

Effect of Participation of Members of Farmers Cooperatives in Community Development Projects for Their Livelihood in Ohafia Agricultural Zone of Abia State

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Abstract

This paper focuses on the effect of participation of members of farmers cooperatives in community development projects for their livelihood in Ohafia. The fact still remains that most of the rural areas are not developed. The necessary amenities are not in place. The specific objectives includes to:- analyses the socioeconomic characteristics of members, identify their livelihood activities, analyze the community development projects, assessing the factors influencing the participation of members etc. The study was carried out in five local government areas. Hundred and twenty-two members of cooperative were purposively selected for the study. Descriptive and inferential statistics were used in the analysis. Results showed that, there were more males, members aged between 41 and 500, married, holders of OND/NCE between 1.00 and 2.00 farm size (crops), less than 100, Livestock (birds), less than 5 (sheep goats), above 15 pigs, 11-15yrs of farming experience, occupation—civil/services outside farming, no extension visit, belong to social organization, source of income—crop, annual income between 500,001-600,000; in terms of livestock. Community development include: road maintenance project, electricity and building halls. The regression results showed that exponential was chosen because it had the highest R^2 , the obstacles were found to have impact on the community. It was recommended that members should look at the problems and know how to solve them.

Introduction

The extent and nature of poverty in the rural communities have led to the implementation of a range of development programme and projects which aimed at improving rural livelihoods. The existing gaps in poverty, unemployment and the rural sectors of urban and the rural sectors of the world have attracted the attention of social scientist to the study of community development (Imo et al 2015). According to Sidi et al 2020, approaches to development have been changing in recent years to reflect a new paradigm that emphasizes sustainability, institutional change and participatory learning process which promote capacity building of employment of local people. The participation of rural people in planning and managing their own development is a means of safeguarding their interest in the development process. In spite of many efforts made to reduce poverty by national as well as international actors, it is not all types of community development projects that create the desired contribution to rural sustainable livelihood. Cooperative implying to work together among a group of persons originated from time immemorial. This could be clearly distinguished between cooperatives on the basis of time as short term/coincidental and long term permanent as well as informal and formal, traditional and scientific genuine pure Pseudo – Cooperative's para-cooperatives. This could in the wildest sense reveal that cooperative means more than working together, but people working together to achieve a common felt need. Hence, it is as old as man otherwise instinctive.

Statement of the Problem

Farmers cooperatives are faced with numerous problem which include:

High degree of illiteracy: Greater percentage of the cooperative members are illiterates as a result they cannot take viable and scientific decisions.

Poor Management of the Farm: Since they cannot take viable decision, they manage their farms poorly.

Size of the Farm: The size of the land is small for them to enjoy economies of scale.

This involves reduction in the cost of production thereby increasing their revenue

Lack of fund: Farming is characterized by limited fund. They are unable to obtain the necessary facilities for the farming activities.

Old age: Most of the farmers are old, they depend on their human muscle for their operations thereby producing little.

Lack of inputs: There is the problem of accessibility to inputs for their farming to increase output.

Literature Review

Modern scientific cooperative is originated on the bench mark of industrial revolution in Europe spanning a century (1750-1850). As such they are formal legal entities in business undertaking as a body corporate and adhering to the international acceptance principal.

According to Umebali (2004) farmers' cooperative society is defined as an autonomous association of persons/farmers united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly – owned enterprise. The farmers' cooperative society plays a significant role by way of different services such as credit, equity and information. Function such as product buying and selling, transportation, storage and graching, and welfare such as healthcare and education.

Community development can be defined as a process where community members come together to take collective action and find

general solutions to common problems. Community wellbeing (economic, social, environment and cultural) often evolves from this type of collective action being taken at the grassroots level. Community development ranges from small initiatives within a small group to large initiatives that involves the broader community (Olori and Okide 2014, Nwaobiala and Ogbonna 2015; Onodugo et al, 2019). Community development seeks to empower individuals and groups of people with the skills they need to effect change within their communities' participation as a process through which stakeholders influence and share control over development activities and the division and resources which affect them (Nwaobiala and Ogbonna 2015).

Ekong (2007) define participation as playing active though not necessarily direct, roles in community decisions, knowledge of local issues, attendance at public meeting, related attempts to influence proposed measures through individual and group actions, belonging to groups and committees and financial contributions toward communities' programmes. According to Madu et al (2013) community participation helps to enhance accountability, transparency and ensure sustainability, and ensure sustainability of development initiatives. Cooperative farmers participation in community development projects means they being part of the decision making, planning and the execution of the project (Aref et al 2010).

Rural people usually see decision made from them as being imposed on them, hence they usually do not take the idea or project which they did not have an input in the decision making as serious. This process is called a top-doing approach. In this top-down approach, the extension agents package ideas developed and tested by

researcher into messages and farmers are told what to do.

According to Udu and Onwe (2016), Ochinanwata et al (2020) over 80% of the population of developing countries resides in the rural community. For this reason, community development efforts ought to be geared towards improving the living standard of the masses of the low-income population residing in rural areas and making the process of their development self-sustaining. In support of the above statement, Onyenemezu & Olumatu (2013), Anowor, Uwakwe and Chikwendu (2019) also reported that close to 80% of the population in Nigerian rural areas are directly or indirectly involved in the use of land resources but majority of these rural dwellers are facing several problems, which reduces their productivity.

Community development projects always affect the livelihood of the community members (Anowor & Agbarakwe, 2018). According to Dev et al (2013) and Blaiki et al (2014) livelihood comprises the capabilities, assets (including both material and social resources) and activities involving securing water, food, fodder, medicine, shelter, clothing and the capacity to acquire necessities working either individually or as a group using endowments for meeting the requirement of self and his/her household on a sustainable basis with dignity. The key to community development is facilitating a community in applying the principles to guide a flexible series of actions that are appropriate for the situation of the community (Olori and Okide, 2014).

However, most of the community development efforts failed to yield the desired results due to such factors as inadequate background studies aimed at understanding the social and demographic characteristics of their target communities

and group, literacy level, pervasive poverty prevalent in those communities, hunger and disease, absence of infrastructure which improves the quality of life such as portable water, electricity and good feeder roads to mention but a few.

Objective of the Study

The objective of this study include to: -

- i. describe the socio-economic characteristics of cooperative farmers.
- ii. identify the livelihood activities of the cooperative farmers in the study area.
- iii. identify the community development projects embarked upon and executes by the cooperative farmers.
- iv. determine the factors that influence level of participation of farmers' cooperative members in community development projects.
- v. identify the obstacles to farmers cooperatives' participation in community development.
- vi. determine the relationship between socioeconomic characteristics of the farmers and perceived effects of their participation in community development project on livelihood.

Methodology

The study was conducted in Ohafia agricultural zone of Abia State. It is made up of five (5) local government areas namely: Ohafia, Isuikwuato, Bende, Umunneochi, and Arochukwu. The five local government areas were used for the study. Simple random sampling was used to select four farmers cooperative societies each from the (5) five local areas making a total of twenty farmers cooperative societies for the study. Then purposive selection eleven members of farmers cooperative societies for each society making it a total of two hundred and twenty respondents for the study. Copies of the questionnaire were used in collecting the data.

Data were collected using structural and inferential statistics. Objective, i, ii, iii were analyzed using descriptive statistics while objective iv and v were analyzed using ordinary least square (ols) regression models. The models include linear $y_o = b_o + b_1x_1 + b_2x_2 = b_1x_1 + e_i$,
 semi log $y = b_o + b_1 \log x_1 + b_2 \log x_2 + b_n \log x_n + e_i$,
 double log $\log y = b_o + b_1 \log x_1 + b_2 \log x_2 + b_n \log x_n + e_i$

Result and Discussion

Socio-economic characteristics of the members farmers' cooperative.

The socio-economic characteristics of cooperative members described in this study were sex, age, marital status, level of education, household size, farm size, farming experience, occupation, extension, contact, members of social organization, annual farm income, annual non-farm income, years of membership in cooperative society and number of years of participation in community development projects.

Table 1: Socio-Economic Characteristics Respondents (n=220)

Options	Percentage	Frequency Mean	Sd
Sex			
Male	69.55	153	
Female	67		30.45
Age (yrs)			
Less than 30	9.09	20	
31 – 40	64		29.09
41 – 50	72		32.73
51 – 60	33		15.00
61 – 70	21		9.55
Above 70	4.55	10	
		44.4yrs	17.2
Marital Status		Frequency	
	Percentage	Mean	
	Sd		

Single	13	13	5.91
Married	73.64	162	
Widow/widower	16.82		3.7
Divorced/Separated	3.64	8	
Level of Education (yrs)			
No Formal Education	4.56	10	
First Sch. Leaving certificate	10.91	24	
WASSCE/NECO	24.09		53
OND/NCE	31.82		70
HND/NCE	25.91		57
Ph.D	2.73		6
	3.7	8.4yrs	
Household size (No)			
1-4	17.27		38
5-8	42.27		90
9-12	25.00		55
13-16	11.36		25
Above 16	4.10		9
	3	8persons	
Farm size (Ha) (Crops)			
Less than 1.00	39.09		86
1.00-2.00	40.45		89
2.01-3.00	11.82		26
3.01-4.00	5.91		13
Above 4.00	2.73		6
		1.33Ha	0.65

Farm size (livestock) No		Above 30		6
Chicken		2.73		
Less than 100	86			
38.09				
		Occupation in addition to farming		
101-150	60	Retiree	14	
27.27		6.36		
151-200	27	Civil Service	109	
12.27		49.55		
201-250	32	Trading	68	
14.55		30.91		
251-300	15	Artisan	28	
6.82	115birds	13.18		
42				
Above 300	-			
Goat/Sheep		Extension contact		
Less than 5	85	No extension visit	150	
38.64		68.18		
6-8	74	Once	39	
33.64		17.73		
9-11	38	Twice	24	
17.27		10.91		
12-14	16	Thrice	7	
7.27		3.18		
15 and above	7			
3.18	7			
		Membership Social Organization		
		Member	183	
		83.18		
Piggery		Non-member	37	
Less than 5	3	16.82		
1.36				
6-8	14			
6.36		Source of farm income		
9-11	21	Crop	90	
9.55		40.91		
12-14	68	Livestock	78	
30-91		35.45		
15 and above	114	Forestry	21	
51-82	6pigs	9.55		
		Fishery	18	
		8.18		
Farming Experience (yrs)		Snailary	13	
Less than 10	16	5.91		
7.27				
11-15	75			
34.09		Annual farm income (₦)		
16-20	66	Less than 200.000	6	
30.00		2.73		
21-25	42	200,000-3000,000	12	
19.09		5.45		
26-30	15	3000,000.01-400,000	20	
6.82		9.09		

400,000.01-5000,000	33	
15.00		
500,000.01-6000,000	102	
46.36		
Above 600,000	47	
21.36		N 499.457
102,113		
Source of Non farm income		
Civil service	60	
27.27		
Trading	79	
35.91		
Artisan	28	
12.73		
Pension	23	
10.45		
Remittance	30	
13.64		
Annual Non-Farm Income (N)		
Less than 100,000	10	
4.55		
100,000-150,000	39	
17.73		
150,000.01-200,000	112	
50.91		
200,000.01-250,000	33	
15.00		
250,000.01-300,000	25	
11.8		N 180.25
52,103		
Above 300,000		
Length of participation in community development project (yrs.)		
Less than 5	8	
3.64		
6-10	35	
15.91		
11-15	33	
15.00		
16-20	113	
511.36		
21-23	19	
8.64		
26 and above	12	
5.45		16 yrs
	5.3	
Source: Field survey 2020		
Sex		

Table 1 above, shows that the majority of the respondents, 69.55 percent were male while 30.45 percent were female. This implies that there were more households headed by the males than the females and the males have more control over the use of resources that the female, therefore can afford to activity participate in community development project than their female counterparts.

Age

The table revealed that majority, 32.73 percent falls between 41-50yrs, 29.09 percent falls between 31-40yrs while 15.00 percent falls between 51-60 yrs, a mean age of 44.4 yrs others were below 10.00 percent. This implies that majority of the respondents are young and at their active age of life to overcome the tediousness associated with farming in the study area. Also, they have enough energy and innovative ideas to participate actively in community development projects. A similar mean age of 45 years was found by Uka and Jones (2017) in their study on farmers livelihood sustenance activities in Kogi State Nigeria.

Marital Status

The table also showed the distribution of the marital status. This result showed that 73.64 percent of the respondents were married while 16.82 percent were widow/widower. Others were below 10.00 percent. This implies that members of farmers cooperative societies were married and have the responsibility to carter for their household members. The urge to provide for their households also extends to their communities thereby leading to active participation in community development projects.

Level of Education

The table indicated that 31.82 percent constituted OND/NCE, HND/BSC constituted 25.91 percent WASSCE/NECO constituted 24.09 percent. FLSC constituted 10.91 percent. The implication of this result is that most of the farmers

cooperative members were educated, which is a good asset for participation in community development projects and livelihood sustenance activities. This finding agrees with that of Okereke (2018) who reported in his study on farmers' participation in agricultural and rural development activities in Anambra state, that literate farmers accept new innovations and participated more in rural development activities than the illiterate farmers.

Household Size

The table I showed that between 5-8 persons constitute 42.27 percent between 9-12 persons constituted 25.00 percent, others were below 20.00 percent, the mean household size was 8 persons with standard deviation of 3. This result implies that most households in the study areas had large household sizes farm size (Crops).

The table showed that 40.45 percent constitute between 1.00-2.00ha, less than 1.00ha constitute 39.09 percent while others were below 10.00 percent. This finding implies that the farmers were small scale operators who produce mainly for their households with very few of their produce being sold in the market. This small scale of production gives the farmers more time to participate in community development projects, and look for more livelihood substance activities to augment crop income.

Chicken

The table I showed that 39.09 percent had less than 100 birds, between 101-150 birds constitute 40.45 percent while other were below 20.00 percent. This implies that the operators were small scale farmers and possibility to be involved in community development is there.

Goat and Sheep

Majority of the respondents 38.64 percent had less than 5 animals, between 6-8 animals constitute 33.64 percent, and between 9-11 animals constitute 17.25 percent while others were below 10.00 percent.

The mean farm size for goat/sheep was 7 animals with the standard deviation of 4 animals. This implies that the farmers are small scale operators, which will enable them amply time to participate in community development projects.

Piggery

The table 1 showed that majority 51.82 percent had pigs above 15, between 12-14 constitute 30.91 percent, between 9-11 constitutes 9.55 percent while other were below 10.00 percent, the mean farm size of piggery was 6 pigs and standard deviation of 3 pigs. This indicated that the operators are small scale farmers.

Farming Experience

The table showed that the majority 34.09 percent which is between 16-20 yrs constitutes 30.00 percent, between 21-25 yrs constitutes 19.09 percent. While others were below 10.00 percent. This implies that most of the farmers have acquired enough farming experience.

Occupation in addition of arming

Majority of 49.55 percent were the civil servants. Traders constituted 30.91 percent; artisan constituted 13.18 percent while retiree constituted 6.36 percent. This implies that the civil servant dominates the study areas and because of no payment of salaries they are involved in farming activities to augment their income also involves in community development project and other livelihood sustenance activities.

Extension Contact

Majority 68/8 percent did not experience any extension contact. Others accepted that they were visited once which constituted 17.73 percent while 10.91 percent and 3.18 percent agreed that they had extension contact twice and thrice respectively. This implies that extension contact was poor. Poor extension contact had a negative consequence on far output and income which dampens the farmers' spirit to participate in community development projects. However, this will increase the

farmers' urge and eager to explore more livelihood sustenance activities.

Membership of social organization

Table 1 showed that majority 83.18 percent belong to other social organization other than cooperative societies while 16.82 percent do not belong to other social organization apart from cooperative societies. This implies that most of the members belong to other social organizations which help; them to get necessary information, loans, grants apart from the ones they got from cooperative societies.

Sources of farm income

Majority 40.91 percent got their income from crop production. Livestock (Chicken, goat/sheep, piggery) constituted 35.45 percent, while others were below 10.00 percent. This implies that the farmers had various sources of farm income generation in the study area.

Annual farm income

The result in table 1 showed that majority 46.36 percent earned annual farm income of believes ₦500,000.01-₦6,000,000, while 21.86 percent earned annual farm income above ₦600,000, 15.00 percent earned below 10.00 percent. The mean annual farm income was ₦499.457 with standard deviation of ₦102.113, this implies that the mean annual farm income earned by the farmers cooperative members was low, supporting that the farmers are small scale farmers.

Sources of non-farm income

Table 1 showed that 35.91 percent of the respondents had trading as their source of non-farm income, 27.27 percent are civil servant; Remittance constitutes 13.64 percent while Artisans and pensioners constitutes 12.73 percent and 10.45 percent respectively. This implies that the respondents supplement their farm income from various sources of non-farm income.

Annual non-farm income

The table 1 indicated that majority 50.91 percent of the respondents had their annual

non-farm income between N150,000.01-N200,000 between N100,000-N150,000 constituted 17.73 percent, between N200,000.01-N250,000.01 constituted 15.00 percent while between N250,000.01-N3,000,000 and less than N100,000 constitute 11.81 percent and 4.55 percent respectively.

The mean annual non-farm income was N180,200 with the standard deviation of N52,103. This implies that the annual non-farm income was low and supports the farmers scale as small-scale operators.

Length of participation in community development projects

The table 1 unfolds that majority 51.36 percent of the members of farmer cooperative societies have participated in community development projects between 16-20 yrs, between 11-15yrs and 6-10yrs constitutes 15.00 percent and 15.91 percent respectively. Others were below 10.00 percent. The mean length of participation to community development projects was 16yrs with the standard deviation of 5.3yrs. This implies that majority of the members of farers cooperative societies are not new in the study area and since the members are equally community members they have to participate in community development projects.

Table 2 Livelihood Activities of the members of the farmers cooperative activities.

Livelihood Activities		
	Frequency	Percent Rank
Crop farming	90.91	200 1 st
Trading	86.36	190 2 nd
Livestock farming	185 3 rd	84.09
Agro processing	160 4 th	72.73
Agro marketing	70.45	155 5 th

Transportation (bus, keke okaka)	112	Plumbing	
50.91	6 th	57	25.91
Forestry		14 th	
74	33.64	Beekeeping	
9 th		40	18.18
Building/construction	31	19 th	
14.09	22 nd	Brick laying	
Snailry/snail picking	25	28	12.73
11.36	24 th	23 rd	
Fishery	65	Multiple responses were recorded	
29.55	12 th	Source: field survey, 2020	
Sand excavation		<p>The major livelihood activities engaged in the study area by the members of farmers cooperative societies were crop farming (90.91%) trading (86.36%) livestock farming (84.09%) Agro processing (72.73%) Agro marketing (70.45%) Transportation (50.91%). Other livelihood activities were below 50.00 percent.</p> <p>The high rating of crop farming as a livelihood activity shows the dominant engagement of farmers in crop farming activities which could be attributed to the abundance of resources for crop farming such as land, labour planting materials etc. This finding is consistent with that of Nwachi (2016) who found in her study on analysis of the effects of farmers participation in community development project on their livelihood in Ebonyi State, Nigeria that crop farming was the major livelihood activity of the farmers. This also agreed with Olarinde and Kuponiyi (2015) who found in their study on rural livelihood and consumption patterns among households in Oyo State, Nigeria that crop and livestock farming dominate the livelihood activities of the rural farmers in their study area.</p> <p>The non-farming livelihood activities in the study are indicated that members of farmers cooperative societies equally engage in diverse non-farming activities to augment</p>	
26	11.36		
24 th			
Blacksmithing	15		
6.82	28 th		
Civil service			
101	45.91		
7 th			
Food vending/restaurant	60		
27.27	13 th		
Tailoring/fashion designing	72		
32.73	10 th		
Herbal healing	88		
40.00	8 th		
Wage labour			
47	21.36		
16 th			
Capentry/furniture making	50		
22.73	15 th		
Paint production/panting			
36	16.36		
20 th			
Wine tapping	20		
9.09	27 th		
Fire wood fathering/selling/charcoal	35		
15.91	21 st		
C.O.S, Computer services	46		
20.91	17 th		
Hawking			
68	30.91		
11 th			
Barbing/hair saloon	36		
16.36	20 th		
Welding			
44	20.00		
18 th			

their household income and participation in community development project. This agree with those of Amadi and Anokwurun (2017) who found in their study on sustainable rural livelihood: elusive post-Colonial development project in Nigeria that farmers engage in various livelihood activities such as crop and livestock farming agro-processing and agro marketing.

Table 3
Community Development project
Embarked upon and Executed upon and
Executed by the people

Development Project	Frequency	Percent	Rank
Erosion Control	48.18		160 10 th
Security Project	67.73		149 4 th
Electricity Project	196 2 nd	89.09	
Viewing Centres	18 14 th	8.18	
Community Hall	158 3 rd	71.82	
Civic Centre	112 9 th	50.91	
School Building	60.45		133 60 th
Farm Road Project	384 12 th	38.18	
Road Maintenance Project	96.36		212 1 st
Hospital Building	97 11 th	44.90	
Cultural Project	58.64		129 7 th
Water Harvesting Project	27 13 th	12.27	

Waste Disposal Project	51.82	114 8 th
Market Project	62.73	138 5 th

Multiple Response were recorded

Source: field survey, 2020

The result showed that the highest rating (96.36%) was road maintenance project. This was followed by electricity project (89.09%), Community Hall (71.82%), Security project (67.73%), Market project (62.73%), school building (60.45%), cultural project (58.64%) waste disposal project (51.82%), civic centre (50.91%) and others are below 50 percent. The highest rating for road maintenance project shows the importance the farmers cooperative members attach to their roads and the negligence and poor level of maintenance of those rural roads. The rural people needed to maintain their farm roads for their produce to be taken to markets and for easy movements within and outside their communities. The other community development projects were equally considered important and executed by the people to improve their living condition of their citizenry since government does not do much in the rural areas as it concerns community development projects.

Factors that influence the level of participation of farmers' cooperative members in community development projects.

The factors that influence levels of participation of farmers cooperative members in community development project was analyzed using four functional forms of the multiple regression model linear, semi-log, double log and exponential. It showed the level of participation of members and their socioeconomic characteristics.

Explanatory Variables			Sample size	
Linear Semi-log			220	220
Constant			Figures in parenthesis are t-ratios	
	203.4916	158.2007	*Significant at 5%	
Age (x1)			**Significant at 10%	
	-195019	-2.5044	Double-log	
	(-0.7469)**	(-1.2149)	Exponential	
Level of education (x2)			123.4619	108.3943
	10.22712.5923		-0.0943	
	(1.0861)	(3.4991)**	(-6.9851)**	-0.0068
Farm Size (x3)				(-4.8571)**
	17.12043.1709		0.0921	
	(5.5304)**	(1.0699)	(1.1043)	0.0094
Farming Experience (x4)				(4.4762)**
	10.92111.8217		0.0641	
	(1.1579)	(1.4909)	(6.1634)**	0.0087
Household Size (x5)				(1.2609)
	-14.2005	-3712	0.0321	
	(-1.0762)	(-1.1171)	(1.0844)	0.0091
Attitude Towards Participation (x6)				(3.9565)**
	-10.8012	1.6659	-0.0513	
	(1.1765)	(1.3166)	(-5.8965)**	-0.0057
Extension Contact (x2)				(5.4285)**
	11.08472.7091		0.0913	
	(1.0742)	(1.2511)	(1.3573)	0.0091
Membership of social organization (x8)				(7.5833)**
	9.0821	1.7165	0.0641	
	(2.2128)*	(5.6951)**	(4.6788)	0.0093
Annual farm income (x9)				(2.7353)**
	14.33143.1106		0.0725	
	(1.0936)	(1.2839)	(3.3105)**	0.0076
Marital Status (x10)				(2.7143)
	11.09133.1158		0.6136	
	(2.6883)***	(1.5057)	33.1676**	0.7346
R ²				57.8425**
	0.4723	0.4133	200	
F-value				220
	18.7421**	14.7082	Source: Field Survey, 2020	

The result showed that the exponential function produced the highest value of coefficient of multiple determination (R^2) and highest number of significant variables, and was therefore selected as the lead equation and used for discussion.

The value of R^2 was 0.7346 which implies that about 73% of the variation in level of participation of farmers cooperative members in community development projects was accounted for the joint action of the independent variables include in the multiple regression model fitted to the data.

The coefficients of the variables age (x1) level of education (x2) farming experience (x3) attitude towards participation (x4) membership of social organization (x5) annual farm income (x6) and marital status (x7) were statistically significant at 1% level of probability, which implies that they are the factors that influence level of participation of farmers cooperative members in community development project in the study area.

The coefficients of farm size (x8) household size (x9) and extension contact (x10) were not statistically significant at 5% level of probability implying that they are not important factors that influence level of participation of members in community development projects in the study area.

Table 4: obstacles to farmers cooperative development projects in the study areas

Obstacles to participation	
Strongly	Agreed
Agreed(4)	(5)
Inadequate of equipment to operate the project	
86(39.1)	75(34.1)
Inadequate Fund	
169(76.8)	33(15.0)

Inadequate of technical know-how	
91(41.4)	38(38.6)
Unsteady government policies	
173(78.6)	42(19.1)
Corruption by leaders	
63(28.2)	59(26.8)
Bureaucratic bottlenecks	
74(33.6)	61(27.7)
Inadequate of Continuity plan	
103(46.8)	82(37.3)
Poor project result	
114(51.8)	
78(35.5)	
Exclusion from project planning	
72(2.8)	105(47.7)
Poor technical skills	
105(47.7)	81(36.8)
Low level of education	
112(50.9)	73(33.2)
Poor social status	
53(24.1)	47(21.4)
Top down approach to project execution	
105(47.7)	75(34.1)

Source: Field survey

2020

Figures in parenthesis are percentages of responses
 Benchmark = 3.00* \geq 3.00 = Agreement \leq 3.00 =

Members in participation in the community

Undecided	Disagree	Mean
Strongly		
Standard		
(3)	(2)	
Disagree(1)		
Deviation		
23(10.5)	20(9.1)	16(7.2)
3.89*	2.01	
18(8.2)	0(0)	0(0)
	4.69*	2.46
19(8.6)	16(7.2)	9(4.2)
	4.06*	2.33
5(2.3)	0(0)	
0(0)		4.06*
2.41		
28(12.7)	63(28.6)	8(3.7)
	3.47*	2.13
25(11.4)	49(22.3)	11(5.0)
3.64*	2.09	
14(6.4)	15(6.8)	6(2.7)
	4.19*	2.16
10(4.5)	14(6.4)	4(1.8)
	4.29*	2.32

26(11.8)	15(6.8)	2(0.9)
	4.05*	2.27
17(7.7)	14(6.4)	3(1.4)
	4.23*	2.24
15(6.8)	13(5.9)	7(3.2)
	4.23*	2.31
39(17.7)	62(28.2)	19(8.6)
3.24*	2.09	
13(5.9)	23(10.5)	4(1.8)
	4.15	2.38

Source: Field Survey, 2020

Disagreement

The table 4 shows, using the discriminating index of > 3.00 for agreement and < 3.00 for disagreement that all the itemized obstacle to farmers participation in community developments projects were agree to the farmer cooperative members. The mean scores ranged from 3.24 to 4.76 while standard deviation ranged from 2.01 to 2.46. The highest mean score of 4.76 was recorded for unsteady government policies. Inadequate fund, poor project result, poor technical skills, low level of education, lack of continuity plan, top-down approach to project execution, lack of technical know-how and exclusion from project planning had mean scores of 4.29, 4.23, 4.19, 4.15, 4.06 and 4.05 respectively.

The result further showed that lack of equipment to operate the project, bureaucratic bottlenecks, corruption by leaders and poor social status had mean scores of 3.89, 3.63, 3.47 and 3.24 respectively, which implies that there were various obstacles to the farmers' Cooperative participation in community development projects in the study area.

The funding supports those of Nwaobials and Ogbonna (2015) who found in their study on evaluation of participation and poverty levels of Fadama 111 project among rural farm women in Gombe state, Nigeria that various constraints including lack of equipment to execute the project, inadequate fund and lack of technical know-how militate against farmer's

participation in community development projects.

The finding also supports those Aderinonye Abdulwahab, Nwachukwu, Salawu and Popoola (2015) who found in their study on assessment of livelihood activities of rural farmers in Kwara State, Nigeria that the major obstacles to community development and livelihoods improvement were lack of fund, poor education and lack of equipment.

Table 5 relationship between socioeconomic characteristics of farmers and perceived effects of their participation in community development projects on their livelihood.

To determine the relationship between socioeconomic characteristics of farmers and perceive effects of their participating in community projects on their livelihood multiple regression model was fitted to the data in four functional forms: linear, semi log, double log and exponential. The results of the four functional forms of multiple regression analysis are presented.

Table 5

Result of four functional forms of multiple regression analysis on relationship between socioeconomic characteristics of farmers and perceived effects of their participation in community development project on their livelihood.

Explanatory variables	linear	Semi-log	Double-log	Exponential
Constant	222.9013			
	168.1029	154.2891		
	127.4408			
Sex (x1)	-18.2009-1.7143	-		
0.0841	-0.0049			
		(-3.0273)**		
		(-1.2608)		
		(-3.7162)**		
4.0833)				
Age (x2)	17.9144	2.8188	0.0713	
	0.0081			
		(1.1205)		
		(3.1154)**		
Marital Status (x3)	14.3982	1.9213		
	0.0926	0.0093		

		(1.0899)	
	(1.1409) (2.9211)**	(3.3214)**	
Level of education (x4)	10.1468	0.8742	0.0847
	0.0088		
		(3.7702)**	
	(1.2273) (4.0526)**	(2.8387)**	
Household Size (x5)	13.0913	3.6083	
	0.0673	0.0037	
	(3.8479)**	(1.2102) (1.1329)	
	(1.2759)		
Membership of social organization (x6)	14.7823	2.1604	0.00921 0.0052
	(1.1276) (1.1013) (2.9806)**		
	(1.1064)		
Membership Status (x7)	-17.4338-		
	1.9703 -0.0773 -0.0086		
		(-	
	1.0761) (-3.2762)**	(-12549) (-1.2464)	
Farm Size (x8)	11.1039	2.1168	
	0.0685	0.0079	
	(1.0176) (1.0601) (2.3379)*		
	(1.2539)		
Annual farm income (x9)	13.1053	1.8003	
	0.0539	0.0047	
		(2.6315)**	
	(2.9945)***	(4.7281)***	(3.6154)**
Number of years of participation (x10)	14.0665	2.5138	0.0529 0.0049
			(2.2398)*
	(1.4969) (3.1488) (3.2667)**		
R ²	0.4024	0.7613	0.6247
F – value			
	18.0078**	14.0699**	
	66.6637***	34.7829**	
Sample size (n)	220	220	220

Figures in parenthesis are t-ratios

*Significant at 5%

**Significant at 1%

Source: Field Survey 2020

The result show that the double-log function produced the highest value coefficient of multiple determination (R^2) and highest number of significant variables, and was therefore selected as the lead equation and used for discussion.

The value of R^2 was 0.7613, which implies that about 76% of the variation in perceived effects of farmers participation in community development projects on their livelihood was accounted for the combined action of the independent variables include in the multiple regression model fitted to the data.

The coefficient of age (x2) marital status (x3) level of education (x4) membership of social organization (x6) annual farm income (x9) and number of years of participation (x10) were statistically significant at 1% level probability while coefficient of farm size was significant at 5% level of probability, implying that they are the variables that accounted for the important socioeconomic characteristics of farmers that influence their perceived effects of participation in community development project on their livelihood.

Therefore, hypothesis which stated that there is no significant relationship between the socioeconomic characteristics of the farmers cooperative members and the perceive effects of their participation in community, development projects on their livelihood, is hereby reject with respect to the significant variables and accepted with respect to the non-significant variables.

Conclusion

The extent of farmers cooperative members in the study area, participation in community development projects was good but not high enough to sustain the projects. High and adequate participation of farmers cooperative members in community development projects will make for the actualization of target goals of executing the community development projects.

The perceptions of the effects of community development projects on farmers cooperative members' livelihood were determined by their socioeconomic characteristics, and the male and female

farmers cooperators did not differ significantly in their perceptions. These cooperative socioeconomic factors are important for formulating policies aimed at community and rural development several factors were identified as constraining the participation of farmers in community development projects.

Therefore, cooperators socioeconomic characteristics designing and formulating policies and programmes on community development projects and cooperators livelihoods improvements by governmental and non-governmental leadership, technical and social skills of farmers should be improved to enable farmers participate affectively in community development.

Recommendations:

The following have been recommended for members perceived effects of participation in community development projects on their livelihood.

Age has to be considered while organizing farmers cooperative.

Marital Status: marital status has to be considered while forming cooperative.

Level of education: Consideration has to be given to education in cooperative organization.

Farm Size: This factor has to be put into consideration while forming cooperative.

Annual farm income: annual farm income has to be considered.

Number of Years of participation: The years participation should be input into consideration.

References:

Aderinonye – Abduiwahab S.A, Nwachukwu S.C. Salawu O.L, and Popoola P.O. (2015) Assessment of livelihood activities of rural farmers in Kwara State, Nigeria, *Ethiopian Journal of Environment Studies and Management* 8(2): 120-129.

Amadi L and Anokwuru G. (2017) Sustainable rural livelihood: Elusive Post-Colonial Development project in *Nigeria International Journal of Political Science* 3(4): 38-42.

Anowor, O. F. & Agbarakwe, Henry U. (2018). How have deforestation affected economic and social welfare: The case of Port Harcourt City. *Journal of Social Sciences Research*, 4(8), 116 – 124

Anowor, O. F.; Uwakwe, Q. C. & Chikwendu, N. F. (2019). How Investment Does Affect Unemployment in a Developing Economy. *Sumerianz Journal of Economics and Finance*, 2(7), 82–88

Aref F, Marof R, and Sarjit S.G. (2010) Community Capacity Building. A Review of its Implications in Tourism Development *Journal of America Science* 6(1): 172-180.

Blaikie P, Cannon T Davis I and Wisner B (2014) At Risk: Natural Hazards, People's Vulnerability and Disasters, Routledge.

Ekong O.F. (2007) "Social and Economic Research Principle and Methods" African Institute for applied Economics, Enugu, Nigeria.

Imoh, A.N, U-James .I and Nwa Chukwu E.O. (2015) Comparative Analysis of Poverty Status of Community Participation in Rural Development Project of Akwa Ibom State Nigeria. *New York Science Journal* 2(6) 1554-0200.

- Madu U.A, Wakili Arm and Mshelia S.E: (2013) The effect of a community-driven development project (Fadama II) on rural farming community in Adamawa State Nigeria. *Comprehensive Research Journal of Agricultural Science (CRJAS)*.
- Nwaobiala C.U, & Ogbonna M.O. (2015) Evaluation of Participation and poverty levels of National Fadama III development project rural farm woman in Gombe state. Nigeria Discourse *Journal of Agricultural and Food Science*. www.reJournal.org/JAFs ISSN: 2346-7002 Vol 3(6): 83-90.
- Ochinanwata, C., Uzomba, P. C., Onodugo, V. A., Anowor, O. F. (2020), Does External Trade Improve Life Expectancy? A Long Run Equilibrium Analysis on English Speaking West African Countries, *Solid State Technology*, 63(5): 778–796
- Okereke U.C. (2018) Farmers Participation in agriculture and Rural Development activities in Anambra State, Nigeria. *Journal of Agricultural and Management Sciences* 12(2) 36-42.
- Olarinde L.O and Kuponiyi F.A (2015) Rural livelihood and food consumption patterns among households in Oyo State, Nigeria *Journal of Social Sciences* 11(2): 127-132.
- Olori C and Okide C.C. (2014) Achieving Sustainable Community development projects through community Participation in River State, Nigeria. *Journal of Education and Practice*. ISSN 2222 – 1735 Vol 5 No.24.
- Onodugo, V. A.; Nwonye, N. G.; Anowor, O. F. & Ofoegbu, G. N. (2019). Attaining Inclusive Growth in a Developing Economy on the Wings of Micro, Small and Medium Scale Enterprises, *Amazonia Investiga*, 8(24), 239 – 252.
- Onyenemezu E.C. and Olumali E.S. (2013) The Imperativeness of felt. Needs in Community development. *Journal of Education and Practice* ISSN 222-17365 Vol 4 No.2.
- Uche-nwachi M.N. (2016) “Analysis of the effects of farmers’ participation in community development projects on their livelihood in Ebonyi State, Nigeria” M.Sc Thesis department of Agricultural Extension Federal University of Technology Owerri.
- Uka F.K and Jones N.Y (2017) Farmer’s livelihood Sustenance activities in Kogi State Nigeria. *Journal of Social and Environmental Science* 13(7): 18-25.
- Umar A.M. Wakili A.M and Mshelia S.E. (2013). The effects of a community – driven development project (Fadama II) on rural farming communities in Adamawa State, Nigeria. *Comprehensive research Journal of Agricultural Science (CRJAS)* 1(1) 6-13.
- Umebali E.E. (2004) Agribusiness and Financial analysis (New edition) Ejigbo-Lagos, Computer Edge Publish

