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Participation and Altitude of Beneficiaries to the Third National Fadama Development Project in Kogi State, Nigeria

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Abstract

The study assessed the attitude to and participation of beneficiaries in the Third National Fadama Development Project in Kogi State, Nigeria. One hundred randomly selected beneficiaries were used. Data were collected with the aid of structured interview schedule and analysed by the use of mean scores and factor analysis. The results reveal that beneficiaries participated at collegial, consultative, and collaborative levels in different activities of the project. Majority (74.0%) of the respondents were satisfied with the objective, activities and operational modalities of the project. The respondents however, indicated that the project was constrained by production, institutional and financial factors. The study recommends that beneficiaries should be encouraged to be self- mobilized in certain areas of the project like design, implementation and supervision of sub-project, selecting services, service providers and location of productive assets. The government, both state and local should ensure timely and adequate provision of fund to facilitate effective implementation of activities in critical areas such as capacity building, demand driven adaptive research, mobility of facilitators and others, which largely influence performance of the project in terms of realizing the objectives.

Key words: Beneficiaries, Attitude, Participation, Fadama, Project, Fadama user groups (FUGs), Fadama community associations (FCAs).

Introduction

Agriculture is the backbone of Nigeria's economy, despite being a leading producer of oil in the African region. According to the National Bureau of Statistics (2012), agriculture generated 34.47 percent growth in the economy outside the oil sector in 2011. Before the oil booms of the 1970s and 1980s, Nigeria had a vibrant agriculture sector and for a while was self-sufficient in food production and was a key exporter of several agricultural commodities, notably, cocoa, oil palm products, rubber, and groundnuts. However excessive real exchange rate appreciation and overvaluation following the oil booms, along with distortions induced by an import substitution industrialization policy, reduced agricultural competitiveness and investment (Ekpo and Umoh, 2012).

In response, the federal government of Nigeria has evolved and implemented several agricultural programmes. According to Oriola (2009) these programmes were designed to revolutionize the agricultural sector of the Nigerian economy which was derailing from its normal contribution to the economy. However, while many of these programmes have gone moribund, some were short lived, and others have remarkable impact, though not without challenges or limitations.

The National Fadama Development Program (NFDP) came on board as a result of the success recorded by the small scale irrigation projects carried out by the Agricultural Development Programs (ADPs) in fadama areas.

''Fadama'' is a Hausa name for irrigable land usually low-lying plains underlay by shallow aquifers found along Nigeria's major river systems. Such lands are especially suitable for irrigated production and fishing, and traditionally provide feed and water for livestock. The enormous potential of this land is only partially developed (World Bank, 2008). According to Akinola (2003), the Fadama I which was the first phase of the Fadama Development Project was implemented between 1992 and 1998 and it concentrated on the production of arable crops only and covered few states in the country. Following the successes recorded in fadama I project, the second phase of the NFDP (Fadama II) was declared loan disbursement effective on the 27th May, 2004 with the actual disbursement to beneficiaries in September 2005 (World Bank, 2008). Unlike Fadama I which covered the cultivation of only few arable crops, fadama II project widened the focus and the horizon of operation among the fadama resource users by supporting both farm and non-farm activities linked to fadama resources.

Fadama III project is a follow up to the successful Fadama II project and the development objective is to sustainably increase the incomes of fadama users by about 60% and also targeted the poor and vulnerable (Nkonya, Markel, Kato, Alomolaron et al., 2010). Meanwhile Fadama III was equipped with measures to correct the shortcomings of Fadama II. New components such as fadama user equity fund, adaptive research support and mainstreaming of sustainable land management were incorporated into the project. One of the key features of the project is to empower the communities to collectively decide on how resources are allocated and managed for their livelihood activities and to participate in the design and execution of their sub-projects. It employs community demand- driven approach which emphasised and promotes beneficiaries' participation and ownership of subprojects from inception, implementation, monitoring and evaluation.

Participation according to Aref (2011) is a direct involvement of marginalized groups in a development process, which aims to build people's capabilities to have access to and control of resources, benefits and opportunities towards self-reliance and an improved quality of life. It empowers farmers to take the leading role to analyze their situations, plan, implement and evaluate development activities; and gain control over resources or services. Advances in literature show that participation of beneficiaries/farmers in development process particularly in agriculture could be contractual, consultative, collaborative and collegiate, interactive, self mobilized, functional, informative, incentive oriented, genuine, symbolic, passive and others (Biggs, 1996; Aref, 2010; Adebo, 2000). Generally, it is necessary to get community support for agricultural development projects (Cole, 2007). Experience from past development programmes shows that active participation of target groups is one of the key factors and determinants of effectiveness of interventions in realizing the set objectives. It influences and explains the altitude, a measure of the beneficiaries' perception, acceptability, disposition, and commitment to programmes. Therefore, with greater expectation from Fadama 111 project, explained by the loadable objectives, coverage and expanded components or activities, the concern about beneficiaries' participation becomes pertinent.

Thus, the study was designed to:

1. assess the level of participation of beneficiaries in the third National Fadama Development Project;
2. assess the attitude of beneficiaries to the project and
3. determine factors that constrained beneficiaries participation in the project.

Methodology

The study was conducted in Kogi State, Nigeria. Kogi State is located in the North-Central (Middle-Belt) geo-political zone of Nigeria at Longitudes 5^{o}, 22'E to 7^{o}, 49'E and Latitude 6^{o}, 33'N to 8^{o}, 44'N. It covers an estimated 29,833 square kilometers and has a population of about 3,314,043 (NPC 2006). Agriculture is the most significant activity in Kogi State. Quite a reasonable proportion (80%) of the population is engaged in subsistence farming. The State has about 2 million hectares of cultivable land but only about 0.5 million hectares are under cultivation (www.kogistatenigeria/aboutus.org). The population for the study comprised the beneficiaries of Fadama 111 Development Project.

Multistage sampling technique was used in selecting the respondent. In the first stage a total of 5 local government areas (LGAs) out of the twenty LGAs participating in Fadama III were randomly selected using simple random sampling techniques. The LGAs were Adavi, Mopamuro, Kabba-bunnu, Idah and Kogi. In the second stage one Fadama Community Association (FCAs) which is apex organizations of about 15 Fadama Users Groups (FUGs) were randomly selected by simple random technique from each of the five (5) LGAs, giving a total of 5 FCAs. The third stage involved purposive selection of two FUGs with at least 10 FUG members from each FCA, giving a total of 10 FUGs. This was based on functional FUGs. Finally, 10 FUG members were selected by simple random technique from each of the selected FUGs. A total of 100 respondents were used for the study.

Data for the study were collected using structured interview schedule. The instrument was divided into three sections and each section contained relevant questions on the objectives. Section A obtained information on the levels of participation of beneficiary farmers. This was measured using Biggs's (1989) and Adebo (2000) four types of participation namely: consultative, collaborative, collegial and self mobilization. Respondents were asked to score their participation in the fadama project activities using a 4-point Likert-type scale ranging from consultative = 1; collaborative = 2; collegial = 3; self mobilization = 4. The respondents' mean scores were computed for each operational activity under the Fadama III Project. These were used to estimate the farmers' type of participation in the project using the following decision rules:

M =1.00 - 1.49 (Consultative= where most of the key decisions are kept with one stakeholder (external bodies) but emphasis is on gathering views or information from others, especially in identification of constraints and opportunities, priority setting and/or evaluation)
M = 1.50 - 2.49 (Collaborative = decisions are not taken on isolation but through exchange of ideas, information etc)
M = 2.50 - 3.49 (Collegial= 'Ownership' (responsibility and risk) are equally distributed among the partners, and decisions are made by agreement or consensus among all actors)
M = 3.50 - 4.0 (Self mobilization =. Farmers have opportunity to analyze decisions without communicating with the fadama officials.)
Section B elicited information on the attitude of beneficiaries to the Fadama III Project. Respondents reacted to 20 altitudinal statements on a 5-point Likert type scale ranging from strongly agree = 5; agree = 4; undecided = 3; disagree = 2; and strongly disagree = 1. These values were reversed for negative statements. The weighted values were added (5=4+3+2+1 =15) to get a value of 15 which was divided by 5 to get a mean score of 3.0. For negative statement the scale is reversed. A mean score of ≥ 3.0 depicts a favourable attitude to fadama III and ≤ 3 means unfavourable altitude. Also, the index of respondents' altitude towards fadama III was obtained from the statements with a maximum score of

100 and a minimum score of 20 based on the Likert type scale. This gave a mid-point score of 60. All scores below the mid-point (20-60) were tagged as the percentage of farmers with unfavourable attitude (or less supportive) to fadama III; while all scores above this mid-point (61-100) were tagged as the percentage of farmers with favourable attitude (more supportive) to fadama III.

The respondents were asked to indicate constraints to effective participation in the project using a three-point Likert type scale of; not serious = 1, serious = 2; and very serious = 3. The weighted values were added (3+2+1 =6/3= 2) to deduce major constraints. All items with mean values of ≥ 2 were regarded as major constraints while variables with mean values of (below) < 2 were regarded as minor constraints to beneficiaries participation in the project. This was further subjected to explanatory factor analysis procedure using the principal factor model. Only variables with loading of 0.40 and above (10% overlapping variance) will be used in naming the factors. Objectives 1 and 2 were analyzed by the use of mean scores and objective 3 by factor analysis.

Results and Discussion

Participation of beneficiaries in the Third National Fadama Development Project

The beneficiaries participated at different levels in the implementation of Fadama III Project. The respondents were involved at consultative level in preparation of list of constraints to be addressed through advisory services (M=1.23), planning for training and building the capacity of FCAs/FUGs (M=1.18), selecting, contracting and payment of service providers (M=1.44), developing monitoring and evaluation indicators and monitoring and evaluation plan (M=1.42) (Table 1). The officials of the project define both problems and solutions, and may modify these in the light of people's responses. Such participation process does not concede any share in decision-making, Certainly, it may be effective in some areas of the programme such as identifying capacity needs or constraints, but may not be very effective in selecting the service providers because of the issues of god- fatherism, personal interest, bribery and corruption which could lead to supply of substandard services. Besides, the service provider might find it difficult to be accountable to the beneficiaries.

Beneficiaries were involved at collegial level in the management of financial resources (M=3.20). Farmers exercise equal ownership but may also seek the opinion of the fadama officials but take the final decision with the help of the later. This is commendable for efficient management of financial resources like grant, income from subprojects, equity account for optimal utilization, profit and sustainability of gain. It also has the potential for mitigating conflict among FUG members.

The table further revealed that beneficiaries collaborated in the following activities: conflict mitigation (M=1.55), development of the local development plan, LDP (M=2.06), implementation, maintenance of subprojects (M=2.06), implementation of community based infrastructure and asset acquisition activities (M=2.06), preparation of lists of priority public infrastructure subprojects (M=2.11), carrying out needs assessment (M=2.16), determination of site of public infrastructure (M=2.21). This means that participation of the beneficiaries in about 58% (7 out of 12 areas) of the project was collaborative which means that neither the fadama officials nor the farmer takes decision in the above areas in isolation. Rather decisions are taken through exchange of knowledge, ideas and sharing of decision-making power. Farmers' wealth of experience and knowledge of socio-cultural environment are considered critical to right decision making at various areas of the project.

Self-mobilization which is the form of participation that gives farmers room to analyze decisions without communicating with the fadama officials was totally absent and this may have hampered the community driven development approach of the project.

Ideally, beneficiaries and communities are expected to be self –mobilized in some areas like selection of external institution for resources and technical advice they need and control over where and how resources are allocated or used. The result suggests limited application of community demand driven approach on which the project is anchored.

However, the predominant type of participation which is collaborative with some touch of consultative and collegiate participation at different areas of the project supports the opinions of Mikkelsen (1995) and Makumbe (1996) that people have a fundamental right to participate fully and effectively in making decisions which affect their lives at all levels and at all times. Generally, their participation could be regarded as both substantive and structural. Relatively, the beneficiaries actively participated in the whole process and not just passive recipients contrary to what existed during the previous phases of the National Fadama Development Project. According to Chabeuf, Toledano, Bouarfa, and Neighbor (2004) if the beneficiaries of development interventions are empowered to the point that virtually all responsibility for sub-project selection, implementation, and supervision, is transferred to them; the beneficiaries gain discretion over their development decisions. Apparently, this gives the hope of sustainability of the project.

Table 1: Mean scores and standard deviations of fadama III farmers' level of participation

Activities	Mean	Standard deviation	Type of participation
Participation in the development of the local development plan (LDP)	2.06	0.90	Collaborative
Carrying out needs assessment	2.16	0.78	Collaborative
Implement, maintenance, of subprojects	2.06	0.75	Collaborative
Managing of financial resources (income from subprojects, FUEF account, etc)	3.20	0.75	Collegiate
Preparing list of constraints to be addressed through advisory services with respect to fadama enterprise production/marketing	1.23	0.47	Consultative
Plan for training/building the capacity of FCAs in financial management, community based procurement&impact screening of subproject	1.18	0.41	Consultative
Preparing of list of priority public infrastructure subproject to be funded& executed	2.11	0.59	Collaborative
Determination of site of public infrastructure to be funded &executed	2.21	0.57	Collaborative
Conflict mitigation measures especially among competing users of resources	1.55	0.74	Collaborative
Selecting, contracting and payment of service providers for technical assistance in subproject execution	1.44	0.70	Consultative
Developing, monitoring/evaluation indicators and monitoring and evaluation plan	1.42	0.71	Consultative
Implementation of community based infrastructure and asset acquisition activities	2.06	0.54	Collaborative

Attitude of beneficiaries to the Third National Fadama Development Project

Table 2 shows the mean score and standard deviations on farmers' attitude toward Fadama III Project. The respondents favourably indicated that Fadama III project had increased fadama farmers' knowledge about farm management (M=3.15) and the farmers confidence in the advisory service provider (M=3.10), fadama III project is a way out of the present problem facing the nation's economy (M=3.31) and that it is better to concentrate on crop production only (M=3.08). On the other hand, the respondents perceived as unfavourable the following positive statements; fadama III project is necessary to achieve increased agricultural productivity and income (2.89), the project has brought about positive effect on my income hence it is worthwhile (2.64), the group approach to fadama III project

has increased cooperation among the farmers (2.48), the project has helped agricultural based enterprises to provide more jobs for the youths (2.61) In other words the respondents perceived that despite the acclaimed relevance of the project to the nations' economy problem and its diversified thematic areas appropriate for improved livelihood.

Similarly, the beneficiaries unfavourably disposed to 11 negative altitudinal statements on Fadama III operations and strategies. Some of these statements include; I prefer managing my farm the old way to getting involved with fadama III project & its stiff protocols (M= 2.15), the project has not helped to alleviate poverty among Fadama farmers (M=2.40), the process of securing the service of an advisory service provider is lengthy & clumsy (M= 1.82), the capacity building workshops are cramped into a day and rushed &time scheduled not favourable to FUG members.(M= 1.67) and others. Further analysis shows that majority (74%) of the respondents were favourably disposed to fadama III project, while 26% had unfavourable disposition toward the project (Figure 1). This suggests that the project objectives, financing and modalities of operation is acceptable to the beneficiaries. This could be attributed to its widened focus and objectives of increasing the income of users of rural land and water resources on a sustainable basis, reduce rural poverty, increase food security and contribute to the achievement of key Millennium Development Goals (MDGs) (World bank, 2008). Besides, the gain from additional components like public ADP and adaptive research support, sustainable land management and Fadama user equity fund (FUEF) intended to take care of critical limiting factors and challenges encountered in Fadama II may have influenced the attitude. The unfavouable attitude is very likely to be associated with the paper work of the project which the few illiterate farmers consider cumbersome, bureaucratic bottleneck and corruption in the system.

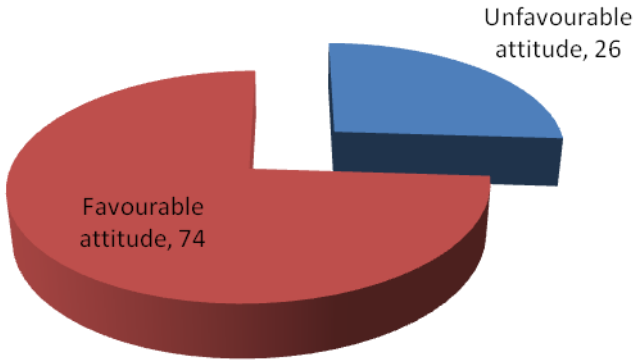

Figure 1: Index of farmers' attitude towards fadama III project
Survey data(2012)

Table 2: Mean score on beneficiaries' attitude to Fadama III Project

Attitudinal statement	Mean	Standard deviation
Participating in fadama III project is necessary to achieve increased agricultural productivity and income.	2.89	
The packages of the project has increased fadama farmers' knowledge about farm management.	3.15*	1.08
The project has brought about positive effect on my income hence it is worthwhile.	2.64	0.85
The group approach of the project has increased cooperation among farmers.	2.48	0.72
The project has helped agricultural based enterprises to provide more jobs for the youths.	2.61	0.81
The farmers have confidence in the advisory service provider.	3.10*	0.80
**Fadama III project is a way out of the present problem facing this nation's economy.	3.31*	0.80
**The fund attached to each package is insufficient.	1.58	0.95
**The group approach brings about conflict among farmers and between farmers and extension workers.	2.57	0.77
**I prefer to managing my farm the old way to getting involved with fadama III project & its stiff protocols (e.g securing land papers, opening of FUEF account, preparing payment voucher etc).	2.15	1.07
**The project has not helped to alleviate poverty among fadama farmers.	2.40	0.87
**It is better to concentrate on crop production only.	3.08*	1.85
**Having a FUEF account is not necessary. We would rather spend our profits on immediate needs.	2.42	1.02
**Not all the six components should be implemented.	1.61	0.82
**Most of the farmers are not willing to participate in the project due to lack of fund for their beneficiary contribution.	2.37	1.26
**The group approach to the project hampers the activities of the FUGs.	2.27	0.99
**Cost sharing in the project is not the best alternative for funding agricultural project.	2.31	0.92
**demand driven approach is not cost effective and leads to low agricultural output as many farmers abscond from the project.	2.31	0.88
**The process of securing the service of an advisory service provider is too lengthy & clumsy.	1.82	0.91
**The capacity building workshops are unnecessary cramped into a day and rushed &time scheduled not favourable to FUG members.	1.67	0.71

*Favourable statements; ** negative statements

Factors constraining participation of beneficiaries in Fadama III Project

The exploratory factor matrix shows that three major factors namely production/political (1) institutional (2), and financial (3) factors constrained the participation of beneficiaries in Fadama III Project (Table 3). The factors that loaded under production constraints were land tenure system (0.618), untimely disbursement of inputs (0.783), untimely counterpart fund from the State and local government areas (0.707), poor attitude of extension staff towards fadama farmers (0.639), high cost of production (-0.652), conflict between service providers (0.679), procurement of substandard income generating assets by contractors (0.867). These factors are critical to production activities of the beneficiaries particularly the economic interest groups involved in farming. For instance, scarcity/poor access to land, delay in payment of counterpart fund and the untimely disbursement of inputs such as fertilizers, herbicides, and poultry feed, day old broiler chicks disrupt the time bound nature of agriculture. It impedes the implementation of the subprojects and consequently dampens the confidence of the farmers in the implementing agencies. The poor altitude of facilitators and supply of substandard productive assets limit access and utilization of technologies and productive assets intended to enhanced production, income and livelihood of the beneficiaries. Consequently, some productive assets are either underutilized or abandoned.

The institutional factors that impede the participation included lack of mobility for the facilitators (0.761), ineffective advisory service (0.638), lack of government commitment to policy (0.754), activities such as opening of bank accounts, group registration and payment vouchers are tasking and consume time (0.853), political instability (0.855), insufficient credit availability (0.531), lack of ready markets to sell the increased output as a result of securing productive asset (-0.776), dishonesty and corruption among the state fadama officials (0.555) .These factors result to delay/poor implementation of project activities, poor access, management and maintenance of productive assets, low income from produce and discouragement to the beneficiaries. They are strong disincentive to active participation and implementation of the project.

Furthermore, three factors loaded high in financial constraint. They included inadequate funding attached to each package of the project (-0.639), general reluctance of the fadama farmers to pay beneficiary contribution (0.648), difficulty in securing money for beneficiary contribution (0.897). These factors affect the implementation of crucial component of the project. For instance, the inadequate fund attached to subproject hampers demand responsive advisory services which are expected to enable beneficiaries adopt output enhancing techniques in farm practices and more profitable marketing practices in their fadama enterprises. The issue about payment of beneficiaries' contribution is not expected to appear as a problem because of implementation of Fadama user equity fund account (FUEF) which enables the farmers to access loans for economic activities. The result however disagrees with the findings that Fadama beneficiaries have favourable attitude toward the cost-sharing approach of the project (Agwu and Abah, 2009). Though in practice the difficulty encountered in opening of bank account with banks that operate online banking, group registration, preparing cash book, payment vouchers, FUEF account book amongst other requirements of the implementing agency makes the whole process unpleasant and discouraging to farmers. The money is not easily accessed and this usually makes most groups abandon the project along the way.

Table 3: Rotated components matrix on constraints to effective participation of beneficiaries in the project

	Factors		
Constraining variables	**Production**	**Institutional**	**Financial**
Land tenure system problem	**0.618**	-0.368	-0.394
Inadequate funding attached to each package of the project	0.137	0.220	**-0.639**
Untimely disbursement of inputs	**0.783**	0.205	-0.023
Untimely counterpart funds from the State &local government	**0.707**	0.325	-0.206
Poor attitude of extension staff towards farmers participating in the project	**0.639**	0.003	-0.248
Lack of mobility for the facilitators	0.182	**0.761**	-0.102
Ineffective advisory services	-0.319	**0.638**	-0.083
High cost of production	**-0.652**	0.083	-0.299
Lack of government commitment to policy issues	0.091	**0.754**	0.110
Activities such as the opening of bank account, group registration, cash book preparation are time consuming &tasking	0.248	**0.853**	0.172
Conflict between service providers in terms of services to be rendered & client group to be served	**0.679**	-0.062	0.182
Lack of ready market to sell the increased output as a result of securing productive asset	-0.105	-**0.776**	-0.255
General reluctance to pay BC	-0.055	0.086	**0.648**
Fadama farmers' experience of difficulty in securing money for beneficiary contribution	0.166	0.159	**0.897**
Insufficient credit availability	-0.163	0.531	0.639
Political instability in the country	0.148	**0.855**	0.006
Dishonesty/corruption among the State fadama officials (e.g. members of the PIU)	0.025	**0.555**	-0.047
Procurement of substandard income generating assets by contractors	**0.867**	0.238	-0.215
Farmers may not ask for non-agricultural based enterprise such as rental business	0.763	0.147	-0.468
The tendency of highly placed individuals/politicians to hijack the project by registering FUGs/FCAs	0.675	0.157	0.364

Note: Factor 1=production factor; Factor 2 = institutional and Factor 3: financial constraints

Conclusion and Recommendation

The result of the study showed that the beneficiaries participated in different areas and activities of the project at both collegiate, collaborative, consultative levels. However there is complete absent of self mobilization in the whole project activities which shows limited application of demand driven community approach in relevant areas of the project. Majority of the beneficiaries of the project expressed favourable attitude and satisfaction with the project objectives, target areas and mode of operation. Lesser proportion with negative altitude was on issues related to promotion of youth involvement, team spirit among FUG farmers and others. Several constraints namely production, institutional and financial factors limited the implementation of the project. The study therefore recommends that beneficiaries should be encouraged to be self mobilized in certain areas of the project like design, implementation and supervision of sub-project, selecting services, service providers and location of productive assets. The government, both state and local should ensure timely and adequate provision of fund to facilitate effective implementation of activities/components such as capacity building, demand driven adaptive research, mobility of facilitators and others which largely determine performance of the project in terms of realizing the objectives.

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