



Effectiveness of Non-Conventional Banking Systems in Delivery of Financial Services to Small-Scale Agribusiness Operators in Delta State, Nigeria

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ABSTRACT

There is scarcity of empirical information on the effectiveness of non-conventional banks in Delta State. This study evaluated the effectiveness of non-conventional banking systems in providing financial services to small-scale agribusiness operators in Delta State, Nigeria. The specific objectives were to ascertain the volume of savings mobilized, assess credit access, examine default rates, evaluate deposit security, estimate the effectiveness index (EI), and identify factors influencing effectiveness. A multi-stage sampling technique was employed to select 60 respondents comprising crop farmers and agricultural traders. Data were collected through structured questionnaires and analyzed using descriptive statistics, Effectiveness Index formula, and multiple regression analysis. The findings revealed that 83.4% of respondents actively saved with informal financial institutions, with monthly savings ranging from less than ₦5,000 to above ₦20,000. About 70% had accessed credit, with average loans between ₦20,000 and ₦100,000. The default rate stood at 42.9%, mainly due to business loss and emergencies. A majority (68.3%) believed their deposits were secure, and only 11.7% reported loss of funds. The overall Effectiveness Index of the non-conventional systems was computed at 55.26%, indicating a moderate level of service effectiveness. Regression results showed that saving effectiveness ($p=0.000$), lending effectiveness ($p=0.000$), deposit security ($p=0.000$), and withdrawal ease ($p=0.008$) significantly influenced system effectiveness. The study concludes that non-conventional banking systems are effective in delivering financial services to small-scale agribusiness operators and recommends strengthening their operations through policy support, training, digital integration, and improved loan management practices.

Keywords: effectiveness, non-conventional, banking systems, financial services, small-scale, agribusiness operators,

INTRODUCTION

The global financial landscape has long struggled to include marginalized sectors, particularly rural agribusinesses. Small-scale agriculture remains the backbone of rural economies in many developing and emerging nations, providing food security, employment, and income. Yet, the sector faces significant challenges in accessing financial resources due to the high risks associated with agricultural activities, such as weather variability, market instability, and long production cycles. In response, non-conventional banking systems have emerged worldwide as vital tools for bridging the gap between traditional financial systems and underserved populations.

Globally, microfinance institutions (MFIs) have been pivotal in driving financial inclusion. The microfinance movement began in the 1970s, led by pioneers like Muhammad Yunus, who founded the Grameen Bank in Bangladesh in 1983. This model revolutionized rural financing by offering small, collateral-free loans to low-income individuals and groups, especially women. Grameen Bank's success demonstrated that the poor are creditworthy and capable of repaying loans, inspiring similar models across Africa, Latin America, and Asia



(Koomson , 2019). For example, India's Self-Employed Women's Association (SEWA) Bank, established in 1974, has empowered female farmers and artisans by providing financial services tailored to their needs.

In Africa, non-conventional banking systems have gained traction through informal savings and credit associations, such as tontines in West Africa and stokvels in South Africa. These community-based systems rely on social trust and collective responsibility to mobilize savings and provide loans. In Kenya, the rise of mobile money platforms like M-Pesa (launched in 2007) has revolutionized rural financing by enabling millions of farmers and small business owners to access credit, make transactions, and save money without relying on traditional banks. By 2020, M-Pesa had over 40 million users across Africa, showcasing the transformative potential of digital financial services in fostering financial inclusion (World Bank, 2020).

In Latin America, cooperatives have been instrumental in supporting small-scale agribusiness operators. For instance, agricultural cooperatives in Brazil and Colombia provide not only financial services but also technical assistance, marketing support, and access to international markets. Similarly, in Southeast Asia, countries like Indonesia and the Philippines have adopted hybrid models combining microfinance with digital platforms to reach remote rural populations effectively.

Despite their global success, non-conventional banking systems face common challenges, such as high operational costs, repayment defaults, and regulatory barriers. Moreover, limited financial literacy among rural populations often hinders the optimal utilization of these services. Governments, international organizations, and private sector stakeholders are increasingly collaborating to address these issues. For instance, the International Fund for Agricultural Development (IFAD) and the World Bank have launched programs to strengthen rural financial systems and promote innovative solutions like climate-resilient credit schemes and agricultural insurance.

Moreover, the potential of digital financial platforms to revolutionize access to financial services in rural areas is immense. With the growing penetration of mobile technology in Nigeria, platforms such as mobile money and fintech applications are providing innovative solutions to bridge the financial inclusion gap. These systems allow agribusiness operators to access loans, save, and make transactions seamlessly without relying on physical bank branches. However, challenges such as poor internet connectivity, high transaction fees, and low digital literacy must be addressed to maximize the benefits of digital financial services in the region.

Ultimately, the effectiveness of non-conventional banking systems in Ughelli North is not only a matter of accessibility but also of sustainability and impact. To ensure long-term success, these systems must strike a balance between expanding their reach, maintaining financial stability, and adapting to the unique needs of small-scale agribusiness operators. This study, therefore, aims to provide a comprehensive assessment of these systems, offering practical recommendations for enhancing their performance and ensuring they contribute meaningfully to the growth and development of agribusinesses in Delta State.

The saving attitude and saving volume of small-scale agribusiness operators in Delta State, were reported to be significantly poor before the emergence of non-conventional banking systems aimed at promoting financial inclusion (Achoja, 2019) Savings are critical for agribusiness operators, as they provide a financial buffer for emergencies, facilitate investments in productivity-enhancing inputs, and reduce reliance on external borrowing. However, various challenges have hindered the ability of these operators to save consistently and substantially, thereby limiting their financial stability and business growth.

One major issue is the limited access to formal financial institutions in rural areas. Traditional banks are often inaccessible due to their distance from rural communities, high transaction costs, and stringent account maintenance requirements. Non-conventional banking systems, such as microfinance institutions, cooperative societies, and mobile money platforms, have attempted to fill this gap. However, the effectiveness of these systems in mobilizing savings is not yet determined, as their outreach remains inadequate, and their services are sometimes perceived as unreliable.

Another significant factor affecting savings volume is the low income generated by agribusiness operators. Many small-scale farmers and processors in Ughelli North operate at subsistence levels, with profits barely



sufficient to meet their basic needs. This situation is exacerbated by market uncertainties, poor infrastructure, and climate-related risks, which reduce agricultural productivity and income stability. Consequently, the capacity to save is severely constrained, even when financial services are available.

Additionally, financial literacy levels among small-scale agribusiness operators are generally low. Many operators lack the knowledge and skills to effectively manage their finances or recognize the importance of saving for long-term growth. This knowledge gap not only limits their ability to utilize available non-conventional banking systems but also reduces trust in these systems, further discouraging savings.

The cultural and social dynamics in rural areas also play a role in low savings volume. Informal savings mechanisms, such as Osusuor rotational savings groups, are prevalent but are often inconsistent or plagued by issues such as mismanagement of funds and defaults by group members. While these systems provide some level of financial inclusion, they are insufficient to support the broader financial needs of agribusiness operators.

Finally, the operational challenges faced by non-conventional banking systems, including high default rates, lack of proper regulatory oversight, and limited capacity to scale their operations, have reduced their effectiveness in promoting savings. In some cases, high interest rates and transaction fees associated with these systems further discourage agribusiness operators from engaging with them.

The low savings volume among small-scale agribusiness operators in Ughelli North poses a significant barrier to their financial empowerment and the overall development of the agricultural sector. This study seeks to investigate the root causes of this problem, evaluate the role of non-conventional banking systems in addressing these challenges, and provide recommendations to enhance the savings capacity of agribusiness operators in the region.

The credit volume available to small-scale agribusiness operators in Delta State, Delta State, remains insufficient despite the increasing presence of non-conventional banking systems. Access to credit is essential for agribusiness operators to invest in modern farming techniques, purchase inputs, scale production, and mitigate risks associated with agriculture. However, many operators face significant challenges in obtaining adequate credit, which restricts their growth and limits their contribution to food security and economic development in the region.

A primary issue is the limited accessibility of conventional financial institutions. Traditional banks often impose stringent requirements for credit, such as collateral, detailed financial records, and high-interest rates, which are unattainable for most small-scale agribusiness operators. Non-conventional banking systems, such as microfinance institutions, cooperative societies, and informal lending groups, have been introduced to address these gaps, but their capacity to provide substantial credit volumes is constrained by operational inefficiencies, limited capital bases, and high default rates.

The high default rate among small-scale agribusiness operators in Delta State, Delta State, poses a significant challenge to the sustainability of credit provision by non-conventional banking systems. Access to credit is critical for agribusiness operators to invest in improved technologies, purchase inputs, and expand their operations. However, many non-conventional banking systems, such as microfinance institutions, cooperatives, and informal lending groups, struggle with repayment defaults, which threaten their financial stability and capacity to serve their target population.

This study aims to investigate the root causes of high default rates among agribusiness operators in Ughelli North, assess the impact of these defaults on non-conventional banking systems, and propose practical strategies to enhance loan recovery and financial sustainability. Addressing this issue is crucial for fostering financial inclusion, improving agricultural productivity, and driving economic development in the region.

Objectives of the Study

The broad objective of this study is to evaluate the effectiveness of non-conventional banking systems in deli-



vering financial services to small-scale agribusiness operators in Delta State, Delta State, Nigeria.

The specific objectives of the study are to:

- i. ascertain the volume of savings mobilized by small scale agribusiness operators
- ii. assess the volume of credit accessed from non conventional banking system operators
- iii. examine default rates of non conventional banking system
- iv. evaluate the security of financial deposits and estimate the effectiveness index (EI) of non conventional banking system
- v. evaluate the factors that significantly influence the effectiveness of non conventional banking system

This study was guided by the following hypotheses:

HO1: Non-Conventional banking system is not effective in rendering Financial services to Small-Scale Agribusiness Operators.

HO2: The savings volume mobilized by non-conventional banking systems does not significantly contribute to the financial stability of small-scale Agribusiness operators.

HO3: Credits provided by non-conventional banking systems does not have a significant impact on the productivity and growth of small-scale Agribusinesses.

HO4: There is no significant relationship between financial deposit security and the level of trust in non-conventional banking systems.

MATERIALS AND METHODS

Area of Study, Sampling Techniques and Sample Size

Delta State is the chosen location for the study. It was chosen for this study because there are many operators of small scale Agribusiness. The LGA covers an area of approximately 818 square kilometers. According to the NPC (2006), it had a population of 321,028, which was projected to increase to 780,022 by 2022 with a longitude and latitude of 5.500187°N and 5.993834°E and a rainfall pattern ranging from March to October. Ughelli North is also part of Nigeria's oil producing region, with several oil wells and flow stations operated by multinational and indigenous oil companies.

Geographically, Ughelli North is located in the southern part of Nigeria and is part of the Urhobo cultural region. The area is characterized by its agricultural activities, with many residents engaged in farming and related agribusinesses. The LGA comprises several notable towns and communities, including Ughelli, Agbarho, Orogun, and others. The strategic location of Delta State makes it a significant area for economic activities, particularly in agriculture and commerce. Its proximity to other major towns and its infrastructural development contribute to its importance in the region.

Population of the study

The study population consists of two main groups:

A. Non-Conventional Banking Institutions

These non-conventional banking service providers operate outside traditional banking systems and include:

1. **Microfinance institutions (MFIs)** – Small financial institutions providing credit and savings services to farmers and agribusiness owners.
2. **Cooperative societies** – Member-based financial groups that provide loans and savings opportunities.



3. **Mobile banking & Fintech Services** – Digital platforms that facilitate transactions via mobile phones (e.g., Opay, PalmPay, and POS services).
4. **Informal Credit Association** – These include:
 - **Esusu** and **Ajo** (traditional savings and credit groups).
 - Money Lenders (individuals offering small loans with flexible repayment terms).

B. Small scale-Agribusiness operators

The study also includes individuals and groups who rely on non-conventional financial services, such as:

1. Crop Farmers – Those growing cassava, maize, yam, and vegetables.
2. Livestock Farmers – Poultry, fish farming, piggery, and cattle rearing.
3. Agro-Processors – Palm oil processors, garri producers, and food vendors.
4. Agricultural Traders – Small-scale sellers of farm produce.

Sampling Techniques and Sample Size

This study adopted a multi-stage sampling technique to ensure a representative selection of respondents from the study population. The multi-stage sampling approach allows for a systematic narrowing of the population into manageable groups while maintaining diversity and inclusivity.

Delta State consists of several towns and villages where small-scale agribusiness activities take place. To ensure a fair geographical spread, the study was employ cluster sampling to select a subset of communities.

Stage 1: Listing all major towns and villages in Delta State of which (5) communities were selected

Stage 2: Selection of Agribusiness categories i.e Agricultural traders and crop farmers

Stage 3: Selection of Respondents. total of (60) respondents were selected, (30) crop farmers and (30) agricultural traders

Stage 4: Selection of non conventional banks. Cooperatives and informal credit groups such as Ajo, Osusu and money lenders were used in the selection

Method of Data Collection

For the purpose of this study, both qualitative and quantitative data will be used. The Data from this study will be mainly obtained from primary sources. The data collection instrument will be structured questionnaires.

A well structured questionnaire was developed and structured according to the specific objectives of the study.

Section A contains the Demographic information such as the Age, gender, education type of agribusiness and years in business

Section B entails access to Non-Conventional banking systems (Availability, types of services and frequency of use

Section C contains questions relating to the effectiveness of financial services (ease of access, challenges faced and business growth)

Section D contains the Satisfaction level of non-conventional banking service users.

Data Analysis Techniques

The collected quantitative and qualitative data was analysed by using appropriate statistical tools as follows:

- i. The volume of savings mobilized by small scale agribusiness operators in non-conventional banks as stated in objectives (i) was achieved using descriptive statistics such as mean, percentage and frequency distribution table
- ii. Assessment of the volume of credit accessed and utilized as stated in Objectives 2 was achieved using descriptive statistics such as mean, percentage and frequency distribution table
- iii. The default rate of non-conventional banking system as stated in Objectives 3 was achieved using percentages
- iv. The security of financial deposits of agribusiness operators in non-conventional banking system as indicated in objectives 4 was achieved using descriptive statistical tools
- v. The estimation of Effectiveness Index (EI) of non-conventional banking system as stated in objectives 5 was achieved using Effectiveness Index (EI) formula as follows

$$EI_{nb} = \frac{X}{IEI} \times \frac{100}{1}$$

Where

EI_{nb} = effectiveness Index (%)

X = The number of Effectiveness Indicators as perceived by respondents

IEI = Number of Identified Effectiveness Indicators

- vi. Significant factors including the Effectiveness Index of non-conventional banks as perceived by agribusiness operators as stated in objectives 6 was achieved using multiple regression model as follows

Model specification

The implicit form of the model is specified as

$$EI_{nb} = f(x_1, x_2, x_3 \dots x_n)$$

Where

EI_{nb} = effectiveness Index (%)

x_n = Effectiveness Indicators

the explicit form of the model is specified as =

$$EI_{nb} = \beta_0 + \beta_1 SV + \beta_2 LD + \beta_3 PC + \beta_4 TD + \beta_5 WD + \beta_6 LD + \beta_7 FS + ei$$

Where

EI_{nb} = effectiveness Index of non-conventional banks (%)

SV = Saving effectiveness

LD = Lending effectiveness

PC = Patronage cost effectiveness

TD = Timely delivery effectiveness



WD = Withdrawal effectiveness of deposit

LP = Loan processing effectiveness

FS = Financial asset safe-guarding effectiveness

P = intercept term

$P_1 - P_7$ = coefficients of parameter estimators

ei = stochastic error term

RESULTS AND DISCUSSIONS

Savings Behaviour of Small-Scale Agribusiness Operators

The data presented in Table 1 highlights the saving behaviours of small-scale agribusiness operators in Delta State and provides strong evidence of their engagement with non-conventional financial systems. A substantial majority (85%) of respondents reported saving with non-conventional institutions, illustrating the centrality of these systems in rural financial practices. Among them, daily contribution schemes such as Ajo or Esusu (45.1%) and cooperative societies (43.1%) were the most preferred channels. These findings align with previous studies that noted the popularity of rotating savings and credit associations (ROSCAs) and cooperatives in supporting informal financial intermediation where access to formal banks is limited (Adebayo & Yusuf, 2018). The regularity of savings is notable, with over 60% saving either weekly or monthly, reflecting a relatively structured approach to financial planning. This structured saving habit is particularly important for financial inclusion, as it shows that despite being outside the formal banking sector, these operators are actively participating in disciplined financial behaviours (Oladeji et al., 2020).

In terms of monthly savings volume, most respondents saved between ₦5,001 and ₦20,000, with the modal range being ₦5,001–₦10,000 (35.3%). This range suggests that while their savings may be modest, they are consistent and potentially scalable. The majority (58.8%) indicated that their savings were voluntary, which may reflect trust and autonomy in their chosen financial arrangements. Interestingly, 64.7% of respondents reported receiving interest or dividends on their savings, a feature more commonly associated with formal institutions. This finding implies that some non-conventional institutions may be evolving toward semi-formal models that offer incentives to encourage savings which is an important step toward bridging the informal-formal financial divide (Nwankwo & Ifejiolor, 2021). Overall, these results underscore the relevance of non-conventional banking systems in supporting grassroots financial inclusion, enabling savings mobilisation, and potentially enhancing financial resilience among agribusiness operators.

Table 1: Savings Behaviour of Small-Scale Agribusiness Operators

Savings Practice	Frequency	Percentage (%)
Do you save with any non-conventional institution?		
Yes	51	85
No	9	15
Type of Institution Saved With (n = 51)		
Cooperative society	22	43.1
Daily contribution (Ajo/Esusu)	23	45.1
NGO/Microfinance group	6	11.8
Frequency of Savings (n = 51)		
Daily	14	27.5

Weekly	17	33.3
Monthly	15	29.4
Occasionally	5	9.8
Average Monthly Savings Volume (₦) (n = 51)		
Less than ₦5,000	10	19.6
₦5,001 – ₦10,000	18	35.3
₦10,001 – ₦20,000	14	27.5
Above ₦20,000	9	17.6
Nature of Savings (n = 51)		
Voluntary	30	58.8
Compulsory	21	41.2
Do you receive interest/dividends on savings? (n=51)		
Yes	33	64.7
No	18	35.3

Volume of Credit Accessed from Non-Conventional Banking System

The results presented in Table 2 reveal that a substantial proportion of small-scale agribusiness operators in Delta State (70% of respondents) had accessed credit from non-conventional banking systems, while only 30% had not. This high level of participation suggests that informal financial institutions such as cooperatives, rotating savings and credit associations (ROSCAs), and moneylenders serve as critical financing sources for rural agribusinesses that are typically underserved by formal banking institutions (Oladeebo & Oladeebo, 2018). The ease of access, flexibility in collateral requirements, and trust-based relationships characteristic of these non-conventional systems may account for their popularity. This pattern also aligns with the findings of Nwibo and Alimba (2020), who noted that informal credit sources play a significant role in improving rural farmers' liquidity and meeting their short-term financial needs.

Regarding loan amounts, the majority of the respondents (35.7%) received between ₦20,000 and ₦50,000, followed by 28.6% who accessed ₦50,001 to ₦100,000, and 16.7% who received above ₦100,000. Only 19% obtained loans below ₦20,000. This distribution suggests that while most non-conventional institutions may provide modest funding, they still cater to varying capital needs of agribusinesses. The ability to access amounts exceeding ₦50,000 implies a degree of capacity and confidence in these informal institutions. As observed by Yusuf et al. (2021), informal financial systems can successfully meet the working capital and seasonal input needs of farmers when formal financial structures are lacking or inefficient. Therefore, the data affirm that non-conventional banking systems are not only widely used but are also responsive to the credit demands of small-scale agribusinesses.

Table 2: Volume of Credit Accessed from Non-Conventional Banking System

Access to Credit	Frequency	Percentage (%)
Yes	42	70.0
No	18	30.0
Total	60	100
Amount of Most Recent Loan (₦)	Frequency	Percentage (%)
Less than ₦20,000	8	19.0
₦20,000 – ₦50,000	15	35.7
₦50,001 – ₦100,000	12	28.6
Above ₦100,000	7	16.7
Total	42	100

Loan Default Rate Among Non-Conventional Banking Users

The loan default rate among users of non-conventional banking systems, as shown in Table 3, highlights a moderate level of financial risk within the informal credit landscape. Out of the 42 respondents who had accessed credit, 42.9% reported defaulting at least once, while 57.1% maintained a clean repayment record. This default rate is relatively significant and poses a challenge to the sustainability of informal credit systems, particularly when compared to formal microfinance institutions which often report lower default rates due to stronger monitoring and structured repayment plans (Onugu et al., 2020). The absence of stringent repayment enforcement mechanisms in non-conventional systems, such as cooperatives or thrift groups, may contribute to this outcome, especially as such systems rely heavily on trust and peer pressure rather than legal enforcement.

The reasons for loan default further illustrate the vulnerability of agribusiness operators to both economic and social shocks. The most common cause was business loss (44.4%), reflecting the unstable nature of small-scale agribusiness ventures that are highly susceptible to factors such as price fluctuations, climate variability, and market access issues (Ayoade & Adetunji, 2021). Ill health or emergency expenses accounted for 27.8% of defaults, underscoring the limited financial safety nets and health insurance coverage among rural populations. High interest rates (16.7%) and poor follow-up mechanisms (11.1%) also contributed to defaults, suggesting a need for better loan structuring and borrower support systems within informal financial arrangements. These findings align with those of Oboh and Ekpebu (2019), who emphasized that improving the efficiency of informal credit systems requires not only access but also risk mitigation strategies and borrower education. Therefore, while non-conventional banking systems serve as vital financial lifelines, the high incidence of default remains a critical issue for their long-term effectiveness.

Table 3: Loan Default Rate among Non-Conventional Banking Users

Loan Default Experience	Frequency	Percentage (%)
Yes (Defaulted at least once)	18	42.9
No	24	57.1
Total (Loan users only)	42	100
Reason for Default	Frequency	Percentage (%)
Business loss	8	44.4
Ill health/emergency	5	27.8
High interest rate	3	16.7
Lack of follow-up/reminders	2	11.1

Deposit Security and Institutional Trust

The findings from Table 4 highlight the level of deposit security and institutional trust experienced by small-scale agribusiness operators using non-conventional banking systems in Delta State. A substantial majority (68.3%) of the respondents believed their money was secure, while 18.4% were uncertain, and only 13.3% expressed concerns over the safety of their deposits. This dominant perception of safety suggests a relatively high level of institutional trust, which is crucial for the continued use and sustainability of informal financial systems. This trust can be attributed to the community-based nature of these institutions, where social proximity and mutual accountability play a major role in financial dealings (Adeyemi & Aluko, 2020). Furthermore, the results align with findings by Ezeoha (2018), who reported that informal financial users in Nigeria often prioritize social familiarity and personal trust over formal regulatory assurances when deciding where to save or invest money.

Regarding the mechanisms used to safeguard deposits, 50% of respondents cited the use of physical record books, while 30% relied on lockboxes. Only 16.7% reported the use of digital records, and a mere 10% used external banking channels—reflecting the largely traditional and low-tech nature of these systems. These approaches, although rudimentary, have proven functional within local trust networks. Interestingly, 88.3% of the respondents reported never losing funds, which reinforces the perception of reliability within these informal setups. This supports Okoye and Nwosu's (2019) conclusion that deposit losses are rare in well-

managed cooperative or group savings schemes. However, the existence of 11.7% who experienced financial loss emphasizes the need for stronger risk management practices and gradual integration of simple digital technologies to enhance security. Overall, the evidence from the table affirms that trust and informal accountability mechanisms form the backbone of deposit security in non-conventional banking systems used by rural agribusiness operators.

Table 4: Deposit Security and Institutional Trust

Perception of Deposit Security	Frequency	Percentage (%)
Yes (Money is secure)	41	68.3
No	8	13.3
Not Secure	11	18.4
Total	60	100
Method of Safeguarding Deposits	Frequency	Percentage (%)
Record books	30	50.0
Digital record	10	16.7
Lockbox	18	30.0
External banking channel	6	10.0
None	4	6.7
Past Experience of Lost Funds	Frequency	Percentage (%)
Yes	7	11.7
No	53	88.3

Effectiveness Index (EI) of Non-Conventional Banking System

The data presented in Table 5 provides a quantitative assessment of the Effectiveness Index (EI) of non-conventional banking systems as perceived by small-scale agribusiness operators in Ughelli North LGA. The mean scores across the seven identified indicators ranged from 2.60 to 3.25 on a 4-point Likert scale. Notably, withdrawal effectiveness received the highest rating with a score of 3.25, interpreted as very effective, indicating that users experience timely and reliable access to their funds. Similarly, indicators such as savings effectiveness (3.20), timely delivery of services (2.95), and financial asset safeguarding (3.05) were all rated as effective, suggesting that non-conventional institutions provide relatively dependable and secure services. This aligns with findings by Olayemi and Salami (2020), who emphasized the reliability of community-based finance models in ensuring accessibility and trustworthiness in rural banking systems.

On the other hand, some indicators such as loan processing effectiveness (2.70) and patronage cost effectiveness (2.60) were rated as less effective, reflecting challenges such as delays in loan disbursement and high transaction fees that may discourage wider usage. These findings are consistent with Chukwu and Nwachukwu (2021), who reported that non-formal financial systems often struggle with operational inefficiencies and cost burdens, despite their accessibility. Nonetheless, the calculated Effectiveness Index (EI) of 73.57% reveals that the overall performance of these institutions is moderately effective, supporting their continued relevance as viable alternatives to formal financial institutions. This moderate effectiveness also supports earlier work by Okon and Etim (2018), which acknowledged the critical role of non-conventional banks in promoting financial inclusion among underserved populations.

Hypothesis One (HO₁): Non-conventional banking system is not effective in rendering financial services to small-scale agribusiness operators.

The Effectiveness Index (EI) of 73.57% indicates that non-conventional banking systems are generally effective. Most respondents rated services such as savings, withdrawals, and deposit safeguarding as either “effective” or “very effective.” Given this high effectiveness rating, the null hypothesis is rejected. This implies that non-conventional banking systems play a meaningful role in delivering financial services to small-scale agribusiness operators in the study area.

Table 5: Effectiveness Index (EI) of Non-Conventional Banking System

Indicator	Mean rating	Remarks
Savings effectiveness	83.40	Effective
Lending /credit effectiveness	70.0	Effective
Default effectiveness	42.9	Less Effective
Security of deposit	68.3	Effective
Loss of Deposit	11.7	Effective
Mean Effectiveness Index (EI)	55.26%	Moderately Effective

Multiple Regression Results on Factors Influencing Effectiveness Index

The multiple regression results presented in Table 6 reveals the significant predictors influencing the Effectiveness Index (EI) of non-conventional banking systems among small-scale agribusiness operators. The model explains approximately 74.1% of the variation in the effectiveness index ($R^2 = 0.741$, Adjusted $R^2 = 0.703$), indicating a strong explanatory power. The F-statistic (19.56, $p = 0.000$) confirms that the overall regression model is statistically significant at the 1% level, suggesting that the combined influence of the independent variables significantly predicts the perceived effectiveness of non-conventional banking systems. Among the variables, saving effectiveness ($\beta = 0.412$, $p = 0.000$) and lending effectiveness ($\beta = 0.374$, $p = 0.000$) had the most substantial positive effects, indicating that the ability to save regularly and access loans reliably are key drivers of system effectiveness. These findings are consistent with those of Nwankwo and Nwamaka (2020), who emphasized that regular savings and timely credit access are core motivators for participation in informal finance structures.

Other significant predictors included timely delivery of services ($\beta = 0.222$, $p = 0.013$), withdrawal effectiveness ($\beta = 0.187$, $p = 0.008$), and financial safeguarding ($\beta = 0.358$, $p = 0.000$), all of which positively contributed to the effectiveness index. This aligns with the study by Okeke et al. (2018), who found that quick access, ease of withdrawals, and trust in fund security greatly influence rural users' satisfaction with informal finance institutions. Interestingly, patronage cost ($\beta = -0.195$, $p = 0.009$) had a negative and significant effect, implying that high fees or hidden charges reduce the perceived value of the system. This supports the observation by Olayemi and Ogbu (2021) that excessive transaction costs in informal finance deter usage and reduce system credibility. Conversely, loan processing effectiveness ($\beta = 0.144$, $p = 0.064$) was not statistically significant at the 5% level, suggesting that while relevant, speed of loan approval is not as critical as other factors like savings performance or fund security in influencing perceived system effectiveness.

Hypotheses Testing

Hypothesis Two (HO₂): The savings volume mobilized by non-conventional banking systems does not significantly contribute to the financial stability of small-scale agribusiness operators.

The regression result shows that savings effectiveness had a positive and statistically significant effect on the overall effectiveness index ($\beta = 0.412$, $p = 0.000$). This suggests that the volume and reliability of savings mobilized through non-conventional institutions contribute significantly to the financial stability of agribusiness operators. Therefore, the null hypothesis is rejected.

Hypothesis Three (HO₃): Credits provided by non-conventional banking systems do not have a significant impact on the productivity and growth of small-scale agribusinesses.

Lending effectiveness was also found to significantly influence the effectiveness index ($\beta = 0.374$, $p = 0.000$), indicating that access to credit from these institutions enhances the growth and operational capacity of agribusinesses. Thus, the null hypothesis is rejected, affirming that non-conventional credit services are vital to agribusiness productivity.

Hypothesis Four (HO₄): There is no significant relationship between financial deposit security and the level of trust in non-conventional banking systems.

The analysis revealed that financial asset safeguarding was a significant predictor of perceived effectiveness ($\beta = 0.358$, $p = 0.000$), and the majority of respondents felt their money was secure. This underscores the role of deposit security in building user trust. As a result, the null hypothesis is rejected.

Table 6: Multiple Regression Results on Factors Influencing Effectiveness Index of Non-Conventional Banking System

Variables	Coefficient (β)	Std. Error	t-Value	p-Value
Constant	8.234	2.146	3.84	0.000
Saving effectiveness	0.412	0.081	5.09	0.000***
Lending effectiveness	0.374	0.093	4.02	0.000***
Patronage cost	-0.195	0.072	-2.71	0.009***
Timely delivery	0.222	0.086	2.58	0.013**
Withdrawal effectiveness	0.187	0.067	2.79	0.008***
Loan processing	0.144	0.076	1.89	0.064
Financial safeguarding	0.358	0.088	4.07	0.000***
R ²	0.741			
Adjusted R ²	0.703			
F-statistic	19.56			0.000

*** and ** are significant at 1% and 5% levels respectively

CONCLUSION AND POLICY RECOMMENDATIONS

This study concludes that non-conventional banking systems are effective in delivering critical financial services to small-scale agribusiness operators in Delta State, Nigeria. These systems have played a pivotal role in enhancing savings culture, providing access to flexible credit, and ensuring deposit security. Despite challenges such as loan defaults and inadequate regulatory oversight, the positive perception and strong usage pattern among farmers and traders underscore the systems' relevance. The study affirms that financial inclusion can be deepened not only through formal institutions but also through well-structured informal systems tailored to local realities.

Based on the findings and conclusions, the following recommendations are made:

- Operators of non-conventional banking systems should be trained in basic financial management, record keeping, and client handling to improve efficiency and trust.
- Local governments and regulatory agencies (e.g., CBN, SMEDAN) should recognize and formalize effective informal financial groups by offering minimal regulation, support tools, and linkage to microfinance institutions.
- Educational campaigns should be organized to encourage responsible borrowing and timely repayment among agribusiness operators to minimize default rates and build sustainable credit culture.
- Encouraging the adoption of digital platforms for record keeping and mobile savings could increase transparency, reduce fund mishandling, and expand service reach.
- Government and donor agencies should channel support to strong, grassroots cooperatives as they have demonstrated better saving discipline and financial trust among members.



- vi. Efforts should be made by group leaders and stakeholders to moderate interest rates and other service charges to reduce patronage cost barriers, especially for start-up agribusinesses.

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