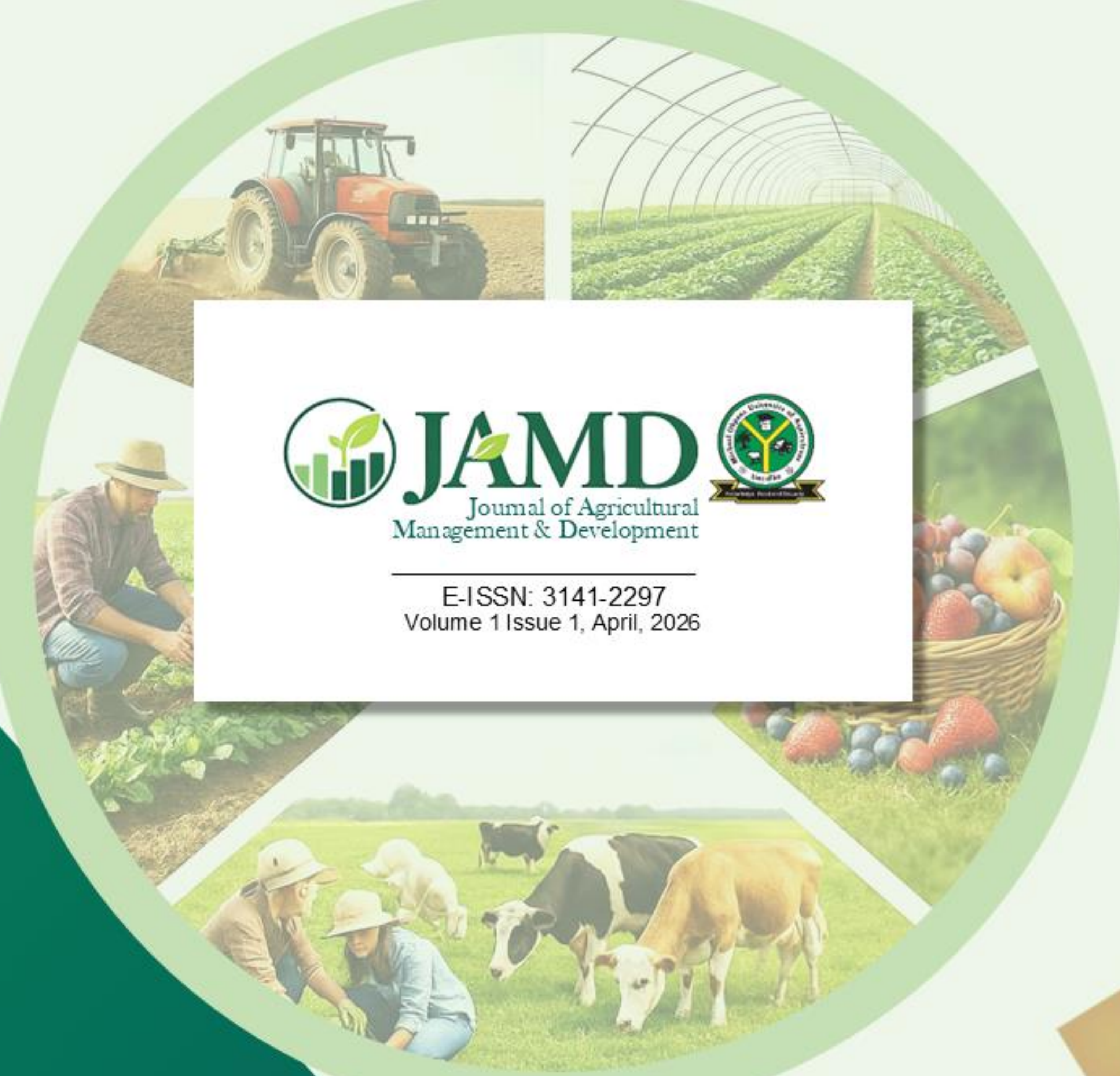

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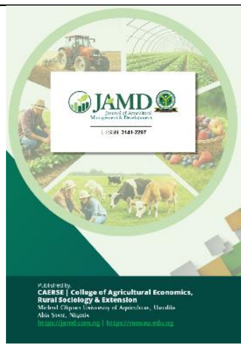

Agribusiness and Entrepreneurship: A Review of Innovative Financing Mechanisms for Sustainable Food Security in Nigeria

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ABSTRACT

Food security remains a pressing challenge in Nigeria, exacerbated by climate change, socio-political instability, and inadequate financing mechanisms. Agribusiness and entrepreneurship play crucial roles in addressing food security challenges, but access to finance remains a major constraint. This paper reviews innovative financing mechanisms available to agribusiness entrepreneurs in Nigeria, including microfinance; impact investing, agricultural value chain financing, fin tech solutions, and government interventions. The study also highlights policy recommendations for improving financial access to enhance food security. A thorough literature review is conducted to provide insights into the intersection of agribusiness, entrepreneurship, and financial innovation. The findings suggest that financial constraints significantly hinder agribusiness growth, and overcoming these barriers is key to sustainable food security in Nigeria.

Introduction

Agribusiness and entrepreneurship are critical drivers of economic growth and food security in Nigeria. The agricultural sector contributes about 24% to Nigeria's GDP and employs over 70% of the workforce, making it a key component of national development (Olu, *et. al.,* 2021). However, food security in Nigeria remains fragile due to climate change, socio-political instability, and inadequate access to finance. The ability of agribusinesses to thrive is largely dependent on financial accessibility, technological advancement, and government support, Adobor, (2020).

Entrepreneurship within the agricultural sector fosters innovation, enhances productivity, and increases food availability. However, many agribusiness entrepreneurs struggle with capital constraints, which limit their ability to invest in improved farming techniques, mechanization, and value chain expansion, Panel, (2018). Traditional financial institutions often perceive agriculture as a high-risk sector, leading to limited credit access for farmers and agribusiness operators. Consequently, innovative financing mechanisms such as microfinance, fintech solutions, value chain financing, and impact investing have emerged to bridge this gap (Rayhan, *et al.,* 2024). This paper explores the various innovative financing mechanisms available for agribusinesses in Nigeria and their impact on food security. It also examines the role of government policies, private sector investments, and technology-driven solutions in enhancing financial accessibility for agribusiness entrepreneurs.

Literature Review

A comprehensive literature review is essential for understanding the relationship between agribusiness, entrepreneurship, finance, and food security. This section presents existing scholarly discussions on these key variables.

Agribusiness and Its Contribution to Food Security

Agribusiness encompasses the entire agricultural value chain, including production, processing, marketing, and distribution. It plays a crucial role in ensuring food security by improving productivity, enhancing supply chain efficiency, and fostering economic development. Studies indicate that agribusiness significantly contributes to food security by increasing food production, reducing post-harvest losses, and improving market accessibility, Gc, and Ghimire, (2019). The integration of agribusiness activities enhances value addition, reduces food wastage, and ensures that agricultural products reach consumers in optimal condition (Urugo, *et al.,* 2024).

Agribusiness fosters rural development by generating employment opportunities and increasing income levels for farmers and agripreneurs. According Ogunleye, (2017), the agribusiness sector in Nigeria employs over 70% of the workforce, making it a key driver of economic growth. By incorporating modern farming techniques, agribusiness improves efficiency and sustainability in food production. Mechanization, precision agriculture, and smart farming technologies have been identified as vital components of agribusiness that enhance food security, Reddy, (2022). One of the major contributions of agribusiness to food security is the reduction of post-harvest losses. Post-harvest losses in Nigeria account for approximately 40% of total agricultural output due to inadequate storage facilities, poor transportation networks, and inefficient supply chains, Ogundele, (2022). The development of agro-processing industries and cold chain logistics can significantly reduce these losses and improve food availability. The adoption of warehouse receipt systems, improved packaging methods, and supply chain digitization have proven to be effective in mitigating food losses (Reyes, *et al.,* 2024).

Agribusiness also enhances market accessibility for farmers by linking them to domestic and international markets. Value chain integration allows smallholder farmers to access stable markets, ensuring consistent income and increased production levels (Ferris, *et al.,* 2014). E-commerce platforms and digital marketplaces are further revolutionizing agricultural trade by connecting producers directly to consumers, thereby reducing the role of intermediaries and increasing farmers' profits (Emeka, *et al.,* 2023).

Despite its immense contributions to food security, the agribusiness sector in Nigeria faces numerous challenges, including poor infrastructure, inconsistent government policies, financial limitations, and climate change impacts (Ukwe, 2025). Addressing these challenges requires strategic investments in rural infrastructure, policy harmonization, and financial support mechanisms to enhance agribusiness development. Strengthening agribusiness financing, promoting innovation, and improving access to technology will further boost the sector's contribution to food security in Nigeria.

Entrepreneurship in Agribusiness

Entrepreneurship in agribusiness involves the application of innovative business models to enhance agricultural productivity and profitability. Entrepreneurs in this sector drive technological adoption, improve efficiency, and create employment opportunities, thereby fostering economic growth and food security, Odeyemi, (2023). Agripreneurs play a critical role in modernizing agriculture through value addition, market expansion, and the introduction of innovative financial mechanisms to bridge investment gaps (Bethi, *et al.,* 2023). One of the key contributions of agripreneurship is its ability to foster innovation. Research indicates that agripreneurs introduce new farming techniques, advanced mechanization, and precision agriculture to improve productivity and reduce losses (Balogun, *et al.,* 2024). The adoption of climate-smart agricultural practices, such as conservation agriculture and hydroponics, further enhances food security and resilience to climate change (Sarma, *et al.,* 2024).

However, many agripreneurs face challenges that hinder their business sustainability. Limited access to finance remains a major barrier, as traditional financial institutions often perceive agriculture as a high-risk sector, making credit accessibility difficult (Khan, *et al.,* 2024). In response, alternative financing mechanisms such as crowdfunding, cooperative societies, and agribusiness venture capital have been proposed to support agripreneurs (Havran, *et al.,* 2021). Additionally, entrepreneurship education and business training programs have been identified as essential for improving the managerial skills of agribusiness owners and ensuring the long-term viability of their enterprises (Kalule, *et al.,* 2017). Market volatility and price fluctuations pose another challenge to agribusiness entrepreneurs. Global economic trends, currency devaluation, and unstable government policies often lead to unpredictable market conditions that negatively affect agribusiness investments (IMF and UNCTAD, (2011)). To mitigate these risks, agripreneurs are increasingly leveraging digital technologies and data analytics for market intelligence, demand forecasting, and efficient resource allocation (Ajayi, *et al.,* 2024).

Furthermore, the role of women and youth in agribusiness entrepreneurship is gaining attention. Studies suggest that empowering women and youth through agribusiness training and financial inclusion strategies enhances food production and economic diversification (Malik, *et al.,* 2019). Government policies and support programs, such as agricultural grants and business incubation hubs, have been recommended to promote inclusive agribusiness entrepreneurship (Ifeoma, 2019).

Finance and Agribusiness Growth

Access to finance is a major determinant of agribusiness success. Studies reveal that financial limitations hinder farm expansion, mechanization, and value addition (Ntagu, *et. al.,* 2022). Limited capital restricts farmers from investing in high-yield technologies, acquiring modern equipment, and improving agricultural infrastructure (Balana, *et al.,* 2022). Financial constraints also limit the ability of agribusinesses to scale operations and compete in domestic and international markets. Various financing options, including microfinance, agricultural banks, government credit schemes, and crowd funding, have been explored to support agribusiness growth (Mapanje, *et al.,* 2023). Microfinance institutions provide small-scale credit to farmers, particularly those without formal collateral, thereby enabling them to invest in productivity-enhancing technologies. Agricultural banks, such as the Bank of Agriculture in Nigeria, offer specialized credit facilities tailored to agribusiness needs (Adeniyi, 2021). Crowd funding platforms have also emerged as viable alternatives, allowing farmers to raise capital from a diverse pool of investors.

Despite these financing opportunities, high-interest rates, bureaucratic loan application processes, and stringent collateral requirements continue to hinder smallholder farmers' access to credit, Hlaing, (2024). Many financial institutions perceive agribusiness investments as high-risk due to climate uncertainties, fluctuating commodity prices, and inadequate insurance coverage, Céu, and Gaspar, (2024). To address these challenges, policymakers and financial institutions must develop tailored financial instruments such as low-interest credit facilities, agricultural insurance schemes, and blended finance models to support agribusiness development. Additionally, public-private partnerships (PPPs) and impact investment funds are gaining traction as innovative financing mechanisms for agribusiness (Nikolaevich, *et al.,* 2019). The public-private partnerships (PPPs) facilitate investment in rural infrastructure, cold storage facilities, and agro-processing industries, thereby improving value chain efficiency. Impact investors, on the other hand, focus on sustainable agribusiness models that deliver both financial returns and social impact (Kish, *et al.,* 2018). Enhancing financial literacy among farmers and agripreneurs is also critical to maximizing the benefits of available funding opportunities. Studies indicate that financial literacy training improves loan repayment rates, investment decision-making, and business sustainability in agribusiness ventures (Obi-Anike, *et al.,* 2023). Government-led financial inclusion programs and agribusiness incubators can further equip entrepreneurs with the skills needed to navigate complex financial landscapes and access funding effectively. By strengthening financial support systems, reducing bureaucratic barriers, and promoting financial literacy, agribusinesses in Nigeria can achieve sustainable growth, increased productivity, and enhanced food security.

Innovative Financing Mechanism

Recent literature highlights the role of innovative financing in transforming agribusiness. These mechanisms include:

- Microfinance Institutions (MFIs): Provide small-scale loans to farmers and agripreneurs, but often at high-interest rates, Adebisi, (2020). These institutions have expanded access to credit but need to adopt flexible repayment structures and reduce borrowing costs to enhance their impact.
- Value Chain Financing (VCF): Ensures financing along the agricultural supply chain, enabling producers, processors, and marketers to access funds, Ojo, and Ayanwale, (2019). By linking financial resources directly to supply chain actors, VCF reduces credit risks and enhances production efficiency.
- Fintech Solutions: Mobile banking, digital lending, and blockchain financing are improving financial inclusion for smallholder farmers (Asare, *et al.*, 2024). Digital platforms such as FarmCrowdy and Thrive Agric facilitate access to investment capital while ensuring transparency and risk reduction.
- Government and Development Bank Interventions: Programs such as NIRSAL and the Anchor Borrowers' Programme provide credit and risk-sharing incentives to agricultural enterprises (CBN, 2020). These interventions address market failures and support agricultural resilience.

Expanding and integrating these financing models will enhance agribusiness sustainability, boost food security, and mitigate financial risks in Nigeria's agricultural sector.

Challenges

Despite these financing innovations, several barriers hinder agribusiness development in Nigeria:

- Inadequate Infrastructure and Logistics: Poor road networks, lack of storage facilities, and inefficient transport systems increase post-harvest losses and reduce access to markets, Bappah, and Adejoh, (2024).
- Regulatory and Policy Inconsistencies: Frequent changes in government policies on agricultural financing and trade regulations create uncertainty for agribusiness investors (Olomu, *et al.,* 2020).
- High Lending Interest Rates and Collateral Requirements: Many financial institutions require high collateral, making it difficult for small-scale farmers and agripreneurs to access credit (Mohammed, *et al.,* 2024).
- Low Financial Literacy: Many farmers lack knowledge of available financing options, credit management, and risk mitigation strategies, which limits their ability to access and utilize funds effectively (Uche, *et al.,* 2024).

Policy Recommendations

To address these challenges, the following policy recommendations are proposed:

- Strengthening Financial Literacy Programs: Educating farmers and agripreneurs on financial management, investment strategies, and available funding options will enhance their ability to secure and utilize financial resources efficiently.
- Expanding Fintech-Driven Financial Inclusion**:** Leveraging mobile banking, digital lending platforms, and blockchain technology can improve access to finance for rural farmers and agribusinesses.
- Enhancing Government-Private Sector Collaboration: Establishing partnerships between the government, financial institutions, and agribusiness investors can foster better access to credit and funding for agricultural enterprises.
- Reducing Interest Rates on Agricultural Loans: Implementing policies to lower interest rates and providing government-backed guarantees can improve credit accessibility for agribusiness entrepreneurs.
- Encouraging Public-Private Partnerships for Infrastructure Development: Investment in rural roads, storage facilities, and logistics infrastructure will reduce post-harvest losses and enhance market access for agricultural products.

By addressing these barriers and implementing these policy recommendations, Nigeria can enhance agribusiness growth, strengthen food security, and promote sustainable agricultural development.

Conclusion

Innovative financing mechanisms are crucial for enhancing agribusiness growth and ensuring food security in Nigeria. A diversified approach, integrating microfinance, fintech solutions, value chain financing, and government interventions, can significantly improve financial access for agripreneurs. However, addressing regulatory bottlenecks, improving infrastructure, and promoting financial literacy are essential for long-term sustainability. Future research should focus on evaluating the effectiveness of these financing mechanisms in different agribusiness sub-sectors. By addressing financing challenges and implementing strategic policy reforms, Nigeria can unlock the full potential of agribusiness entrepreneurship and ensure sustainable food security for its growing population.

References

Adebisi, A. A. (2020). Microfinance credit and micro enterprise development in the agricultural sub-sector of the Nigerian economy. *Bullion*, *44*(3), 2.

Adeniyi, A. (2021). Nigeria's Bank of Agriculture: An Agenda for Organizational Renewal. *Journal of Business Administration Research*, *10*(1), 41-50.

Adobor, H. (2020). Entrepreneurial failure in agribusiness: evidence from an emerging economy. *Journal of Small Business and Enterprise Development*, *27*(2), 237-258.

Ajayi, O. O., Toromade, A. S., and Olagoke, A. (2024). Data-Driven Agropreneurship (DDA): Empowering farmers through predictive analytics. *Journal of Agribusiness and Technology*.

Asare, J., Kobena Agbek, A., Owusu Afriyie, S., and Michael, N. O. A. (2024). The Impact of Financial Technology-Digital Lending, Mobile Banking and Blockchain on Small and Medium Enterprises for Inclusive Growth and Sustainable Development in Africa. *Stephen and ppong Appiagyei Ampong, George O. and Michael, Nana Owusu-Akomeah, The Impact of Financial Technology-Digital Lending, Mobile Banking and Blockchain on Small and Medium Enterprises for Inclusive Growth and Sustainable Development in Africa*.

Balana, B. B., and Oyeyemi, M. A. (2022). Agricultural credit constraints in smallholder farming in developing countries: Evidence from Nigeria. *World Development Sustainability*, *1*, 100012.

Balogun, O. S., Nwahia, O. C., and Nwebor, E. (2024). Climate-smart agriculture for sustainable agricultural development in Nigeria: an empirical review. *Journal of Applied Sciences and Environmental Management*, *28*(6), 1853-1858.

Bappah, F., and Adejoh, S. (2024). Mitigating Post-Harvest Losses to Ensure Food Security in North-West Nigeria. *Academy Journal of Multidisciplinary Doctoral Research*, *2*(2), 118-127.

Bethi, S. K., and Deshmukh, S. S. (2023). Challenges and opportunities for Agri-Tech startups in developing economies. *International Journal of Agriculture Sciences, ISSN*, 0975-3710.

CBN (2020). *Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) Report*. Central Bank of Nigeria.

Céu, M. S., and Gaspar, R. M. (2024). A review on climate change, credit risk and agriculture. *Rural Sustain. Res*, *51*, 38-49.

Emeka, O., Christiana, I., Emmanuel, O., Akunna, T. A., Esther, N., Rachael, I., and Kelechi, E. (2023). A Review on Digitalization of Agriculture and Economic Business Model Strategies in the 21 st Century. *American Journal of Operations Management and Information Systems*, *8*(2), 30-41.

Ferris, S., Robbins, P., Best, R., Seville, D., Buxton, A., Shriver, J., and Wei, E. (2014). Linking smallholder farmers to markets and the implications for extension and advisory services. *MEAS Brief*, *4*(10), 13-14.

Gc, A., and Ghimire, K. (2019). Estimating post-harvest loss at the farm level to enhance food security: A case of Nepal. *International Journal of Agriculture Environment and Food Sciences*, *3*(3), 127-136.

Havran, D., Kerényi, P., and Víg, A. A. (2021). Social Finance and Agricultural Funding. In *Innovations in Social Finance: Transitioning Beyond Economic Value* (pp. 269-290). Cham: Springer International Publishing.

Hlaing, T. T. (2024). *Analysis of Credit Accessibility and Loan Utilization of Small-Scale Farmers (Lawei Township, Nay Pyi Taw (Thin Thiri Hlaing, 2024)* (Doctoral dissertation, MERAL Portal).

Ifeoma, O. D. (2019). A review of the Nigerian agricultural promotion policy (2016-2020): implications for entrepreneurship in the agribusiness sector.

IMF, O., and UNCTAD, W. (2011). Price volatility in food and agricultural markets: Policy responses. *FAO: Roma, Italy*.

Kalule, S. W., Mugonola, B., and Ongeng, D. (2017). The student enterprise scheme for agribusiness innovation: A University-based training model for nurturing entrepreneurial mind-sets amongst African youths. *African Journal of Rural Development (AFJRD)*, *2*(1), 55-66.

Khan, F. U., Nouman, M., Negrut, L., Abban, J., Cismas, L. M., and Siddiqi, M. F. (2024). Constraints to agricultural finance in underdeveloped and developing countries: a systematic literature review. *International Journal of Agricultural Sustainability*, *22*(1), 2329388.

Kish, Z., and Fairbairn, M. (2018). Investing for profit, investing for impact: Moral performances in agricultural investment projects. *Environment and Planning A: Economy and Space*, *50*(3), 569-588.

Malik, B., and Shrestha, R. B. (2019). Youth and Women in Agriculture for Economic Development and Food Security in Pakistan. *Youth and Women in Agriculture: Economic Development and Food Security in South Asia*, *101*.

Mapanje, O., Karuaihe, S., Machethe, C., and Amis, M. (2023). Financing sustainable agriculture in sub-saharan africa: a review of the role of financial technologies. *Sustainability*, *15*(5), 4587.

Mohammed, M., Bardai, B. B., and Adam, M. I. A. B. (2024). Access to Finance and its Implications for Micro, Small and Medium Business Enterprises (MSMEs) Growth: A Case Study of Financial Institutions and Alternative Financing Channels in Nigeria. *International Journal of Research and Innovation in Applied Science*, *9*(12), 128-137.

Nikolaevich, M., Fedorovich, O., Vladimirovna, N., and Igorevna, D. (2019). Public and private partnership: Innovation-driven growth of agriculture at the regional level. *Journal of Environmental Management & Tourism*, *10*(7 (39)), 1435-1444.

Ntagu, M. P., Nyam, V., and Promise, C. V. (2022). Policy of Agricultural Mechanization and Food Security in Nigeria: Challenges and Prospects. *NIU Journal of Social Sciences*, *8*(1), 233-245.

Obi-Anike, H. O., Daniel, O. C., Onodugo, I. J., Attamah, I. J., and Imhanrenialena, B. O. (2023). The role of financial information literacy in strategic decision-making effectiveness and sustainable performance among agribusiness entrepreneurs in Nigeria. *Sustainability*, *15*(13), 10416.

Odeyemi, C. A. (2023). Leveraging on Innovation and Technological Entrepreneurship in achieving economic growth in Nigeria. *Covenant Journal of Entrepreneurship*, 51-58.

Ogundele, F. (2022). Post-Harvest Losses and Food Security in Nigeria: An Empirical Review. *African Journal of Agriculture and Food Science*, *5*(3), 77-89.

Ogunleye, E. K. (2017). Synthesis of the Literature on Employment Creation in Nigeria's Agriculture and Agro-Industries in the Context of Inclusive Growth. *National Institute for Legislative Studies, National Assembly*.

Ojo, M. P., and Ayanwale, A. B. (2019). Value chain financing and plantain production in Nigeria: an ex-ante approach. *Financial Innovation*, *5*, 1-15.

Olomu, M. O., Ekperiware, M. C., and Akinlo, T. (2020). Agricultural sector value chain and government policy in Nigeria: issues, challenges and prospects. *African Journal of Economic and Management Studies*, *11*(3), 525-538.

Olu, J. F., Adama, F., and Umejiaku, C. (2023). Analysis of the Contribution of the Agricultural Sector to Employment Generation in Nigeria (1999–2021). *Journal of Global Economics, Management and Business Research*, *15*(1), 42-52.

Panel, M. M. (2018). *Mechanized: Transforming Africa's agriculture value chains*. Intl Food Policy Res Inst.

Rayhan, M. J., Rahman, S. M., Mamun, A. A., Saif, A. N. M., Islam, K. A., Alom, M. M., and Hafiz, N. (2024). FinTech solutions for sustainable agricultural value chains: A perspective from smallholder farmers. *Business Strategy & Development*, *7*(2), e358.

Reddy, R. (2022). Innovations in Agricultural Machinery: Assessing the Impact of Advanced Technologies on Farm Efficiency. *Journal of Artificial Intelligence and Big Data*, *2*(1), 10-31586.

Reyes, V., Cahill, E., and Mis Solval, K. E. (2024). The potential for reducing food waste through shelf-life extension: Actionable insights from data digitization. *Sustainability*, *16*(7), 2986.

Sarma, H. H., Borah, S. K., Dutta, N., Sultana, N., Nath, H., and Das, B. C. (2024). Innovative approaches for climate-resilient farming: strategies against environmental shifts and climate change. *International Journal of Environment and Climate Change*, *14*(9), 217-241.

Uche, I. V., Ekene, O. G., and Miebi, G. T. (2024). Prospects and challenges of agricultural financing in Nigeria: A review. *GSC Advanced Research and Reviews*, *18*(3), 388-399.

Ukwe, C. (2025). Nigeria and Food Security Challenges: Intertwining of Climate Change and Non-State Armed Groups and Policy Interventions.

Urugo, M. M., Yohannis, E., Teka, T. A., Gemede, H. F., Tola, Y. B., Forsido, S. F., and Abdu, J. (2024). Addressing post-harvest losses through agro-processing for sustainable development in Ethiopia. *Journal of Agriculture and Food Research*, 101316.