Effect of Participation in Community-based Agriculture and Rural Development Project on Socio-economic Status of Rural Dwellers in Northern Nigeria

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Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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ABSTRACT

Community-Based Agriculture and Rural Development Project (CBARDP) is expected to enhance Socio-Economic Status (SES) of rural dwellers; consequently impact positively on general welfare of the rural dwellers. However, impact of the project on SES of rural dwellers is yet to be ascertained. Thus, the effect of participation in CBARDP on SES of rural dwellers in northern Nigeria was investigated. Three of the five participating states were randomly selected. Three participating and non-participating Local Government Areas (LGAs) were chosen from selected states using stratified random sampling. One Rural Village Area (RVA) from each of the participating and one ward from non-participating LGAs were randomly selected. Five percent of registered participants in each RVA and equal proportion of non-participants were selected to obtain 410 respondents. Interview schedule was used to collect data. Participants had high SES (113.9±20.1) than non-participants (106.6±14.7) as 5.9% and 0.7% of participants and non-participants attained better-off SES. Respondents' SES was significantly related to age ($r = 0.246$) and monthly income ($r = 0.438$) and significantly related to marital status ($\chi^2 = 926.644$) and

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education (χ^2 = 66.176). Similarly, SES was significantly influenced by knowledge (r = 0.220), attitude (r = 0.187) and benefit derived (r = 0.142) from the project. Significant difference existed between SES of participants and non participants (t = 4.612). The project impacted positively on participants' socio-economic status but delayed implementation constituted major challenge to project participants.

1. INTRODUCTION

1.1 Background of the Study

Community-based development is a form of development within the community through maximum participation of community members in design and implementation of the project that brings about improvement. Usually, community-based development is small-scale, low-cost, and uses simple technologies. According to [1], community-based development projects help build capacity and strengthen institutions, providing services to rural poor people, assisting with necessary policy changes, developing local organizations to enhance their effective participation, and promoting initiatives to foster rapid private sector-led poverty reduction strategy and economic growth.

For community-based development to occur, people must adopt a new attitude, in which they become actors rather than recipients, and embrace small incremental change generated internally rather than expect large infusions of external wealth and technology [2]. Hence community-based development encompasses forms of development as well as the structures needed to achieve them. It is a participatory, community-controlled method employed by African Development Bank Community-Based Agriculture and Rural Development Project (AfDB-CBARDP).

The improved quality of life expected from participation in any community-based development project is best seen in positive change in the socio-economic status of participants [3]. Socio-economic status (SES) is an individual ranking or position in a society [4]. Socio-economic status denotes the position of an individual in a community with respect to the amount of cultural possession, effective income, material possession, prestige and social participation [5]. According to [6], socio-economic status is the position that an individual or family occupies with reference to the prevailing average standards of cultural possession, effective income, material possessions and participation in the group activities of the community.

Considering the pronounced poverty in the country especially in the rural areas in the northern states of Nigeria, African Development Bank (AfDB) came up with Community-Based Agriculture and Rural Development Project (CBARDP) intervention for the country. The project was approved in 2003 and started in 2005 with the Federal Ministry of Agriculture and Rural Development as the implementing agency. The project, located in northern Nigeria, covered Adamawa, Bauchi, Gombe, Kaduna and Kwara states. Major components of the project are capacity building, production development, community development as well as project management and coordination.

1.2 Statement of the Research Problem

This problem of poverty among rural dwellers has been confirmed to be more pronounced in northern Nigeria [7]. [8] observed that 23% of all children in Nigeria were underweight with the North East and North West having the largest proportion of children who are underweight (35% each); and about half of children in the North West (53%) and North East (49%) are found to be stunted. Corroborating this notion, [9] lamented that begging had become a tradition and a way of life in the North with over 30 per cent of Northern youths between the ages of four to 13 as street beggars.

In collaboration with the Federal government of Nigeria, the AfDB through its community-based poverty reduction initiatives started projects of community development in Nigeria; one of which is Community-Based Agriculture and Rural Development Project (CBARDP) located in the northern Nigeria. According to [10], the African Development Bank Community-Based Agriculture and Rural Development Projects (AfDB-CBARDP), was expected to assist 1.6 million rural dwellers in the participating states move out of poverty and have their living

condition improved. This is in line with the assertion of [11] that such projects that were demand-driven and participatory in approach, targeted at rural dwellers would enable them to possess the basic and essential means of achieving socio-economic independence. This invariably means assuming a better socio-economic status.

The AfDB-CBARDP for northern Nigeria has been on since 2005 and still on-going. Unfortunately since the inception of the programme, there has not been any record of a study on the effects of the project on the socio-economic status of participants, for which it was launched. If this can be determined, it will help re-adjust the project activities to achieve the desired goal rather than failure recorded in the past development programmes. Hence, this research was designed to determine the effect of participation in community - based agriculture and rural development projects on the socio-economic status of rural dwellers in northern Nigeria. In order to come out with a reliable result, the study therefore, tried to provide answers to the following research questions:

(i) What are the personal characteristics of rural dwellers in the study area?
(ii) What is the level of knowledge of participants about African Development Bank Community-Based Agriculture and Rural Development Project in the study area?
(iii) What is the attitude of the participants towards the project?
(iv) What are the challenges facing participants in the African Development Bank Community-Based Agriculture and Rural Development Project in the study area?
(v) What are the benefits derived from participation in the project in the study area?
(vi) What is the level of rural dwellers' participation in the project in the study area?
(vii) Is there any difference in the socio-economic status of participants and non-participants of African Development Bank Community-Based Agriculture and Rural Development Project in the study area?

1.3 Objectives of the Study

The specific objectives were to:

(i) determine the personal characteristics of the rural dwellers in the study area;

(ii) evaluate the participants' level of knowledge about African Development Bank Community-Based Agriculture and Rural Development Project activities in the study area;
(iii) determine the attitude of rural dwellers towards the project in the study area;
(iv) find out the challenges facing participants in the project in the study area;
(v) identify the benefits derived from participation in the project in the study area;
(vi) ascertain the level of rural dwellers' participation in the project in the study area and
(vii) compare the socio-economic status of the project participants and non-participants in the study area.

2. METHODOLOGY

2.1 Area of the Study

The research was carried out in the northern Nigeria; which consists of three of the six geo-political zones in Nigeria. The zones are North-Central (Benue, Kogi, Kwara, Federal Capital Territory (FCT), Nasarawa, Niger and Plateau; North-East (Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe) and North-West (Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto and Zamfara).

Most of the cities and towns in northern Nigeria are predominantly occupied by Hausa-Fulani except the north central. The prominent among the cities in northern Nigeria are Kano, Zaria, Katsina, Abuja, Bauchi, Birnin Kebbi, Damaturu, Dutse, Gombe, Gusau, Jalingo, Jebba, Jos, Kaduna, Lafia, Maiduguri, Makurdi, Sokoto, Suleja and Lokoja. There are many indigenous tribes of northern Nigeria. The major ones are the Hausa, Fulani, Kunuri, Tiv, Jukun, Ebira, Nupe, Berom, and Igala. As a result of economic activities, many other tribes from the west, south and eastern part of the country now reside in different cities, towns and villages of northern Nigeria.

Major occupation of the people in the area is farming. As a result of the wide range of climate and vegetation of the area, different kinds of arable crops (such as maize, millet, rice, sorghum, beans, soyabeans, yam, cassava, cocoyam, irish potato and sweet potato) and tree crops (such as citrus, mango, pears and cashew) are plated.

2.2 Sampling Procedure and Sample Size

The AfDB-CBARDP had only 5 participating states, which are located in northern Nigeria (3 in North-east: Adamawa, Bauchi and Gombe), (1 in the North-west: Kaduna) and (1 in North-central: Kwara). There are 9 participating local government areas (LGAs) in each of the participating states and 3 communities called rural village areas (RVAs) in each participating local government area.

Multistage sampling technique was used in selecting respondents for the study. Simple random sampling technique was used to select Gombe State in the North-east while the only participating states in North west i.e. Kaduna and North-central i.e. Kwara were selected using purposive sampling technique. From each of the 3 selected states, 3 participating and 3 non-participating LGAs were considered to provide information for comparison.

One (1) RVA was selected from each of the selected participating LGAs and 1 ward (community) from each of the non-participating LGAs. Five (5) percent of registered participants in each RVAs (participating communities) was selected for interview. Equal number of non-participants was selected through systematic sampling of households in sampled wards to provide for fair comparison. The sampling procedure gives a total sample size of 410 respondents comprising 205 participants and 205 non-participants in the AfDB-CBARDP.

2.3 Validation and Reliability Tests

Content validity was conducted on the instrument to determine how well the behavioural constructs covered by the instrument matched those specified in the objectives. The instrument was also subjected to face validity by discussing colleagues in the field of Agricultural Extension and Rural Development.

The reliability of the instrument was tested using the split-half method on 30 copies of interview schedules administered to the respondents. The instrument was analyzed using Covariance Matrix resulted in correlation co-efficient of $r = 0.79$, which was considered high enough to make the instrument reliable for this study.

2.4 Measurement of Variables

1. **Age:** Respondents were asked to state their age in years

2. **Sex:** Respondents were asked to indicate their sex from the option below
   (a)   Male   (b)   Female
3. **Marital status:** Respondents were asked whether they were single, married, divorced or widow
4. **Household size:** Respondents were asked to state the number of people in their households
5. **Highest educational level attained:** Respondents were asked to indicate their educational level among the following options:

   (a)   No formal education
   (b)   Adult education
   (c)   Quran education
   (d)   Some years in primary school
   (e)   Completed primary school
   (f)   Some years in secondary school
   (g)   Completed secondary school
   (h)   Others (specify)

6. **Major occupation:** Respondents were asked to state their major source of income
7. **Monthly income:** Respondents were asked to state their estimated monthly income. From the responses, mean score was calculated as 17919.02±18524.28. Then, responses were categorised into < 7,500; 7,500-9,900; 10,00-19,900; 20,000-29,900; 30,000-39,900; 40,000-49,900; 50,000 and above
8. **Knowledge about the project:** Respondents were asked to respond Yes or No to fifteen (15) questions covering general information about the project. Yes was scored 1 and No was scored 0. Obtainable highest score=15 and Lowest score=0. Mean score was used to categorise the knowledge about AfDB-CBARDP to 'low' and 'high' knowledge
9. **Attitude of rural dwellers towards AfDB-CBARDP:** Respondents were asked to respond appropriately to 25 attitudinal statements using a five-point Likert type scale of strongly agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly disagree (SD).

Scoring:	SA	A	U	D	SD
Positive statements	5	4	3	2	1
Negative statements	1	2	3	4	5

Obtainable highest score =125 and lowest score =25. Scores below mean were considered unfavourable while mean and above mean were categorised as favourable attitude towards AfDB-CBARDP activities.

10. **Challenges facing rural dwellers in AfDB-CBARDP:** Respondents were asked to mention the challenges faced in their participation in AfDB-CBARDP activities. List of challenges was generated with 9 items.
Faced by the challenge = 1
Not faced by the challenge = 0
Maximum score = 9 and minimum score = 0
Mean score obtained = 1.2±0.4
The mean score was used to categorise the responses into 'mild' and 'serious' challenges.

11. **Benefits from AfDB-CBARDP:** Respondents were asked to mention the benefits they have derived from their participation in the project activities. List of benefits was generated with 9 items.
Benefited = 1
Not benefited = 0
Maximum score = 9 and minimum score = 0
Mean score obtained = 1.6±0.9
The mean score was used to categorise the responses into 'low' and 'high' benefits.

12. **Level of participation in AfDB-CBARDP:** Respondents were asked to indicate their participation at initiation, planning, contribution, execution and utilization stages of the project's 13 sub-components. Participation at a stage was scored 1 while not participated was scored 0. Obtainable maximum score = 65 and minimum = 0. Means score was calculated to categorise the level of participation into 'low participation' and 'high participation' in AfDB-CBARDP activities.

13. **Socio-economic status:** Socio-economic status was measured through the application of socio-economic status scale developed for northern Nigeria in 2011 [12]. The 28 valid items identified in the scale were considered in this study. Standard scores were fixed for the response categories. Total score for each respondent was determined with the lowest as 76 and the highest as 172. The lowest and the highest scores were used in calculating values to categorise the socio-economic status of the respondents into

low (76 – 108), middle (109 – 141) and high (142 – 172). Highest score and lowest scores were used in calculating values to categorise the socio-economic status of the respondents into poor, average and better off.

Formula used:

(i) $\text{Poor} = L \quad\text{——}\quad L + \left(\frac{H-L}{3}\right)$

(ii) $\text{Average} = L + \left(\frac{H-L}{3}\right) + 1 \quad\text{——}\quad L + \left(\frac{H-L}{3}\right) + 1 + \left(\frac{H-L}{3}\right)$

(iii) $\text{Better-off} = L + \left(\frac{H-L}{3}\right) + 1 + \left(\frac{H-L}{3}\right) + 1 \quad\text{——}\quad H$

Where L = lowest score and H = highest score

3. RESULTS AND DISCUSSION

3.1 Respondents' Personal Characteristics

3.1.1 Age

Table 1 shows that the mean age was 43.8±12.8 years indicating that 54.9% of the respondents were within the mean age and above. This result is in consonance with the finding of [13] where he observed mean age of 43.2 years for farmers in Nigeria. In a similar study in Gombe state, [14] discovered mean age of 43.7 years for rural dwellers participating in community-based development project. Based on these findings, it can be inferred that majority of the respondents were working class and matured as only few of them were above 60 years of age.

3.1.2 Marital status

Table 1 reveals that 90.0% of the respondents were married; 44.6% participants and 45.4% non-participants. The result is in line with those of [15] who observed that 98.5 married among rural farmers in Benue State and [16] in a study of rice farmers in Kwara State where they observed that 85.3% of the respondents were married.

3.1.3 Household size

Table 1 shows that 53.7% of the respondents had household size of more than 7 persons; 30.5% participants and 23.2% non-participants (8.4±6.0). Based on the findings, it can be inferred that large family size was common in the study area, where most of the families were

larger than 8 persons. The result is in line with the [8] population reports, which specify the average family size of 8 for Kwara State and household size of greater than 8 persons for both Gombe and Kaduna States.

3.1.4 Educational status

Majority of the respondents (84.4%) acquired one form of education or the other (Table 2). Only 5.1% of participants and 10.5% of non-participants were not educated. It can therefore, be inferred that majority of the respondents are literate. This result is in line with the discovery of [17] that farmers have one form of education or the other. Education is an important characteristic, especially in the acquisition of knowledge and skill in different areas of human endeavours [18]. According to [19], respondents' attained educational status is expected to influence positive growth and development of their society. Hence the respondents' attained educational status is expected to influence positive change in the community.

3.1.5 Major source of income

The major source of income of the respondents is as shown in Table 2. The table reveals that 72.7% of the respondents indicated farming as their major source of income. Of those in farming, 34.9% were participants while 37.8% were non-participants. Other major sources of

income include trading 13.2% and civil service 6.3%. Farming has the highest percentage in the two groups of respondents (participants and non-participants). The highest percentage of the respondents in farming is expected because agriculture engages about 75% of people in most developing nations [20]. According to [21], agriculture as a sector is dominated by small holdings farming families, with most of them residing in rural areas.

3.1.6 Other sources of income

Table 3 shows the respondents' other source of income. The result reveals that 43.4% of the respondents (19.8% participants and 23.7% non-participants) had no other source of income. The next high percentage of respondents (24.6%) had trading as their other source of income, 21.2% of the respondents had farming as other source of income, and 8.3% of the respondents were artisans while 2.0% were civil servants. This shows that rural dwellers are not involved in only one source of income. The result is similar to the observation of [19] that participants in community-based project had other sources of income. This proves that rural dwellers are very industrious. Hence it is very necessary to take note of the other sources of income of the rural dwellers to be able to estimate their income correctly. Similarly knowledge of other source (s) of income will help in timing of meeting with the rural dwellers in such a way that conflict of activities will be avoided.

Table 1. Personal characteristics of respondents

Variable	Participants		Non-participants		Total		Mean
	F	%	F	%	F	%	
Age (years)							
< 31	34	8.3	35	8.5	69	16.8	
31-40	61	14.9	55	13.4	116	28.3	
41-50	58	14.1	69	16.8	127	31.0	43.8±12.8
51-60	31	7.6	22	5.4	53	12.9	
61 and above	21	5.1	24	5.9	45	11.0	
Marital status							
Single	7	1.7	3	0.7	10	2.4	
Married	183	44.6	186	45.4	369	90.0	
Divorced	2	0.5	2	0.5	4	1.0	
Widowed	13	3.2	14	3.4	27	6.6	
Household size							
1 – 2	7	1.7	9	2.2	16	3.9	
3 – 4	27	6.6	42	10.2	69	16.8	8.4±6.0
5 – 6	46	11.2	59	14.4	105	25.6	
7 and above	125	30.5	95	23.2	220	53.7	

Source: Field survey (2011)

Table 2. Personal characteristics of respondents continued

Variable	Participants		Non-participants		Total	
	F	%	F	%	F	%
Educational status						
No education	21	5.1	43	10.5	64	15.6
Adult education	11	2.7	19	4.6	30	7.3
Quranic education	44	10.7	21	5.1	65	15.9
Some primary school	24	5.9	21	5.1	45	11.0
Completed primary	41	10.0	39	9.5	80	19.5
Some secondary sch.	16	3.9	7	1.7	23	5.6
Completed secondary	33	8.0	40	9.8	73	178
Tertiary education	15	3.7	15	3.7	30	7.3
Major source of income						
Farming	143	34.9	155	37.8	298	72.7
Civil service	12	2.9	14	3.4	26	6.3
Trading	39	9.5	15	3.6	54	13.2
Artisan	11	2.7	17	4.1	28	6.8
Pension	0	0.0	2	0.5	2	0.5
House wife	0	0.0	3	0.7	3	0.7

Source: Field survey (2011)

3.1.7 Monthly income (N)

The result in Table 3 shows that 30.5% of the respondents earned between N10,000 and 19,900 monthly from all their income generating activities; when N170.00 = $1. Following this were 28.7% who earned less than N7,500 in a month, 15.9% earned N20,000 - 29,900; 8.3% earned N30,000 - 39,900 and 6.6% earned N40,000 - 49,900 while only 3.9% earned N50,000 and above per month. The result reveals that 65.4% of the respondents (33.4% participants and 32.0% non-participants) earned less than N20,000 per month. Mean income of the respondents was N17919.02. This result is different from the observation of [22] where the majority of the respondents were within the range of N1,000 and N3,999. The difference is possible because the value of Nigerian naira was higher in 2004 than 20011. However, the result is similar to that of [23] where majority of farmers in Kachia, Kaduna state were within the range of N16,000 and N20,000. The similarity in the result with that of [23] is possible because the time of the researches were close.

3.2 Participants' Level of Knowledge about the AfDB-CBARDP

Table 4 shows the participants' level of knowledge about AfDB-CBARDP. Majority of the participants (60.5%) had high level of knowledge about AfDB-CBARDP. High knowledge about the project is an indication of enough understanding of the project's objective, components and implementation. The knowledge is expected to enhance interest towards participation in the project. The high knowledge recorded is possible since the approach of the project is bottom-up. The participants were involved from the inception of the project. Hence they were expected to understand each stage of the project.

3.3 Participants' Attitude towards AfDB-CBARDP

Result of the participants' attitude towards AfDB-CBARDP is shown in Table 5. Majority of the participants (58.0%) had favourable attitude towards AfDB-CBARDP. In a study of attitude on participation in self-help project, [24] discovered that there was correlation between attitude and participation. With the favourable attitude observed in this study, it is expected that they show more interest in the project and consequently have high participation.

3.4 Challenges Facing Participants in the AfDB-CBARDP

Challenges facing rural dwellers participating in AfDB-CBARDP activities as identified by the respondents are shown in Table 6a. Of all the challenges, delayed implementation, financial problem and insufficient items had scores above mean (mean = 0.1±0.3). One can conclude that those three were common challenges to the participants.

Table 3. Personal characteristics of respondents continued

Variable	Participants		Non-participants		Total		Mean
	F	%	F	%	F	%	
Other source of income							
None	81	19.8	97	23.7	178	43.4	
Trading	55	13.4	46	11.2	101	24.6	
Farming	59	14.4	28	6.8	87	21.2	
Artisan	8	2.0	26	6.3	34	8.3	
Pension	1	0.2	4	1.0	5	1.2	
Gifts	0	0.0	5	1.2	5	1.2	
Civil service	6	1.5	2	0.5	8	2.0	
Monthly income (N)							
< 7,500	75	18.3	43	10.5	118	28.7	
7,500-9,900	9	2.2	16	3.9	25	6.1	17919.02±18524.28
10,00-19,900	53	12.9	72	17.6	125	30.5	
20,000-29,900	22	5.4	43	10.5	65	15.9	
30,000-39,900	15	3.7	19	4.6	34	8.3	
40,000-49,900	15	3.7	12	2.9	27	6.6	
50,000 and above	16	3.9	0	0.0	16	3.9	

Source: Field survey (2011)

Table 4. Participants level of knowledge about AfDB-CBARDP (n=205)

Level of knowledge	Score range	F	%
Low (below mean)	0 – 9.76	81	39.5
High (mean and above)	9.77 – 15	124	60.5
Total	0 – 15	205	100.0

Mean = 9.8±2.4; Source: Field survey (2011)

Majority of the participants (82.9%) were not seriously affected by the challenges Table 6b. The implication of this result is that, the challenges facing the participants were so mild that they might not be able to prevent active participation on the project. However, that does not mean they should be unattended to. Any challenge not given a prompt attention can turn to a problem. Hence they must be prevented from aggravating into problems.

3.5 Benefits Derived by Participants of AfDB-CBARDP

Benefits derived by participants of AfDB-CBARDP are shown in Table 7a. Of all the benefits, agric training, breeding stock, consumable input, durable inputs and non-agric tools had scores of mean and above mean (mean = 0.2).

Table 7b shows the level of benefit enjoyed by participants in the AfDB-CBARDP. The result reveals that majority of the participants (54.6%) had low level of the benefit derived from the project. The implication of this result is that, the participants were yet to have full benefit of the project. However, the benefit might increase as more facets of the project are executed since the project is on-going.

Table 5. Participants' attitude towards AfDB-CBARDP

Attitude	Scores range	F	%
Unfavourable (below mean)	73 – 93.50	86	42.0
Favourable (mean and above)	93.51 – 117	119	58.0
Total	73 – 117	205	100.0

Mean = 93.5±8.8; Source: Field survey (2011)

Table 6a. Challenges facing participants in the AfDB-CBARDP (n=205)

Challenge	Yes		No		Mean
	F	**%**	**F**	**%**	
1. Delayed implementation	96	46.8	109	53.2	0.5±0.5
2. Unfulfilled promise	24	11.7	181	88.3	0.1±0.3
3. Lack of infrastructure	2	1.0	203	99.0	0.0±0.1
4. Financial problem	61	29.8	144	70.2	0.3±0.5
5. Insufficient items	43	21.0	162	79.2	0.2±0.4
6. Poor communication	3	1.5	202	98.5	0.0±0.1
7. Poor leadership	2	1.0	203	99.0	0.0±0.1
8. Poor extension services	10	4.9	195	95.1	0.1±0.2
9. Lack of cooperation	3	1.5	202	98.5	0.0±0.1

Mean = 0.1±0.3; Source: Field survey (2011)

Table 6b. Seriousness of the challenges facing participants in the AfDB-CBARDP

Challenges	Score range	F	%
Mild (below mean)	1 – 1.18	170	82.9
Serious (mean and above)	1.19 – 3	35	17.1
Total	1 - 3	205	100.0

Mean = 1.2±0.4; Source: Field survey (2011)

Table 7a. Participants' identified benefits of the AfDB-CBARDP (n=205)

Benefit	Yes		No		Mean
	F	**%**	**F**	**%**	
1. Agric training	99	48.3	106	51.7	0.5±0.5
2. Non-agric training	8	3.9	197	96.1	0.0±0.2
3. Breeding stock	69	33.7	136	66.3	0.3±0.5
4. Durable inputs	42	20.5	163	79.5	0.2±0.4
5. Consumable inputs	62	30.2	143	69.8	0.3±0.5
6. Non-agric tools and machine	35	17.1	170	82.9	0.2±0.4
7. Fisheries	11	5.4	194	94.6	0.1±0.2
8. Orchard	1	0.5	204	99.5	0.0±0.1
9. Social interaction	8	3.9	197	96.1	0.0±0.2

Mean = 0.2±0.3; Source: Field survey (2011)

Table 7b. Level of benefit derived by participants in the AfDB-CBARDP (n=205)

Benefit	Scores range	F	%
Low (below mean)	1 – 1.62	112	54.6
High (mean and above)	1.63 – 4	93	45.4
Total	1 – 4	205	100.0

Mean = 1.6±0.9; Source: Field survey (2011)

3.6 Level of Participation in AfDB-CBARDP

Respondent's participation in different components of the AfDB-CBARDP activities is presented in Table 8a. Participation was high at initiation, planning and contribution stages of all the sub-components of the project with percentages ranging between 54.6% and 78.0%. Participation at execution and utilization stages was high only in agriculture sub-components (crop production, input supply, and livestock production). However, participation in execution and utilization stages in infrastructural development sub-components was zero indicating that the execution of rural development component had not taken off in the project. The implication of this observation is that the improved SES may not be as high as expected since one of the

three components of the project had not taken off.

Table 8b shows the level of participation in the projects. Majority of the participants (63.9%) had high participation in the AfDB-CBARDP. This result is different from that obtained by Adegboye and Oyesola [2] where only 38.8% of rural dwellers in Jos south local government area of Plateau state were discovered to have high participation in community-based development project. The high level of participation obtained here is possible as the participants had favourable attitude towards the project.

3.7 Socio-economic Status (SES) of the Respondents

The result reveals that 52.2% of the respondents were in the category of people of average socio-economic status. Only 6.6% of the respondents were better-off while the remaining 43.2% were poor (Table 9). The implication of this result is that the rural dwellers were about average or poorer than average in terms of socio-economic status. This is similar to the observation of Hassan (2009) that the rural people were about average or poorer than average in term of socio-economic status.

Table 8a. Participation in different components of the AfDB-CBARDP (n=205)

Project's components	Stages of participation									
	Initiation		Planning		Contribution		Execution		Utilization	
	F	%	F	%	F	%	F	%	F	%
(A) Agricultural										
(i) Crop production	112	54.6	148	72.2	148	72.2	171	83.4	173	84.4
(ii) Input Supply	112	54.6	148	72.2	148	72.2	172	83.9	174	84.9
(iii) Post harvest	112	54.6	148	72.2	148	72.2	172	83.9	172	83.9
(iv) Livestock production	112	54.6	148	72.2	148	72.2	145	70.7	145	70.7
(v) Agro forestry	112	54.6	148	72.2	148	72.2	72	35.1	33	16.1
(vi) Fishery	112	54.6	148	72.2	148	72.2	30	14.6	33	16.1
(B) Capacity building										
(i) Skill acquisition	112	54.6	126	61.5	126	61.5	55	26.8	55	26.8
(ii) Empowerment	112	54.6	126	61.5	126	61.5	55	26.8	55	26.8
(C)Infrastructural Development										
(i) Road	112	54.6	160	78.0	160	78.0	0	0.0	0	0.0
(ii) Water supply	112	54.6	160	78.0	160	78.0	0	0.0	0	0.0
(iii)Health care facilities	112	54.6	160	78.0	160	78.0	0	0.0	0	0.0
(iv)School	112	54.6	160	78.0	160	78.0	0	0.0	0	0.0
(v)Market	112	54.6	160	78.0	160	78.0	0	0.0	0	0.0

Source: Field survey (2011)

Table 8b. Level of participation in the AfDB-CBARDP (n=205)

Level of participation	Score range	F	%
Low (below mean)	4 – 23.7	74	36.1
High (mean and above)	23.8 – 36	131	63.9
Total	4 --36	205	100.0

Mean = 23.8±9.3; Source: Field survey (2011)

Table 9. Socio-economic status distribution of the respondents

SES	Score range	Participants		Non-participants		Total (n = 410)	
		F	%	F	%	F	%
Poor	76 – 108	78	19.0	99	24.2	177	43.2
Average	109 –141	103	25.1	103	25.1	206	50.2
Better-off	142–172	24	5.9	3	0.7	27	6.6
Total	76 –172	205	50.0	205	50.0	410	100

Source: Field survey (2011)

3.8 Relationship between Selected Personal Characteristics and Socio-Economic Status (SES)

The results in Table 10 show that marital status and education of the respondents had significant relationship with their socio-economic status at p = 0.05, χ^2 = 926.644 and 66.176 respectively. However, respondents' major source of income had no significant relationship with their socio-economic status (χ^2 =1176.405, p = 0.289).

As shown in Table 10, the socio-economic status had correlation with respondent's age (r = 0.246, p = 0.05), household size (r = 0.508, p = 0.05), monthly income (r = 0.438, p = 0.05), farming experience (r = 0.396, p = 0.05) and farm size (r = 0.459, p = 0.05).

3.9 Relationship between Other Independent Variables and Socio-Economic Status Using PPMC

The results in Table 11 shows that there is significant relationship between socio-economic status (SES) and respondents' level of knowledge (r = 0.220, p = 0.002), attitude (r = 0.187, p = 0.007), benefits (r = 0.142, p = 0.043), level of participation (r = 0.201, p = 0.007).

Table 10. Relationship between personal characteristics and socio-economic status of respondents using χ^2

Variable	Df	Cal.	p-value	Decision
Marital status	3	926.644*	0.000	Significant
Education	7	66.176*	0.000	Significant
Major source of income	6	1176.405^	0.289	Not significant

Variables	r –value	p-value	Decision
Age	0.246**	0.000	Significant
Household size	0.508**	0.000	Significant
Monthly income	0.438**	0.000	Significant
Farming experience	0.396**	0.000	Significant
Farm size	0.459**	0.000	Significant

Df = Degree of freedom, χ^2 = Chi-square, p = Probability level, *Chi-square is significant at p<0.05, ^Chi-square is not significant at p<0.05, r = Correlation, p = Probability level, ** Correlation is significant at the 0.01 level (2-tailed); Source: Field survey (2011)

Table 11. Relationship between other independent variables and socio-economic status using PPMC

Variables	N	r-value	p-value	Decision
Level of knowledge	205	0.220**	0.002	Significant
Perception of the project	205	0.369**	0.000	Significant
Attitude of participants	205	0.187**	0.007	Significant
Benefit derived by participants	205	0.142**	0.043	Significant
Level of participation	205	0.201**	0.007	Significant

** Correlation is significant at the 0.01 level (2-tailed); Source: Field survey (2011)

Table 12. Difference between socio-economic status of rural dwellers participants and non participants of the project using t-test

Variable	Df	t- value	p-value
Socio-economic status of participants and Socio-economic status of non-participants	408	4.612*	0.000

*t – test is significant at 0.05 levels; Source: Field survey (2011)

3.10 Difference between Socio-economic Status of Rural Dwellers Participants and Non Participants of the Project Using t-test

The result shows that there is a difference between socio-economic status of rural dwellers participants and non participants of African Development Bank Community-Based Agriculture and Rural Development Projects at t-value of 4.612, (p = 0.000). This is an indication that the project has started achieving the goal, even as it continues.

4. CONCLUSION AND RECOMMENDA-TIONS

The participants of the project had high knowledge and favourable attitude towards the project. These are good indicators of possible high participation in the community-based development project. Major challenges facing participants in the project were delayed implementation, financial problems and insufficient items (inputs and tools) to each group of participants. Similarly, the project with agricultural development, infrastructure development and capacity building as major components has just been able to introduce agricultural component in all the RVAs and capacity building in only few of the RVAs. Execution of the rural development components had not started. Participation in the project was high and participants' socio-economic status was higher than that of non-participants, which is an indication that the project had impacted positively on participants' socio-economic status.

It is therefore, recommended that marital status, education, age, household size and monthly income which had significant relationship with socio-economic status in this study should be noted when planning any project towards improving rural dwellers' socio-economic status. Also, there is a need for the African Development Bank to hasten up the implementation of the project as the beneficiaries were tired of delayed implementation of different components of the project expected to have commenced.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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