# **Empowering Women Agriculture Entrepreneurs:** Banks' Role in Achieving Sustainable Development Goals

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## **Declaration of Interest statement**

The authors declare that there is no conflict of interest.

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#### Abstract

**Purpose**: This research aims to explore the role of banks in supporting Women Agriculture Entrepreneurs (WAEs) to contribute towards achieving the Sustainable Development Goals (SDGs). It focuses on the experiences of women entrepreneurs in the agriculture sector, recognising their vital role in driving economic growth and achieving the SDGs.

**Design/methodology/approach** – The study utilises the role congruity theory and the feminist agri-food systems model as its theoretical framework. Qualitative data from 35 Women Agricultural Entrepreneurs and 7 Bank Managers responsible for agricultural financial services and business development are collected and thematically analysed to achieve the research objectives.

**Findings**: Though bank managers claim they offer specialised financial products with dedicated support teams, WAEs express scepticism due to fears of unfavourable deals and excessive requirements. WAEs need more understanding of SDGs but recognise their substantial contributions. Bank managers acknowledge the need to enhance efforts, improve communication of offers, and integrate SDGs across all business operations beyond agriculture and women-centric initiatives.

Originality - The study connects WAEs and Banks in achieving SDGs.

**Practical implications**: Banks must prioritise gender sensitivity and inclusivity for WAEs, offering tailored financial products and flexible loan structures. Microfinance and strategic marketing can enhance outreach. WAEs benefit from forming associations, accessing support networks, collaborating with banks, government agencies, NGOs, and agricultural associations for mentoring and networking, and achieving the SDGs and sustainable agriculture.

**Keywords**: Women Entrepreneurs, Agriculture, Banks, Emerging Economies, Developing Countries, SDGs

## Introduction

The Sustainable Development Goals (SDGs) serve as a roadmap for addressing pressing global challenges and fostering sustainable development, and there is an ongoing race from the international communities to achieve this by 2030 (Montiel et al., 2021; Xue et al., 2018; Leal Filho et al., 2022). However, achieving these goals remains formidable, particularly in emerging economies where socio-economic obstacles hinder progress (Sarvajayakesavalu, 2015; Ordonez-Ponce & Weber, 2022; Mogaji et al., 2021). Among the key challenges these economies face is the need to empower key stakeholders like entrepreneurs and recognise their vital role in driving economic growth and achieving the SDGs (Biglari et al., 2022; Kaur et al., 2022).

While there is a growing interest in entrepreneurship and achieving SDGs (Dhahri et al., 2021; Diaz-Sarachaga & Ariza-Montes, 2022) and women playing significant roles in improving the Gross Domestic Product (GDP) of developing countries by creating jobs and wealth and alleviating poverty (Bilal et al., 2023; Mas-Tur, 2022; Kaur et al., 2022), there is limited insight and recognition of their contribution towards SDGs (Mogaji et al., 2021), especially in many emerging economies worldwide, where women are often considered second-class citizens. Recognising these limited insights, this present study focuses on the experiences of women entrepreneurs.

Specifically, the study focuses on women agriculture entrepreneurs (WAEs). Aligning with the definition of entrepreneurs, these are individuals who independently own and actively manage a [agriculture] business (Walter & Heinrichs, 2015), seek and exploit economic opportunity (McKenzie et al., 2017) and generate and develop an idea for validation (Prince et al., 2021). These individuals take responsibility for the day-to-day running of their businesses within the agriculture ecosystem. The focus on agriculture is

imperative because it directly connects with most SDGs. It supports the first three goals: eliminating poverty, eradicating hunger and providing good health by ensuring that people can farm, which guarantees food security, good health and physical well-being (Gennari et al., 2019; Abraham & Pingali, 2020). Women's involvement in agriculture and across different value chains ensures gender equality and economic growth for the country that promotes it (Doss et al., 2018; Agarwal, 2018). Agriculture also contributes to responsible consumption, production and climate action and supports life underwater and on land. This link with most SDGs highlights the importance of agriculture and stakeholder involvement and support (Biglari et al., 2022; Abraham & Pingali, 2020).

Insufficient financial support poses a significant challenge to achieving SDGs, especially across many developing countries and emerging economies (Juju et al., 2020; Omisore, 2018). Despite lofty aspirations, attaining these goals necessitates support from stakeholders, including banks and financial service providers (Mogaji et al., 2021). Their crucial role is indispensable in providing the essential financial backing required to develop initiatives aligned with the SDGs. As critical financial intermediaries, banks facilitate access to credit, financial services, and innovative products tailored to entrepreneurs' needs (Nguyen & Mogaji, 2021; Al-Kubati & Selvaratnam, 2023). Specifically, in this context, the study delves into the essential role of banks in supporting WAEs toward achieving SDGs. The research aims to engage various stakeholders in understanding how banks can support women in achieving SDGs through agricultural entrepreneurs' financial barriers, banks can significantly contribute to their empowerment, fostering sustainable economic growth and advancing SDGs in emerging economies. Thus, this study seeks to bridge the gap between WAEs and banks, facilitating

a comprehensive understanding of financial institutions' role in empowering women entrepreneurs within the agricultural sector for broader societal sustainability.

Specifically, this research aims to answer these questions – 1. How can banks support WAEs in achieving SDGs? 2. What are the prospects and challenges of this bank's support? To answer these questions, the role congruity theory (Eagly & Karau, 2002) and the feminist agri-food systems (FAST) model developed by Sachs et al. (2016) were adopted as the theoretical framework for the study, and we adopted a deductive qualitative research approach which includes interviews with WAEs and bank managers responsible for Agricultural financial services and business development. The study is contextualised in Nigeria, one of the world's largest emerging economies and developing countries.

By analysing the specific obstacles faced by women entrepreneurs, investigating the existing banking infrastructure and initiatives, and assessing the potential solutions, this study offers significant theoretical and managerial implications, providing insight into the crucial intersection between women entrepreneurs, agriculture, and the achievement of the SDGs (Abraham & Pingali, 2020; Agarwal, 2018; Bilal et al., 2023). The study broadens the applicability of the feminist agri-food systems model to include WAEs in developing countries (McMahon, 2011; Tsiaousi & Partalidou, 2023; Sachs et al., 2016), addressing their challenges in accessing resources and navigating traditional gender roles and emphasising the need for gender-responsive bank marketing and financial services for entrepreneurs, considering the nature of their businesses (Al-Kubati & Selvaratnam, 2023; Soetan et al., 2021; Mogaji et al., 2021). Notably, the study recognises the contextualised experiences of WAEs in contributing to SDGs despite limited awareness, emphasising their vital role in achieving these goals in their respective countries (Diaz-

Sarachaga & Ariza-Montes, 2022; Roy & Xiaoling, 2022; Xue et al., 2018). This study also offers implications for policymakers, stakeholders, and financial institutions on developing targeted strategies and interventions to empower women entrepreneurs, accelerating progress towards sustainable development in emerging economies.

The rest of this paper is structured as follows: the next section reviews related literature about women, entrepreneurship, financial services and SDGs, followed by the theoretical foundation of this study. The subsequent section presents the study's methodology, followed by the results and a discussion of the findings. Lastly, the conclusion highlights theoretical and managerial contributions, study limitations and suggestions for future research.

## Literature review

#### Banks' integral role in SDGs and WAEs

Banks play an integral, multifaceted and significant role in the economic development of countries, as they significantly contribute to socio-economic growth (Khan, 2023). Furthermore, banks contribute to financial stability by implementing prudent risk management practices and adhering to regulatory requirements, from taking regulatory responsibilities in strengthening the economy during a crisis (Cao & Chou, 2022) to adopting digital transformation for the circular economy (Ozili, 2022). Their support for entrepreneurs and businesses and their financial intermediation and stability efforts make them indispensable drivers of socio-economic progress and prosperity (Chowdhury et al., 2018; Ofori-Okyere et al., 2023).

In many emerging economies around the world, banks serve as the backbone of economic activities, even though many consumers are financially excluded; Soetan et al. (2021) noted that banks facilitate the flow of funds between savers and borrowers, ensuring that capital reaches productive sectors and investments are made in ventures that drive innovation and job creation. Ofori-Okyere et al. (2023) presented insights from the Ghanaian banks and how they act as financial intermediaries to ensure financially vulnerable consumers have access to financial services. Likewise, Mogaji et al. (2021) highlight banks' contribution to Nigeria's economic development, one of the largest emerging economies in the world.

Despite the bank's efforts, there are still recognised shortcomings, especially concerning vulnerable consumers (David-West et al., 2020; Soetan et al., 2021) and women (Omojolaibi et al., 2019; Al-Kubati & Selvaratnam, 2023; Chowdhury et al., 2018). Mogaji et al. (2021b) examined how Nigerian banks use their corporate social responsibility (CSR) initiatives to empower women to participate in economic and commercial activities. They found that banks support the different levels of engagement but argued that banks could do more for women's entrepreneurial and career development. Amisdts the inherent challenges around banks' support for women entrepreneurs, Al-Kubati & Selvaratnam (2023) examined banks' linkage programme as a tool for sustainable development in India; they found that with appropriate support, banks have the potential to empower women and foster entrepreneurial ventures, boost confidence and trust, and facilitate access to technical skills and markets. Chowdhury et al. (2018) highlighted the importance of bank support in their research on women entrepreneurs' challenges in accessing bank credit in Bangladesh. The study revealed that the

contribution of women entrepreneurs remains relatively small compared to other forms of entrepreneurship, primarily due to several barriers hindering their financial inclusion.

Despite the growing acknowledgement of banks' roles in supporting entrepreneurs and engaging in corporate social responsibilities to achieve SDGs (Biglari et al., 2022; Diaz-Sarachaga & Ariza-Montes, 2022; Abdullah, 2021), a significant gap persists in the literature, specifically regarding their focus on women in agriculture. While some studies have explored banks' contributions to women in business, such as Chowdhury et al. (2018), which explored women entrepreneurs' perceptions of accessing bank credit, their study did not focus on WAEs. Similarly, Mogaji et al. (2021b) examined corporate social responsibility for women's empowerment in Nigeria, but their research did not specifically focus on WAEs either. Additionally, Hendriks (2019) explored banks' role in driving women's economic empowerment, but these studies have yet to concentrate on WAEs specifically. Recognising the crucial role of agriculture in achieving most SDGs, this research addresses the need for more understanding regarding the role of banks in supporting women entrepreneurs, particularly those involved in agriculture. One of the research questions guiding this study is: "How can banks support WAEs in achieving SDGs?" This inquiry is essential for developing effective strategies that promote gender equality, sustainable agriculture, and SDGs. By bridging this research gap, we can uncover untapped potential for banks to play a transformative role in advancing SDGs and gender equality within agriculture.

## Women entrepreneurship through agriculture and the SDGs

Women's entrepreneurship is perceived to be an essential driver of economic growth and wealth accumulation worldwide. Some women utilise their entrepreneurial platforms to inspire women outside their organisations and within their network of entrepreneurship (Bayat, 2015). The involvement of women in agriculture within developing countries has been viewed as a departure from traditional gender norms. Initially, agriculture was considered a domain reserved for men due to associations with physical strength and machinery interest, reflecting masculine traits (Sheridan & Newsome, 2021). This perspective led to the marginalisation of women, and their valuable contributions to the agricultural sector were overlooked. However, in recent times, this historical pattern restricting women's participation in agriculture has been challenged, with a growing number of women actively engaging in rural agricultural activities.

According to CGIAR (2021), the agricultural labour force comprises, on average, 43 per cent of women, and in the least developed countries, two out of three women are engaged in farming activities. The report further stated that many rural girls and young women in developing countries who cannot pursue further education often rely on agriculture as their livelihood. However, their labour in this field is frequently undervalued and underrecognised. According to the Food and Agriculture Organization (FAO), rural women face many challenges, including discrimination in accessing land and other natural resources, inequality within the family unit and inadequate infrastructure (FAO, 2020). FAO recognises women's role in enhancing agricultural production and rural development and contributing towards poverty eradication and food security.

According to UN Women, women's participation in agriculture is a critical source of employment (UN Women, 2018). Entrepreneurship allows women to contribute effectively to sustainable development (Agarwal et al., 2020; Hammawa & Hashim, 2016). Though women experience less access to jobs and opportunities than men, entrepreneurship has been recognised as a veritable platform for women to contribute to the economy, eliminate gender-based inequality and promote the SDGs in emerging economies (Okeke-Uzodike, 2019). For instance, in their quest for sustainable growth, the South African government has made public policies to empower women through entrepreneurship (Okeke-Uzodike, 2019). Women are increasingly aware of their rights and values and are taking their place in socio-economic life. Therefore, women must not be treated as passive actors in the sustainability movement but as active partners whose contributions must be significant (Mohieldin, 2019; Okeke-Uzodike, 2019) towards achieving the SDGs.

According to the United Nations, the SDGs are the blueprint for achieving a better and more sustainable future for all; they address global challenges, including those related to poverty, inequality, climate change, environmental degradation, peace and justice (Agarwal, 2018; Kaur et al., 2022). A strong and sustainable agricultural sector forms a basis for reaching and achieving the SDGs. As well as its direct impact on poverty and hunger, our food system is also linked to other developmental challenges addressed by the SDGs. The adoption of the SDGs by the UN in 2015 led to wide recognition of the importance of the agricultural sector in ensuring socio-economic progress (CGIAR, 2021; Bilal et al., 2023)

A crucial aspect of the SDGs that has attracted less attention in the literature is women's role in achieving the SDGs (Agarwal, 2018; Bilal et al., 2023; Mohieldin, 2019). The 17 sustainable development goals' trajectory concentrates more on measures to improve the lives of women and less on how women can contribute to the SDGs' completion (Ordonez-Ponce & Weber, 2022; Roy & Xiaoling, 2022; Sarvajayakesavalu, 2015). Women are potential beneficiaries of the goals and possess immeasurable strengths that can be geared towards the success of the SDGs (Hammawa & Hashim, 2016). Women

are crucial to achieving SDGs in emerging economies, as they contribute to improving the standard of living and the well-being of their families through their entrepreneurship endeavours (Rashid & Ratten, 2020). Women entrepreneurs contribute to local economies and the sustainability agenda through their entrepreneurial activities (Ordonez-Ponce & Weber, 2022; Kaur et al., 2022; Sharma et al., 2012); therefore, the opportunities they create must be encouraged, while concerted efforts must be made to ameliorate the challenges they are experiencing.

Debnath et al. (2019), in their study on the role of women entrepreneurs and the achievement of the SDGs in Bangladesh, found that women contribute to social and economic life through their businesses and create new opportunities for economic participation. Women's well-being is improved through economic participation, and SDGs such as gender equality and women's empowerment are achieved through this process. Similarly, Maziri et al. (2019) identified women as key drivers of South Africa's transition to a green economy. Mapuranga et al. (2019) further highlighted that a greener economy could be built for sustainable development through women entrepreneurs' activities in South Africa. In their study, Quagrainie et al. (2020) revealed that microwomen entrepreneurs contribute to the SDGs' targets for earning income and procuring economic resources through their micro-entrepreneurial activities in Ghana. Quagrainie et al. further emphasised the role of cultural factors in achieving SDGs through women engaging in micro-entrepreneurship.

The first SDG is poverty eradication across the world. This goal mainly targets developing countries because they constitute the highest proportion of global poverty. According to the United Nations, poverty eradication can only be achieved through

ending gender-based discrimination (UN Women, 2015). Various studies have indicated that gender discrimination is a major factor limiting women's participation in agriculture. Agriculture has, over time, been perceived to be a gendered activity despite the recent changes in farming technology. For example, Sharia law, an Islamic legal framework derived from the Quran and Hadith, significantly influences Saudi Arabia's legal system and societal norms. In entrepreneurship, it imposes restrictions on women, potentially hindering their participation and posing challenges to achieving the Sustainable Development Goals (SDGs), as highlighted by UNWomen (2015).

The second SDG focuses on ending hunger and achieving food security. Agricultural participation is thought to be the main solution for attaining this goal. Recent trends indicate that women participate more in agriculture, positively contributing to attaining the first and second SDGs (UN Women, 2015). According to studies, agriculture is crucial for food security and poverty eradication because it is both an economic activity and a food source (Agarwal, 2018; Timmer, 2017; Ali & Erenstein, 2017). Agriculture occupies a central place in the actualisation of the 2030 SDGs (Campbell et al., 2018; Mensi & Udenigwe, 2021).

Regarding food security, women contribute to various agricultural activities that help this, including horticulture, crop production, fisheries and livestock production. In developing countries, women produce around 60 to 80% of the food and are responsible for around 50% of the world's food production (Benson et al., 2017). Food security is also a significant challenge in developing countries, but women contribute to this problem by providing labour and other services in farm operations and marketing.

While significant progress has been made in fostering women's entrepreneurship in agriculture within developing countries, various constraints hinder their contributions. Challenges such as limited land ownership for women (Benson et al., 2017) and marital status restrictions (Slavchevska, 2015; Apusigah, 2009) have impeded the advancement of women in the agricultural sector. Additionally, obstacles including restricted access to resources, insufficient business support, lack of information, deficient entrepreneurial skills, and limited funding opportunities pose substantial barriers to women's entrepreneurship and their potential contributions to achieving SDGs (Maziriri et al., 2019; Okeke-Uzodike, 2019; Sharma et al., 2012).

Recognising these well-established challenges, this study aims to delve into the role of banks as financial institutions in supporting women entrepreneurs. Building upon research by Mogaji et al. (2021) on banks' corporate social responsibility in Nigeria, Al-Kubati & Selvaratnam's (2023) exploration of banks' linkage programs in India, and Chowdhury et al.'s (2018) investigation into challenges faced by women entrepreneurs accessing bank credit in Bangladesh, this research seeks to uncover the prospects and challenges of banks' support for Women in Agriculture Entrepreneurs (WAEs). Despite the commendable efforts of WAEs, addressing these constraints is vital to harness their full potential for meaningful contributions to economic development. This context leads to the second research question: "*What are the prospects and challenges of this bank's support?*" Answering this question provides insights for improving current support mechanisms, identifying opportunities, overcoming barriers for WAEs, informing policy and initiatives, and fostering a more inclusive financial support system.

## Theoretical framing

The role congruity theory (Eagly & Karau, 2002) and the feminist agri-food systems (FAST) model developed by Sachs et al. (2016) underpinned this study. The role congruity theory recognises the existing construct of gender roles within society. There are consensual beliefs within society that highlight the roles of men and women in society. These social roles often expect women to be homemakers rather than take a leadership role or get involved in entrepreneurial activities. The role congruity theory recognises the prejudice females face in leadership.

The theory has been adopted in many different spheres, including politics (Benstead et al., 2015), corporate organisations (Kim, 2020; Kubu, 2018) and sports management (Whisenant et al., 2014). It recognises the prospect of women assuming roles irrespective of inherent gender biases. Benstead et al. (2015) explored this role congruity within the political landscape of Tunisia. They asked voters if they considered male and female candidates equally. They found apparent biases towards both genders, but the mechanism is unclear. Conroy et al. (2020) also explored role congruency to discuss the stereotypes used to evaluate Hillary Clinton during the US presidential election in 2016. They concluded that there was a persistence of inherent biases toward female candidates.

While gender role congruity theory often pertains to the congruity between gender and leadership (Eagly & Karau, 2002), this study expands into entrepreneurial activities and societal expectations, focusing specifically on agriculture. Like political leadership, agriculture has predominantly been a male-dominated industry, with women often considered not physically strong enough to farm and made to stay at home and cook the proceeds from the farm. With the additional context of developing countries, there are inherent challenges for women aspiring to succeed in the agricultural industry. The present study focuses on the impact gender differences have on the farm. It aims to recognise the array of challenges faced by WAEs, as well as the support and ultimate contribution of the banks to the SDGs.

In addition to the gender role congruity theory, we adopt the FAST model developed by Sachs et al. (2016). The FAST model is part of the emerging body of academic works exploring the growing agri-feminist scholarship and the rise of women farmers and sustainable agriculture. The theoretical framework was developed to help us understand the growth prospects of women in the agriculture business, a traditionally male-dominated sector. Sachs et al. (2016) identified six themes that explained the growing role of women in the contemporary agriculture business. They are: (1) creating gender equality for women on farms, (2) asserting the identity of a farmer, (3) accessing the resources they need to farm (land, labour and capital), (4) shaping new food and farming systems, (5) navigating agricultural organisations and institutions, and (6) forming new networking organisations for women farmers.

The FAST model has also been recently extended by Leslie (2017), focusing on gay and lesbian farmers and their transition to sustainable agriculture. However, Wright and Annes (2020) recently conducted a qualitative interview with women farmers from Michigan who were engaging in diverse value-added agriculture initiatives. They, however, found that the experiences of Pennsylvania farm women do not align with the experiences of those in other states in North America, such as Michigan. They recognised that there is evidence that agriculture creates many openings for women, but there are still many unexplored opportunities. As seen with these two studies, which were conducted within a developed country, there are inherent challenges specific to each location, which concerns the general applicability of the identified six themes of Sachs et al. (2016). It is, however, essential to explore these themes further in developing countries like Nigeria, with their inherent economic, societal, and gender-related challenges.

#### Methodology

Consistent with other studies on women entrepreneurs in the agricultural sector, our study was qualitative and exploratory (Wright & Annes, 2020; Sheridan & Newsome, 2021; Alkhaled, 2021; Sampat et al., 2023). A qualitative research methodology was adopted to gain illustrative empirical evidence from the experiences of women agricultural entrepreneurs (WAEs). This approach was adopted to understand women's contextualised experiences running their agricultural businesses (Sheridan & Newsome, 2021), how they constructed the meaning of their work, the empowerment they experienced within the boundaries of value-added agriculture (Wright & Annes, 2020) and the corporate social responsibilities of banks in enhancing the entrepreneurial activities of WAEs (Mogaji et al., 2021). Qualitative data were collected through an interview guide developed from the role congruity theory of prejudice toward women (Eagly & Karau, 2002) and the FAST model developed by Sachs et al. (2016). After conducting a pilot study, the guide underwent refinement with interviews of four WAEs not included in the final sample and thus excluded from further analysis. Modifications were made to the interview guide based on the observations from the pilot study. Specifically, redundant questions were removed, and others were combined to avoid repetition and streamline the interview process. Additionally, the order of questions was adjusted to improve the overall flow of the interview.

The final interview guide (Appendix 1) was used to elicit responses regarding the experiences of WAEs and bank managers' (BMs) roles in supporting WAEs. The questions also explored their understanding of the SDGs, contributions, and challenges in achieving these goals. WAEs were selected based on the following criteria: a) an individual independently owning and actively managing a [agriculture] business, following the definition of entrepreneur as presented by Walter & Heinrichs (2015); b)

identifies as a woman; c) 18 years old or older; d) owned a farm in Nigeria; e) classified as small and medium-scale enterprises (SME) employing more than one person in the business, and f) they were responsible for the day-to-day operation, recruitment and decision making on the farm. BMs were selected based on the following criteria: a) employed by a commercial bank in Nigeria; b) responsible for SMEs, which included agricultural businesses. These were BMs who engaged with the WAEs to discuss funding options. Participants were recruited through snowballing, personal networks and contacting the BMs on LinkedIn. The sample size for the study included 35 WAEs and 7 BMs with 5 to 16 years of experience. Four of the managers are from FUGAZ (First, United, Guaranty, Access and Zenith Bank), an acronym for the top five banks in Nigeria. Table I presents the demographic information of the WAEs, while Table II presents the demographic information of the BMs.

## Table I here

#### Table II here

Table 1 indicates that a large percentage (34%) of interviewed women entrepreneurs fall between 40 and 49. 46% of interviewed women entrepreneurs had a bachelor's degree, 31% had no formal education, 20% had secondary education, and 3% had a master's degree, which shows that a majority had primary education. 34% of women entrepreneurs are involved in farm production, 17% are involved in input supply, 9% are involved in marketing, 25% are involved in post-harvest handling, and 14% are involved in processing in the value chain.

Interviews with the WAEs were conducted in English and sometimes in pidgin English. Pidgin English is a simplified and informal language that serves as a lingua franca, enabling communication among people from diverse linguistic backgrounds who do not share a common native language. Interviews were conducted both face-to-face on their farms and via Zoom by the first and third authors. The third author conducted the interviews with the BMs in English on Zoom. Recognising the benefits of conducting face-to-face interviews, which allow for direct, in-person interactions with participants, we also acknowledge the advantages of Zoom interviews, offering convenience and flexibility, especially suitable for busy entrepreneurs. Various factors, including participant preferences and logistical considerations, influenced the decision to opt for face-to-face or Zoom interviews. All interviews were recorded with consent from the participants. The interviews were carried out between May and July 2021. The recorded interviews were transcribed and exported to NVivo 12, a qualitative analysis software tool used for thematic analysis (Farinloye et al., 2019). For WAEs, interviews lasted between 43 and 67 minutes, while for BM, interviews lasted between 54 and 76 minutes (an average of 62 minutes).

We adopted a reflexive thematic analytical method (Sheridan & Newsome, 2021) following Braun and Clarke's (2019) stages of thematic analysis. Initial codes were generated from the interviews and corroborated with some recognisable codes from the literature on gender in agriculture, entrepreneurship and SDGs (Sheridan & Newsome, 2021). All the codes were subsequently collated and assigned to a relevant overarching theme, which qualitatively highlights the WAEs' experiences and the role of the banks. Last, we developed a thematic map and coding tree of the data (Appendix 2), graphically illustrating how the codes and categories are linked and nested, providing a clear analysis overview. These contextual data were the primary sources for developing the summary of findings in the findings section. Table III presents a summary of the 56 initial codes (first-order concepts, third phase of thematic analysis) that were later sorted into nine

themes (second-order concepts, fourth phase of thematic analysis) and finally into three main themes addressing challenges and prospects for WAEs' contribution to SDGs and the role of banks.

Considerable effort was made to ensure this study's external validity and reliability. Member checks, which involved sending transcripts back to participants, were conducted. This additional engagement with the participants was considered the most critical step in bolstering the study's credibility (Lincoln & Guba, 2004) because it allowed participants to check, validate and verify their interview transcripts (Merriam & Tisdell, 2015). The positive feedback received during the member checks confirmed our portrayal's accuracy and indicated a high level of participant satisfaction. The absence of discrepancies and the alignment of participant feedback with the perspectives initially presented in the transcript underscore the robustness and reliability of our study. This validation process enhances the credibility of our findings, affirming the consistency and satisfaction of participants with the reported findings. Additionally, a detailed account of the methods, procedures and decision points involved in conducting this study was created in the form of an audit trail in accordance with Shenton (2004). All the participants agreed that all the information provided during the interviews could be used to advance the qualitative research.

## **Findings and discussion**

Analysis of the qualitative data from the interviews with the WAEs and BMs revealed three key themes reflecting WAEs' opportunities and challenges in contributing to the SDGs. These themes are: 1. financial support provided by the banks, 2. The WAEs' challenges in accessing this support from banks, and 3. Prospects of contributing to SDGs through agriculture entrepreneurship. Direct participant quotes are used as evidence to support the research findings and are coded by an assigned serial number.

#### Support provided by banks

## Specialised financial provisions

Bank managers highlighted the role of banks in supporting agriculture and their commitment to contribute to the Sustainable Development Goals (SDGs). Specifically, they (n=5, 71.4%) emphasised the diverse portfolio of financial products available to support agriculture businesses. These products cater to the unique needs of farmers and entrepreneurs in the agricultural sector. There is evidence of interaction between women entrepreneurs in agriculture and bank managers regarding financial support to develop and expand their agricultural businesses. This interaction indicates an existing dialogue and engagement between the two parties. The managers, however, acknowledged that a more specialised level of support might be necessary to address the specific needs of WAEs comprehensively. One manager said:

We have many agricultural financial products that entrepreneurs can apply for. The Anchor Borrower's Programme (ABP) creates an economic link between small farm holders and processors; these entrepreneurs need to be more conversant about what is available. – **BM1** 

Despite this acknowledgement, bank managers were forthcoming about the specialised financial provisions available to support agricultural businesses in Nigeria. Four managers recognised the importance of tailored financial solutions that consider agriculture entrepreneurs' specific challenges, including women's. While the existing support may be partial, the willingness of bank managers to openly discuss and provide specialised financial provisions demonstrates a step in the right direction. This signals a commitment to improving and expanding the support available to women entrepreneurs in agriculture, recognising their vital role in driving sustainable development in Nigeria. One manager shared his thoughts:

The Conventional Term Loans and Overdrafts are aimed at providing support for farmers who may not be entitled to government intervention funds specification. The bank is aware of the entrepreneurs' needs, and these products are available for them to consider. -BM2

#### Dedicated team

In addition to the diverse range of financial products, the bank managers (n=5, 71%) revealed that they have a dedicated team within the bank specifically focused on supporting agriculture businesses. This team actively reaches out to entrepreneurs, including women entrepreneurs in agriculture, to explore opportunities and provide guidance. One manager explained further:

At least you were able to track me down for this interview; my office focuses on the business needs of small and medium enterprises. There is a dedicated team for these financial products, and we are working to reach out to them - **BM1**.

However, four bank managers acknowledged that many WAEs may need to be fully prepared or aware of the requirements for obtaining loans and accessing financial support. Despite this, the bank managers expressed their commitment to reaching out to these women and offering additional support. To assist WAEs, the bank managers (n=4, 57%) stated that they provide links and information on other organisations that can offer support and resources. This demonstrates their recognition of the importance of collaboration and the need to connect women entrepreneurs with relevant networks and opportunities beyond their institutions. One manager said:

You know this is my work; it is my target to engage and offer loans and other financial services. This is what I am employed to do, and I am trying my best to engage with those who need these products. The team is working hard to communicate, market and engage with the women - **BM3**.

By providing additional support and resources and facilitating connections, the bank managers are striving to bridge the knowledge and awareness gap faced by WAEs. Through these efforts, three bank managers noted that their banks are working towards fostering an enabling environment for women entrepreneurs in agriculture, equipping them with the knowledge, resources, and connections they need to succeed and contribute to sustainable development in their communities and achieve the SDGs.

#### Communicating support

Bank managers (n=5, 71%) have acknowledged their efforts to promote financial products tailored for agriculture entrepreneurs. However, all these five managers also recognised that they may need to do more to specifically target women in their outreach. Their communication strategies provide general information to farmers and other entrepreneurs without addressing WAEs' unique needs and challenges in the agricultural sector. While banks have recognised the importance of supporting women entrepreneurs in agriculture, there is a realisation that more focused and targeted approaches are necessary. By providing specific information and tailored financial products, banks can better serve the needs of women entrepreneurs and empower them to overcome the barriers they face in accessing finance. One bank manager said:

We worked with various cooperatives to show them how we could support them through loans, grants and even business advice. We are trying to reach out but have yet to target the women specifically. I agree we can do better -BM2.

Three of the bank managers also emphasised their utilisation of social media platforms to create content promoting their financial products. They acknowledged the effectiveness of digital media in reaching out to prospective agriculture entrepreneurs, particularly educated young people and graduates who are increasingly venturing into the agricultural sector. The managers explained that social media aligns with the media consumption habits of this target demographic. However, when it was pointed out to these managers that many women involved in agriculture may not necessarily be active on platforms like Facebook or Twitter, they concurred and admitted that more could be done. Five managers acknowledged exploring alternative communication channels to engage with WAEs effectively. One of the managers explained further:

I agree that many people may not be on social media to see our advert. However, there are growing numbers of Agric entrepreneurs who would have seen our messages on social media and will engage, though not the women in the rural villages; there is an ongoing effort to expand our marketing strategies. -BM6

When questioned about their response to the challenges faced by women in accessing their financial products, the bank managers (n=6, 86%) acknowledged that they have existing policies and procedures that must be followed. However, they recognised that these policies may only sometimes align with the specific circumstances of women entrepreneurs, making it difficult for them to access loans or other financial services. The managers emphasised their continuous efforts to communicate these policies to women entrepreneurs, expecting them to act upon the information provided. However, they acknowledged that despite their efforts, it is not always the case due to the unique business arrangements and structures that women have set up for their companies. One manager said.

Our products are for medium to large-scale commercial farming, and you expect the business owner to present some documentation which includes [a] Certificate of Incorporation, Memorandum and Article of Association and business plans, but the [WAEs] do not have these documents, and that is why they cannot access the loan. -BM5

Another manager reiterated this point, saying:

The structure of their farming business often limits the women from accessing these loans. It is different from personal loans; the company needs to be well structured and registered to prove to the bank that these loans will be used correctly and that the customer can pay back. – BM4

This recognition highlights a gap in understanding the specific needs and realities of women entrepreneurs in agriculture. While the managers may have policies in place, they need to be more responsive and adaptable to the diverse business models and arrangements that women employ. This requires a deeper understanding of WAEs' challenges, such as land ownership issues, collateral requirements, and cultural barriers that may restrict their access to financial services.

## WAEs accessing support provided by banks

#### The fear of the unknown

The reservations expressed by many women entrepreneurs regarding the support provided by banks are rooted in their fear of the unknown. Twenty WAEs (66%) believe

they need more information about what the banks can offer, leading to hesitancy to explore financial opportunities. This fear stems from concerns that they may receive unfavourable offers or encounter unfavourable conditions when seeking support from banks (n=21, 60%). As a result, women entrepreneurs (n=12, 34%) often approach their families and friends for financial support, as they feel more comfortable and familiar with these sources. Ten WAEs noted that this reliance on informal networks for financial assistance could limit the growth potential of their businesses and hinder their ability to access the resources needed to expand and thrive. When asked if they had approached a bank, one of the women, WAE22, stated, 'No, I never have. I know that people go, but I do not. I do my business within my means'. Most WAEs said they seldom consider banks for loans or grants and must look for alternative means.

No, I live within my means. It is not until you get a loan that you can increase your business. If you plan well enough, you can save to increase. The time and stress wasted in the bank should be ploughed into the business. I have never borrowed money for my business. – WAE23

Even educated WAEs with existing personal banking relationships with banks feel they need more confidence in approaching their banks for financial support. Ultimately, by actively addressing the fear of the unknown and providing comprehensive support and information, banks can empower women entrepreneurs in agriculture, enabling them to make informed choices and access the financial support needed to drive their businesses forward.

## Preferential treatments

Contrasting the claims made by the bank managers, WAEs express a different perspective regarding the opportunities banks offer. According to most WAEs (n=32, 91%), the banks must do more to provide equal opportunities for everyone in the agricultural sector. These WAEs believe that preferential treatment is given to specific groups of entrepreneurs,

further jeopardising their chances or opportunities to receive funding and financial support. Some of the WAEs shared their concerns; one said:

Most banks need to be more realistic with the support they claim to give. Agriculture requires patient capital, and most banks cannot give this. I mean capital that you do not need to pay back in a hurry. High interest rates are also not encouraging, and the timeline for access to funding is also a big challenge. – WAE3

Agricultural business is very capital intensive. Money is needed to achieve your desired aim. It is also very stressful, especially for a woman. There are money challenges. At times, I do not usually get money to buy seeds or clearing or getting fertiliser to nourish the soil. – WAE29

The concerns raised by the WAEs highlight the potential disparities and lack of transparency in the support provided by banks. It suggests that women entrepreneurs may have limited awareness of available financial opportunities, leading to unequal access to resources and support. These discrepancies in perceived access to financial services can stem from various factors, including limited communication channels, lack of targeted outreach to specific groups, and potential biases in the lending process. Such challenges align with the comments raised by the bank managers in their effort to communicate support. These challenges can undermine the goal of fostering an inclusive and enabling environment for women entrepreneurs in agriculture. One woman shared her frustration when asked about agricultural loans. She said:

No, I only heard about the agricultural loan they were into, but the approach was poor. Most banks do not have Agricultural loans. Even the approach by the bank staff was not very good; it was a tedious process, and the bank was frustrating. I tried the Bank of Agriculture, but they ask for collateral farmers cannot afford. – **WAE12** 

#### Requirements

WAEs who have managed to overcome the fear of the unknown and engage with banks have realised the requirements involved in accessing financial support (n=29, 83%). However, their experiences attempting to apply for loans have often been marked by difficulties in completing the paperwork, encountering numerous bottlenecks and stringent requirements that have discouraged the process. 31 WAEs (89%) have also expressed discouragement about the high interest rates and collateral that banks typically request. They feel that the banks do not give specific attention to the agricultural sector but treat it like any other business. One woman noted:

I was trying to borrow 1 million naira [about \$1,300] from the bank to buy some seedlings, but the paperwork and requirements, coupled with the interest rate, were very discouraging. You hear these banks saying they want to support, but the practicalities are discouraging; they are not favourable at all - WAE11.

While it is true that the concerns raised by women entrepreneurs in agriculture (WAEs) align with the bank managers' point about the necessity of following strict policies and procedures in providing loans, the WAEs strongly believe that there should be consideration for the nature of their businesses and that banks should be willing to relax some of their rules. 32 WAEs (91%) feel that the banks should consider the unique characteristics of agricultural businesses and the challenges women face in this sector. They argue that a more flexible and tailored approach is needed to support their needs. As agricultural enterprises often operate on seasonal cycles and face various market fluctuations, the WAEs argue that rigid loan requirements and high collateral demands may not be practical or feasible for their businesses.

One of the WAEs said:

By relaxing some rules and requirements, banks can demonstrate a deeper understanding of the agricultural sector and create a more supportive environment for women entrepreneurs. We need this recognition, and the bank should show that they genuinely care - **WAE24**.

Another WAES suggests that:

Banks can consider alternative forms of collateral, offering flexible repayment schedules that align with the agricultural cycle and providing specialised financial solutions that address the specific challenges faced by women in agriculture – **WAE29**.

From these explanations, it is imperative to recognise that considering the type of business conducted by women entrepreneurs in agriculture can contribute to fostering genderresponsive lending practices. Recognising women's potential and unique contributions to the agricultural sector, banks can play a pivotal role in promoting gender equality and empowering women to thrive in their businesses.

#### Partnership towards achieving SDGs

#### Awareness of the goals

In Nigeria, an emerging economy, WAEs have significant opportunities to contribute towards the Sustainable Development Goals (SDGs) through their active involvement in the agricultural sector. Likewise, we recognise the role of banks in providing support to achieve these goals. However, it is observed that there needs to be more awareness about the SDGs, especially among these women. Many may need to be more familiar with the specific goals, even though their work aligns with and contributes to them. Of the 35 participants, only 10 could provide the full meaning of SDGs, and four could mention one or more SDGs. However, when the SDGs were introduced and explained to these women, 22 WAEs (63%) expressed happiness and satisfaction in discovering their efforts aligned with a global vision for sustainable development. This realisation validates their work and fosters a sense of connection and participation in a larger global movement (n=21, 60%).

By engaging with the SDGs, WAEs can gain a broader perspective on the impact of their activities beyond their immediate communities. They can recognise their contributions to addressing poverty, hunger, gender equality, climate change, and other critical issues outlined in the SDGs.

One woman shared her idea about creating awareness of SDGs; she said:

Creating awareness and providing information about the SDGs is crucial for women in agriculture to understand the broader context of their work and the significance of their contributions. This awareness can be achieved through targeted awareness campaigns, workshops, training programs, and local and government agency collaborations. – WAE24

Upon recognising their contributions, 18 WAEs (51%) noted that by educating and empowering women with knowledge about the SDGs, they could become active agents of change and further enhance their positive impact on sustainable development. One woman noted that:

Awareness about SDGs can help raise women's profile in agriculture and create opportunities for partnerships, funding, and capacity-building initiatives that further strengthen their contributions towards the SDGs. People need to know what we [WAEs] contribute and should be supported and encouraged - WAE9.

While there may be limited awareness about the SDGs among women entrepreneurs in agriculture in Nigeria, introducing and explaining the goals to them can have a profound impact. It allows them to recognise and celebrate their role in contributing to a global vision of sustainable development, inspiring them to continue their efforts and seek avenues for collaboration and support.

The BMs, on the other hand, apparently by virtue of their education and work experience, were aware and conversant with SDGs; these Managers were particular about promoting gender equality and empowering women. One Manager said:

Recognising women's pivotal role in agriculture and rural economies, we try to align our initiatives with SDG 5, which focuses on achieving gender equality and empowering all women and girls. We want to design and offer financial products and services specifically catering to women agricultural entrepreneurs – **BM6**.

The managers, acknowledging the significance of SDGs, recognise them as a guiding principle in their decision-making. While mindful of their responsibility for SMEs, including agricultural businesses, they understand that their department's scope is relatively small within the broader framework of the bank's operations. Despite their limited involvement in the grand scheme of the bank, these managers affirm that the awareness of SDGs plays a crucial role in shaping the strategic direction of their banks.

This awareness inspires a commitment to fostering gender-inclusive practices within the agricultural sector. Even though their department may be modest in size, aligning with SDGs resonates significantly in contributing to gender equality and empowerment in agricultural businesses associated with SMEs.

#### Acknowledging contribution

Even if WAEs were not explicitly aware of the SDGs, analysing their data and contributions reveals the need to recognise and acknowledge their specific contributions. This analysis highlights the tremendous prospects and opportunities for banks and other stakeholders to provide enhanced support to these women. The data analysis demonstrates the significant impact of WAEs on various dimensions of sustainable development. It reveals their role in promoting economic growth, reducing poverty, ensuring food security, and empowering women within the agricultural sector. These women are active agricultural participants and agents of positive change in their communities and the broader society. Expressly, our thematic analysis acknowledges that WAEs contribute to the five SDGs.

SDG 1: No Poverty: 26 WAEs (74%) noted that they play a crucial role in reducing poverty by generating income and employment opportunities for themselves and their families. Their agricultural activities contribute to food security and improved livelihoods, lifting communities out of poverty. These women took pride in the fact that they were helping people gain employment and providing a livelihood for many others who may not have had the opportunity to work.

Our effort in agriculture has led to job creation and empowerment across the value chain. We have also reached out to more than 20,000 young people in the last six years and trained more than 4,000 women and youth in various enterprises along with the biofortified cassava, maise and sweet potato value chain. Nigeria currently loses about \$1 billion to malnutrition. Our efforts and those of others in the value chain can help solve this country's economic problems. – **WAE10** 

SDG 2: Zero Hunger: WAEs contribute to achieving food security and ending hunger. They are involved in crop production, livestock rearing, and food processing, ensuring a sustainable and diverse food supply for their communities. These WAEs (n=27, 77%) recognise that with proper financial support from the bank, they can further contribute towards achieving food security. These women share their enthusiasm, saying:

Agriculture and health meet at a point of nutrition. My work as a food processor has exposed me to the various challenges of food and nutrition facing the world population, where 2 billion people suffer from hidden hunger. This is one of the reasons why I work with biofortified crops to produce nutritious foods that can reduce hunger and support good health at the same time. Biofortification is a cost-effective intervention to address food and nutrition security challenges. – WAE24

Agriculture presents many opportunities for women. To achieve meaningful impact and progress in agriculture, women hold the key and, therefore, must be given all necessary support. Women can key into various aspects of the agriculture value chain, which presents many opportunities. - **WAE25** 

SDG 5: Gender Equality: This goal is actively pursued by WAEs as they defy traditional gender norms within the sector. Their active participation contributes to economic and social empowerment and fosters gender equality. 24 WAEs (69%), a majority acknowledged facing challenges related to human resources, reflecting societal expectations that women should prioritise domestic roles rather than engaging in farming activities. This concern aligns with the gender role congruity theory (Eagly & Karau, 2002). Many WAEs expressed concerns about prevailing male attitudes that discourage women from involvement in agriculture, insisting on traditional gender roles where women manage household responsibilities, leaving farming to men. These societal expectations, in alignment with the role congruity theory, create an unfavourable environment for women in Nigerian agriculture, often leading to feelings of intimidation among women engaging in farming. One of the WAEs shared her experience, saying:

I firmly believe that I can thrive in this business, breaking barriers and proving that women can excel in agriculture. My husband supports me wholeheartedly, and we are challenging the stereotypes that confine women to traditional roles. It is about equality, and we are making our mark in the field – **WAE27**.

A resilient Woman Agricultural Entrepreneur (WAE), also a widow, courageously shared her personal journey striving for gender equality in the agricultural business, expressing:

I am a young widow, and I took over this business after the death of my husband. Despite facing intimidation and harassment, I persist because I believe in the potential of women in entrepreneurship. I am determined to defy challenges, honouring my husband's legacy, and prove that even in adversity, women can lead and thrive in the business world - **WAE22.** 

Beyond just the intimidation, instances of violence and attacks on women are unfortunately prevalent, as exemplified by a reported incident involving a WAE. The WAE in question was targeted and assaulted on her farm, with the assault stemming from dissatisfaction among locals regarding her farm's progress. This regrettable situation underscores women's challenges in agriculture, where success can sometimes provoke adverse reactions from the community.

Women Agricultural Entrepreneurs (WAEs) highlighted the need for financial support to alleviate challenges in managing human resources. The WAEs anticipate that this support would reduce the reliance on seeking assistance from men, foster the employment of more women on their farms, ensure fair wages, and contribute to the education of other women, thereby advancing the cause of gender equality in the agricultural sector. They said:

I wish I could get a loan; it has been challenging because money is needed for farming work. Some of my friends call labourers to clear the land, but I always do mine myself because I do not have enough money to call labourers. It is also very stressful. - WAE3

Empowering women in agriculture with loans and financial support is not just an investment in their businesses but in gender equality. With the right resources, we can expand our ventures, contribute to a more balanced industry, and operate our businesses without undue pressure from men, fostering an environment where intimidation is replaced by empowerment – **WAE28**.

As mentioned, the bank managers reiterate their acknowledgement of their role in advancing gender equality. They recognise and appreciate the growing importance of women as entrepreneurs, decision-makers, and key contributors to the entire agricultural ecosystem. Despite potential differences in perspectives with WAEs, these managers believe they are actively making substantial efforts to support and empower women in agriculture. Their commitment to valuing the role of women in the sector reflects a dedication to fostering inclusivity and addressing any disparities that may exist. One of the Bank Managers said:

We are adjusting our lending criteria and risk assessment frameworks to consider women-led agricultural enterprises' unique challenges and strengths. Though things are not perfect, we recognise the multifaceted contributions of women in agriculture, and we are trying to tailor our support mechanisms, ensuring that we address the specific needs and aspirations of women agric entrepreneurs – **BM3**.

SDG 8: Decent Work and Economic Growth: 18 WAEs (51%) took pride in the fact that they contribute to economic growth by creating employment opportunities and driving rural development. They engage in various agricultural activities, including farming, processing, marketing, and value addition, contributing to the economy. Many of the WAEs are university graduates (n=17, 49%) who view their involvement in agriculture as a reward for their education and, importantly, as an opportunity to educate others about the prospects of agriculture. They teach other farmers how to improve their yield and serve as mentors for young people considering farming.

As a Nutrition and Biofortification Ambassador, I advocate [for] the need to consume nutritious and healthy foods that are very rich in micronutrients in homes, especially in rural areas where malnutrition is more prevalent. – WAE24

The women noted that when people see that a female runs the farm, they are very reluctant to work with them, particularly men, who believe that women cannot control them. In some cases, the workers may become disrespectful and not acknowledge the woman as the farm owner. This eventually leads to staff retrenchment, thereby causing a staff shortage. WAE11, a participant in farm production, noted that 'Agriculture was perceived as a man's venture, so having us in the sector as women is seen as daring'. This position was further reiterated by WAE31, who is into post-harvest handling -

People get to look down on and take advantage of women. Working with male staff is challenging. They do not receive instructions, and there is a barrier to communication. They do not even respect that I am a widow; they will ignore you because you are a woman. -WAE31

There is a form of gender bias when it comes to communicating with male staff; they do not want to see us women as a leader or someone who can run an agricultural business. The societal norm is that people undermine women and do not trust my capability as a woman, especially when they see you are a young woman; they feel they can walk over you. – WAE2

SDG 12: Responsible Consumption and Production: 12 WAEs (34%) recognise their action in promoting sustainable and responsible production practices. They are crucial in promoting agroecology, organic farming, and sustainable resource management, ensuring the preservation of natural resources and the environment. In addition, they see the growth prospects for equal opportunities for both men and women in economic activities and in supporting their families. This would promote inclusive and sustainable economic growth that guarantees decent work for all, regardless of gender. They believe getting involved in agriculture helps achieve gender equality, empowers all women and girls, and ensures responsible consumption and production.

I am happy because I produce hygienic food and give it out to people who cannot afford it, and they always pray for me. So, it is an achievement on its own. -WAE1

#### Addressing the challenges

To improve the alignment of WAEs with the SDGs, it is crucial to provide them with proper education, training, and awareness. Many women may need to be fully aware of the SDGs and the specific ways their agricultural businesses can contribute to these global goals. By equipping them with the necessary knowledge and understanding, they can make more informed decisions and take actions that align with the SDGs.

One woman suggested that:

Education and training programs can be developed to help WAEs recognise the connections between their agricultural activities and the SDGs. These programs can focus on sustainable farming practices, climate-smart agriculture, gender equality, responsible resource management, and market opportunities for sustainable products – WAE25.

Our engagement with the WAEs and bank managers indicates that awareness campaigns and outreach initiatives can also play a vital role in ensuring that WAEs understand the relevance and importance of the SDGs in their work. This can involve workshops, seminars, and community events sponsored by the banks as a form of corporate social responsibility to highlight the SDGs and showcase success stories of women who have effectively aligned their agricultural businesses with the goals. Furthermore, fostering partnerships and collaborations with relevant stakeholders, such as government agencies, NGOs, and development organisations, can contribute to the education and awareness of WAEs. These partnerships can provide platforms for sharing best practices, exchanging knowledge, and offering mentorship opportunities to women in agriculture. Additionally, engaging with local community leaders and agricultural associations can help disseminate SDG information and encourage collective action among WAEs. One bank manager agrees to this and suggests that:

By enhancing the education, training, and awareness of WAEs regarding the SDGs, we can empower them to take more strategic actions that align with these global goals. This will strengthen their businesses and contribute to the overall sustainable development of the agricultural sector – **BM7**.

12 WAEs (34%) recognise that government policies are not adequately supporting their efforts. Despite their hard work and commitment to contributing to the SDGs, more supportive policies specifically tailored to address women's unique needs and challenges in the agricultural sector are needed. This absence of adequate policies hampers their ability to thrive and make significant contributions. One woman shared her worries.

[An] enabling environment must be available for women. Venturing into agriculture should be easy for women. There must [be] equal opportunities in accessing inputs as men; women must be encouraged and allowed to be involved across the agricultural value chain. – WAE28

Financial support from banks is crucial for WAEs to enhance their business operations and significantly contribute to the SDGs. This support can come in various forms and is essential for overcoming the financial challenges that WAEs often face. 32 WAEs (91%) asked for access to loans to expand their agricultural businesses, invest in modern farming techniques, and improve their productivity. Additionally, 15 WAEs (43%) asked for streamlined paperwork and loan application process. One woman said:

Achieving these SDGs is possible but let us start with banks; they should simplify the documentation requirements and make the application process more user-friendly, as this will remove barriers and make it easier for WAEs to access the financial resources they need - WAE12.

Moreover, 13 WAEs (37%) noted that offering flexible payment arrangements can greatly support WAEs in managing their cash flows. Agriculture is often seasonal, with fluctuating incomes and expenses. Banks can work with WAEs to develop payment arrangements that align with their income cycles, allowing for more manageable repayment schedules. This flexibility can alleviate financial stress and enable WAEs to invest in their businesses more effectively, fostering sustainable growth and contribution to the SDGs.

One manager alluded to the possibility of additional support from her team. She said:

We [banks] can also provide advisory services and capacity-building programs tailored to the specific needs of WAEs. These programs can cover financial management, business planning, marketing strategies, and sustainable agricultural practices. By equipping WAEs with the necessary knowledge and skills, we [banks] can enhance their entrepreneurial capabilities and empower them to make informed decisions that align with the SDGs - **BM6** 

By providing the proper financial support, banks can unlock the potential of WAEs and facilitate their meaningful contribution to the SDGs. This support goes beyond just loans and encompasses a holistic approach that addresses the unique challenges and needs of WAEs. By partnering with these women, banks can foster inclusive economic growth, gender equality, sustainable agriculture practices, and poverty reduction, ultimately contributing to achieving the SDGs.

Going beyond the initial understanding of the awareness and education initiatives for WAEs, it is pivotal to underscore the Bank Managers' existing knowledge gaps

concerning the SDGs. Their current focus primarily revolves around the promotion of gender equality and empowerment of women within the agricultural sector. Upon delving deeper into discussions with the Bank Managers, it became evident that there is a significant need for additional education and awareness surrounding the SDGs. This education should emphasise how these global goals should intricately influence their roles, guide product development strategies, and shape their contributions to the broader financial services landscape.

During further exploration, it was clarified to the Bank Managers that the intention was not to test or examine their knowledge of SDGs. However, a consensus emerged among the managers that a more comprehensive understanding of SDGs is imperative for aligning their initiatives with the overarching global sustainability goals. The recognition of a lack of congruency between the conceptualisation of SDGs, the role of women in agriculture, and the specific solutions tailored for them prompted a collective acknowledgement of the need for a more nuanced and integrated approach. Furthermore, the Bank Managers emphasised that the banking institutions' management team must initiate the adoption process for SDGs to be effectively incorporated into financial services. One Manager said:

Thanks to this session, I have reflected on my knowledge [of SDGs] and what my bank could be doing better. However, I believe that the principles and objectives of SDGs are fully integrated into the banks' organisational culture, strategies, and day-to-day operations - **BM2**.

This reflection underscores the importance of aligning the banks' overarching vision and mission with the broader global sustainability agenda, ultimately contributing to the holistic development of WAEs and sustainable practices within the agricultural sector. Figure 1 presents a graphical overview of the working relationships between the banks and WAEs to achieve the SDGs; we recognise the support provided by banks, the challenges in accessing these supports and the partnership towards achieving the SDGs. Table III summarises the key themes and sub-themes from the thematic analysis.

----- Figure 1 here ------

----- Table III here ------

## **Contributions and implications**

#### Theoretical contributions

First, this study extends the contextualised experiences of women to understand their contribution towards the SDGs while still dealing with the inherent challenges of the country in which they operate (Dawson et al., 2019). Even though many of them are not aware of the exact meanings and descriptions of the goals, they are making efforts to contribute to these goals through their food production, ensuring there is no hunger, creating employment opportunities, ensuring there is no poverty and supporting gender equality (Al-Kubati & Selvaratnam, 2023; Roy & Xiaoling, 2022). Women entrepreneurs contribute to their localities, create jobs and generate additional work for suppliers and other spin-off business linkages (Iyiola & Azhu, 2014). Recognising the pivotal role that women entrepreneurs play in achieving the Sustainable Development Goals (SDGs), by addressing the specific challenges faced by women in agriculture and providing them with the necessary financial support, banks can contribute significantly to the empowerment of women entrepreneurs and the overall attainment of the SDGs in emerging economies.

Second, the study highlights gender-responsive lending practices in agriculture and role congruity theory. Building on previous studies that have explored marketing financial

services for vulnerable individuals and marketing financial services in developing countries (Soetan et al., 2021; Omoge et al., 2022; Ofori-Okyere et al., 2023), we establish the need for a strategic bank marketing for entrepreneurs, recognising their gender and nature of business. The findings emphasise the importance of gender-responsive lending practices in agriculture, contributing to the theoretical framework of gender and finance. The study aligns with the role congruity theory, exploring how societal expectations and stereotypes influence perceptions about women's suitability in certain roles (Eagly & Karau, 2002). Specifically, we noted that women in agriculture challenge traditional gender roles and contribute to their households through entrepreneurial activities; they face role incongruity and encounter challenges navigating their roles in a male-dominated field; the study sheds light on the changing role of women as employees and highlights their leadership potential. Our findings indicate that the communication and support banks and corporate organisations provide may need to align with women's roles in agriculture. Ultimately, we established the need for financial institutions to adopt flexible and tailored approaches in their lending practices, addressing the role incongruity faced by women in agriculture.

Third, the intersectionality of gender, entrepreneurship, and sustainable development goals is another theoretical contribution. The study connects the activities of WAEs with the SDGs, emphasising the role of banks in achieving these global goals. The theoretical contribution lies in exploring the intersectionality of gender, entrepreneurship, and sustainable development. Building on the intersectionality of patriarchal culture, the challenges posed by insufficient infrastructure on business operations and the dominance of the male-dominated transport industry, as reported by Mogaji (2023), this study highlights the multifaceted challenges WAEs face. It underscores the importance of

recognising and addressing these challenges for more inclusive and sustainable development.

Fourth, the study presents a novel contribution to the emerging field of agri-feminist scholarship (Wright & Annes, 2020) by expanding the applicability of the feminist agri-food systems model beyond its previous focus on Pennsylvania women farmers in the USA (Sachs et al., 2016). In this research, the scope is broadened to include women in developing countries, such as Nigeria, who face similar challenges regarding their identity as farmers (Nguyen & Mogaji, 2021). These challenges encompass difficulties in accessing land, facilities, human capital, and knowledge about farming. Moreover, societal expectations often limit women's involvement in economic activities, as they are traditionally tasked with household duties and childbearing responsibilities (Al-Kubati & Selvaratnam, 2023; Bilal et al., 2023). However, developing countries' economic activities for continued economic viability and growth. Banks and financial institutions have a crucial role in supporting this economic growth. Unfortunately, women, particularly those engaged in entrepreneurial activities, have often been overlooked when providing financial services (Asongu & Nwachukwu, 2018).

Lastly, business-centred bank marketing and customer-contextualised experiences are other worthwhile contributions. While previous literature has examined women's participation in agriculture (Abraham & Pingali, 2020; Bilal et al., 2023), the current study aims to shed light on a less explored area—the support provided by banks in achieving SDGs. This research expands our understanding of initiatives that empower women through bank programs in India (Al-Kubati & Selvaratnam, 2023) and trade aids that contribute to achieving SDG in developing countries (Roy & Xiaoling, 2022). The study acknowledges the challenges women face in accessing support from financial institutions and the importance of partnerships in working towards achieving SDGs. The study offers theoretical implications for bank marketing, emphasising gender-responsive product offerings and marketing strategies. It introduces a business-centred approach to bank marketing, recognising the seasonal nature of agricultural businesses and beyond. The contribution extends to understanding the contextualised experiences of women entrepreneurs, aligning their contributions with the SDGs, and emphasising the role of banks in addressing specific challenges women face in emerging economies.

In summary, these theoretical contributions collectively provide a comprehensive framework for understanding the intricacies of women entrepreneurship in agriculture, their challenges, and banks' pivotal role in fostering gender-responsive and sustainable practices within the sector.

### Managerial implications

Supporting WAEs in achieving the SDGs requires specific managerial implications for stakeholders.

For the banks - First, there is a need for enhanced gender sensitivity and inclusivity in banking practices. The understanding of this sensitivity should be reflected in fostering a supportive and nondiscriminatory environment for WAEs by addressing gender biases and providing equal opportunities for financial support. Second, banks should consider the development of tailored financial products and services for WAEs. This financial service development strategy should involve creating flexible loan structures, payment arrangements, and collateral requirements that accommodate agricultural businesses' unique characteristics and seasonal nature. Banks can also explore innovative financial

mechanisms such as microfinance or group lending to enhance access to finance for WAEs, considering the potential challenges they face in meeting traditional lending criteria. Third, banks must enhance their marketing strategies. Although financial products are available, effective communication strategies are crucial. Soetan et al. (2021) highlight the concept of "market storms" employed by banks, utilising speakers and music to create awareness and attract financially excluded consumers.

Similarly, banks must adopt strategic approaches to reach WAEs beyond relying on social media or print advertisements. The WAEs need to know what the bank offers and how best they can access it. Bringing these financial products closer to WAEs, such as engaging with them directly in their communities or at agricultural gatherings, can significantly improve accessibility and awareness. By tailoring their marketing strategies to target WAEs effectively, banks can bridge the gap and provide the necessary financial support for their agricultural ventures.

For the WAEs - first, they can form thrift associations to provide themselves with opportunities, resources and education. These can take the form of an Entrepreneurial Ecosystem (EE) (Scheidgen, 2021) and a support network that can push for more government support and infrastructure development (Nordstrom et al., 2020). The FAST model recognises women's activism, advising them to create their association/group to meet their interests as farmers (Wright & Annes, 2020; Gbadegeshin et al, 2021). In addition, this network can support women having difficulties recruiting workers for their farms, help them access relevant resources, and mentor other women in the business. Second, foster partnerships and collaboration among banks, government agencies, non-governmental organisations (NGOs), and agricultural associations, as this can significantly contribute to supporting WAEs in achieving the SDGs. These collaborations

can help create comprehensive support systems, including mentoring programs, networking opportunities, and knowledge-sharing platforms, to assist WAEs in overcoming challenges and accessing resources for sustainable agricultural practices.

#### Societal implications

The findings from the study highlight several societal implications for WAEs' access to support from banks. Firstly, the fear of the unknown represents a significant challenge, with many women hesitating to approach banks due to concerns about unfavourable conditions and unfamiliarity with available opportunities. Addressing this fear by providing comprehensive support and information could empower women to make informed choices and access the financial support needed for business growth.

Secondly, the perceived preferential treatment by banks, as reported by WAEs, suggests potential disparities in accessing financial services. This emphasises the need for increased transparency, targeted outreach, and efforts to ensure equal opportunities for all entrepreneurs in the agricultural sector.

Thirdly, the stringent requirements and challenges WAEs face in accessing financial support underscore the importance of recognising the unique characteristics of agricultural businesses. A more flexible and tailored approach by banks, considering agricultural enterprises' seasonal nature and market fluctuations, could contribute to fostering gender-responsive lending practices.

## Conclusion

This research underscores the pivotal role of WAEs in driving economic growth and contributing to Sustainable Development Goals (SDGs) in Nigeria. While there is a growing interest in entrepreneurship and its link to SDGs, WAEs' contributions still need to be recognised, necessitating a focus on tailored bank support. The study reveals that

banks play a crucial role in supporting agriculture, yet there is a need for more targeted approaches to address the unique challenges faced by women entrepreneurs. WAEs express reservations about accessing bank support, emphasising the importance of flexible, gender-responsive lending practices. The study calls for increased awareness, education, and collaborative efforts between WAEs and banks to foster inclusive economic growth and advance SDGs.

## Limitations

Despite the valuable contributions and findings presented in this study, it has limitations. One noteworthy constraint is the limited emergence of counterintuitive findings, potentially restricting the depth of insight and avenues for further research. While the study provides valuable insights, the absence of unexpected or unconventional aspects limits the diversity of perspectives explored. Another consideration is that comments obtained from bank managers may not necessarily reflect their organisations' official stance or position, necessitating caution in generalising findings to broader organisational perspectives. To address these limitations, future research endeavours could actively seek diverse perspectives and ensure a more comprehensive representation of organisational viewpoints, enhancing the robustness and applicability of the study's conclusions. Another acknowledged limitation of our research is using a single coder, who also conducted some interviews. While this approach has its merits, such as ensuring a deep understanding of the data, it introduces a potential source of bias. The involvement of the coder in the interview process may influence the interpretation and coding of the data. Future research could consider employing multiple coders or separating the roles of interviewers and coders to enhance the objectivity and reliability of the coding process.

#### Agenda for future research

Beyond Nigeria, there is a need for further research into the constraints hampering women's participation in agriculture in many other developing countries. Establishing the contexts and origins of these challenges will help devise the best solutions and maximise women's contributions towards attaining the SDGs. Future research should also focus on large datasets that include more developing countries and enhance the data's generalisability. Additionally, future studies should exceedingly focus on rural agriculture since it has been identified as the major subsector women occupy in developing countries.

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## **Declaration of Interest statement**

The authors declare that there is no conflict of interest.

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Code	Age	Education	Marital	Primary Value Chain	
			Status	Category	
WAE1	18-24	Bachelors	Single	Post-harvest handling	
WAE2	18-25	Bachelors	Single	Farm production	
WAE3	25-29	Bachelors	Single	Farm production	
WAE4	25-29	Bachelors	Single	Farm production	
WAE5	25-29	Bachelors	Single	processing	
WAE6	30-39	Bachelors	Married	Post-harvest handling	
WAE7	30-39	Bachelors	Married	Marketing	
WAE8	30-39	Bachelors	Married	Input supply	
WAE9	30-39	Bachelors	Married	Farm production	
WAE10	30-39	Bachelors	Married	Farm production	
WAE11	30-39	Bachelors	Single	Farm production	
WAE12	40-49	Bachelors	Married	Input supply	
WAE13	40-49	Bachelors	Single	Input supply	
WAE14	40-49	Secondary	Married	processing	
WAE15	40-49	Secondary	Married	Farm production	
WAE16	40-49	Secondary	Married	Farm production	
WAE17	40-49	No formal Education	Married	processing	
WAE18	40-49	No formal Education	Married	Input supply	
WAE19	40-49	No formal Education	Married	Post-harvest handling	
WAE20	40-49	No formal Education	Married	Post-harvest handling	
WAE21	40-49	No formal Education	Married	Input supply	
WAE22	40-49	No formal Education	Widow	Post-harvest handling	
WAE23	40-49	Bachelors	Married	Processing	
WAE24	50-59	Master's Degree	Married	Post-harvest handling	
WAE25	50-59	Bachelors	Married	Post-harvest handling	
WAE26	50-59	Secondary	Married	processing	
WAE27	50-59	Secondary	Married	Farm production	
WAE28	50-59	Secondary	Married	Farm production	
WAE29	50-59	No formal Education	Married	Farm production	
WAE30	50-59	No formal Education	Married	Farm production	
WAE31	50-59	No formal Education	Widow	Post-harvest handling	
WAE32	60-69	Bachelors	Married	Marketing	
WAE33	60-69	Secondary	Widow	Marketing	
WAE34	60-69	No formal Education	Widow	Post-harvest handling	
WAE35	60-69	No formal Education	Married	Input supply	

Table I: Demographics Information of Women Agriculture Entrepreneurs (WAEs). Source: Author

Code	Gender	Years of Experience	Type of Bank	Interview	Duration
BM1	Male	5	FUGAZ	Zoom	58 mins
BM2	Male	8	Non FUGAZ	Zoom	54 mins
BM3	Male	8	Non FUGAZ	Zoom	63 mins
BM4	Male	12	FUGAZ	Zoom	55 mins
BM5	Female	6	FUGAZ	Zoom	76 mins
BM6	Female	6	FUGAZ	Zoom	56 mins
BM7	Female	15	Non FUGAZ	Zoom	70 mins

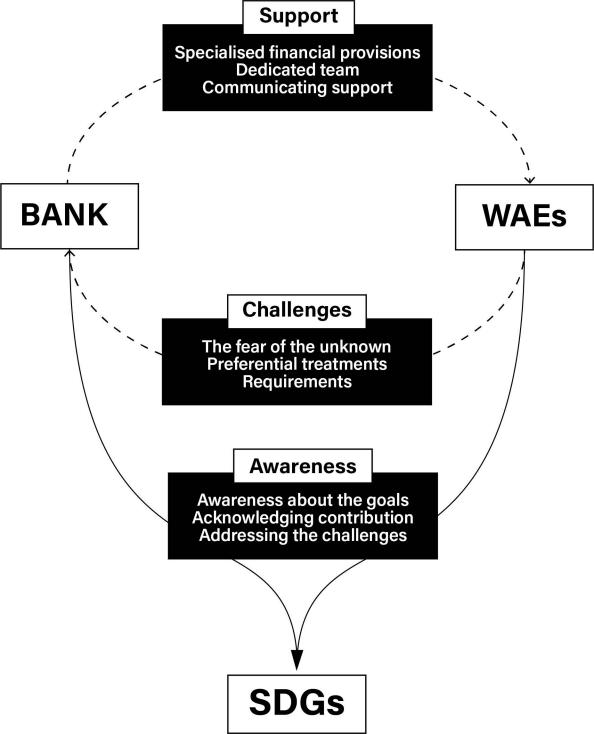
Table II: Demographic information of the BMs. Source: Authors

FUGAZ is an acronym for top five banks in Nigeria - First, United, Guaranty, Access and Zenith Bank

Initial codes (first-order concepts)	Sub themes (second-order concepts)	Main (aggregate dimension)	
<ol> <li>Farmer-centric financial products (n=5)</li> <li>Tailored to unique needs (n=4)</li> <li>Established dialogue and engagement (n=5)</li> <li>Specialized financial provisions for women (n=4)</li> </ol>	Specialised financial provisions	Support provided by Banks.	
5. Awareness of women's entrepreneurial needs (n=2)			
<ul> <li>6. BMs actively engage with entrepreneurs (n=5)</li> <li>7. BMs identify lack of preparedness in WAEs (n=4)</li> <li>8. BMs address awareness gaps in WAEs (n=4)</li> <li>9. BMs provide links and information (n=4)</li> <li>10. BMs promote an enabling environment for WAEs (n=3)</li> </ul>	Dedicated team		
<ul> <li>11. BMs admit not doing enough for WAEs (n=5)</li> <li>12. General communication strategies insufficient (n=5)</li> <li>13. Social media (n=3)</li> </ul>	Communicating support		
14. Need for targeted approaches (n=5)15. Providing specific information for WAEs (n=7)			
<ul> <li>16. Communicating existing policies and procedures (n=6)</li> <li>17. Exploring alternative channels (n=7)</li> </ul>	-		
18. Understanding challenges faced by women (n=6)	-		
<ul> <li>19. Insufficient information (n=23)</li> <li>20. Uncertainty about banks' responses (n=21)</li> <li>21. Hesitance to explore financial opportunities (n=15)</li> <li>22. Fear of unfavourable offers (n=13)</li> <li>23. Reliance on family and friends for financial support (n=12)</li> <li>24. Reliance limiting growth potential (n=10)</li> </ul>	The fear of the unknown	WAEs accessing support provided by Banks	
25. WAEs express concerns about opportunities by banks (n=32)	Preferential treatments		
<ul> <li>26. WAEs feels the banks are not doing enough to provide equal opportunities (n=31).</li> <li>27. WAEs suggests preferential treatment is given to certain entrepreneurs (n=16)</li> <li>28. Unequal access to resources and support (n=15)</li> </ul>			
29. Requirements for accessing financial support (n=29)	Requirements		

Table III: Summary of sub and main themes. Source: Authors

20 Challongos with nonomically completion (n-22)		
30. Challenges with paperwork completion (n=22)		
31. Bottlenecks in the process (n=23)		
32. Discouraging stringent requirements(n=28)		
33. High-interest rates (n=31)		
34. Collateral requested by banks (n=23)		
35. BMs adhering to strict loan policies and		
procedures (n=7)		
36. WAEs urge banks to consider their business and		
gender (n=32)		
37. Seasonal cycles in agricultural enterprises (n=26)		
38. Types of businesses conducted by women		
entrepreneurs in agriculture (n=17)		
39. Limited SDG awareness among WAEs (n=25)	Awareness	Partnership
40. WAEs contributing to SDGs despite limited	about the goals	towards
awareness (n=24)		achieving SDGs
41. Discovery of alignment with SDGs brings		
happiness and satisfaction (n=22)		
42. Sense of connection to a larger global movement		
(n=21)		
43. Recognition of their contributions (n=23)		
44. Empowerment as active agents of change (n=18)		
45. SDG 1: No Poverty (n=26)	Acknowledging	
46. SDG 2: Zero Hunger (n=27)	contribution	
47. SDG 5: Gender Equality (n=24)		
48. SDG 8: Decent Work and Economic Growth		
(n=18)		
49. SDG 12: Responsible Consumption and		
Production (n=12)		
50. Education, training, and awareness (n=36)	Addressing the	
51. Lack of SDG awareness among women (n=25)	challenges	
52. Outreach campaigns and partnerships (n=32)	C	
53. Government policies (n=12)		
54. Financial support from banks (n=32)		
55. Streamlined paperwork and application process		
(n=15)		
56. Payment arrangements aligned with income cycles		
(n=13)		



# Appendix 1: Interview Questions

# Women in Agriculture

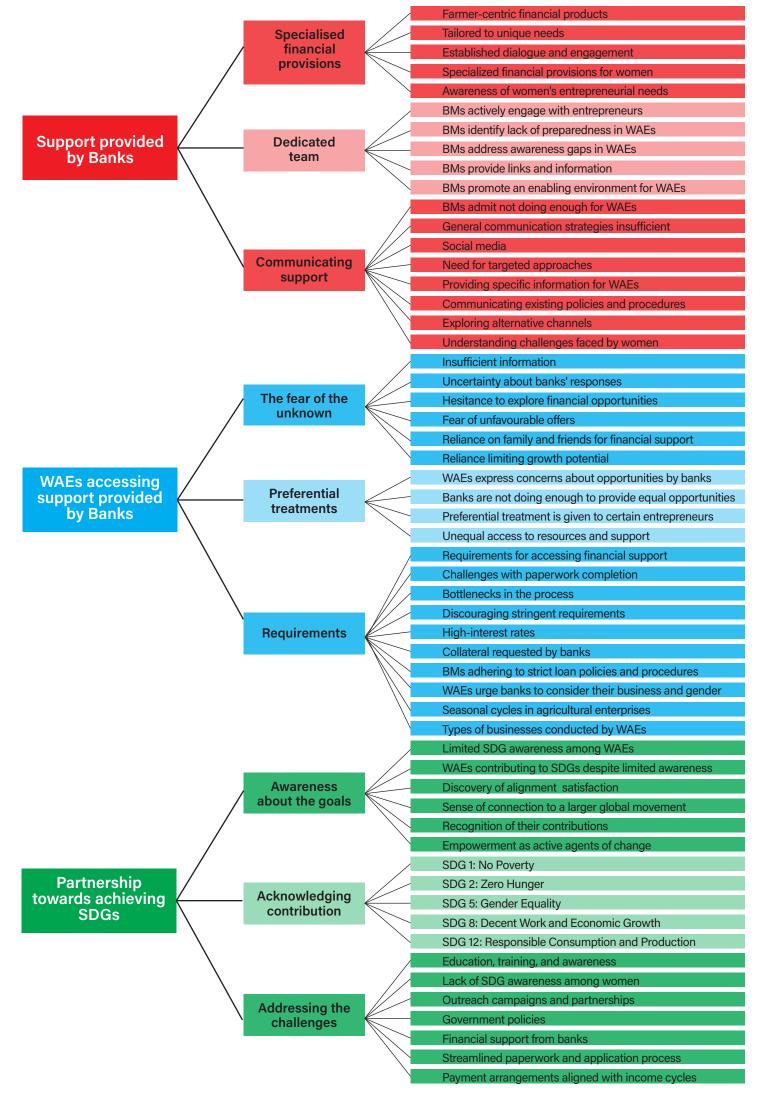
- 1. Your Background
- 2. How did you get into Agriculture?
- 3. How would you describe your experience?
- 4. How is the Agric business going?
- 5. Would you say you have a different experience because you are a woman?
- 6. What are the challenges you face as Women Entrepreneurs in Agriculture?
- 7. What are your prospects as Women Entrepreneurs in Agriculture?

# Women Entrepreneurs in Agriculture and Nigerian Banks

- 1. Have you sought support from a bank to facilitate the expansion of your business?
- 2. Do you currently maintain any business-related associations with a bank?
- 3. Are you aware of any specialized financial products offered by banks that cater to agricultural entrepreneurs?
- 4. Could you please share your experiences and interactions with banks regarding your business endeavors?
- 5. How has access to financial resources, such as loans, grants, or investment opportunities, influenced the growth and expansion of your agricultural enterprise?
- 6. In your opinion, to what extent does the Bank provide adequate support to entrepreneurs?
- 7. From your perspective, do Nigerian banks offer sufficient support to women entrepreneurs?
- 8. In your view, should banks consider supporting women entrepreneurs as part of their corporate social responsibility efforts?

# Women Entrepreneurs in Agriculture and SDG

- 1. Are you familiar with the SDGs, and could you briefly share their significance?
- 2. How does your role as a woman entrepreneur in agriculture align with specific SDGs? (e.g., interviewer to explain SDG2 and 5).
- 3. Do you see women's increased involvement in agriculture as a step towards achieving gender equality? How does this empowerment impact women and society? (e.g., consider SDG 4)
- 4. How do your efforts as a Women Entrepreneur in Agriculture contribute to reducing hunger and promoting good health locally and beyond?
- 5. In what ways do your agricultural endeavors contribute to economic growth and development in your country?
- 6. Do you believe the agriculture sector significantly contributes to achieving the SDGs? If yes, could you highlight key aspects where agriculture supports them?
- 7. Have you collaborated with NGOs, government agencies, or international bodies to advocate for SDGs through your agricultural work?
- 8. From your experience, do policymakers and stakeholders adequately recognize and support the role of women entrepreneurs in agriculture for achieving the SDGs? If not, what initiatives would you recommend?
- 9. Have you witnessed transformational changes in your community due to your agricultural business's contributions to the SDGs?
- 10. How do you foresee your role as a woman entrepreneur in agriculture evolving in the context of the SDGs in the future?



Appendix 2 - Thematic Map graphically illustrating how the codes and categories are linked and nested. Source: Authors