

International Journal of Agricultural Science, Research and Technology in Extension and Education Systems (IJASRT in EESs) Available online on: http://ijasrt.iau-shoushtar.ac.ir ISSN: 2251-7588 Print ISSN: 2251-7596 Online 2020: 10(1):1-8

Comparison of the Achievements of Fadama III Agricultural Enterprises in the Niger Delta Area of Nigeria

Oghenero Joseph Ovharhe

Department of Agricultural Economics & Extension, Faculty of Agriculture, Delta State University, Asaba Campus, Asaba, Nigeria. Email: drovharhe.oghenero@gmail.com

> he study addressed the economic comparison of the achievements of Fadama III agricultural enterprises in the Niger Delta Area of Nigeria usingtask-target performance approaches. It aimed at identifying the indicators, tasks and targets and achievement of Fadama III. Some materials used were secondary information collected from the various Fadama III project offices. Simple random sampling technique was employed to select three locations: Akwa Ibom, Bayelsa and Delta States. The results included: the mean achievement index across the study area as percentage increase in

> income (163%), crop based activities (132%), fisheries based activities (105%), number of staff trained (162%) and number of monitoring visits to sub projects (149%). However, some indicators did not achieve set tasks and targets as in livestock based activities (51%),

Abstract

Keywords: Achievements, Fadama. Farmers, Agriculture, Enterprises, Niger-Delta.

agro-processing based activities (13%), marketing equipment (7%), irrigation/drainage equipment (3%) and storage facilities (10%). The three States met their target of 40%increase in farmers' income by achieving far beyond the set target: Akwa Ibom (155%), Bayelsa (163%) and Delta (170%) Upon contribution into Fadama Users' Equity Fund (FUEF), achievable were: Akwa Ibom reached 101%, Bayelsa reached 75% and Delta reached 232%. Only Bayelsa State did not achieve the set target of getting up to 100% in FUEF contribution. The study concluded that the economic achievement of Fadama III project activities was commendable. The study recommended that there should be critical followed up for enterprises with proven agro-economic performances with success story of tasks and targets achievement for project sustainability.

1. Introduction

The Federal Government of Nigeria, over the years has partnered with many global organizations. One of which is the World Bank group. The World Bank in collaboration with the Nigeria government established the Fadama Concept. The concept is basically promotion of food security, improvement livelihoods and community development. The National Fadama Development Project is a development intervention programme designed primarily to supply the small scale farmers with those inputs and assets needed to boost food production with the overall purpose of enhancing rural livelihood (Ike, 2016). The various phases of Fadama in Nigeria are: Fadama I (1993 - 1999), Fadama II (2003 -2007) and Fadama III (2008 -

2014). It was a poverty alleviation and economic empowerment programme designed to meet a wide array of needs which the beneficiary communities identified as critical to their welfare. It is nondiscriminatory in terms of gender, age, social class, occupation, physical disability and religion (NFDP, 2009a).

The current trend in measurement of organization strengths is the level of timely outputs, outcomes and deliverables. The use of given tasks and targets has been reliable vardstick to measure the performance or achievement index of any organization. An enabling environment is needed for effectiveness and efficiency in institutional performance (Ragasa, Ulimwengu, Randriamamonjy and Badibanga, 2016).

1) For actual project performance, there are needs for Project Development Objectives (PDOs) of Fadama III is to increase the incomes of rural land and water resources on a sustainable basis. The key indicators and targets of the PDOs are:

2) attain a 40% increase in income for 75% of the beneficiaries by close of project,

3) attain a 20% increase in yield of primary agriculture produce (disaggregated by crops, livestock and fisheries),

4) savings participating groups: 10 percent of net earnings from income-generating activities of the FUGs is saved annually (with effect from year 2). This type of saving is denoted as Fadama Users Equity Fund (FUEF),

5) physical verification of operations, maintenance utilization of assets at mid-term and at project exit by surveys of random selected project sites and

6) investigations at mid-term and at project closing to display that at least 75 percent of Fadama users are satisfied with operations, maintenance and utilization of community owned infrastructure and capital assets obtained through the project.

Fadama III focuses on six project components:

1)Capacity building, communication and information support, 2)Small-scale community owned infrastructure, 3)Advisory services and input support, 4)Support to ADPs-sponsored research and on-farm demonstrations, 5)Asset acquisition for individual FUGs/EIGs and 6)Project management, Monitoring and Evaluation and Environmental Management plan compliance (NFDP, 2009b).

The agro-economic activities of Fadama III are based on community members and farmers felt needs using the socio-economic profile of the intended beneficiaries as a benchmark for agricultural project distribution, implantation and sustainability (Ovharhe, 2019).

However, it is necessary to recall the report on "Appraisal of Beneficiaries Level of Satisfaction in the Utilization and Maintenance of Rural Infrastructures Provided by Fadama III Project in Delta Central Senatorial District of Delta State, Nigeria" (Ovharhe, Oyibo and Alakpa, 2016) stated that on satisfaction levels, beneficiaries meet their felt needs in the utilization of culverts, cold rooms, roads and market stalls only. They were not satisfied with the provision and use of wooden bridges as access roads. On maintenance of rural infrastructure, Fadama III beneficiaries were only satisfied with culverts, cold rooms and roads project. Again, this study is important because some participants of Fadama III claimed to have adopted aquaculture techniques as rendered by Fadama III facilitators (Ovharhe, 2016 and 2019).

In essence, did Fadama III meet its objectives in the various states of Nigeria? Response to this question necessitated this research and interventional measures.

During the conduct of Fadama III Beneficiaries Agronomic Production Survey (FBAPS) in Delta State, The cost-benefit analysis sector revealed that big time farmers made over one million Naira annually from farming whether in the crop, poultry or aquaculture industry (Ovharhe, Thus, the study aimed at identifying the 2014). indicators, tasks and targets of Fadama III, ascertaining the achievement of set targets using the actual-target ratio formula and finding out the level of economic contributions of various states into the Fadama Users' Equity Fund.

2. Materials and methods

The study was conducted in Niger Delta area of Nigeria. The study are lies between latitudes 4°321 and 5°331 North, and longitudes 7°251 and 8°251 East of Nigeria (Federal Republic of Nigeria, 2017). The Niger Delta states are nine: Ondo, Edo, Delta, Bayelsa, Rivers, Akwa Ibom, Cross Rivers, Imo and Abia States. The research method was done by using a simple random sampling technique which was employed to select three states for the study area from the nine Niger Delta states. The study was conducted in Akwa Ibom, Bayelsa and Delta States. The materials involved were the use of secondary data which were collected from the different offices of Fadama III in Akwa Ibom, Bayelsa and Delta States. The data relating to physical achievement of Fadama III projects were compared with the set annual targets. Targets for various activities included the following from secondary data:

Capacity Building: The number of FCAs and FUGs registered; FCAs and FUGs trained; LDPs prepared; FCAs and FUGs fully implemented subprojects prepared, and Monitoring visits to sub projects. Number of FUGs reached with Advisory Services/ Input Support on: crop based activities, livestock based, fisheries based, agro-processing based, storage based and marketing based.

Number of productive assets acquisition for Individual FUGs: crop based activities, livestock based, fisheries based, agro-processing based, marketing equipment, irrigation and drainage equipment, storage facilities, percentage increase in income and contribution into Fadama Users' Equity Fund (FUEF) in naira.

Project Performance Index

The Performance Index was used as in actual-target ratio formula applied by Ogunbameru, Sabo and Gwary (2005):

 $PI = A/T \times 100$ Where

PI = Performance Index; A = Project Achievement and T= Project Target

3. Results and discussion

Results in Table 1 showed that Fadama III project in Akwa Ibom State was able to exceed anticipated targets in project achievement on five activities, thus exceeding 100% achievement. They are number of trained local government area LGA staff, number of monitoring visits, number of productive assets acquired by FUGs, percentage increase in income and contribution into Fadama Users' Equity Fund. This implies that the Fadama III facilitators were well equipped with mobility and communication gadgets to reach their clientele. Realistic given tasks and targets under suitable environmental condition of any organization contribute to project achievement and high level of performance (Ragasaet al., 2016).

Again, Ovharhe (2019) opined that using educated farmers assist extension workers to achieve their aims in technological advancement.

Results for Bayelsa State Fadama III project (Table 2) recorded achievement in the following targets: good performance in number of LGA staff trained (160%), number of monitoring visits to sub projects (140%), number of productive assets acquisition for member FUGs (134%) and percentage increase in income (163%). In contribution into Fadama Users' Equity Fund, the project beneficiaries attained a weak achievement (75%). Among others, poor achievements were notable in reduced number of FUGs reached with Advisory Services/ Input Support for fisheries based beneficiaries (2%) and poor number of productive assets acquisition for member FUGs using irrigation and drainage equipment (2%). Uzokwe, Ogbekene, and Ovharhe, (2015) described how inadequate irrigation and drainage equipment contributed to poor agricultural and rural development in Delta State.

Results for Delta State Fadama III project (Table 3) showed that there were achievement in number of LGA staff trained (175%), number of monitoring visits to sub projects (150%), number of productive assets acquisition for crop based member FUGs (154%), Fisheries based member FUGs (162%) and percentage increase in income (170%) contribution into Fadama Users' Equity Fund (232%). Conversely, meager achievements were recorded in number of FUGs reached with Advisory Services/ Input Support for FUGs in agro-processing (3%), storage based (2%) and Marketing (1%). This result was not a huge surprise. In a similar survey conducted, Ovharhe, et al. (2016) recorded some

levels of satisfaction among beneficiaries of Fadama III in Delta State.

3.1 Agro-economic achievement index for Fadama III enterprises in Niger Delta States

The ratings of achievement index of Fadama III project activities in the Niger Delta showed that some activities exceeded 100% set targets (Table 4). These activities are number of trained LGA Staff, number of monitoring visits, number of productive assets acquired by FUGs concerned with crop based activities and percentage increase in income of beneficiaries. Furthermore, upon contribution into Fadama Users' Equity Fund (FUEF), the following records were achieved: Akwa Ibom reached 101%, Bayelsa reached 75% and Delta reached 232%. Only Bayelsa State did not achieve the set target of getting up to 100% in FUEF contribution. The poor performance of Bayelsa State to meet set targets could be attributed to decrease in number of FUGs reached with advisory services and input support in the following sectors: crop based, livestock based, fisheries based, agro-processing based activities and storage The overall performance of Fadama III in the Niger Delta through the pooled mean of Achievement Index is 56.33 percent (Table 4) .This is a good attempt.

The achievement rating of Fadama III project in terms of financial contribution was gauged using its actual achievements against set targets; particularly the yardstick of percentage increase in income and contribution into Fadama Users' Equity Fund (FUEF) by members. The essence of FUEF contribution is to attain the status of a Micro-Finance bank ownership, which is a potential of project sustainability. The three States of Akwa Ibom, Bayelsa and Delta met the target of 40% increase in farmers' income (Table 4) by achieving far beyond the set target.

Poor achievement was recorded in fewer number of FUGs reached with advisory services and input support. Some of the reasons behind this were delay in provision of farm inputs and advisory services. In this sector (Table 4: B1 - B6), however, the Fadama III project was able to reach the following FUGs accordingly: crop (30.67%), livestock (4.67%), fisheries 2.33%), agro-processing (2.33%), storage (2.33%), and marketing (1.33%). Thus failure of achieving the set targets in this sector resulted to a decline in the overall achievement index in the Niger Delta (56.33%).

Most areas with achievement levels below 50% such as some crop based, livestock based, fisheries based, agro-processing based, storage and marketing activities need a revisit to appraise the reasons for poor achievements and buffer strategies to enhance productivity.

3.2Fadama Users' Equity Fund (FUEF) **Financial Performance**

The target of FUEF was eleven million two hundred and fifty thousand naira (250,000). This target was achieved by Akwa Ibom State, thus attained 101% of the target, equivalent to eleven million three hundred and forty three thousand six hundred and thirty one naira (11,343,631). Delta State achieved 232% of the target which is equivalent to twenty six million forty eight thousand five hundred and thirty three naira (26,048,533.00). Bayelsa State had 75% of the target which is equivalent to eight million four hundred and seventy seven thousand seventy naira (8, 477.070). In order of achievement (financial performance), Delta ranked first followed by Akwa Ibom and Bayelsa (Table 5).

т.1

Based on these findings, the project is considered successful in the area of FUEF as Akwa Ibom and Delta States actually overshot the set targets. Farmers in Akwa Ibom and Delta States were more responsive in savings and contributed more to FUEF than Bayelsa State farmers; hence, the better performance in Akwa Ibom and Delta States. Ovharhe (2014) reported that Fadama III farmers in Delta State were satisfied with income generating activities the project exposed them to since major beneficiaries achieved millions in Naira per annum.

The non-achievement of in FUEF by Bayelsa State farmers during the study was attributed to communal clashes and youth restiveness which resulted to adornment of some project sites.

	Table 1. Agro-economic achieve		*	
	Activities/ Indicators	States Targets	Akwa Ibom Actual	Akwa Ibom
		(2010–2013)	(2010 – 2013)	Achievement
		(T)	(A)	(A/T X 100/1) %
A	Capacity Building			
1	Number of FCAs registered	200	120	60
2	Number of FUGs registered	3000	1920	64
3	Number of FCAs trained	200	120	60
4	Number of FUGs trained	3000	1920	64
5	Number of LDPs prepared	200	83	42
6	Number of LDPs approved	200	80	40
7	Number of LG Staff trained	80	120	150*
8	Number of Monitoring visits to	120		
	sub projects		152	126*
В	Number of FUGs reached with			
	Advisory Services & Input			
	Support			
1	Crop Based activities	3000	996	33
2	Livestock based	3000	199	7
3	Fisheries based	3000	76	2
4	Agro-processing based	3000	75	2
5	Storage	3000	97	3
6	Marketing	3000	42	1
С	Number of productive assets			
	acquired by FUGs			
1	Crop Based activities	3000	3200	107*
2	Livestock based	3000	1855	62
3	Fisheries based	3000	1240	42
4	Agro-processing based	3000	385	13
5	Marketing equipment	3000	210	7
6	Irrigation equipment	3000	120	4
7	Storage facilities	3000	380	13
8	Percentage increase	40%		
	in income		62%	155*
9	Contribution into Fadama Users'			
	Equity Fund (FUEF)	₩11,250,000	₩11,343,631	101*

ole 1. Ag	ro-economic	achievement	index fo	or Fadama	III enter	prises ir	n Akwa Il	bom State

Note: Asterisked activities are those in which more than the set targets are achieved, exceeding 100% achievement. Table 2. Agro-economic achievement index for Fadama III enterprises in Bayelsa State

	Activities/ Indicators	States Targets	Bayelsa State Actual	Bayelsa State
	Activities/ indicators	(2010 –2013) (T)	(2010 - 2013) (A)	Achievement $(\frac{A}{T} \times 100)\%$
A	Capacity Building			
1	Number of FCAs registered	200	97	49
2	Number of FUGs registered	3000	1180	39
3	Number of FCAs trained	200	95	49
4	Number of FUGs trained	3000	1156	39
5	Number of LDPs prepared	200	97	49
6	Number of LDPs approved	200	95	48
7	Number of LG Staff trained	80	128	160*
8	Number of Monitoring visits to	120	168	
	sub projects			140*
В	Number of FUGs reached with			
	Advisory Services & Input			
	Support			
1	Crop Based activities	3000	645	21
2	Livestock based	3000	96	3
3	Fisheries based	3000	61	2
4	Agro-processing based	3000	64	2
5	Storage	3000	62	2 2 2 2
6	Marketing	3000	79	2
C	Number of productive assets			
	acquired by FUGs			
1	Crop Based activities	3000	4011	134*
2	Livestock based	3000	1400	47
3	Fisheries based	3000	3301	110
4	Agro-processing based	3000	387	13
5	Marketing equipment	3000	235	8
6	Irrigation & drainage equipment		54	
		3000		2
7	Storage facilities		212	
	c	3000		7
8	Percentage increase in income	40%	65%	
	6			163*
9	Contribution into Fadama Users'	₩11,250,000	₩8,477,070	
	Equity Fund (FUEF)	,,	-, .,,	75

Note: Asterisked activities are those in which more than the set targets are achieved, exceeding 100% achievement.

Table 3. Agro-economic achievement index for Fadama III enterprises in Delta State States Targets Activities/ Indicators Delta State Actual Delta State (2010 - 2013)(2010 – 2013) (A) Achievement $(^{A}/_{T} \times 100) \%$ (T) **Capacity Building** А Number of FCAs registered 200 79 157 1 2 3000 52 Number of FUGs registered 1746 3 Number of FCAs trained 200 157 79 4 Number of FUGs trained 3000 1746 52 5 Number of LDPs prepared 200 65 130 6 Number of LDPs approved 200 130 65 7 Number of LG Staff trained 80 140 175* 8 Number of Monitoring visits to 120 sub projects 180 150* В Number of FUGs reached with Advisory Services & Input

	Support			
1	Crop Based activities	3000	1150	38
2	Livestock based	3000	130	4
3	Fisheries based	3000	92	3
4	Agro-processing based	3000	96	3
5	Storage	3000	66	2
6	Marketing	3000	30	1
С	Number of productive assets acquired by FUGs			
1	Crop Based activities	3000	4626	154*
2	Livestock based	3000	1370	45
3	Fisheries based	3000	4870	162
4	Agro-processing based	3000	432	14
5	Marketing equipment	3000	224	7
6	Irrigation equipment	3000	65	2
7	Storage facilities	3000	315	11
8	Percentage increase in income	40%		
	-		68%	170*
9	Contribution into Fadama Users'	₩11,250,000		
	Equity Fund (FUEF)		₩26, 048,533	232*

Note: Asterisked activities are those in which more than the set targets are achieved, exceeding 100% achievement.

Table 4. Summary of agro-economic achievement index for Fadama III enterprises in the Niger Delta

	Activities/	States Targets	Akwa Ibom	Bayelsa	Delta	Mean Index
	Indicators	(2009 – 2013)	Achievement	Achievement	Achievement	Achievement
		(T)	%	%	%	%
А	Capacity Building					
1	Number of FCAs	200				62.67
	registered		60	49	79	
2	Number of FUGs	3000				51.67
	registered		64	39	52	
3	Number of FCAs	200				62.67
	trained		60	49	79	
4	Number of FUGs	3000				51.67
	trained		64	39	52	
5	Number of LDPs	200				52.00
	prepared		42	49	65	
6	Number of LDPs	200				51.00
	approved		40	48	65	
7*	Number of LGA	80				161.67
	Staff trained		150	160	175	
8*	Number of	120				138.67
	Monitoring visits to					
	sub projects		126	140	150	
В	Number of FUGs					
	reached with					
	Advisory Services					
	& Input Support					
1	Crop Based	3000	33	21	38	30.67
	activities					
2	Livestock based	3000	7	3	4	4.67
3	Fisheries based	3000	2	2	3	2.33
4	Agro-processing	3000	2	2	3	2.33
	based					
5	Storage	3000	3	2	2	2.33

IJAS	RT in EESs, 2020; 10(1)				http://ijasrt.ia	u-shoushtar.ac.ir
6 C	Marketing Number of productive assets acquired by FUGs	3000	1	2	1	1.33
1*	Crop Based activities	3000	107	134	154	131.67
2	Livestock based	3000	62	47	45	51.33
3	Fisheries based	3000	42	110	162	104.67
4	Agro-processing based	3000	13	13	14	13.33
5	Marketing equipment	3000	7	8	7	7.33
6	Irrigation &					2.67
	drainage equipment	3000	4	2	2	
7	Storage facilities	3000	13	7	11	10.33
8*	Percentage increase	40%				162.67
	in income		155	163	170	
9	Contribution into Fadama Users'	11,250,000				136.00
	Equity Fund (FUEF) (₦)		101	75	232	
				Pooled Mean Achie	vement Index =	56.33

Note: Asterisked activities are those in which more than the set targets are achieved, exceeding 100% achievement.

Table 5. Fadama III Fadama User Equity Fund Contribution in Akwa Ibom, Bayelsa and Delta States

		Project Target	Amount Achieved (A)	Performance (%) (A/T X	
	State	(T)(₩)	in Savings (₦)	100/1)	Rank
1	Delta	11,250,000.00	26,048,533.00	232	1^{st}
2	Akwa Ibom	11,250,000.00	11,343,631.00	101	2^{nd}
3	Bayelsa	11,250,000.00	8,477,070.00	75	3^{rd}

4. Conclusion and Recommendations

The study concluded that Fadama III project recorded agro-economic achievements by exceeding 100% in set tasks and targets amongpercentage increase in income, crop and fisheries based activities, number of LGA staff trained and number of monitoring visits to sub projects. However, some indicators that did not achieve set tasks and targets included livestock based, agro-processing based, marketing equipment, irrigation/drainage equipment and storage facilities. Another huge financial achievements of Fadama III project was in the contribution into Fadama Users' Equity Fund (FUEF) by members. While Delta and Akwa Ibom States exceeded the set target on contribution to FUEF, Bayelsa was below the bench mark on its contribution as at when the study was conducted. In conclusion, agro-economic achievements of given tasks and targets plus financial performance in FUEF is a pointer to project and enterprises sustainability.

Based on the findings from this study, it becomes imperative to recommend the following:

There should be critical examination on items that did not achieve their tasks and targets so that learning points from failed activities can be avoided and managed by policy makers.

Similarly, reasons for non-achievement in FUEF by Bayelsa State should be looked into and readdress for future purposes

Enterprises with proven agro-economic achievement in success story should be followed up for project sustainability.

References

1. Federal Republic of Nigeria. (2017). Map of Nigeria States and coordinates @ en.wikipedia.org/wiki/Nigeria

2. Ike, P. C. (2016). Assessment of Beneficiaries Satisfaction with FADAMA III/SEEFOR Funded Rural Infrastructures and Productive Assets, Nigerian Agricultural Policy Research journal/Agricultural Policy Research network,1 (1), 60 -74

3. National Fadama Development Plan (NEDP). (2009a). Third National Fadama Development Project (Fadama III) Support to ADPs, sponsored research and On-Farm Demonstrations. Federal Ministry of Agriculture and Water Resources, Abuja. Manual, 6, 3-7

4. National Fadama Development Plan (NEDP). (2009b). Third National Fadama Development Project (Fadama III) Asset Acquisition Federal Ministry of Agriculture and Water Resources Abuja,. Manual No. 8 pp. 1-8 @ www.fadama.net

5. Ogunbameru, B. O., Sabo, M. and Gwary, M. M. (2005). Performance of the Women in Agriculture (WIA) Project in Bomo State during and after the World Bank support 1989 - 2003. Paper presented at 39th Annual Conference of Agricultural Society of Nigeria held at University of Benin, Benin City. 9th - 13th October, 2005.

6. Ovharhe, O. J. (2014). Fadama III Beneficiaries Agronomic Production Survey (FBAPS), Delta State.Proceedings of the 28th Annual Conference of the Farm Management Association of Nigeria held from 15th to 18th November, 2014 at the Delta State University Abraka, pp. 44-51.

7. Ovharhe, O. J. (2016). Aquaculture Technologies Adoption by Fadama III Aquaculture Farmers in Niger Delta. Journal of Northeast Agricultural University, 23(4), 78 – 81

8. Ovharhe, O. J. (2019). Determinants of the socioeconomic profile of Fadama III Project beneficiaries in three States of Niger Delta Area of Nigeria. International Journal of Agricultural Science 4, 29 - 34

9. Ovharhe, O. J. Oyibo, O. and Alakpa S. O. E. (2016). Appraisal of Fadama III Beneficiaries levels of satisfaction in the Operation, Utilization and Maintenance of Rural Infrastructure in Delta State, Nigeria. Journal of Agriculture and Food Environment, 3(2), 2-40

10. Ragasa C., Ulimwengu, J., Randriamamonjy, J. and Badibanga, T. (2016). Factors Affecting Performance of Agricultural Extension: Evidence from Democratic Republic of Congo. Journal of Agricultural Education and Extension 22, (2), 113-143

11. Uzokwe, U. N., Ogbekene, N. and Ovharhe, O. J (2015). Community Based Organization System and the Development of Rural Communities in Delta State. Journal of Agriculture and Food Environment, 2 (3), 25 - 33.

12. Voon, J. ., Ngui, K. ., & Agrawal, A. (2011). Determinants of Willingness to Purchase Organic Food: An Exploratory Study Using Structural Equation Modeling. International Food and Agribusiness Management Review, 14(2), 103–120.

13. Weaver, R. ., D.J, E., & Luloff, A. (1992). Pesticide use in tomato production consumer concerns and willingness to pay. Agribusiness, 8, 131–142.

14. Willer, H., & Lernoud, J. (2018). The World of Organic Agriculture Supported by Global Policy Toolkit on Public Support to Organic Agriculture.