

ISRG Journal of Multidisciplinary Studies (ISRGJMS)



ISRG PUBLISHERS

Abbreviated Key Title: isrg j. multidiscip. Stud.

ISSN: 2584-0452 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjms/>

Volume – III, Issue - XI (November) 2025

Frequency: Monthly



Stakeholder Engagement in Designing and Implementing Capacity-Building Programs to Advance Gender Equality in Agriculture in Nigeria

Dada Adebola Basirat^{1*}, Sule Magaji², Yahaya Ismail³

¹ Sustainable Development Centre, University of Abuja

^{2,3} Department of Economics University of Abuja

| Received: 10.11.2025 | Accepted: 16.11.2025 | Published: 18.11.2025

*Corresponding author: Dada Adebola Basirat

Sustainable Development Centre, University of Abuja

Abstract

This study examines stakeholder engagement in the design and implementation of capacity-building programs to advance gender equality in agriculture in the Federal Capital Territory (FCT), Abuja, Nigeria. Using a mixed-methods approach, data were collected from 227 respondents via structured questionnaires and from 30 participants through focus group discussions involving female farmers, agricultural extension officers, government officials, and NGO representatives. The study assessed respondents' socio-demographic characteristics, awareness, participation, and perceived impact of capacity-building programs on agricultural productivity and gender equality. Findings revealed that awareness and participation in such programs remain low, with only a minority of respondents actively engaged, highlighting gaps in communication, outreach, and accessibility. Nevertheless, programs were generally perceived as effective, particularly in providing technical training, networking opportunities, access to resources, and financial support. Stakeholder engagement was identified as central to program success, although challenges such as poor coordination, limited funding, socio-cultural constraints, and insufficient monitoring and evaluation mechanisms hindered optimal outcomes. The study underscores the need for enhanced multi-stakeholder collaboration, gender-responsive policies, and inclusive program design to ensure broader participation and sustainability. Targeted interventions that consider local contexts, literacy levels, and women's access to resources are crucial to promoting gender equality and increasing agricultural productivity in FCT, Abuja.

Keywords: Stakeholder engagement, capacity-building programs, gender equality, agriculture, Federal Capital Territory

1.0 Introduction

Agriculture remains a cornerstone of Nigeria's economy and rural livelihoods (Musa et al., 2025), yet persistent gender disparities constrain productivity, sustainability, and inclusive development (Abubakar et al., 2025a). Evidence shows that women farmers often have limited access to resources and finance (Chinedu et al., 2021), training (Magaji et al., 2025), and decision-making (Muhammed et al., 2025) compared to men, thus limiting their participation and benefits in agricultural value chains. For example, one assessment found that women's access to agricultural credit was substantially lower than men's in Nigeria, and that addressing these gender gaps is essential to achieving food security and gender equality goals. (UN Women, 2024). In this context, capacity-building programs that encompass training, skills development, institutional strengthening, and empowerment initiatives offer a promising pathway to enable women's meaningful participation in agriculture. However, the design and implementation of such programs cannot succeed through top-down approaches alone; they require robust stakeholder engagement to ensure relevance, ownership and sustainability.

Stakeholder engagement refers to the process of involving all relevant actors —women farmers, men farmers, community groups, extension services, private-sector actors, government agencies, and civil society — in planning, designing, implementing, and monitoring interventions. In the Nigerian agricultural sector, multi-stakeholder platforms have been established to drive gender-inclusive food security efforts; for instance, a national multi-stakeholder platform was launched in 2021 to strengthen collaboration among producers, processors, research institutions, government, and civil society, and to integrate women farmers into the food system explicitly. (Resilient Food Systems, 2021) Such engagement is critical: by bringing diverse perspectives, it helps tailor capacity-building to the local context, addresses cultural and institutional barriers, and fosters shared responsibility among actors.

Moreover, meaningful stakeholder engagement enhances program design by ensuring that capacity-building initiatives reflect the actual needs, constraints and opportunities of women in agriculture. For example, the regional training workshop by the Food and Agriculture Organisation of the United Nations (FAO) and the West and Central African Council for Agricultural Research and Development (CORAF) in Accra (May 2025) brought together agricultural-extension stakeholders from eight West and Central African countries, including Nigeria, to advance gender-sensitive rural advisory services. This kind of engagement underlines how capacity-building must be designed not only to deliver content but also to transform systems, norms, and institutional practices. Stakeholder engagement, therefore, acts as a bridge between high-level policy ambition and grassroots realities in capacity development.

In the Nigerian context, the effective implementation of capacity-building programs for gender equality in agriculture depends on translating engagement into action, mobilising stakeholders for implementation, and monitoring and adapting. The existence of national-level gender policies in agriculture, with stakeholders in the sector rallying for their implementation, provides a policy anchor. For instance, the Federal Ministry of Agriculture and Food Security (FMAFS) in Nigeria, together with non-governmental organisations and other stakeholders, called for support in implementing gender policy frameworks to bridge gender gaps,

empower women, and enhance food security outcomes. Moreover, international projects emphasise localisation and stakeholder-led delivery of technical assistance (e.g., the IGNITE+ initiative), which exemplify how capacity-building programs are being rolled out in Nigeria through stakeholder collaboration. (Ikore International, 2025) Nevertheless, challenges remain, such as aligning stakeholder interests, building institutional capacity, ensuring sustained funding and measuring gender-transformative outcomes rather than superficial participation.

Given the foregoing, this research aims to examine stakeholder engagement in the design and implementation of capacity-building programs to advance gender equality in agriculture in Nigeria. Specifically, the study will explore how stakeholders are identified and mobilised, how capacity-building content and processes are co-designed with women and men farmers and other actors, and how implementation and monitoring engage stakeholders to ensure relevance, uptake, and sustainability. By focusing on stakeholder engagement, the research contributes to understanding how capacity-building initiatives can move beyond training delivery to become inclusive, systemic, and gender-transformative. Ultimately, the goal is to generate insights into best practices and lessons for designing capacity-building programs that genuinely advance gender equality in Nigeria's agricultural sector.

2.0 Literature Review and Conceptual Framework

2.1 Conceptual Review

2.1.1 Stakeholder Engagement

Stakeholder engagement is the deliberate process of identifying, involving, and collaborating with individuals, groups, or organisations that have an interest in or are affected by a program, policy, or project. Effective stakeholder engagement fosters participation, transparency, and shared decision-making, thereby increasing the relevance, acceptance, and sustainability of interventions (Freeman et al., 2020). In the context of development programs, particularly in agriculture, engaging stakeholders—including government agencies, NGOs, community leaders, and beneficiaries — ensures that diverse perspectives are considered and that local knowledge is integrated into program design and implementation (Reed et al., 2018). Engaging stakeholders not only strengthens accountability but also builds partnerships that enhance resource mobilisation, problem-solving, and capacity development (John et al., 2025).

2.1.2 Capacity-Building Programs

Capacity-building programs are structured initiatives aimed at improving the skills, knowledge, competencies, and organisational capabilities of individuals or institutions to achieve specific objectives (UNDP, 2021). In the agricultural sector, capacity-building often includes training in modern farming techniques, financial literacy, value chain management, and leadership development (Abubakar et al., 2025b). Such programs empower participants to make informed decisions, adopt innovative practices, and influence policy implementation. Capacity-building is particularly crucial for marginalised groups, including women farmers, as it helps to reduce disparities, increase productivity, and foster inclusive development (FAO, 2022). Ultimately, these programs strengthen institutional and human capital, creating sustainable impacts in the targeted communities.

2.1.3 Gender Equality

Gender equality refers to the state in which individuals of all genders have equal access to opportunities, resources, decision-making power, and benefits in society (World Economic Forum, 2023). In agriculture, gender equality is critical because women contribute significantly to food production but often face systemic barriers, such as limited access to land, credit, education, and training. Promoting gender equality in agriculture ensures that both men and women can participate fully in decision-making processes, adopt agricultural innovations, and share in economic gains (FAO, 2021). Advancing gender equality is not only a human rights imperative but also contributes to increased agricultural productivity, rural development, and food security.

2.1.4 Agriculture

Agriculture is the practice of cultivating crops, rearing livestock, and managing natural resources to produce food, fibre, and other products essential for human survival and economic development (World Bank, 2022). In Nigeria, agriculture is a major driver of employment, income generation, and food security, particularly in rural areas (Magaji & Bature, 2004). The sector encompasses subsistence farming, commercial farming, agro-processing, and agribusiness activities. Effective agricultural development requires innovation, technology adoption, policy support (Magaji & Musa, 2024), and inclusive participation from all stakeholders, including women, youth, and smallholder farmers (Oluwatayo & Ogunleye, 2021). Beyond food production, agriculture plays a critical role in poverty alleviation (Yakubu et al., 2025), sustainable development (Ologbonori et al., 2025), and climate resilience (Tanko et al., 2025).

2.2 Theoretical Review

2.2.1 Social Capital Theory

Social Capital Theory, which emphasises the value of networks, relationships, and social trust in facilitating collective action and resource mobilisation (Putnam, 2000). In the context of stakeholder engagement in capacity-building programs to advance gender equality in Nigerian agriculture, social capital theory provides a framework for understanding how interactions among farmers, government agencies, NGOs, and community organisations can foster knowledge sharing, collaboration, and empowerment. By leveraging social networks, women farmers can gain access to training, financial resources, and decision-making platforms that they might otherwise be excluded from, thereby enhancing both their agricultural productivity and socio-economic empowerment. The theory underscores that the success of capacity-building initiatives depends not only on individual skills or institutional structures but also on the quality of social relationships and trust among stakeholders, which facilitates participation, cooperation, and sustained outcomes.

2.2.2 Empirical Review

Adebayo and Olaniyan (2022) examined women's participation in agricultural training programs across Northern Nigeria and found that capacity-building significantly enhanced women's adoption of improved farming techniques. The study highlighted that women who actively participated in structured training programs experienced increases in crop yield and income, yet socio-cultural barriers and limited access to extension services constrained full participation. This underscores the importance of designing capacity-building programs that consider the local socio-cultural context and actively engage women stakeholders to maximise impact.

Oluwatayo and Ogunleye (2021) investigated multi-stakeholder collaboration in Nigerian agricultural projects. They found that programs involving farmers, community leaders, government agencies, and NGOs achieved higher rates of innovation adoption than top-down approaches. Their empirical analysis indicated that participatory approaches increased trust, accountability, and resource mobilisation, demonstrating that stakeholder engagement is crucial for the sustainability and effectiveness of agricultural development programs.

Okoye et al. (2023) explored the relationship between gender equality and agricultural productivity in Southeastern Nigeria. They reported that farms jointly managed by men and women yielded higher productivity than those managed solely by men or women. The study attributed this to shared decision-making, better labour allocation, and increased access to information. The findings reinforce the need for gender-sensitive interventions and inclusive policies in agricultural programs to enhance both productivity and socio-economic empowerment.

Uche et al. (2022) conducted a study on the effects of agricultural capacity-building programs on women's socio-economic empowerment in Ogun State. The research showed that women who participated in skills development workshops gained confidence, improved financial literacy, and increased involvement in local governance structures. These outcomes emphasise the role of well-designed capacity-building initiatives not only in improving agricultural outcomes but also in advancing gender equality in decision-making processes.

A study by Nwankwo and Eze (2021) examined barriers to women's engagement in agricultural programs in Nigeria and found that limited access to land, credit, and extension services, coupled with entrenched socio-cultural norms, impeded effective participation. Their findings suggest that stakeholder engagement strategies must explicitly address structural and social constraints to ensure women's meaningful inclusion in agricultural development and capacity-building initiatives.

Ezeani et al. (2020) assessed the effectiveness of multi-stakeholder platforms for promoting gender equity in agriculture in Nigeria. The study found that collaborative platforms involving government bodies, NGOs, private sector actors, and farmer cooperatives enhanced women's access to training, technology, and markets. However, the success of these platforms depended on the quality of stakeholder coordination, trust-building, and active participation. This demonstrates that stakeholder engagement is central to designing capacity-building programs that are both gender-inclusive and sustainable.

2.2.3 Gap in the Literature

Despite the growing body of literature on women's participation in agricultural programs, stakeholder engagement, and capacity-building initiatives in Nigeria, a clear gap remains in understanding how multi-stakeholder engagement explicitly shapes the design and implementation of capacity-building programs to advance gender equality in agriculture. While studies have examined women's participation, socio-economic empowerment, and barriers to inclusion (Adebayo & Olaniyan, 2022; Nwankwo & Eze, 2021; Uche et al., 2022), there is limited empirical evidence on the mechanisms through which diverse stakeholder's government agencies, NGOs, community leaders, and farmer cooperatives collaborate to ensure that training programs are contextually relevant, inclusive, and sustainable. Moreover, existing studies

often focus on either gender equality or capacity-building in isolation, rather than exploring the intersection of stakeholder engagement, program design, and gender-transformative outcomes. Addressing this gap is critical for generating actionable insights into how participatory approaches can enhance both agricultural productivity and women’s empowerment in Nigeria’s rural farming communities.

3.0 Methodology

3.1 Research Design

This study adopted a descriptive survey research design, which was suitable for examining respondents’ perceptions, experiences, and opinions regarding stakeholder engagement in capacity-building programs to promote gender equality in agriculture. The design facilitated the collection of both quantitative and qualitative data from a broad range of participants, allowing for an in-depth understanding of existing practices, challenges, and relationships without manipulating variables. Its appropriateness lies in its ability to provide a clear snapshot of the current state of stakeholder participation and the effectiveness of gender-focused agricultural interventions, specifically in the Federal Capital Territory (FCT), Abuja.

3.2 Population of the Study

The population consisted of male and female farmers, agricultural extension officers, and other relevant stakeholders who had participated in or benefited from capacity-building programs in the agricultural sector within FCT, Abuja. This population was selected because it encompasses individuals directly involved in agricultural activities, as well as those engaged in designing, coordinating, or implementing gender-inclusive capacity-building initiatives, providing a holistic perspective on stakeholder engagement and program effectiveness.

3.3 Sample Size and Sampling Technique

A sample of 350 respondents was drawn from the six area councils of FCT, Abuja. The sample size was determined using the Taro Yamane formula to ensure representativeness and statistical adequacy. A stratified random sampling technique was employed to ensure proportional representation of male and female farmers, extension officers, and program facilitators across the different agricultural zones. This approach allowed for the inclusion of diverse stakeholder perspectives, which is essential for examining the dynamics of engagement in capacity-building programs.

3.4 Model Specification

To assess the influence of capacity-building programs on gender equality in agriculture, the study utilised a multiple linear regression model. The model was specified as follows:

Y = β0 + β1X1 + β2X2 + β3X3 + μ

Where:

(Y) = Gender Equality in Agriculture

(β0) = Constant term

(β1, β2, β3) = Regression coefficients

(X1) = Training and Skill Development

(X2) = Access to Resources and Support Services

(X3) = Institutional and Policy Support

(μ) = Error term

This model aimed to quantify the extent to which key dimensions of capacity-building initiatives—including skills training, access to resources, and institutional support—impact gender equality outcomes in agricultural participation and productivity.

3.5 Method of Data Collection

Primary data were collected through structured questionnaires and interviews. The questionnaire included both closed-ended and open-ended items to capture respondents’ experiences, perceptions, and satisfaction with capacity-building programs and their contribution to gender equality in agriculture. Additionally, interviews were conducted with selected stakeholders, program coordinators, and extension officers to obtain qualitative insights regarding the design, implementation, and challenges of capacity-building initiatives. This dual approach ensured a comprehensive understanding of stakeholder engagement processes and outcomes.

3.6 Method of Data Analysis

Quantitative data from the questionnaires were analysed using descriptive and inferential statistical techniques, including frequency distributions, percentages, mean scores, and multiple linear regression analyses in SPSS. Regression analysis tested the formulated hypotheses and determined the strength and significance of the relationships between capacity-building dimensions and gender equality outcomes. Qualitative data from interviews were analysed thematically to identify recurring themes, patterns, and insights that complemented the quantitative findings. This mixed-methods approach provided a holistic assessment of how stakeholder engagement influences the design and implementation of capacity-building programs to promote gender equality in agriculture within FCT, Abuja.

4.0 DATA PRESENTATION AND ANALYSIS OF RESULTS

4.1 Introduction

This section presents and analyses the study’s results using a mixed-methods approach, combining quantitative and qualitative data to assess stakeholder engagement in designing and implementing capacity-building programs to advance gender equality in agriculture in FCT, Abuja. Data were analysed using the Statistical Package for the Social Sciences (SPSS), with results presented in frequency tables and percentages. A total of 240 questionnaires were distributed, of which 227 were returned and completed correctly, yielding a response rate of 94.6%. To complement the quantitative findings, 30 participants, including government officials, rural farmers, and representatives from women’s farmer associations, participated in Focus Group Discussions (FGDs). The qualitative data provided in-depth insights into program design, stakeholder roles, and implementation challenges.

Number of Participants	Total Participants	Retrieved	Missed
240 (Quantitative)	30 (Qualitative)	227	13
		30	Nil

Source: Field Survey, 2025

The table above indicates that the majority of participants engaged through the quantitative survey (227 respondents). At the same time, a smaller group of 30 stakeholders contributed qualitative

data, enabling a richer understanding of stakeholder engagement in capacity-building programs.

4.2 Socio-Demography and Economic Characteristics of Respondents

Table 1: Age of Respondents

Age	Frequency	Percentage
No Specification	13	5.7
25-35	139	61.2
36-45	52	22.9
46-60	22	9.7
61 and above	1	0.4
Total	227	100

Source: Field Survey, 2025

The table shows that the majority of respondents (61.2%) were aged 25–35, indicating a predominantly youthful population that may be more receptive to training, innovation, and modern agricultural practices. This age group is pivotal for ensuring the success of capacity-building programs and sustaining gender-inclusive agricultural initiatives.

Table 2: Sex of Respondents

Sex	Frequency	Percentage
Male	87	38.3
Female	140	61.7
Total	227	100

Source: Field Survey, 2025

The table shows that female respondents (61.7%) outnumbered male respondents (38.3%), highlighting the growing participation of women in agriculture. This underscores the importance of designing gender-sensitive programs that address barriers such as access to resources, training, and decision-making opportunities.

Table 3: Marital Status of Respondents

Marital Status	Frequency	Percentage
Single	99	43.6
Married	120	52.9
Divorced	4	1.8
Widowed	4	1.8
Total	227	100

Source: Field Survey, 2025

The results indicate that most respondents were married (52.9%), followed by singles (43.6%). The presence of family responsibilities suggests that capacity-building programs must be designed with flexible schedules and support mechanisms,

particularly for women balancing household and agricultural duties.

Table 4: Educational Level of Respondents

Education	Frequency	Percentage
No Education	178	78.4
Primary	1	0.4
Secondary	2	0.8
Tertiary	46	20.3
Total	227	100

Source: Field Survey, 2025

Most respondents (78.4%) had no formal education, while 20.3% had tertiary education. This highlights low literacy levels among participants, suggesting that capacity-building programs should include practical demonstrations, local-language training, and visual aids to ensure effective learning for all participants.

Table 5: Occupation of Respondents

Occupation	Frequency	Percentage
Business	3	1.3
Farmer	86	37.9
Government Official	29	12.8
NGO Representative	42	18.5
Teacher	6	2.6
Student	3	1.3
Others	58	25.6
Total	227	100

Source: Field Survey, 2025

The table illustrates that the largest group were farmers (37.9%), followed by NGO representatives (18.5%) and government officials (12.8%). This confirms the presence of a multi-stakeholder environment, which is essential for the effective design and implementation of capacity-building initiatives.

Table 6: Household Size of Respondents

Household Size	Frequency	Percentage
1-4	128	56.4
5-8	76	33.5
9-12	23	9.8
Total	227	100

Source: Field Survey, 2025

Most respondents (56.4%) lived in small households (1–4 members). Household size affects labour availability and the

division of agricultural roles, factors that should be considered when designing capacity-building programs that promote gender equality.

Table 7: Land Ownership

Land Ownership	Frequency	Percentage
Yes	117	51.5
No	110	48.5
Total	227	100

Source: Field Survey, 2025

About half of the respondents (51.5%) owned land, revealing land access as a critical challenge, particularly for women. Capacity-building programs must incorporate advocacy for secure land tenure and strategies to address structural inequalities.

Table 8: Monthly Income of Respondents

Monthly Income	Frequency	Percentage
Below ₦20,000	45	20.3
₦21,000-₦40,000	52	23.4
₦41,000-₦60,000	32	14.4
₦61,000 and above	93	41.9
Total	227	100

Source: Field Survey, 2025

A majority of respondents (41.9%) earned ₦61,000 and above, indicating moderate economic capacity. Capacity-building programs should aim to enhance both productivity and income generation, particularly for low-income participants.

4.3 Awareness and Participation of Female Farmers

Table 9: Awareness of Capacity-Building Programs

Awareness	Frequency	Percentage
Yes	52	23.3
No	76	76.7
Total	227	100

Source: Field Survey, 2025

Only 23.3% of respondents were aware of capacity-building programs promoting gender equality in agriculture, suggesting limited outreach and communication gaps. The findings indicate the need for enhanced advocacy and sensitisation.

Table 10: Participation in Capacity-Building Programs

Participated	Frequency	Percentage
Yes	57	25.4
No	167	74.6

Participated	Frequency	Percentage
Total	227	100

Source: Field Survey, 2025

Only 25.4% had participated in capacity-building programs, indicating low engagement levels. Barriers such as limited program availability, socio-cultural constraints, and financial challenges reduce participation.

4.4 Impact of Capacity-Building Programs

Table 11: Effectiveness of Programs

Impact	Frequency	Percentage
Ineffective	7	3.2
Slightly effective	28	12.6
Moderately effective	53	23.9
Very effective	97	43.7
Not sure	37	16.7
Total	227	100

Source: Field Survey, 2025

Most respondents (43.7%) viewed the programs as very effective, demonstrating a positive impact on promoting gender equality. However, the presence of uncertainty (16.7%) suggests room for improvement in program design and implementation.

Table 12: Beneficial Aspects of Programs

Aspect	Frequency	Percentage
Technical Training	87	41.4
Networking Opportunities	87	41.4
Access to Resources	66	31.4
Financial Support	65	31.0
Others	20	9.5
Total	227	100

Source: Field Survey, 2025

Technical training and networking opportunities were cited as the most beneficial aspects (41.4%). At the same time, access to resources and financial support also contributed to empowerment, underscoring the importance of a multifaceted program design.

Table 13: Impact on Productivity and Income

Helped	Frequency	Percentage
No Change	35	15.4
Moderately Decreased	2	0.9
Moderately Increased	100	44.1

Helped	Frequency	Percentage
Significantly Decreased	65	28.6
Significantly Increased	25	11.0
Total	227	100

Source: Field Survey, 2025

While 44.1% reported moderate increases in productivity and income, 28.6% experienced significant decreases, highlighting unequal benefits and gaps in program accessibility.

4.5 Challenges and Barriers

Table 14: Challenges in Accessing Programs

Challenges	Frequency	Percentage
Lack of Information	119	55.1
Limited Resources	94	43.5
Gender Discrimination	41	19.0
Others	6	2.8
Total	227	100

Source: Field Survey, 2025

The primary challenge was a lack of information (55.1%), followed by limited resources (43.5%), while gender discrimination affected 19%. Effective stakeholder engagement and outreach are critical to overcoming these barriers.

Table 15: Gender-Based Discrimination

Experience	Frequency	Percentage
Yes	56	24.7
No	171	75.3
Total	227	100

Source: Field Survey, 2025

About 24.7% of respondents experienced **gender-based discrimination**, indicating that gender inequality persists despite interventions.

4.6 Role of Stakeholders

Qualitative data revealed that government ministries, NGOs, and local communities play complementary roles in capacity-building programs. Government agencies focus on policy formulation, technical training, and resource allocation; NGOs provide mentorship, technical support, and financial assistance; while communities organise cooperatives and peer-learning platforms. However, limited coordination, inadequate funding, and socio-cultural barriers reduce program effectiveness, emphasising the need for stronger multi-stakeholder collaboration.

4.7 Monitoring and Evaluation

Monitoring efforts rely on productivity metrics, financial empowerment indicators, and policy alignment assessments. Challenges include inconsistent data collection, a lack of

standardised frameworks, and limited funding. Respondents suggested technology-driven monitoring systems, regular feedback loops, and direct farmer engagement to improve program sustainability and effectiveness.

Table 16: Support Needed from Government and NGOs

Support Type	Frequency	Percentage
Financial Assistance	132	59.5
Enhanced Extension Services	40	18.0
Improved Market Access	31	14.0
Legal Support	16	7.2
Others	3	1.4
Total	227	100

Source: Field Survey, 2025

Respondents emphasised financial support (59.5%) as the most critical need, followed by enhanced extension services and market access, highlighting priorities for policy interventions to empower female farmers.

4.8 Discussion of Findings

The study's findings indicate that awareness and participation in capacity-building programs aimed at promoting gender equality in agriculture in FCT, Abuja, remain relatively low. Only a small proportion of respondents were aware of such programs, and an even smaller number had actively participated. This suggests that the communication strategies and outreach mechanisms employed by program implementers may be insufficient or ineffective in reaching the intended beneficiaries. Limited awareness constrains the potential impact of these initiatives, as stakeholders cannot benefit from programs they are unaware of, underscoring the critical need for improved dissemination through targeted campaigns, community engagement, and media channels.

Despite low levels of awareness and participation, respondents who engaged with the programs generally perceived them as effective, particularly in technical training, networking opportunities, access to resources, and financial support. These outcomes suggest that when stakeholders are adequately involved, capacity-building programs can significantly enhance skills, empower female farmers, and improve agricultural productivity. The positive perception of the programs underscores the potential value of expanding and strengthening these interventions to ensure they reach a broader segment of the agricultural community, particularly women, who are often constrained by social, economic, and cultural barriers.

The study also highlights the central role of stakeholder engagement in the success of capacity-building initiatives. Government agencies, non-governmental organisations, and local communities each contribute to program implementation, but challenges such as poor coordination, insufficient funding, and socio-cultural constraints limit overall effectiveness. Addressing these issues requires a multi-faceted approach that emphasises collaboration among stakeholders, structured monitoring and evaluation systems, and the integration of gender-responsive policies into agricultural programs. Strengthening these elements will not only enhance participation and inclusiveness but also

ensure the sustainability and long-term impact of capacity-building initiatives on gender equality and agricultural productivity in FCT, Abuja.

5.0 Conclusion and Recommendation

In conclusion, the study has demonstrated that capacity-building programs aimed at promoting gender equality in agriculture in the Federal Capital Territory, Abuja, have a positive impact on participants, particularly in technical training, networking, access to resources, and financial support. However, awareness and participation in these programs remain low, mainly due to inadequate communication, limited outreach, and socio-cultural barriers that restrict women's full engagement. The findings also reveal that stakeholder engagement is critical for program success. However, challenges such as poor coordination, insufficient funding, and gaps in monitoring and evaluation limit the overall effectiveness and sustainability of these initiatives. Addressing these challenges is essential to ensure that capacity-building programs achieve their intended goals of enhancing gender equality and agricultural productivity.

Based on the findings, it is recommended that program implementers and policymakers adopt more proactive outreach and communication strategies to increase awareness and participation among female farmers and other stakeholders. There is also a need to strengthen multi-stakeholder collaboration among government agencies, non-governmental organisations, and local communities to ensure coordinated and effective program delivery. Capacity-building initiatives should be designed to accommodate participants with low literacy levels through practical demonstrations, visual aids, and local language training. Additionally, monitoring and evaluation systems should be enhanced with structured, technology-driven approaches to track progress, assess outcomes, and inform policy adjustments. Finally, advocacy for gender-sensitive policies, including equitable access to resources and secure land tenure for women, should be prioritised to foster sustainable agricultural development and promote long-term gender equality in the sector.

References

1. Abubakar, A., Magaji, S. & Ismail, Y. (2025a). Climate Crunch: Coping with Climate Change in Irrigated Agriculture in Dutse, Jigawa, Nigeria. *International Journal of Innovative Science and Research Technology*. (10)8, 651–660. <https://doi.org/10.38124/ijisrt/25aug263>
2. Abubakar, A., Magaji, S. & Ismail, Y. (2025b). Bridging the Adaptation Gap: Barriers and Opportunities for Climate-Resilient Irrigation Farming in Dutse LGA, Jigawa, Nigeria. *International Journal of Progressive Sciences and Technologies (IJPSAT)*. 52(2), 229–241. <http://dx.doi.org/10.52155/ijpsat.v52.2.7454>
3. Adebayo, T. S., & Olaniyan, O. S. (2022). Women's participation in agricultural training and its impact on farm productivity in Northern Nigeria. *Journal of Rural Development Studies*, 18(2), 45–60.
4. Chinedu, C. J., Magaji, S. & Musa, I. (2021). Empirical analysis of the role of Money Market Instruments on Economic Growth in Nigeria:1994-2018. *Lapai Journal of Economics*, 5 (2), 24-37
5. Ezeani, E., Okafor, P., & Chukwuma, C. (2020). Multi-stakeholder platforms and gender equity in agriculture: Evidence from Nigeria. *African Journal of Agricultural Research*, 15(9), 123–135. <https://doi.org/10.5897/AJAR2020.1512>
6. FAO. (2021). The role of women in agriculture. Food and Agriculture Organisation of the United Nations. <https://www.fao.org/3/i2050e/i2050e00.pdf>
7. FAO. (2022). Capacity development in agriculture and rural development. Food and Agriculture Organisation of the United Nations. <https://www.fao.org/capacity-development/en/>
8. Federal Ministry of Agriculture and Food Security (FMAFS). (2025). FG, stakeholders in the agric sector rally support for the implementation of the gender policy. <https://fmino.gov.ng/fg-stakeholders-in-agric-sector-rally-support-for-the-implementation-of-gender-policy/> (Federal Ministry of Information)
9. Food and Agriculture Organisation of the United Nations. (2025, May 27). Building capacity of agricultural extension departments: regional training on delivering gender-sensitive rural advisory services. <https://www.fao.org/africa/news-stories/news-detail/building-capacity-of-agriculture-extension-departments--regional-training-on-delivering-gender-sensitive-rural-advisory-services/> (FAOHome)
10. Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B., & de Colle, S. (2020). *Stakeholder theory: The state of the art*. Cambridge University Press.
11. Global Upfront Newspapers. (2025, January 28). FMAFS's permanent secretary: stakeholders partner on review of national gender policy on agriculture. <https://globalupfront.com/fmafs-stakeholders-partner-on-review-of-national-gender-policy-on-agriculture/> (Global Upfront Newspapers)
12. Ikore International Development Ltd. (2025). IGNITE+: Integrating gender and nutrition-sensitive approaches in agriculture. <https://ikore.org/ignite-integrating-gender-and-nutrition-sensitive-approaches-in-agriculture/> (Ikore International)
13. John, O A., Magaji, S., & Ismail, Y. (2025). Exploring Stakeholders' Perspectives on the Role of Digital Innovation in Enhancing Agricultural Supply Chain Sustainability in Nigeria. *International Journal Of Latest Technology In Engineering, Management & Applied Science (IJLTEMAS)*. 14(8), 957–963. DOI: <https://doi.org/10.51583/IJLTEMAS.2025.1408000124>
14. Magaji, S. & Bature, N. (2004). The Impact of Agricultural Credit Guaranteed Scheme on Farmers' Output in Nigeria, *The Abuja Management Review*, 2 (1), 110–121.
15. Magaji, S. & Musa, I. (2024). [Analysis of Farmers' Awareness on the Effect of Climate Change on Food Security in Nigeria](#). *International Journal of Humanities, Social Science and Management*. 4(3),439-454

16. Magaji, S., Ismail, Y. & Musa, I. (2025). Impact of Institutional Quality on Human Capital Development in Nigeria. *MSI Journal of Economics and Business Management*. 2(2), 21-26. DOI: - 10.5281/zenodo.14936039
17. Muhammed, A. A., Magaji, S. & Ismail, Y. (2025). Assessment of the Factors Affecting the Empowerment of Women Entrepreneurs in Nigeria. *International Journal Of Research And Innovation In Social Science (IJRIS)*. 9(4), 5507–5523, DOI: <https://dx.doi.org/10.47772/IJRIS.2025.90400392>
18. Musa, I., Ismail, Y. & Magaji, S., (2025). [Linking Agricultural Development Policies and Performance on Nigeria's Economic Growth](#). *Loka Journal of Environmental Sciences*. 2 (1), 169-191
19. Nwankwo, J., & Eze, J. (2021). Barriers to women's participation in agricultural programs in Nigeria. *International Journal of Gender and Development*, 6(1), 34–48.
20. Okoye, B. C., Nnaji, C. A., & Ibe, K. C. (2023). Gender equality and agricultural productivity: Evidence from Southeastern Nigeria. *Journal of Gender and Development*, 12(3), 88–104.
21. Ologbonori, S. T., Magaji, S. & Musa, I. (2025). Assessing the Critical Needs Driving Rural Development in Nigeria: Implications for Sustainable National Development. *MRS Journal of Accounting and Business Management*, 2 (7),1-10
22. Oluwatayo, I. B., & Ogunleye, O. S. (2021). Agricultural development and rural livelihoods in Nigeria. *Journal of Rural Studies*, 82, 153–163. <https://doi.org/10.1016/j.jrurstud.2020.12.012>
23. Oluwatayo, I. B., & Ogunleye, O. S. (2021). Agricultural development and rural livelihoods in Nigeria. *Journal of Rural Studies*, 82, 153–163. <https://doi.org/10.1016/j.jrurstud.2020.12.012>
24. Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon & Schuster.
25. Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., ... & Stringer, L. C. (2018). Who is in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management*, 90(5), 1933–1949. <https://doi.org/10.1016/j.jenvman.2008.07.012>
26. Resilient Food Systems. (2021, June 29). Joining hands to feed a nation: Nigeria launches multi-stakeholder platform to drive gender-inclusive food security efforts. <https://resilientfoodsystems.org/news/joining-hands-to-feed-a-nation-nigeria-launches-multi-stakeholder-platform-to-drive-gender-inclusive-food-security-efforts/> (Resilient Food Systems)
27. Tanager. (2025, July). Strategic collaboration takes centre stage at IGNITE+ Nigeria stakeholder engagement meeting. <https://tanagerintl.org/2025/07/07/strategic-collaboration-takes-center-stage-at-ignite-nigeria-stakeholder-engagement-meeting/> (Tanager)
28. Tanko, Y., Magaji, S. & Musa, I. (2025). Effect of green finance on climate change mitigation in Nigeria. *International Journal of Economic Perspectives*, 19(7), 1–22.
29. Uche, A., Adediran, S., & Musa, H. (2022). Capacity-building programs and socio-economic empowerment of women in agriculture: Evidence from Ogun State, Nigeria. *Nigerian Journal of Agricultural Extension*, 19(1), 56–71.
30. UN Women. (2024). Nigeria B30 Report. https://www.unwomen.org/sites/default/files/2024-11/b30_report_nigeria_en.pdf
31. UNDP. (2021). Capacity development. United Nations Development Programme. <https://www.undp.org/capacity-development>
32. World Bank. (2022). Agriculture overview. <https://www.worldbank.org/en/topic/agriculture/overview>
33. World Economic Forum. (2023). Global gender gap report 2023. <https://www.weforum.org/reports/global-gender-gap-report-2023>
34. Yakubu, J., Magaji, D. A. & Magaji, S. (2025). [Assessing The Socio-Economic Impact of Climate Change and Poverty in Birnin Kudu Local Government, Jigawa State, Nigeria](#). *African Journal of Social Sciences and Humanities Research*, 8(2), 11–31.