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Participation of Women in the Third National Fadama Development Programme in Edo State, Nigeria

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Abstract

This study assessed participation of women in the third National Fadama Development Programme (NFDP-III) in Edo State, Nigeria. A sample of 150 women were randomly selected from the Fadama Users Groups (FUGs) drawn from the three zones of the State. A structured questionnaire administered through interview was used to obtain relevant data. Findings show that majority of the women were married, between 51-60 years of age, had household size of 5-8 persons, farm size below 1ha, and Fadama farming experience of about 3 years. The livelihood activities in which women were mostly involved were crops related (71.1%) with major crops being cassava and plantain followed by processing (47.3%) and marketing (28.7%). The community driven CDD and participatory community planning (PCP) activities highly participated in were needs assessment (mean=2.95), group mobilization (mean=2.81) and preparation of local development plans (mean=2.79). Multiple regression result ($R^2 = 0.464$; $P < 0.050$, $F=5.878$) indicates that only farm size ($b=-1.151$) and Fadama experience ($b=1.208$) were significantly associated with participation in FUGs activities. Women should be encouraged by the extension service to participate more in empowerment programmes of this nature which has the potential to graduate small holders to higher level with time.

Keywords: Women, participation, *Fadama* programme, empowerment, Nigeria

Introduction

The Nigerian government over the years, in an attempt to tackle the dependence on rain-fed agriculture initiated the *Fadama* programme in 1992. *Fadama* is a Hausa name for irrigable lands-usually low-lying flood plains areas underlay by shallow aquifers found along Nigeria's major river system (Ingawa *et al* 2004). The goal of NFDP-III is to ensure all-year-round production of food through enhanced use of production technologies, improve agricultural productivity through *Fadama* irrigation farming along with the use of improved seeds, fertilizer and other relevant inputs became the best alternative option. The programme has evolved in phases covering different States in the first and second while the third which is on-going, covers 36 States of the federation. According to Okunlola (2005), one of the ways of achieving constant food supply in Nigeria is *Fadama* farming.

The NFDP-III aims at sustainably increasing the income of *Fadama* Resource Users by directly delivering resources to the beneficiary rural communities, efficiently and effectively, and empowering them to collectively decide how resources are allocated and

managed for their livelihood activities and to participate in the design and execution of their subprojects, (World Bank, 2011). The project targets the rural poor [farmers, pastoralists, fisher folks, marketers, processor, hunters, gatherers and other economic interest groups (EIGs)], disadvantaged groups (widows, handicapped, the unemployed youth), service providers, public and private operators and professional associations operating in the project area. The components of *Fadama* III include; capacity building, communication and information support, small-scale community-owned infrastructure, advisory service and input support, support to the ADPs, sponsored research, and on-farm demonstration, assets acquisition for individual FUGs and EIGs, Project management, monitoring and evaluation.

The NFDP-III adopts a Community Driven Development (CDD) approach. Under this approach, the *Fadama* resource users operate through their respective *Fadama* User Groups [FUGs] and their apex bodies, *Fadama* Community Association [FCA] would reach consensus on how to use the common resources on their mutual advantage. Through this process, communities would decide on which advisory service and infrastructure they need to enable them attain development goals, they set for themselves based on their efforts. The concession so reached would be articulated in the Local Development Plans (LPDs) drawn on the level of *Fadama* Community Association. Local community members under the umbrella of *Fadama* Community Association (FCAs) and *Fadama* User Groups (FUGs), oversee the design and implementation of the project and are empowered through skills and capacity-building to improve their livelihood by Increasing income generating activities.

Women contribute substantially to agricultural production of the food system of the third world (Ajayi, 1997; Ani, 2004; Mgbada, 2010; Yahere, 2004). The contribution of the women range from such task as land clearing, tilling, planting, weeding, fertilizer/manure application to harvesting, food processing, threshing, winnowing, milling, transportation and marketing as well as management of livestock.

Participation in programmes is a continuum (Oakley, 1991). It ranges from being passive to full participation. It could be contribution to predetermined programmes and projects, organization or as empowerment, thereby enabling people to develop skills and abilities to become more self-reliant, and to make decision and take actions essential to their development. Thus participation could be seen as a means to an end or an end in itself. Through participation, people are empowered (Clayton *et al.*, 1998) with skills, knowledge, and experience. These are achieved through social capital development via formation and development of the capacities of groups such as the FUGs through capacity building in technical and social knowledge and skills. Some of the major obstacles to socio-economic empowerment of women include limited access to and control over production resources: land, labour, time, capital/credit, exclusion from decision making, work load among others. FAO, (2011) asserts that giving women the same access as men would boost production on women's farms in developing countries by 20-30%. *Fadama* III sets out to give voice to women hence there is hardly any user group without women because of the priority importance, 38% was pegged as minimum proportion of women.

The *Fadama* III programme has been ongoing in Edo State since 2009, and many beneficiaries including women have been participating in various activities implemented. Just like other states in the federation, FUGs and EIGs are in place in Edo State and women are included. Their participation in *Fadama* III as an indicator for empowerment needs to be assessed to show if the programme is on course. The study therefore assessed the participation of women in the FUG activities in the Third National *Fadama* Development Programme, (NFPD-III) in Edo State. Specifically the study:

- (a) Described the socio-economic characteristics of the women who participate in *Fadama* III programme /belong to FUGs in Edo State?
- (b) Identified livelihood and community driven development activities implemented among the FUGs and participated in by the respondents.
- (c) Identify the constraints faced by women to effectively participate in FUG activities?

Methodology

Edo State has three (3) agricultural zones: North, Central and South zones. The state covers an area of 17,802km² and has a population of 3,497,502. (NPC,2006). The State is bounded in the South by Delta State, in the North and North East by Kogi, in the West by Ondo and in the East by Anambra State. Edo State covers an area of 19794kmsq and has a total population of 3,497,502.

Edo State is made up of 18 Local Government Areas: Akoko-Edo, Esan Central, Igueben, Esan North-East, Esan South-East, West, Etsako East, Etsako Central, Etsako West, Oredo, Egor, Ikpoboka Oka, Ovia North-East, Ovia South-West, Owan East, Owan West, Orhionmwon, Ujunwode. Sample for the study was drawn through a multistage process involving: selection of the three agricultural zones in the State, one Local Government Area was randomly selected from each zone to give three LGAs (Ovia South West LGA from Edo South, Esan Central LGA from Edo Central and Etsako North LGA from Edo North). Five *Fadama* User Groups (FUGs) were randomly selected per LGA to give a total of fifteen FUGs. Ten women were purposively selected per FUG to give a total of 150 of respondents.

A structured questionnaire administered through interview was used for data collection. The questionnaire captured the socio-economic characteristics of the respondents, livelihood enterprises involved in and participation in the community driven development activities.

The socio-economic (independent) variables were measured as appropriate while the dependent variable participation in CDD activities was measured using a 3-likert scale (1=always involved, 2=occasionally involved, 3=not involved). The mid-point mean= 2.00
Constraints to participation: were measured on a 3-point likert scale: not serious=1, serious =2, very serious =3. Midpoint= 2.00.

Descriptive statistics involving the use of frequencies, percentages, means, and standard deviation were used to present the data on socio-economic characteristics of the respondents. Multiple regression analysis was used to examine the determinant of women's participation.

Results and Discussion

Socio-economic characteristics of the respondents

Table 1 shows that majority of the women (60.7%) were 51years and above, married (61.3%), had some form of education or the other (67.3), with family size of between 5-10 persons (65.3%) and farm size of less than 1ha (77.3%). The means were: age (52.2years), farming experience (18.7years), family size (6 persons), farm size (1.3ha), and *Fadama* experience (2.9years). These findings indicate that most of the respondents were advanced in age, experienced in farming, educated who are likely to appreciate different programme interventions. This is partly with the findings of Onuebuwa and Adesope (2006) and Onyemauwa *et al.*, (2007) that women in their early 30s and early 50s take active part in food crop production. The results also show that 61.3% of respondents were married thus belong to male headed household, while a high proportion (39.7%) belonged to female headed households an indication of high proportion of vulnerability which constitute part of the target group of *Fadama* programme. The results therefore imply that the women could rely on family labour which agrees with Oladoja *et al.*, (2008a). The study revealed that majority were small farm holders. Furthermore, the study revealed that 75% of the farmers acquired their land by inheritance. The size of farm cultivated by farmer is a function of production pressure, family size, labour availability, financial background and experience of farmer (Imonikhe, 2004). This result can be collaborated with that of Baba and Singh (1998), that inheritance is the most common method of acquiring *Fadama* lands in most part of the country. But less than 20% of agricultural landholders worldwide are women, due to legal and cultural constraints associated with land inheritance, ownership and use (FAO, 2010).

Table 1: Distribution of respondents demographic characteristics

Variable	Categories	mean	percentage %
Age	30 & below years		6.7
	31-40 years		16.7
	41-50 years		16.0
	51 -60 years	52.27	32.0
Marital status	Married		10.7
	Single		61.3
	Divorced		07.3
	Widowed		20.7
Educational attainment	No formal education		35.3
	primary		32.0
	Secondary.		22.0
	Tertiary		10.7
Farming experience	10 % below	18.72	44.0
	11-20		19.3
	21-30		14.7
	31-40		15.3
	40 % above		18.72
Family size	4 & below		20.7
	5-8 people		65.3
	9-12 people	6.25	14.0
Farm size	1 & below		77.3
	1.1-2.0 ha	1.03	20.0
	2.1-3.0ha		02.7
Fadama experience	1year		10.0
	2years		16.7
	3years	2.89	52.0
	4years		21.3
Mode of land acquisition	Inheritance		50.0
	Rent/lease		41.3
	purchase		08.7

Source: Field survey 2012

Involvement in livelihood activities under *Fadama*

Table 2 revealed that women FUG members were highly involved in *Fadama* activities related mostly to arable crop enterprises (71.1%) of the total respondent. Cassava producers constituted the highest proportion under crops (98.1%) followed by plantain (71.4), vegetables (63.6%). It shows that arable crops followed by processing (47.3%) and marketing (28.7%) dominated *Fadama* activities while they were less involved in non-cropping activities.

Table 2: Fadama livelihood Activities of the Respondents

Activity	Percentage % (n=150)
Crops	71.1
Cassava	98.1
Plantain	71.4
Maize	40.1
Yam	36.4
Vegetables	63.6
Livestock	21.3
Poultry	53.1
Sheep & goat	46.9
Cattle	6.25
Fisheries	4.00
Capture/artisanal	33.3
Aquaculture	83.3
Processing	41.3
Games	19.7
Fish	25.4
Root & tubers	74.6
Grains	15.5
Marketing	28.7

*multiple responses

Participation in community driven development activities by respondents

Table 3, it shows that women highly participated in Needs Assessment (mean=2.95), Group Mobilization (mean=2.81), preparation of local development plans (mean=2.79), input supply (mean=2.51), Demonstration of improved farm practices (mean= 2.47), and marketing of output (mean= 2.46), since their means are greater than 2.0. The Table also explore that respondents poorly participated in training on improved farming practices (mean=2.33), provision of credit facilities (mean=2.27), Advisory services on farm management (mean=2.23), campaigns (mean=2.17), training on processing and utilization techniques (mean=2.19), organizing field days (mean=2.18), field trips (mean=2.14), agric shows (mean=2.13) and sourcing of agric input (mean=2.09). Extension agents were less likely to target this group because of their inability to respond to recommendations to purchase inputs and hire additional labour. Without credit, women were less likely to be able to afford the inputs recommended by extension agent. This can in turn, lessen chances of having contact with extension agents.

Table3: Respondents' participation in Fadama-III Programme Community Driven Development Activities

Community Driven Development Activities	Mean	SD
Needs assessment/problem analysis	2.95*	.63
Group mobilization	2.81*	.45
Preparation of local development plans (LPDs)	2.79*	.44
Monitoring and evaluation	2.51*	.64
Demonstration of improved farm practices	2.47*	.63
Capacity building on Marketing of exhibition of farm produce	2.46*	.55
Training on improved production practices (crops, livestock, etc)	2.33*	.74
Processing and disbursement of credit facilities	2.27*	.60
Advisory services on agribusiness management skills	2.23*	.62
Campaigns	2.17*	.58
Trainings on enterprise related topics	2.19*	.67
Organizing field days	2.18*	.55
Field trips	2.14*	.80
Agric shows	2.13*	.77
Sourcing of agric inputs	2.09*	.65

***Regular (mean>2.00)**

Constraints to effective participation

Table 4, it is revealed that respondents were faced with several constraints, which hindered their participation. Severe amongst them were time constraint due to work load (mean=2.51), low level of competency among facilitators (mean=2.49), livelihood activity not properly addressed (mean=2.39), overlapping/duplication of programme (mean=2.15), poor monitoring and feedback mechanism (mean=2.02). Folorunsho *et al.*,(2013) stated that facilitators needs to improve their listening ability so as to be competent enough.

Table4. Constraints hindering respondents' participation in Fadama livelihood activities

Constraints	Mean	Standard Deviation
Time constraints due to work load	2.51	0.8
Low level of competency among facilitators	2.49	0.8
My livelihood activity is not properly addressed	2.39	0.9
Programme overlaps or is a duplication of other programmes	2.15	0.7
No effective monitoring and feedback mechanism	2.02	0.8
No accountability	1.89	0.9
Neglect of indigenous knowledge system	1.85	1.0
Needs are not properly addressed	1.68	0.8
There is social exclusion-my class is not included in certain activities	1.60	0.7
Few people take decision	1.50	0.6
Elite capture-only the rich and influential ones benefit	1.46	0.6
We cannot hire and fire facilitators or other service providers	1.41	0.8
I cannot afford my contribution of matching grant	1.31	0.6

*Severe (mean>2.00)

Determinants of women's participation

The multiple regression analysis revealed the determinant of women participant in Fadama III. From Table 5, the substantial value of F-statistics ($f=5.878$) which was significant at 5% indicates that the explanatory variables included in the model collectively have significant influence on participation of the Fadama III beneficiaries. The R^2 at 0.464 suggest about 50% variation in the independent variables of women participation were explained by the explanatory variables included in the model. The t-test for Fadama experience ($b=1.208$) and farm size ($b= -1.151$) were found to be significant at the conventional 5% level. So changes in Fadama experience and farm size have significant influence on the participation of women in Fadama III programme, while changes in other variables were not.

Fadama experience level of respondents was found to be positive and significant at 5% level. This means that advancement in the level of Fadama experience increases the probability of participation in Fadama III which could increase the benefits derivable by participants. The influence of farm size was found to be negative which implies that the smaller the farm size, the more the participation of respondents. This could imply that small scale farmers were challenged to intensify efforts at improving their status over time.

Table 5: Determinants of women's participation in *Fadama* III (Multiple Regressions)

Independent variables	Coefficient (b)	T	Prob. Level
(Constant)	27.455	12.015	0.000
Age	-0.027	-0.807	0.421
Family Size	-0.070	-0.313	0.755
Education	-0.075	-0.205	0.838
Farming Experience	0.055	1.547	0.124
Fadama Experience	1.208*	2.880*	0.005
Farm Size	-1.151*	-2.440*	0.016

* $P \leq 0.05$ $F = 5.878$; $P < 0.050$

Adjusted R square = 0.464

Conclusion and Recommendation

The livelihood activities women were mostly involved were crops related, with major crops being cassava and plantain followed by processing and marketing. The community driven CDD and participatory community planning (PCP) activities highly participated in were needs assessment, group mobilization and preparation of local development plans. *Fadama* experience and farm size significantly influence women participation in *Fadama* III programme. Area of constraints, bothered on their needs not being met, poor timing, low competence of extension officers and duplication of programme.

Based on the findings of this study, capacity building of all stake holders in the project including staff of National, States, Local Government *Fadama* offices, (NFCO, SFCOs, LFCOs), Facilitators, *Fadama* Community Associations (FCAs) and *Fadama* User Groups (FUGs) members is recommended. The trainings should be continuous, inclusive in timing address all the enterprises of women and cover key areas of CDD such as Local Development Plans preparation, participatory monitoring and evaluation and group organization to sustain the gains of programme participation.

References

- Ajayi, S., (1997). Women in agriculture as a strategy for food security in Nigeria, *J. Rural Dev. Administ.*, XXIX: 11–7
- Ani, A.O, (2004). Women in Agriculture and Rural Development. In Ekiti state, *Nigerian J. Agric. Educ.*, 2: 112– 119
- Baba and Singh, (1998), cited in Oladoja, M.A and Adeokun, O.A (2009), An Appraisal of the National *Fadama* Development Project (NFDP) in Ogun State, Nigeria, *Agricultural Journal*, Scientific Research Publishing Company, Volume: 4, Issue: 3, pp. 124-129.

- Banmeke, T.O.A. and Ajayi, M.T. (2006). Roles of cooperative societies in extension delivery in Ikpoba-Okha and Oredo Local Government Areas of Edo State. *Journal of Agricultural Extension*, 9:95 -100
- Clayton A. P. and B. Pratt, (1998). Empowering People: A Guide to participation, New York: UNDP.
- FAO, (2010). Gender and land rights database. <http://www.fao.org/gender/landrights/en/>
- FAO, (2011). The State of Food and Agriculture. *Women in Agriculture Closing the Gender Gap for Development*. FAO, Rome 2011.
- Folorunsho S., Olaolu M.O. and Madukwe M.C. (2013). Emerging Roles and Training Needs of Extension Personnel in Kogi State Agricultural Development Programme. *Journal of Agricultural Extension Society of Nigeria*; conference proceedings. Pp 80-88
- Ingawa, S.A., Oredipe, A.A., Idefor, K. and Okafor, C., (eds) (2004) Facilitators Project Implementation Manual. Second National Fadama Development Project (Fadama 2). Federal Ministry of Agric. and Rural Development Abuja, pp1-14.
- Imonikhe, G.A. (2004). Impact of Katsina State Agriculture and Community Development Project on Income and Productivity of Farmers. Unpublished Ph.D Thesis, Department of Agric. Economics & Rural Sociology, Ahmadu Bello University, Zaria, Nigeria. p.59
- Mgbada J. U. (2010). Agricultural Extension: the Human Development Perspective Computer edge publishers, Enugu, pp3-5
- National Population Commission (2006): 2006 Housing and Population Census Result; Edo State National Population Office, Benin City.
- Oakley P (1991). Projects with People. International Labour Office, Geneva.
- Okunlola J. O. (2005). Factors affecting fadama farming system in South Western Nigeria , Proceeding of the 1st Annual conference on development in Agriculture and biological science , Federal University of Technology, Akure, pg. 175-180.
- Onuebuawa B. N. and O.M. Adesope, (2006). Contributions of Women and Children to Backyard Farm Labour in Ikeduru area of Imo State, Nigeria. *International Journal of Natural and Applied Sciences* 2 (3): 189-192.
- Onyemauwa C. S., Eze C. C., Oguoma N. N. O., Ehirim N. C., and I.I. Osugiri, (2007). Allocative Efficiency and Output Elasticity of Crop Mixture Farmers by Gender in Nwangele, Imo State, Nigeria.

World Bank (2011): Community Driven Development in Africa, a Vision of Poverty Reduction through Empowerment. www.worldbank.org/cdd.

Yahere, M. (2004). A study of women participation in fish food security and poverty alleviation in Lagos and Ogun States. In P.A Araoye (ed), Proceedings of the 19th Annual Conference of the Fisheries Society of Nigeria, 29th-3rd December, Ilorin Kwara State . Pp. 167 -178.