# Assessment Of Various Activities (Indicators) Made Available To Farmers For Participation Through Fadama Iii Agricultural Project Delivery Agency In Bayelsa State, Nigeria

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**ABSTRACT:** The study assessed the activities made available to farmers for participation through Fadama III Project in Bayelsa State. Objective of the study was activities made available to farmers through National Fadama III Agricultural project delivery agency. Purposive sampling technique was used to select One-Hundred and fifty (150) farmers that participated, and 150 staff from the delivery agency. Data were collected with a structured questionnaire. The data collected was analyzed using frequency count, percentage, mean  $(\bar{X})$ , standard deviation (STD), while z-test was used to test the null hypotheses at 0.05% level of significance. Farmers in the state truly believe in the existence of various activities in Fadama III project in the state as being made available to them through the delivery agency. The result of the z-test showed that the mean response of the farmers in Fadama III projects was 2.986 while the mean response of the delivery agency was 3.793, there was significant difference (z = -20.245) in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities that were made available to the farmers at P  $\leq$  0.05. The study therefore recommended that National Fadama III Project activities should be reorganized to be of great benefit to the farmers, proper training in all the activities should be made available for effective participation, empower the participants to improve their income level, and to move them away from poverty by improving their standard of living by reorganizing the Fadama III Project.

Keywords: Farmers, Participation, Fadama III, Agriculture, Bayelsa State.

## INTRODUCTION

As a developing nation, Nigeria is weighed down by the problems of underdevelopment, which include widespread endemic poverty, unemployment, distribution of resources and incomes, low productivity, food insecurity, poor public infrastructure among others, [1]. Fadama project is aimed at reducing poverty and increasing farm productivity and income of farmer participants, [2]. For example, in 1993, the federal government of Nigeria in collaboration with the World Bank and State government started a new programme referred to as the National Fadama Development programme. The First National Fadama Development Programme (Fadama I) is a World Bank assisted programme designed to promote simple and low cost improved irrigation technology. The widespread adoption of the technologies enabled farmers to increase production. Federal government impressed by the achievements, approached the African Development Fund (ADF) of the African Development Bank (ADB) for support in expanding the achievement of Fadama in scope and size.

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This led to the formation of Fadama II programme, [3]. Fadama II programme was implemented in 17 states and Federal Capital Territory between 2004 to February 2009. The programme adopted community driven development Approach with extensive participation of the stakeholders at early stage of the programme cycle. This approach was in line with African Development Bank policies and development strategies for Nigeria which emphasizes poverty reduction to beneficiary participation, [4]. However, Fadama III programme is a follow-up of fadama II programme, which covers the remaining nineteen states of the country including Bayelsa state with 380 Local Government Areas that did not participate in Fadama II programme, [3]. The National Fadama Development Project III is aimed at sustainably increasing income of beneficiary groups such as Fadama Users Groups (FUGs) and Fadama Community Associations (FCAs) in all the states, by directly delivering resources to them, empowering them to take decisions collectively on how to effectively and efficiently allocate and manage resources for their livelihood activities, [5].

# **OBJECTIVE OF THE STUDY**

Objective of the study assessed the various activities (indicators) that were made available to farmers through National Fadama III Agricultural project delivery agency in the area of study;

# **RESEARCH HYPOTHESIS**

Based on the objective of the study, the null hypothesis was empirically stated as:

HO<sub>1</sub>: There is no significant difference in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities (indicators) that were made available to the farmers in the area of study.

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### **METHODOLOGY**

The study was carried-out in Bayelsa State; the State is made up of eight Local Government Areas, namely: Brass, Ekeremor, Kolokuma/Opokuma, Nembe, Ogbia, Sagbama, Southern Ijaw and Yenagoa Local Government Areas respectively. Each of this L.G.As is known as Agricultural districts. The major occupations of the people are farming and fishing, [6]. Purposive sampling technique was used to select the communities that participated in Fadama III Project; one (1) Local Government Area was used to represent each of the three (3) Agricultural zones, five Fadama communities were used to represent each of the selected Local Government Areas, the Local Government Areas were Kolokuma/Opokuma, Ogbia and Sagbama respectively, ten (10) participants belonging to a Fadama

User Group were selected from each of the communities which gave us a sample size of One-Hundred and fifty (150) respondents.

### RESULTS AND DISCUSSION

Assessment of the Various Activities (Indicators) Made Available to Farmers through National Fadama III Agricultural Project Delivery Agency in the Study Area

The mean score of the assessment of the various activities (indicators) made available to farmers through National Fadama III Agricultural project delivery Agency in the study area is presented in table 1 below.

**Table 1:** Various Activities (Indicators) made Available to Farmers through National Fadama III Agricultural Project Delivery Agency in the Study Area.

S/N	Activities made Available for Participation in National Fadama III Project in Bayelsa state	$\overline{X}_{1}$	$\overline{\mathbf{X}}_{2}$	$\overline{X}_{\text{G}}$	STD	Remark
1	Micro- Credit (loan) Service	2.9	3.8	3.3	0.47	Accepted
2	Timely Input supply advisory service	2.9	3.8	3.3	0.48	Accepted
3	Extensive yam production	2.9	3.9	3.4	0.52	Accepted
4	Extensive plantain production	2.9	3.8	3.3	0.48	Accepted
5	Extensive cassava production	3.0	3.8	3.4	0.39	Accepted
6	Mixed cropping	3.3	3.9	3.6	0.27	Accepted
7	Advisory services on marketing produce	2.9	3.8	3.3	0.44	Accepted
8	Advisory services on production technologies	2.9	3.8	3.4	0.43	Accepted
9	Physical structure (housing, water project, etc)	3.0	3.9	3.5	0.45	Accepted
10	Oil palm processing	3.0	3.6	3.3	0.33	Accepted
11	Fisheries production	3.2	3.7	3.4	0.23	Accepted
12	Snail farming	2.9	3.8	3.3	0.45	Accepted
13	Agro-processing improvement service	3.1	3.8	3.5	0.37	Accepted
14.	Livestock production	2.9	3.7	3.3	0.40	Accepted
	Overall mean score	3.0	3.8	3.4	0.41	Accepted
	Bench mark mean score (Decision cut point)	2.50	2.50	2.50		
	Number of responders	150	150	160		

Source: Field Survey, 2016.

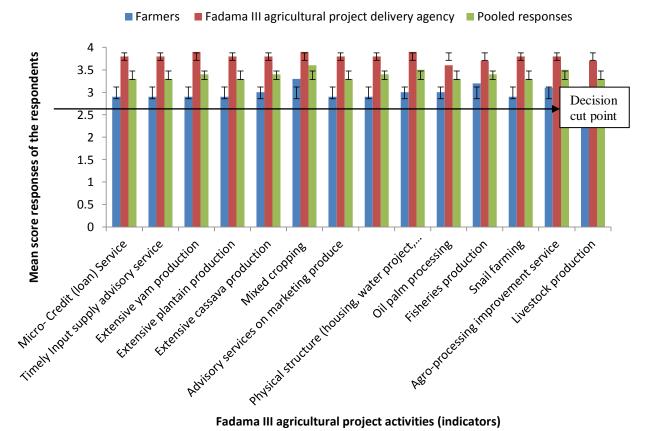
**Keys:**  $\bar{X}_1$  = Mean response of Farmers in National Fadama III project;  $\bar{X}_2$  = Mean response of National Fadama III project delivery agency;  $\bar{X}_G$  = Grand total mean score. STD = Standard Deviation.

The result in table 1 showed that all the categories of respondents have pooled mean ratings above the mean cut off point of 2.50. The pooled mean ratings of Mean response of Farmers in National Fadama III Project, National Fadama III Project Delivery Agency and Grand total were 3.0, 3.8, and 3.4 respectively. This implies that all the categories of the respondents (both farmers in National Fadama III project and National Fadama III project Delivery Agency) accepted that such activities (indicators) as micro- credit (loan) service (with grand mean score of 3.3); timely input supply advisory service (with grand mean score of 3.3); extensive yam production (with grand mean score of 3.4); extensive plantain production (with grand mean score of 3.3); extensive cassava production (with grand mean score of 3.4); mixed cropping (with grand mean score of 3.6); advisory services on marketing produce (with grand mean score of 3.3); advisory services on production technologies (with grand mean score of 3.4); physical structure (housing, water project, etc) (with grand mean score of 3.5); oil palm processing (with grand mean score of 3.3); fisheries production (with grand mean score of 3.4),

snail farming (with grand mean score of 3.3); Agroprocessing improvement service (with grand mean score of 3.5); and livestock production (with grand mean score of 3.3) were made available to farmers through National Fadama III Agricultural Project Delivery Agency in the study area. This therefore signifies that Fadama III Agricultural project in Bayelsa state has various activities (indicators) which the delivery agency made available to farmers and that farmers in the state truly believe in the existence of these various activities (indicators) in National Fadama III Agricultural project in the state as they are being made available to them through the delivery agency in the state. The standard deviations of the mean ratings of the respondents was very small (< 1.0) and indicates the closeness of the responses of the various categories of respondents considered in the study on the acceptance of the various activities (indicators) made available to farmers through National Fadama III Agricultural Project Delivery Agency in the study area. Figure 1 below shows a bar chart representation of the variations in the mean ratings of the responses of the respondent on the various activities (indicators) made

available to farmers through National Fadama III Agricultural Project Delivery Agency in the study area. The bar chart showed mean rating of the various categories of the respondents on the various activities (indicators) made available to farmers through National Fadama III Agricultural Project Delivery Agency in the study area that were more than the decision mean score of 2.50. Thus, it could be adjudicate that the various categories of the respondents had same view on the various activities (indicators) made available to farmers through National Fadama III Agricultural Project Delivery

Agency in the study area. The bar charts were presented alongside the error bar with standard deviation. The error bar with standard deviation displays the extent of deviation from the mean scores of the responses of the respondents with one standard deviation. The closeness of the error bar with standard deviation implies that the respondent had close view in their acceptance or rejection of the various activities (indicators) made available to farmers through National Fadama III Agricultural Project Delivery Agency in the study area.



**Figure 1:** Variations in the mean ratings of the responses of the respondent on the various activities (indicators) made available to farmers through National Fadama III Agricultural Project Delivery Agency in the study area.

HO<sub>1</sub>: There is no significant difference in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities (indicators) that were made available to the farmers

The result of the z-test used to test for the significant difference in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities (indicators) that were made available to the farmers is presented in table 2 below.

**Table 2:** Test of significant difference in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities (indicators) that were made available to the farmers

Variables	Mean	Std. Deviation	Std. Error Mean	Df	z- value
Mean response of Farmers in National Fadama III Agricultural project	2.986	0.129	0.035		
Mean response of National Fadama III Agricultural project delivery agency	3.793	0.083	0.022		
Difference	-0.807	0.149	0.040	149	-20.245***

**Source:** Computed by the Author from field survey data, 2016-tabulated value (2-tails) at 5% = 1.960; at 1% = 2.576 \*\*\* = Significant at  $P \le 0.05$ .

The result of the z-test showed that the mean response of the farmers in National Fadama III Agricultural projects was 2.986 while the mean response of National Fadama III Agricultural projects delivery agency was 3.793. There was significant difference (z = -20.245) in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities (indicators) that were made available to the farmers at P ≤ 0.05. This implies that the National Fadama III Agricultural Project delivery agency made available to the farmers all the various activities (indicators) as claimed by the agency in their response to this matter. It can be deduced from the result that National Fadama III Agricultural Project are not training farmers in all aspect of the project mandate. This may be due to lack of sufficient facilitators (qualified personnel) for some Fadama training activities or due to poor funding of the project carter for those cost-intensive activities of the project. Given that the computed z-value of -20.245 was greater than the tabulated z-value of 1.960 at and 2.576 at 1%, we therefore reject the null hypothesis that "there is no significant difference in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities (indicators) that were made available to the farmers" and accept the alternative hypothesis that "there is significant difference in the mean score response of the delivery agency and participants of National Fadama III Agricultural Project on the various activities (indicators) that were made available to the farmers". The study therefore concluded that farmers do not receive training in all the various activities (indicators) under National Fadama III Agricultural Project in Bayelsa state.

# **CONCLUSION AND RECOMMENDATIONS:**

# CONCLUSION

The relevance of Fadama III Agricultural project in empowering farmers effectively and ensuring rural development has continued to drawn mixed feelings. This study assesses the various activities (indicators) made available to farmers for participation through Fadama III Agricultural project delivery agency in Bayelsa State, using survey analysis. The study showed that most of the farmers that participated in Fadama III Agricultural Project in Bayelsa State were still in their active stage in life and female were more involved in Fadama III Agricultural project activities in the area studied than their male counterparts. Married individuals dominated among the sampled farmers that participated in Fadama III Agricultural project. Most of the farmers that participated in Fadama III Agricultural project in Bayelsa state were small scale farmers who are subsistent in nature with relatively large household size. Most of the participants in Fadama III Agricultural project in the study area are devoted farmers who take farming as their major business and means of generating income of their well being and survival. The monthly income of the farmers in the study area is quite low and points to the fact that Fadama Project in Bayelsa State may not have improved on the financial status of its participants so much as expected. Most of the farmers that participated in Fadama III Agricultural Project were literate, experienced in farming, and have stayed in Fadama III Project for a considerable number of years. Extension visit

to the farmers in the study area is very low. Both farmers and the delivery agency agreed that such activities (indicators) as micro-credit (loan) services, timely input supply advisory services, extensive yam production, extensive plantain production, extensive cassava production, mixed cropping, advisory services on marketing produce, advisory services on production technologies, physical structure (housing, water project, etc), oil palm processing, fisheries production, snail farming, agro-processing improvement services, and livestock production were made available to farmers through National Fadama III Agricultural Project delivery agency in the study area.

### RECOMMENDATIONS

Based on the finding of the study, the following recommendations were proffered; Conduct of most project activities of the Fadama III Agricultural Project in Bayelsa State should be reorganize in a more better and effective manner that will enhance micro-credit (loan) services, agroprocessing improvement services, mixed cropping, physical structure (housing, water project, etc), oil palm processing, snail farming as well as ensure timely input supply advisory services, advisory services on marketing of produce. extensive yam, plantain, and fisheries production. This could be achieved by incorporating farmers in key planning and decision making of the Fadama III Projects such that farming issues facing the farmers would be considered in most project activities of the Fadama III Agricultural Project in Bayelsa State. There is need for National Fadama III Agricultural Project in Bayelsa State to improve on its provisions in such a way that will benefit farmers commendably by ensuring adequate and timely supply of agrochemicals, farmers access to improved planting materials, livestock and fisheries, provision of essential farm implements (hoes, cutlass etc), provision of high quality livestock/fish feed, procurement of irrigation equipment (pump, pipes), training of farmers on modern farming techniques, giving farmers advisory services on various farm enterprises, provision of loans/credits to farmers, procurement of agro-processing equipments, provision of infrastructure facilities etc. Governments at all levels (Federal, State and Local) should ensure timely disbursement of funds and payment of counterpart funds to National Fadama III Agricultural Project delivery agency in Bayelsa State in order to enhance availability of funds for loan services and operational logistics (for items like vehicles, communicational equipments etc.), monitoring of project activities as well as handling cost of managing project activities. By so doing, Fadama III Project will be so effective in empowering its participants in Bayelsa State. Cordial relationship with project communities and introducing the principles of comparative advantage, by the provision of credit facilities to the comparative group in Bayelsa State, only for those businesses that earned them the highest income should be encouraged.

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