



Economic Analysis of Cooperative Societies and Agricultural Productivity in Rural Households in Delta State, Nigeria

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Abstract

The study assessed rural household participation in co-operatives on rural household agricultural productivity. The sampling technique used was a Multistage procedure to randomly select 120 co-operators and non-cooperators respectively. But only 115 co-operators and non-cooperators were utilized. The active mean age was 42 years and married farmers co-operatives (62.6%); farmers non-cooperatives (55.7%) rural households with secondary educational level farmers co-operatives (42.6%); farmers non-cooperatives (24.4%) obtained their sources of credit facilities from co-operatives. The study revealed that most rural households engaged in livestock and crop production obtained their sources of credit from co-operatives. It was discovered that rural households have constraints in obtaining credits from conventional banks (mean=1.7). The study recommends that policies should be inclined towards agricultural co-operatives to increase food productivity and food security. Again, that there should be an enabling law to enforce the conventional banks to provide soft loans via rural households' co-operatives for their farming activities.

1. Introduction

Agricultural credit is a vital component of any economy. A small-holders farming is an active driver in Nigerian economy (Rahji and Fakayode, 2009), but agricultural advancement is stalled by inadequate access to funds for their agricultural activities (Odoemenem and Obinne, 2012). Okorji and Mejaha (2010) testified that poor collateral, bank accounts by rural farmers and procedure for accessing credit facilities from conventional banks limit rural household's farmers' fund accessibility. Co-operatives offer small-scale rural farmers a greater opportunity in access to credits market, technologies, information, processing, storage and warehouses (International Labour Organisation, 2007).

Co-operatives society is a voluntary organization formed with the objective of the service to its members and promotion of their goals and aspirations. I-project (2011) reported that farming co-operatives are group of persons that voluntarily come

together for achievement of common goals through democratically controlled business establishment. It thus means that cooperatives activities are controlled by members taking vital decisions democratically as it affects members growth especially in credit, hence members are encourage to save periodically.

Saving is the most vital economic obligation of co-operators. Idrisa, (2006) reported that members are expected to save cash daily, weekly, monthly or quarterly bases to members convenient. The savings of rural households cooperators act as credit for borrowing to needy members with the principal amount and interest on loan are calculated for repayment either in installment or full. The arrangement permits members to have access to capital during production".

The enormous benefits of small-scale rural farmers' cooperators can guarantee their livings and play a pivotal role in meeting food demands and contributing to poverty reduction and hunger

eradication (ILO, 2007).

Various studies have pointed out the difficulties in farmers having access to credit amenities. Sani Ibrahim and Aliero (2012) opined that higher rates of interest coupled with higher cost of transaction contribute to low accessibility to credit facilities among rural households. Thus, this study is approached from a different perspective such that farmers were able to access credits through cooperative and self-help.

Objectives of the study

The study focused on the socio-economic characteristics of rural households cooperative and non-cooperatives nature of Rural Households co-operators and non-cooperators on livestock enterprises spread of Rural Households co-operators and non-cooperators on crop enterprises forces against Rural Households according to the constraints to credit facilities.

2. Materials and methods

Delta State has a latitude and longitude of 5.50 and 6.000 respectively. Delta state is has twenty-five (25) local government areas. Delta state has an average population of 4,112,445 persons (NPC, 2006) and a projected population value of 5,663,400 persons in 2016 (National Population Commission (NPC) of Nigeria 2016, and National Bureau of Statistic, 2017). Delta State of Nigeria is blessed with natural minerals resources (crude oil) and vast in agricultural production. Delta State of Nigeria has approximate land area mass of about 17,698 square kilometer) and share boundaries with Edo, Anambra, Rivers, Bayelsa and Ondo States. (Delta State Gov., 2003). Delta State is endowed with agricultural and mineral deposits.

Multistage sampling procedure was used in the selection of rural households. Area. Firstly, one block each was randomly selected from each of the three Agricultural zones making a total of three (3) blocks. Secondly, ten communities were randomly selected from the three blocks making thirty (30) communities. Lastly, four (4) co-operators and four (4) non-cooperators were purposely selected making a total of 120 co-operators and non-cooperators respectively. Only 115 rural households' cooperators and non-cooperators were utilized for this study due to data cleaning of questionnaires from the field.

The data for the research study were obtained with the aid of structured questionnaires purposely administered to rural households' co-operators and non-cooperators respectively. The data collected were analysed with the aid of descriptive

statistics (Percentages, tables, mean and mode). The constraint level was achieved in accordance with Ovharhe (2020) who used the mean derivation from Likert-type scale model to measure the constraint in cooperative performance.

3. Results and discussion

3.1 Socio-Economic Characteristics of Rural Households Cooperators and Non-cooperators in Delta State, Nigeria

The study reveals that active mean age of forty-two (42) years and forty-five (45) years obtained their sources of credit from co-operative and non-cooperative respectively. Married female rural households were mostly co-operators with educational level of secondary school. The study shows that most rural households obtained their credits facilities from non-conventional banks (co-operatives) for their farming operations as shown in Table 1. The mean age of farmers, marital status and educational qualification were similar to the findings of Emaziye and Ebeore (2020) as reported in the socioeconomic profile of a study on agricultural production in rural communities in Delta State, Nigeria.

3.2 Distribution of Rural households' co-operators and non-cooperators on Agricultural enterprises

Most rural households engaged in livestock and crop production for their livelihoods as revealed by the study. Credit facilities is major hindrance in achieving food security in the rural households that lives in the rural areas that are predominantly poor. The study reveals that rural households that engaged in co-operatives have more funds for their farming operations. Rural households' co-operators have one hundred and twenty-seven (127) livestock compared to the non-cooperators of seventy three (73) livestock as shown in Table 2. The study further revealed that rural households' co-operators were able to harvest eighty six (86) bags from their crops yield while non-cooperators only harvested fifty-one (51) bags from their crops yield as shown in Table 3. This clearly show that those respondents obtaining their credits from cooperatives have more funds for their farming operations resulting in increase in agricultural productivity. A similar result on livestock enterprises, Ovharhe, Okpara, and Asedegbega (2020), reported that the different enterprises were assisted with rural infrastructure among farming communities to increase productivity.

Table 1. The Socio-economic characteristics of rural households cooperative and non-cooperatives in the study area

Parameters	Farmers Co-operatives	Farmers Non-Cooperatives
Age (years)		
19-29	22 (19.1%)	31 (27%)
30-40	30 (26.1%)	20 (17.4%)
41-57	39 (33.9%)	12 (10.4%)
52-62	19 (16.5%)	33(28.7%)
63-73	5 (4.4%)	19(16.5%)
Mean	42 years	45 years
Females	74 (64.4%)	52 (45.2%)
Educational Level	Female	Male
Informal education	23(20.0%)	39(33.9%)
Primary education	32 (27.8%)	36 (31.3%)
Secondary education	49 (42.6%)	28 (24.4%)
Tertiary education	19 (9.6%)	12 (10.4%)
Mode	Secondary education	Informal education
Marital Status		
Single	25 (21.7%)	32 (27.8%)
Married	72 (62.6%)	64 (55.7%)
Widowed	14 (12.2%)	12 (10.4%)
Divorced	4(3.5%)	7(6.1%)
Mode	Married	Married

Source: Field survey, 2019

Table 2. Distribution of Rural Households cooperators and non-cooperators on livestock production

Enterprises	Rural Households cooperators	Rural Households Non-cooperators
Poultry	57 (44.8%)	43 (58.9%)
Pigs	18 (14.2%)	7 (9.6%)
Sheep	20(15.7%)	10 (13.7%)
Goat	27 (21.3%)	12 (16.4%)
Cattle	3 (2.4%)	0 (0.0%)
Turkey	2 (1.6%)	1 (1.4%)
Total	127 livestock	73 livestock

Source: Field Survey 2019

Table 3. Distribution of Rural Households cooperators and non-cooperators on crop enterprises

Crop yields (bags) per annum	Rural Households cooperators	Rural Households Non-cooperators
Maize	21	13
Cassava	39	22
Yam	26	16
Total	86 bags	51 bags

Source: Field Survey 2019

Table 4. Distribution of Rural Households according to the constraints to credit facilities.

Statement	Agreed (2)	Disagreed (1)
Conventional banks are closer to the Rural households	0.38	0.8
Rural households easy access to credit facilities	0.24	0.9
Conventional banks attract more interest rate than co-operative societies	1.7	0.1
Conventional loan processes are difficult with bottleneck	1.8	0.1
Conventional societies are closer to the Rural households	1.7	0.2
Cooperative societies loan are easily accessed	1.5	0.3
Cooperative societies loan processes are difficult with bottleneck	0.3	0.9

Source: Field survey 2019, Cut-off mean =1.5

3.3 Distribution of Rural Households according to the constraints to credit facilities

The study shows that 80.9% of respondents disagreed (mean = 0.8) that conventional banks (commercial banks) are closer to the rural households since most conventional banks in Delta State and Nigeria respectively are located in the urban areas far away from the rural areas where the poor live. The study also shows that 87.8% of respondents disagreed (mean = 0.9) that rural households do not easily have access to conventional loans due to its difficulties and bottlenecks in its acquisition. The study further reveals that co-operative societies are closer to the rural households (82.6%) or (mean = 1.7) and credit facilities are easily obtained without much difficulties and bottlenecks as shown in Table 4. In similar results on constraints analysis, Ovharhe (2020) reported that Fadama group of farmers were able to manage high impact constraints in their farming enterprises to increase income generation among rural households.

4. Conclusions and recommendations

The farmers obtained their sources of farm credit from cooperative societies as shown by the study. The study also revealed that most rural households' cooperators engaged in livestock and crop enterprises. The study further showed that rural households have constraints in acquisition of credit facilities from conventional banks. The study recommends that government programs should be geared towards agricultural cooperatives so as to increase food production to guarantee food security. The study recommends that government should put enabling laws to enforce the conventional banks to provide soft loans via rural households' co-operatives for their smooth farming operations.

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