Determinants of the Socioeconomic Profile of Fadama III Project Beneficiaries in Three States of Niger Delta Area of Nigeria

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Abstract: - The study described the various socioeconomic profile of the Fadama III beneficiaries in Akwa Ibom, Bayelsa and Delta States, and provided implications with necessary recommendations for stakeholders. A sample size of 360 beneficiaries were selected using sampling methods involving multistage and simple random techniques. Results obtained revealed that the average age of respondents in the Niger Delta was 51.33 years. Respondents' disaggregation by gender showed that male respondents were 57% and female respondents were 43%. It was found that 50.3% of the respondents had secondary education. Respondents' average years of experience on farming were 14years. The Niger Delta Fadama III farmers had average farm sizes of 1.6 hectares. About one-third of respondents (30%) earned annual farm income of less than ₦120,000.00 in the study area. The household size on the average per state is 6 persons per household. It was generally noted that the activities of local facilitators and extension workers were average at 48% and 57% respectively. The study concluded that the socioeconomic profile of the Fadama III beneficiaries in the Niger Delta are similar in some situations and recommended that needs assessment should be conducted before specific project implementations.

Key-Words: - Socioeconomic, Determinants, Profile, Fadama, Beneficiaries, Project

1 Introduction

The Niger Delta area of Nigeria. This area is made up of nine states namely Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Rivers, Ondo, Imo and Abia States. The Niger Delta Area is trace-crossed by a large number of rivers rivulets, streams, canals and creeks [1]. Bayelsa and Delta States are at the center of the Niger Delta Region. Akwa Ibom State land occurs in the drier landward parts of the Niger Delta where crop farming assumes considerable importance. In contrast, the seaward parts of the Niger Delta, which are inhabited by Delta and Bayelsa States, are characterized by uplands, lowlands, extensive creeks and volumes of sea water. As with most parts of Nigeria, agriculture is the dominant aspect of the rural economy. About 70% of the population is engaged in farming.

The concerned states in this study: Akwa Ibom, Bayelsa and Delta States lie within the equatorial hot/wet climatic belt except for the Northern part of these states where the derived savanna climate is experienced. The rainfall is high; the mean annual rainfall varies from 2600mm in the coastal area of these three states to nearly 1200mm in their northern extremes. During the raining season, the mean monthly temperature ranges from 18°C to 35°C and during the dry season it ranges from 30°C to 35°C. The climate experienced in these three states is favourable to agriculture, which is the dominant occupation of people of Akwa Ibom, Bayelsa and Delta States.

The high rainfall is favourable for the cultivation of tree crops like cocoa, oil palm, kola nut and rubber. Other crops grown include cocoyam, yam, cassava, plantain/banana and pineapple. Livestock that is mostly favourable is poultry while aquaculture and artisanal fisheries activities are also prevalent in the coastal areas of these three Niger Delta States.

Fadama III project, a World Bank project in collaboration with the Federal Government of Nigeria, has impacted many farmers and rural dwellers over the years in the areas of poverty reduction [2]. The study sought to address the indicators aligned with the socioeconomic profile of the Fadama III project beneficiaries in the Niger Delta area.

2 Objectives

The objectives of the study were to:

i. Describe the various socioeconomic profile of the Fadama III beneficiaries in Akwa Ibom, Bayelsa and Delta States.
ii. Provide implications and necessary recommendations for stakeholders.

3 Materials and Methods

3.1 Selection of Farmers

The population of the study comprised all Fadama III farmers involved in cassava, poultry and fisheries production in Akwa Ibom, Bayelsa and Delta states of Nigeria. A multi-stage sampling in three phases and random sampling for the fourth phase were employed for the selection. The lists of cassava, poultry and fisheries FCAs and FUGs were obtained from the State Fadama Coordinating Offices (SFCOs) and the ADP offices of the three states. Akwa Ibom, Delta and Bayelsa States Agricultural Zones/ Local Government Areas are shown in (Table 1). From the list of farmers registered with the three states Fadama Coordinating Offices (SFCOs), four FUGs were selected from each LGA and six LGAs from each state resulting in 72 FUGs across the three States. From each group, two cassavas, one poultry and one aquaculture FUGs were randomly selected. Out of the 72 FUGs, five farmers were selected from each FUG resulting sample size of 360 farmers (Table 1 in Appendix).

3.2 Data Collection and Measurement of Variables

Data were collected by use of a simplified questionnaire. Eight indicators were provided to elicit information and measured as follows:

Socio-Economic Profiles

The socio-economic profiles are integrated in the followings:

- **Age:** This was measured in years by asking the respondents to indicate their actual age.
- **Sex:** Respondents were asked to indicate as applicable in the male or female options provided.
- **Educational Level:** They were asked to indicate their highest qualification from the following categories: No Formal Education, Primary School, Secondary School, OND/NCE, HND/First Degree and Post Graduate categories.
- **Farming Experience:** The respondents were asked to indicate the number of years they have spent in farming.
- **Farm Size:** The respondents were asked to indicate the actual size of their farms in hectares.
- **Farm Income:** The respondents were asked to indicate their annual income in Naira.
- **Household Size:** Respondents were asked to state the number of people in the same house that eat from the same pot.

4 Results and Discussion

4.1 Socio-economic Profiles of Project Beneficiaries

The socio-economic characteristics of the beneficiaries of Fadama III project were captured under the following sub-headings: age, gender, educational level, farming experience, farm size, farm income, household size, contact with local facilitator and contact with other extension agents (Table 2).

Age: The results revealed that the average age of respondents in Akwa Ibom State was 51 years; Bayelsa State, 48 years and Delta State, 55 years. The average age of respondents in the Niger Delta was 51.33 years. This result is similar to the findings of [3] who found that the average age of Fadama III participants in Delta State was 50.6 years. Again, on youth level participation analysis in Delta State Fadama III, [4] reported a low level of participation in agricultural activities.

Implication of the Finding and Recommendation. School leavers and agile youths between the ages of 30 and 50 are less targeted in the study area. Efforts should be made to incorporate more of these age brackets into agricultural programme.

Gender: Respondents' disaggregation by gender showed that male respondents were 57% and female respondents were 43%. [5] and [6] asserted that males participated more in Fadama III agricultural activities than females. Females are more interested in processing and marketing of agricultural products [7].

Implication of the Finding and Recommendation. The higher percentage of males than female in Fadama III agricultural activities depend on the outcome of the need assessment in the study area. Notwithstanding, international organizations have always advocated for gender fairness in rural community operations. It should be

advised that women should not be denied any opportunities they deem necessary to function so far it does not conflict with cultural norms.

Education: It was found that 50.3% of the respondents in the Niger Delta had secondary education. All the respondents had formal education.

Implication of the Finding and Recommendation. From the finding here, the possession of an average education is a veritable tool and platform to carry out behavioural changes in agricultural innovations. Younger or new farmers should be encouraged to excel above this standard for improved compatibility in stakeholders' nexus.

Farming experience: Respondents from Akwa Ibom, Bayelsa and Delta States had averages of 11, 15 and 16years respectively. The average years of experience on farming in the Niger Delta were 14years. This finding is closely similar to that of [3] who reported an average of 11 years on farming experience in the Fadama III mid-term review report submitted to Delta State. [8] also discovered that the mean age of arable crop farmers in Delta State was 11 years.

Implication of the Finding and Recommendation. Farmers with low farming experiences are often mediocre. Compare to the average age of beneficiaries, the farming experience age is fairly alright. However, the higher the farming experiences, the better the farmer critiquing and adoption tendencies. For acceptability and sustainability of agricultural innovations, it is advisable to target farmers with higher years of farming experience.

Farm size: Majority of respondents, 68.1% possessed farm sizes less than two hectares in the study area. Individual state analysis portrayed that respondents in Akwa Ibom (63.3%), Bayelsa (86.7%) and Delta (54.2%) cultivated between one and two hectares. Furthermore, the means farm sizes of the separate states were Akwa Ibom (1.7), Bayelsa (1.1) and Delta (2.0). The Niger Delta Fadama III farmers had average farm sizes of 1.6 hectares. This is similar to [5], [6], and [3] on farm sizes of Fadama III participants in Delta State.

Implication of the Finding and Recommendation. Presently, the farm sizes are low if farmers were to be supported to provide food for national and international capacities. There are serious needs for farmers to increase farm sizes which will invariably boost agricultural productivity and income generation in the Niger Delta area.

Annual farm income: About one-third of respondents (30%) earned annual farm income of less than ₦120,000.00 in the study area. Individual state breakdown exposed that both Akwa Ibom and Delta respondents (68.3%) ranked highest in farm income between ₦120,000.00 and ₦211,000.00, while Bayelsa respondents (43.3%) ranked highest in farm income of less than (₦120,000.00). An outlook of respondents' farm income means on state yardstick signified that Akwa Ibom respondents' mean income was ₦173,108.00; Bayelsa (₦137,225.00) and Delta (₦192,342.00). The respondents average annual farm income was ₦167,558.00. This study's finding is agreement with [5] and [9] who found that annual income by Fadama III household beneficiaries ranged between ₦151,000.00 and ₦200,000,00 annually in Delta State.

Implication of the Finding and Recommendation. The average annual income of the farmers is low compared to the current economic prevalence and standard of living. Actions are needed to project this financial status so that farmers can meet their domestic, agricultural and economic needs.

Household size: This study also found that 48% of the respondents possessed between five and eight persons per household. This is comparable to the findings of [9]. The household size on the average per state is 6 persons per household.

Implication of the Finding and Recommendation. An average persons of 6 per household is ideal for development practitioners. In essence, family planning activities championed by community health extension workers is being put into practice. This should be encouraged.

Contact with Extension Workers: This study showed that respondents' contacts with Fadama local facilitators across the selected Niger Delta States were highest with monthly outreach (48%). On state platform, similar findings were discovered. Respondents contacts with the Fadama local facilitators in Akwa Ibom (55%), Bayelsa (59.2%) and Delta (57.5%) on monthly basis. A similar finding on better performance of other extension workers than ADP extension workers was reported by [10]. They reported that the Farmers Field School extension activities were having more contacts with farmers than the traditional extension approaches by the Ondo State ADP extension workers.

Furthermore, Table 2 (Appendix) shows respondents' contacts with other extension agents across the selected Niger Delta States were of poor rating at 57% of yearly contact. As regards the States comparison, Akwa Ibom recorded 36% yearly contact, Bayelsa (35%) and Delta (44.2%) This study's result is similar to the findings of [11]

who reported that extension efforts were very weak in reaching out to farmers.

Implication of the Finding and Recommendation. It was generally noted that the activities of local facilitators and extension workers were average (48% and 57% respectively). If this continues, there will be reduction in the awareness and distribution of newly discovered improved varieties to farmers. Thus, local facilitators and extension workers need to be more motivated and equipped in the discharge of their duties so as to assist farmers in current practices of farm technological advancement and productivity.

In conclusion, besides the various implications of the study cited above, the socioeconomic profile of the Fadama III beneficiaries in the Niger Delta are similar in some status quo and it is therefore recommended that needs assessment should be conducted before specific project executions in the Niger Delta area.

5 Conclusion

The study concluded that some socioeconomic profile of the Fadama III beneficiaries in the Niger Delta area are alike in some circumstances and parameters (e.g. age, educational status and farm sizes). This facilitates baseline studies in developmental issues. Therefore, it is recommended that felt need assessment survey should be carried out on the basis of targeted project contracting and executions for community development.

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Appendix:

Table 1: Phases of Sampling Distribution (n = 360)

State Phase 1	LGAs Phase 2	FUGs Phase 3	Farmers/ Group	Total
Akwa Ibom	6	12C 6P 6F	60C 3OP 3OF	120
Bayelsa	6	12C 6P 6F	60C 3OP 3OF	120
Delta	6	12C 6P 6F	60C 3OP 3OF	120
3	18	72	360	**n = 360**

Note: C = Cassava; P= Poultry; F= Fisheries enterprises

Table 2: Socio-economic characteristics of respondents (n = 360)

S/№	Parameters	Akwa Ibom Freq. (%)	Bayelsa Freq. (%)	Delta Freq. (%)	Total	Pooled Mean/Mode
1	**Age (Yrs)**					
	26 – 35	2 (1.6)	9 (7.5)	0 (0)	11 (3.06)	
	36 – 45	27 (22.5)	40 (33.3)	23 (19.2)	90 (25.0)	
	46 – 55	62 (51.7)	40 (33.3)	36 (30.0)	138 (38.3)	
	56 – 65	23 (19.2)	24 (20.0)	39 (32.5)	86 (23.9)	
	66 – 75	6 (5.0)	7 (5.8)	22 (18.3)	35 (9.72)	
	Mean Age	**51**	**48**	**55**	**360 (100)**	**51.33 Years**
2	**Sex**					
	Male	72 (60.0)	69 (57.0)	65 (54.0)	206 (57.0)	
	Female	48 (40.0)	51 (43.0)	55 (46.0)	154 (43.0)	
					360 (100)	
3	**Educational Level**					
	No Formal Educ.	0	0	0	0	
	PrimaryEduc.	14 (12.0)	16(13.0)	1(0.8)	31 (8.7)	
	Secondary Educ.	76(63.0)	56(47.0)	49(40.8)	181 (50.3)	**50.3**
	OND/NCE	30(25.0)	44(37.0)	51(42.5)	125 (35.0)	
	HND/First Degree	0	4(3.0)	18(15.0)	22 (6.0)	
	Higher Degree	0	0	1(0.8)	1 (0.3)	
					360 (100)	
4	**Farming Experience (Yrs)**					
	1 – 5	23 (19.1)	7 (5.8)	7 (5.8)	37 (10.0)	
	6 –10	54 (45.1)	41 (34.2)	37 (30.9)	132 (37.0)	
	11 –15	24 (20.0)	11 (9.2)	21 (17.5)	56 (16.0)	
	16 –20	9 (7.4)	24 (19.9)	8 (6.6)	41 (11.0)	
	21 –25	10 (8.4)	37 (30.7)	47 (39.1)	94 (26.0)	
	Mean	**11**	**15**	**16**	**360 (100)**	**14years**
5	**Farm Size (Ha)**					
	0.1 – 2.0	76 (63.3)	104 (86.7)	65 (54.2)	245 (68.1)	
	2.1 – 4.0	31 (25.8)	16 (13.0)	45 (37.5)	92 (25.6)	
	4.1 – 6.0	13 (11.0)	0	10 (8.3)	23 (6.3)	
	Mean	**1.7**	**1.1**	**2.0**	**360 (100)**	**1.6ha**
6	**Farm Income per annum (₦)**					
	30,000 – 120,000	12 (10.0)	52 (43.3)	44 (36.7)	108 (30.0)	
	121,000 – 210,000	82 (68.3)	27 (22.5)	45 (37.5)	154 (42.7)	
	211,000 – 300,000	26 (21.7)	41 (34.2)	31 (25.8)	98 (27.2)	
	Mean	**₦173,108.00**	**₦137,225.00**	**₦192,342.00**	**360 (100)**	**₦167,558**

Table 2: Socio-economic characteristics of respondents (cont'd.)

S/№	Parameters	Akwa Ibom Freq. (%)	Bayelsa Freq. (%)	Delta Freq. (%)	Total	Pooled Mean/Mode
7	**Household Size (№s of persons)**					
	1 – 4	60 (50.0)	58 (48.3)	21(17.5)	139 (39.0)	
	5 – 8	48 (40.0)	43 (35.9)	81 (67.5)	172 (48.0)	
	9 – 12	12 (10.0)	17 (14.2)	18 (15.0)	47 (13.0)	
	13 – 16	0 (0)	2 (1.6)	0 (0)	2 (1.0)	
	Mean	**6**	**6**	**7**	**360 (100)**	**6 persons**
8	**Contact with Local Facilitators**					
	Weekly	0 (0)	0 (0)	0 (0)	0 (0)	
	Fortnightly	0 (0)	0 (0)	18 (15.0)	18 (5.0)	
	Monthly	49 (40.8)	54 (45.0)	69 (57.5)	172 (48.0)	**48**
	Quarterly	71 (59.2)	66 (55.0)	33 (27.5)	170 (47.0)	
	Yearly	0 (0)	0 (0)	0 (0)	0 (0)	
	Bi-annually	0 (0)	0 (0)	0 (0)	0 (0)	
					360 (100)	
9	**Contact with other Extension Workers**					
	Weekly	0 (0)	0 (0)	0 (0)	0 (0)	
	Fortnightly	0 (0)	0 (0)	0 (0)	0 (0)	
	Monthly	0 (0)	0 (0)	0 (0)	0 (0)	
	Quarterly	0 (0)	0 (0)	4 (3.3)	4 (1.1)	
	Bi-annually	65 (54.0)	78 (65.0)	63 (52.5)	206 (57.0)	**57**
	Yearly	55 (46.0)	42 (35.0)	53 (44.2)	150 (41.9)	
					360 (100)	

***Note**: Figures in parentheses imply percentages. Abbreviations: Freq. = frequency, % = percentage, Educ. = education.*