International Journal of Innovative Agriculture & Biology Research 7(1):70-75, Jan.-Mar., 2019

© SEAHI PUBLICATIONS, 2019 www.seahipaj.org ISSN: 2354- 2934

Improved Productivity of Rural Farmers and Their Level of Participation in Community Development Activities in Rivers and Bayelsa States, Nigeria

Holly Ledornu Deekor PhD

Department of Vocational and Technology Education
Rivers State University, Port Harcourt Nigeria
E-mail: deekor.holly@ust.edu.ng

ABSTRACT
This study identified relationship between improved productivity of farmers and participation in community development activities in Rivers and Bayelsa State. One thousand and thirty two (1,032)farmers were drawn from a population of 10,320 registered cooperative farmers using proportionate and stratified sampling techniques. The instrument used for data collection was questionnaire developed through literature with focus group discussion guide and training modules. Data analyses used frequency counts, mean and Pearson Product Moment Correlation (PPMC) statistics. Based on the data collected and analyzed, it was found out that training increases productivity of farmers and that as productivity increased participation in community development activities of rural farmers in Rivers and Bayelsa State also increases. It was therefore recommended that rural farmers should be trained regularly to enhance productivity and participation in community development activities.
Keywords: Improved productivity, rural farmers, participation, community development activities, Rivers State, Bayelsa State.

INTRODUCTION

The predominant occupation of the indigenous people of Rivers and Bayelsa States is farming and fishing. They rely on their environment for livelihood. Prominent among the farm produce in Rivers State are cassava, yam, cocoyam, vegetables and plantains. Owing to their proximity with rivers, creeks and sea, some communities in Rivers State are involved in various forms of artisanal fisheries capture activities. The animals reared are goats, sheep and poultry on the extensive, free range and tertering management systems.

Among the indigenous people of Bayelsa State, fishing is the most predominant occupation with few farmers of tuber crops, vegetables, plantain and bananas. The nature of the farming and fishing occupation and activities here in Rivers and Bayelsa States which are largely on the subsistence level suggest a peasant and rural population.

It is their typology that Frantz-Fanon cited in Deekor (2018) refers to as "the wretched of the earth" whose endless striving for survival has not been helped by low income and inadequate innovations in farm practices. The farmers work the land from sunrise to sunset and yet productivity is still below the desired level. The fishers are involved in various forms of artisanal fisheries capture activities using dug-out canoes and local fishing gears with associated low catch, preservation and marketing problems.

These peasants and migrant fishers have over the years attracted the attention of the Nigerian Government and the World Bank. Consequently, several agricultural policies and proprammes have been formulated and redefined. Such programmes include Operation Feed the Nation (OFN), Niger Delta Basin Development Authority (NDBDA), and the State-Wide Agricultural Development Programme (ADP),

among others. The general goals of these programmes were to enhance productivity and to promote small holder farmers' participation in community development.

It is popular among agricultural extension practitioners, and community development experts that training is one sure way to achieving this increased productivity among rural farmers. Probably, this was why Adesoji, Farinde and Ajayi (2006) recommended that extension agents be encouraged and motivated to train the farmers on a regular basis. In another study, Musebe, Massawe, Mansuet, Kimani, Kuhlmann and Toepfer (2014) recommended the training of farmers to improve the production of vegetables that are safer for producers, consumers and the environment.

As productivity increases, what happens to participation of community members in community development activities? Tomina (2011) conducted a research study titled "Determinants of community participation in Oradea, Romania" and results show that community participation is determined and varied by gender, age, social status, social capital, civic competence, leadership experience and participation opportunities. Tomina therefore concluded that people from wealthier social categories have a higher rate of participation, and that though older people participate more than young people, participation decreases with age.

Though, these studies identified the role of training in improving productivity and determinants of community participation, none showed a direct relationship between improved productivity of farmers and their participation in community development activities. It is against this background that the study was planned to determine the relationship between increase in the productivity of farmers and their participation in community development activities.

METHODOLOGY

The study was carried out in Rivers and Bayelsa States of Nigeria. Rivers and Bayelsa States were purposively chosen as the study area because they possess the characteristics needed for the purpose of the study. Using a proportionate 10% and stratified sampling techniques, one thousand and thirty two (1,032) farmers were randomly drawn from a population of 10,320 registered cooperative farmers and studied as the sample.

Stratified random sampling was considered appropriate because the population contained subgroups (Strata) of crop farmers, animal farmers, and fish farmers. This corroborates Gay, Mill and Airasian (2006) that stratified sampling is used in selecting a sample in such a way that identified strata in the population are represented in the sample in the same proportion in which they exist in the population.

The instrument used in the study was validated training modules for the training of farmers in cluster centres, structured questionnaire on level of impact of training on productivity, level of participation of farmers in community development activities, and a Focus Group Discussion guide. The training and the questionnaire were conducted and administered respectively by the researcher and 5 field assistants. Focus Group Discussion (FGD) was also used to support the main instrument and the training modules. The participants in the FGD were selected along homogenous groups of crop farmers, animal keepers and fishers in the study area. The discussion session was organized for the homogenous groups one at a time to foster homogeneity of discussion. The questionnaire adopted a 4-point summated rating scale of impact and participation. Using a criterion mean of 2.50, decision was reached on each item of impact and participation. Data analyses used the mean and Pearson Product Moment Correlation (PPMC) statistics.

RESULTS

Table 1: Levels of Impact of Training on the Productivity of Rural Farmers

S/No	Item	VHL	HL	LL	VLL	N	X	Decision
1	Preparation of organic manure	300	4	30	20	354	3.65	High level
2	Application of chemical fertilizers	288	25	15	26	354	3.62	High level
3	Mixing and application of herbicides on farm lands	209	47	30	68	354	3.12	High level
4	Prevention and control of different pests and diseases of crop plants.	255	61	8	30	354	3.53	High level
5	Use and maintenance of modem farm tools	270	24	36	24	354	3.53	High level
6	Dry season vegetable production	296	38	20	-	354	3.57	High level
7	Production of poultry and animal feeds	208	136	-	10	218	3.53	High level
8	Rearing of goats and pigs	108	37	15	58	218	2.89	High level
9	Techniques of feeding different animals	190	6	7	15	218	3.79	High level
10	Prevent and control different pests and diseases of farm animals.	153	29	5	31	3.39	3.39	High level
11	Management of breeders.	191	6	1	20	218	3.69	High level
12	Construction and preparation of fish pond.	367	21	10	62	460	3.51	High level
13	Sorting and stocking of pond with fingerlings.	318	90	11	41	460	3.49	High level
14	Maintenance of healthy fish pond by carrying out different cultural practices.	322	40	2	96	460	3.28	High level
15	Repair of fishing nets.	394	14	12	40	460	3.66	High level

Table 1 shows responses of farmers on impact of training on their productivity. All the 15 items indicate high level of impact as they possess mean weights of 2.89 and above. This means that there was increase in the productivity of farmers who participated in the training in Rivers and Bayelsa States.

Table 2: Levels of Participation of Rural Farmers in Community Development Activities in Increased Productivity

S/No	Community Development Activities	VHL	HL	LL	VLL	N	X	Decision
1	Contribution of levies in the community	464 (1856)	302 (906)	206 (412)	60 (60)	1032	3.1	High level
2	Voluntary charity action	582 (2328)	204 (1224)	200 (400)	46 (46)	1032	3.9	High level
3	Self help projects	514 (2056)	282 (846)	156 (312)	80 (80)	1032	3.2	High level
4	Provision of shelter	380 (1520)	416 (1248)	220 (440)	16 (16)	1032	3.1	High level
5	Maintenance of shelter	360 (1440)	460 (1380)	136 (272)	130 (130)	1032	3.1	High level
6	Producers cooperative society	500 (2000)	306 (918)	126 (252)	100 (100)	1032	3.2	High level
7	Marketing cooperative society	194 (1976)	402 (1206)	136 (272)	-	1032	3.3	High level
8	Thrift and capital formation activities	116 (1664)	380 (1140)	210 (420)	26 (26)	1032	3.1	High level
9	Social club and leisure activities	580 (2320)	206 (618)	160 (320)	86 (86)	1032	3.2	High level
10	Community festivals	460 (1840)	306 (918)	130 (260)	136 (136)	1032	3.1	High level
11	Community environmental sanitation	100 (1600)	196 (1488)	136 (272)	-	1032	3.3	High level
12	Training sessions	420 (1680)	376 (1128)	200 (400)	36 (36)	1032	3.1	High level
13	Counselling sessions	378 (1512)	448 (1344)	120 (240)	160 (160)	1032	3.1	High level
14	Prayer sessions	326 (1304)	380 (1140)	166 (332)	160 (160)	1032	2.8	High level
15	Town conference and community governance activities	542 (2168)	240 (720)	150 (300)	100 (100)	1032	3.2	High level

Table 2 shows responses of farmers on participation in community development activities in increased productivity as they possess mean weights more than the criterion mean of 2.50. This indicates high level of participation of rural farmers in community development activities in increased productivity in Rivers and Bayelsa States.

Table 3: Pearson Product Moment Correlation on Relationship between Increase in Productivity of Farmers and their Participation in Community Development Activities.

Variable	N	Df	r-cal	r-crit	Decision
Improved Productivity	1032	1030	0.814	0.195	Statistically Significant Reject H0
Participation					

The above table 3 shows that at 0.05 level of significance and 1030 degree of freedom, r-calculated is 0.814 and r-critical is 0.195. Since r-calculated is greater than r-critical value, we reject the null hypothesis that there is no significant relationship between increase in productivity of farmers and their level of participation in community Development activities in Rivers and Bayelsa States, and accept the alternate since there is significant relationship. This means that a significant relationship exists between improve productivity of farmers and their participation in community development activities.

DISCUSSION OF FINDINGS

Data in table 1 show responses on impact of training on the productivity of rural farmers in Rivers and Bayelsa States. Findings indicate high level of impact of training on the productivity of rural farmers. This finding corroborates Musebe, Massawe, Mansuet, Kimani, Kuhlmann and Toepfer (2014) who conducted farmers training among small holder farmers in Kilimanjaro and Arusha regions of Northern Tanzania and found out that training improved farmers production of vegetables that are safer for producers, consumers and the environment. This, no doubt borders on increased productivity as benefit of farmers training. This also agrees with Adesoji, Farinde and Ajayi (2006), and Omotesho, Ogunlade, and Adenuga (2014) who recommended in their different studies, regular farmers training.

It is therefore popular among community development scholars and agricultural extension experts that a synergy does exist between increased productivity of farmers and their economic status. That as economic status increases, social status also increases.

Data in table 2 show responses on level of participation of rural farmers in community development activities in increased productivity. Findings indicate high level of participation of rural farmers in community development activities as their productivity increases. This finding agrees with Tomina (2011) who studied determinants of community participation in Oradea, Romania and found out that people participate in community activities more as their social status increase.

There was significant relationship between improved productivity of farmers and their level of participation in community development activities (Table 3). This also agrees with earlier findings of Tomina (2011) that community participation is determined by gender, age, social status, social capital, civic competence, leadership experience and participation opportunities. That is to say, a positive relationship exist between community participation and social status which confirms the synergy between improved productivity, increased economic status, increased social status, and enhanced participation in community development activities.

CONCLUSION

The study identified relationship between improved productivity of rural farmers and participation in community development activities. The study therefore conclude that training of rural farmers leads to improved productivity and improved productivity leads to increase in social status, and increase in social status enhances participation in community development activities in Rivers and Bayelsa States.

RECOMMENDATIONS

Based on the findings and conclusion of this study, it is recommended that rural farmers should be trained regularly by agricultural education and extension experts to enhance productivity and participation in community development activities.

REFERENCES

Adesoji, S. A., Farinde, A. J. & Ajayi, O. A. (2006). Determinants of Training Needs of Fadama Farmers in Osun State of Nigeria and Implication for Extension Workers. *Journal of Applied Sciences.* 6 (15) 3082-3088.

Deekor, H. L. (2018). Non-Formal Education Needs and Participation in Community Development Among Rural Farmers in Rivers and Bayelsa States. *Unpublished Ph.D Thesis*. Department of Adult and Non-Formal Education, University of Port Harcourt, Choba-Port Harcourt.

Gay, L. R., Mills, G. E. and Airasian, P. (2006). *Educational Research: Competencies for Analysis and Applications.* Columbus, Ohio: Pearson Merrill Printice Hall.

Musebe, R., Massawe, A., Mansuet, T., Kimani, M., Kuhlmann, U. and Toepfer, S. (2014). Achieving Rational Pesticide use in Outdoor Tomato production through Farmer Training and Implementation of a Technical Guideline. *Journal of Agricultural Extension and Rural Development.* 6 (12) 367-381 http//www.academicjournals.org/JAERD retrieved:22/11/2014.

Omotesho, K. F., Ogunlade, L. and Adenuga, A. H. (2014). An Assessment of Farmers' Ability to Determine their Agricultural Extension Needs in Kwara State, Nigeria. *Albanian Journal of Agricultural Science.* 13(3) 6 1-67.

Tomina, S. (2011). Determinants of Community Participation in Oradea. *Annals of the University of Oradea: Economic Science*. XX(1) 221-227.