildlife and Environment. 2(1), 112-117.

Ugwumba, C. O. A & Okechukwu, E. O. (2014): The Performance of Fadama III User Groups at Mid-Term in South-East, Nigeria. Scholars Journal of Agriculture and Veterinary Sciences. 1(2), 75-82

## Appendix

Aggregated sub-projects (Economic Interest Activities) by senatorial zones

Senatorial Zones	Rivers South-East		Rivers West		Rivers East		Total Sub-projects
	No.	(%)	No.	(%)	No.	(%)	
Artisanal	4	0.3	13	1.1	5	0.4	22
Agro Processing			1	0.0			1
Banana Farm				8	1	0.0	1
Cassava Farm	48	4.3	35	3.1	78	7.0	161
Cassava Processing	8	0.7	10	0.8	14	1.2	32
Cocoa Yam	1	0.08	1	0.0			2
Corn Processing	2	0.1		8			2
Cucumber					1	0.0	1
Fish Farm	75	6.7	77	6.9	74	6.6	226
Fish Processing			3	0.2			3
Feed Mill					1	0.0	1
Feed Processing					1	0.0	1
Food Processing					1	0.0	1

Garden Egg					17	1.5	17
Goatry Farm	21	1.8	13	1.1	22	1.9	56
Grass Cutters	3	0.2	1	0.0	10	0.8	14
				8			
Garden Egg	1	0.08					1
Groundnut					3	0.2	3
Hat Beading			1	0.0			1
				8			
Livestock Farm	2	0.1	5	0.4	6	0.5	13
Moringa Farm					4	0.3	4
Maize	2	0.1			5	0.4	7
Okro	2	1.0			1	0.0	3
						8	
Oil Palm Processing	19	1.7	14	1.2	35	3.1	68
Pineapple Farm	5	0.4	1	0.0	12	1.0	18
				8			
Palm Kernel Processing	1	0.08					1
Periwinkle Gathering			3	0.2			3
Pepper Farm	1	0.08					1
Poultry Farm	35	3.1	32	2.8	67	6.0	134
Plantain Farm	17	1.5	29	2.6	33	2.9	79
Piggery	11	0.9	12	1.0	7	0.6	30
Rice Farm					1	0.0	1
						8	
Rabbitry	1	0.08					1
Rentals			1	0.0	1	0.0	2
				8		8	
Snail Farm	17	1.5	9	0.8	1	0.0	27
						8	
Spice Processing					3	0.2	3
Soap Making	1	0.08					1
Tricycle	12	1.0	9	0.8	5	0.4	26
Vegetable Farm	28	2.5	21	1.8	32	2.8	81
Yam Farm	28	2.5	7	0.6	29	2.6	64
<b>Total Sub-projects = 1,113</b>	<b>345</b>		<b>298</b>		<b>470</b>		<b>1,113</b>

Source: Author's Compilation, 2021.