

EFFECTS OF FADAMA III USER GROUPS (FUGS) PARTICIPATION ON FARMERS' INCOME: A STUDY OF SELECTED CROP FARMERS IN AGRICULTURAL ZONES AND BLOCKS OF ANAMBRA STATE

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ABSTRACT: *Participation is a direct involvement of groups in development process, which is aimed at building their capacities towards gaining access to productive resources that will enable them attain self-reliance and improve their quality of life. Meanwhile, FADAMA III developmental project is a follow-up to the successful Fadama II project and the development objective is to sustainably increase the income of Fadama users by about 60percent. As such, the study examined the effect of FADAMA III users groups (FUGs) participation on crop farmers income in selected Anambra State. Multistage sampling technique was adopted to select 323 crop farmers. Data obtained were analyzed with both descriptive and inferential statistics with. Evidence from the study revealed that, the majority of the crop farmers participate actively in the Fadama programmes and their participation is being influence by their socioeconomic characteristics. Also, findings showed that there is a positive relationship between farmers level of income and their participation experience (years) in Fadama programmes. Therefore, in order to strengthen the participation of crop farmers in the policies and programmes of the government, the following recommendations are made; farmers should be given compulsory adult education also, encourage them to enroll for any formal education programmes this will enhance their literacy level and build their capacities on how to adopt and manage productive resources; the farmers should be allowed to design and choose project and programmes that are important to them rather than imposing any programme on them, this will facilitate active participation among beneficiaries; finally, the government should adequately fund the developmental programmes and provide quality extension service delivery with competent extension officers.*

KEYWORDS: Fadama III Programme, Fadama Users Group, Participation; Crop Farmers Income

INTRODUCTION

Over the years, various level of government (federal, state, and local government) with different regime have tried to improve the livelihood of Nigerian citizens, especially the farmers and the rural dwellers. Many government policies and programmes have been implemented to promote the livelihood of beneficiaries who participated in such programmes where majority of these programmes were being designed to transform Nigerian agricultural sector which was failing from being the major contributor to economy development. Meanwhile, the efforts the governments have not yielded much expected results as many of these policies and programmes have collapsed or in the state of coma, where they are not functioning to their optimum capacity. According to Muhammad, Umar, Abubakar and

Abdullahi, (2011). Whenever positive development is achieved in Nigeria, it's not often stands the test of time because, as soon as the external support ceases such programmes and projects also ceases to exist,

The National Fadama Development Program (NFDP) came on board as a result of the success recorded by the small scale irrigation projects carried out by the Agricultural Development Programs (ADPs) in fadama area. The meaning of 'Fadama' irrigable land usually low-lying plains underlay by shallow aquifers found along Nigeria's major river systems. Such lands are especially suitable for irrigated production and fishing, and traditionally provide feed and water for livestock. The enormous potential of this land is only partially developed (fadama.net.2014).

Meanwhile Fadama III was equipped with measures to correct the shortcomings of Fadama II. One of the key features of the project is to empower the communities to collectively decide on how resources are allocated and managed for their livelihood activities and to participate in the design and execution of their sub-projects. It employs community demand-driven approach which emphasised and promotes beneficiaries' participation and ownership of subprojects from initiation, implementation, monitoring and evaluation the developmental projects (Innih and Dimelu, 2013).

Development effort at local or grassroot level is worsened when targets of such programmes are either left worse off than before or the project measures were not relevant to the needs and aspirations of the people. This situation calls for people-oriented programme, where intervention is designed to improve existing circumstances of the people; and it should begin and end with target of change, such approaches which encourage self-reliance among communities and reduce dependence on external interventions by involving people in rural livelihood improvement programme right from needs assessment, prioritizing needs, identifying solutions, adequate planning, implementation as well as monitoring and evaluation of the programmes remained imperative (Mohammed, cited in Muhammad; et.al 2011).

Therefore, the need to evaluate and validate this claim became necessary and this necessitated this study. Meanwhile, the existing literatures and empirical evidence (Adegbite; Oloruntoba, Adubi; Oyekunle, and Sobanke 2008; Innich and Dimelu, 2013; Muhammad, Umar, Abubakar and Abdullahi, 2011; Alabi, Ogbonna, Hawal and Awoyinka, 2014; Ike, 2012; Bature, Sanni and Adebayo, 2013; etc), showed that a lot of studies have been conducted on the FADAMA development projects on the promotion of beneficiaries (FUGs) livelihood; poverty eradication and economic development in Nigeria. But majority of these studies were conducted on FADAMA I and II while few of them were on FADAMA III. Most especially, these studies were conducted to study all the interest groups in FUGs at the same time without considering the fact that fadama users comprises of different interest groups (farmers, hunters, fishermen, trader, women, youth handicapped etc) which might be too large to handle simultaneously. Moreso, there is lack of documented evidence on any study conducted in the agricultural zones of Anambra State specifically on the effect of FADAMA III on income level of a particular interest group and this create a gap. Thus, this current study is determine to fill this gap as it is focus to determine the level of participation among crop farmers and compare farmers level of income before and after their participation in the FADAMA III programmes in agricultural zone and blocks of Anambra State.

Hypotheses of the Study (Null)

- 1 The socioeconomic characteristics of the crop farmers in FUGs have no significant influence on their participation in the FADAMA III programmes.
- 2 There is no significant difference on the income level of crop farmers of FUGs before and often their participation in FADAMA III programmes.

Empirical Evidence from Related Literatures

In a study conducted by Ike (2012) in Delta State where he analyzed the impact of FADAMA III project on poverty alleviation. He sampled 152 participating households Fadama users and 50 were participating households, he then used Double Difference (DD) estimator to compare outcome. Therefore the result showed that, there is significant increase (36.6%) in average per capita income of those households that participate in the Fadama projects when compare to those households who do not participate.

Ahmadu, Ahmad and Hamsan (2012) conducted study on perspective on beneficiaries experiences of participation in community based agriculture and rural development program in Guba, Northern Nigeria, where 408 beneficiaries were sampled and they mode use of qualitative research, findings of the study are presented thematically and it was concluded that participation theoretically implies the active and full movement of beneficiaries in all program cycle- from design to evaluation, evidences also indicated that beneficiaries participation in the program is only faceable at lower levels and does not transcend beyond participating through labour contribution and by consolation. Their study further revealed that several factors were agreed with by the beneficiaries to have influenced them to participate, but the desire by to meet tangible material benefits in the program turns out as the most influential factor that motivated beneficiaries.

Imoh, Isaac and Nwachukwu (2009) conducted a study in Akwa Ibom state of Nigeria on comparative analysis of poverty status of community participation in rural development of Akwa Ibom state of Nigeria, and the maximum like hood probit regression analysis were used in the analysis and the result revealed that determinants of beneficiaries participation are age, household size, level, of education, sex and occupation were statically significant and positive of 1% level of significance.

Also, Bature, Sanni and Adebayo (2013) conducted a study on the analysis of impact of national Fadama development projects on beneficiaries income and wealth in FCT, Nigeria and their result revealed that the value of productive assets of Fadama beneficiaries increases from N81,240.97 before Fadama III to N84,9577.5 after Fadama III projects and conversely, there was a decrease in the net farm income of Fadama beneficiaries from N198261.5 to N170180.4 during Fadama III project. The reduction in income despite the acquisition of productive assets could be due to limitations encountered by the FUGS.

The participation of the beneficiaries took different forms at different stages of the project development. As Muhammad, Umar, Abubakar and Abdulahi (2011) assessed the factors that influence beneficiary's participation in fadama project in Niger state, and they discovered that beneficiaries participation in problem identification and project implementation was remarkable while their participation was so low in for project evaluation and decision making. More so, they used logit regression estimates to determine factors that influence participation of beneficiaries and it was found out that household size, is a significant factors ($P < 0.05$) with

positive coefficient (0.0193), education years of membership are all significant factors influencing beneficiaries' participation.

Also, Innih and Dimelu (2013) studied participation and attitude of beneficiaries to Fadama III in Kogi state and the result revealed that beneficiaries participated at different levels in the Implementation of Fadama III as they were involved at consultative level in preparation of list of constraints to be addressed through advisory services and were involved at collegial level in the management of financial resources as well as collaborated activities.

METHODOLOGY

Anambra State occupies an average 4.416 square kilometers with 70percent arable land that are under cultivated, and there are 338721 farm families in Anambra State with an average size of eight persons per farm family or household (ASADEP cited in Ugbajah and Ugumba, 2013).

The Fadama users are organized into Fadama users Groups, (FUGs) with average of 20 persons per group at community level (circle). These FUGs are further organized into Fadama Community Associations (FCAs) with average of 15 FUGs per FCAs at local government level (Blocks).

Therefore, Anambra State has four Agricultural zones (Azs) with 21 blocks and 177 circles (towns and communities). The state has total of 4, 182 Fadama users (farmers) in the estimated households of 2,042.9495 person (federal ministry of Agricultural and water resources, project Implementation manual 2009).As such, multistage sampling technique and Taro Yamane method were used to arrived at 323 respondents (crop farmers)

Logit regression was used to determine the factors that influence beneficiary participation in the third national Fadama III development projects.

The logit model is based on the cumulative logistic distribution function expressed by Gujarati cited in Muhammad et al (2011). The model is stated as:

$$P_i = \frac{1}{1 + e^{-Z}} \dots\dots\dots (1)$$

If pi is the probability of participation in Fadama 111 project, then probability of otherwise is 1 – P1 which is logistic function can be expressed as

$$1 - P_i = \frac{1 - 1}{1 + e^{-Z}} \dots\dots\dots (2)$$

$$= \frac{1}{1 + e^Z} \dots\dots\dots (3)$$

The ratio of equation (1) and (3) will be odds ratio:

$$\frac{P_i}{1 - P_i} = \frac{1 + e^{-Z}}{1 + e^Z} \dots\dots\dots (4)$$

The equation is the odds ratio in favour of participation in fadama III project. It is the ratio of the probability that a beneficiary participated in fadama III project to the probability that he/she did not participate.

Though Z (cumulative logistic distribution) is a linear combination of variable that have both upper and lower bounds, no bounds can be assigned to the variable z itself as values assigned by z depend on the values of the unknown parameters, β_1 – β_9 also, to obtain the value of z, the likelihood of observing the sample was formed by introducing dichotomous response variable Y_i , such that;

Y_i	=	1 if ith beneficiary participated
	=	0 if ith beneficiary did not participate
X_1	=	Sex of beneficiary (male = 1, otherwise = 0)
X_2	=	Beneficiary age (years)
X_3	=	Marital status (married = 1, otherwise = 0)
X_4	=	Years of formal education (years spent in school)
X_5	=	Occupation (Farming = 1, otherwise = 0)
X_6	=	Farm income per annum in Naira
X_7	=	Household size (Number of persons)
X_8	=	Type/nature of participation (collaborative = 1, otherwise = 0)
X_9	=	Group membership experience (years)
β_1 - β_9	=	Regression coefficient
β_0	=	Constant term

RESULT AND DISCUSSION

Socioeconomic Characteristics of the Crop Farmers

Table 1: Distribution of Responses on the Socioeconomic Profile of the Respondents

Socioeconomic Factor	Frequency n=323	Percentage (%)	Minimum	Maximum	Average Mean (\bar{X})
SEX:					
** Male = 1	142	44	-	-	-
*Female = 0	181	56	-	-	-
Age (Years)	-	-	≥ 18yrs	≤ 71yrs	41.38yrs
MARITAL STATUS:					
**Married =1	245	76	-	-	-
*Single = 0	78	24	-	-	-
Years of Formal Education	-	-	0yr	≤17yrs	11.37yrs
OCCUPATION:					
** Farmer = 1	236	73	-	-	-
*Otherwise = 0	87	27	-	-	-
Farm Income Per Annum in Naira	-	-	< 200,000	≥ 5million	170157.26 2
Household size per prs	-	-	1 prs	≥ 20 prs	8.24 prs

NATURE/TYPE OF PARTICIPATION:					
	191	59	-	-	-
** Collaborative	132	41	-	-	-
*Otherwise					
Years of participation Experience	-	-	>1yr	≤16yrs	9.71yrs

Source: Field Survey, October 2014

*Dummy Variables (** = 1 * = 0)

The result from the above table 1 shows the socioeconomic characteristics of the studied crop farmers who participate in the FADAMA III programmes. The result revealed that majority of these crop farmers are female (56%) while the males represents (44%) of total respondents. The age range of the majority of these respondents fell in between 31years – 50years (58%) while the general average age is 41.38years, the implication of this is that, the respondents are still in their productive and active working age which might influence their participation in the Fadama programme. The result also revealed that, majority of the respondents are married (76%). Meanwhile, the result revealed that most of the respondents have in between 7years to 12years (49%) of formal education, which is equivalent to senior secondary school certificates examination (SSCE), while 18% had zero year of formal education, moreso, 11% and 16% of the respondents had in between 13 – 16years post secondary school and above 17years postgraduate qualification respectively. But the average years of the respondents is 11.57years.

This implies that the respondents are literate to an extent as they possessed basic educational qualifications. The result table also revealed that the respondents are crop farmers (73%) but some of them are still engage in other minor occupational activities (27%), while their minimum income is < ₦200,000 and maximum is ≥N5million but the average annual per capital income of the respondents as revealed by the result is N170,157.262. The result table 1 also revealed that the respondents have minimum of 1 person household size and above 20 persons house hold size with average of 8.2 persons. This may likely enhance family labour supply that can boost productivity capacities. This corroborates Adegbite, Oloruntoba, Adubi, Oyekunle and Sobartse (2012), that the larger the house hold size, the higher the likelihood of sustainable labour efficiency on farmers farms, given the constant labour supply. Also revealed that the majority of the respondents agreed that the type of their participation in FADAMA III programmes is collaborative in nature (59%) while few agreed otherwise (consultative (18%) and contractual (19%). Finally from the result table 1, it was revealed that the respondents have 9.71 years experience participating in FADAMA programmes.

Test of Hypothesis One (H₀₁)

H₀₁: The socioeconomic characteristics of the crop farmers in FUGs have significant influence on their participation in the FADAMA III programmes.

H₀₂: The socioeconomic characteristics of the crop farmers in FUGs have insignificant influence on their participation in the FADAMA III programmes.

In order to affirm or reject the above hypothesis statement the socioeconomic characteristics versus x₁, x₂, x₃, x₄, x₅, x₆, x₇, x₈, x₉ were subjected to regression analysis test.

The regression equation is:-

$$y = 0.825 + 0.19x_1 + 0.139x_2 + 0.102x_3 + 0.0346x_4 - 0.000x_5 + 0.00000x_6 - 0.0114x_7 + 0.0059x_8 - 0.0845x_9$$

Table 2: Regression Analysis Result

Predictor	Coef.	SE. Coef	T-Value	P-Value
Constant	0.82541	0.09925	8.32	0.00**
X ₁ Sex	0.10885	0.05118	2.13	0.34**
X ₂ Age	0.013858	0.001681	8.24	0.000**
X ₃ Marital Status	0.10151	0.04590	2.21	0.028**
X ₄ yrs. Education	0.034621	0.005195	6.66	0.000**
X ₅ Occupation	-0.00000	0.06287	-0.00	.1.000*
X ₆ INC.	0.0000002	0.0000001	2.09	0.037**
X ₇ Household Size	-0.011448	0.004769	-2.40	0.017**
X ₈ T.pat	0.00590	0.05345	0.11	0.912*
X ₉ Pat. Exp yrs	-0.084537	0.003474	-24.33	0.000**

** Significant

* Not significant

R – Square = 83.9

Adjusted R – Square = 83.4

Table 2.1: Summary Result of Analysis of variance

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Regression	9	24.1904	2.6878	.181.34	0.000**
Residual Error	313	4.6393	0.0148		
Total	322	28.8297			

** Significant at 5% level

P-value < 0.05

DECISION

The result analysis showed that $R^2 = 83.9$ which indicated that the extent which the dependent variable is explained by the independent variables. That is, 84% of variation in crop farmers (dependent variable) are caused (explained) by the independent variables sex; age; marital status; years of education; income; household size and participant experience (years). Also the adjusted R^2 was also 83.4 which shows 83% of the variation in crop farmers participation was explained by changes in their size; age; marital status; years of formal education; annual per capita income; household size and years of participation experience in Fadama.

An examination of coefficient also revealed that occupation and type/nature of participation were not significant factors for participation. Therefore, all other variables are significant at 5% level of significance and the P-value is less than 0.05. As such, the researcher reject the null hypothesis and conclude that the socioeconomic characteristics of the crop farmers in FUGs have significant influence on their participation in the FADAMA III developmental programs.

Beneficiaries Level of Participation in FADAMA III Development Projects**Table 3: Distribution of Responses on the Level of Participation in FADAMA III Programmes among Crop Farmers**

S/N	FADAMA III Programmes	Mean (\bar{X})	Std. Dev.	Decision
i.	Participation in the disbursement of credits	4.046	.65245	Involved
ii.	Offer advisory services with respect to productive resources to be provided	4.1026	.30417	Involved
	Adoption of farm technology and improved seedlings			
iv.	Help in project identification and implementation of sub projects	4.3949	.78843	Involved
v.	Usage of processing assets provided by Fadama	3.2359	.75008	Involved
vi.	Participate in community based procurement of inputs	3.2000	.73639	Involved
vii.	Participate in training/building capacity of FCAs in farm management and financial management	4.0154	.59618	Involved
viii.	Involved in the preparation of list of priority public	4.2821	.58100	Involved
ix.	Participate in conflict mitigation measures especially among competing users of resources	3.1641	.72064	Involved
x.	Involved in decision process on the selection, contracting and payment of service providers for technical assistance	4.1949	.73422	Involved
xi.	Participation in the monitoring and maintenance of Fadama II development projects	4.0439	.7246	Involved
	Grand mean (\bar{X})	3.9135		involved

Source: Field Survey October, 2014

The table 3 above depicted result of responses on the level of crop farmer participation in FADAMA III programmes. The result was revealed on 5 point scale with threshold of 3.0. That is, any Fadama programme that has ≥ 3.0 indicated the crop farmer participation (involved) while they are not participate (not involve) in any Fadama programme that is < 3.0 . Therefore; there was unanimity in the crop farmers' responses as the majority of them are involved in all the programmes of FADAMA III. As, such the grand mean result ($\bar{x} = 3.9135$) affirmed their unanimity participation.

Meanwhile, the outcome of the result table 3 corroborates with result of the study conducted by Ahadu, Ahad and Hamsan (2012) where they revealed that beneficiaries participate actively in all program cycle.

Annual Income Level in Naira Before and After Participation in FADAMA III Programme

Table 4: Showing the Annual Income Level Distribution Before Respondents Participation in FADAMA III programmes

Income Level (₦) Before Participation (Annual	2009		2010		2011		2012		2013	
	Frequency n=323	Percentage	Frequency n=323	Percentage	Frequency n=323	Percentage	Frequency n=323	Percentage	Frequency n=323	Percentage
Less than 100,000	201	62.2	104	32.2	84	26	194	60.1	215	66.6
100,001, 500,000	106	32.8	118	36.5	140	43.3	112	34.7	79	24.5
500,001, 1 million	16	5.0	63	19.5	99	30.7	17	5.3	24	7.4
1.1million – 2million	-	-	31	9.6	5	1.6	-	-	5	1.6
2.1million– 5million	-	-	7	2.2	-	-	-	-	-	-
5.1million-10million	-	-	-	-	-	-	-	-	-	-
Above 10million	-	-	-	-	-	-	-	-	-	-

Source: Field Survey October, 2014.

From the above table 4, the result shows the annual income of crop farmers (2009 – 2013) and there is enough evidence that the majority of the crop farmers earn an average annual per capita income of less than 100,000, while few of them earn in between 100,000 - 500,000 before their participation in the FADAMA III programmes.

The result also conform with the result of Ike (2012) where his study shows stagnant and decrease in the average per capita income of non-participating households in the Fadama III projects.

Table 5: Showing the Annual Income Level Distribution After Respondents Participation in FADAMA III programmes

Income Level (₦) After Participation (Annual	2009		2010		2011		2012		2013	
	Frequency n=323	Percentage	Frequency n=323	Percentage	Frequency n=323	Percentage	Frequency n=323	Percentage	Frequency n=323	Percentage
Less than 100,000	25	7.7	71	22	11	3.4	34	10.5	17	5.3
100,001, 500,000	64	19.8	92	28.5	10	3.1	19	5.9	12	3.7
500,001, 1 million	108	33.4	50	15.5	48	14.9	152	47.1	93	28.8
1.1million – 2million	112	34.7	75	23.2	146	45.2	61	18.9	88	27.3
2.1million– 5million	14	4.3	31	9.6	82	25.4	53	16.4	79	24.5
5.1million-10million	-	-	4	1.2	26	8.1	4	1.2	34	10.5
Above 10million	-	-	-	-	-	-	-	-	-	-

Source: Field Survey October, 2014.

The result from the above table 5 shows that crop farmers participation in FADAMA III programmes has significantly increase their annual income level. Evidence shows that, farmers recorded high income increase in 2011 – 2013 when compare to before their participation in the programme.

The result (table 5) also correlate with the result of Ike (2012) where the real income of the Fadama users increase by 36.7% as a result of their participation in FADAMA III programmes.

Test of Hypothesis Two (H₀₂)

H₀₂: There is no significant difference in the annual income level of crop farmers of FUGs before and after their participation in FADAMA III programmes.

H₀₃: There is significant difference in the annual income level of crop farmers of FUGs before and after their participation in FADAMA III programmes.

In order to affirm or reject the above statement of hypothesis table 4 and 5 were subjected to percentage decrease and increase test and the result is presented in the table below.

Table 6: Result summary of Percentage Test using SPSS

Before Participation	After Participation	Difference	Movement of the Data	Remarks
139	19	120	0.86	Decrease
95	36	59	0.62	Decrease
54	74	-20	0.37	Increase
28	109	-81	2.89	Increase
7	64	-57	8.14	Increase
0	21	-21	0.46	Increase
0	0	0	0	Nil

* Movement of the data in percentage (%)

DECISION

From the above table result, the movement of the data shows significant improvement in the income of the farmers after their participation in the FADAMA III programmes, as the number of farmers with low income per annum decreased significantly (0.86 and 0.62) meanwhile, the number of farmers with high income per annum increased significantly. Thus, the null hypothesis was rejected while the alternate was accepted, this implies that, there is significant difference on the annual income level of crop farmers of FUGs before and after their participation in FADAMA III programmes.

The result further strengthen the outcome of table 4 and 5, also further establish the fact that FADAMA III programmes has significant effect on participants (beneficiaries) average per capita income as the result correlate with result of Bature, Sanni and Adebayo (2013) and Ike (2012) has significant relationship with average per capita income of those beneficiaries who participate in the FADAMA III programmes.

Relationship between Crop Farmers Years (Experience) of Participation in FADAMA Projects and their Annual Income

Table 7: Shows the Distribution of Crop Farmers Participation Experience and their Annual Income Responses from respondents Socioeconomic Profile Table

Annual Income Level (N)	Frequency n= 323	Participation Experience (Years)	Frequency n = 323
< 200,000	39	1 – 5years	63
200,001 – 500,000	63	6 – 10years	171
500,001 – 1million	121	11 – 15years	58
1.1million – 2million	94	16 – 25years	31
2.1million – 5million	6	Above 25years	0

Source: Field Survey October, 2014.

Pearson correlation of variable 1 and 2 = 0.673

P – Value = *0.043

The above table 7 shows the comparison results between crop farmers participation experience (years) and their annual income level using Karl Pearson correlation. Therefore, the annual income table and farmers participation experience tables from their socioeconomic profile were compare. As such, there is enough evidence that there is a positive correlation between farmers participation experience (years) and their income level as the P-value of the correlation is less than 0.05.

This implies that, income per capita of crop farmers tend to increase when they have more years of participation experience in Fadama projects.

Constraints that Hindered Crop Farmers Participation in the FADAMA III Developmental Project

Table 8: Distribution of Responses on the Constraints that Limit Crop Farmers Participation

S/N	Possible constraints	Mean (\bar{X})	Std. Dev.	Decision
i.	Inadequate funding attached to each project	3.733	.9419	Agree
ii.	Land tenure system	3.9077	.86256	Agree
iii.	Untimely disbursement of farm inputs	3.553	1.33969	Agree
iv.	Poor attitude of extension service providers	3.741	1.0796	Agree
v.	Ineffective advisory services	2.7128	1.0252	Disagree
vi.	Lack of mobility for the facilitators	2.5590	1.07950	Disagree
vii.	High cost of production	3.8205	1.16813	Agree
viii.	Lack of government commitment on policies	4.2513	.98621	Agree
ix.	Bottle neck and bureaucracy involve in participation	2.333	.82279	Disagree
x.	Conflict between service providers and beneficiaries	2.0103	1.30024	Disagree
xi.	Lack of access to market for farm produce	3.5077	1.25743	Agree
xii.	High cases of credit default	2.433	.82279	Disagree

xiii.	Farmers inability to secure beneficiary contribution fund	3.0103	.30024	Agree
xiv.	Political and economic instability	4.5590	1.07950	Agree
xv.	Dishonesty/Corruption Among The Fadama officials	4.9077	.86256	Agree
xvi.	Bad experience from Fadama I and II project	4.1047	1.30024	Agree
	Grand mean (\bar{X})	3.249		Agree

Source: *Field Survey October, 2014*

From the above table 8 the responses of the crop farmers was analysed on five (5) point scale with weighted mean of 3.0, where any variable ≥ 3.0 is considered a possible constraint (agree) while < 3.0 was considered not a possible constraint (disagree). Therefore, the grand mean ($\bar{x} = 3.249$) indicated that, crop farmers are been faced by some challenges which limit their participation in the FADAMA III programme. These challenges include; inadequate funding of project (3.738); land tenure system (3.909); untimely disbursement of farm inputs (3.552); poor attitude of extension service providers (3.741); lack of government commitment (4.25); and bad experience from Fadama I and II (4.104).

CONCLUSION AND POLICY IMPLICATIONS

To develop agricultural sector for sustainable economic development and food security, the farmers have significant role to pay through their active participation in the policies and programmes of the government. Therefore, there must be a cordial relationship between the farmers and the government, because farmers are the major drivers toward this development while the government policies and programmes will serve as stimulus.

In order to strengthen the participation of farmers in the policies and programmes of the government which will productively contribute to their livelihood and economic development of the nation, the following recommendations are made necessary;

Since the socioeconomic characteristics of the farmers has been affirmed to be the determinant factor for their participation in development programmes, as such the government should endeavour to provide adult education or encourage the beneficiaries to enroll for any formal education programme since majority of them are in their active and productive age (42years or average). This is very necessary because, it improve the level of farmers literacy which will boost their managerial ability and enhance their knowledge on the need and benefits of participation in any programmes that will promote their social and economic inclusion;

The government should encourage and allow the farmers to be involve in choosing and designing their own needed project and programmes that is important to them. This will encourage full and active participation among farmers because the project and programmes are being choose and design by those beneficiaries who make use of them;

Since increase per capita income was attributed to the number of beneficiaries years of participation (experience). Therefore, the farmers should be encourage and given re-orientation on the need to sustain and maintain their continuous active participation in the policies and developmental programmes of the government, so that they can be empowered economically as such alleviate their poverty level; and

Lastly, if the government want to attain success on the implementation of their programmes, they must remove any forms of hindrances that limit farmers participation. More especially by providing adequate fund for the projects; timely disbursement of farm inputs; as well as providing quality extension service delivery for the farmers. This will enhance the adoption policies and programmes among farmers.

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