Assessment of the Factors Influencing Rice Farmers' Participation in Anchor Borrower's Programme in Southwest Nigeria

ISAAC ABE
Department of Agriculture

Abstract- The study investigated the participation of the anchor borrower's progamme beneficiary rice farmers in Osun state. Multistage sampling method was used to obtain information from 120 participants and non participants. Data obtained was analyzed using mean and percentage score. The result showed that there is male dominance in rice production in the state with dominance rate of 54.2% and average age of 54.4 years. 67.5% of the farmers had completed at least secondary school education and with a mean household size of 6 persons. The average farm size of the beneficiaries was 3.5 ha. Majority of the beneficiaries (90.8%) indicated Information/awareness as the major factor that influence their participation in programme. This is followed by access to land (89.2). The study therefore recommends that efficient extension services that will deliver relevant and timely information to the farmers should be supported.

I. INTRODUCTION

For numerous years, the Nigerian economy heavily relied on agriculture, predating the discovery of oil in 1956. Key agricultural endeavours such as cocoa, groundnut, oil palm, and cotton production played a significant role in generating foreign exchange earnings for Nigeria. The Southwestern region, in particular, gained renown for its cocoa production, while the Southeast and South-South regions were notable for oil palm production. Additionally, the Northern part of the country was recognized for its groundnut and cotton production. Nigeria was a major exporter of oil palm and cocoa until the discovery of crude oil, which led to a partial neglect of the agricultural sector. Despite a decline in output, the sector has consistently contributed an average of 24% to Nigeria's Real GDP from 2012 to 2018 (KPMG, 2019).

Nigeria has implemented various agricultural and rural development policies and programs over the years, yet it continues to grapple with challenges related to food insecurity and rural poverty. In contrast, similar initiatives in other regions have shown success. Longinus and Gomathy (2016) note that every attempt by successive governments and international donor agencies to alleviate poverty in Nigeria has thus far been unsuccessful. Despite the consistent launch of agricultural and rural development programs by successive governments, the tangible impact of these initiatives on the livelihoods of the beneficiaries remains uncertain.

Given the prevalent poverty conditions, the Federal Government of Nigeria, through the intervention of the Central Bank, introduced the Anchor Borrower's Programme in 2016 (CBN, 2016). The core objective of the Anchor Borrower's Programme (ABP) is to supply Small Holder Farmers (SHF) with farm inputs, both in kind and cash (for farm labour), aiming to enhance the production of commodities, stabilize input supply for agro-processors, and address the country's unfavourable balance of payments concerning food. Upon harvest, the SHF delivers their produce to the Agro-processor (Anchor), who compensates the farmer with the equivalent cash, deposited directly into their account. To finance the program, the Participatory Financial Institution (PFI) is responsible for providing funding through the CBN's Micro Small and Micro Enterprise Development Fund (MSMEDF) at an all-inclusive interest rate of 9.0% per annum, directly into individual farmers' accounts. The PFI also ensures that all payments due to suppliers are made on behalf of the farmers. The CBN is tasked with coordinating the entire program and

• The Anchor Borrower's Programme

In line with its developmental role, the Central Bank of Nigeria established the Anchor Borrower's Programme, which was officially launched by President Muhammadu Buhari on November 17, 2015. The primary objective of this program is to establish a connection between anchor companies engaged in processing and smallholder farmers involved in cultivating key agricultural commodities. The Anchor Borrower's Program focuses on providing farm inputs, both in kind and cash (for farm labour), to smallholder farmers with the aim of boosting the production of these commodities. Additionally, the program aims to stabilize input supplies to agroprocessors and address the country's negative balance of payments on food. Upon harvest, smallholder farmers supply their produce to the Agro-processor (Anchor), who then pays the equivalent cash amount into the farmer's account (CBN, 2016).

The inception of the program resulted from consultations with various stakeholders, including the Federal Ministry of Agriculture and Rural Development, State Governors, agricultural produce millers, and smallholder farmers. The goal is to enhance agricultural production and non-oil exports, especially in light of the unpredictable nature of crude oil prices and their impact on Nigeria's revenue profile.

• Objectives of the Programme

The overarching aim of the Anchor Borrower's Program is to establish economic ties between smallholder farmers and well-established large-scale processors, aiming to enhance agricultural output and substantially improve the capacity utilization of processors. Additional objectives encompass:

- Augment the financial support provided by banks to the agricultural sector
- Minimize the importation of agricultural commodities and preserve foreign reserves
- Enhance the operational capacity of agricultural firms
- Foster the emergence of a new generation of farmers/entrepreneurs and generate employment opportunities
- Advance the implementation of the cashless policy and promote financial inclusion

- Diminish poverty levels among smallholder farmers
- Support rural smallholder farmers in transitioning from subsistence to commercial production levels.
- Anchor Borrower's Programme in South-West Nigeria

The programme was launched in November 2016 by the President. The farmers in the South West states of Nigeria, through the Rice Farmers Association of Nigeria (RIFAN) also started their participation immediately after the launch. Some members of RIFAN in Osun state embarked on late season rice cultivation in 2016 under irrigation through the Anchor Borrower's Programme. The number of RIFAN members participating in the programme increases yearly. To date, Osun state RIFAN is on the fourth cycle of participation in the CBN's Anchor Borrower's Programme.

The programme thrust of the ABP is provision of farm inputs in kind and cash (for farm labor) to Small Holder Farmers (SHF) to boost production of commodities, stabilize inputs supply to agroprocessors and address the country's negative balance of payments on food. At harvest, the SHF supplies his/her produce to the Agro-processor (Anchor) who pays the cash equivalent to the farmer's account. To fund the programme, the Participatory Financial Institution (PFI) is to provide financing through the CBN's Micro Small and Micro Enterprise Development Fund (MSMEDF) at an all inclusive interest rate of 9.0 per cent per annum; directly to the individual farmer's account. The PFI is also to ensure that all payments due to suppliers are made on behalf of the farmers. The CBN is also to coordinate the entire programme and serve as its secretariat.

Nigeria Incentive-based Risk Sharing for Agricultural Lending (NIRSAL) shall provide technical assistance to farmers, extension workers and banks and organize farmers into groups/cooperatives. The NIRSAL is the technical component provider of the programme. For insurance coverage, the Nigerian Agricultural Insurance Corporation (NAIC) is to provide insurance cover to the projects under the programme. Participating state governments also coordinate the

process in conjunction with the CBN and provide support to the farmers.

Balogun *et al.*, (2021) observed that despite varied criticism of the programme, positive impact of the programme has been recorded on the rate of adoption of improved rice varieties by farmers. The authors also noted that this has led to an increase in income of the beneficiaries and upsurge in the popularity and consumption of locally grown rice.

This study therefore investigated the factors which influence the participation of rice farmers in the prograame. This study is justified on the fact that participation in a programme is the key to ascertain its eventual success or otherwise.

II. METHODOLOGY

• The Study Area

The research was conducted in Osun and Ekiti states. Osun state, named after the River Osun, was established in 1991 and consists of thirty local government areas (LGAs) with Osogbo as the state capital. It is bordered by Oyo, Ondo, Ekiti, Kwara, and Ogun states and covers a total land area of 9251 km2. The estimated population, according to the National Bureau of Statistics (NBS) in 2019, was around 5 million inhabitants. The climate of the state is tropical, characterized by distinct wet and dry seasons. The mean temperature ranges from 21°C to 34°C, and the annual rainfall varies between 150 mm and 3000 mm. The wet season is influenced by the southwestern monsoon wind from the Atlantic Ocean, while the dry season is associated with the northeastern trade wind from the Sahara Desert. Osun state was chosen because it has rice farmers who are participants in the Anchor Borrowers' Programme and to investigate the impact of the Programme on rice production in the state.

• Target Population

The study focused on rice farmers, encompassing both those who benefited from and those who did not benefit from the Anchor Borrowers' Programme in the state.

• Sampling Procedure and Sample Size

Multistage purposive and random sampling procedures were used to select respondents for the study. At the first stage, three local governments which are noted for rice production and which also participate in the Anchor Borrower's Programme from each state were purposively selected. For this, Ido/Osi, Ekiti West and Efon Alaye local government areas were selected for Ekiti state. In Osun state, Egbedore, Odo Otin and Oriade local government areas were selected. This makes a coverage area of six local governments in the two states.

At the second stage, four rice farming communities or villages in each local government were randomly selected to make twenty four villages or communities. At the final stage, systematic random sampling was used to select five respondent farmers who participate in the Anchor Borrower's Programme in each community. Five non participant farmers in the Anchor Borrower's Programme from each community were also selected through random sampling. This gives a total number of 240 respondents.

· Sources of Data

The data used for the study were primary data.

• Data Collection and Analysis

The primary data collection method involved the distribution of structured questionnaires to the rice farmers. Respondents were asked to indicate their agreement with factors such as Adequate training; Timeliness of input fund disbursement; Information/awareness; Access to land e.t.c on 3 point Liker scale of Major factor =2, Minor factor = 1 and Not a factor =0.

The values were summed and divided by 3 to get a mean value of 1. Any mean value greater than or equal to 1 was implied as a factor influencing participation in the Anchor Borrower's Programme. Any variable with mean value of less than 1 was regarded as not a factor influencing participation in the Anchor Borrower's Programme.

Percentage was used to analyze the result obtained.

III. RESULT AND DISCUSSION

Result from Table 1 stated that 54.6% of the participants were male while 45.8% were females. About 57% of the non-participants were male while the remaining 43.3% were females. The close margin between both sexes also showed that agriculture is not only a male dominated occupation. This result could be attributed to factors like lack of female sequestration in the study area and their right to own property (Lands) having a profound effect on their participation in rice production. Olademeji *et al.*, (2020) accounted for a lower proportion of female rice farmers and asserted the reason to be the cultural and religious orientation of the people in the study area as most of women practiced the purdah system of dressing which secluded them from the public.

The average age of both participants and non-participant rice farmers was 54.4 years and 55.8 years and this implied that though most of the farmers could still be active, and full of vigour to carry out their farm work, at the same time at that age, their strength will began to slowly dwindle. The result from the table also indicated that there were few youth in rice production which could pose a future problem when there are

inadequate rice farmers to replace the ones that are dying out as a result of old age.

Most (67.5%) of the participants completed their secondary school education while 22.5% finished their tertiary education. Few (5.0%) of the participants completed their primary school education while 4.2% completed adult literacy and the remaining 0.8% completed the Koranic education.

Majority (75.8%) of the participants have 0.1 to 4 hectares of land for cultivation while 73.3% of the non-respondents also have 0.1 to 4 hectares of land. The average farm size for both participant and non-participant is 3.8 hectares respectively. This implied that the respondents had significant size of land for cultivation and therefore high farm yield was expected. Abdallah (2016) opined that rice productivity would significantly increase when there is enough land for cultivation. Ameh *et al.*, (2022) stipulated that the likelihood of farmers receiving more loan diminishes as their land increases showing that a large farm size influenced their tendency to get loan.

Table 1 Socio-Economic characteristics of the respondents

Variables	Participants			Non-participant		
	F	%	Mean	F	%	Mean
Sex						
Male	65	54.2		68	56.7	
Female	55	45.8		52	43.3	
Age						
20-34	10	8.3		8	6.7	
35-49	42	35.0	54.4	32	26.7	55.8 years
50-64	28	23.3		43	35.8	
65-79	29	24.2		35	29.2	
80-94	11	9.2		2	1.7	
Level of Education						
No Education	-	-		-	-	
Koranic	1	0.8		1	0.8	
Adult literacy	5	4.2		3	2.5	
Primary	6	5.0		26	21.7	
Secondary	81	67.5		71	59.2	
Tertiary or any higher education certificate	27	22.5		19	15.8	

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Years of Rice Farming Experience							
≤ 1 -5 years (2018-2023)	60	50.0		57		47.5	
6 – 11 years (2012-2017)	45	37.5	6.9 years	44		36.7	7.3 years
12- 17 years (2006-2011)	11	9.2		13		10.8	
Household Farm size							
- 4ha	91	75.8			88	73.3	
4.1 - 7 ha	26	21.7			25	20.8	3.8ha
7.1 - 10 ha	1	0.8	3.5ha		7	5.8	
Above 10 ha	2	1.7			-	-	
Above 12	4	3.3			2	1.7	

Source: Field survey, 2023

The result of the factors influencing rice farmer's participation in Anchor Borrowers' programme is presented in Table 2. With the participation of the rice farmers in the Anchor Borrower's Programme, the farmers identified the factors that influenced their participation in the programme. Factors like information/awareness =1.87), Access to land =1.84), Income =1.78), Membership of cooperative society=1.70), Extension services =1.69), Household size=1.68), Education =1.61), and Age =1.55), were identified by the farmers as the major factors that influenced their participation. These results therefore mean that the most important factor which influences the farmers' participation in the program is awareness/information which is the first stage of any adoption process and it simply implies knowing about an innovation or new technology so as to gather information which leads to developing interest and eventual participation. This result corroborates the findings of Balogun et al., (2021)which affirmed that the farmers who had contact with extension workers would be more exposed to information that could be beneficial to them like the ABP funds and better method of production than their counterparts.

The data showed that there can be no participation without awareness and sufficient information. One of the core missions of an extension agent is to

disseminate timely and useful information to the farmers. As the extension agents are the closest government agents to the farmers, the farmers develop a sense of trust in them and this trust influences their participation in any intervention the agents introduce to them.

These findings also implied that the socio-economic characteristics like education, income, household size, age etc. are determinant of their participation in the program. Kumar et al., (2010) also agreed that socioeconomic characteristics are determinants for participation in an intervention program. An increase in age, increase the probability of participation (Shalmani et al., 2017). This indicated that older farmers were more likely to participate in any intervention because they are experts in farm management operation. Pal, et al., (2015) asserted that education plays a major role in borrowing decisions and reduces credit transaction costs. Ojo, et al., (2019) affirmed that extension services is an important factor that influences participation but opined that it was no longer a reliable services and attributed this to inadequate, unqualified staff members and poor organization which hampered the efficient dissemination of agricultural extension service and because of this, there was a limit of the dissemination of information that could enhance participation.

Table 2 Factors influencing participation in the Anchor Borrower's Programme

Factors	Major factor	Minor factor	Not a factor	Mean	
Information/awareness	109 (90.8)	6 (5.0)	5 (4.2)	1.87	
Access to land	107 (89.2)	7 (5.8)	6 (5.0)	1.84	
Education	83 (69.2)	27 (22.5)	10 (8.3)	1.61	
Extension services	89 (74.2)	25 (20.8)	6 (5.0)	1.69	
Membership of cooperative society	86 (71.7)	32 (26.7)	2 (1.7)	1.70	
Age	79 (65.8)	28 (23.3)	13 (10.8)	1.55	
Income	97 (80.8)	20 (16.7)	3 (2.5)	1.78	
Household size	86 (71.7)	30 (25.0)	4 (3.3)	1.68	

Source: Field survey, 2023

The study focused on factors influencing participation of rice farmers in the Anchor Borrowers Programme. Per centage analysis of the result to determine the factors influencing rice farmer's participation in anchor Borrowers' Programme, indicates that information/awareness, Access to land, education, extension services, cooperative society membership, age, income, and house-hold size significantly determined rice farmers participation in Anchor Borrowers' programme.

The findings from the study indicate that information and land size essentially affects participation in the ABP amongst the rice farmers. The study therefore recommends that efficient extension services that will deliver relevant and timely information to the farmers should be supported. Also, all stringent conditions attached to access to land for agricultural investment by farmers should be erased.

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