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Gender Dimension to Farmers' Perception of the National Fadama Development Project Phase III in Kogi State

Innih, C. D.¹, Dimelu M. U.² and Olaolu, M. O.³

¹ Kogi ADP-State Fadama Coordination Office
Lokoja, Kogi State.

Email: cellydupson@yahoo.com

07037073530

³ Department of Agricultural Extension
University of Nigeria, Nsukka, Enugu State, Nigeria.

Email: michealolaolu@yahoo.com, mabeldimelu@yahoo.com

08065489702 and 08185631828

Abstract

The study evaluated the perception of farmers of the Third National Fadama Project in Kogi state with particular interest on the gender dimension. A multistage random sampling technique was used in selecting the respondents while structured interview schedule was used for data collection. Samples of 20 farmers were selected in 5 local government areas to give a total of 100 respondents. Data were analyzed with frequency, percentages, mean, standard deviation and t-test. The result indicates that the mean membership composition of the groups by gender was about 5 for both male and female. The major source of information for the male was radio (90.1) while for the female was Buyers (75.9). The test of difference (t-test) shows that the male and female differ significantly on 2 activities and did not differ significantly on 10 activities. The result also shows that the male and female beneficiaries do not differ significantly in their attitudes to project ($P \leq 0.05$) with only one item having significant difference. There were only 2 being untimely disbursement and Lack of ready market to sell the increased output as a result of securing productive asset out the 20 possible constraints where the male and female participant differ ($P \leq 0.05$). These 2 constraints are Untimely disbursement of inputs ($t=4.53$ $p<0.05$) and Lack of ready market to sell the increased output as a result of securing productive asset ($t= 5.59$, $p<0.05$). The study therefore concluded that there is no significant disparity in the perception of the Third National Fadama Project in Kogi State based on gender and as such recommends that intervention programmes should be gender sensitive.

Keywords: Gender, Fadama Development Project.

Introduction

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 underlain 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. The project adopted the Small Scale Irrigated Farming System (SSIFS), as the preferred option because of its cost saving features when compared with large scale irrigation projects in Nigeria. The National Fadama Development Project performed very well in some states such as Kano and Plateau states and only fairly in others (Akinola, 2003).

The National Fadama Development Project (NFDP), phase II was jointly sponsored by the World Bank and the African Development Bank (ADB). The purpose of this phase was to increase the income of fadama users, namely farmers, pastoralists, fishers, hunters and others. The project was implemented over six years in 18 states. Fadama II recorded considerable success, although not without her challenges and shortcomings. According to International Food Policy Research Institute (2007), the project had limited impact on income among the poorer households because the poor were unable to pay their beneficiaries' contribution for productive assets. This was because Fadama II did not involve credit service providers who could help beneficiaries pay their contribution by providing loans to the poor.

Fadama III project is a follow up to the successful Fadama II project and became loan disbursement effective on March, 2009 (Kogi ADP-SFCO, 2009) in Kogi State. The development objective of Fadama III Project which is sponsored by the International Development Association (IDA) was to sustainably increase the incomes of fadama users. By increasing their incomes, the Project would help reduce rural poverty, increase food security and would have invariably contributed to the achievement of a key Millennium Development Goal (MDG) (World Bank, 2008). The Third National Fadama Development Project (Fadama III) aimed 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 on how resources are allocated and managed for their livelihood activities and to participate in the design and execution of their subprojects. 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 (Nkonya, *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 (Kogi ADP-SFCO, 2009). Participation in programmes of this kind usually depends on some factors such as the perception of the expected beneficiaries of the project, and gender would normally have effect on perception.

Gender goes far beyond the physiological and biological specifics of the two sexes in terms of the roles each is expected to play. Gender differences are social constructs, inculcated on the basis of a specific society's particular perceptions of the physical differences and the assumed tastes, tendencies and capabilities of men and women. Gender differences, unlike the immutable characteristics of sex, are universally conceded in historical and comparative social analyses to be variants that are transformed over time and from one culture to the next, as societies change and evolve (<http://www.fao.org/docrep/003/x2919e/x2919e04.htm>).

Gender relations are accordingly defined as the specific mechanisms whereby different cultures determine the functions and responsibilities of each sex. They also determine access to material resources, such as land, credit and training, and more ephemeral resources, such as power. The implications for everyday life are many, and include the division of labour, the responsibilities of family members inside and outside the home, education and opportunities for professional advancement and a voice in policy-making. (<http://www.fao.org/docrep/003/x2919e/x2919e04.htm>). In this paper gender refer to the socially determined differences between women and men, such as roles, attitudes, behaviour and values. This concept of gender presupposes that based on the gender differences, individuals (male or female) could vary in their perception of intervention or programmes. Therefore this study sought to assess the gender dimension to the perception of the National Fadama Development Programme Phase III in Kogi state.

Purpose of the study

The purpose of the study was to assess the gender disparity in the farmers' perception of Third National Fadama Development Project Phase III in Kogi State. Specifically, the study was designed to:

1. identify the various sources of information by gender;
2. determine the level of participation of beneficiaries by gender;
3. determine the attitude of beneficiaries to the Fadama III Project by gender; and
4. ascertain gender perception of the constraints to the Fadama III Project

Methodology

The study was conducted in Kogi State, Nigeria. Multistage random sampling technique was used in selecting respondents. In the first stage 5 local government areas (LGAs) out of the twenty 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 Associations (FCAs) which are apex organizations of about 15 Fadama Users Groups (FUGs) were randomly selected by simple random techniques 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 techniques 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 four sections and each section contained relevant questions on the objectives. Objective 1 and 2 were analyzed using frequencies, percentages and mean, while objective 3 and 4 were analyzed using mean, standard deviation and test of difference (t-test). Results on participation was categorized as follows M =1.00 - 1.49 (Consultative) , M = 1.50 - 2.49 (Collaborative) , M = 2.50 - 3.49 (Collegial) and M = 3.50 - 4.0 (Self mobilization).

Results and Discussion

Gender distribution of the Fadama III membership

Figure 1 shows that both male and female had their highest percentage of membership between 1 to 5 members (male 56%, female 69%), mean while more of the groups have female membership of between 1 to 5 members. Membership of group between 6 and

10 members had more of the male members (37.6%) than their female (17.8%) counterparts and for membership that range between 11 to 15 members, the female (5.6 %) were more than the male (2.2 %). The average number of members in the groups by gender shows that the male that the male were 5.3 members and female 4.6 members. The result indicates that the membership of the fadama III group did not really differ among the male and the female farmers. Kotze (2003) asserted that women are now able to participate through groups in all aspects of subprojects, from identification through to planning and implementation

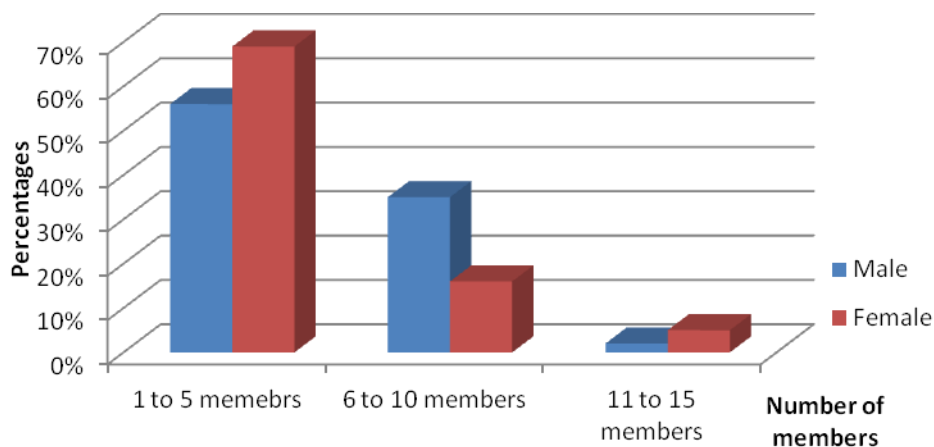


Figure 1: Percentage distribution of group membership by gender (means : Male= 5.3, Female = 4.6)

Sources of information

Table 1 shows the major source of information on Fadama III issues for the male farmers was radio (90.1%), this was followed by the facilitators (63.4%) and then fellow farmers (43.7%). Most of the male respondents did source information from family members as only 2.8% did as well as from Friends/ neighbours (18.3%) and ADP/Ministry of agriculture (21.1%). On the other hand, most of the female counterparts sourced information on Fadama III from Buyer (75.9%) and then from the facilitators (44.8%), this was followed by the Television (41.4%). The least source of information for the female farmers was from ADP/Ministry of agriculture (10.3%) then fellow farmers (24.1%). This result indicates a difference in the major sources of information by gender as what were the main sources for the male was not the same for the female. But the

facilitators were both rates second major source information by both the male and the female farmers.

This implies that the males were more adventurous in their sources of information for their partition.

Table 1: Percentage distribution of respondents among respective gender by sources of information

Source of information	Percentage (n=100)	
	Male	Female
Radio	90.1	27.6
Television	25.4	41.4
Friends/neighbours	18.3	31.0
ADP/Ministry of Agric	21.1	10.3
Family members	2.8	37.9
Fellow farmers	43.7	24.1
Buyers	29.6	75.9
Facilitators	63.4	44.8

***Multiple responses**

Farmers' level of participation by gender

Table 2 shows that the level of participation of the respondents by gender has it that the male farmers had four activities in which their level of participation was collaborative, three activities in which they participated on the collegial level and five activities which had consultative level of participation. The female farmers on the other hand had eight activities in which they had collaborative level of participation, One activity with collegial level of participation while three activities were at consultative level. The results indicate that the female farmers have a higher level of participation than the male farmers, because more (5 out of 12 activities) are at the level of consultative level while the female have 8 out of the 12 activities at collaborative level which is a higher level of participation than the consultative level. A further test of difference (t-test) shows that the male and female differ significantly on two activities and did not differ significantly on 10 activities. This shows that there is no significant difference most activities among the male and female.

Table 2: Mean scores and standard deviations of fadama III farmers' level of participation by Gender and gender differences

Activities	Female				
	Mean	Type of part.	Mean	Type of part.	t
Participation in the development of the local development plan (LDP)	2.07	Collaborative	2.03	Collaborative	0.03
Carrying out needs assessment	2.18	Collaborative	2.10	Collaborative	0.22
Implement, maintenance, of subprojects	2.00	Collaborative	2.21	Collaborative	1.57
Managing of financial resources (income from subprojects, FUEF account, etc)	3.21	Collegial	3.17	Collegial	0.05
Preparing list of constraints to be addressed through advisory services with respect to fadama enterprise production/marketing	1.15	Consultative	1.41	Consultative	6.65*
Plan for training/building the capacity of FCAs in financial management, community based procurement&impact screening of subproject	1.14	Consultative	1.28	Consultative	2.25
Preparing of list of priority public infrastructure subproject to be funded&executed	2.05	Collegial	2.29	Collaborative	2.52
Determination of site of public infrastructure to be funded &executed	2.14	Collegial	2.42	Collaborative	3.78*
Conflict mitigation measures especially among competing users of resources	1.49	Consultative	1.75	Collaborative	1.49
Selecting, contracting and payment of service providers for technical assistance in subproject execution	1.39	Consultative	1.55	Collaborative	1.04
Developing, monitoring/evaluation indicators and monitoring and evaluation plan	1.41	Consultative	1.45	Consultative	0.06
Implementation of community based infrastructure and asset acquisition activities	2.03	Collaborative	2.15	Collaborative	0.67

*Significant difference

Attitude of beneficiaries to Fadama III by gender

Table 3 shows that the male farmers beneficiaries had a favourable attitude on 4 attitude statements because of the mean scores that are greater than the cut-off of 3.00, these attitude statements includes: Fadama III project is not a way out of the present problem facing this nation's economy (mean= 3.31), the packages of the project have increased fadama farmers' knowledge about farm management (Mean= 3.06), It is better to concentrate on crop production only (Mean= 3.01) and the farmers have confidence in the advisory service provider (3.03). the Female on the other hand have favourable attitude for 4 attitude statements as because they have mean score that is greater than the cut off of 3.00, these statements includes: Participating in fadama III project is necessary to achieve increased agricultural productivity and income (M=3.00); Fadama III project is not a way out of the present problem facing this nation's economy (mean= 3.31); The packages of the project have increased fadama farmers' knowledge about farm management (mean =3.38); It is better to concentrate on crop production only (mean = 3.29) and The farmers have confidence in the advisory service provider (mean = 3.29).

The test of mean difference (t-test) shows that there exist a significant difference on only one attitude statement while on all other attitude statements, there is no significant difference between the mean ratings of male and female farmers. This result implies that the attitude of the male and female farmers is the same on Fadama III. This means that gender has no effect on the attitude of Fadama III beneficiaries as gender will not hinder female participation in Fadama III, this result does not agree with the position of Ogunlela and Mukhtar (2009) who stated that gender discrimination, rather than ignorance, is the reason for the lack of women participation in agricultural programmes and projects.

Table 3: Mean score on beneficiaries' attitude to fadama III project by gender and gender differences

Attitudinal statement	Female		t
	Mean	Mean	
Participating in fadama III project is necessary to achieve increased agricultural productivity and income.	2.85	3.00	0.52
**Fadama III project is not a way out of the present problem facing this nation's economy.	3.31	3.31	0.00
**The fund attached to each package is insufficient.	1.55	1.66	0.26
The packages of the project have increased fadama farmers' knowledge about farm management.	3.06	3.38	1.87
The project has brought about positive effect on my income hence it is worthwhile.	2.54	2.86	2.95
The group approach of the project has increased cooperation among farmers.	2.45	2.55	0.41
**The group approach brings about conflict among farmers and between farmers and extension workers.	2.59	2.52	0.19
**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).	2.14	2.18	0.03
**The project has not helped to alleviate poverty among fadama farmers.	2.34	2.55	1.26
The project has helped agricultural based enterprises to provide more jobs for the youths.	2.57	2.71	0.67
**It is better to concentrate on crop production only.	3.01	3.29	1.94
**Having a FUEF account is not necessary. We would rather spend our profits on immediate needs.	2.42	2.41	0.002
**Not all the six components are fully implemented.	1.48	2.05	7.81*
**Most of the farmers are not willing to participate in the project due to lack of fund for their beneficiary contribution.	2.31	2.54	0.65
**The group approach to the project hampers the activities of the FUGs.	2.21	2.41	1.45
**Cost sharing in the project is not the best alternative for funding agricultural project.	2.24	2.48	1.35
**Cost sharing leads to low agricultural output as many farmers abscond from the project.	2.23	2.52	0.65
**The process of securing the service of an advisory service provider is lengthy & clumsy.	1.77	1.93	2.09
The farmers have confidence in the advisory service provider.	3.03	3.29	1.34
**The capacity building workshops are cramped into a day and rushed & time scheduled not favourable to FUG members.	1.66	1.69	0.031

*Significant difference ** negative statements

Constraints to Fadama III by Gender

Table 4 shows that out the 20 possible constraints to the proper function of the Fadama III project, both the male and female farmers perceive 14 each as serious constraints to them. These constraints had mean scores greater than the cut off mean score of 2.0., these 14 constraints for the male ranged from between 2.03 and 2.71 while that of the female ranged from between 2.05 and 2.61. The most serious constraints to the male farmers was Untimely disbursement of inputs (mean= 2.71), then Inadequate funding attached to each package of the project (Mean= 2.65) this was followed by Insufficient credit availability (mean= 2.54). On the side of the female farmers the most serious constraints was Inadequate funding attached to each package of the project (mean=2.61) and followed by Insufficient credit availability and Political instability in the country with mean of 2.50 each. This result indicates that both male and female farmers perceived the seriousness of the constraints in a similar manner.

On the test of mean difference the t-test results shows that there was a significant difference on only 2 out the 20 possible constraints at 0.05 level of significance given their degree of freedom. These 2 constraints are Untimely disbursement of inputs ($t=4.53$ $p<0.05$) and Lack of ready market to sell the increased output as a result of securing productive asset ($t= 5.59$, $p<0.05$).

This result implies that the perception of the male and female does not really differ significantly on the constraints to the Fadama II project.

Table 4: Mean scores on constraints to Fadama III project by gender and gender differences

Constraining variables	Female		t
	Mean	Mean	
Land tenure system problem	2.20	2.21	0.008
Inadequate funding attached to each package of the project	2.65	2.61	0.112
Untimely disbursement of inputs	2.71	2.42	4.53*
Untimely counterpart funds from the State & local government	2.29	2.20	0.41
Poor attitude of extension staff towards farmers participating in the project	1.63	1.69	0.14
Lack of mobility for the facilitators	2.21	2.29	0.04
Ineffective advisory services	2.47	2.24	2.25
High cost of production	2.38	2.28	0.44
Lack of government commitment to policy issues	2.47	2.45	0.02
Activities such as the opening of bank account, group registration, cash book preparation are time consuming & tasking	2.52	2.59	0.16
Conflict between service providers in terms of services to be rendered & client group to be served	1.80	1.88	0.23
Lack of ready market to sell the increased output as a result of securing productive asset	1.29	1.64	5.59*
General reluctance to pay BC	1.91	1.90	0.02
Fadama farmers' experience of difficulty in securing money for beneficiary contribution	2.41	2.32	0.36
Insufficient credit availability	2.54	2.50	0.06
Political instability in the country	2.51	2.50	0.01
Dishonesty/corruption among the State fadama officials (e.g. members of the PIU, facilitators)	1.80	1.90	0.40
Procurement of substandard income generating assets by contractors	2.20	2.27	0.12
Farmers may not ask for non-agricultural based enterprise such as rental business	2.03	2.05	0.01
The tendency of highly placed individuals/politicians to hijack the project by registering FUGs/FCAs	1.79	1.82	0.03

*Significant difference

Conclusion

That women participation and perception does not differ much as from that of the men, as the women are getting more favourably with their men folks in terms of their over-participation in agricultural activities and contribution to household economy and food security would be an understatement. The women therefore deserve to be given equal

recognition as their male counterpart as far as decision-making process in agriculture is concerned.

Recommendation

Based on the findings of this study the following recommendations are made:

1. Since there was no significant disparity in the perception of the Third National Fadama Project in Kogi State based on gender, upcoming intervention programmes should give both the male and female prospective beneficiaries, equal chances of contributing to the planning and implementation of the programmes.
2. The Fadama III approach of group formation for participation should be encouraged for subsequent programmes as this is perceived to encourage better women participation in agricultural activities.

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