



RESEARCH ARTICLE

THE EFFECT OF COUNTERPART FUND PAYMENTS ON THE IMPLEMENTATION OF
FADAMA III INTERNATIONAL DONOR PROJECT IN RIVERS STATE: 2009-2012

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ABSTRACT:

This study analyzed the effects of beneficiary contributions, local and state government counterpart fund payments on the implementation of FADAMA III project in Rivers State from 2009 –2012. Monthly and annual time series secondary data of counterpart fund payments within the period under review were used for the analysis. The study made use of descriptive statistics, the short run ordinary least square test, unit-root test analysis, Co-integration procedure, as well as Parsimonious Error Correction Models. Results show long run relationship between the dependent and independent variables. The parsimonious result for the Total Project Implemented (TPI) equation shows that for every ₦1 million paid as beneficiary contributions by FADAMA Groups, the value of Total Project Implementation increases by ₦2.91 million. The result of Asset Acquisition for Groups (AAG) equation shows that with every ₦1 million paid as beneficiary contributions by FADAMA Groups, the value of Asset Acquired increases by ₦1.12 million monthly. The result for Capacity Building for Groups (CBG) equation shows that for every ₦1 million paid as beneficiary contributions by FADAMA Groups, the value of Capacity Building increases by ₦137,620 monthly. The result for the OPT equation shows that for every ₦1 million contributed by beneficiaries of FADAMA, the value of Output Produced is increased by ₦4.72 million monthly. Also, every ₦1 million disbursed by the World Bank fund to FADAMA Groups, the Output Produced increases by ₦1.42 million monthly. Based on the findings of the study, it is recommended that there should be legislative approval to deduct counterpart fund payments at source to avoid the problem of nonpayment after project takeoff as this will contribute effectively to full implementation of FADAMA III project.

INTRODUCTION: Nigeria's agricultural sector has a high potential for further growth. Productivity is low and can be much improved. Basic social and Productive infrastructure is both inadequate and in a state of decay due to low budgetary provision for operation and maintenance of the facilities and lack of community participation in maintenance. The agricultural research and extension systems are unable to respond to the increasingly diverse needs

of rural clients, including advice on sustainable land management. Deficiencies in input distribution systems limit the timely availability of improved seed, fertilizers, chemicals, and machinery. Livestock and fishery sub-sectors also lack adequate availability of inputs such as feeds and veterinary inputs.

Many Farmers could not have access to financial services(less than 10 percent of rural household use formal banking and insurance services) limits the farmers' ability to obtain inputs and exploit the opportunities offered by a huge and rapidly growing domestic market. (World Bank, 2008). It was in the light of the above problems that the FADAMA III project was established, although the effective implementation of this project required the payment

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of counterpart funds by major stakeholders.

Counterpart fund payment is the contributory fund to the total cost of project implementation for a project or programme. Such payment by major stakeholders in the International Donor projects is key to effective implementation of programmes and projects. This is because such payments could form the necessary capital that cumulates in total project cost requirements that would serve as important tool for the procurement of assets, provision of infrastructures, vehicles, etc which could serve as preparatory framework for project takeoff.

It will also enable the acquisition of necessary capacity building and training to be carried out on the project staff as well as the target beneficiaries before the implementation of the project. Important equipment and assets, as well as necessary inputs would also be acquired for the implementation of their subprojects. In the case of FADAMA Development Project, the State and Local Government Councils as well as the beneficiary groups were expected to comply in the payment of counterpart funds.

However, Akinleye, (2005) maintained that the tier of government entrusted with the responsibility in Nigeria of developing the rural areas has not lived up to expectation in spite of the huge capital investment. Somiari (2004), maintained that inadequate counterpart fund payments by the Rivers State Government in the Root and Tuber Crop Expansion Programme was a huge setback in the establishment of cassava processing centers in most local Government areas of the State.

Generally, the implementation of agricultural activities depends on a number of factors of which Counterpart fund payments occupy a central place in the context of FADAMA III project. This is because counterpart payment by stakeholders in the International Donor project has been identified as a key to effective implementation of programmes and projects. Essentially, such programmes form the necessary capital and cumulates in total project cost requirements that would serve as an important tool for the procurement of assets, provision of infrastructures, vehicles etc, for the effective

implementation of the programme. The stakeholders in FADAMA III project, which include the Federal Government, State, and, the local governments and the beneficiaries, are expected to make payments to enable the project managers to acquire the necessary tools in form of assets, capacity building of staff, etc, for the implementation of the projects.

Specifically, assets acquisition and capacity building play more central role in the implementation of the project. This is because total project implementation is a function of the ability of FADAMA beneficiaries to perform appropriate functions, effectively, efficiently and sustainably. Also, being able to access, control, and own productive assets such as, land, labour, finance, and social capital, would enable the beneficiaries to participate positively towards the sustainability of the project.

In view of the foregoing, the stakeholders are expected to participate fully by contributing their quotas towards the full implementation of the project. Government in this direction has recognized that agricultural growth is the key to ensuring poverty alleviation, food security and the attainment of Millennium Development Goals(MDGs); hence the prompt payment of their quota at the federal level.

As at Mid-term in the FADAMA project life, the number of subprojects fully implemented greatly fell short of the target in Rivers State. This would mean a sharp fall in the FADAMA project development objectives stipulated in the Project Appraisal Document. Since counterpart fund payments, asset acquisition and capacity building play major roles in the implementation process, there is the need to conduct an evaluation study on the effects the various contributory factors played for effective and efficient implementation of the programme. Consequently, the following research questions are raised:

To what extent have beneficiary contributions, State and Local Government counterpart fund payments affected the total number of subproject implementation in the State? To what extent have the same variables affected the quantity of assets expected to be acquired by the groups for the production of outputs? How far have the above mentioned variables affected the quantity of capacity

building acquired by group members to correctly implement their sub projects? To what extent have the World Bank disbursements to the groups, beneficiary contributions and quantity of assets acquired by the groups affected the quantity of output produced in the State. The answers to these questions can only be addressed through an evaluative study.

Therefore, the study was guided by these objectives, to: assess the effects of Counterpart fund payments on the total sub projects implemented in the state; determine the effect of Counterpart fund payments on the total value of assets acquired for use in the production of output by group members; assess the extent to which beneficiary's contributions, and counterpart fund payments have affected the total value of capacity building acquired by individual members to correctly implement their Subprojects; and assess the effect of World Bank grants, counterpart payments, and value of asset acquired on the total value of output by the groups.

These hypotheses also gave the study a research direction: there is no significant relationship between Counterpart fund Payments and the total number of Subprojects implemented in the State; there is no significant relationship between Counterpart fund Payments and the total quantity of assets acquired by the individual groups for the production of output; there is no significant relationship between Counterpart fund Payments and the adequate capacity building by the group members to correctly implement their Sub projects and there is no significant relationship between World Bank fund, beneficiary contribution, value of asset acquired by FADAMA groups and total value of output.

This work was divided into five sections: section one considers the introduction. Section two examines some relevant literature with a view to providing the background for the theoretical and conceptual framework. Section three outlines the methodological issues together with model Specification, evaluation and sources of data required. Section four presents and analyzes the empirical data. Finally, section five considers conclusion and recommend policy actions.

LITERATURE REVIEW: Theoretical Framework: Theories of Counterpart Funding: Contracting Foreign Aid: Much of the theoretical literature on aid contracting starts from the assumption that donors are benevolently concerned with poverty reduction and economic development. The models in this body of research demonstrate the ways in which incentive structures in the principal-agent relationship between donors and aid-receiving states limit the effectiveness of foreign aid in achieving these ends.

This literature portrays a Samaritan's dilemma in which donors' desires to provide assistance to impoverished populations creates aid dependency and limits the effectiveness of aid: although donors want to alleviate poverty, governments want to continue receiving foreign aid and therefore lack incentives to see that the aid is used for the purpose of poverty alleviation. Since the threat to withdraw aid is not credible (because this would mean interrupting the flow of goods and services to impoverished populations), aid flows continue despite the fact that development objectives are not being met (Svensson 2000; Gibson, 2005; Williamson, 2010).

Authors also have recognized how this situation is compounded by the intense "disbursement culture" that prevails within aid agencies. Professional incentives within aid organizations reward complete disbursement of available budgets to a greater extent than they reward the design of effective development programs. This culture hinders the ability of a donor to credibly threaten the withdrawal of aid in the event that it has been used inappropriately, sustaining large aid flows without development progress (Mosley, Harrigan and Toye, 1991; Killick, 1998; Easterly, 2002; Svensson, 2003; Dreher, 2004; de Renzio, 2005).

According to Winters and Streitfeld (2013), in the literature on the Samaritan's dilemma and disbursement culture, aid is conceptualized as a transfer from an international agency to a domestic government, where the donor decides whether to give aid or not and the state decides whether to use the money in line with the purposes for which it has been given or not. The model that Winters and Streitfeld

(2013) offer below challenges two aspects of this common portrayal of aid relationships. First, they view the first-stage decision as one in which the donor and the recipient- country bargain over the total size and specific financing of the project. Second, they allow for the possibility that states (and not donors) make the initial project and financing proposals.

Where there is the possibility of counterpart financing, the mix of domestic and international funding is necessarily the result of a bargaining process. This bargaining has not been addressed in the theoretical or empirical literature to date. In the next section, they provide a schematic of four possible bargaining scenarios and discuss the components of the donor and borrower’s objective functions and how they are likely to affect bargaining outcomes (Winters and Streitfeld, 2013).

Bargaining Over Who Pays: What Explains the Size of Counterpart Commitments in Development Projects? There are two sides that participate in the negotiation of an international development project – development agency staff and recipient-country technocrats. Both aid agency staff and recipient-country technocrats have preferences over aid project financing that can involve a mix of aid

agency money and recipient-country counterpart funding. Either the aid agency or the recipient-country might initiate a project, and an agreement to share the financing might either be feasible or not. They assume that each side will be interested in contributing additional money insofar as it yields additional resources from the other side. They depict four scenarios in Figure 1.

In the upper left hand corner, the project is initiated by the donor. The donor is willing to dedicate some money to the project even if the recipient-country is not willing to dedicate any. As the country becomes willing to provide money for the project, the donor is willing to provide additional foreign assistance, although the marginal amount is decreasing as project size increases.

Therefore an agreement can be reached that includes some donor funding and some counterpart funding. Alternatively, as pictured in the upper right hand corner, there may be a project initiated by the government, where the government will undertake the investment on a certain scale even if the donor provides no money. Then as the donor provides more money, the government also is willing to provide additional funding. A bargaining space is defined by the decreasing marginal utility of

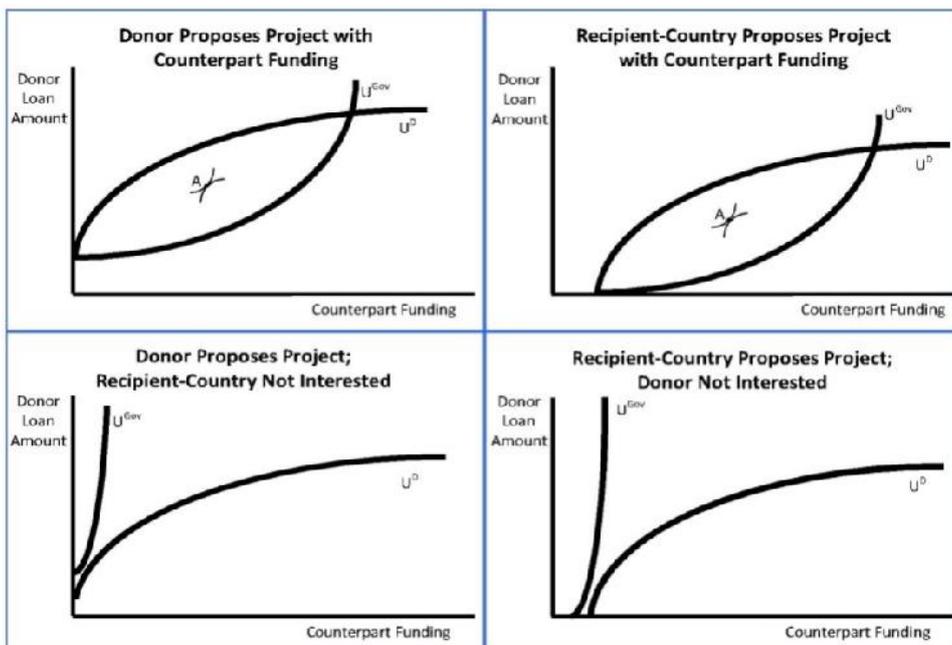


Figure 1. Possible Scenarios in Donor-Recipient-Country Bargaining over Project Design

Source: Adapted from Somiari, 2014; Easterly, 2002; Svensson, 2003 and Droher, 2004

contributing additional amounts of one's own money, and the two sides reach agreement on a certain mix of recipient-country and donor funding. In projects initiated by the recipient-country, the government is willing to agree to a higher maximum amount of counterpart commitments for a given amount of donor funding than in donor-proposed projects. In the lower left hand corner, the project is initiated by the donor.

The government is only willing to contribute a small amount of money, and therefore the donor opts to undertake a relatively small project with no counterpart funding involved. In the lower right hand corner, the government proposes the project and is willing to contribute a certain amount, but this amount is not enough for the donor to be interested in financing part of the project. In this case, the government finances a relatively small project on its own without any donor funding (or potentially with funding from a different, more amenable donor).

This basic bargaining schema produces their first testable hypothesis, which is that donor and country funding, on average, will increase simultaneously. They describe this as the quid pro quo hypothesis. Bargaining spaces, however, are not all equal. They depend on the specific characteristics of the negotiators and the project being negotiated over. In their study, they are holding one actor (the World Bank) constant, but this aid agency interacts with a variety of borrowers. In the remainder of this section, they describe the objectives and constraints faced by the aid agency engaged in this bargaining, and then they describe some factors that might provide additional leverage to the country with which the aid agency is negotiating.

MATERIALS AND METHOD: Research Design: The research design adopted in this study was evaluation and quasi experimental research designs. The prominent and adaptable evaluation model which dwells on providing data that enable decision makers to take decision about a particular programme, is that developed by Stufflebeam (1971). That is the CIPP model, an acronym which stands for four types of evaluation, namely, Context evaluation, Input evaluation, Process evaluation, and Product evaluation. Supporting the choice of

research design in this study, Kpolovie (2010) asserts that evaluation research design covers any systematic and logical search for solution to pressing social or educational problems, identifying and resolving the problems inherent in implementing policy decisions and monitoring initiatives in educational practice or institutional practice through empirical comparison.

The study made use of secondary data. They included monthly data on beneficiary contributions from Fadama User Groups in the sixteen Local government Areas of Rivers State 2009-2012; Local Government Counterpart fund Payments in 2009-2012; State Governments Counterpart Fund Payments in 2009 – 2012, and Total Number of implemented sub projects in 2009 -2012. These data were collected from: monthly, reports of the World Bank for Fadama Projects implementation in Rivers State.

The sixteen LGAs are those who met the eligibility/qualification criteria for participating in implementing FADAMA projects. Further, this study adopted the analytical method of multiple regression of ordinary least square (OLS). Fischer and Jordan (2009) support this by asserting that econometrics is the field of study that applies mathematical and statistical techniques to economic theory. As such, it is the most precise and scientific of the approaches. In applying this method, the study precisely quantified the relationship and assumptions that show the interrelationships of the economic variables which include: asset acquisition, capacity building, counterpart fund payments made by the beneficiaries, state and local government in Rivers state.

Furthermore, regression analysis describes relationship between variables one dependent and other explanatory variables and allows for specification in a formal mathematical manner, the precise relationship between the dependent and independent variables. The procedure of this method includes; unit root of test, co-integration test and parsimonious error correction model. The purpose of adopting these methods is for the purpose of testing the null hypotheses and conduct other econometric second order tests in order to detect and correct the problem of multicollinearity, heteroscedasticity, and auto-correlation. Models with more than two

explanatory variables, as we have in this case, are too complex for manual ordinary estimation; hence the use of E-view statistical software version 7.1.

E-view version 7.1 is computer software used in running of regression equations. The choice of co-integration test for our analysis aside from the Ordinary least squares (OLS) method is informed due to pitfalls, that sometimes characterizes time series data. Hence the use of co-integration test is to help correct these anomalies.

The specification of the functional relationship adopted for this investigation is implicitly stated below.

$$\begin{aligned} \text{TPI} &= f(\text{BCF, LGF, SGF}) & (1) \\ \text{AAG} &= f(\text{BCF, LGF, SGF}) & (2) \\ \text{CBG} &= f(\text{BCF, LGF, SGF}) & (3) \\ \text{OPT} &= f(\text{WBF, BCF, AAG}) & (4) \end{aligned}$$

Where:

- TPI = Values of Total Project Implementation in the Rivers State
- AAG = Values of Asset Acquired for Fadama Groups in the Rivers state
- CBG = Values of Capacity Building for Fadama Groups in the Rivers state
- OPT = Value of output produced by the groups
- BCF = Values of Beneficiary Contributions by Fadama Groups in the State
- LGF = Values of Local Government Counterpart fund payment in the State
- SGF = Values of State Government Counterpart fund payment
- WBF = Values of World Bank fund disbursement to the groups

From the functional relationships, the econometric models are specified in order to capture the influence of the statistic or random terms: hence the equations are explicitly transformed thus:

$$\begin{aligned} \text{TPI} &= a_0 + a_1\text{BCF} + a_2 \text{LGF} + a_3 \text{SGF} + U_t & (5) \\ \text{AAG} &= a_0 + a_1\text{BCF} + a_2 \text{LGF} + a_3 \text{SGF} + U_t & (6) \\ \text{CBG} &= a_0 + a_1\text{BCF} + a_2 \text{LGF} + a_3 \text{SGF} + U_t & (7) \\ \text{OPT} &= a_0 + a_1\text{WBF} + a_2 \text{BCF} + a_3\text{AAG} + U_t & (8) \end{aligned}$$

As other variables in equation 4 retained as earlier defined, a_0 stands for constant of the equation, a_1 , a_2 , and a_3 , are coefficients of: BCF, LGF, and SGF, while U_t is the stochastic or random or error term.

From equation (5) to (8), the mathematics forms of the models are specified thus:

$$\text{TPI} = \hat{a}_0 + \hat{a}_1 \text{BCF} + \hat{a}_2 \text{LGF} + \hat{a}_3 \text{SGF} \quad (9)$$

$$\text{AAG} = \hat{a}_0 + \hat{a}_1 \text{BCF} + \hat{a}_2 \text{LGF} + \hat{a}_3 \text{SGF} \quad (10)$$

$$\text{CBG} = \hat{a}_0 + \hat{a}_1 \text{BCF} + \hat{a}_2 \text{LGF} + \hat{a}_3 \text{SGF} \quad (11)$$

$$\text{OPT} = \hat{a}_0 + \hat{a}_1 \text{WBF} + \hat{a}_2 \text{BCF} + \hat{a}_3 \text{AAG} \quad (12)$$

Justification of the Variables in the Models and A Prior Expectation:

Economic postulations suggest that payment of beneficiary contributions by the individual groups, local and State Government counterpart fund payments will bring about increase in total number of subproject implementation in the state, increase in Asset Acquisition by individual groups for the production of outputs, and increase in capacity building of the group members to equip them with the technical knowledge on project implementation principles and practice will bring about more effective implementation of projects.

Furthermore, increase in payment of beneficiary contributions by the individual groups, local and State Government counterpart fund payments will positively affect the total number of subproject implementation in the state, increase asset acquisition by individual groups for the production of outputs, as well as increase in capacity building of the group members.

This is based on the economic postulation that an increase in beneficiary contribution payments, increase in local and State Government Counterpart Fund payments in the State will directly bring about an increase in the total number of subproject implemented in the State, increase the capacity building of the group members to correctly implement their projects and also help to increase the quality and quantity of their acquired assets that will bring about increase in total production. This will eventually increase their capital and income base and will improve their standard of living in a sustainable manner. Based on the foregoing the expected signs of regression coefficients in all the equations are: $a_1, a_2, a_3, > 0$.

EMPIRICAL RESULTS AND DISCUSSIONS:

Descriptive Statistics: The descriptive statistics of the variables used in estimations in this study are presented in table 1.

minimum of 1.30 and a maximum of 58.70. OPT has a standard deviation of 11.12.

The figure recorded for maximum and mean implies

Table 1 Descriptive Statistics of Variables

	AAG	BCF	CBG	LGF	OPT	SGF	TPI	WBF
Mean	5.893958	2.780417	0.643333	0.918333	13.47208	0.966667	12.75000	13.75625
Median	5.355000	2.625000	0.610000	0.500000	10.29500	0.000000	12.00000	14.27000
Maximum	12.83000	6.370000	1.620000	4.000000	58.70000	10.00000	32.00000	26.85000
Minimum	1.600000	0.400000	0.000000	0.000000	1.300000	0.000000	0.000000	3.110000
Std. Dev.	2.998450	1.610184	0.465793	1.113422	11.12213	2.449953	9.345610	5.729560
Probability	0.151937	0.237003	0.306778	0.000133	0.000000	0.000000	0.354516	0.471540
Observations	48	48	48	48	48	48	48	48

Note: AAG stands for Value for Asset Acquired by Fadama Groups; BCF stands for Beneficiary Contribution by Fadama Groups; CBG stands for Value for Capacity Building to Fadama Groups; LGF stands for Local Government Council Counterpart fund Payments; OPT stands for Value of output by the groups; SGF stands for State Government Counterpart fund; TPI stands for Value of Total number Sub Projects implemented and WBF stands for World Bank fund disbursements to the groups.

The Value for Asset Acquired by Fadama Groups (AAG) averages 5.89. It (AAG) ranges from 1.60 to 12.83 with a standard deviation of approximately 3.00. The descriptive statistics on the AAG variable implies that a minimum asset on the worst off scenario needs to be acquired for a sub project takeoff, while an adequate and complete asset acquired will boost production. This means that a good number of the groups acquired adequate assets, while the probability of groups that did not acquire asset is zero. Beneficiaries' contribution by Fadama groups (BCF) has a mean of 2.78 with 0.40 and 6.37 as its minimum and maximum values respectively.

The standard deviation of BCF is 1.61. The implication of these on beneficiary contribution is that there must be an atom of contribution to attract World Bank fund. The mean contribution is low implying that beneficiary contribution by the groups is a problem. Next is the value for capacity building to Fadama groups (CBG) with 0.00, 1.62, 0.64 and 0.47 as the results for its minimum, maximum, mean and standard deviation respectively.

The statistics for Capacity Building are low, implying that adequate Capacities were not acquired before project takeoff. This may be due to low Counterpart fund payments by the major Stakeholders. Local government council counterpart fund payments (LGF) average 0.92 ranging from 0.00 to 4.00 with a standard deviation of 1.11. The figures for Local Government Counterparts are low implying low payments. The mean for the value of output by Fadama groups (OPT) was 13.47 with a

reasonable and adequate production for most groups that received World Bank Funds and actually implemented their subprojects. Counterpart fund from the Rivers State Government (SGF) and value of total number sub-projects implemented (TPI) had a mean of 0.97 and 12.75 respectively. The time series variables (SGF and TPI) had a minimum of 0.00 and 0.35 respectively. The highest values for SGF and TPI is 10.00 and 32.00; with a standard deviations of 2.45 and 9.35 respectively. The figures for State Government Counterpart Fund Payments were low meaning poor compliance for the period under review, while there was adequate number subproject implementation for those who received World Bank disbursements. World Bank fund disbursements (WBF) average 13.76 million naira with a minimum of 3.11 million naira and 26.85 million naira respectively. WBF had a standard deviation of 5.73. This means that a good number of the groups actually received disbursements from the World Bank Fund for Subproject Implementation.

Correlation Matrix:

Table 2 Correlation Matrix for all Variables

	AAG	BCF	SGF	LGF	OPT	CBG	TPI	WBF
AAG	1.00	0.91	-0.38	-0.38	0.49	0.98	0.99	0.68
BCF	0.91	1.00	-0.39	-0.32	0.53	0.92	0.92	0.64
SGF	-0.38	-0.39	1.00	0.67	-0.30	-0.43	-0.42	0.69
LGF	-0.38	-0.32	0.67	1.00	-0.22	-0.37	-0.39	-0.24
OPT	0.49	0.53	-0.30	-0.22	1.00	0.50	0.50	0.08
CBG	0.98	0.92	-0.43	-0.37	0.50	1.00	0.98	-0.39
TPI	0.99	0.92	-0.42	-0.39	0.50	0.98	1.00	0.68
WBF	0.68	0.64	0.69	-0.24	0.08	-0.39	0.68	1.00

Source: Author's Computation. Note: Variables are as defined in Table 1. Positive correlation as well of negative correlation exists among all the variables; with high correlation and some with low correlation (see table 4.3 above). For example, there is high positive correlation between AAG and TPI (i.e. 0.99). Table 4.3 also shows that a negative and low correlation exists between LGF and WBF (i.e. -0.24).

Stationarity Test: The time series behavior of each of the series is presented in Tables 4.4 and 4.5 below, using the ADF and PP tests at both level and first difference of the series. The results presented in tables 4.4 and 4.5 below depicts that all the variables are homogenous of order one. Therefore, they are made stationary by first difference prior to subsequent estimations to forestall spurious regressions.

TPI model. Since the variables are cointegrated, there is, therefore, a long run relationship among the variables. It also means that the study can proceed to estimating the Error Correction Model for the TPI model.

The test statistics, as shown in table 4.7, indicate that the hypothesis of no cointegration (i.e H_0) among the variables can be rejected. The results reveal four

Table 3 Unit Root Test at level

Variable	ADF			PP			Decision
	t_{μ}	t_T	t	t_{μ}	t_T	t	
TPI	-2.646553	-2.888342	-1.422335	-2.153683	-2.211414	-1.069042	Non-Stationary
OPT	-3.471036	-3.431442	-2.528080	-3.415776	-3.393073	-2.339751	Non-Stationary
AAG	-2.728539	-3.056574	-1.469151	-2.241956	-2.399531	-1.134978	Non-Stationary
CBG	-2.729903	-2.998079	-1.481737	-2.156890	-2.207379	-1.066305	Non-Stationary
BCF	-2.845381	-3.227899	-0.939203	-2.790058	-3.322057	-1.319382	Non-Stationary
LGF	-2.363227	-2.702757	-2.183383	-2.940473	-3.266677	-2.183383	Non-Stationary
SGF	-6.084383*	-4.286443*	-6.821987*	-3.017643	-3.599984	-2.708714	Non-Stationary
WBF	-1.975682	-4.730558*	0.577759	-2.339508	-4.729909*	0.171250	Non-Stationary
Critical Value	Critical Value	Critical Value	Critical Value	Critical Value	Critical Value	Critical Value	
1% = -3.581152	1% = -4.170583	1% = -2.616203	1% = -3.577723	1% = -4.165756	1% = -2.615093		
5% = -2.926622	5% = -3.51074	5% = -1.94814	5% = -2.925169	5% = -3.508508	5% = -1.947975		
10% = -2.601424	10% = -3.185512	10% = -1.61232	10% = -2.600658	10% = -3.18423	10% = -1.612408		

Table 4 Unit Root Test at First Difference

Variable	ADF			PP			Decision
	t_{μ}	t_T	t	t_{μ}	t_T	t	
TPI	-4.275652*	-4.312145*	-4.341868*	-4.230306*	-4.257595*	-4.299189*	I (1)
OPT	-9.914436*	-9.881632*	-10.02647*	-11.04012*	-11.71265*	-11.18151*	I (1)
AAG	-4.239516*	-4.273000*	-4.304970*	-3.965116*	-4.873794**	-4.043431*	I (1)
CBG	-4.034711*	-4.076052**	-4.101048*	-4.007012*	-4.237514**	-4.074610*	I (1)
BCF	-9.207581*	-9.175282*	-9.297391*	-9.259064*	-9.209273*	-9.340249*	I (1)
LGF	-5.332239*	-5.160966*	-5.338406*	-8.038153*	-8.007156*	-8.137095*	I (1)
SGF	-4.024710	-6.927256	-6.842180	-11.81451	-11.04826	-12.04467	I (1)
WBF	-10.08098*	-9.982646*	-9.863833*	-10.24550*	-10.12783	-9.863833	I (1)
Critical Value	Critical Value	Critical Value	Critical Value	Critical Value	Critical Value	Critical Value	
1% = -3.581152	1% = -4.170583	1% = -2.616203	1% = -3.577723	1% = -4.165756	1% = -2.615093		
5% = -2.926622	5% = -3.51074	5% = -1.94814	5% = -2.925169	5% = -3.508508	5% = -1.947975		
10% = -2.601424	10% = -3.185512	10% = -1.61232	10% = -2.600658	10% = -3.18423	10% = -1.612408		

t_T stands for the most general model with an intercept and trend; t_{μ} is with an intercept but without trend; t is the one without intercept and without trend. Unit root tests were performed from the most general to the most restricted model as also suggested by Enders (1995). *, ** and *** represent the rejection of the null hypothesis at alpha 1 percent, 5 percent and 10 percent respectively. Tests were carried out in E-VIEWS 7.1.

The test statistics indicate that the hypothesis of no cointegration, H_0 , among the variables can be rejected. The results reveal four cointegrating vectors exist among the variables of interest in the

Table 5 Cointegration Result for the Total Project Implementation (TPI) Model

Trace Test k=2				Maximum Eigenvalue Test k=2			
H_0	H_A	(trace)	Critical Values (5%)	H_0	H_A	(Max)	Critical Values (5%)
r = 0	r > 0	70.80864*	47.85613	r = 0	r > 0	30.37617*	27.58434
r = 1	r > 1	40.43247*	29.79707	r = 1	r > 1	20.15882	21.13162
r = 2	r > 2	20.27366*	15.49471	r = 2	r > 2	15.54650*	14.26460
r = 3	r > 3	4.727157**	3.841466	r = 3	r > 3	4.727157*	3.841466

Note: r represents number of cointegrating vectors and k represents the number of lags in the unrestricted VAR model. * denotes rejection of the null hypothesis at the 5% level.

Table 6 Co integration Result for the Asset Acquired for Fadama Groups (AAG) Model

Trace Test k=2				Maximum Eigenvalue Test k=2			
HO	H_A	(trace)	Critical Values (5%)	H_0	H_A	(Max)	Critical Values (5%)
r = 0	r > 0	69.06445*	47.85613	r = 0	r > 0	30.19156*	27.58434
r = 1	r > 1	38.87289*	29.79707	r = 1	r > 1	18.67412	21.13162
r = 2	r > 2	20.19877*	15.49471	r = 2	r > 2	15.48202*	14.26460
r = 3	r > 3	4.716744*	3.841466	r = 3	r > 3	4.716744*	3.841466

Note: r represents number of cointegrating vectors and k represents the number of lags in the model. * denotes rejection of the null hypothesis at the 5% level.

cointegrating vectors exist among the variables of interest in the AAG model. Since the variables are cointegrated, there is, therefore, a long run relationship among the variables. It also means that

the study can proceed to estimating the Error Correction Model for the AAG model.

Table 7 Cointegration Result for Capacity Building for Fadama Groups (CBG) Model

Trace Test				Maximum Eigenvalue Test			
		k=2				k=2	
H ₀	H _A	(trace)	Critical Values (5%)	H ₀	H _A	(Max)	Critical Values (5%)
r = 0	r > 0	68.47316*	47.85613	r = 0	r > 0	25.48458	27.58434
r = 1	r > 1	42.98858*	29.79707	r = 1	r > 1	22.61376*	21.13162
r = 2	r > 2	20.37482*	15.49471	r = 2	r > 2	15.09343*	14.26460
r = 3	r > 3	5.281390*	3.841466	r = 3	r > 3	5.281390*	3.841466

Note: r represents number of cointegrating vectors and k represents the number of lags in the unrestricted VAR model. * denotes rejection of the null hypothesis at the 5% level.

The result presented in table 4.8 above shows that we can reject the hypothesis of no cointegration (i.e H₀) among the variables. The test statistics reveals that four cointegrating vectors exist among the variables of interest in the CBG model. Since the variables are cointegrated, there is, therefore, a long run relationship among the variables. It also means that the study can proceed to estimating the Error Correction Model for the CBG model.

Table 8 Cointegration Result for Output Produced by Fadama Groups (OPT) Model

Trace Test				Maximum Eigenvalue Test			
		k=2				k=2	
H ₀	H _A	(trace)	Critical Values (5%)	H ₀	H _A	(Max)	Critical Values (5%)
r = 0	r > 0	62.65645*	47.85613	r = 0	r > 0	31.23791*	27.58434
r = 1	r > 1	31.41854*	29.79707	r = 1	r > 1	16.25394	21.13162
r = 2	r > 2	15.16459	15.49471	r = 2	r > 2	9.199106	14.26460
r = 3	r > 3	5.965486*	3.841466	r = 3	r > 3	5.965486*	3.841466

Note: r represents number of cointegrating vectors and k represents the number of lags in the model. * denotes rejection of the null hypothesis at the 5% level.

Table 4.9 above shows that we can reject the hypothesis of no cointegration, H₀, among the variables. The test statistics reveals that three cointegrating vectors exist among the variables of interest in the OPT model. Since the variables are cointegrated, there is, therefore, a long run relationship among the variables. It also means that the study can proceed to estimating the Error Correction Model for the OPT model.

Error Correction Model: This section will focus on the estimation and interpretation of the error correction model for the four models. Therefore, based on the result from tables 4.6, 4.7, 4.8 and 4.9, four over-parameterised model were estimated namely: total project implementation (TPI) Model; asset acquired for Fadama groups (AAG) model; capacity building for Fadamagroups (CBG) model;

and output produced by Fadama groups (OPT) model.

Every variable was set at 2 lag. ECM was derived from the cointegrating relationship in tables 4.6, 4.7, 4.8 and 4.9. The parsimonious interaction involves dropping insignificant variables. Therefore, the size of the model was reduced by imposing zero coefficients on those lags where 't' statistic is low. Through simplification, a more parsimonious and interpretable model was produced as shown in the equations and tables that follows.

Table 9 Parsimonious TPI Model

Dependent Variable: D(TPI)				
Included observations: 45 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.090753	0.395693	0.229354	0.8199
D(TPI(-1))	0.587952	0.165246	3.558051	0.0011
D(BCF)	2.908024	0.350406	8.299018	0.0000
D(BCF(-1))	-1.150405	0.636815	-1.806497	0.0792
D(BCF(-2))	-0.382454	0.359104	-1.065022	0.2940
D(LGF)	-0.968751	0.481717	-2.011038	0.0519
D(LGF(-1))	-0.494697	0.448655	-1.102621	0.2775
D(SGF(-1))	0.368287	0.202670	1.817174	0.0775
ECM(-1)	-0.845067	0.175882	-4.804739	0.0000
R-squared	0.749948	Mean dependent var	0.177778	
Adjusted R-squared	0.694381	S.D. dependent var	4.730409	
S.E. of regression	2.615101	Akaike info criterion	4.937339	
Sum squared resid	246.1952	Schwarz criterion	5.298672	
Log likelihood	-102.0901	F-statistic	13.49629	
Durbin-Watson stat	2.090093	Prob(F-statistic)	0.000000	

Error Correction Model for Total Project Implementation (TPI) Model: The parsimonious result for the TPI equation is shown in the table 4.11 above.

According to the result, R² value of 0.75 shows that all the variables can explain about 75% of the value of Total Project Implementation. 25% of the variation in the model is accounted for by other variables not included in the model. They may, though not limited to, loans gotten from commercial banks, loans from microfinance institutions and loans from co-operative societies. The unexplained variation in the model also influences the behaviour of the model. F-statistic of 13.496 (P<0.05) shows that they are jointly significant and the Durbin Watson value of 2.09 implies that the model does not suffer from autocorrelation problem.

The In terms of the significance of the individual variables, it is observed that the explanatory variables (i.e SGF, LGF and BCF) were significant determinants, at various conventional levels of statistical significance (i.e 1%, 5% and 10%), of the value of Total Project Implementation under Fadama

for the period of analysis. Specifically, beneficiary contributions by Fadama Groups in Rivers State {measured by D(BCF)} raises the value of Total Project Implementation by ₦2.91 million. This implies that with every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Total Project Implementation increases by ₦2.91 million.

Again, though significant, Local Government Counterpart fund payment in the State {measured by D(LGF)} was not correctly signed. Local Government Counterpart fund payment in the State reduces the value of Total Project Implementation by ₦969,000. Past State Government Counterpart fund payment {measured by D(SGF(-1))} was correctly signed and raises the value of Total Project Implementation by ₦368,000. The ECM has the correct sign (i.e -ve) and significant meaning that about 84.5% of the errors are corrected monthly.

Table 10 Parsimonious AAG Model

Dependent Variable: D(AAG)				
Included observations: 45 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.037294	0.179180	0.208138	0.8363
D(AAG(-1))	0.573150	0.165897	3.454860	0.0014
D(BCF)	1.115940	0.160357	6.959105	0.0000
D(BCF(-1))	-0.410079	0.261566	-1.567781	0.1254
D(BCF(-2))	-0.161711	0.162733	-0.993720	0.3268
D(LGF)	-0.452211	0.206561	-2.189238	0.0350
D(SGF)	0.128983	0.090248	1.429203	0.1613
ECM(-1)	-0.840151	0.178405	-4.709236	0.0000
R-squared	0.685024	Mean dependent var	0.071333	
Adjusted R-squared	0.625434	S.D. dependent var	1.935330	
S.E. of regression	1.184456	Akaike info criterion	3.336256	
Sum squared resid	51.90865	Schwarz criterion	3.657440	
Log likelihood	-67.06575	F-statistic	11.49563	
Durbin-Watson stat	2.100624	Prob(F-statistic)	0.000000	

Error Correction Model for Asset Acquired for Fadama Groups (AAG) Model: The parsimonious result for the AAG equation is shown in the table 4.13 above. The R² value of 0.69 implies that all the variables can explain about 69% of the value of Asset Acquired for Fadama Groups (AAG). 31% of the variation in the model is accounted for by other variables not included in the model. They may, though not limited to, include loans gotten from commercial banks, loans from microfinance institutions and loans from co-operative societies. F-statistic of 11.496 (P<0.05) shows that they are jointly significant and the Durbin Watson value of 2.10 implies that the model does not suffer from autocorrelation problem.

In terms of the significance of the individual variables, it is observed that beneficiary contributions by Fadama Groups (BCF) and Local Government Counterpart fund payment (LGF) were significant determinants of the value of Asset Acquired for Fadama Groups (AAG) for the period of analysis. Specifically, beneficiary contributions by Fadama Groups in Rivers State {measured by D(BCF)} raises the value of Total Project Implementation by ₦1.12 million. This implies that with every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Asset Acquired for Fadama Groups (AAG) increases by ₦1.12 million monthly.

Secondly, Local Government Counterpart fund payment in the State {measured by D(LGF)} reduced the value of Asset Acquired for Fadama Groups (AAG). Local Government Counterpart fund payment in the State reduced the value of Total Project Implementation by ₦452, 000 monthly. This implies that with every ₦1 million paid as Local Government Counterpart fund, the value of Asset Acquired for Fadama Groups (AAG) increases by ₦1.12 million monthly.

Though correctly signed (i.e +ve), State Government Counterpart fund payment {measured by D(SGF)} was insignificant and thus not a reliable statistics. The ECM has the expected sign (i.e -ve) and also significant meaning that about 84% of the errors are corrected monthly.

Table 11 Parsimonious CBG Model

Dependent Variable: D(CBG)				
Included observations: 45 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001800	0.022355	0.080520	0.9363
D(CBG(-1))	0.460273	0.160771	2.862918	0.0069
D(BCF)	0.137620	0.020098	6.847384	0.0000
D(BCF(-1))	-0.027167	0.028093	-0.967049	0.3398
D(LGF(-1))	-0.014836	0.025586	-0.579833	0.5655
D(LGF(-2))	-0.030356	0.025418	-1.194293	0.2400
D(SGF(-2))	0.010244	0.011467	0.893363	0.3774
ECM(-1)	-0.742381	0.165138	-4.495524	0.0001
R-squared	0.662057	Mean dependent var	0.008889	
Adjusted R-squared	0.598122	S.D. dependent var	0.235075	
S.E. of regression	0.149023	Akaike info criterion	-0.809623	
Sum squared resid	0.821689	Schwarz criterion	-0.488438	
Log likelihood	26.21651	F-statistic	10.35514	
Durbin-Watson stat	2.019862	Prob(F-statistic)	0.000000	

Error Correction Model for Capacity Building for Fadama Groups (CBG) Model: The parsimonious result for the CBG equation is shown in the table 4.15 above. The R² value of 0.66 implies that all the variables can explain about 66% of the value of

Capacity Building for Fadama Groups (CBG). 34% of the variation in the model is accounted for by other variables not included in the model. These includes, though not limited to, loans secured from commercial banks, loans from microfinance institutions and loans from co-operative societies. F-statistic of 10.355 ($P < 0.05$) shows that they are jointly significant and the Durbin Watson value of 2.10 implies that the model does not suffer from autocorrelation problem.

Only beneficiary contributions by Fadama Groups (BCF) proved to be a significant determinant (at all conventional levels of statistical significance) of the value of Capacity Building for Fadama Groups (CBG) for the period of analysis. Specifically, beneficiary contributions by Fadama Groups in Rivers State {measured by D(BCF)} raises the value of Capacity Building for Fadama Groups (CBG) by ₦137,620. This implies that with every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Capacity Building for Fadama Groups (CBG) increases by ₦137,620 monthly. Though correctly signed (i.e +ve), State Government Counterpart fund payment {measured by D(SGF(-2))} was not significant and thus not a reliable statistics. Also, Local Government Counterpart fund payment {measured by D(LGF(-1))} was not also significant at all conventional levels of statistical significance The ECM has the correct sign (i.e -ve) and also significant meaning that about 74% of the errors are corrected monthly.

Table Parsimonious OPT Model

Dependent Variable: D(OPT)				
Included observations: 45 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.268625	1.281573	0.989897	0.3287
D(OPT(-1))	-0.323631	0.151360	-2.138155	0.0392
D(WBF)	1.418478	0.434687	3.263216	0.0024
D(WBF(-1))	1.330213	0.415949	3.198018	0.0028
D(BCF)	4.722482	1.142705	4.132721	0.0002
D(BCF(-1))	3.060209	1.143366	2.676492	0.0110
D(AAG(-2))	-1.182394	0.778274	-1.519253	0.1372
ECM(-1)	-0.488104	0.185331	-2.633688	0.0123
R-squared	0.552184	Mean dependent var		0.000000
Adjusted R-squared	0.467462	S.D. dependent var		11.37371
S.E. of regression	8.299991	Akaike info criterion		7.230197
Sum squared resid	2548.925	Schwarz criterion		7.551381
Log likelihood	-154.6794	F-statistic		6.517598
Durbin-Watson stat	2.039446	Prob(F-statistic)		0.000049

Error Correction Model for value of Output Produced by Fadama Groups (OPT) Model: The parsimonious result for the OPT equation is shown in the table 4.17 above. The R^2 value of 0.55 implies

that all the variables can explain about 55% of the value of output produced by the groups (OPT). 45% of the variation in the model is accounted for by other variables not included in the model. The unexplained variation is the error component of the regression equation. F-statistic of 6.517 ($P < 0.05$) shows that they are jointly significant and the Durbin Watson value of 2.03 implies that the model does not suffer from autocorrelation problem.

In terms of the significance of the individual variables, it is observed that World Bank fund disbursement to Fadama Groups (WBF) and beneficiary contributions by Fadama Groups (BCF) were significant determinants of the value Output Produced by Fadama Groups (OPT). In specific terms, while current World Bank fund disbursement to Fadama Groups {measured by D(WBF)} raises the value of Output Produced by Fadama Groups (OPT) by ₦1.42 million; past World Bank fund disbursement to Fadama Groups {measured D(WBF(-1))} raises the value of Output Produced by Fadama Groups (OPT) by ₦1.33 million. This implies that with every ₦1 million disbursed by the World Bank fund to Fadama Groups, the Output Produced by Fadama Groups (OPT) increases by ₦1.42 or ₦1.33 million monthly. Beneficiary contributions by Fadama Groups (BCF) in the State {measured by D(BCF)} raises the value of Output Produced by Fadama Groups (OPT). Beneficiary contributions by Fadama Groups (BCF) in the State raised the value of Output Produced by Fadama Groups (OPT) by ₦4.72 millions monthly. This implies that with every ₦1 million contributed by beneficiaries of Fadama, the value of Output Produced by Fadama Groups (OPT) by ₦4.72 million monthly.

Values of Asset Acquired for Fadama Groups (AAG) did not meet the requirement for consideration as a significant determinant the value of Output Produced by Fadama Groups (OPT). The ECM has the expected sign (i.e -ve) and also significant meaning that about 48% of the errors are corrected monthly.

RESULTS AND DISCUSSIONS: This study analyzed the effects of beneficiary contributions, local and state government counterpart fund payments as well as World Bank disbursements on

the implementation of fadama III project in Rivers State from 2009 – 2012, using descriptive statistics, multiple regression analysis, unit root and Co integration tests as well as Parsimonious error correction model to arrive at the following findings: The parsimonious result for the TPI equation shows that all the variables can explain about 75% of the value of Total Project Implementation.

F-statistic of 13.496 ($P < 0.05$) shows that they are jointly significant and the Durbin Watson value of 2.0 implies that the model does not suffer from autocorrelation problem. In terms of the significance of the individual variables, for every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Total Project Implementation increases by ₦2.91 million. Local Government Counterpart fund payment in the State reduces the value of Total Project Implementation by ₦969,000, while State Government Counterpart fund payment raises the value of Total Project Implementation by ₦368,000.

For the parsimonious result of AAG equation, R^2 value of 0.69 implies that all the variables can explain about 69% of the value of Asset Acquired for Fadama Groups (AAG). F-statistic of 11.496 ($P < 0.05$) shows that they are jointly significant and the Durbin Watson value of 2.10 implies that the model does not suffer from autocorrelation problem.

In terms of the significance of the individual variables, it is observed that beneficiary contributions by Fadama Groups (BCF) and Local Government Counterpart fund payment (LGF) were significant determinants of the value of Asset Acquired for Fadama Groups (AAG) for the period of analysis. Specifically, beneficiary contributions by Fadama Groups in Rivers State {measured by D(BCF)} raises the value of Total Project Implementation by ₦1.12 million. This implies that with every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Asset Acquired for Fadama Groups (AAG) increases by ₦1.12 million monthly. Secondly, Local Government Counterpart fund payment in the State reduced the value of Total Project Implementation by ₦452, 000 monthly. This implies that with every ₦1 million paid as Local Government Counterpart

fund, the value of Asset Acquired for Fadama Groups (AAG) increases by ₦1.12 million monthly.

The parsimonious result for the CBG equation shows all the explanatory variables can explain about 66% of the value of Capacity Building for Fadama Groups (CBG). F-statistic of 10.355 ($P < 0.05$) shows that they are jointly significant and the Durbin Watson value of 2.10 implies that the model does not suffer from autocorrelation problem. In terms of significance, only beneficiary contributions by Fadama Groups (BCF) proved to be a significant determinant (at all conventional levels of statistical significance) of the value of Capacity Building for Fadama Groups (CBG) for the period of analysis.

Specifically, beneficiary contributions by Fadama Groups in Rivers State {measured by D(BCF)} raises the value of Capacity Building for Fadama Groups (CBG) by ₦137,620. This implies that with every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Capacity Building for Fadama Groups (CBG) increases by ₦137, 620 monthly. State Government Counterpart fund payment was not significant and thus was not a reliable statistics. Also, Local Government Counterpart fund payment was not also significant at all conventional levels of statistical significance.

The parsimonious result for the OPT equation shows that all the variables can explain about 55% of the value of output produced by the groups (OPT). F-statistic of 6.517 ($P < 0.05$) shows that they are jointly significant and the Durbin Watson value of 2.03 implies that the model does not suffer from autocorrelation problem.

In terms of the significance of the individual variables, it is observed that for every ₦1 million contributed by beneficiaries of Fadama, the value of Output Produced by Fadama Groups (OPT) is increased by ₦4.72 million monthly. Also, every ₦1 million disbursed by the World Bank fund to Fadama Groups, the Output Produced by Fadama Groups (OPT) increases by ₦1.42 or ₦1.33 million monthly.

The parsimonious result for the TPI equation shows for every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Total

Project Implementation increases by ₦2.91 million. Local Government Counterpart fund payment in the State reduces the value of Total Project Implementation by ₦969,000, while State Government Counterpart fund payment raises the value of Total Project Implementation by ₦368,000.

For the parsimonious result of AAG equation, it shows that every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Asset Acquired for Fadama Groups (AAG) increases by ₦1.12 million monthly. Secondly, for every ₦1 million paid as Local Government Counterpart fund, the value of Asset Acquired for Fadama Groups (AAG) increases by ₦1.12 million monthly. The parsimonious result for the CBG equation shows that for every ₦1 million paid as beneficiary contributions by Fadama Groups, the value of Capacity Building for Fadama Groups (CBG) increases by ₦137,620 monthly. The parsimonious result for the OPT equation shows that for every ₦1 million contributed by beneficiaries of Fadama, the value of Output Produced by Fadama Groups (OPT) is increased by ₦4.72 million monthly. Also, every ₦1 million disbursed by the World Bank fund to Fadama Groups, the Output Produced by Fadama Groups (OPT) increases by ₦1.42 or ₦1.33 million monthly. This study was divided into five sections. Section one - the introduction, ranging from the background to statement of the problem and hypotheses, section two considered literature review, section three – research methodology, while section four considered results and discussions and section five has summary, conclusion and recommendations.

Concluding Remarks and Recommendations:

This study analyzed the effects of beneficiary contributions, counterpart fund payments by local and State Government on the implementation of Fadama III projects in Rivers State from 2009 to 2012 by using the Monthly time series data for percentage analysis. Furthermore, the econometric technique of ordinary least square was used to show the short run relationship, unit root test to stabilize the data, Co- integration to show the long run relationship and the parsimonious error correction model to estimate and interpret the relationship using the monthly time series data of 48

observations. From the findings, there exist a long run positive relationship between the dependent and the Independent.

Based on the findings of the study, the following recommendations are hereby proposed, there should be legislative approval by the National Assembly to deduct such participating State and Local Government Council counterpart fund payments at source to avoid the problem of nonpayment after project takeoff as this will contribute effectively to full implementation of Fadama III project, for the future project of this nature, the Government should formulate a policy action to encourage stakeholders to increase their contributions towards the full and more effective implementation of the projects and programmes, one of the results reported shows that a long run relationship exists among the variables, therefore the stakeholders should ensure that they increase their contributions for the improvement on asset acquisition and capacity building that will enhance the implementation of the projects, for the future international donor projects of this nature, beneficiary contributions should be made minimal so that the groups could afford it, since the dependent variables in the three equations (total project implementation, asset acquisition and capacity building) are stationary at first difference, meaning that they were differenced twice, it therefore becomes imperative that operators of Fadama III projects should guide and maintain the policy action in operation and the Fadama group members should undergo a value re-orientation programme that will enable them realize that co-operate spirit among them will contribute to effective implementation of Fadama III project in the state.

References

- Akinleye, S., Awoniyi, S. & E. Fapojuwo. (2005). *Evaluation of the National Fadama development project approach to rural development*: Paper prepared for presentation at the Farm management Association of Nigeria Conference, Delta State, Asaba.
- Alesina, A. & Dollar, D. (2000). Who gives foreign aid to whom and why. *Journal of economic growth*, 5(1), 33-63.
- De Renzio, P., David, B., Andrew, R. & Zaza, C. (2005). Incentives for harmonization and alignment in Aid Agencies, *overseas Development Institute Working Paper No. 248, London*.
- Dickey, D.A. & Fuller, W.A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Econometrica*, 49(4),

- 1057-1072.
- Dreher, A. (2004). A public choice perspective of IMF and World Bank Lending and Conditionality," *Public Choice* 119: 445-464.
- Easterly, W. (2002). The cartel of good intentions: The Problem of Bureaucracy in Foreign Aid. *Journal of Policy Reform* 5.4: 223-50.
- Engle, R. F. & Granger, C. W. I. (1987). Co-integration and error correction: representation, estimation and testing. *Econometric. Vol. 3(55):251-76.*
- Eremie, S. (2006). Capacity building in agricultural extension: The World Bank experience in Nigeria. *Journal of Agricultural Extension, Vol 9, pp 1 – 7.*
- Fadama Project Coordinating Unit (2013). Implementation status report, Abuja, F. C.T. July.
- Fischer, D. E. & Jordan, R. J. (2009). *Security analysis and portfolio management, Edition.* Patparganj
- Delhi, Dorling Kindersley Publishers Ltd.
- Gibson, & Clark, C. Kriste A, Elinor, O & Sujai S. (2005). *The Samaritan's dilemma: the political economy of development aid.* New York: Oxford University Press.
- Gujarati, D. N. & Sangeetha, P. (2007). *Basic econometrics.* Tata McGraw-Hill Publishing Company Limited. Pp. 92
- Jhingan, M. L. (2008). *The economics of development and planning, 34th Edition.* Delhi, Vrinda Publications Ltd, pp. 123-124; 154-155.
- Killick, T. (1998). *Aid and the political economy of policy change.* With Ramani Gunatilaka and Ana Marr. New York: Routledge.
- Koutsoyiannis, A. (1977). *Theory of econometrics (Second Edition).* PALGRAVE MACMILLAN pp. 16-17
- Kpolovie, P. J. (2010). *Advanced research method.* Springfield Publishers Ltd. Pp.26
- Mosley, P. Jane, H. & John T. (1991). *Aid and power: The World Bank and Policy-Based Lending. Vol. 1. New York: Routledge.*
- Ohale, L. (2013). *A study to assess the adoption rate of technologies in Fadama III implementation in Rivers State.* Port Harcourt, Nigeria.
- Onuchuku, O. (2013). *Medium-term impact of Fadama (fadama III) project in Rivers State.* Port Harcourt, Nigeria.
- Rivers State Government, (2013). *Bye-Laws of the Ogoloma Amie Fadama Fish Farmers Co- Operative Investment and Credit Society Limited,* Port Harcourt, Nigeria.
- Robert, Y. & Nicholas R. B. (1980). The project cycle and the project appraisal process, *International Bank for Reconstruction and Development. Washington 540/010, CN-419. EDI.*
- Stephane, P. & Michel, A. R. (2003). Asymmetric information, counterpart fund and procyclicality of foreign aid. *Journal of economics literature : G15, D82, E32, F35, O19*
- Stephen, M. R. (2012). Counterpart funding and sustainable rural development in Nigeria. *Journal of Business and Organizational Development, Volume 4, December 2012 .*
- Somiari, F, R. (2011, May). Overview of Fadama III and coordination arrangement: capacity building training paper presentation for Fadama Community Associations. Port Harcourt, Rivers State.
- Somiari, F. R. (2004). *Export supply of cassava products from Nigeria* (Unpublished M.Sc. dissertation).
- University of Science & Technology, Port Harcourt, Rivers State.
- Svensson, J. (2000). When is Foreign Aid Policy Credible? Aid Dependence and Conditionality. *Journal of Development Economics 61: 61-84.*
- Szabolcs, S. (1986). Considering uncertainties in project appraisal, Washington; *International Bank for reconstruction and development, Economic development institute, Pp.1-3.*
- The World Bank (2004). Aid, policies and growth: revisiting the evidence. *World Bank Policy Research Working Paper 3251, Washington, D.C.*
- The World Bank, (2008). Project appraisal document: *Third National FADAMA Development Project. Abuja, Nigeria. Report No: 39489 – NG.*

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