

Attitude of farmers towards cost- sharing mechanism in the third National Fadama development project (FADAMA III) in Gokana LGA of Rivers State

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Abstract

This study examined the attitude of farmers towards cost-sharing mechanism in the third National Fadama Development Project (NFDP-III) in Gokana LGA of Rivers State. It specifically described the socio-economic characteristics of Fadama III beneficiaries in the area, examined the attitude of Fadama III beneficiaries towards cost sharing mechanism and also examined the constraint to effective implementation of cost-sharing mechanism of Fadama III project in Gokana LGA. Data were collected with the aid of structured questionnaire and interview schedule from a total of 80 Fadama III beneficiaries who were selected using multistage sampling techniques. Data analysis was done using descriptive statistics. Findings showed that 60% of the farmers were male, while 41.2% of them were in the age bracket of 35 to 44 years. The results further showed that the farmers agreed with the statements that participation in cost sharing of Fadama III project is necessary to achieve increased agricultural productivity and income (Mean=3.58), and that cost sharing of the Fadama III project is necessary to increase cooperation among the farmers (Mean=3.32). The farmers further indicated that late disbursement of funds by African Development Bank (Mean = 2.62) and poor government commitment to implementation of the cost sharing policy in the program (Mean =3.55) were the problems militating against the effective implementation of the cost-sharing mechanism of the project. The study recommends improved collaboration among stakeholders to enhance adequate implementation of cost-sharing in such projects.

Keywords: Cost-sharing mechanism, third National Fadama development project, farmers.

Introduction

One of the strategies adopted by Federal Government of Nigeria to reduce poverty in the rural communities was the implementation of Fadama Project. Targeting the poor has been a

major challenge of development. Thus most developing nations now focus on strategic investment plan (SIP) that contains programmes which enhance utilization of resources on a sustainable manner (Agwu, 2005). Apart from

enhancing growth in sectors other than oil to achieve increase in food security, Fadama contributes to increase in rural income and increased opportunities for gainful employment thereby supporting the achievement of a key Millennium Development Goal (MDG).

Fadama is the Hausa name for irrigable land- usually low-lying plains underlain by shallow aquifers found along Nigeria's river system. Such lands are especially suitable for irrigated crop production and fishing, and traditionally provide feed and water for livestock. The enormous potential of this land is partially developed. Over the years, Fadama 1 and II projects were successfully implemented in some states of Nigeria using community Demand Driven (CDD) approach. Beneficiary impact assessment conducted by International Food Policy Research Institute (IFPRI) in 2007 revealed that Fadama II was highly satisfactory in income generation capacity building and provision of advisory services to farmers. Consequently, upon the achievements of Fadama I and II on livelihood of rural dwellers, the third National Fadama Development Project also known as Fadama III was approved by the World Bank and became effective in 2009. Fadama III is being implemented in 36 States of Nigeria and FCT. In Rivers State, Fadama is being implemented in 20 Local Government Areas including Gokana Local Government

Area. The main paradigm shift of Fadama III includes change from cost driven to demand driven approach as well as move from subsistence to commercial agriculture.

The cost-sharing strategy which aims at ensuring a demand-driven agricultural technology transfer and services is expected to bring about desirable changes especially in developing countries such as Nigeria. Cost sharing in agriculture involves government-farmer partnership in the funding of agricultural project with the aim of achieving sustainable and stable funding for agricultural technology delivery. It has been described by Chukwuone, Agwu and Ozor (2006) as a tenable privatization policy towards providing adequate and stable funding of agricultural services in Nigeria.

According to Heemskerk and Wennink (2005) local cost-sharing and co-financing arrangements aim at strengthening collaboration through joint responsibility by building on the comparative advantage of different stakeholders. In a study carried out by Chukwone *et. al.* (2006) on cost sharing of agricultural technology transfer in Nigeria, it was found that the majority of the farmers and extension staff in all the six geopolitical zones had positive perception towards cost sharing of

agricultural technology transfer. The findings of another study by Agwu (2005) also showed that majority of farmers have strong positive attitude towards the Fadama II project in Okigwe agricultural zone of Imo state. The Fadama I project was the first attempt to share cost of programme implementation at the local level in Nigeria, involving 18 states of the country with the World Bank as a major co-financier and 10% counterpart funding by beneficiaries.

The basic strategy of the project was that of a Community – Driven Development (CDD) approach with strong emphasis on stake holder participation, especially at the community level. Facilitators supported under the project helped in organizing the Fadama Community Associations (FCAs) and guided them through an intensive process of group decision - making using a range of participating techniques .(Nwachukwu, Agwu, Ezeh, Mbanasor, Onyenweaku and Kamalu, 2009).

Fadama III has gone far in supporting a lot of activities most of which are agriculturally oriented and is at the verge of closing. Implementation of Fadama III project across the country is an intervention programme of giving voice to the voiceless by allowing them to make decisions of what they want to do best to alleviate poverty and contribute to self-reliance and economic empowerment.

Inadequate funds to initiate small holder investments, low capacity building on management of investments, unviable local institutional structures, top-down approaches in development programmes and inefficient utilization of resource and deviant behaviours are counterproductive to socio-economic development of Nigerian society.

Therefore there is need to appraise the cost-sharing mechanism of Fadama III project on the beneficiary groups in order to ascertain its effectiveness.

Objectives of the study

The objectives of the study were to;

- i) Describe the socio-economic characteristics of Fadama III beneficiaries in the study area.
- ii) Examine the attitude of Fadama III beneficiaries towards cost sharing mechanism.
- iii) Examine the constraint to effective implementation of cost-sharing mechanism of Fadama III project in Gokana LGA.

Methodology

The study area was Gokana Local Government Area in Rivers State which is one of 23 Local Government Area in Rivers State. It is bounded

by different Local Government Area, to the south bonny, to the north by Tia, to the east by Khana, to the west by Okrika. Gokana Local Government Area covers 126sq.km. Multistage random sampling techniques were used in selecting the respondents. In the first stage a total of four (4) out of nine (9) Fadama Community Associations (FCAs) in Gokana LGAs were randomly selected. In the second stage four(4) Fadama User group(FUGs) were selected from each FCA making a total of 16 FUGs, the third stage is selection of 5 beneficiaries from each FUG making a total of 80 respondents for the study.

The major techniques that were used to collect data from the respondents were the use of structured questionnaire and interview schedule. Data analysis was done by the use of descriptive statistics such as mean, frequency and percentages. In order to obtain a quantitative measure of respondents' perception on cost sharing in Fadama III Project, rating scales with a pool of positive and negative statements were framed through review of literature and Fadama III project documents. Four-point Likert scale with values of strongly agree = 4; agree = 3; disagree = 2; strongly disagree = 1 was used to determine each respondent's level of agreement or disagreement with the statements. The decision was that any mean score greater than

or equal to 2.5 implies agreement with the statement, and mean score less than 2.5 implies disagreement with the statement. Scores were dichotomized into agreed and disagreed.

To identify the problems militating against the effective implementation of the cost-sharing mechanism of Fadama III in Gokana LGA, items depicting problems facing the cost-sharing mechanism of Fadama III project were framed again from literature review. A four-point Likert scale with values of not serious = 1, moderately serious = 2; serious = 3 and very serious = 4; was used to determine the respondents' perception of the problems. All the statements with the mean values of (above) > 2.5 were regarded as major constraints while mean values of (below) < 2.5 were regarded as minor constraints

Results and Discussion

Socio-economic Characteristics of the Respondents

Table 1 shows that majority (60%) of the Fadama III farmers were between 35 and 44years old. The average age of the respondents was 42 years, indicating that the majority of the participating farmers belong to the young and middle aged group, which is an advantage in learning new technologies (Agwu, 2004). About 60% of the respondents were males. Majority (65%) of them were married, which is an indication that Fadama farming will be sustainable as it involves

responsible people who can be trusted in cost sharing programme. Level of formal education was encouraging as up to 78.8% of the farmers had formal education, including primary school education, secondary education and tertiary education. According to Agwu (2004) education has been shown to be a factor in the adoption of yields increasing modern farm practices.

The Table further shows that 50.0% of the respondents had family size of between 7-10 members. The implication of this is that more family labour will be readily available since relatively large household size has been reported by Igben (1988) to be an obvious advantage in terms of farm labour supply. Analysis of occupational status of the respondents showed that 41.2% of the respondents were primarily engaged in crop farming, while 17.5% were engaged in livestock, 11.2 in fishing, 13.8% in trading and civil service, 16.2% in agro processing respectively. The table also shows that 68.9% of farmers had above 10 years of farming experience. This shows that a good number of the respondents had many years of farming experience. This could increase their level of acceptance of new ideas as means of overcoming their production constraints (Agwu, 2004) and hence serve as an advantage for increased productivity of Fadama farmers. Analysis of annual income indicates that the average income of farmers before joining Fadama III programme was N90000. Average income of farmers from Fadama III in 2009 was N100, 000 while in 2010 it was N950000 and N110, 000 in 2011. This shows that

there is a successive increase in their income annually from Fadama farming. The difference in annual income between when they had not joined Fadama III and after joining the programme was quite high. This shows improvement in the income status of the farmers as a result of this project. It is most likely that increase in the annual income of these farmers will bring about effective cost sharing and sustainability of the Fadama programme.

Attitudes of Fadama Farmers towards Cost Sharing in Fadama III Project;

Table 2 shows the distribution of the mean scores of the Fadama III farmers' attitude towards cost-sharing in the Fadama III project. The result showed that the farmers expressed positive attitude towards 16 statements bordering on cost-sharing arrangement. Among these statements, 10 were positive statements while 6 were negative statements. Specifically, the following positive statements elicited favourable attitude from the farmers: participating in cost sharing of Fadama III project is necessary to achieve increased agricultural productivity and income ($M=3.88$); cost sharing of Fadama III project has increased farmers' voice in the management of the programme ($M=2.96$); cost sharing in Fadama III has made agricultural services to be more relevant and responsive to farmers' needs ($M=3.27$); Fadama participating farmers are willing to share in the cost of services

considered important to them ($M = 2.95$); cost sharing of Fadama III project has encouraged farmers to express their rights as information consumers thus ensuring project effectiveness ($M = 3.12$); cost sharing of the Fadama III project has increased cooperation among the farmers ($M = 3.32$); cost sharing in the Fadama III project makes extension workers to provide better service to farmers ($M = 3.06$) and cost sharing of Fadama III project will reduce the financial burden of government and international donor agencies in Nigerian agriculture ($M = 3.0$).

However, the farmers disagreed with the following negative statements: farmers stand to lose as a result of cost sharing in the Fadama III project ($M = 1.92$); cost sharing in Fadama III project is not the best alternative for funding agriculture ($M = 2.05$); most farmers are not willing to participate in the cost sharing due to lack of funds ($M = 2.5$); cost sharing of Fadama III project does not allow service providers to provide quality service ($M = 2.36$); cost sharing in Fadama III project brings about conflict between farmers and extension workers ($M = 2.01$), as well as, that cost sharing in Fadama III project has not improved farmers' economic status ($M = 2.1$).

These findings show that the majority of the farmers have strong positive attitude towards

the cost sharing mechanism of the Fadama III programme. More so, This finding agrees with Ozor, Agwu, Chukwuone, Madukwe and Garforth (2007) who noted in their study that farmers were in favour of cost-sharing of agricultural technology delivery in Nigeria. In this study, specific issues which elicited the most favourable attitude from the farmers include "participating in cost sharing of Fadama III project is necessary to achieve increased productivity and income" and "cost sharing of the Fadama III project has increased cooperation among the farmers". This indicates that the farmers are aware that cost sharing of Fadama III project has improved their socio-economic status.

Problems militating against the Effective Implementation of the cost-sharing Mechanism in Fadama III Project

Results in Table 3 showed that the major constraints to effective implementation of the cost-sharing mechanism in Fadama III were as follows; high production and service cost ($M = 2.66$); poor attitude of extension staff towards farmers participating in the programme ($M = 3.16$) untimely counterpart funds from African Development Bank ($M = 2.62$); poor government commitment to the implementation of the cost-sharing policy in the programme ($M = 3.55$).

However the minor constraints in the implementation of NFDP include: lack of ready markets to sell the increased output as a result of increased productivity from cost sharing of Fadama II project (M =1.99); poor coordination / planning of the cost sharing programme (M=2.34); and lack of farmers interest in participating in the programme (M= 1.7)

These findings tend to indicate that high production and service costs and late release of funds to farmers are clear issues that need to be addressed if the implementation of the Fadama III project is to yield expected results in the future.

Conclusion

The result of this study indicated that the majority of the Fadama III farmers had a very high positive attitude towards cost sharing. The major problems militating against the effectiveness of cost sharing mechanism were untimely counterpart fund from African Development Bank (ADB) and poor government commitment to implementation of the cost sharing policy in the program.

Recommendations

The study recommends improved collaboration among stakeholders to enhance adequate implementation of cost-sharing in such projects. Also ADB and other funders should

ensure speedy disbursement of funds to further reinforce the existing positive attitude of the farmers towards the cost sharing mechanism.

References

- Agwu, A. E. (2004), Factors influencing adoption of improved cowpea production technologies in Nigeria. *Journal of International Agricultural and Extension Education*, 11(1):81-88.
- Agwu, A. E. (2005). Attitude of farmers towards the fadama in Okigwe Agricultural Zone, Imo State, *Nigerian Journal of Horticultural Science (NJHS)*, 10(1): 65-74.
- Chukwuone, A. N., Agwu, A. E. & Ozor, N. (2006). Constraints and strategies towards effective cost-sharing of agricultural technology delivery in Nigeria: perception of farmers and agricultural extension personnel, *Journal of International Agricultural and Extension Education (JAEE)*, 13 (1): 29-41.
- Heemskerk, W. & Wennink, B. (2005). Stakeholders-driven funding mechanisms for agricultural innovation. Case study of sub-Saharan, Development Policy and Practice, Bulletin 273, Royal Tropical Institute (KIT) –Amsterdam. KIT.
- Igben, M. S. (1988). Farmers' Capability Profile. In: M.S. Igben (Ed). *The Nigerian farmer and agricultural institution: An assessment of NISER Ibadan, Nigeria*.
- Nwachukwu, I. N., Agwu, A. E., Ezech, C. I., Mbanasor, J. A., Onyenweaku, C. E. & Kamalu, C.E. (2009). Evaluation of second National Fadama development project in Nigeria: A rapid policy appraisal. Available online at <http://mpira.ub.uni-muenche.de/12914/>.

Ozor, N., Agwu, A.E., Chukwuone, N. A., Madukwe, M. C. & Garforth, C.J. (2007), Cost-sharing of agricultural technology transfer in Nigeria: perceptions of farmers and extension professionals, *Journal of Agricultural Education and Extension*, 13 (1): 23-37.

World Economic Forum (2017) *The Global Gender Gap Report*. Geneva: WEF.

Table 1: Socio- economic Characteristics of the Respondents

Variables	Frequency	%	Mean
Sex			
Male	48	60	
Female	32	40	
Age			
Below 25	7	8.8	
25-34	18	22.5	
35-44	33	41.2	
45-54	15	18.8	
55 and above	7	8.8	
Marital status			
Single	12	15	
Married	52	65	
Widow	5	6.2	
Widower	7	8.8	
Divorced	4	5	
Religion			
Christianity	69	86.2	
Islam	6	7.5	
Traditional religion	4	5	
Others	1	1.2	
Level of formal education			
No formal education	17	21.2	
Primary education	27	33.8	
Secondary education	18	22.5	
Tertiary education	18	22.5	
Family size (members)			
1-3 members	14	17.5	
4-6 members	21	26.2	
7-10 members	20	50.0	
Major occupation of farmers			
Live Stock Farming	14	17.5	
Crop Farming	33	41.2	
Agro Processing	13	16.2	
Trade Commerce	11	13.2	
Fishing	9	11.2	
Years of farming experiences			
1-5 years	3	3.8	
6-10 years	22	27.5	
11-15 years	34	42.5	
16-20 years	8	10	
21-25 years	3	3.8	
26-30 years	3	3.8	
31-36 years	7	8.8	
36 and above	-	-	
Annual income of farmers			
Income before joining Fadama III programme		90,000	
Income from Fadama III in 2009		100,000	
Income from Fadama III in 2010		95,000	
Income from Fadama III in 2011		110,000	

Table 2. Attitude of farmers towards cost-sharing of Fadama III project

S/N	Items	SA	A	D	SD	Mean	Remarks
1	Participation in cost sharing of Fadama 111 project is necessary to achieve increased agricultural productivity and income	49(61.3)	28(35.0)	3(3.8)	-	3.58	Agreed
2	Cost sharing in FadamaIII project brings about conflict between farmers and Fadama facilitators	4(5.0)	18(22.5)	33(41.2)	25(31.2)	2.01	Disagreed
3	Cost sharing in the FadamaIII project makes extension workers to provide better service to farmers	14(17.5)	58(72.5)	7(8.8)	1(1.2)	3.06	Agreed
4	Cost sharing of FadamaIII project has increased farmers voice in the management of the program	11(13.8)	57(71.2)	10(12.5)	2(2.8)	2.96	Agreed
5	Cost sharing in FadamaIII project should be restricted only to large scale farmers	4(5.0)	3(3.8)	24(30)	49(61.3)	1.52	Disagreed
6	Cost sharing in FadamaIII project has made agricultural services to be more relevant and responsive to farmers needs	30(37.5)	46(57.5)	1(1.2)	3(3.8)	3.27	Agreed
7	Farmers stand to lose as a result of cost sharing in the FadamaIII project	-	9(11.2)	56(70)	15(18.8)	1.92	Disagreed
8	Most farmers are not willing to participate in the cost sharing due to lack of funds	9(11.2)	29(36.2)	35(43.8)	7(8.8)	2.5	Agreed
9	Cost sharing of the FadamaIII project is necessarily to increase cooperation among the farmers	37(46.3)	35(43.8)	5(6.2)	3(3.8)	3.32	Agreed
10	Cost sharing of FadamaIII project will reduce the financial burden of government and international donor agencies in Nigeria agriculture	11(13.8)	58(72.5)	11(13.8)	-	3.0	Agreed
11	Cost sharing of FadamaIII project does not allow service providers to provide quality services	12(15)	21(26.3)	31(38.8)	16(20.0)	2.36	Disagreed
12	Cost sharing has increased farmers knowledge about farm management	31(38.8)	42(52.5)	6(7.5)	1(1.2)	3.29	Agreed
13	Cost sharing has encouraged farmers to express their right as information consumers thus ensuring project effectiveness	13(16.2)	65(81.2)	1(1.2)	1(1.2)	3.12	Agreed
14	Fadama III participating farmers are willing to share in the cost of services considered of importance to them	9(11.2)	62(77.5)	5(6.2)	4(5)	2.95	Agreed
15	Cost sharing is not the best alternative for founding agricultural program	8(10)	8(10)	44(55)	20(25)	2.05	Disagreed
16	Participating in cost sharing of FadamaIII project has not improved farmers' socio-economic status	10(12.5)	12(15)	35(43.8)	23(28.7)	2.1	Disagreed

N/B: Mid Point = 2.5, Any mean score < 2.5 suggests Disagreement , Any mean score \geq 2.5 suggests Agreement

Table 3. Constraints to effective implementation of cost-sharing mechanism of Fadama III project.

	Constraints	VS	S	MS	NS	Mean	Remark
		4	3	2	1		
1.	Untimely counterpart fund from African Development Bank	10(12.5)	36(45)	28(35)	6(7.5)	2.62	Agreed
2.	Poor attitude of extension staff toward farmer participation in the program	36(45)	24(30)	17(21.2)	3(3.8)	3.16	Agreed
3.	High production cost and service	16(20)	33(41.2)	19(23.8)	31(38.8)	2.66	Agreed
4.	Lack of ready markets to sell the increased output as a result of increased productivity from cost sharing of Fadama III project	9(11.2)	12(15)	28(35.0)	31(38.8)	1.99	Disagreed
5.	Poor government commitment to implementation of the cost sharing policy in the program	49(61.3)	26(32.5)	5(6.2)	-	3.55	Agreed
6.	Poor coordination/planning of the cost sharing program	10(12.5)	30(37.5)	17(21.2)	23(28.7)	2.34	Disagreed
7.	Lack of farmers interest in participating in the cost sharing of Fadama 111 project	2(2.5)	15(18.8)	20(25.0)	43(53.8)	1.7	Disagreed