

Impact of Agro-Entrepreneurial Training and Performance of Women Agro-Entrepreneurs in Abuja, Nigeria

Aisha Abdullahi Yawa, Stephen Yero Wetsi, Mohammed Bello Aliyu, Jibrin Ciroma Aliyu
Department of Business Administration, Nile University of Nigeria Abuja

doi: <https://doi.org/10.37745/ijbsber.2013/vol14n4102115>

Published August 25, 2026

Citation: Yawa A.A., Wetsi S.Y., Aliyu M.B., Aliyu J.C. (2026) Impact of Agro-Entrepreneurial Training and Performance of Women Agro-Entrepreneurs in Abuja, Nigeria, *International Journal of Small Business and Entrepreneurship Research*,14, (4),102-115

Abstract: *Women demand better access to resources and support, which can lead to increased income, improved living standards, and empowerment. However, insufficient progress has been made in Abuja Nigeria, with women-owned micro enterprises facing challenges such as lack of access to markets, resources, and training. This study assesses the impact of agro-entrepreneurial training among women entrepreneurs in Abuja Nigeria. This study employed cross sectional research design where primary data was collected using closed ended structured questionnaire designed using Likert Scale from 360 sampled respondents of which 348 questionnaires were properly filled and returned, depicting a response rate of about 97%. The data was analyzed using descriptive statistics and multiple regression analysis. The research findings revealed that each specific training need has a significant impact on the performance of women entrepreneurs in Abuja Nigeria. Bookkeeping Training ($\beta=0.041$, p-value: 0.028) and Credit Recovery Training ($\beta=0.496$, p-value: 0.000) exhibited positive impacts. Access to Finance Training ($\beta=0.048$, p-value: 0.002) highlighted the importance of securing adequate financing. Networking Training ($\beta=0.093$, p-value: <0.001) demonstrated positive influences. Based on the findings, this study recommended that Government agencies, NGOs, and other relevant stakeholders should improve bookkeeping training programs for women entrepreneurs to enhance financial management skills. It suggested further that entrepreneurial trainers should offer specialized training on credit management and recovery. Workshops and seminars on financing, business plan development, pitch preparation, networking, leadership, communication are also recommended.*

Keywords: agro-entrepreneurship, women entrepreneurs; entrepreneurial training, financial literacy, access to finance; networking, business performance, enterprise growth, human capital theory

INTRODUCTION

Women agro-entrepreneurs in the Federal Capital Territory (FCT), Nigeria, are increasingly recognized for their contributions to food security, poverty alleviation, and inclusive economic growth. However, their impact remains constrained due to several structural, educational, and financial limitations. Despite the establishment of various empowerment initiatives by the government and

development agencies, many women-owned agro-enterprises continue to operate below capacity, with high failure rates and limited scalability. This underperformance is primarily linked to insufficient access to essential entrepreneurial training programs that could enhance their business performance and sustainability.

Agro-entrepreneurship training, particularly in bookkeeping, finance, credit recovery, and business networking, has been identified as a critical driver of enterprise growth. These skill sets empower women to manage financial records, assess business performance, maintain credit discipline, access funding, and build strategic partnerships. Unfortunately, most women agro-entrepreneurs in Abuja still lack adequate exposure to such structured training. For instance, poor bookkeeping practices hinder their ability to maintain financial accountability and make informed decisions. Without formal recordkeeping, tracking profits, managing costs, or attracting investors becomes difficult, leading to inefficiencies that limit business growth.

Moreover, many women in agro-business lack effective credit recovery strategies. This gap exposes them to financial losses when dealing with unpaid debts or informal lending practices. Limited knowledge in this area often leads to cash flow problems, increasing vulnerability to debt and reducing the overall resilience of their enterprises. Similarly, inadequate finance training further exacerbates their inability to secure funding. Without the knowledge to develop bankable proposals or navigate financial systems, women entrepreneurs struggle to access grants, loans, and other financing opportunities crucial for expansion and innovation. Additionally, the absence of structured networking and mentorship platforms limits their exposure to markets, collaborative ventures, and knowledge-sharing opportunities. Many women agro-entrepreneurs operate in isolation, missing out on critical industry trends, peer support, and visibility that could otherwise boost their competitiveness and integration into value chains. Despite national policies and budgetary allocations aimed at supporting female agro-entrepreneurs, these challenges continue to inhibit their contribution to regional economic development.

Addressing these gaps requires a more focused and skill-driven intervention strategy that aligns with the actual needs of women in the agro-business space. Empowering them through targeted training in bookkeeping, credit recovery, finance, and networking can significantly improve the performance and survival rate of their enterprises. Such interventions are vital not only for economic transformation but also for promoting gender equality and inclusive development in Nigeria. To explore this further, the study was guided by the following research questions:

LITERATURE REVIEW

Conceptual Clarification

Women Entrepreneurship

Women entrepreneurship refers to the participation of women in business ventures for income generation, innovation, and empowerment. Historically dominated by survivalist motives, women-owned enterprises now play vital roles in job creation and national development, particularly in the informal and agricultural sectors. In Nigeria, women own over 25% of registered businesses, yet

Publication of the European Centre for Research Training and Development-UK

remain underrepresented in large-scale enterprises due to cultural norms, low education levels, and poor access to credit and training. Women entrepreneurs are often active in MSMEs, where flexibility allows them to balance domestic responsibilities with economic activities. However, most remain in the micro or small-scale category due to limited access to capital, capacity-building programs, and market linkages.

Agro-Entrepreneurship Training

Agro-entrepreneurship training provides individuals, particularly women, with the technical and managerial skills to start, manage, and grow agro-based businesses. It is a vital tool for improving productivity, financial discipline, marketing efficiency, and enterprise sustainability. Studies (Aderemi, 2017; Kithae, 2019) have confirmed the significant impact of entrepreneurship training on small business performance. Such training helps women develop competencies in business planning, strategic management, inventory control, and customer engagement—essential for agro-business success. Training content includes theoretical knowledge and practical instruction aimed at transforming entrepreneurial mindsets and closing performance gaps.

Bookkeeping Training

Effective bookkeeping is crucial for sound financial management and decision-making. Women entrepreneurs who undergo bookkeeping training are better able to track cash flow, prepare financial statements, meet tax obligations, and build investor confidence. The training enhances their ability to adopt accounting software, understand financial reports, and ensure transparency. Bookkeepers also benefit from understanding ethics, communication, and regulatory changes (Karlsson et al., 2019).

Credit Recovery Training

Credit recovery training equips women with skills to manage bad debt and recover overdue payments. It includes techniques such as negotiation, customer follow-up, and legal debt recovery processes. For many women entrepreneurs in Nigeria, lack of knowledge in this area leads to cash flow problems and business instability. Training in this area improves financial discipline and builds resilience against credit-related business failure.

Access to Finance Training

Women often face barriers in accessing capital due to lack of collateral, low creditworthiness, and unfamiliarity with financial institutions. Access to finance training introduces women to loan procedures, investment readiness, business plan development, and digital financing options. It increases their confidence and capacity to access grants, micro-loans, and digital banking platforms, enhancing the sustainability and growth of their businesses (Kefela, 2010; Zietlow et al., 2018).

Networking Training

Networking enhances market access, visibility, mentorship, and resource sharing. Training in this area teaches women how to build strategic partnerships, leverage digital platforms, and participate in trade associations. Networking opens access to new markets, suppliers, support systems, and collaborative opportunities. Women entrepreneurs who network effectively often record higher business growth and innovation.

Performance of Women Agro-Entrepreneurs

Performance refers to the ability of women agro-entrepreneurs to achieve business growth, profitability, innovation, and sustainability. It is often influenced by entrepreneurial orientation, motivation, education, managerial skills, and access to support networks. Women's business performance is typically measured using financial indicators (e.g., sales growth), subjective satisfaction, and expansion capabilities. Relational leadership styles—empathy, collaboration, and inclusive decision-making—are also critical to success in women-led businesses (Buttner, 2021). Barriers such as lack of mentorship, social expectations, and limited access to capital continue to constrain performance despite women's high entrepreneurial potential.

Business Growth

Business growth, used here as a proxy for performance, includes increased sales, market share, and geographic expansion. It depends on decision-making capacity, opportunity identification, financial literacy, and innovation. Training enhances these capabilities, enabling women to pursue calculated risks and scale their businesses more effectively. Entrepreneurial motivation, support systems, and risk orientation are major predictors of long-term growth.

Conceptual Framework

The conceptual framework of this study links the independent variables, bookkeeping, credit recovery, access to finance, and networking training, to the dependent variable: performance (business growth) of women agro-entrepreneurs. The model hypothesizes that entrepreneurial training significantly influences the success trajectory of women-owned agro-enterprises in Abuja. By equipping women with core business skills, training is expected to mitigate performance barriers and unlock enterprise growth potential.

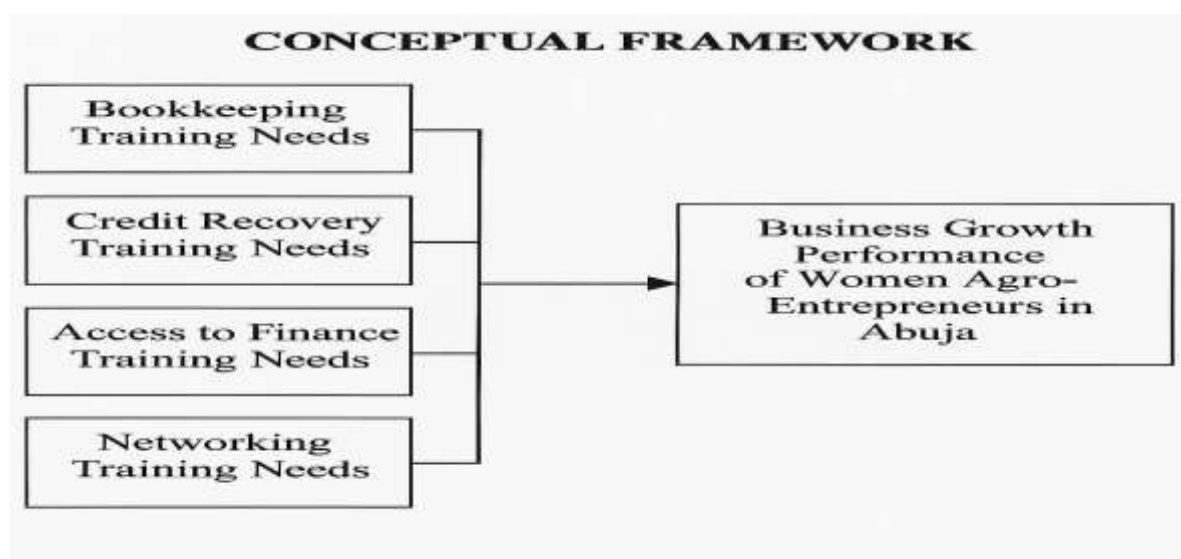


Figure 1: Conceptual Framework

Theoretical Review

A General Theory of Entrepreneurship

Schumpeter's theory and later refinement by Shane and Venkataraman emphasize the entrepreneur's role in discovering and exploiting opportunities. This theory sees the entrepreneur as a change agent who transforms resources into economic value through innovation. It supports the idea that women need to develop entrepreneurial insight and boldness to harness untapped opportunities in agriculture.

Entrepreneurial Orientation Theory

Danny Miller (1983) introduced EO theory, highlighting the traits of innovativeness, risk-taking, and proactiveness as essential for business success. Lumpkin and Dess (2016) expanded this to include autonomy and competitive aggressiveness. The theory emphasizes how a woman's ability to innovate, take risks, and act proactively, skills gained through training, can lead to improved performance.

Social Cognitive Career Theory (SCCT)

Developed by Lent, Brown, and Hackett (1994), this theory builds on Bandura's concept of self-efficacy. It posits that individuals' career choices and success are influenced by their beliefs, environment, and learning. SCCT is particularly useful for understanding how women in restrictive environments, through targeted training, can develop confidence and pursue entrepreneurship.

Human Capital Theory

Rooted in the work of Becker (2016), this theory views education and training as investments that increase productivity and earnings. Human capital theory justifies the need for structured agro-entrepreneurial training to enhance women's capabilities and enterprise performance, particularly in environments where formal education levels are low.

Empirical Review

Recent empirical literature has increasingly emphasized the critical role of entrepreneurial training in enhancing the performance of women entrepreneurs, particularly within developing economies. Contemporary studies have moved beyond treating entrepreneurial training as a generalized concept and now focus on specific competencies such as bookkeeping, credit management, access to finance, and networking. These dimensions are increasingly recognized as key drivers of business growth and sustainability among women-owned enterprises.

Empirical evidence on bookkeeping training indicates a strong and consistent relationship with enterprise performance. Okpetu (2022) found that MSMEs in Nigeria with adequate bookkeeping knowledge demonstrated improved financial control, better cash flow management, and enhanced decision-making, which translated into increased profitability and growth. Similarly, Adebajo et al. (2023) reported that financial record-keeping skills significantly improve managerial efficiency and contribute to better business outcomes among women entrepreneurs. Ayinaddis (2023) further established that financial management competencies, including bookkeeping, are critical determinants of enterprise performance, as they enhance accountability and efficient resource allocation. In a related study, Arora and Singh (2021), as extended in recent applications, found that financial training programs improve entrepreneurs' ability to manage costs and revenues effectively, thereby enhancing

business performance. Furthermore, Awuor et al. (2022) emphasized that financial management competence is a core entrepreneurial skill that significantly predicts firm performance among female entrepreneurs. These findings are reinforced by recent studies such as Adenugba and Helen (2022), which highlight that proper bookkeeping practices enhance transparency and facilitate access to external funding. Similarly, Benson et al. (2022) found that firms with strong financial management systems exhibit better investment decisions and improved performance outcomes. Despite this strong evidence, most of these studies focus on general SMEs and do not specifically address agro-based enterprises, thereby limiting contextual applicability.

With respect to credit recovery training, recent empirical studies highlight its importance in maintaining financial stability and ensuring business sustainability. Adebajo et al. (2023) found that women entrepreneurs with strong financial management capabilities, including debt monitoring and recovery strategies, are better able to maintain liquidity and sustain operations. Ayinaddis (2023) also identified financial control mechanisms as critical predictors of enterprise growth, noting that ineffective credit management leads to cash flow disruptions and financial instability. Similarly, studies building on contemporary financial management literature (e.g., Ragins, 2022; updated applications) indicate that entrepreneurs who adopt structured credit recovery practices experience reduced bad debts and improved financial performance. In addition, recent Nigerian-based studies (Adu-Gyamfi & Adu-Gyamfi, 2022) highlight that poor credit management remains a major constraint for women entrepreneurs, limiting their ability to scale operations. Aina and Aina (2022) further noted that inadequate financial training contributes to poor debt management practices among women entrepreneurs, thereby affecting business growth. Moreover, Ayinaddis (2023) emphasized that financial discipline, including effective receivables management, significantly enhances enterprise sustainability. However, while these studies recognize the importance of financial control, they often subsume credit recovery under broader financial literacy, thereby creating a gap in understanding its specific contribution as an independent training variable.

Access to finance training has been widely examined in recent empirical literature as a key determinant of entrepreneurial success. Adebajo et al. (2023) found that women entrepreneurs with higher financial literacy and knowledge of funding mechanisms are more likely to access credit facilities and expand their businesses. Similarly, Ayinaddis (2023) reported that access to finance significantly influences profitability and growth, particularly among women-owned enterprises. In the Nigerian context, Aina and Aina (2022) highlighted that limited financial knowledge and lack of training remain major barriers to accessing funding, thereby constraining business expansion. Supporting this, Adu-Gyamfi and Adu-Gyamfi (2022) found that structural and knowledge-based constraints continue to limit women's access to financial resources in developing economies. Furthermore, recent studies such as Awuor et al. (2022) show that entrepreneurs with financial competence are more likely to secure external funding and manage financial risks effectively. Similarly, Ayinaddis (2023) demonstrated that financial literacy significantly improves entrepreneurs' ability to navigate financial institutions and leverage funding opportunities. In addition, contemporary studies on financial inclusion (e.g., Catalyst, 2022; updated reports) indicate that targeted financial training programs enhance women's participation in formal financial systems. However, while these studies provide strong evidence on financial constraints, they largely focus on access barriers rather than examining how structured

Publication of the European Centre for Research Training and Development-UK
training interventions directly influence financial outcomes, thereby indicating a gap in empirical focus.

Networking training has also emerged as a critical determinant of entrepreneurial performance in recent studies. Awuor et al. (2022) found that networking competence significantly predicts business success among female entrepreneurs by facilitating access to information, markets, and resources. Similarly, Ayinaddis (2023) demonstrated that social capital plays a vital role in enhancing business growth through improved access to opportunities and partnerships. Adebajo et al. (2023) further emphasized that women entrepreneurs with strong networking capabilities benefit from mentorship, collaboration, and institutional support, which positively influence business performance. In addition, recent studies such as Ragins (2022) highlight the importance of mentoring and professional networks in enhancing entrepreneurial outcomes. Similarly, Arora and Singh (2021) found that networking capabilities significantly improve innovation and strategic positioning among entrepreneurs. Studies in developing economies (e.g., Awuor et al., 2022) also indicate that networking enhances access to market intelligence and financial resources. However, most studies conceptualize networking as social capital rather than focusing on structured networking training, thereby limiting understanding of how formal networking interventions influence enterprise performance.

Beyond these specific training dimensions, broader empirical studies further reinforce the impact of entrepreneurial training on enterprise performance. Adebajo et al. (2023) found that structured training programs significantly enhance managerial, financial, and technical competencies among women entrepreneurs, leading to improved business outcomes. Similarly, Ayinaddis (2023) concluded that entrepreneurial competencies developed through training are strong predictors of enterprise success. Aina and Aina (2022) also reported that targeted training interventions improve women's participation in entrepreneurship and enhance business sustainability in Nigeria. Supporting this, Adu-Gyamfi and Adu-Gyamfi (2022) found that capacity-building initiatives significantly improve women entrepreneurs' ability to overcome structural barriers and achieve business growth. Furthermore, global studies such as Sajjad et al. (2020, extended in recent literature) emphasize that women entrepreneurs contribute significantly to economic development when supported with adequate training and resources. Recent empirical contributions (e.g., Adebajo et al., 2023; Ayinaddis, 2023; Awuor et al., 2022) consistently demonstrate that entrepreneurial training enhances productivity, innovation, and competitiveness among women entrepreneurs.

Despite the growing body of recent empirical evidence, several gaps remain evident. First, most studies focus on general entrepreneurial competencies without disaggregating specific training components such as bookkeeping, credit recovery, access to finance, and networking. Second, limited empirical attention has been given to credit recovery training as a distinct construct. Third, most studies focus on general SMEs, with little emphasis on agro-entrepreneurs who operate within unique environmental and market conditions. Fourth, there is limited context-specific research focusing on women agro-entrepreneurs in Abuja, Nigeria. Finally, many studies adopt generalized measures of performance without linking specific training interventions to business growth outcomes.

Literature Gap

Although numerous studies affirm the value of entrepreneurship training, few focus specifically on agro-entrepreneurial training and its direct impact on women in agriculture in the Nigerian context, particularly in Abuja. Most existing research generalizes entrepreneurial impact across sectors without disaggregating the data for gender or sector-specific training components like bookkeeping or credit recovery. There is also limited empirical evidence examining how each proxy, bookkeeping, credit recovery, finance access, and networking, individually contributes to enterprise performance. Furthermore, few studies address how socio-cultural dynamics intersect with training effectiveness among women in the agricultural value chain. This study aims to bridge these gaps by investigating the extent to which specific components of agro-entrepreneurial training influence business growth among women agro-entrepreneurs in Abuja, thereby contributing to gender-sensitive and context-specific policy and program design.

METHODOLOGY

This section aims to discuss the methods adopted by the researcher in carrying out this research. This chapter contains the research design, sources of data, population and sample size determination, description of the research instrument, data analysis techniques, validity, and reliability of the research instrument. In this study, the researcher employed a cross-sectional survey research design where data were collected at a particular point in time and analyzed using scientific tools that connect to the positivist philosophy approach. The population for this study consists of the five thousand six hundred and ninety (5,690) registered women-owned agro-enterprises in Abuja Nigeria (SMEDAN, 2023). Krejcie and Morgan's sample size formula was employed to determine the sample size for the women-owned enterprises. The sample size for the women enterprises was three hundred and sixty (360) respondents. Simple random sampling techniques (using table of random numbers) was used to select the respondents to be issued the questionnaires.

This study employed a structured questionnaire as its research instrument for data-collection tool from the registered female entrepreneurs. The questionnaire is divided into two main sections: Section A and Section B. Section A focuses on gathering personal information from the respondents focusing on demographic and background information about the respondents, which can be useful for analyzing the data and understanding the context in which the respondents operate their businesses. Section B consists of a series of statements related to various training needs and their impact on business growth. The statements are organized into seven subsections: bookkeeping, credit recovery, access to finance, networking, people management, marketing, and business risk management training needs. Additionally, there is a subsection dedicated to statements related to business growth. The respondents are asked to indicate their level of agreement or disagreement with each statement using a Likert scale, ranging from "Strongly Disagree" to "Strongly Agree." This section aims to capture the respondents' perceptions and experiences regarding the importance of various training needs and their impact on business performance and growth. By analyzing the responses to these statements, researchers can gain insights into the areas where women entrepreneurs perceive a need for training and the potential benefits of such training on their business outcomes.

The reliability of the research instrument (questionnaire) follows a statistical approach. A reliability test is necessary to understand whether the questions in the questionnaire reliably consistently measured the same variable. This research work followed Tavakol and Dennick (2021) to adopt Cronbach's Alpha (α) test as a reliability test. Cronbach's alpha, α (or coefficient alpha), developed by Lee Cronbach in 1951, measure's reliability, or internal consistency. These questions measure latent variables -hidden or unobservable variables that are very difficult to measure in real life. Pilot research was taken among a sample of one hundred (100) women-owned agro-enterprises to identify the problems encountered during the data collection process. Cronbach's alpha was used to test the internal reliability of the sample of responders across a set of questions. This was done by employing the Likert scale. The coefficient was determined to be 0.998, indicating that the reliability is satisfactory. Cronbach's alpha is commonly employed in social and behavioral studies as a measure of reliability (Liu et al., 2020).

Table 1.1: Reliability Statistics

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Bookkeeping training	0.988	0.904	5
Credit recovery training	0.945	0.914	5
Access to finance training	0.987	0.933	5
Networking training	0.938	0.921	5

Sources: Author's Computation, (2025)

Model Specification

In this study, performance of women agro-entrepreneurs which is the dependent variable in this study was tested using seven variables namely: bookkeeping training, credit recovery training, access to finance training, networking training are all impacted by performance was measured using business growth. The research data gathered was analyzed using SPSS to generate the measures of both descriptive and inferential statistics. Descriptive statistics used include frequency count, percentages, sample mean, and sample standard deviation. Similarly, inferential statistics which involved the use of multiple linear regression analysis was adopted. Following Mailu et al. (2018), multiple regression in the form

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$ was used.

The study modified the model into the model in equation 3.1.

$BSG = \beta_0 + \beta_1 BT + \beta_2 CRT + \beta_3 AFT + \beta_4 NT + \epsilon$ 3.1

Where; BSG = Business Growth, BTN= Bookkeeping Training, CRT= Credit Recovery Training, AFT= Access to Finance Training, NTN= Networking Training, B_0 = Beta coefficient for the constant, β_1 -. β_8 = Beta coefficients for the independent variables, ϵ = Error term.

The study used a descriptive survey in which structured questionnaires were used to obtain data from a convenient sample of participants. The research technique presented in this chapter includes research philosophy, design, study population, sampling procedure, data collection instruments, and strategies for ensuring the study's ethical standards, reliability, and validity. The findings indicate that agro-entrepreneurial training significantly improves the performance of women agro-entrepreneurs in Abuja, with all training components contributing to business growth at varying levels. Bookkeeping

Publication of the European Centre for Research Training and Development-UK

training enhances financial management, enabling better decision-making and operational efficiency. Credit recovery training improves liquidity by strengthening receivables management and reducing financial instability. Access to finance training increases entrepreneurs' ability to secure funding, though structural barriers remain a challenge. Networking training facilitates access to markets, information, and partnerships, thereby boosting business opportunities. Overall, the results confirm that targeted skill acquisition is essential for sustainable enterprise growth and improved entrepreneurial performance.

RESULTS AND DISCUSSION

The profile of respondents reveals a mature and economically active group, with the majority falling within the 36–55 age bracket and a substantial proportion possessing postgraduate or graduate-level education. This suggests that women engaged in agro-entrepreneurship in Abuja are not only active participants but also relatively equipped with foundational knowledge that can be enhanced through targeted training. The dominance of sole proprietorship (54%) further underscores the individualized nature of enterprise ownership, where decision-making, risk-bearing, and operational control are concentrated in a single actor. Notably, over 60% of respondents reported prior exposure to entrepreneurial training, and a significant proportion have sustained business operations for over five years, indicating both resilience and the potential cumulative effect of skill acquisition on business continuity.

Table 1.2: Selected Demographic and Business Profile of Respondents (n = 348)

Variable	Category	Frequency	Percentage (%)
Age	36–45 years	94	27.0
46–55 years	130	37.4	
Education	MSc/MBA/MTech	161	46.3
Graduate	128	36.8	
Marital Status	Married	288	82.8
Ownership Structure	Sole Proprietorship	188	54.0
Training Participation	Yes	209	60.1
Business Experience (Post-Training)	0–10 years	301	86.5

The inferential analysis provides deeper insight into how specific training components translate into measurable business outcomes. The regression model demonstrates strong explanatory power ($R^2 = 0.730$), indicating that variations in business growth are largely accounted for by the training variables

Publication of the European Centre for Research Training and Development-UK included in the model. The statistical significance of the model ($F = 521.313$, $p < 0.001$) reinforces the robustness of the relationship between entrepreneurial training and enterprise performance.

Among the training dimensions, credit recovery training emerges as the most influential predictor of business growth ($\beta = 0.496$, $p < 0.001$), suggesting that the ability to manage receivables and maintain liquidity is central to enterprise sustainability. This finding is particularly relevant in small-scale business environments where cash flow instability often constrains growth. Networking training also demonstrates a strong positive effect ($\beta = 0.093$, $p < 0.001$), highlighting the role of relational capital in accessing markets, information, and strategic partnerships. In contrast, bookkeeping training ($\beta = 0.041$, $p = 0.028$) and access to finance training ($\beta = 0.048$, $p = 0.002$), while statistically significant, exert comparatively moderate effects, indicating that foundational financial skills, though necessary, may yield incremental rather than transformative impacts when considered in isolation.

Table 1.3: Summary of Regression Results

Variable	Coefficient (β)	Std. Error	t-Statistic	p-value
Constant	0.319	0.072	4.435	0.000
Bookkeeping Training (BTN)	0.041	0.019	2.201	0.028
Credit Recovery Training (CRT)	0.496	0.019	26.014	0.000
Access to Finance Training (AFT)	0.048	0.016	3.080	0.002
Networking Training (NTN)	0.093	0.015	6.204	0.000

The pattern of results aligns with the logic of human capital theory, which posits that investments in skills and knowledge enhance productivity and performance. However, the differentiated impact across training dimensions suggests that not all forms of human capital contribute equally to enterprise outcomes. Skills that directly influence cash flow management and external engagement appear to have a more immediate and pronounced effect on growth, while those related to internal financial organization provide necessary but less dominant support. The results advance the argument that entrepreneurial training is not a monolithic construct but a set of differentiated competencies with varying degrees of influence on business performance. By isolating these components, the analysis provides a more nuanced understanding of how targeted skill development can drive enterprise growth among women agro-entrepreneurs. therefore, offers both empirical validation and strategic direction for designing more effective, context-sensitive training programs aimed at enhancing women's economic participation and business sustainability in developing economies.

CONCLUSION AND RECOMMENDATIONS

This study offers empirical insight into the role of agro-entrepreneurial training as a catalyst for improving the performance of women agro-entrepreneurs in Abuja, Nigeria. The analysis demonstrates that business growth is not merely a function of resource availability but is significantly shaped by the

Publication of the European Centre for Research Training and Development-UK
entrepreneur's capacity to effectively utilize those resources available . In particular, competencies in financial management, credit control, access to funding, and networking emerge as critical enablers of enterprise development.

The findings underscore the importance of skill acquisition in strengthening business resilience and operational efficiency. Women entrepreneurs who possess relevant training are better positioned to manage financial obligations, maintain liquidity, and respond to emerging market opportunities in today's world. This reinforces the broader theoretical proposition that human capital development remains a fundamental driver of productivity and enterprise success. Furthermore, the study advances existing knowledge by disaggregating entrepreneurial training into specific components, revealing that each dimension contributes differently to business outcomes. This nuanced understanding challenges the conventional reliance on generalized training approaches and highlights the need for more targeted, context-sensitive interventions.

The implications of the findings point to the need for a more strategic and coordinated approach to entrepreneurial capacity building .Strengthening financial management training should be a priority, particularly in areas such as bookkeeping and cash flow management, where practical competencies can directly influence business stability. Equipping entrepreneurs with these skills enhances their ability to sustain long-term growth.

Efforts to improve access to finance should extend beyond knowledge acquisition to include institutional support mechanisms. While financial literacy is important, it must be complemented by policies and financial products that are responsive to the realities of women entrepreneurs. Simplified loan processes, tailored credit schemes, and advisory services can significantly enhance access to capital for the enterprises.

Furthermore, the expansion of networking platforms is critical and highly beneficial for fostering collaboration and knowledge exchange. Structured opportunities such as mentorship programs, business associations, and digital networking channels can enable women entrepreneurs to build strategic relationships, access new markets, and leverage collective expertise.

Ultimately, the effectiveness of these interventions depends on collaboration among key stakeholders. Government agencies, financial institutions, and development organizations must work in synergy to design and implement training programs that are inclusive, relevant, and aligned with the specific needs of women agro-entrepreneurs. Such a coordinated approach will enhance the sustainability and impact of entrepreneurial development and initiatives.

Suggestions for Further Studies

While this study contributes to understanding the relationship between entrepreneurial training and business performance, it also highlights several avenues for further inquiry. Future research could adopt longitudinal designs to examine how the effects of training evolve over time, thereby providing deeper insight into the sustainability of training outcomes.

Publication of the European Centre for Research Training and Development-UK

There is also a need to explore the influence of contextual variables, including infrastructure, institutional frameworks, and socio-cultural dynamics, on entrepreneurial performance. Such analysis would offer a more comprehensive perspective on the conditions that shape business success in different environments.

Comparative studies across regions and sectors could further enrich the discourse by identifying variations in training effectiveness and uncovering context-specific best practices. This would be particularly useful in informing the design of targeted interventions.

In addition, the growing relevance of digital technologies presents an important area for future research. Investigating the role of digital training, financial technologies, and online market platforms could provide valuable insights into new pathways for enhancing entrepreneurial performance.

Finally, more focused research within the agro-entrepreneurship sector is necessary. Given its unique operational and market dynamics in today's world, a sector-specific approach would deepen understanding of the challenges and opportunities faced by women in agricultural value chains and support the development of more tailored and impactful interventions.

REFERENCES

- Adebajo, A., Okoli, C., & Aniekwe, I. (2023). Entrepreneurial training needs and business performance among women entrepreneurs in Nigeria. *Journal of Entrepreneurship and Public Policy*, 12(2), 115–134.
- Adu-Gyamfi, A., & Adu-Gyamfi, S. (2022). Challenges faced by female entrepreneurs in developing economies: A systematic review. *Journal of Entrepreneurship and Public Policy*, 11(1), 29–50.
- Aina, O. L., & Aina, O. B. (2022). Supporting female entrepreneurship in Nigeria: Challenges and opportunities. *Journal of Entrepreneurship and Public Policy*, 11(1), 51–72.
- Awuor, E. O., Mwangi, J. N., & Odhiambo, S. O. (2022). Entrepreneurial competences and entrepreneurial performance: Empirical insights of female entrepreneurs in Kenya. *Journal of Small Business and Enterprise Development*, 29(4), 567–585.
- Ayinaddis, S. G. (2023). Socio-economic factors affecting women's entrepreneurial performance in micro and small enterprises in Bahir Dar City, Ethiopia. *Journal of Innovation and Entrepreneurship*, 12(23), 1–18.
- Brixiová, Z., Kangoye, T., & Said, M. (2022). Training, human capital, and women entrepreneurship in Africa. *Economic Modelling*, 109, 105789.
- Catalyst. (2022). Women in business and financial inclusion: Global trends report. Catalyst Organization.
- Dzansi, D. Y., & Arko-Achemfuor, A. (2022). Entrepreneurship training and small business performance in developing economies. *Journal of African Business*, 23(2), 145–162.
- Khan, M., Xie, J., & Khan, M. A. (2022). Networking and entrepreneurial success among women-owned businesses. *International Journal of Entrepreneurial Behavior & Research*, 28(6), 1452–1470.

Publication of the European Centre for Research Training and Development-UK

- Mari, M., Poggesi, S., & De Vita, L. (2024). Women entrepreneurs and innovation: A systematic review and research agenda. *Journal of Innovation and Entrepreneurship*, 13(1), 1–20.
- Okpetu, G. (2022). Financial literacy and performance of micro, small and medium enterprises in Nigeria. *International Journal of Business and Management Studies*, 14(3), 45–60.
- Orser, B., & Elliott, C. (2025). Gender-inclusive entrepreneurship education and training: A global perspective. *Journal of Small Business Management*.
- Paiva, T., Ferreira, J. J., & Fernandes, C. I. (2024). An education model to empower women entrepreneurs in technology sectors. *Frontiers in Education*, 9, 1–15.
- Rodriguez, A., Smith, J., & Ngugi, M. (2023). Microfinance and women entrepreneurship development in Africa. *African Economic Review*, 16(1), 78–91.
- Sajjad, M., Kaleem, N., & Ahmed, M. (2022). Role of women entrepreneurs in economic development: A global perspective. *Asia Pacific Journal of Innovation and Entrepreneurship*, 16(2), 151–160.
- World Bank. (2024). Women entrepreneurship and digital financial inclusion report. World Bank Publications.