

Micro-Pension Schemes, Education and Economic Security: A Statistical Analysis of Social Protection and Sustainable Livelihoods in Nigeria

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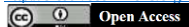
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ABSTRACT

Micro-pension schemes have emerged as an important instrument for extending social protection to workers whose livelihoods fall outside conventional employer-based pension arrangements. In Nigeria, the significance of such schemes is heightened by the large size of the informal economy, irregular incomes, limited retirement protection and persistent household economic vulnerability. This study examines the relationship between micro-pension participation, education, economic security and sustainable livelihoods in Nigeria, using statistical evidence from national and international datasets and pension-industry reports. The study adopts a quantitative secondary-data design and employs descriptive statistics, trend analysis, percentage changes, ratios and comparative analysis. Evidence from the International Labour Organization, World Bank, EFINA, National Bureau of Statistics, Federal Ministry of Education and National Pension Commission is complemented by comparative evidence from the United Kingdom, Germany, Kenya, Ghana and South Africa. Findings show that pension participation is substantially higher in countries with stronger institutional arrangements and financial-education mechanisms, while coverage of informal workers remains a major challenge in Sub-Saharan Africa. In Nigeria, Micro-Pension participation increased from 76,588 contributors in 2022 to 215,914 registered participants by September 2025, representing an increase of approximately 181.9%. However, the scale of participation remains small relative to the informal workforce. The study argues that education, particularly financial literacy and pension awareness, should be treated as an economic capability that can improve long-term saving behaviour, retirement preparedness and livelihood resilience. It recommends stronger integration of financial education, pension inclusion, digital financial services and social-protection policy.

Introduction

Background to the Study

Social protection has become increasingly important in economic policy because households and workers face a range of life-cycle, labour-market and economic risks that cannot always be managed through individual income alone. At the global level, social protection systems provide mechanisms for reducing vulnerability to income loss, old age, unemployment, disability and other shocks. The International Labour Organization (ILO) reports that 52.4% of the world's population was effectively covered by at least one social protection benefit in 2023, up from 42.8% in 2015, but approximately 3.8 billion people remained entirely unprotected. The coverage gap is particularly significant in lower-income economies, where limited fiscal capacity, labour-market informality and weak contributory systems constrain access to social insurance (International Labour Organization [ILO], 2024).

Old-age protection constitutes an important component of this global social-protection challenge. Globally, 58.5% of the labour force actively contributed to a pension scheme in 2023, whereas effective pension contribution coverage in Sub-Saharan Africa was only 9.7%. Although 79.6% of persons above retirement age globally received some form of pension, the corresponding proportion in Sub-Saharan

Africa was only 22.3% (ILO, 2024). These figures demonstrate that pension exclusion is not simply a retirement issue; it represents a broader economic-security problem because inadequate retirement protection can transfer financial responsibility from formal institutions to households, relatives and communities.

The economic significance of pension saving is also connected to the life-cycle allocation of income. Individuals generally earn, save and consume differently across stages of their lives, making mechanisms that facilitate long-term saving important for smoothing consumption and maintaining economic welfare after retirement (Modigliani & Brumberg, 1954). Pension systems therefore perform both an insurance and savings function, allowing part of current income to be transformed into future economic security. For workers with stable formal employment, this process can be supported by mandatory employer-based arrangements. For self-employed and informal workers, however, the absence of an employer contribution and irregular income can make long-term retirement saving considerably more difficult (Holzmann & Jørgensen, 2000; ILO, 2024).

The experience of European countries demonstrates the importance of institutional design, automatic participation and financial capability. In the United Kingdom, approximately 82% of employees were members of workplace pension schemes in 2024, while 89% of eligible employees in Great Britain were saving through workplace pensions. The expansion followed the introduction of automatic enrolment in 2012, demonstrating how institutional design can influence pension participation (Office for National Statistics [ONS], 2026; Department for Work and Pensions [DWP], 2025).

The British experience nevertheless shows that participation does not automatically eliminate inequalities in retirement preparedness. Pension participation varies by earnings and employer size, and only about 59% of eligible employees working for private-sector micro-employers with fewer than five employees were saving into workplace pensions in 2024 (DWP, 2025). This suggests that the economic characteristics of employment continue to influence pension inclusion even within a relatively mature pension system.

Germany provides another important illustration of the relationship between education, financial literacy and retirement planning. OECD evidence indicates that 88% of adults in Germany actively save, but only 60% set long-term financial goals. Approximately 54% planned to draw on private or occupational pensions, while only 52% of working-age adults felt confident or very confident that they had planned adequately for retirement. More importantly, adults with high financial literacy were 70% more likely to hold pension products and 120% more likely to hold investment products after accounting for socio-demographic characteristics (Organisation for Economic Co-operation and Development [OECD], 2024). The German evidence is particularly relevant to the present study because it demonstrates that education should not be understood only in terms of formal years of schooling. Financial literacy can constitute an economic capability that enables individuals to understand saving, investment, risk and retirement decisions. OECD evidence further shows that adults with high financial literacy in Germany were 80% more likely to feel confident about retirement planning and 70% more likely to hold pension products, after controlling for socio-demographic characteristics (OECD, 2024).

The situation is substantially different in Sub-Saharan Africa, where the dominance of informal employment creates structural difficulties for contributory social insurance. ILO estimates indicate that only 9.7% of the labour force in Sub-Saharan Africa actively contributed to pension schemes in 2023, compared with much higher levels in Europe and other high-coverage regions (ILO, 2024). Countries such as Kenya, Ghana and South Africa illustrate different approaches to extending retirement protection. In Kenya, the informal sector accounts for more than 85% of the workforce, and the country's 2024 National Retirement Benefits Policy specifically identified the expansion of pension coverage among informal workers as a major policy objective. The Kenya National Entrepreneurs Savings Trust

was established to provide a savings and pension mechanism adapted to informal-sector workers (Retirement Benefits Authority [RBA], 2024). Kenya's pension industry also demonstrates the economic importance of pension funds as institutional savings. Pension assets reached approximately KSh2.23 trillion in December 2024, representing a 17.5% increase from KSh1.84 trillion in 2023, while pension-scheme membership reached 7.53 million excluding occupational schemes (RBA, 2025). Nevertheless, the Authority continues to identify informal workers as a major coverage gap, demonstrating that growth in pension assets does not necessarily translate into universal pension inclusion.

Ghana presents a similar challenge. Although its formal pension system has relatively substantial participation, informal-sector coverage remains considerably lower. In 2024, Ghana's Social Security and National Insurance Trust reported that approximately 60% of 3.2 million formal-sector workers were covered, compared with only 3.2% of an estimated 3.1 million qualified informal-sector workers (Ghana News Agency, 2024). Earlier national reporting had estimated that 6% of informal-sector workers were enrolled in third-tier pension arrangements in 2023, demonstrating both the scale of the gap and the importance of targeted pension education and outreach (Government of Ghana, 2024).

South Africa provides another useful example because pension policy has increasingly addressed the tension between retirement preservation and short-term household liquidity. The country's two-pot retirement system, introduced from September 2024, allows a portion of retirement savings to be accessed before retirement while preserving the larger retirement component for old age. The reform was designed partly to address household financial distress without requiring workers to terminate employment or cash out their entire retirement savings (Government of South Africa, 2024).

These international experiences suggest that pension inclusion is shaped by more than the existence of pension legislation. Institutional design, financial education, accessibility, income characteristics, trust and the flexibility of contribution arrangements influence the capacity of workers to participate in long-term savings. The OECD's comparative evidence on informal workers similarly shows that more than 70% of formal workers across surveyed countries benefited from or contributed to at least one social-protection programme, compared with approximately 37% of informal workers (OECD, 2024).

The Nigerian context makes these issues particularly important. Nigeria's labour market is characterised by substantial informality and self-employment, making conventional employer-based pension arrangements insufficient for a large segment of workers. Recent ILO evidence reports an informal employment rate of 58.7% in 2024 under its current statistical framework, with a higher rate of 69.4% among young people (ILO, 2026). Other Nigerian labour-market sources using different definitions and reference periods have reported considerably higher levels of informality, underscoring the importance of specifying the statistical definition employed when analysing the informal economy.

The economic vulnerability associated with employment informality is reinforced by persistent poverty. The World Bank estimates that Nigeria's national poverty rate increased from an estimated 61% in 2024 to 63% in 2025, with an additional seven million Nigerians estimated to have fallen below the national poverty line during 2025. The World Bank also identifies weak job quality and structural constraints to productive employment as continuing challenges for translating macroeconomic reforms into improved household welfare (World Bank, 2026). The relationship between education and employment is also significant. ILO evidence indicates that in Nigeria less than 3% of persons with no formal education held wage-paying jobs, compared with 45.7% of individuals with post-secondary education. This demonstrates the importance of education in shaping access to higher-quality employment and, by implication, opportunities for participation in formal financial and social-protection arrangements (ILO, 2024).

Education is also relevant to financial inclusion. The International Monetary Fund (IMF) reports that more than half of Nigerian adults had limited financial literacy and capability in earlier national evidence, while financial illiteracy was associated with lower educational attainment. The IMF further observed that financial topics were often taught late in the education cycle, limiting their reach among individuals who leave school earlier (International Monetary Fund [IMF], 2023). More recent evidence reinforces the financial-capability challenge. EFINA's 2023 Access to Financial Services survey reported that formal financial inclusion increased from 56% in 2020 to 64% in 2023, while the proportion of financially excluded Nigerians declined from 32% to 26%. However, 38% of adults were classified as having low financial capability in 2023, compared with 34.5% in 2020. EFINA also reported that 78% of adults, equivalent to approximately 87 million people, would find it difficult to generate ₦75,000 within seven days in an emergency (EFInA, 2024).

This financial-capability problem has direct implications for micro-pension participation. A worker who struggles to understand long-term saving, investment returns, inflation, risk and the purpose of retirement planning may be less likely to commit scarce and irregular income to a pension account. Conversely, financial education can improve the ability of individuals to assess financial products, distinguish long-term savings from short-term expenditure and make informed decisions about retirement security (Lusardi & Mitchell, 2014; OECD, 2024). Nigeria's formal education system itself provides an important platform for developing such economic capabilities. Federal Ministry of Education statistics for the 2024/2025 school year record 222,888 schools, 39,881,798 learners and 1,187,031 teachers, although only 124,146 schools submitted data, representing a national reporting rate of 55.7%. The learner-teacher ratio was 33.6 while the learner-classroom ratio was 60.1 (Federal Ministry of Education, Nigeria, 2026).

The existence of such a large education system creates an opportunity to treat financial education as part of economic preparation rather than an activity reserved for financial institutions. Education can contribute to economic security by improving knowledge, decision-making, planning and the capacity to participate in financial markets. Human capital theory similarly proposes that investment in knowledge and skills increases productive capabilities and can influence economic outcomes (Becker, 1964). The Nigerian pension system has progressively attempted to address the retirement-protection gap among informal workers. The Pension Reform Act 2014 extended eligibility under the Contributory Pension Scheme to self-employed persons and workers in organisations with fewer than three employees, while the Micro Pension Plan was subsequently designed to accommodate the characteristics of informal workers, including dispersed workplaces and irregular incomes (National Pension Commission [PenCom], 2018, 2026).

The statistical growth of the Micro-Pension Plan is notable. PenCom reported 76,588 registered Micro Pension Contributors as of March 2022. By December 2023, cumulative registration had increased to 114,382, while by December 2024 it reached 172,936. The figure increased further to 186,825 by March 2025 and 215,914 by September 2025 (PenCom, 2022, 2023, 2024, 2025). The increase represents considerable progress in numerical participation but also reveals the magnitude of the remaining coverage challenge. Between March 2022 and September 2025, registered participants increased from 76,588 to 215,914, an increase of approximately 181.9%. Yet PenCom reported that the 215,914 participants represented only about 0.23% of Nigeria's estimated 92.1 million informal-sector workforce as of September 2025. Furthermore, only 15,677 of 206,917 subsisting Personal Pension Plan Retirement Savings Accounts were funded during the third quarter of 2025, while 191,240, or 92.4%, remained unfunded (PenCom, 2025).

This distinction between registration and active contribution is central to understanding pension inclusion. Registration demonstrates institutional reach, but regular contribution determines whether a

pension account can generate meaningful retirement protection. A large number of registered but unfunded accounts therefore indicates that the policy challenge has moved beyond awareness and enrolment to sustained economic participation. The financial dimension is also visible in the growth of pension contributions. PenCom reported total Micro-Pension contributions of ₦1.06 billion by December 2024. By September 2025, total Personal Pension Plan contributions had increased to approximately ₦1.41 billion, while ₦134.72 million was contributed during the third quarter alone (PenCom, 2024, 2025).

These developments provide the basis for examining micro-pensions through an economic-security perspective. The issue is not merely whether informal workers possess pension accounts, but whether education, financial capability, income patterns, institutional accessibility and social-protection design can transform pension participation into meaningful long-term economic security. This study therefore examines the interaction between education, micro-pension participation, social protection and sustainable livelihoods in Nigeria, using statistical evidence to identify the scale of the challenge and the policy implications.

Statement of the Problem

Nigeria's pension system has expanded considerably since the introduction of the Contributory Pension Scheme and the subsequent development of the Micro-Pension Plan. However, the expansion of registration has not yet translated into broad-based pension coverage among informal workers. The central problem is therefore not the absence of a policy framework but the limited conversion of a large informal workforce into sustained pension participation. The problem is significant because informal employment constitutes a major component of Nigeria's labour market, while informal workers generally lack employer-sponsored social insurance. Irregular income, low savings capacity, limited financial literacy, inadequate awareness and weak access to formal financial services can make long-term pension contributions difficult (ILO, 2024; OECD, 2024).

The second problem concerns education. Formal education improves economic capabilities, but educational attainment alone does not necessarily provide individuals with the practical knowledge required to understand pension products, calculate retirement needs, assess investment risks or maintain long-term savings. Financial literacy therefore represents an important bridge between education and economic security (Lusardi & Mitchell, 2014; OECD, 2024).

The third problem concerns the relationship between short-term livelihood pressures and long-term retirement security. Where households experience income volatility and difficulty meeting immediate needs, long-term saving can be crowded out by current consumption and emergency expenditure. EFINA's evidence that 78% of Nigerian adults would struggle to generate ₦75,000 within seven days illustrates the scale of short-term liquidity vulnerability (EFInA, 2024).

The fourth problem is institutional. Although PenCom has recorded substantial growth in Micro-Pension registration, the high proportion of unfunded accounts demonstrates that registration alone is insufficient. The challenge is to design a pension system that corresponds to the economic realities of informal workers and supports regular contributions despite irregular incomes. The study therefore addresses the gap between pension access and meaningful economic security by examining how education, financial capability and micro-pension participation can contribute to social protection and sustainable livelihoods.

Objectives of the Study

The general objective of the study is to examine the relationship between micro-pension schemes, education, economic security, social protection and sustainable livelihoods in Nigeria.

The specific objectives are to:

- i. examine the relationship between education, financial literacy and pension participation;

- ii. assess the development and statistical growth of Nigeria's Micro-Pension Plan;
- iii. examine the extent to which micro-pension participation can contribute to household economic security and sustainable livelihoods;
- iv. compare Nigeria's micro-pension and social-protection experience with selected European and Sub-Saharan African countries;
- v. identify the principal economic, educational and institutional barriers to sustained micro-pension participation; and
- vi. propose policy measures for strengthening education-based pension inclusion and economic resilience in Nigeria.

Research Questions

- i. What is the relationship between education, financial literacy and pension participation?
- ii. How has Nigeria's Micro-Pension Plan developed statistically in recent years?
- iii. What role can micro-pension participation play in economic security and sustainable livelihoods?
- iv. What lessons can Nigeria draw from pension and financial-education experiences in selected European and Sub-Saharan African countries?
- v. What economic, educational and institutional factors constrain sustained micro-pension participation in Nigeria?
- vi. How can education and social-protection policy be integrated to strengthen long-term economic security?

Conceptual Clarification

Micro-Pension Schemes

A micro-pension scheme is a pension arrangement designed to extend retirement savings and social insurance to workers who may not be covered by conventional employer-based pension arrangements. In Nigeria, the Micro-Pension Plan was designed specifically for self-employed persons and employees of organisations with fewer than three employees, reflecting the dispersed nature and irregular income patterns of informal-sector workers (PenCom, 2018, 2026).

The concept is important because conventional pension systems are often structured around stable employment, regular wages and employer contributions. Informal workers frequently operate under different economic conditions, requiring flexible contribution mechanisms and accessible payment channels.

Education and Financial Capability

Education in this study extends beyond formal schooling to include financial education, pension awareness, financial literacy and the ability to interpret economic information. Financial literacy enables individuals to understand financial concepts and make informed decisions regarding saving, investment, borrowing and retirement planning (Lusardi & Mitchell, 2014).

The relationship between education and pension participation is therefore conceptualised as a capability pathway:

Education → Financial Literacy → Pension Knowledge → Saving Behaviour → Pension Participation → Economic Security

Evidence from Germany supports this relationship, as adults with high financial literacy were significantly more likely to hold pension and investment products (OECD, 2024).

Economic Security

Economic security refers to the capacity of individuals and households to maintain an adequate and predictable standard of living in the face of income loss, economic shocks and life-cycle risks. It includes income stability, savings, access to social protection, retirement preparedness and the capacity

to meet essential needs. Pension savings contribute to economic security by transferring part of current income into future resources. For informal workers, this function becomes especially important because retirement income may otherwise depend heavily on continued labour, family support or informal community arrangements.

Social Protection

Social protection encompasses policies and programmes designed to protect individuals and households against economic and social risks. It includes social insurance, social assistance, labour-market interventions and other mechanisms that protect income and consumption (ILO, 2024). Pension schemes constitute a major component of social insurance because they address the risk of income loss associated with old age. The distinction between contributory and non-contributory protection is important because contributory schemes depend on individuals' ability and willingness to make regular payments.

Sustainable Livelihoods

Sustainable livelihoods refer to the ability of households to maintain productive and socially acceptable living conditions while coping with economic shocks and preserving the resources required for future livelihood opportunities (Chambers & Conway, 1992). Within this framework, pension savings represent a form of financial asset. A household with accumulated retirement savings has an additional financial resource that can reduce dependence on family members and informal support systems in later life.

Theoretical Framework

Life-Cycle Hypothesis

The Life-Cycle Hypothesis developed by Modigliani and Brumberg (1954) provides a central economic foundation for this study. The theory proposes that individuals allocate income and consumption across different stages of their lives, with saving occurring during economically productive periods to support consumption during retirement. The relevance of the theory to micro-pensions is direct. Workers who save during their productive years accumulate financial resources that can support consumption after retirement. For informal workers, however, irregular income can complicate the process of systematic life-cycle saving. The theory therefore supports the argument that micro-pension schemes can contribute to economic security by facilitating long-term income smoothing.

Human Capital Theory

Human Capital Theory, associated particularly with Becker (1964), views education and skills as forms of investment that improve individual productive capacity and economic outcomes. The theory provides the educational dimension of the study. Education can improve employment opportunities and earnings while financial education can improve the ability to make informed economic decisions. In this sense, education influences economic security through both income-generation and financial-management channels.

Social Risk Management Theory

Social Risk Management theory emphasises the ways in which individuals, households, communities, markets and governments manage risks associated with economic vulnerability (Holzmann & Jørgensen, 2000). The theory is particularly useful for analysing informal workers because their livelihoods are exposed to multiple risks, including income instability, illness, business shocks, unemployment and old age. Micro-pensions represent a form of risk management because they transfer part of the burden of retirement risk from households to an organised financial institution.

Financial Literacy Perspective

Financial literacy provides a complementary behavioural-economic perspective. Lusardi and Mitchell (2014) demonstrate that financial literacy is an important component of economic decision-

making, particularly in relation to saving and retirement planning. The present study therefore conceptualises financial education as the mechanism through which general education can be translated into practical pension behaviour.

Conceptual Model

The study proposes the following relationship:

Education → Financial Literacy → Pension Awareness → Micro-Pension Participation → Retirement Savings → Economic Security → Sustainable Livelihoods

The model also recognises the influence of:

Income Stability + Digital Financial Access + Trust + Institutional Accessibility + Contribution Flexibility on the relationship between education and pension participation.

The model does not assume automatic causality. Rather, it provides a conceptual framework for examining relationships using available statistical evidence.

Methodology

Research Design

The study adopted a quantitative secondary-data research design. The design was selected because the study seeks to examine measurable relationships and trends using existing statistical evidence on pension participation, education, financial capability, social protection and labour-market conditions. The analysis draws on data from the National Pension Commission, Federal Ministry of Education, National Bureau of Statistics, EFINA, International Labour Organization, World Bank, OECD, Office for National Statistics and selected African pension authorities.

Sources of Data

The principal sources include:

- i. National Pension Commission pension-industry reports and Micro-Pension/Personal Pension Plan statistics;
- ii. National Bureau of Statistics labour-market and household datasets;
- iii. Federal Ministry of Education education statistics;
- iv. EFINA Access to Financial Services in Nigeria surveys;
- v. International Labour Organization social-protection and labour-market statistics;
- vi. World Bank financial inclusion, poverty and social-protection databases;
- vii. OECD pension and financial-literacy evidence;
- viii. Office for National Statistics and UK Department for Work and Pensions pension statistics;
- ix. pension-industry statistics from Kenya, Ghana and South Africa; and
- x. peer-reviewed literature on education, financial literacy, pensions, social protection and economic security.

Statistical Approach

The statistical analysis employs descriptive statistics, percentage change, ratios, comparative analysis and trend interpretation.

For pension participation, percentage change is calculated as:

$$\text{Percentage Change} = [(\text{Current Value} - \text{Previous Value}) / \text{Previous Value}] \times 100$$

The study also examines the ratio of registered Micro-Pension participants to the estimated informal-sector workforce. Because the study relies principally on published aggregate data, it does not manufacture individual-level correlations or regression coefficients. Inferential analysis would require compatible microdata containing education, income, financial literacy, pension participation and livelihood indicators for the same respondents.

Where such microdata are available, the following models could be estimated in future research:

$$\text{PENSION}_i = \beta_0 + \beta_1 \text{EDU}_i + \beta_2 \text{FINLIT}_i + \beta_3 \text{INCOME}_i + \beta_4 \text{DIGITAL}_i + \varepsilon_i$$

and:

$$ECSEC_i = \beta_0 + \beta_1 PENSION_i + \beta_2 EDU_i + \beta_3 FINLIT_i + \beta_4 INCOME_i + \varepsilon_i$$

where PENSION represents pension participation, EDU represents educational attainment, FINLIT represents financial literacy, INCOME represents economic capacity, DIGITAL represents digital financial access and ECSEC represents economic security.

Statistical Findings and Analysis

Global Social Protection and Pension Coverage

The global evidence establishes a substantial social-protection gap.

Table 1: Selected Global Social Protection Indicators

Indicator	Statistical Evidence	Source
Global population covered by at least one social-protection benefit	52.4%	ILO (2024)
Global population without any social protection	47.6%	ILO (2024)
People entirely without social protection	3.8 billion	ILO (2024)
Global labour force actively contributing to pensions	58.5%	ILO (2024)
Sub-Saharan African labour force actively contributing to pensions	9.7%	ILO (2024)
Global population above retirement age receiving a pension	79.6%	ILO (2024)
Sub-Saharan African population above retirement age receiving a pension	22.3%	ILO (2024)

Source: International Labour Organization (2024).

The figures reveal a substantial regional inequality. While almost six in ten workers globally actively contribute to pensions, fewer than one in ten workers in Sub-Saharan Africa do so. This gap illustrates the structural disadvantage faced by workers whose employment is predominantly informal.

Comparative Evidence from Europe

The United Kingdom and Germany demonstrate the importance of institutional and educational mechanisms.

Table 2: Selected Pension and Financial-Literacy Indicators in Europe

Country	Indicator	Value	Source
United Kingdom	Employees in workplace pension schemes, 2024	82%	ONS (2026)
Great Britain	Eligible employees saving in workplace pensions, 2024	89%	DWP (2025)
Great Britain	Workplace pension savings, 2024	£149.7 billion	DWP (2025)
Germany	Adults actively saving	88%	OECD (2024)
Germany	Adults setting long-term financial goals	60%	OECD (2024)
Germany	Working-age adults confident in retirement planning	52%	OECD (2024)
Germany	Increase in likelihood of holding pension products among highly financially literate adults	70%	OECD (2024)

Sources: DWP (2025); ONS (2026); OECD (2024).

The evidence demonstrates that pension participation is closely associated with institutional mechanisms that reduce the behavioural burden of retirement saving. The UK's automatic-enrolment

experience shows the potential importance of default participation, while Germany's financial-literacy evidence demonstrates the relevance of knowledge and capability.

Sub-Saharan African Pension Evidence

Table 3: Selected Pension Indicators in Sub-Saharan Africa

Country	Indicator	Statistical Evidence
Kenya	Informal-sector share of workforce	>85%
Kenya	Pension-scheme membership, 2024	7.53 million
Kenya	Pension assets, December 2024	KSh2.23 trillion
Ghana	Formal-sector workers covered by SSNIT, 2024	60%
Ghana	Qualified informal workers covered by SSNIT, 2024	3.2%
Ghana	Informal-sector workers enrolled in third-tier pensions, 2023	6%
South Africa	Employees with employer pension contribution, 2024	44.8%

Sources: RBA (2024, 2025); Ghana News Agency (2024); Government of Ghana (2024); Statistics South Africa (2025).

The comparison reveals a common pattern: pension systems are more established among formal workers than among informal workers. This reinforces the argument that the central challenge is not simply the availability of pension legislation but the ability to adapt pension products to workers with irregular earnings.

Growth of Micro-Pension Participation in Nigeria

Nigeria's Micro-Pension Plan has experienced substantial numerical growth.

Table 4: Growth of Micro-Pension Registration in Nigeria

Period	Registered Micro-Pension Contributors
March 2022	76,588
December 2023	114,382
December 2024	172,936
March 2025	186,825
September 2025	215,914

Sources: PenCom (2022, 2023, 2024, 2025).

The data show sustained growth. Registration increased by approximately 49.3% between March 2022 and December 2023, by 51.2% between December 2023 and December 2024, and by 24.9% between December 2024 and September 2025. Overall, registration increased by approximately 181.9% between March 2022 and September 2025. The trend is encouraging but must be interpreted alongside the size of Nigeria's informal economy. PenCom estimated that 215,914 Personal Pension Plan contributors represented only approximately 0.23% of an estimated 92.1 million informal-sector workers in September 2025 (PenCom, 2025). This means that the statistical growth of the scheme has occurred from a very low base.

Registration Versus Active Funding

A more important indicator of pension inclusion is whether registered accounts receive contributions.

Table 5: Personal Pension Plan Registration and Funding, Q3 2025

Indicator	Value
Total PPP registrations/PINs issued	215,914
Subsisting RSAs	206,917
Funded RSAs during Q3 2025	15,677

Unfunded RSAs	191,240
Funded share	7.6%
Unfunded share	92.4%
Total PPP contributions	₦1.41 billion
Q3 2025 contributions	₦134.72 million

Source: PenCom (2025).

The most significant finding is the distinction between registration and actual contribution. Although 215,914 Personal Pension Plan accounts had been registered, only 15,677 of 206,917 subsisting accounts were funded during the quarter. Thus, approximately 92.4% of the subsisting accounts were unfunded at that point (PenCom, 2025). This suggests that the principal policy challenge is no longer merely creating access to pension accounts. It is converting access into regular, sustainable contributions.

Education, Financial Capability and Economic Security

The education-finance relationship is supported by both international and Nigerian evidence. In Germany, high financial literacy was associated with a 70% higher likelihood of holding pension products and a 120% higher likelihood of holding investment products, after controlling for socio-demographic characteristics (OECD, 2024).

Nigeria's financial-capability evidence is less favourable. EFInA reported that 38% of adults had low financial capability in 2023, while only 22% were classified as having high financial capability. The survey also found that 78% of adults would find it difficult to raise ₦75,000 within seven days in an emergency (EFInA, 2024). These statistics have direct implications for pension policy. Where households have limited liquidity and financial capability, long-term pension contributions compete with immediate consumption, health expenditure, school fees, business capital and emergency needs.

Education Infrastructure and Economic Capability

Nigeria's education system provides a potentially important platform for developing economic capabilities.

Table 6: Nigeria Education Statistics, 2024/2025

Indicator	Value
Schools listed	222,888
Schools reporting	124,146
Reporting rate	55.7%
Learners	39,881,798
Teachers	1,187,031
Classrooms	726,847
Learner-teacher ratio	33.6
Learner-classroom ratio	60.1%

Source: Federal Ministry of Education, Nigeria (2026).

The scale of the education system demonstrates the potential for integrating financial literacy and retirement planning into formal education, vocational training, adult education and non-formal learning. However, the 55.7% school-reporting rate also indicates that education-sector administrative data require further strengthening for effective national planning (Federal Ministry of Education, Nigeria, 2026).

Financial Inclusion as an Enabling Condition

Financial inclusion is another important component of the pension-participation pathway. EFInA reported that formal financial inclusion increased from 56% in 2020 to 64% in 2023, while financial exclusion declined from 32% to 26% (EFInA, 2024). The World Bank's Global Findex 2025 dataset

provides additional evidence on the financial behaviour of Nigerian adults. Among its 2024 Nigerian sample, 51.5% reported saving through a bank or similar financial institution, while 26.2% reported saving through an informal savings group or a person outside the family (World Bank, 2025). These figures suggest that informal savings mechanisms remain economically important. Micro-pension policy can therefore benefit from linking formal pension products to existing savings behaviour rather than attempting to replace informal financial practices entirely.

Sociological and Economic Analysis of the Findings

The statistical evidence reveals five interconnected patterns. First, pension coverage is strongly associated with the structure of the labour market. Countries with substantial formal employment and institutionalised pension systems generally have higher pension participation, while economies characterised by widespread informality experience larger pension gaps. The 9.7% pension-contribution coverage in Sub-Saharan Africa compared with much higher levels in Europe illustrates this structural relationship (ILO, 2024).

Second, education has both direct and indirect economic effects. Formal education can improve access to employment and income, while financial education can improve the capacity to manage income and participate in financial products. Nigeria's labour-market evidence showing a substantial relationship between educational attainment and wage employment supports the first pathway, while German financial-literacy evidence supports the second (ILO, 2024; OECD, 2024).

Third, financial capability is a critical intermediate variable. The difference between having access to a pension account and making regular contributions suggests that pension participation involves behavioural and economic decisions. Individuals must understand the product, trust the institution, assess future benefits, accommodate contributions within their income and continue saving despite competing immediate needs.

Fourth, income volatility affects the sustainability of pension participation. Informal workers frequently experience irregular income, making fixed contribution requirements less compatible with their economic circumstances. This supports the rationale behind flexible micro-pension arrangements but also indicates the need for mechanisms that allow contributions to respond to fluctuations in income.

Fifth, pension policy should be understood as part of sustainable livelihood policy. A pension account is not merely a future financial product; it represents an accumulation of financial assets that can reduce old-age vulnerability. Where retirement protection is absent, the burden of supporting older persons can fall on households and communities.

Discussion

The findings support the argument that micro-pension schemes should be situated within a broader economic-security framework. The rapid growth of Nigeria's Micro-Pension Plan demonstrates that demand for formal retirement savings exists among informal workers. However, the very low proportion of informal workers participating and the high proportion of unfunded accounts demonstrate that registration alone cannot produce economic security.

The comparison with the United Kingdom indicates the importance of institutional architecture. Automatic enrolment significantly increased workplace pension participation, illustrating the capacity of institutional defaults to overcome behavioural barriers to long-term saving (DWP, 2025). The German experience adds the educational dimension. Financial literacy is positively associated with pension and investment participation, suggesting that pension inclusion requires not only access but also knowledge and confidence (OECD, 2024).

The experiences of Kenya and Ghana demonstrate the continuing difficulty of extending pension coverage to informal workers in Sub-Saharan Africa. Kenya has explicitly created mechanisms targeted

at informal workers, while Ghana continues to experience a substantial formal-informal coverage divide (RBA, 2024; Ghana News Agency, 2024).

Nigeria's own experience reinforces these lessons. PenCom's statistics show that Micro-Pension registration has increased rapidly, but active funding remains limited. The policy challenge should therefore shift from **registration expansion alone** toward **sustained contribution, financial capability and pension adequacy**.

This requires an integrated approach in which education, financial inclusion and pension policy reinforce one another. Financial education should not be viewed as an isolated consumer-awareness exercise. It should be treated as part of economic capability formation.

Implications for Economic Development and Sustainable Livelihoods

Micro-pension schemes have implications beyond individual retirement planning. First, pension contributions represent long-term domestic savings. As pension assets accumulate, they can contribute to the development of domestic capital markets and provide institutional sources of long-term finance, subject to appropriate investment regulation and risk management.

Second, pension participation can reduce future dependency. A worker who accumulates retirement savings may have greater capacity to meet consumption needs after leaving the labour market without depending exclusively on relatives.

Third, pension participation can support livelihood sustainability by providing a financial asset that complements other livelihood assets. This is particularly relevant for informal workers whose economic security depends on self-employment, small enterprises and family-based production.

Fourth, financial education can improve the quality of pension participation. Education can help workers understand contribution requirements, investment returns, inflation and retirement needs.

Fifth, pension inclusion can contribute to financial inclusion by bringing informal workers into regulated financial institutions. Nigeria's experience with increasing formal financial inclusion demonstrates that access to financial institutions can expand even where large segments of the population remain economically vulnerable (EFInA, 2024).

Policy Recommendations

Recommendation One

The Federal Government should institutionalise financial and pension education as a core component of economic empowerment and social-protection policy.

Implementation Strategies

- i. The Federal Ministry of Education, in collaboration with National Educational Research and Development Council (NERDC), tertiary institutions and State education authorities to integrate practical financial literacy, savings, retirement planning and pension awareness into relevant curricula and adult-learning programmes.
- ii. The National Pension Commission (PenCom) in collaboration with Central Bank of Nigeria (CBN), financial institutions and educational institutions to develop accessible pension-literacy programmes for students, apprentices, self-employed persons and informal-sector workers.

Recommendation Two

The National Pension Commission should reposition the Micro-Pension Plan from an enrolment-focused intervention to a sustained-contribution mechanism for informal-sector economic security.

Implementation Strategies

- i. PenCom in collaboration with Pension Fund Administrators to develop contribution structures that accommodate irregular income patterns, including flexible payment frequencies and accessible digital contribution channels.

- ii. PenCom to establish measurable indicators for active contribution, contribution continuity, account funding and pension adequacy in addition to registration numbers.

Recommendation Three

The Federal Government should strengthen the integration of financial inclusion and pension inclusion as complementary components of social protection.

Implementation Strategies

- i. The Central Bank of Nigeria in collaboration with PenCom and financial-service providers to expand interoperable digital channels that allow informal workers to save and make pension contributions conveniently and securely.
- ii. Federal and State Governments to leverage existing community, cooperative, market-association and enterprise structures to facilitate pension enrolment, financial education and regular contributions among informal workers.

Recommendation Four

The Federal Government should strengthen education-based pathways to economic security by linking human-capital development with long-term financial planning.

Implementation Strategies

- i. The Federal Ministry of Education in collaboration with the Ministry of Labour and Employment to incorporate financial capability, entrepreneurship, savings and retirement planning into vocational, technical and continuing education programmes.
- ii. State Governments in collaboration with local education authorities to partner with pension operators, cooperatives and community organisations to provide financial-literacy programmes for out-of-school youth, apprentices and informal workers.

Recommendation Five

The National Bureau of Statistics in collaboration with PenCom and relevant research institutions should institutionalise statistical monitoring of pension inclusion and economic security among informal workers.

Implementation Strategies

- i. The National Bureau of Statistics in collaboration with PenCom to include pension participation, contribution frequency, financial literacy, educational attainment, income volatility and retirement preparedness in relevant national surveys.
- ii. Universities in collaboration with research institutions to conduct longitudinal studies examining the relationship between education, financial capability, pension participation and household economic resilience.

Recommendation Six

The Federal Government should develop an evidence-based framework for using pension inclusion as an instrument for sustainable livelihood development.

Implementation Strategies

- i. The Federal Ministry of Finance in collaboration with PenCom and relevant economic institutions to assess the contribution of pension savings to domestic capital formation and long-term economic development while maintaining prudent investment standards.
- ii. Federal and State Governments to integrate pension inclusion into broader programmes addressing informal employment, entrepreneurship, poverty reduction, financial inclusion and household economic resilience.

Conclusion

Micro-pension schemes occupy an increasingly important position at the intersection of economics, education and social protection. The global evidence demonstrates that substantial pension

and social-protection inequalities remain between high-coverage economies and regions characterised by extensive informal employment. In Europe, the United Kingdom demonstrates the importance of institutional mechanisms such as automatic enrolment, while Germany demonstrates the relevance of financial literacy to pension and investment behaviour. In Sub-Saharan Africa, Kenya, Ghana and South Africa illustrate different attempts to address the persistent retirement-security gap among informal and economically vulnerable workers.

Nigeria has made measurable progress. Registered Micro-Pension participants increased from 76,588 in March 2022 to 215,914 by September 2025, representing an increase of approximately 181.9%. Pension contributions have also increased. Yet the scheme still reaches only a very small proportion of the country's informal workforce, while the high proportion of unfunded accounts indicates that enrolment has not yet translated into sustained pension saving (PenCom, 2025). The statistical evidence also demonstrates that education and financial capability are important components of the economic-security pathway. Formal education influences employment and income opportunities, while financial literacy influences the capacity to make informed saving and investment decisions. Consequently, pension inclusion should not be treated solely as a financial-sector or regulatory issue.

The central argument of this study is that micro-pensions can become a stronger instrument of economic security when pension access is combined with education, financial literacy, financial inclusion and livelihood support. Registration must therefore be accompanied by sustained contributions, appropriate products, accessible payment mechanisms and continuous financial education. Ultimately, the economic value of micro-pension schemes extends beyond retirement. By enabling informal workers to accumulate financial assets during their productive years, such schemes can reduce future vulnerability, strengthen household economic security and contribute to more sustainable livelihoods. For Nigeria, the challenge is therefore to move from pension inclusion as a question of how many workers are registered to pension security as a question of how many workers are building adequate and sustainable retirement assets.

REFERENCES

1. Becker, G. S. (1964). Human capital: A theoretical and empirical analysis, with special reference to education. Columbia University Press.
2. Chambers, R., & Conway, G. R. (1992). Sustainable rural livelihoods: Practical concepts for the 21st century. Institute of Development Studies.
3. Department for Work and Pensions. (2025). Workplace pension participation and savings trends of eligible employees: 2009 to 2024. UK Government.
4. EFInA. (2024). Access to financial services in Nigeria 2023 survey: Key highlights. Enhancing Financial Innovation & Access.
5. Federal Ministry of Education, Nigeria. (2026). Nigeria education statistics 2024/2025. Nigeria Education Management Information System.
6. Ghana News Agency. (2024). SSNIT launches mobile service week to drive informal sector participation.
7. Government of Ghana. (2024). The budget statement and economic policy of the government of Ghana for the 2024 financial year. Ministry of Finance.
8. Government of South Africa. (2024). President Cyril Ramaphosa enacts law allowing emergency access to retirement funds. The Presidency.
9. Holzmann, R., & Jørgensen, S. (2000). Social risk management: A new conceptual framework for social protection, and beyond. Social Protection Discussion Paper Series, 0006. World Bank.
10. International Labour Organization. (2024). World social protection report 2024–26: Universal social protection for climate action and a just transition. ILO.

11. International Labour Organization. (2026). ILOSTAT labour-market statistics for Nigeria. International Labour Organization.
12. International Monetary Fund. (2023). Nigeria—Fostering financial inclusion through digital financial services. International Monetary Fund.
13. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
14. Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In K. K. Kurihara (Ed.), *Post-Keynesian economics* (pp. 388–436). Rutgers University Press.
15. National Pension Commission. (2018). Guidelines for micro pension plan. PenCom.
16. National Pension Commission. (2022). First quarter report 2022. PenCom.
17. National Pension Commission. (2023). Fourth quarter report 2023. PenCom.
18. National Pension Commission. (2024). Pension industry information dashboard: Q4 2024. PenCom.
19. National Pension Commission. (2025). Pension industry information dashboard: Q3 2025. PenCom.
20. National Pension Commission. (2026). Micro pension. PenCom.
21. Office for National Statistics. (2026). Employee workplace pensions in the UK: 2024 provisional and 2021 to 2023 final results. UK Statistics Authority.
22. Organisation for Economic Co-operation and Development. (2024). Financial literacy in Germany: Supporting financial resilience and well-being. OECD Publishing.
23. Organisation for Economic Co-operation and Development. (2024). Strengthening financial literacy in Germany: Proposal for a national financial literacy strategy. OECD Publishing.
24. Organisation for Economic Co-operation and Development. (2024). Breaking the vicious circles of informal employment and low-paying work. OECD Publishing.
25. Retirement Benefits Authority. (2024). Kenya launches national retirement benefits policy. RBA.
26. Retirement Benefits Authority. (2025). Statistical digest 2024: Kenyan pension industry shows strong growth and resilience. RBA.
27. Statistics South Africa. (2025). Quarterly labour force survey. Statistics South Africa.
28. World Bank. (2025). The Global Findex Database 2025: Connectivity and financial inclusion in the digital economy. World Bank.
29. World Bank. (2026). Nigeria. World Bank Group.
30. World Bank. (2026). Social protection and labour. World Bank.