

Commercial Agriculture Credit Scheme (CACS) and Poverty Alleviation in South-East Nigeria: A Xeriscaping Approach to Enhancing Food Security and Self-Employment

Ofodu, Henry I. Ph.D.¹, Okegbe, Onyinyechukwu Ph.D.²

¹Enugu State University of Science and Technology (ESUT)

²Federal Polytechnic Ohodo Enugu State, Nigeria

DOI: <https://doi.org/10.51583/IJLTEMAS.2025.1408000061>

Received: 29 July 2025; Accepted: 06 Aug 2025; Published: 06 September

Abstract: This study examines the effect of the Commercial Agriculture Credit Scheme (CACS) on poverty alleviation in South-East Nigeria, focusing on its contributions to food security and self-employment. CACS is a federal government initiative designed to accelerate the development of the agricultural sector through credit facilities. Using a mixed-methods approach, the study collected and analyzed both quantitative and qualitative data from CACS beneficiaries. Findings reveal that access to CACS significantly improved food security through increased agricultural output, diversification of food production, and the creation of income-generating opportunities. The scheme also contributed to self-employment, particularly among rural youth. The study further shows that the adoption of xeriscaping principles has enhanced farming efficiency in water-scarce areas, further strengthening food production systems. The study concludes that CACS has significantly contributed in reducing poverty in South-East Nigeria by supporting agricultural activities that boost food security and employment. It recommends expanding the scheme's coverage and providing agro-based training, with increased awareness of xeriscaping techniques to maximize the impact of the programme across the region and Nigeria in general.

Keywords: Poverty, Poverty Alleviation, Xeriscaping Approach, Food Security, Self-Employment

I. Introduction

Nigeria, despite being abundantly endowed with natural resources and human capital, remains one of the poorest countries in the world (Mustapha, 2014) and Adeleke, Alabede, Joel & Ashibuogwu, 2022). Economic growth has been hindered by poor governance, insecurity, unemployment, and weak infrastructure. These persistent issues have contributed to rising poverty levels, especially in rural areas. According to Aminu & Alhassan (2021), the inability of successive governments to translate economic potential into improved living standards has made poverty one of the most pressing development challenges facing the country.

Poverty in Nigeria is multi-dimensional, manifesting as a lack of access to basic needs such as food, clean water, education, shelter, and healthcare. It is also marked by social exclusion, limited economic opportunities, and poor access to infrastructure (Chepkwei, 2020; Obadire, 2022). This pervasive poverty has placed Nigeria at the forefront of global poverty rankings. The Brookings Institution in 2018 reported that Nigeria had overtaken India as the country with the largest number of people living in extreme poverty. Estimates suggest that over 87 million Nigerians live below the poverty line, with approximately six individuals falling into poverty every minute (Kharas, Hamel & Hofer, 2018).

In the South-Eastern region of Nigeria, poverty is equally severe, though it varies across states. The National Bureau of Statistics (NBS, 2020) reported that Ebonyi State had a poverty rate of 79.8%, while Anambra State had the lowest at 14.8%. On average, the region's poverty headcount stands at 42.44%, with rural areas (52.1%) being disproportionately affected compared to urban centers (18.04%). Poverty in the region is influenced by factors such as education, gender, occupation, and rural-urban location (Onah, Ezeodili & Okwueze, 2024).

Over the years, the Nigerian government has launched various poverty alleviation programmes, including the National Poverty Eradication Programme (NAPEP), National Economic Empowerment and Development Strategies (NEEDS), and the National Social Investment Programmes (NSIP) like N-Power, Home Grown School Feeding Programme and Conditional Cash Transfer. Despite these efforts, most interventions have failed to achieve sustainable poverty reduction, often due to weak implementation, lack of transparency, and limited coverage (Kolawole, 2021).

In Nigeria, several micro-credit programmes have been initiated to support economic activities, particularly in the agricultural sector. One of the key programmes is the Commercial Agriculture Credit Scheme (CACS), launched in 2009 by the Central Bank of Nigeria (CBN) in collaboration with the Federal Ministry of Agriculture and Water Resources. CACS is part of the broader Commercial Agriculture Development Programme (CADP) and was funded through a ₦200 billion bond. The scheme aims to fast-track agricultural development, promote food security, reduce credit costs, and create self-employment. Loans are provided at a maximum interest rate of 9%, with each state government eligible to access up to ₦1 billion for on-lending to farmers and cooperatives (SDCBN, 2018).

Given the significant dependence of the South-East on agriculture and the rising rural poverty in the region, evaluating the impact of the CACS becomes essential. Examining how this micro-credit initiative has influenced food security, income generation, job creation, and poverty reduction in the region will provide insights into its effectiveness and inform future policy directions.

Statement of the Problem

The South-East region of Nigeria (Abia, Anambra, Ebonyi, Enugu, and Imo States) is naturally endowed with fertile land, small crude oil deposits, and human capital. Yet, the region struggles with rising unemployment and food insecurity, largely due to mismanagement, poor healthcare, declining quality of education, increased crime, social instability, and weak political will. Rural poverty is deepening, affecting health, education, and overall living standards. Four in ten South-Easterners live in poverty, with increasing violence and insecurity, ranging from kidnapping and armed robbery to child trafficking and political thuggery (Ejogba, 2019). Despite investments in poverty alleviation, more people are falling into poverty rather than escaping it.

Micro-credit interventions which had been in the core of economic analysis for two or three centuries have re-emerged as significant poverty alleviation strategy. This has happened because the target of sustained capital accumulation, technological progress and economic growth has not been achieved especially in the agricultural, industrial and livestock sectors of developing countries. In sub-Saharan Africa, per capita food production has declined over three decades due to population growth outpacing food supply. Farmers lack access to formal credit because they cannot provide collateral, and banks avoid small loans due to high transaction costs and income unpredictability tied to weather (Buchenrieder, Ngueto & Benjamin, 2019). To address this, the Central Bank of Nigeria and the Federal Ministry of Agriculture introduced the Commercial Agriculture Credit Scheme (CACS) in 2009 to enhance food security, increase agricultural output, create jobs, reduce credit costs, and boost foreign exchange.

Despite CACS's contributions nationally, severe food insecurity and unemployment persist, South-East is not an exception. Most existing studies on micro-credit in Nigeria provide general findings without breaking down results by region or programme. This leaves a gap in understanding how interventions like CACS affect poverty, food security, and employment specifically in the South-East. This study aims to fill that gap by evaluating CACS's delivery mechanisms and regional impact. A targeted analysis like this is essential for crafting more effective, region-specific poverty reduction strategies.

Objectives of the Study

- To evaluate how access to the Commercial Agriculture Credit Scheme (CACS) has enhanced food security in South-East Nigeria.
- To assess the contribution of the Commercial Agriculture Credit Scheme (CACS) to self-employment generation in South-East Nigeria.

Research Questions

- How has access to the Commercial Agriculture Credit Scheme (CACS) enhanced food security in South-East Nigeria?
- In what ways has the Commercial Agriculture Credit Scheme (CACS) contributed to self-employment generation in South-East Nigeria?

Hypotheses

- Access to the Commercial Agriculture Credit Scheme (CACS) has significantly enhanced food security in South-East Nigeria.
- Commercial Agriculture Credit Scheme (CACS) has significantly contributed to self-employment generation in South-East Nigeria.

II. Review of Related Literature

Conceptual Review

Poverty

Poverty, in its simplest form, refers to the inability of individuals to meet the minimum standard of living necessary for survival and dignity. It involves a lack of access to basic needs such as food, shelter, clean water, healthcare, education, and employment. Ribotta (2023) describes poverty not only as material deprivation but also as a social condition that hinders economic, political, and psychological well-being. The debate around poverty includes whether it should be defined strictly by material needs (absolute poverty) or in relation to societal standards (relative poverty), and if it should be measured through income, access to services, or broader indicators of human development.

In the Nigerian context, poverty manifests in various forms shaped by economic, social, cultural, and environmental factors. These include absolute poverty (severe deprivation of basic needs), relative poverty (falling below societal living standards), subjective poverty (individual perception of being poor), and dire poverty (extreme hardship due to environmental or structural issues). Additional types such as urban, subsistence, socio-cultural, and endemic poverty further highlight how poverty is influenced by

location, cultural practices, and chronic underdevelopment. Overall, poverty in Nigeria is a complex, multi-dimensional issue that reflects deep-rooted inequality and systemic challenges.

Poverty Incidence in South-Eastern States of Nigeria

The recently published data indicates that 40.09 percent of Nigerians are poor. Whereas the poverty rate in urban areas is only 18.04 percent, as much as 52.1 percent of rural dwellers are poor. This is according to the Nigerian Living Standards Survey (NLSS) report published by the National Bureau of Statistics (NBS), (2020).

The report also revealed that South-East Nigeria had the fourth most poverty headcount rate and third least across geo-political zones. Across geo-political zones North-Eastern Nigeria had the most poverty average while South Western Nigerian had the least. The average poverty headcount rate by geo-political zone is North Central (42.70 percent), North East (71.86 percent), North West (64.84 percent), South East (42.44 percent), South-South (21.28 percent), and South West (12.12 percent).

Table 2.1: Poverty Headcount Rate (%) for Geo-Political Zones in Nigeria

Geo-Political Zones	Rate (%)
North-East	71.86
North-West	64.84
North-Central	42.70
South-East	42.44
South-South	21.28
South-West	12.12

Source: National Bureau of Statistics (NBS), (2020:12)

Also, the report indicated that the states with higher poverty rates in South-East Geo-Political Zone are Ebonyi state (79.76 percent) and Enugu state (58.13 percent). On the other hand, Anambra state (14.78 percent) and Imo state (28.86 percent) had the least poverty rate in South-East Geo-Political Zone, while Abia state is at the middle with (30.67 percent). The table below presents the poverty headcount rate (%) for the states in South-East Geo-Political Zone of Nigeria.

Table 2.2: Poverty Headcount Rate (%) for the States in South-East Geo-Political Zone

South-Eastern States	Rate (%)
Ebonyi	79.76
Enugu	58.13
Abia	30.67
Imo	28.86
Anambra	14.78

Source: National Bureau of Statistics (NBS) (2020:14) and Adeleke (2021:99)

Historically, the Nigerian economy has been characterized by high inflation and widespread poverty. It may be recalled that the poverty incidence was put at 35 per cent during Nigeria's oil boom decade in 1970-79. But Central Bank of Nigeria (CBN) data indicated that in 2012, the poverty incidence topped 70 per cent. By May 2018 under Buhari, Nigeria sank into the poverty capital of the world and has remained so since then (Central Bank of Nigeria (CBN), 2021).

Indicators of Poverty in South-East Nigeria

Poverty in South-East Nigeria is a multi-headed crisis manifesting in key welfare indicators such as food insecurity, lack of access to clean water, bad health, high unemployment, insecurity, and widening income gaps. Food shortages are driven by erratic agricultural output, inadequate storage facilities, and steeply rising food prices, which trigger widespread malnutrition. Individuals still do not have access to clean drinking water in urban and rural areas, and individuals have to walk far or wait for long hours to obtain it (Adenike, 2021). The underfinanced health system, plus out-of-pocket payment systems, puts the poor out of reach and keeps infant and child mortality rates high. Over-employment and under-employment leave a majority of people, especially youths, incomeless, pushing them to informal jobs or crime. Insecurity, usually built on economic desperation, undermines progress, with a growing gap in incomes having wealth concentrated in the hands of a privileged few. This further entrenches the poverty of the majority (Muddassir, 2025).

Food Security

Food security refers to the condition in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs for an active and healthy life (FAO, 2021). Current literature highlights that food security is increasingly challenged by factors such as climate change, conflict, economic instability, and global supply chain disruptions (World Bank, 2024). Addressing these challenges requires integrated approaches combining sustainable agricultural practices, social protection programs, and resilient food systems to ensure equitable food access and reduce hunger worldwide.

Self-employment

Self-employment refers to working for oneself rather than working for a specific employer who pays them a salary. Self-employed individuals often act as independent contractors by collaborating with other businesses. It refers to a work arrangement where an individual operates their own business or profession independently, rather than working as an employee for someone else. This means they are responsible for managing all aspects of their business, including securing clients, handling finances, and complying with tax obligations. Self-employed individuals have the flexibility to set their own hours and work conditions but also bear the risks and rewards of their enterprise (Kuko, Msuya & Seni, 2025). Self-employment is common in a variety of occupations, but one common theme is that self-employed individuals tend to be highly skilled in a specific area. Examples of occupations in which self-employment is common include various jobs within the skilled trades, writers, freelancers, artists, agro-based enterprises, lawyers, accountants, financial services professionals, and investors (Efido & Ogbu, 2020).

Xeriscaping Practices

Xeriscaping in agriculture emphasizes water efficiency through practices like selecting drought-tolerant or native plants, improving soils, applying mulches, and using precise irrigation. For example, Boussetot, Koski & Skinner (2021) highlight how xeriscaping strategies can significantly reduce water use while maintaining agricultural productivity, particularly in arid regions. A study on super hydrophobic sand mulches (SHS) demonstrated its ability to reduce soil evaporation and boost tomato, barley, and wheat yields under saline irrigation (Gallo, Al-Hemairy & Mishra, 2021). Moritz, Danilo, Miguel & Fabio (2025) noted that complementary research on organic or plastic mulches showed yield and water-use efficiency in maize and wheat across different regions. Beyond mulching, United States Department of Agriculture (USDA)-endorsed agronomic practices include compost amendments to improve soil water retention, drip irrigation paired with moisture sensors, and planting drought-resilient crops like agave or native grasses. Collectively, these techniques form a scientifically grounded framework for maximizing yield and water conservation in dryland and sandy soil agriculture.

Background Information on Commercial Agriculture Credit Scheme (CACS)

Prior to the establishment of the Commercial Agriculture Credit Scheme (CACS), lending by Deposit Money Banks (DMBs) to the agricultural sector was minimal, averaging just 2.08% of total sectoral loan distribution between 2005 and 2009, and only 3.0% in more recent years. Similarly, budgetary allocations to the agriculture sector during the same period averaged 4.63%, despite the sector contributing an average of 33.43% to Nigeria's GDP. This funding gap significantly constrained the sector's growth, limiting its ability to contribute optimally to output growth, employment generation, wealth creation, and value chain development.

In response, the Federal Government, through the Central Bank of Nigeria (CBN) and in collaboration with the Federal Ministry of Agriculture and Water Resources, launched the CACS in 2009 as a sub-component of the Commercial Agriculture Development Programme (CADP). The Scheme targeted commercial agricultural enterprises with minimum assets of N100 million (with plans to grow to N250 million in three years), and non-integrated agro-enterprises with at least N50 million in assets (planning to grow to N150 million in three years), covering a wide range of agro-industrial activities including production, processing, marketing, and input supply. It was funded through a N200 billion, seven-year bond raised by the Debt Management Office (DMO) and provided through participating banks at a maximum interest rate of 9%, with the CBN subsidizing the interest rate differential and covering administrative expenses. State Governments were also allowed to borrow up to N1.0 billion for on-lending to farmers' cooperatives, provided the interventions aligned with CACS objectives (SDCBN, 2018). The general objective of the CACS was poverty alleviation, with specific aims to fast-track agricultural development through single-digit credit provision, enhance food security by boosting supply and reducing prices, create self- and paid employment, reduce agricultural credit costs to unlock sector potential, increase national output, diversify Nigeria's revenue base, boost foreign exchange earnings, and ensure sustainable input supply for manufacturing. From inception to December 2020, the Scheme disbursed a total of N807.362 billion to 487 projects, including N327.362 billion to 436 private sector projects and N80.0 billion to 51 State Government projects. Releases from the CACS Receivables Account totaled N199.831 billion, while releases from the CACS Repayment Account stood at N207.531 billion. A cumulative N225.009 billion had been repaid into the Repayment Account in respect of 445 projects, out of which 109 projects were fully repaid by the end of 2020, underscoring the need to assess the Scheme's overall impact on the sector (SDCBN, 2018).

Theoretical Framework

The study was grounded on Sustainable Livelihoods Framework (SLF) and Credit Rationing Theory to capture both the development-oriented and financial access dimensions necessary to fully evaluate the impact of CACS in enhancing rural livelihoods in South-East Nigeria.

Sustainable Livelihoods Framework (SLF)

Sustainable Livelihoods Framework (SLF) was prominently developed by the Institute for Development Studies (IDS) at the University of Sussex Brighton and the British Department for International Development (DFID) in the late 1990s. The Sustainable Livelihoods Framework (SLF) focuses on how individuals and communities use available resources (natural, financial, human, social, and physical capital) to achieve sustainable outcomes such as income generation, food security, and resilience to shocks. It emphasizes the role of institutions, policies, and access to assets in improving rural livelihoods (Scoones, Leach & Newell, 2022). This theory is particularly relevant because it helps assess how access to credit (financial capital through CACS) and environmentally sustainable practices (natural capital via xeriscaping) enhance farmers' ability to secure livelihoods, generate self-employment, and ensure long-term food security. It also explains how supportive policies (like CACS) help reduce poverty in agrarian communities.

Credit Rationing Theory

Credit Rationing Theory was founded by Joseph E. Stiglitz and Andrew Weiss in their 1981 paper in the American Economic Review. Their work is a seminal contribution to understanding credit markets, particularly when there is imperfect information between lenders and borrowers. Credit Rationing Theory explains the behaviour of financial institutions when limit the amount of credit offered to borrowers, not necessarily due to interest rates, but due to risk and imperfect information. It highlights how some creditworthy borrowers may still be excluded from loan access due to perceived risks or lack of collateral (Afolabi & Olayemi, 2021). This theory is vital for understanding the constraints and challenges farmers face in accessing CACS. It explains why, despite the existence of the scheme, not all farmers benefit equally. By applying this theory, the study can investigate how credit access affects participation, adoption of innovative techniques like xeriscaping, and ultimately the potential for self-employment and food security.

III. Research Method

This study adopts a mixed-methods approach combining both quantitative and qualitative research methods to evaluate the impact of the Commercial Agriculture Credit Scheme (CACS) on food security and self-employment in South-East Nigeria. The study area encompasses the five states in South-East Nigeria: Abia, Anambra, Ebonyi, Enugu, and Imo. The quantitative aspect involves the use of structured questionnaires administered to a purposively selected sample of CACS beneficiaries, including commercial farmers, agro-entrepreneurs, and cooperative societies. The data collected assessed variables such as credit access, crop yield, income levels, employment status, and the adoption of xeriscaping practices like water-efficient irrigation, mulching, and drought-resistant crops. A purposive random sampling technique was used to select high CACS participants and beneficiaries for the survey. A total of three hundred and eighty-five (385) copies of the questionnaire were properly completed and were used for the analysis. Statistical Package for the Social Sciences (SPSS) version 28 was used for descriptive and inferential analysis. Descriptive statistics, including frequencies, percentages, and mean scores were used to present respondents' perceptions in a Likert scale format: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD). Hypotheses were tested using Simple Linear Regression analysis to assess the significance of the relationships between the independent variable (CACS) and the dependent variables (food security and self-employment generation).

The qualitative component used secondary data and in-depth interviews with key stakeholders including agricultural extension officers, local government officials, organisers of CACS and selected farmers. These interviews helped uncover vital insights into how CACS has influenced farming practices, employment creation, and the practical use of xeriscaping for environmental sustainability. Thematic analysis was used to analyze the qualitative data, focusing on objectives of the study.

IV. Results and Discussion

In this section, the results of data collected are presented and analysed according to the research questions using frequency, percentage, and mean score and any item with a mean of 3.00 or above was agreed while any item with a mean score below 3.00 was disagreed. The hypotheses were also tested using Simple Linear Regression analysis.

Research Question One

How has access to the Commercial Agriculture Credit Scheme (CACS) enhanced food security in South-East Nigeria?

Table 1: Mean score on how access to the Commercial Agriculture Credit Scheme (CACS) has enhanced food security in South-East Nigeria

S/N	Items	SA 5	A 4	U 3	D 2	SD 1	Total	Mean	Dec
1	Most CACS beneficiaries have accessed funding more than once through the programme	224 1120 58%	96 384 25%	10 30 3%	20 40 5%	35 35 9%	385 1609 100%	4.2	Agree

2	That the primary use of the CACS loan include purchase of seeds/fertilizers, land expansion, equipment or machinery, water-efficient irrigation systems, hiring labour	201 1005 52%	117 468 30%	20 60 5%	20 40 5%	27 27 7%	385 1600 100%	4.2	Agree
3	Since receiving CACS loan my household food availability improved significantly	212 1060 55%	103 412 27%	15 45 4%	15 30 4%	40 40 10%	385 1587 100%	4.1	Agree
4	That no adults in your household ever not eat two square meals a day because there was no enough food since you benefited from CACS	299 1495 78%	55 220 14%	5 15 1%	10 20 3%	16 16 4%	385 1766 100%	4.6	Agree
5	With access to CACS recipients were able to adopt xeriscaping practices like water-efficient irrigation, mulching, and drought-resistant crops	218 1090 57%	122 488 31%	10 30 3%	18 36 5%	17 17 4%	385 1661 100%	4.3	Agree
6	That access to CACS provided farmers with access to high quality inputs that improves food production in South-East	207 1035 54%	94 376 24%	20 60 5%	12 24 3%	52 52 14%	385 1547 100%	4.0	Agree
7	That access to CACS has improved the value and growth of food production of beneficiaries in your state	211 1055 55%	109 436 28%	15 45 4%	35 70 9%	15 15 4%	385 1621 100%	4.2	Agree
Total average mean Score								30/7=4.2	

Source: Survey Report, 2025

The analyses presented in Table 1 above shows that mean scores of all the items are above the cutoff point of 3.00 indicating agree. This shows that all the items are how access to the Commercial Agriculture Credit Scheme (CACS) enhanced food security in South-East Nigeria. The overall average mean score of 4.2 is a strong indication that the items are confirmation that access to the Commercial Agriculture Credit Scheme (CACS) significantly enhanced food security in South-East Nigeria.

Test of Hypothesis One

Access to the Commercial Agriculture Credit Scheme (CACS) has significantly enhanced food security in South-East Nigeria.

Table 2: Coefficients Summary for the Regression Model

Variables	Coefficient (B)	Std. Error	t-value	p-value
Food Security	3.235	0.0983	32.926	0.000
Access to CACS	0.598	0.068	8.738	0.000

The constant ($B=3.235$, $p<0.05$, $B = 3.235$, $p < 0.05$, $B=3.235$, $p<0.05$) represents the baseline level of food security when access to CACS is zero. This value indicates the foundational level of food security independent of access to CACS funding. The coefficient for access to CACS ($B=0.598$, $t=8.738$, $p<0.05$, $B = 0.598$, $t = 8.738$, $p < 0.05$, $B=0.598$, $t=8.738$, $p<0.05$) demonstrates a strong and statistically significant positive effect on food security. For every one-point improvement in access to CACS funding, food security improves by 0.598 units, holding other factors constant. The analysis therefore supports our alternate hypothesis number one which claims that access to the Commercial Agriculture Credit Scheme (CACS) has significantly enhanced food security in South-East Nigeria.

Research Question Two

In what ways has the Commercial Agriculture Credit Scheme (CACS) contributed to self-employment generation in South-East Nigeria?

Table 3: Mean Score on ways CACS has contributed to self-employment generation in South-East Nigeria

S/N	Items	SA 5	A 4	U 3	D 2	SD 1	Total	Mean	Dec
1	CACS funding enabled me and many others I know to start our own agricultural business	210 1050 55%	105 420 27%	10 30 3%	20 40 5%	40 40 10%	385 1580 100%	4.1	Agree
2	Credit received through CACS helped me expand my business and employ others	190 950 49%	90 360 23%	20 60 5%	20 40 5%	65 65 18%	385 1475 100%	3.8	Agree
3	CACS provided me with access to affordable credit at the right time for business development	212 1060 55%	103 412 27%	15 45 4%	15 30 4%	40 40 10%	385 1587 100%	4.1	Agree
4	The conditions for accessing CACS funds were favorable for starting self-employment ventures	299 1495 78%	55 220 14%	5 15 1%	10 20 3%	16 16 4%	385 1766 100%	4.6	Agree
5	The CACS loan encouraged my transition from job-seeking to job-creation through agriculture	208 1040 54%	102 408 26%	10 30 3%	18 36 5%	47 47 12%	385 1561 100%	4.1	Agree
6	The training or guidance that accompanied the CACS loan improved my entrepreneurial skills	197 985 51%	91 364 24%	20 60 5%	12 24 3%	65 65 17%	385 1498 100%	3.9	Agree
7	The scheme has led to a noticeable rise in self-employment opportunities in South-East Nigeria	215 1075 56%	105 420 27%	15 45 4%	10 20 3%	40 40 10%	385 1600 100%	4.2	Agree
Total average mean Score								29/7=4.1	

Source: Survey Report, 2025

The statistical analysis in Table 2 indicates that all the items have mean scores above the cutoff point of 3.00 indicating that the respondents agree that all the questionnaire items are ways the Commercial Agriculture Credit Scheme (CACS) has contributed to the generation of self-employment in South-East Nigeria. The overall average mean score of 4.1 > 3.00 (Likert mean) which indicated base on decision rule that Commercial Agriculture Credit Scheme (CACS) has significantly contributed to the generation of self-employment in South-East Nigeria.

Test of Hypothesis Two

Commercial Agriculture Credit Scheme (CACS) has significantly contributed to self-employment generation in South-East Nigeria

Table 4: Coefficients Summary for the Regression Model

Variables	Coefficient (B)	Std. Error	t-value	p-value
self-employment	2.107	0.0784	32.926	0.000
Access to CACS	0.676	0.068	12.010	0.000

The constant (B=2.107, $p < 0.05$) represents the baseline level of self-employment when CACS was not in existence. This value indicates the foundational level of self-employment independent of CACS funding. The coefficient for CACS (B=0.676, $t=12.019$, $p < 0.05$) demonstrates a strong and statistically significant positive contribution to self-employment generation. For every one-level improvement in access to CACS

funding, self-employment improves by 0.676 level, holding other factors constant. The analysis therefore affirms our alternative hypothesis number two which states that Commercial Agriculture Credit Scheme (CACS) has significantly contributed to self-employment generation in South-East Nigeria.

V. Discussion of Findings

The results of the first hypothesis revealed that access to the Commercial Agriculture Credit Scheme (CACS) has significantly enhanced food security in South-East Nigeria. Based on the outcome of the analysis presented on research question one, the following findings indicated how access to the CACS funding enhanced food security in South-East Nigeria. These include among other things that most CACS beneficiaries have accessed funding more than once through the programme, the primary use of the CACS loan include purchase of seeds/fertilizers, land expansion, equipment or machinery, water-efficient irrigation systems, hiring labour, since receiving CACS loan household food availability improved significantly, no adults in CACS beneficiaries household ever not eat two square meals a day because there was no enough food, with access to CACS recipients were able to adopt xeriscaping practices like water-efficient irrigation, mulching, and drought-resistant crops, access to CACS provided farmers with access to high quality inputs that improves food production in South-East, and improved the value and growth of food production of beneficiaries in your state.

Growth in volume of agriculture crop production stayed positive/stable and averaged 27.04% between 2011 and 2020, and average growth of 24.11% was recorded in aggregate income of CACS benefiting firms involved in crop production. In 2011 and 2012, the growth in volume of crop production of the CACS benefiting firms was significantly low because of the devastating effects of the 2011 and 2012 flooding of farm lands and communities during which the agriculture sector recorded an estimated loss of ₦481 billion in produce and physical/durable assets across the country (National Bureau of Statistics, 2013). The growth in volume of crop production and in income of firms that benefitted from CACS facility remained more robust over the period under study except in 2020 when it recorded negative growth which was attributed to the 2020 Coronavirus lockdown.

Overall, fish production was boosted by the scheme within the period under study, recording a continuous growth in volume/quantity of fish produced by beneficiaries of CACS. Livestock production is one of the important subsectors of the national agriculture. Livestock production ensures food security through supply of protein and income from export of hides and skin. Between 2011 and 2020, growth in livestock output volume averaged 12.0% as against the average growth of 65.33% in income of CACS beneficiaries. Very robust growth was recorded in some years like 2013, 2018 and 2019 while 2020 indicated declining growth attributed to the 2020 Coronavirus lockdown. The contribution of CACS benefiting firms towards food security in South-East Nigeria is very pronounced in agricultural processing and trading. The volume of production of firms that benefitted from the scheme grew at an average of 29.02% between 2011 and 2020 as against the average of 8.52% recorded in income of CACS beneficiaries in agricultural processing and trading. There was steady growth within the period under study though at a low rate except 2020 that recorded a decline growth. Growth in food and beverages manufacturing averaged 10.91% between 2011 and 2022, but the sales of CACS beneficiaries in the manufacturing of food and beverages grew by an average of 84.26% over the same period. The substantial growth difference of 73.35 percentage points is an evidence of the contribution of the beneficiaries of the CACS funds towards food security in South-East.

The dominant food related activities of the beneficiaries of CACS loans in South-East Nigeria are presented in figure 1 below.

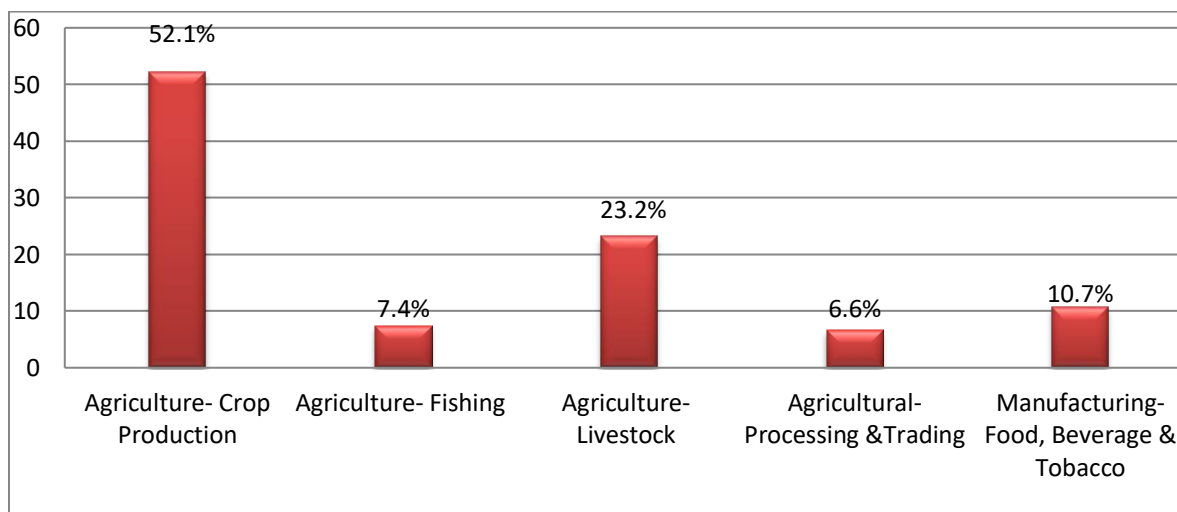


Figure 1: Bar Chart Representing the Dominant Food Production Activities of CACS Beneficiaries in South-East

However, growth in the combined production (agriculture and manufacturing) of CACS was more robust than growth recorded in real gross domestic product (GDP) and has been stable between 2011 and 2020, while growth in income of combined CACS benefiting firms also recorded stable growth except in 2020. The recent concerted effort towards the production of cereals under

different CACS benefiting firms in South-East is a completely new idea and may have being showing up in national agriculture manufacturing production, but not indicated at the regional level. The growth in volume of production and the income of the dominant food production activities of CACS beneficiaries is a clear indication that provision of funds to these firms may have sustained expansion in their productive capacities, and is a substantial contribution towards food security in the South-East within the period under study (SDCBN, 2018).

The results of the second hypothesis revealed that Commercial Agriculture Credit Scheme (CACS) has significantly contributed to self-employment generation in South-East Nigeria. Based on the outcome of the analysis of primary data presented on research question two, the following findings indicated that CACS has recorded fair outcome in generating self-employment that produced paid employment. These include among others that CACS funding enabled many beneficiaries to start their own agricultural business, helped many expand their business and employ others, provided beneficiaries with access to affordable credit at the right time for business development, conditions for accessing CACS funds were favorable for starting self-employment ventures, encouraged beneficiaries transition from job-seeking to job-creation through agriculture, and training or guidance that accompanied the CACS loan improved beneficiaries entrepreneurial skills.

The figure 2 shows the forms of expansion in operations activities by existing firms that benefited from CACS loans in South-East.

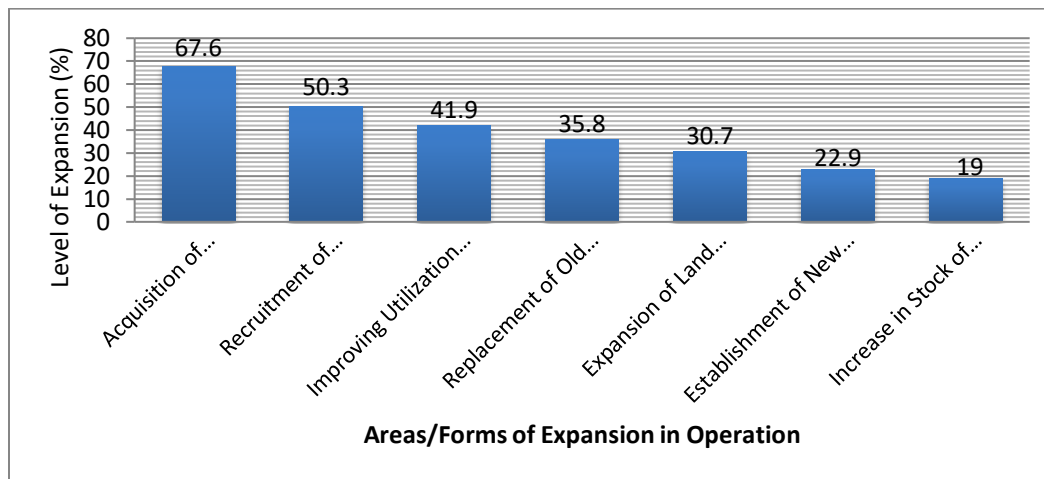


Figure 2: Bar Chart Representing the Areas of Expansion in operation by Beneficiaries of CACS Funds

Most (67.6%) of firms acquired new plants or additional equipment/machinery, while other forms of expansion included; recruitment of additional employees (50.3%), improving utilization of installed capacity(41.9%), replacement of old equipment (35.8%), expansion of land under cultivation(30.7%), establishment of new outlets (22.9), increase in stock of agrochemical/supplies (19.0). There is therefore strong indication that the expansion in operational activities of the old/existing firms beneficiaries of CACS loan generated paid employment as recruitment of additional employees occupied the second position in other of ranking (50.3%) as shown in figure 1 above.

The aggregate increase in employment size of firms attributed to the funds received by 166 beneficiary firms in South-East between 2011 and 2020 is presented in figure 3. The fluctuation in the employment generation across the 10 years under review is clearly revealed in the bar chart for clarity purpose.



Figure 3: Bar Chart Representing the Aggregate Number of Employment Provided by 166 Beneficiary Firms from 2011-2020

The scheme has led to a noticeable rise in self-employment opportunities in South-East Nigeria. One of the objectives of the CACS is to “generate self-employment that can produce paid employment” (SDCBN, 2018). However, no targets for the number of new jobs were specified, and evaluation attempted to enumerate the number of new jobs as the nominal increases in staffing positions of the beneficiary firms. As a group, the 166 firms that provided employment records showed continuous increases in the number of employees between 2011 and 2020, growing from 443 employees in 2011 to 16,864 in 2020 in South-East (Figure 3). This is therefore a strong indication that the expansion in operational activities of the old/existing firms’ beneficiaries of CACS loan generated paid employment as recruitment of additional employees occupied the second position in other of ranking (50.3%) as shown in figure 3 above.

VI. Conclusion and Recommendations

It is the conclusion of this study that the Commercial Agriculture Credit Scheme (CACS) has significantly contributed to poverty alleviation in South-East Nigeria by enhancing food security and generating self-employment through its support for various agricultural activities. Beneficiaries engaged in various food production activities, largely crop production, livestock, fish farming, manufacturing of food and beverage, and processing and trading of agricultural produce among other activities. These food production activities recorded relatively stable growth in volume of production and income of beneficiaries highlighting the role of access to CACS funding in improving food security and livelihoods. In addition, the CACS significantly contributed in generating self-employment by facilitating the establishment and expansion of agro-based enterprises. There are a number of new firms established and old firms that expanded as a result of loan from CACS leading to the beneficiaries hiring more workers. These nominal increases in staffing positions of the beneficiaries that accessed CACS loans each year generated commendable net increases in employment size and is a clear indication of its significant contribution to poverty alleviation and the need to strengthen and continue the scheme.

Based on the findings which demonstrate the significant role of the Commercial Agriculture Credit Scheme (CACS) in enhancing food security, promoting self-employment, and alleviating poverty in South-East Nigeria, the following recommendations are made to strengthen and sustain the impact of the scheme.

The Commercial Agriculture Credit Scheme (CACS) should be supported by government at all levels, development organisations, agricultural cooperatives and individuals among others to aid small scale farmers in agricultural food production. This will help to increase the CACS coverage to reach more small and medium-scale farmers and agro-entrepreneurs.

There is need to streamline loan approval and disbursement processes to ensure timely access to funds. Agriculture is rain fed in Nigeria and production activities are seasonal. For an effective yearly tenured facility, correct timing of disbursement is a key. All efforts should be made to ensure that crop producers receive funding at appropriate cropping periods

There is need to implement robust monitoring systems to track loan utilization and impact on productivity and employment. A number of beneficiaries and benefiting firms in South-East like in other regions were not involved in any active economic activity, and such beneficiaries refused providing information even to the organizing and management body. This calls for the need to monitor closely all beneficiaries through periodic collection of data. This study is therefore recommending for active state government collaboration at least for close monitoring and impact assessment for annual reporting by all firms under the scheme through the state government.

Lastly, government should also improve the CACS by providing agro-based training, increased awareness of xeriscaping techniques, and support services to beneficiaries for effective agro-based entrepreneurship, business development, and farm management, including sustainable practices such as xeriscaping approaches like drought-tolerant plant selection, efficient irrigation, soil enhancement, mulching, and water-smart landscape design.

References

1. Adeleke, R., Alabede, O., Joel, M. & Ashibuogwu, E. (2022). Exploring the geographical variations and influencing factors of poverty in Nigeria, *Regional Science Policy & Practice*, 15(6), 1182–1197. <https://doi.org/10.1111/rsp3.12621>
2. Adenike, E.T. (2021). Poverty, unemployment and insecurity challenges in Nigeria. *Tanzanian Economic Review*, 11(1), 115–136 <https://doi.org/10.56279/ter.v11i1.75>
3. Afolabi, M. O., & Olayemi, S. O. (2021). Agricultural Financing and Credit Constraints among Smallholder Farmers in Nigeria. *Journal of Development Finance*, 12(1), 45–58.
4. Aminu, Y.U. & Alhassan, M.I. (2021). Assessing the resilience, strength, and challenges of the Nigerian economy. *Nigeria Deposit Insurance Corporation, (NDIC) Quarterly Journal* 36(3&4), 73-85. <https://ndic.gov.ng/wp-content/uploads/2023/05/NDIC-Quarterly-Vol-36-No-34-2021-Article-Assessing-the-Resilience-Strength-and-Challenges-of-the-Nigerian-Economy-In-Q3-And-Q4-2021.pdf>
5. Bousselot, J. M., Koski, R. D., & Skinner, M. M. (2021). Xeriscaping: Sustainable landscaping for dry climates. *Journal of Environmental Horticulture*, 39(2), 50-58. <https://doi.org/10.24266/0738-2898-39.2.50>
6. Buchenrieder, G., Nguefo, G.J., & Benjamin, E.O. (2019). Poverty alleviation through microcredit in Sub-Saharan Africa revisited: New evidence from a Cameroonian village bank, the Mutuelle Communautaire de Croissance. *Agricultural Finance Review*, 79(3), 386-407. <https://doi.org/10.1108/AFR-03-2018-0019>

7. Central Bank of Nigeria (2021). Statistical Bulletin Explanatory Notes, Abuja: Central Bank of Nigeria Press <https://www.cbn.gov.ng>
8. Chepkwei, A.K. (2020). Growth of microfinance industry: A critical global review. International Journal of Research Publication, 51(1), 172-183. <https://ijrp.org/filePermission/fileDownload/4/938b31e2d1386974d73d3e8f76522b8b/2>
9. Efido, B.S.O. & Ogbu, C.I. (2020). Entrepreneurship for self-employment in the face of unemployment and white collar job among Nigerian graduates, International Journal of Youth Empowerment and Entrepreneurship Development, 1(2), 147-158 <https://doi.org/10.13140/IJYEED.08.2020.147.158>
10. Ejogba, O.A (2019). Poverty, unemployment and national insecurity in Nigeria's fourth republic. International Journal of Legal Studies (IJOLS), 6(2), 89-98 <https://doi.org/10.5604/01.3001.0013.7410>
11. Food and Agriculture Organization. (2021). The state of food security and nutrition in the world 2021: Transforming food systems for food security, improved nutrition and affordable healthy diets for all. FAO. <https://doi.org/10.4060/cb4474en>
12. Gallo, A., Al-Hemairy, M. & Mishra, H. (2021). Super hydrophobic sand mulches reduce soil evaporation and increase agricultural productivity under arid conditions. <https://arxiv.org/abs/2102.00495>
13. Kharas, H., Hamel, K., & Hofer, M. (2018, June 19). The start of a new poverty narrative. Brookings Institution. <https://www.brookings.edu/articles/the-start-of-a-new-poverty-narrative/>
14. Kolawole, R.J. (2021). Evaluation of poverty alleviation programmes in Nigeria: The demand driven approach perspective, International Journal of Development and Management Review (INJODEMAR), 16(1), 161-177 <https://www.ajol.info/index.php/ijdmr/article/view/208147/196195>
15. Kuko, A.K., Msuya, O.W. & Seni, A.J. (2025). Making the higher education graduates employability real: curriculum analysis of self-employment enterprise skills development, Educational Dimension, <http://dx.doi.org/10.55056/ed.815>
16. Moritz, C., Danilo, S., Miguel, A. & Fabio, G. (2025). Spotlight on agro ecological cropping practices to improve the resilience of farming systems: a qualitative review of meta-analytic studies, Journal of Agro-Ecological Cropping Systems, 7 <https://doi.org/10.3389/fagro.2025.1495846>
17. Muddassir, A.G. (2025). The Impact of Unemployment on Income Inequality in Nigeria, Journal of Arts and Sociological Research (JASR), 7(6), 1-18. <http://dx.doi.org/10.70382/ajars.v7i6.007>
18. Mustapha, H. (2014). Poverty alleviation programs in Nigeria: Issues and challenges, International Journal of Development Research, 4(3), 717-720 <https://www.journalijdr.com/sites/default/files/issue-pdf/1529.pdf>
19. National Bureau of Statistics (NBS) (2020). 2019 Poverty and Inequality in Nigeria: Executive Summary, Abuja: National Bureau of Statistics Press <https://nigerianstat.gov.ng>
20. Obadire, A.M. (2022). Analysis of the impact of microfinancing on poverty alleviation in Nigeria, Journal of Financial Risk Management, 11, 648-657. <https://doi.org/10.4236/jfrm.2022.113031>
21. Onah, E.V., Ezeodili, W.O. & Okwueze, F.N. (2024). Interrogating Sustainable Development Goal 1 and poverty in South East Nigeria: Is there any development to be sustained? NG-Journal of Social Development, 13(2), 160-183 <https://dx.doi.org/10.4314/ngjsd.v13i2.11>
22. Ribotta, S. (2023). Poverty as a matter of justice. The Age of Human Rights Journal, 20, 1-13 <http://dx.doi.org/10.17561/tahrj.v20.7327>
23. Scoones, I., Leach, M. & Newell, P. (2022). The Politics of Green Transformations. Routledge. <http://dx.doi.org/10.4324/9781315747378>
24. Statistics Department Central Bank of Nigeria (SDCBN) (2018). Commercial Agriculture Credit Scheme (CACS): Evaluation and Impact Assessment Report https://www.cbn.gov.ng/out/2018/std/cacs%20evaluation%20and%20impact%20assessment%20report_compressed.pdf
25. U.S. Bureau of Labor Statistics. (2024, June 20). Nonagricultural self-employment rate at 5.7 percent in fourth quarter 2023. https://www.bls.gov/opub/ted/2024/nonagricultural-self-employment-rate-at-5-7-percent-in-fourth-quarter-2023.htm?utm_source=chatgpt.com
26. World Bank. (2024). Addressing food insecurity in a changing world: Policy priorities and global actions. <https://www.worldbank.org/en/topic/agriculture/publication/addressing-food-insecurity>