

Factors Affecting Women's Success in Micro and Small Enterprises and Implications for Economic Development: The Role of Feed the Future Nigeria Integrated Agriculture Activity, Northeast Nigeria

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Abstract

This study examines the factors affecting women's success in micro and small enterprises in Northeast Nigeria focusing on the role of Feed the Future Nigeria Integrated Agriculture Activity. The Feed the Future Nigeria Integrated Agriculture Activity provided interventions for youth and women in the conflicted affected Northeast Nigeria to contribute towards such empowerment and building economic resilience. This study employed survey research design, collected data on the beneficiaries of the interventions and analysed using both descriptive and inferential methods. The findings from this study provided evidence that majority of the respondents/participants were youth, married, have at least primary education, with 1-10 household size and engaged in agricultural activities as their main source of occupation. Their annual income ranges between ₦100,000 and ₦500,000 further justifying the poverty level among the respondents. Majority (65%) of the respondents participated/benefitted from agricultural production and entrepreneurship and over 90% indicated to have increased their capacity to confront and address factors affecting their success in micro and small enterprises. The regression result shows that access to production knowledge and technology, ownership of farmland, Feed the Future gender training, access to enterprise starter park and annual income of the respondents have positive effect on women's success in micro and small enterprises. On the other hand, poor access to bank accounts, poor access to credit, poor access to farmland, lack of control over farmland and lack of access to agro input dealers negatively affect women's success in micro and small enterprises in Northeast Nigeria. The study recommends among others the need for more interventions both in material, financial and skill development and establishment of women-based fund by the government to specifically target micro and small women entrepreneurs.

Keywords: *Women's Success, Micro and Small Enterprises, Feed the Future, Northeast, Nigeria.*

1.0 Introduction

Women's economic empowerment has become essential in global policy objectives, emphasizing women's rights and gender equality. This assertion informs the creation of the "UN Women, the United Nations Entity for Gender Equality and the Empowerment of Women" in July 2010 in line with the sustainable development goals 5 and 10 [United Nations (UN), 2013]. The formation of the UN-Women alongside the SDG goals illuminates income disparities between men and women, women's access to financial resources, and workforce trends in women's entrepreneurship development. Women's entrepreneurship has contributed significantly to economic development, employment creation and source of entrepreneurial diversity (Verheul *et al.*, 2006; Khan *et al.*, 2021). In addition, organizations with three or more women in the senior management cadre scored higher in all dimensions of organizational performance (UN Women, 2015). Thus, these underscore the importance of micro and small enterprises (MSEs) and the pivotal role of women in driving economic development in developing economies (Box & Larsson Segerlind, 2018).

Nigeria is a developing economy with a population projection of over 216,783,381 million, with men constituting about 49.98 per cent (108,350,410 million) while women are 50.02 per cent (108,432,971 million) [National Bureau of Statistics (NBS), 2022; National Population Commission (NPC), 2022]. The population statistics indicate that women account for more than half the population of Nigeria, and their role in economic development through involvement in MSMEs is strategic. However, numerous factors have stalled their potential to create, manage and control micro and small enterprises effectively. For instance, Ojinta (2018) found that women-owned businesses in Nigeria are confronted with socio-cultural barriers like family, gender and patriarchal attitudes of the culture. Similarly, Ukwueze (2022) indicates that social inclusion, access to finance, financial inclusiveness and socio-cultural factors like household size impede the growth of women-owned micro-enterprises in Nigeria. This naturally speaks about the scenario in Northeast Nigeria with empirical peculiarities.

The Northeast geopolitical zone of Nigeria has six states- Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe- and it's one of the least developed (Dauda, 2021). Factors affecting women's success in Micro enterprises in the Northeastern zone could be highly severe owing to the insurgency and religious and cultural barriers that affect women's success in business. To address these challenges, the governments of Northeastern states have implemented programmes to foster social inclusion by empowering women to engage in viable and sustainable business through advocacy and investment in social protection programmes. While several attempts have been made over the years by the successive governments of the six Northeastern states to encourage women's involvement and success in enterprises, minor achievements have been attained. Hence, the uniqueness of the timely intervention of the USAID funded Feed the Future Nigeria Integrated Agriculture Activity, which reinforced local efforts at empowering women in enterprise activities for economic growth in the Northeast geopolitical zone of Nigeria.

According to USAID & IITA, Feed the Future Nigeria Integrated Agriculture Activity (IAA) has three cardinal objectives First, to improve agricultural productivity through access to production technologies, input and output market, finance and extension services. Secondly, to

build resilience, mitigate risks and reduce poverty in the northeast geopolitical zone of Nigeria, which is vulnerable to insurgencies. Thirdly, empower women and youth by facilitating their access to agricultural technology and entrepreneurship skills to generate employment opportunities in the value chain. The IAA program seems to have impacted women entrepreneurs in Northeast Nigeria by collaborating with private and public partners to expedite their access to extension services and agro-inputs and their involvement in agricultural-related business activities.

However, despite the significant contribution of women to economic development and the Feed the Future Nigeria IAA intervention to encourage women entrepreneurship in the Northeast geopolitical zone of Nigeria, they still face numerous challenges and barriers that affect their success in micro and small enterprises. Empirical literature identifies these challenges and barriers as internal and external factors (Alene, 2020; Khan *et al.*, 2021). The external factors affecting women's success in MSEs are access to conventional education (Tripathy & Mohanty, 2018; Ayinaddis, 2023), access to productive knowledge and technology (Ramli & Razali, 2019; Laxmi & Gochhait, 2023), access to gender-sensitive extension services (Alene, 2020; Ukwueze, 2022), access to information (Ojinta, 2018). Other external factors are access to productive resources (Alene, 2020), access to economic and financial literacy training (Birdi & Mokaya, 2017; Animaw, 2019), access to market and market information (Tripathy & Mohanty, 2018; Alem *et al.*, 2024), culture (Ojinta, 2018; Khan *et al.*, 2021) and government support (Feng *et al.*, 2023). The internal factors are control over family income and expenditure (Hossain *et al.*, 2018), leadership traits (Khan *et al.*, 2021; Abdelwahid & Kaoud, 2022), and gender-related factors (Birdi & Mokaya, 2017).

This study seeks to determine factors that affect women's success in MSEs and their effect on the economic development of the Northeast geopolitical zone, focusing on the role of Feed the Future Nigeria Integrated Agriculture Activity. To the best of the researchers' knowledge, there is no study on the factors affecting women's success in micro and small enterprises and its implications for economic development in the Northeast geopolitical zone of Nigeria. In addition, no study has been conducted on the post-intervention analysis of the Future Nigeria Integrated Agriculture Activity in the four intervention States (Adamawa, Borno, Gombe and Yobe), Northeast Nigeria. The study is divided into five sections: Section 1 is the introduction; Section 2 is the literature review; Section 3 is the methodology; Section 4 is the results and discussion; Section 5 is the conclusion and recommendations.

2.0 Literature Review

This section presents the conceptual clarification, and theoretical and empirical literature review on factors affecting women's success in micro and small enterprises.

2.1 Contemporary Factors Affecting Women's Success in MSEs

2.1.1 Access to Conventional Education/Literacy Level

Education relates to the acquisition of skill, knowledge, confidence, motivation, problem-solving capacity, discipline and commitment (Alene, 2020). Globally, Razmi and Firoozabadi (2016) observed that access to conventional education increases women's ability to identify and seize opportunities and cope with business-related problems. On the other hand, lack of access to conventional education or literacy level has impeded the success of women in MSEs especially in

developing economies (Bhardwaj, 2014). On the contrary, Alem *et al.* (2024) found that there is no significant difference in women's entrepreneurial success across their levels of education. In Nigeria, Oyitso and Olomukoro (2012) observed that limited access to conventional education and illiteracy keep women marginalized and affect their potential to succeed in MSEs.

2.1.2 Access to Production Knowledge and Technologies

Production knowledge and technologies entail access to agro-production training, climate-smart agricultural technologies, and enterprise development training. Women generally lack access to production knowledge and technologies compared to their male counterparts. To support this assertion, Isa *et al.* (2021) observed that women's access to and use of technology in business is vital for promoting their entrepreneurial success. On the Contrary, Ramli and Razali (2019) opined that the use of technology in women-owned businesses does not impede their performance. In Nigeria, Owolabi *et al.* (2011) observed that one of the serious problems faced by women in agro business is the procurement of modern technology. Similarly, the use of production knowledge and technologies in women-owned MSEs is limited and not widely explored (Adewoye *et al.*, 2013).

2.1.3 Access to Gender-Sensitive Extension Services

There is a growing concern about the need for gender-sensitive extension services in agriculture and related industries for farming women in and outside Nigeria. These gender-sensitive extension services are aimed at addressing the divergent issues faced by women in agriculture (Yadav & Preethi, 2024). These services include providing gender-sensitive customised support and training to empower women-owned agro-business and promote gender equality. Despite these benefits, Jafry and Sulaiman (2013) observed that women in agriculture are faced with a lack of access to gender-sensitive extension services. This lack of access to extension services by women has continued to contribute to income and food insecurity around the globe and in Nigeria (Diaz & Najjar, 2017).

2.1.4 Access to Reliable and Sustainable Climate and Weather Information and Services

Climate and weather affect all aspects of the agricultural value chain from production to consumption. According to Bryan *et al.* (2024), men and women play important roles and exercise similar responsibilities in the agricultural value chain. Climate and weather information and services have the potency of reducing temperature and precipitation allied risks associated with agribusinesses (Carr *et al.*, 2016). However, inequalities exist between men and women in terms of their access to reliable and sustainable climate and weather information. These inequalities create and limit the way women perceive climate change information and eventually affect their success in agricultural-related MSEs. This limited access to climate and weather information and services increases women's time poverty, and labour burden, and reduces their decision-making ability (Bryan *et al.*, 2024). Similarly, the International Finance Corporation (IFC, 2023) observed that climate and weather-related risks are greater for women-owned MSEs due to persistent gender inequalities in the entrepreneurial ecosystem.

2.1.5 Access to Production Resources

Production resources are crucial elements in determining the success of entrepreneurial endeavours. These resources include access to, ownership, and control of farmlands, and access to last-mile/community-based agro-input dealers, among others. Generally, land ownership and control are guided by the land tenure system, which regulates the ability of a person to gain access to and security over its usage. The African land tenure system limits women's access to ownership and control of land. In Nigeria, the land tenure system has made women transitory custodians of land because it is passed from a father to his male child through inheritance. It is believed that women do not inherit land. This assertion limits women's ownership and control of land and affects their success in MSEs. Empirically, Alene (2020) observed that women's access to landownership and control inhibits their entrepreneurial success.

In addition, women's access to community-based agro-input (seeds pesticides and equipment, among others) dealers can improve agricultural productivity (Terrillon & Vogelsperger, 2017). In spite, of the crucial role access to community-based agro-input dealers plays in improving farming yields, women farmers have limited access to fertilizer, seeds, farm equipment and machinery, and pesticides among others, compared to their male counterparts (Njobe, 2015).

2.1.6 Access to Economic and Financial Literacy Training, Cooperative Group Savings and Revolving Loans Scheme

Economic and financial literacy training like savings, record keeping, budgeting, and personal finance management are key elements for the success of women-owned MSEs. However, empirical evidence has shown that men are more economically and financially literate than women (Al-Tamimi & Kalli, 2009; Kuruvilla & Harikumar, 2018). This lack of access might be worse in Nigeria due to the socio-cultural barriers that refuse women access to conventional education. Similarly, access to cooperative group savings and revolving loan schemes also impede women's success in MSEs. Empirical findings of Ademola *et al.* (2013) indicate that even though women have access to cooperative group savings and revolving loan schemes in Nigeria, the amount they provide as loans is inadequate for entrepreneurial success. In addition, to support the empirical findings of Ademola *et al.* (2013), Simba *et al.* (2023) observed that access to community-based financing schemes is crucial for women's success in MSEs and helps to cushion their instinctive exclusion from formal financial services. However, whether these finances provided are adequate to accelerate the success of women in business is still a serious concern.

2.1.7 Access to Markets and Market Information

Lack of access to markets and market information affects both formal and informal MSEs globally, particularly in developing economies. AGRA (2021) opined that developing agribusiness on the African continent requires an urgent shift by agripreneurs from selling their products at low-value markets to producing for high-value markets. Similarly, ILO (2004) observed that women entrepreneurs generally face trouble in accessing domestic and export markets due to the sociocultural constraints that affect their ability to travel to other markets outside their immediate communities. This finding is further buttressed by Alem *et al.* (2024), which indicates that access to market and market information are some of the factors impeding

women's success in MSEs. In Nigeria, Ejike *et al.* (2018) observed that women agricultural entrepreneurs are faced with the problem of access to market and information which leads to a significant loss of control and income as products move from the farm to the market.

2.1.8 Control over Income and Expenditure at the Household Level

Women's control over household income and expenditure has a fundamental implication on their empowerment and for reinvestment in agricultural and allied businesses. A study by FAO (2023) observed that women's control over household income and expenditure has a positive and significant impact on their empowerment. This implies that women's control over income and expenditure increases their ability to invest in agribusinesses. However, in most developing economies like Nigeria, women's control is limited due to the inequality that exists between men and women in general household expenditure, among others. This assertion is in line with the study of Olagunju *et al.* (2020) which reported that about 84-90 per cent of households in Nigeria are headed by men. This tendency negatively affects women's ability to spend and invest in MSEs (Opata *et al.*, 2020).

2.1.9 Group Participation and Leadership Positions in Associations

The success of women in MSEs has also largely been influenced by their participation in group and leadership positions held in associations. Women's ability to participate and assume leadership positions in associations is limited compared to men. This gender disparity in participation is fueled by the patriarchal nature of societies. The empirical study of Abdelwahid and Kaoud (2022) revealed that participation and leadership traits significantly affect the ability of women to succeed in business. However, Oxfam's (2012) post-intervention review indicates that women's participation in groups and associations improves their leadership traits.

2.1.10 Time Allocation – Household Care Responsibilities, Gender Norms and Stereotypes

Women's ability to do and succeed in business is generally constrained by the time they allocate to household care responsibilities, gender norms and stereotypes. Empirical evidence showed that women with household care responsibilities perform abysmally in the growth of their MSEs compared to others without (Birdi & Mokaya, 2017). This poor performance in MSE due to household care responsibilities is because women have a large burden of domestic work which gives them less time to engage in entrepreneurship activities. Similarly, gender norms and stereotypes have also been documented to have a negative and significant impact on the success of women in MSEs. For instance, Tabassum and Nayak (2021) observed that gender-related behaviour demoralizes and demotivates women in their workplace. In general, these household care responsibilities, and gender-related stereotypes make entrepreneurial growth and success difficult for women (Bullough *et al.*, 2021).

2.2 The Feed the Future Nigeria Integrated Agriculture Activity in Northeastern Nigeria

Nigeria has six geopolitical zones: South-South, South-West, South-East, North-Central, North-West and North-East. Out of these geopolitical zones, the northeast zone is the most affected by the activities of Boko Haram insurgents and necessitated the intervention of the Feed the Future Nigeria Integrated Agriculture Activity. This intervention is aimed at improving food security,

agriculture – led economic growth, and improving resilience among smallholder farmers and their families, including women and youth empowerment in Northeast Nigeria.

The Integrated Agriculture Activity (IAA) issued under the U.S. Government’s (USG) Global Food Security Act (GFSA), being implemented by IITA and partners, aims to advance the objectives of inclusive and sustainable agriculture-led economic growth; strengthened resilience among people and systems; and a well-nourished population, especially among women and children in targeted locations of Adamawa, Borno, Gombe and Yobe States. The Activity supports vulnerable population disenfranchised by conflict and seeks to re-engage them in basic farming activities. The intervention is promoting food security and agriculture-led economic recovery, increase agricultural incomes, and improve resilience for smallholder farmers and their families in Adamawa, Borno, Gombe and Yobe States, Northeast Nigeria.

In specific terms, efforts of the Feed the Future Nigeria integrated agriculture activity in the Northeast, under component three, are focused on women and youth empowerment through engagement in economic and entrepreneurial activities along the crop and livestock production value chain and off-farm enterprises. The pieces of training and established enterprises in the target value chain acknowledged that women and youth participation are crucial for sustainable food production and food security, job creation and income generation. Hence, the significance of the training and subsequent set up of enterprises to improve the livelihoods of the population affected by the Boko Haram insurgency in Northeast Nigeria. In addition, lack of know-how has been a major obstacle impeding the success of women and youth in the agriculture value chain in the Northeast. From 2019 to 2022, six thousand two hundred and forty-one (6,241) participants have been trained along the priority crops and livestock value chains for women and youth providing both direct and indirect job opportunities for thousands of people in the intervention communities.

Among the trained participants are the Spray Service Providers (SSP). The Spray Service Providers (SSP) skill training was introduced under the Feed the Future Nigeria Integrated Agriculture Activity as a programmatic solution to the pervasive environmental hazard associated with pesticide application among the farming population of North-eastern Nigeria. The training is focused on the male youth because of the long-term reproductive health risks linked to female handling of pesticides. However, it is also a programmatic intervention to provide support for women farmers/entrepreneurs by the trained youth Spray Service Providers. Hitherto, women are always at a disadvantage in terms of access to pesticides application on their farms.

In addition, the Feed the Future Nigeria Integrated Agriculture Activity has provided training and helped women establish enterprises in the vegetable production and agro-processing value chain, especially dry season vegetable production. This intervention is designed to integrate more women and youth in this venture and provides them with the opportunity to maximize their full potential along this enterprise which has very high demand across the region. Through the Feed the Future Nigeria Integrated Agriculture Activity, USAID and IITA trained two hundred and ninety-three (293) women and youth in four LGAs of Adamawa State (Hong, Gombi, Song, and Guyuk) and Biu LGA, Borno State in the science of production and the art of doing business with vegetables in the dry season.

Furthermore, the Feed the Future Nigeria Integrated Agriculture Activity has trained women and youth on TOMAPEPO production under the agroprocessing value chain. TOOMAPEPO is simply a blend of tomatoes, pepper and onion (TOMA=Tomatoes, PEP=Pepper, O=Onions). The product development as an enterprise activity for participants, particularly women, is informed by its combined nutritive value, which is also underscored by the focus of Integrated Agriculture Activity on food and nutrition security in the northeastern region of Nigeria. The Statistics of women groups trained in Tomapepo production in Borno State in 2020 are presented in Table 3.

Table 3: Women groups trained in TOMAPEPO production in Borno State (2020)

LGA	Name of Group	Number Trained
Biu	Birmason Farmers Coop	11
	Dugja Helapa Nduwa	16
	Hamta Jiri Farmers Coop	7
	Maina Hari Women Multi-Purpose Coop	14
	Mbwidifu Batiltil Welfare Coop	13
	National Council of Women Coop	13
	Pangea Farmers Coop	6
KwayaKusar	Progressive Women VSL Coop	18
	Tatali Farmers Serving Loan Coop	12
	Tsintsiya Daya Groundnut Oil Extraction	10
	Watakiri Gnut Oil Extractors Coop	15
	Wandali Youth Women Farmers Multip Coop	6
	Wawa Fadama Coop Society Ltd (Youth&Women)	6
	Guwal Nasara Women Tailoring Co	7
	Midla Galadima Maize Coop	6
Shani	Kubo Women Perspiration Rice Association	26
	Lajada Fadama 3 Women Coop	8
	Ngabu Perspiration rice Coop	23
	Women In Agriculture Association Shani	23
Hawul	Shaffa Peace Women group	15
	Ndragna Farmers Coop	19
	Godiya Mbulatawiwi Women Farmers Coop	14
	Alhaeri Women Group	7
	Alheri Sakwa Women Agric	8
	IDPs Zaman Tare Yimirshika Farmers	11
	Nasara Group Bilatum Farmers	6
	Youth in Agriculture Azare/Shaffa	20
Zumunchi Women Coop	20	
Bayo	Bayo Producer Group	40
Total		29
		400

Source: Designed and implemented by USAID/IITA (2019-2023).

In 2022, the Feed the Future Nigeria Integrated Agriculture Activity trained five hundred ninety-596 – six (596) women and youth in both Adamawa and Borno States on TOMAPEPO production.

In the livestock and fish production value chains, the Feed the Future Nigeria Integrated Agriculture Activity has provided training to women and youth of Northeast Nigeria. The training focused on providing the target participants with the necessary skills required for them to succeed in the business and live a better life, especially after the devastating effect of the Boko Haram insurgency. The participants in the area of ruminants rearing/fattening and entrepreneurship were trained with the objective of obtaining a broader understanding of the business and entrepreneurial skills. This particular aspect of livestock production attracts women over the years especially in small scale owing to the little start-up capital requirement of the business. Other aspect of the training includes, pig production, sheep and goat rearing, fish production and Market and Marketing of small ruminants.

In the non-farm enterprises, the Feed the Future Nigeria Integrated Agriculture Activity has also provided training to women and youth. The non-farm enterprises formed another significant component of the Feed the Future intervention program where women and youth were trained and supported in various business endeavour, with, 415 in vocational skills and 344 in cosmetology representing 6.65% and 5.50% of the overall beneficiaries, respectively. The non-farm enterprises training includes liquid soap, balms, shampoo, petroleum jelly, and liquid and bar soap production. These are shown in Figures 10, 11 and 12, respectively.

Briquette production is another aspect of the Feed the Future Nigeria Integrated Agriculture Activity intervention programme. The intervention trained both women and youth entrepreneurs engaging in the production of briquettes as an innovative agricultural value chain business model through the dimensions of increasing postharvest gains and turning waste to wealth. Briquette is an alternative fuel source for domestic cooking and heat requirements produced from either cleaned and compressed saw-dusts, waste papers/ cartons, rice husks, and/or other postharvest crop residues. This innovative product is billed to add value to the Climate-Resilient Practices and Carbon Market Opportunities in Northeast Nigeria.

The Feed the Future Nigeria Integrated Agriculture Activity intervention also aim to encourage women and youth participation by ensuring that there was a balance in gender inclusion, with more attention on the most vulnerable women in the Boko Haram devastated region of Northeast Nigeria. In the training, female constitutes 60 percent while male constitute the remaining 40 percent, which align with the goal of youth and women engagement in economic and entrepreneurial activities. In terms of youth participation, youth male constitutes 40 percent of the beneficiaries while youth female constitutes 23 percent. This also indicates a reasonably high level of participation in economic and entrepreneurial activities by young female participants.

Vocational skills are another means of sustainable job creation, income inflows and poverty eradication among youth and women especially those affected by the Boko Haram insurgency, which is why Feed the Future intervention provided training and support in the Northeast. The vocational skills orientation workshop was designed to bring the trainees face-to-face with Master

Trainers and provide the platform for general induction into the vocations, as well as matching trainees with Master Trainers based on proximity in Adamawa and Borno States. The established skills set include tailoring, knitting, GSM phone repairs, tyre vulcanization, screen-printing, shoe making, soap making, generator & machine repairs, and barbing, with four hundred and fifty-four (454) youth and women participants.

Table 4: Vocational Training/Apprenticeship statistics (Adamawa & Borno States)

S/N	VOCATIONAL SKILL	NUMBER OF PARTICIPANTS (Adamawa)	NUMBER OF PARTICIPANT S (Borno)	TOTAL
1.	TAILORING	82	115	197
2.	VULCANIZING	12	40	52
3.	SHOEMAKING	-	25	25
4.	KNITTING	-	15	15
5.	SOAP MAKING	-	15	15
6.	BARBING	54	50	104
7.	GENERATOR & MACHINE REPAIRS	6	-	6
8.	GSM PHONE REPAIRS	28	-	28
9.	SCREEN PRINTING	12	-	12
	Total	194	260	454

Source: Designed and implemented by USAID/IITA

In summary, the Feed the Future Nigeria Integrated Agriculture Activity training and support in the Northeast to youth with particular attention on women is focused on eliminating those factors affecting women's success in MSEs and promoting gender inclusiveness. The gender inclusivity agenda of the Feed the Future Nigeria Integrated Agriculture Activity is to promote the contribution of women to economic development through their entrepreneurial engagements in the face of religious proclivity and insecurity in the Northeast.

2.3 Theoretical Literature

2.3.1 Resource-based theory

The resource-based theory is also called the resource-based view (RBV) or resource-advantage theory of the firm. Birger Wernerfelt proposed the theory in 1984, but Jay Barney later refined it in his work titled “Firm Resources and Sustained Competitive Advantage”, published in 1991. The work is critical to the emergence of resource-based theory. The theory argues that firms are heterogeneous because they have different quantum of resources and can embrace divergent business strategies due to their dissimilar resource mix. The RBV draws managers’ attention to internal resources like competencies, capacities, and assets firms have to develop a competitive advantage over their rivals. This competitive advantage can help firms maximize profit in the end. According to Barney (1991), traits of resources that can birth competitive advantage are value, imperfect imitability, rarity and lack of substitutability. The competitive advantage implies that

firms can outperform other firms by combining their human, technical and other resources (Dul & Neumann, 2007).

2.3.2 Social Capital Theory

The social capital theory was propounded by the French social scientist Pierre Bourdieu (in 1986) and further developed by James Coleman (in 1988) and Robert David Putnam (in 1993). The first school of thought observed that capital is not limited to economic capital but includes cultural and symbolic capital that defines social stratification. The second school combines economic and sociological perspectives on social capital by emphasizing its significance to individuals, organizations, institutions, groups and societies. According to van Bakel and Horak (2024), social capital stimulates attaining particular ends. The third school integrates the functional perception of social capital with a socio-centric focus by examining the role of citizenship and civic culture in a democracy. This civic culture centres on factors of social organization like norms, networks, and trust that can improve societal efficiency.

It emphasized that social relationships could instigate the accumulation and development of human capital (Machalek & Martin, 2015). The theory attempts to incorporate socioeconomic factors to explain economic development outcomes. For instance, a stable family environment can stimulate educational accomplishment, and support increased valued and rewarded credentials and skills.

2.3.3 Liberal Feminist Theory

The liberal feminist theory goes back to the early days of feminism when the concern was on individual rights, entitlement, and gender equality. The theory argues the importance of social reforms to give women the same opportunities and status as men in all spheres of life (Ali, 2018). The fundamental principles of liberal theory feminism centre on the assumption that women and men are equal and that rationality, not gender, should be the basis for their rights. The theory further emphasizes the presence of chauvinist barriers and biases affecting women, like business experience, access to education, socio-cultural barriers and resources (land, finance, among others). These discriminatory barriers and biases must be eradicated to ensure women's success in micro and small enterprises. Liberal feminist theory of women's entrepreneurship ensures that if women are given equal opportunity in terms of work experience, education and other resources, they will achieve the same business success as men.

2.3.4 Social Feminism Theory

The social feminist theory asserts that there are differences between men's and women's experiences through socialization methods from their initial moments of life that lead to fundamental ways they perceive the world differently. Within the context of the social theory, Brush (2006) posits that women's socialization generates diverse goals, choices and perspectives, and this informs their choice of business fields. According to the theory, for women, there is a strong relationship between business and family rather than seeing their enterprise as a distinct economic unit in a social globe. Hence, women see their micro and small enterprises as interconnected business, family and community relationships. However, these interconnected

relationships do not suggest that women will adopt different business approaches that will be less effective than men (Watson & Robinson, 2003).

2.3.5 Upper-echelon Theory

Donald C. Hambrick and Phyllis A. Mason propounded the upper-echelon theory in 1984 by synthesizing previously fragmented literature on the echelon perspective (Hambrick & Mason, 1984). The theory argues that top cadre employees' behaviours significantly affect an organization's performance (Khan *et al.*, 2021). This implies that top managers' experiences, values, and personalities are combined to jeopardize the success of micro and small enterprises. Hambrick (2007) fragmented the elements affecting business success into external and internal factors to capture further and develop the theory. The external factors are financial, political and environmental, which affect business success. On the other hand, the internal factors identified that affect business success are personal experiences and perceptions of an entrepreneur.

2.4 Empirical Literature

There is considerable empirical literature on the factors affecting the success of women in micro and small enterprises in different countries using diverse sampling and estimation techniques. For instance, Wube (2010) analysed factors impeding the success of women entrepreneurs in micro and small enterprises in Dessie Town in Ethiopia using a sample of 203 respondents. The study used random and stratified sampling methods and statistical techniques like tables, percentages and descriptive statistics. The result showed economic factors like access to finance, technology, training, raw materials, and lack of business premises. On the other hand, the social factors are conflicting gender roles, networking with outsiders and social acceptability. At the same time, the high amounts of tax, bureaucratic red tape, access to policymakers, and the overall legal and regulatory environment were the legal and administrative factors affecting women entrepreneurs' success. Thus, the study emphasized the formation of a women's entrepreneurship association and approach supporting organizations like NGOs to get financial support.

Similarly, Birdi and Mokaya (2017) employed descriptive statistics, correlation, and chi-square to assess factors that impede the growth of women-owned small and medium enterprises in the Municipality of Tanzania, using a random sample of 95 businesses. The study observed that women-owned SMEs do not get support from the government, and established rules and regulations do not provide a conducive business environment. In addition, the growth of women-owned SMEs was affected by uneven gender roles, insufficient capital and a deficit of entrepreneurial skill. In their recommendations, they emphasized the important role of government and development partners in liaising with financial service operators to provide exceptional financial support to women-owned SMEs and create awareness about gender-related impediments affecting involvement in business.

In Bangladesh, Hossain *et al.* (2018) analysed possible factors affecting women-entrepreneurial involvement in SMEs, economic development, and poverty-reducing impact using 300 responses from a convenient sampling technique. The study employed descriptive statistics and regression estimation techniques. The results indicate that knowledge and skill, legal and

administrative factors, and family significantly influence women's involvement in SMEs. In addition, women entrepreneurs, employment creation, and long-term business performance affect economic development, while remarkable development reduces poverty. In their recommendation, the government and other supporting sectors were advised to encourage women's entrepreneurial involvement in SMEs.

Like in the study of Hossain *et al.* (2018), Ojinta (2018) explores the barriers to women's leadership in small and medium enterprises in Nigeria using a purposive sample of 10 entrepreneur leaders over 30 years old. The study employed a qualitative narrative inquiry method using face-to-face semi-structured interviews and a thematic analysis technique. The result showed that gender, family and patriarchal attitudes of culture are the factors impeding women's entrepreneurial success. Thus, Ojinta recommends a positive social change poised with mentoring programs, training, and information to empower, equip and guide emerging women entrepreneurs to avoid future challenges.

For India, Tripathy and Mohanty (2018) also investigated micro-financial factors affecting women entrepreneurs and sustainable development in Odisha. The study used a structured questionnaire to collect data from 170 respondents and employed the factor analysis technique. The result revealed that credit accessibility, access to the market, access to policymakers, and lack of societal support and access to education are fundamental factors that affect women-owned micro businesses and sustainable development. Hence, programmes to promote women and youth entrepreneurs and strategies that help grow business culture among rural and urban women were recommended.

In Malaysia, Ramli and Razali (2019) used a structured questionnaire to obtain responses from 100 women micro and small businesses in Kelantan. The study employed descriptive statistics, correlation analysis and multiple regression techniques. The results indicate that internal factors like managerial skills and personal traits influence the performance of women-owned micro and small enterprises, and external factors like access to finance, marketing, and the availability of infrastructure and information technology do not. Their recommendation suggests that women entrepreneurs consider internal factors to enhance their business performance.

Contrary to the study of Ramli and Razali (2019), Alene (2020) used a two-stage random sampling technique and logistic regression technique to study factors determining female entrepreneurs' performance in micro and small enterprises in Gondar City, Northwest Ethiopia. The findings from 180 women entrepreneurs indicate that educational level, access to finance and business training, business information, land ownership, government support, previous experience and tax are essential in explaining women's entrepreneurial success. Thus, the study suggested that the government reconsider micro and small enterprises' strategy and financial policy since finance is critical to survival.

On the other hand, Mekuria and Ayalew (2020) analysed factors affecting the success of women-owned micro and small enterprises in Mizan Town-Ethiopia using data from 123 businesses. The data obtained were evaluated using descriptive statistics and the Pearson correlation technique. The results indicate that the fundamental factors affecting the success of women-owned businesses in the study area are finance, infrastructure and government-related

elements. Thus, the study recommended that the micro and small enterprise development agency liaise with financial institutions to ensure a continuous flow of finance to women entrepreneurs while the government enacts policies that induce the creation, expansion and growth of women-owned businesses.

Using a confirmatory factor analysis (CFA), Khan *et al.* (2021) examined factors affecting women entrepreneur's success using a structured questionnaire to obtain data from 181 registered SMEs in Pakistan. The results indicate that internal factors like the need for achievement, self-confidence and risk-taking, in addition to external factors like socio-cultural and economic factors, have a significant positive effect on the success of women-owned businesses. Based on the result observed, policymakers were advised to encourage women's participation in entrepreneurship by providing support and incentives related to internal and external factors.

In Jordan, Thaher *et al.* (2021) investigated factors that hinder women from attaining business stability using a semi-structured interview method and open-ended questionnaire to collect data. The study employed purposive sampling and the NVivo technique. The result revealed that women's failure in business depends on the environment, micro-financial institutions and women entrepreneurs. From their results, they recommend that the government strengthen women's entrepreneurial sustainability by minimizing business failure through integrated strategies that account for the identified three factors.

In like manner, Abdelwahid and Kaoud (2022) investigated factors affecting women's entrepreneurial success in Egypt using a purposive sampling technique. The study interviewed 11 women entrepreneurs from different sectors and employed a qualitative data analysis technique. The result showed that external factors like environmental (sustainable environmental strategy, use of social media platforms and technology, and the Egyptian entrepreneurial ecosystem) and social support factors (family background, attitudinal drivers, and friends and family support) in conjunction with personal factors (entrepreneurial mindset, attributes of leadership, opportunity recognition, team builder, motivation and passion) significantly affect women entrepreneurial success. Government mitigation was advised to help eliminate the identified factors that negatively affect women's success in business.

Using structural equation modelling (SEM) techniques, Feng *et al.* (2023) used a purposive sampling of 255 women-owned small and medium enterprises (SMEs) in Pakistan. The results revealed that personal traits, availability of financial resources, commitment and motivation and government support directly impact the success of women-owned SMEs. The study also observed that commitment and motivation mediate the nexus between personal traits and the entrepreneurial success of women-owned businesses. In comparison, individual traits and access to finance are the most crucial factors influencing business success. Thus, the study recommends that the government encourage women's business activism through financial training and moral encouragement that can help them overcome start-up and sustainability challenges.

With particular interest in the Northeast geopolitical zone of Nigeria, Ukwueze (2022) examined the role of social inclusion and economic and non-economic factors affecting women-owned enterprises using a binary logistic estimation technique. The sampled states exclude Adamawa, Borno and Yobe. The result indicates that social inclusion, economic factors like access

to finance to start a business, financial inclusiveness in rural areas and non-economic factors like household size have a positive and significant effect on women-owned micro and small businesses. Hence, viable loans and grant schemes for women entrepreneurs in the rural and urban centres to encourage them were recommended.

Elotmani and El Boury (2023) examined the factors responsible for the success of female entrepreneurs in Morocco using interviews and qualitative techniques on data between 2022 and 2023. The result indicates that women's entrepreneurship success is defined by financial standing, societal recognition, benefits provided to others and achievements. Their recommendation differs from previous studies by emphasizing that policymakers feature the success stories of female entrepreneurs by producing concise documentaries of their accomplishments and endeavours.

In India, Laxmi and Gochhait (2023) studied factors influencing women's entrepreneurial success in the international market using a structured questionnaire to obtain data from 181 registered SMEs. The data were analysed using descriptive statistics, correlation and multiple regression techniques. The result indicates that internal factors like the ability to take risks, achievement and technological adoption contribute to the success of women entrepreneurs. In addition, external factors include socio-culture and economics. The study, therefore, recommended that the government and its agencies provide support and incentives to women-owned enterprises related to the identified external and internal factors.

With little modification on the study of Laxmi and Gochhait (2023), Ayinaddis (2023) examined social and economic factors affecting women's entrepreneurial success in micro and small enterprises in Bahir Dar City, Ethiopia. The study used data from 348 women-owned enterprises and employed correlation, regression and factors analysis procedures as its estimation techniques. The results indicate that in addition to socioeconomic factors, administrative and legal factors positively impact women's entrepreneurial success in MSEs, while the effect of demographic factors is insignificant. Thus, he recommended the development of socioeconomic factors that can aid women's entrepreneurial success in business.

Equally, Alem *et al.* (2024) investigated factors affecting the success of women-owned entrepreneurs in micro and small enterprises at DebreMarkos town-Ethiopia using 200 respondents obtained from a cross-sectional random sampling technique. The study employed the correlation and one-way ANOVA estimation technique. The result indicates that infrastructure, finance and market are fundamental factors that affect women's success in MSEs, and there is no significant difference in women's entrepreneurial success across their levels of education. Thus, they recommended that government agencies and NGOs extend support and design workable strategies to encourage and sustain women's businesses.

2.4.1 Summary of Empirical Review

From the empirical literature reviewed in subsection (2.4), there are myriads of factors impeding the success of women-owned micro and small enterprises outside globally and in Nigeria. Consequently, a few of these studies are summarized in Table 1.

Table 1: Summary of Empirical Review and Research Gap

Author(s)/Year of Study	Title and Scope	Variables	Method	Major Findings	Weakness
Ramli & Razali (2019)	Women's micro-enterprises: factors influencing business performance (Kelantan, Malaysia)	Business performance (BP), External factors (EF; access to finance, information technology, marketing, & infrastructure) and Internal factors (IF: entrepreneurial trait & managerial skills)	Correlation and regression technique	IF (managerial skills & personal traits) influence BP, while EF does not	Did not check for socio-political factors like religion and insecurity
Alene (2020)	Determinants that influence the performance of women entrepreneurs in MSEs in Ethiopia (Gondar City, Northwest Ethiopia)	Women's entrepreneurial performance (WEP; profit), socio-demographic factors (SDS; age, marital status, educational level, previous experience), environmental factors (EF; access to finance, infrastructure, government support, land ownership and tax), and training and development factors (TDF; business training, access to market and information)	Binary logistic regression	SDS (educational level, previous experience), EF (access to finance, land ownership, government support, and tax) and TDF (business training, business information) significantly influence WEP	Did not check for socio-political factors like religion and insecurity
Khan <i>et al.</i> (2021)	Factors affecting women entrepreneurs' success: A study of SMEs in the emerging market of Pakistan (Islamabad,	Women entrepreneur success (WES), need for achievement (NA), risk-taking (RT), Self-confidence (SC), economic factors (EF), and social-cultural factors (SCF)	Confirmatory factor analysis (CFA)	Internal factors like NA, RT, and SC and external factors like EF and SCF positively and significantly affect WES.	Did not check for socio-political factors like religion

	Lahore and Rawalpindi)				and insecurity
Ukwueze (2022)	Women and entrepreneurial in Nigeria: What role does social inclusion play (34 states in Nigeria)	Female-owned business (FOB), age of female entrepreneur (AFE), gender of the entrepreneur (GE), rural business location (RBL), female account holders (FAH), marital status (MS), financial institution account in rural areas (FIARA), financial inclusion (FI), lack of proper documentation (LPD), loan to female (LF), household size (HHS), age of respondents (AR) and Muslim religion (MR)	Binary logistic regression	FI, FAH, FIARA, LF, and HHS positively and significantly influence FOB.	Excluded Adamawa, Borno and Yobe State
Feng <i>et al.</i> (2023)	Factors influencing women's entrepreneurial success: A multi-analytical approach (Pakistan)	Entrepreneurial success (ES), personal trait (PT), motivation and commitment (MC), availability of financial resources (AFR), government support (GS), age and business type	Structural equation modelling (SEM)	PT, MC, AFR and GS have a direct effect on ES	Did not check for socio-political factors like religion and insecurity
Ayinaddis (2023)	Socioeconomic factors affecting women's entrepreneurial performance in MSEs in Bahir Dar City (Ethiopia)	Women's entrepreneurial performance (WEP; profit, asset, and capital growth), demographic factors (DF), social factors (SF), economic factors (EF) and legal and administrative factors (LAF)	Explanatory factor analysis, correlation and regression technique	SF, EF, and LAF have positive effects on WEP	Did not check for socio-political factors like religion and insecurity

Alem <i>et al.</i> (2024)	Factors affecting the performance of women-owned entrepreneurs in MSEs at DebreMarkos Town (Ethiopia)	Women's entrepreneurial performance (WEP), economic factors (EF, finance, infrastructure and market), social support system (SSS) and educational status (ES)	Regression Technique	EF have a significant effect on WEP	Did not check for socio-political factors like religion and insecurity
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Source: Compiled by the Author

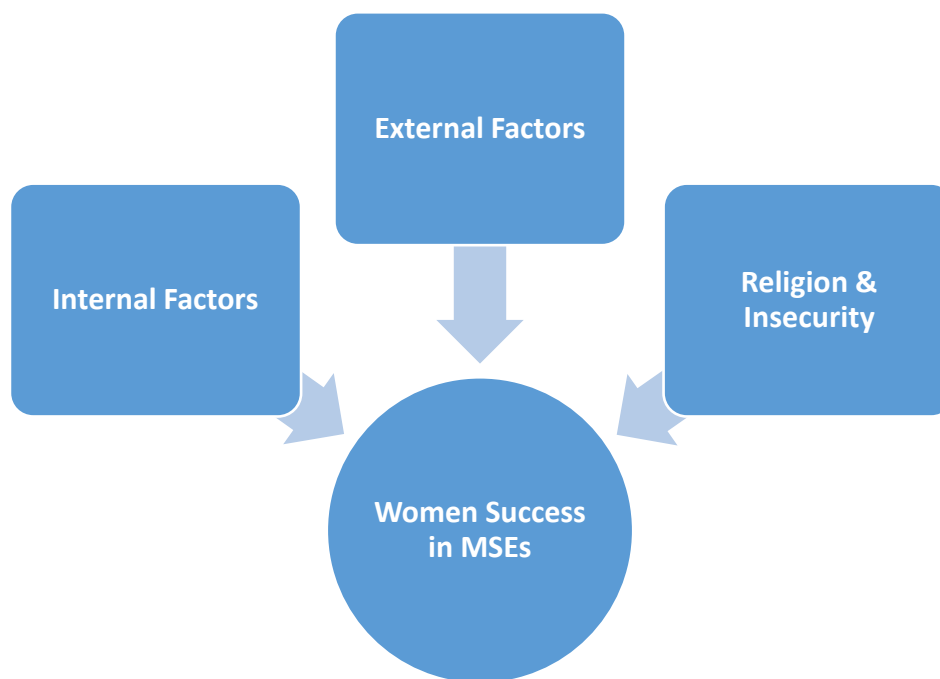
Table 1 shows that many factors that affect women's success in MSEs in different countries have been identified using diverse sample sizes, sampling techniques, and estimation techniques. The findings of these studies revealed that factors affecting women's success in MSEs are similar across countries and geographical locations. However, none of the studies examined socio-political factors like religion and insecurity except the study of Ukwueze (2022), which considered only the former but excluded states like Adamawa, Borno and Yobe. Thus, this study will add to the existing literature by investigating factors affecting women's success in MSEs in the Northeast geopolitical zone of Nigeria by considering socio-political factors like religion and insecurity and external and internal factors identified in the empirical literature reviewed. In addition, this study examined the implications of these factors on the economic development of the Northeast region, with particular interest in the role of Feed the Future Nigeria Integrated Agriculture Activity.

2.5 Conceptual Framework

The conceptual framework of this study is adapted from the study of Alem *et al.* (2024) but modified to capture the peculiarity of the Northeast geopolitical zone of Nigeria. The empirical literature reviewed shows that factors affecting women's success in MSEs are divided into two broad categories: external and internal. The external factors of interest are access to education, access to production knowledge and technologies (agricultural production training, climate-smart agricultural technologies, and enterprise development training), access to gender-sensitive extension services, access to reliable and sustainable climate and weather information and services, access to production resources (access to, ownership, and control of farmlands, and access to last-mile/community-based agro-input dealers), access to economic and financial literacy training, cooperative group savings and revolving loans scheme, and access to markets and market information.

On the other hand, the internal factors are control over income and expenditure at the household level, group participation and leadership positions in associations and time allocation – household care responsibilities and gender norms and stereotypes. In contrast, this study included religion and insecurity due to the activities of the insurgents.

Fig 1: Conceptual Framework



3.0 Methodology

Description of Study Area

The study area of this research is northeast Nigeria with a particular focus on the states where USAID Feed the Future Nigeria Agriculture Activity provided interventions for youth and women to facilitate quick economic recovery through agricultural -led economic growth, economic and entrepreneurial skills development. Northeast region of Nigeria has been one of the most economically backward regions in the country and in recent years, one of the most devastated regions by the activities of insurgents particularly Boko Haram. In this region, women happen to be the most vulnerable and most affected segments of the population by the insurgents with hundreds of girls and women being abducted, kidnapped, raped and violated over the past decade. The population of Northeast Nigeria is projected to be approximately 26 million people, with a considerable amount living in rural areas (National Population Commission, 2024).

Specifically, two states – Borno and Adamawa have been selected for the study being the states of intervention by the USAID Feed the Future Nigeria Integrated Agriculture Activity. Borno State is located in the northeastern region of Nigeria, bordering Chad to the northeast, Niger to the north, and Cameroon to the east. It lies between latitudes 10° and 14°N and longitudes 11° and 14°E, covering a vast expanse of semi-arid terrain. The state has been severely impacted by insecurity due to the insurgency led by Boko Haram and the Islamic State in West Africa Province (ISWAP). These groups have been active in the region for over a decade, leading to widespread violence, displacement, and destruction of infrastructure. The insecurity has devastated the local economy, exacerbated poverty levels and hindered development efforts. Poverty in Borno State is pervasive,

with many residents struggling to meet basic needs. The prolonged conflict has disrupted agricultural activities, trade, and access to essential services, further entrenching economic hardship. Women in Borno State face significant challenges, including limited access to education, healthcare, and economic opportunities. The lack of empowerment initiatives has left many women vulnerable, with few avenues for improving their livelihoods. The ongoing conflict has disproportionately affected women, making them more susceptible to poverty and marginalization.

Adamawa State is located in the northeastern region of Nigeria, sharing borders with Borno State to the north, Gombe State to the west, and Taraba State to the southwest. It also has an international border with Cameroon to the east. Geographically, Adamawa lies between latitudes 7° and 11°N and longitudes 11° and 14°E, characterized by diverse topography, including mountains, valleys, and rivers. The state has faced significant security challenges, particularly due to spillover effects from the Boko Haram insurgency in neighbouring Borno State. While not as severely impacted as Borno, parts of Adamawa have experienced violence, displacement, and disruption of local economies due to insurgent activities. Poverty is a major issue in Adamawa State, with a large proportion of the population living below the poverty line. The conflict, combined with limited economic opportunities, has exacerbated the poverty situation, particularly in rural areas where access to basic services and infrastructure is poor. Women in Adamawa State face significant barriers to empowerment. They often have limited access to education, healthcare, and economic opportunities. Cultural practices and gender inequality further restrict their ability to participate fully in the economic and social life of the state. The lack of targeted empowerment programs for women has left many in a vulnerable position, contributing to ongoing cycles of poverty and underdevelopment.

Research Design

This study employed survey research by collecting data from the respondents who participated in the USAID Feed the Future training and other support interventions in Northeast Nigeria. Both qualitative and quantitative data were collected and analysed using both descriptive and inferential methods.

Population and Sample

The population of the study included all the participants/beneficiaries of the USAID Feed the Future in different enterprises from Adamawa and Borno states. The total beneficiaries of the intervention are 7,986 which makes up the total population of this study. The sample size for the study was determined using the popular formula of Taro Yamane as follows:

$$n = \frac{N}{1 + Ne^2} \text{-----(1)}$$

Where n = sample size

N = population size

e = the acceptable sampling error (margin of error)

substituting the $N = 7,986$ and $e = 0.05$ (5% error) into equation 1, the resulting sample size for this study is 380.

Method of Data Collection

The study employed primary method of data collection using structured questionnaires administered by trained research assistants from Adamawa and Borno states with the aid of Kobocollect mobile – based data collection application.

Method of Data Analysis

The study employed both descriptive and inferential methods of data analysis in the forms of charts, tables and linear regression. The descriptive method facilitated in describing the nature, and distribution of the data collected while the inferential method facilitated in analysing the factors affecting women's success in micro and small enterprises using ordinary least squares.

Model Specification

The study specified a multiple linear regression model which was used as the basis for analysing factors affecting women's success in micro and small enterprises in Northeast Nigeria. The model is shown as:

$$Y = \alpha_0 + X_1\alpha_1 + X_2\alpha_2 + X_3\alpha_3 + X_4\alpha_4 + X_5\alpha_5 + X_6\alpha_6 + X_7\alpha_7 + X_8\alpha_8 + X_9\alpha_9 + X_{10}\alpha_{10} + X_{11}\alpha_{11} + X_{12}\alpha_{12} + X_{13}\alpha_{13} + e_i$$

Where Y = Women success in micro and small enterprises (measured by income and cash inflows from their enterprises)

X_1 = Access to Production knowledge and technologies

X_2 = Poor Access to Bank accounts

X_3 = Poor Access to credit

X_4 = Poor access to farmland

X_5 = Ownership of Farmland

X_6 = Lack of control over farmland

X_7 = Poor access to agro input dealers

X_8 = Feed the Future Gender training

X_9 = Access to enterprise starter park

X_{10} = Educational level

X_{11} = Household size

X_{12} = Annual income

X_{13} = Age (Years)

e_i = Error term representing other factors affecting women’s success in micro and small enterprises which have not been capture in this model.

4. RESULTS AND DISCUSSION

This section provides the results of the data analysis and concurrent discussion of the findings for both the descriptive analysis using the charts and tables as well as the inferential analysis using the regression analysis.

Distribution by State and LGAs

The respondents who are at the same time the beneficiaries of the Feed the Future intervention, are distributed according to their state and LGAs where they benefited. As indicated in figure 4.1, there are 179 respondents drawn from Adamawa State cutting across 7 LGAs and 175 respondents from Borno State across 5 LGAs with the sample unevenly distributed among the LGAs on the basis of the proportion of the population of the beneficiaries from each LGA. This results in a total of 354 sample respondents across the two intervention states.

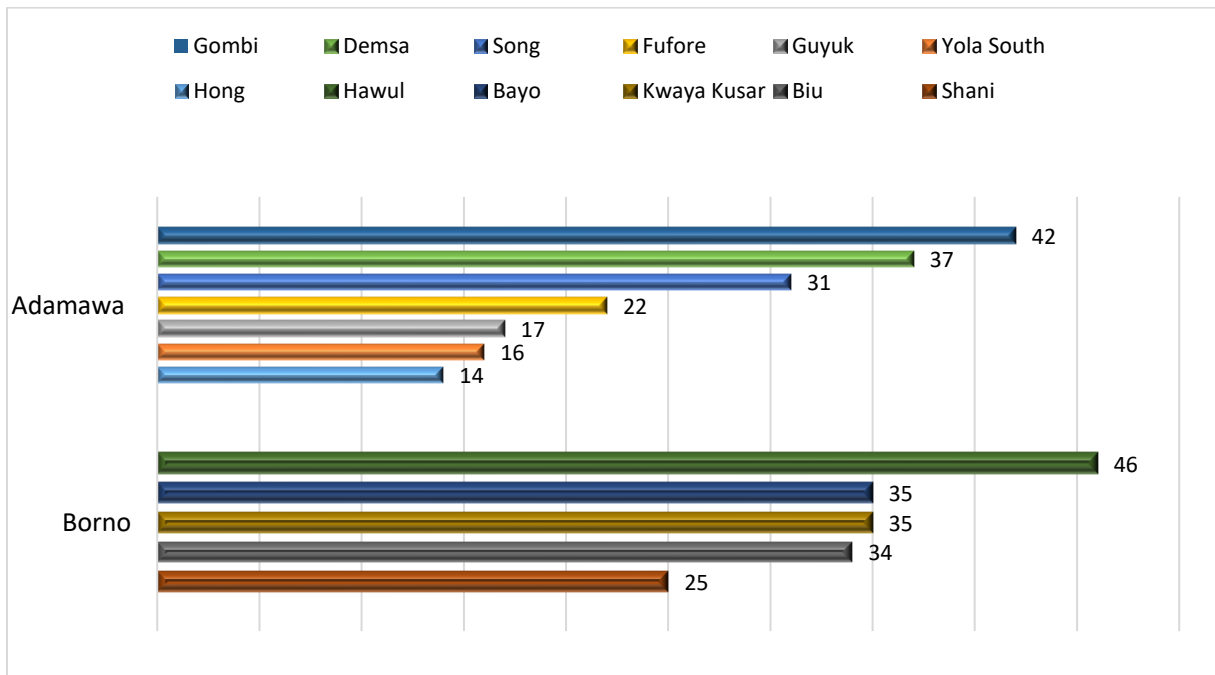


Figure 4.1: Distribution of Respondents by State and LGAs of Intervention

The socioeconomic characteristics of the respondents have been summarised in table 4.1 providing insights on their distributions based on age, marital status, educational qualification, household size, main occupation and estimated annual income. The result shows that majority (50.57%) of the respondents were within the age range of 18-35 years signifying the importance of active

women and youth participation and inclusion in the intervention program. The marital status shows that 75.42% were married, 22.60% were single and 1.69 and 0.28 were divorced and widows respectively. This indicates family responsibility associated with the majority (75.42%) of the beneficiaries, informing the need for provided intervention facilitating youth and women empowerment for them to live up to such responsibilities and improve their livelihoods. This family responsibility is also evident from the household size distribution where majority (73.78%) had 1-5 household size, 28.20% had household size between 6 -10, with a cumulative percentage of 18.03% having household size above 10 further re-enforcing the substantial family obligations of the respondents which has severe implications on their income and poverty levels.

Table 4:1: Socioeconomic Characteristics of the Respondents/Beneficiaries

	Frequency	Percentage
Age		
18-25	47	13.28
26-35	132	37.29
36-45	90	25.42
46-55	53	14.97
56-65	26	7.34
66 and above	6	1.69
Total	354	100.00
Marital status		
1) Single	80	22.60
2) Married	267	75.42
3) Divorced	1	0.28
4) Widowed/widower	6	1.69
Total	354	100.00
Educational qualification		
Non formal education	16	4.52
Quran Education	6	1.69
Primary Education	23	6.50
Junior Secondary School	15	4.24
Senior Secondary School	151	42.66
Tertiary Education	143	40.40
Total	354	100.00
Household size		
1-5	185	53.78
6-10	97	28.20
11-15	25	7.27
16-20	22	6.40
21 and above	15	4.36
Total	344	100.00
Main Occupation		
1) Crop farming	150	42.61
2) Livestock farming	92	26.14

3) Trader/business	108	30.68
4) Civil Servant	2	0.57
Total	352	100.00
Estimated annual income		
₦100,000 - ₦500,000	283	86.54
₦600,000 - ₦1,000,000	33	10.09
₦1,100,000 - ₦1,500,000	8	2.45
₦1,600,000 - ₦2,000,000	3	0.92
Total	327	100.00

Source: Field Survey, 2024.

The distribution of the respondents based on the educational qualification shows that majority (cumulatively 83.06%) of them had senior and tertiary educational qualifications signifying that the beneficiaries had capacity to absorb the training interventions in various enterprises. Furthermore, the distribution of the respondents based on main occupation indicates that majority (cumulatively 68.75%) were mainly engaged in agricultural activities with 42.61% and 26.14% in crop and livestock farming respectively. On the other hand, 30.68% were engaged in trading/business, and only 0.57% were civil servant. This result suggests that intervention had targeted the right groups since agriculture has been known as the main occupation in northeast Nigeria and empowering women in this sector will facilitate poverty reduction and improved livelihood especially of the households and communities that were devastated by the conflicts and insurgencies. The result provides insights into the pathetic economic conditions of the beneficiaries as indicated by the annual income distribution where 86.54% of the respondents had annual income between ₦100, 000 to ₦500, 000 and 10.09% had annual income between ₦600, 000 to ₦1, 000, 000. Given the household sizes of the respondents, it is clear that such annual income cannot sustain the family, hence, the need for the interventions provided by the Feed the Future Nigeria Integrated Agriculture Activity which aimed at building their entrepreneurial and economic capacities to explore and take advantage of opportunities available in their communities.

Categories of Feed the Feed Trainings Accessed by the Beneficiaries

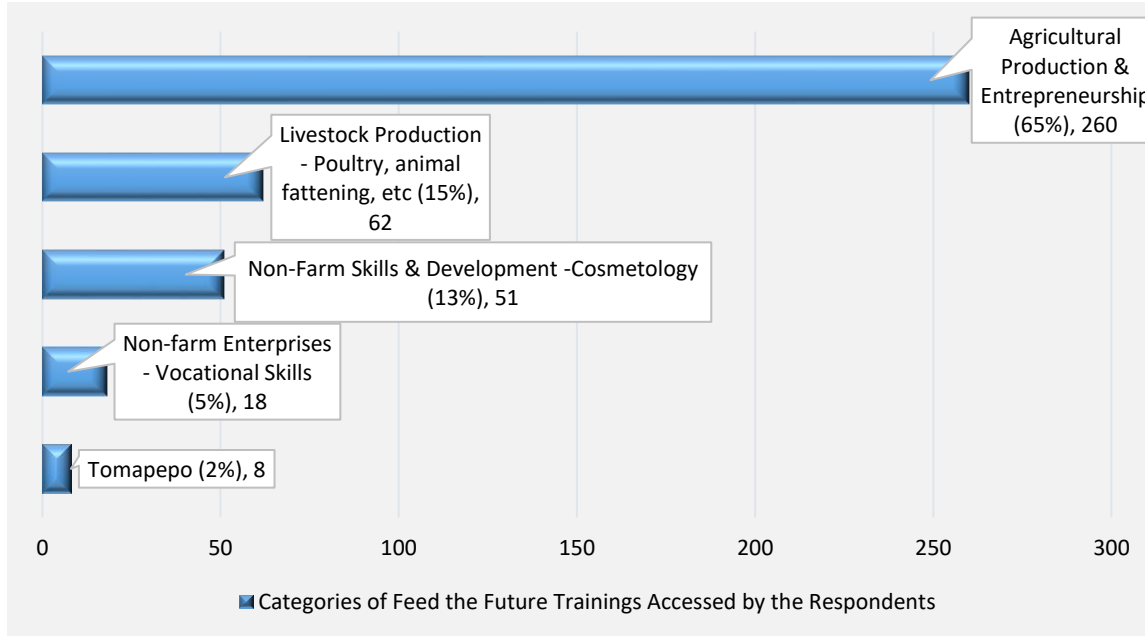


Figure 4.2: Enterprises Engaged by the Beneficiaries

The Feed the Future Nigeria Integrated Agriculture Activity provided training and support interventions in different enterprises as shown in figure 4.2 with agricultural production and entrepreneurship having the largest percentage of participants representing 65% of the total participants/respondents. This highlights the dominance of agricultural production as the main occupation of the people at the grassroots in northeast Nigeria. Livestock production such as poultry production and cattle fattening among others constitute the second largest enterprise engaging 15% of the respondents/participants. This further demonstrate importance of livestock sector in serving as a source of employment and livelihood to the communities devastated by the insurgency in the northeast. The data also shows that 13% of the participants/respondents were engaged in non-farm skills and development focusing on cosmetology. Non-farm enterprises such as vocational skills constitute 5% of the participants while Tomapepo is the least with 2% of the participants/respondents.

Distribution of Beneficiaries who believed that Feed the Future Trainings Intervention Has Enlightened them on how to Access Various Productive Resources

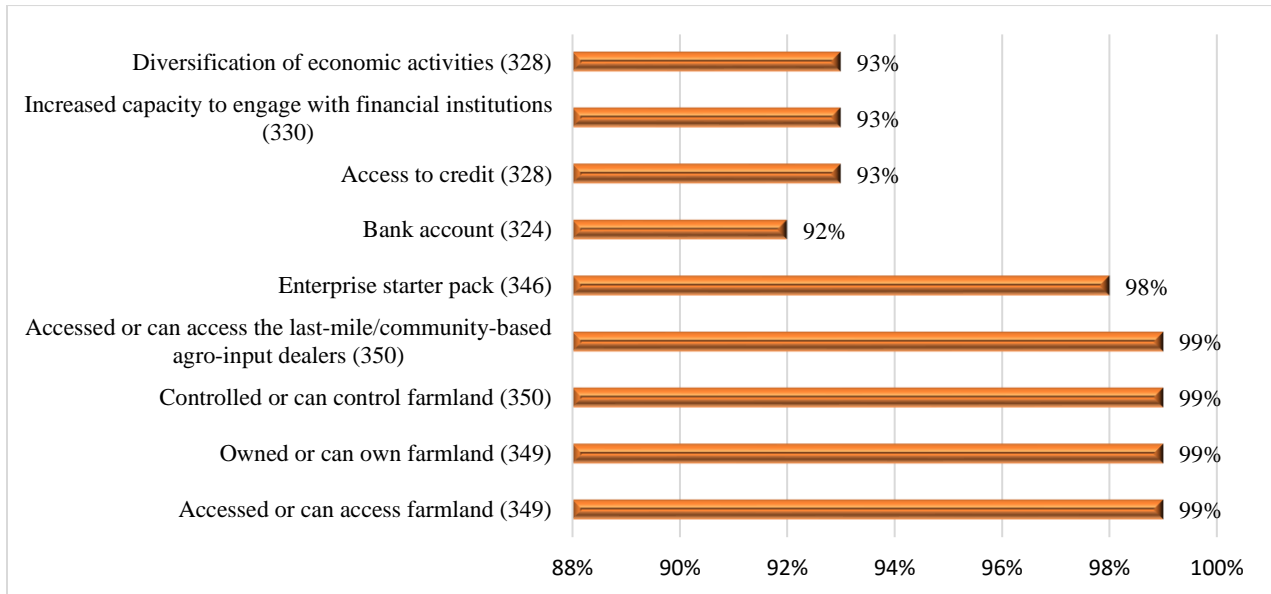


Figure 4.3: Level of Enlightenment on how to access Productive Resources by Participants

The information in figure 4.3 shows the distribution of respondents based on their belief of how Feed the Future training enlightened and built their capacities for accessing productive resources being the most significant challenges to women success in entrepreneurial development. The data shows that 93% had expressed confidence that the training improved their capacities to engage in diverse economic activities, engage with financial institutions for financial access, and to access credit. However, they expressed worry that access to credit is still among the biggest challenges they are facing. Similarly, 92% expressed confidence that they can approach banks to open bank accounts, and many were already operating bank accounts. Impressively, 99% of the participants/respondents indicated that they have developed their capacities and strategies on how to access community based agro input dealers, how to access, own and control farmland as important agricultural productive resources.

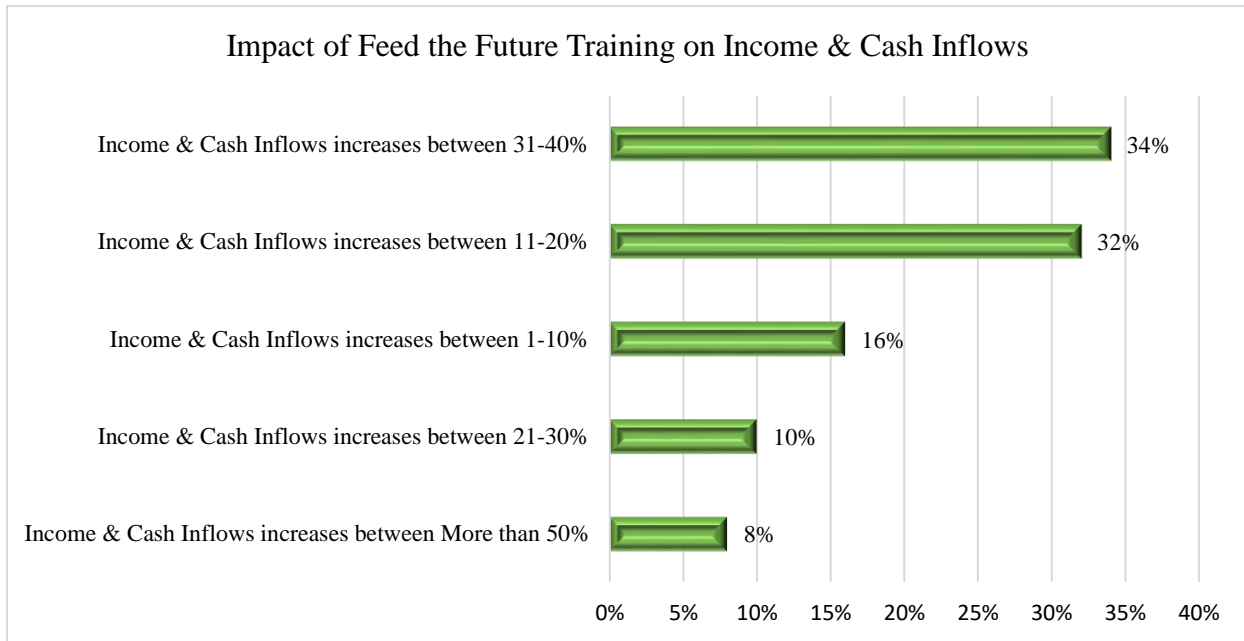


Figure 4.4: Extent of Change in Income and Cash inflows of Participants

The participants were asked to provide their views on the impact of the Feed the Future trainings on their income and cash inflows. Majority of the participants/respondents, representing 34%, indicated that their income and cash inflows increased between 31%-40% while 32% of them showed that their income and cash inflows increased by 11% to 20%. Furthermore, 16% of the respondents showed that their income and cash inflows increased between 1% and 10%. Similarly, 10% of respondents stated that their income and cash inflows increased between 21% and 30%, while 8% of respondents stated that their income and cash inflows increased by more than 50%.

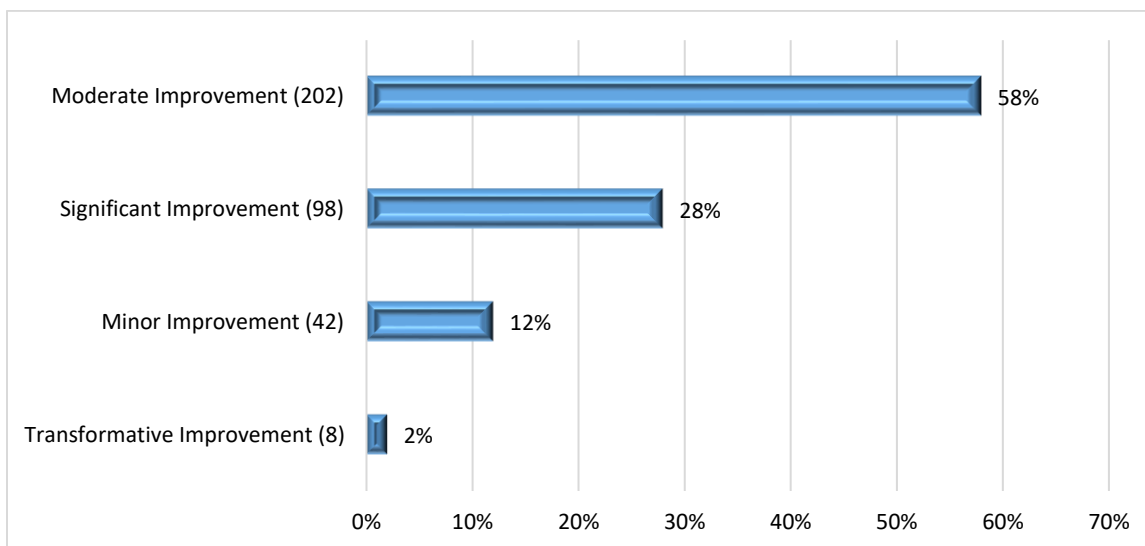


Figure 4.5: Extent of Performance Improvement Because of Feed the Future Training

The extent to which the training influenced the business performance of the participants was examined as shown in figure 4.5 where 58% of participants acknowledged moderate improvement while 28% of them experienced significant improvement, with 12% reporting minor improvement. Impressively, some participants experienced transformative improvement which constituted 2% of the total respondents.

4.2 Robust OLS Regression Result of the Factors Affecting Women’s Success in Micro and Small Enterprises

Dependent variable: Women success in micro and small enterprises (measured by income and cash inflows from the business)

Independent variables:	Coefficient	Standard error	t-value	P-value
Access to Production knowledge and technologies	2.683***	0.496	5.410	0.000
Poor Access to Bank accounts	-4.076	3.774	-1.080	0.281
Poor access to credit	-6.592	4.052	-1.630	0.105
Poor access to farmland	-0.344	7.577	-0.050	0.964
Ownership of Farmland	3.282	8.151	0.400	0.688
Lack of control over farmland	-3.971	5.453	-0.730	0.467
Poor access to agro input dealers	-10.013***	2.584	-3.880	0.000
Feed the Future Gender training	4.056*	2.364	1.720	0.087
Access to enterprise starter park (Accessed = 1, not accessed = 0)	3.74	5.027	0.740	0.457
Educational level	0.607***	0.196	3.100	0.002
Household size	-0.316**	0.139	-2.280	0.023
Annual income (thousands of naira)	0.0001	0.0002	-0.500	0.752
Age (Years)	-0.029	0.061	-0.480	0.633
Constant	31.245***	10.26	3.050	0.003
Mean dependent var	25.666	SD dependent var		13.317
R-squared	0.537	Number of obs		317
F-test	14.776	Prob > F		0.000
Akaike crit. (AIC)	2484.311	Bayesian crit. (BIC)		2540.694

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 4.2 shows the regression result of the factors affecting women’s success in micro and small enterprises. Several factors informed by the literature have been taking into account in running the regression. Access to production knowledge and technology appears to exert a positive and statistically significant impact on women’s success in micro and small enterprises as indicated by the coefficient 2.683 with the t-value of 5.410 and p-value of 0.000. This means that participants with more access to knowledge and technologies are likely to succeed in their business enterprise 2,683 times better than those without access. It demonstrates the importance of knowledge and technologies in facilitating women’s success in micro and small enterprises in the northeast

Nigeria, which is one of the areas the USAID Feed the Future intervention mostly paid serious attention.

However, poor access to bank accounts by the participants has a negative impact on their success in micro and small enterprises. Based on the result, women without access to bank accounts are likely 4.076 times less successful in their business compared to those who own bank accounts. This highlights the role of bank accounts which is essential in instilling financial discipline in the business. Similarly, poor access to credit constitutes a negative influence on women's success as indicated by the coefficient -6.592 signifying the magnitude of the impact. It shows that participants who had no access to credit are almost 7 times less likely to succeed in their business. In other words, their business income and cash inflows are likely to reduce by about 7 times more than those who had access to credit. In the same way, poor access to farmland is another factor that affects the success of women in micro and small enterprise with coefficient of -0.344, the result indicates that women who have challenges in accessing farmland are 0.344 times less likely to succeed in their business enterprises. Also, lack of control over farmland has a negative effect on women's success as shown by the coefficient -3.971 indicating that women who have no control over farmland are 3.971 times less likely to succeed in their micro and small enterprises compared to those who have control over farmland. Furthermore, it is shown that lack of access to agro input dealers negatively affect women's success as demonstrated by the coefficient -10.013 which suggests that women who have no have to these dealers are 10.013 times less likely to succeed in their business enterprises. This explains the importance of accessing inputs from agro dealers which are likely to be cheaper leading to profit maximisation by the women business owners. Household size also has a negative effect on women's success as shown by the coefficient -0.316 suggesting that large household size decreases women success in business enterprises possibly due to family burden and associated economic burden on the business income. The age of the respondents also has negative effect on women success in micro and small enterprises as indicated by the coefficient -0.029 suggesting that older individuals are less success in business enterprises compared to younger ones.

Conversely, ownership of farmland tends to increase women's success in micro and small enterprises as indicated by the coefficient 3.282 suggesting that women who own farmland are 3.282 times more likely to succeed in their business enterprises compared to those who do not own farmland. Similarly, Feed the Future gender training has a positive effect on women's success in micro and small enterprises as shown by the coefficient 4.056 indicating that women who benefitted from the Gender training are 4.056 times more likely to succeed in their business enterprises. Also, access to enterprise starter park also positively affects women succeed in micro and small enterprises as indicated by the coefficient 3.74 signifying that women who were able to access enterprise starter park provided by the USAID Feed the Future are 3.74 times more likely to be successful in their business enterprises. The effect of educational level on women success is positive based on the coefficient 0.607 which suggests that higher level of education is associated with increased women succeed in micro and small enterprises. Annual income of the respondents also has a positive effect on women's success in micro and small enterprises as indicated by the coefficient 0.0001 suggesting an increase in women success resulting from increase in their annual income.

The R-squared of 0.537 suggests a good fit for the model signifying that about 54 percent of the factors affecting women success in micro and small enterprises are explained by the independent variables included in the regression analysis. This indicates that the model has been able to capture most of the factors affecting women success in business while the remaining 46 percent of the factors cannot be accounted for by the model, providing room for improvement upon the analysis of these factors.

5. Conclusion and Recommendations

This study examines the factors affecting women's success in micro and small enterprises in Northeast Nigeria focusing on the role of Feed the Future Nigeria Integrated Agriculture Activity. While women have been acknowledged to play a vital role in building a decent society and prosperous economy, this role cannot be performed without adequately identifying and addressing major factors that can influence their successful engagement in businesses especially micro and small enterprises. The Feed the Future Nigeria Integrated Agriculture Activity provided interventions for youth and women in the conflicted affected Northeast Nigeria to contribute towards such empowerment and building economic resilience. This study employed survey research design, collected data on the beneficiaries of the interventions and analysed using both descriptive and inferential methods. The findings from this study provided evidence that majority of the respondents/participants were youth, married, have at least primary education, with 1-10 household size and engaged in agricultural activities as their main source of occupation. Their annual income ranges between ₦100,000 and ₦500,000 further justifying the poverty level among the respondents. Majority (65%) of the respondents participated/benefitted from agricultural production and entrepreneurship and over 90% indicated to have increased their capacity to confront and address factors affecting their success in micro and small enterprises. The regression result shows that access to production knowledge and technology, ownership of farmland, Feed the Future gender training, access to enterprise starter park and annual income of the respondents have positive effect on women's success in micro and small enterprises. On the other hand, poor access to bank accounts, poor access to credit, poor access to farmland, lack of control over farmland and lack of access to agro input dealers negatively affect women's success in micro and small enterprises in Northeast Nigeria. Based on the findings of the study, the following recommendations have been offered:

1. There is a need for expansion of interventions in the area of capacity building for women in various enterprises northeast Nigeria in order to ensure speedy recovery from the devastating effect of insurgency in the region.
2. While training support is very crucial and highly needed, attention and priority should be given to provision of tangible material and financial support to back the soft skills so provided.
3. There is need for federal and state governments to provide special funds to support women at the grassroot levels especially those engaged in micro and small enterprises.

4. There is a need for public private partnership (PPP) in the agricultural value chain in Northeast to encourage establishment of agro-processing plants and to incorporate more women in a sustainable manner.
5. Access to finance should be improved through such ways like empowering Bank of Agriculture (BOA), Bank of Industry (BOI), establishment of government micro finance banks targeting women and youth to provide loans to micro and small-scale women entrepreneurs with minimal or no collateral.

References

- Abdelwahid, M., & Kaoud, H. (2022). Factors affecting the success of women entrepreneurs in Egypt. *International Journal of Organizational Leadership*, 11, 444-461.
- Ademola, A. O., Oyeleye, O. A., & Afolabi, O. D. (2013). Performance evaluation of cooperative societies on women entrepreneurs in Nigeria. *Elixir Finance and Management*, 65, 19900-19904.
- Adewoye, J. O., Ademola, A. O., Afolabi, O. D., & Oyeleye, O. A. (2013). Performance impact of information and communication technology (ICTs) on women entrepreneurs in Southwestern Nigeria. *Elixir Finance and Management*, 65, 19905-19909.
- AGRA, (2021). Women in agribusiness value chains in Africa: a white paper on constraints and opportunities for developing a gender-responsive agribusiness sector. Nairobi, Kenya: AGRA. https://agra.org/wp-content/uploads/2022/05/Women_in_agribusiness_value_chains_in_Africa.pdf
- Alem, T. A., Hasan, A. A., Alemu, W. G., & Alam, P. (2024). Factors affecting the performance of women owned entrepreneurs in micro and small enterprises at DebreMarkos Town. *YMER*, 23(1), 0044-0477.
- Alene, E. T. (2020). Determinants that influence the performance of women entrepreneurs in micro and small enterprises in Ethiopia. *Journal of Innovation and Entrepreneurship*, 9(24), 1-20. DOI: <https://doi.org/10.1186/s13731-020-00132-6>
- Ali, R. S. (2018). Feminist theory and its influence on female entrepreneur's growth intentions. *International Journal of Innovation and Economic Development*, 4(3), 20-31. DOI: <https://doi.org/10.18775/ijied.1849-7551-7020.2015.43.2003>
- Al-Tamimi, H., & Kalli, A. (2009). Financial literacy and investment decision of UEA investors. *The Journal of Risk Finance*, 10(5), 500-516.
- Animaw, D. (2019). *Factors affecting the performance of women entrepreneurs (in case of WEDP members)* (Doctoral dissertation) Addis Ababa: St. Mary's University, Ethiopia. <https://hdl.handle.net/123456789/4497>

- Ayinaddis, S. G. (2023). Socioeconomic factors affecting women's entrepreneurial performance in MSEs in Bahir Dar City, Ethiopia. *Journal of Innovation and Entrepreneurship*, 12(23), 1-21. DOI: <https://doi.org/10.1186/s13731-023-00289-w>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Birdi, M. R., & Mokaya, S. O. (2017). Factors affecting growth of women-led small and medium enterprises in Arusha Municipality, Tanzania. *International Journal of Scientific Development and Research (IJS DR)*, 2(10), 45-50.
- Bhardwaj, B. R. (2014). Impact of education and training on performance of women entrepreneurs: a study in emerging market context. *Journal of Entrepreneurship in Emerging Economies*,
- Box, M., & Larsson Segerlind, T. (2018). Entrepreneurial teams, gender, and new venture survival: contexts and institutions. *SAGE Open*, 8, 215824401877702. DOI: <https://doi.org/10.1177/2158244018777020>
- Bruch, C. (2006). Women entrepreneurs: a research overview. In: Basu, A., Casson, M., Yeung, B., & Wadesdon, N. (Eds). *Oxford Handbook of Entrepreneurship*. Oxford: Oxford University Press.
- Bryan, E., Alvi, M., Huyer, S., & Ringler, C. (2019). Addressing gender inequalities and strengthening women's agency to create more climate-resilient and sustainable food systems. *Global Food Security*, 40, 1-14. DOI: <https://doi.org/10.1016/j.gfs.2023.100731>.
6(1), 38-52. DOI: <https://doi.org/10.1108/JEEE-05-2013-0014>
- Bullough, A., Guelich, U., Manolova, T. S., & Schjoedt, L. (2022). Women's entrepreneurship and culture: gender role expectations and identities, society culture, and the entrepreneurial environment. *Springer Link Small Business Economics*, 58, 985-996. DOI: <https://doi.org/10.1007/s11187-020-00429-6>
- Carr, E. R., Fleming, G., & Kalala, T. (2016). Understanding women's needs for weather and climate information in agrarian settings: the case of Ngetou Maleck, Senegal. *Weather, Climate, and Society*, 8, 247-264.
- Dauda, R. S. (2021). Conflict and development in the North-East, Nigeria: the case of Boko Haram insurgency. *Mondopoli Journal*, 2(2), 1-6.
- Diaz, I. I., & Najjar, D. (2017). *Gender and agricultural extension: why a gender focus matters?* International Center for Agricultural Research in Dry Areas (ICARDA). Rabat: Morocco.
- Dul, J., & Neumann, W. P. (2007). The Strategic Business Value of Ergonomics. In: R. N. Pikaar, E. A. P. Koningsveld & P. J. M. Settels (Eds.). *Meeting Diversity in Ergonomics* (2nd ed., pp.17-27). Elsevier Science Ltd.
<https://doi.org/10.1016/B978-008045373-6/50003-9>

- Elotmani, S., & El Boury, M. (2023). Women's entrepreneurial success in Morocco: between transition and patriarchal resistance. *Journal of Development Entrepreneurship*, 2350030, 1-33. DOI: <https://doi.org/10.1142/S1084946723500309>
- Ejike, R. D., Osuji, E. E., Effiong, J. A. L., & Agu, C. G. (2018). Gender dimension in agricultural food value chain development in Nigeria: the women perspective. *International Journal of Agriculture and Earth Science*, 4(3), 37-45.
- Feng, J., Ahmad, Z., & Zheng, W. (2023). Factors influencing women's entrepreneurial success: A multi-analytical approach. *Frontiers in Psychology*, 13, 1-15.
DOI: <https://doi.org/10.3389/fpsyg.2022.1099760>
- FAO. (2023). *The status of women in agrifood systems*. Rome, FAO.
<https://openknowledge.fao.org/server/api/core/bitstreams/e7689bf7-00f0-465b-ad03-e0c56ffb14b1/content>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-206.
- Hambrick, D. C. (2007). Upper echelons theory: an update. *Academy of Management Review*, 32(2), 334-343.
- Hossain, A., Siddique, Md. Z. R., & Al Jamil, Md. A. (2018). Factors affecting women involvement as entrepreneur in SMEs sector, economic development and its impact on poverty reduction in Bangladesh. *Business, Management and Economics Research*, 4(5), 51-65.
- International Finance Corporation. (2023). *Exploring opportunities for women entrepreneurs driving climate solutions: a discussion note*. Washington D. C.: International Finance Corporation. <https://www.ifc.org/en/insights-reports/2023/exploring-opportunities-for-women-entrepreneurs-driving-climate-solutions&ved>
- ILO. (2004). *The challenges of growing small businesses: insight from women entrepreneurs in Africa*. Geneva, International Labour Office.
https://www.enterprise-development.org/wp-content/uploads/Growing-Small-Businesses-Women-Entrepreneurs-in-Africa_ILO2004.pdf
- Isa, F. M., Muhammad, N. M. N., Ahmad, A., & Noor, S. (2021). Effect of ICT on women entrepreneur business performance: case of Malaysia. *Journal of Economics and Business*, 4(1), 137-146. DOI: <https://doi.org/10.31014/aior.1992.0401.326>
- Khan, R. U., Salamzadeh, Y., Shah, S. Z. A., & Hussain, M. (2010). Factors affecting women entrepreneurs' success: a study of small-and medium-sized enterprises in emerging market of Pakistan. *Springer Nature: Journal of Innovation and Entrepreneurship*, 10(1), 11. DOI: <https://doi.org/10.1186/s13731-021-00145-9>
- Kuruvilla, R. R., & Harikumar, P. N. (2018). A study on the financial awareness among women entrepreneurs in Kottayam district. *Journal of Management Research and Analysis*, 5(3), 331-335.

- Laxmi, S. S., & Gochhait, S. (2023). Factors influencing the success of women entrepreneurs in the international market: a comprehensive analysis. *Journal of Women's Entrepreneurship and Education*, Special Issue, 146-165.
DOI: <https://doi.org/10.28934/jwee23.pp146-165>
- Machalek, R., & Martin, M. W. (2015). Sociobiology and Sociology: A New Synthesis. In James D. Wright (Ed), *International Encyclopedia of the Social & Behavioral Sciences* (2nd ed., pp. 892-899). Elsevier. DOI: <https://doi.org/10.1016/B978-0-08-097086-8.32010-4>.
- Mekuria, M. M., & Ayalew, G. T. (2020). Factors affecting performance of women owned micro and small enterprises in Mizan Town. *International Journal of Creative Research Thoughts (IJCRT)*, 8(6), 1356-1365.
- National Bureau of Statistics. (2021). 2020 *Statistical Report on Women and Men in Nigeria. General Population Patterns 2018-2020*. Abuja, Nigeria. https://www.nigerianstat.gov.ng.2020_ReportWomenMen_August2021.pdf
- National Population Commission. (2022). Population Projection by State. https://factcheckhub.com/wp-content/uploads/2022/07/national-population-commission-Projection_2022.pdf
- National Bureau of Statistics. (2022). Demographic Statistics Bulletin. https://www.nigeriastat.gov.ng/pdfuploads/DEMOGRAPHIC_BULLETIN_2022_FINAL.pdf
- Njobe, B. (2015). *Women and agriculture: the untapped opportunity in the wave of transformation*. Feeding Africa 21-23 October 2015, An Action Plan for African Agricultural Transformation. African Development Bank Group.
- Ojinta, R. I. (2018). *Barriers to women leadership of small and medium enterprises in Nigeria* (Doctoral Dissertation, Walden University, Minneapolis, Minnesota, United States).
- Olagunju, K. O., Ogunniyi, A. I., Awotide, B. A., Adenuga, A. H., & Ashagidigbi, W. M. (2020). Evaluating the distributional impacts of drought-tolerant maize varieties on productivity and welfare outcomes: An instrumental variable quantile treatment effects approach. *Climate and Development*, 12(10), 865-875.
- Opata, P., Ezeibe, A. B., & Ume, C. O. (2020). Impact of women's share of income on household expenditure in southeast Nigeria. *African Journal of Agricultural and Resource Economics*, 15(1), 51-64.
- Owolabi, J. O., Abubakar, B. Z., & Amodu, M. Y. (2011). Assessment of farmers (women) access to agricultural extension, inputs and credit facility in Sabon-Gari local government area of Kaduna State. *Nigerian Journal of Basic and Applied Science*, 19(1), 87-92.
- Oxfam. (2012). *Improving women's leadership and effectiveness in agricultural governance: programme effectiveness review-Summary Report*. Nigeria, Oxfam.

- <https://oxfamilibrary.openrepository.com/bitstream/10546/303455/2/er-women-agriculture-nigeria-effectiveness-review-011212-summ-en.pdf>
- Oyitso, M., & Olomukoro, C. O. (2012). Enhancing women's development through literacy education in Nigeria. *Review of European Studies*, 4(4), 66-76.
- Ramli, A., & Razali, Z. L. (2019). Women's micro-enterprises: factors influencing business performance. *Archives of Business Research (ABR)*, 7(9), 268-282.
DOI: <https://doi.org/10.14738/abr.79.7161>
- Razmi, M. J., & Firoozabadi, S. R. (2016). Investigating the effect of education on women's entrepreneurship. *International Journal of Learning and Intellectual Capital*, 13(2/3), 273-288. DOI: <https://doi.org/10.1504/IJLIC.2016.075693>
- Simba, A., Ogundana, O. M., Braune, E., & Dana, L-P. (2023). Community financing in entrepreneurship: a focus on women entrepreneurs in the developing world. *Journal of Business Research*, 163, 113962. DOI: <https://doi.org/10.1016/j.jbusres.2023.113962>
- Terrillon, J., & Vogelsperger, R. (2017). *Gender mainstreaming in agribusiness partnerships: insights from 2SCALE Thematic Paper*. Toward Sustainable Clusters in Agribusiness through Learning in Entrepreneurship, 2SCALE: BoP Innovation Center.
https://www.2scale.org/upload/e98abe_2SCALE_GENDERPAPER_0310_.pdf
- Tabassum, N., & Nayak, B. S. (2021). Gender stereotypes and their impact on women's career progressions from a managerial perspective. *IIM Kozhikode Society & Management Review*, 10(2), 192-208. DOI: <https://doi.org/10.1177/2277975220975513>
- Thaher, L. M., Radieah, N. M., & Wan-Norhaniza, W. H. (2021). Factors affecting women micro and small-sized enterprises' success: A case study of Jordan. *Journal of Asian Finance, Economics and Business*, 8(5), 0727-0739.
DOI: <https://doi.org/10.13106/jafeb.2021.vol8.no5.0727>
- Tripathy, D. P., & Mohanty, D. A. (2018). Factors affecting women micro entrepreneurs and sustainable economic development in Odisha. *IJRDO-Journal of Business Management*, 4(3), 24-27. DOI: <https://doi.org/10.53555/bm.v4i3.1886>
- United Nations (2013). UN Women: The United Nations Entity for Gender Equality and the Empowerment of Women.
- United Nations Women. (2017). Progress of the World's Women 2015-2016. Chapter 2. P. 69.
- USAID & IITA (2022). *Feed the Future: Nigeria Integrated Agricultural Activity*-18th edition. Abuja, Nigeria: USAID, (1-10). <https://hdl.handle.net/10568/129252>
- Van Bakel, M., & Horak, S. (2024). Social Capital Theory. In: Hutchings, K., Michailova, S., & Wilkinson, A. (Eds.). *A Guide to Key Theories for Human Resource Management Research* (pp. 261-267). Cheltenham: Edward Elgar.
DOI: <https://doi.org/10.4337/9781035308767.ch33>

- Verheul, I., Stel, A. V., & Thurik, R. (2006). Explaining female and male entrepreneurship at the country level. *Entrepreneurship and Regional Development*, 18(2), 151-183. DOI: <https://doi.org/10.1080/08985620500532053>
- Watson, J., & Robinson, S. (2003). Adjusting for risk in comparing the performance of male and female-controlled SMEs. *Journal of Business Venturing*, 18(6), 773-788.
- Wube, M. C. (2010). *Factors affecting the performance of women entrepreneurs in micro and small enterprises: The case of Dessie Town* (Master Dissertation, Bahir Dar University, Ethiopia).
- Yadav, M. K., & Preethi, M. (2024). Gender Inclusive Extension Services: Empowering Women in Agriculture. In: A. Nikhita, R. Tanwar, T. Banik & A. Panda (Eds.). *Modern Horizons in Agriculture Extension* (Vol. 1, pp. 99-117). Stella International Publication.