INTERNATIONAL JOURNAL OF RESEARCH AND INNOVATION IN SOCIAL SCIENCE (IJRISS)
ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

# Women's Adaptive Strategies and Poverty Reduction in Rural Communities of Cross River and Akwa Ibom States, Nigeria

**Oriakpono Imade Emmanuel*, Uyang Francis Abul and Omono Cletus Ekok**

**Department of Sociology, Faculty of Social Science, University of Calabar, Cross River State**

**DOI: https://doi.org/10.47772/IJRISS.2026.100700338**

**Received: 17 July 2026; Accepted: 22 July 2026; Published: 31 July 2026**

## ABSTRACT

This study investigates the relationship between women's adaptive strategies and poverty reduction in rural communities of Cross River and Akwa Ibom States, Nigeria. Adopting a cross-sectional survey research design that integrated quantitative and qualitative approaches, primary data were collected from 700 rural women selected through purposive, stratified random, and systematic sampling techniques across the Southern Senatorial District of Cross River State and Eket Senatorial District of Akwa Ibom State. Data were obtained using structured questionnaires based on a 4-point Likert scale and Key Informant Interviews (KII). The study employed descriptive statistics and Pearson Product Moment Correlation (PPMC) to examine the relationship between income-based saving schemes and asset ownership, petty trading activities and income improvement, food processing and food security, as well as vocational skills acquisition and employment opportunities. The findings revealed significant positive relationships between income-based saving schemes and asset ownership ($r = 0.995$), petty trading activities and income improvement ($r = 0.993$), food processing and food security ($r = 0.996$), and vocational skills acquisition and employment opportunities ($r = 0.991$). The results indicate that women's adaptive strategies significantly improve household welfare, economic resilience, income diversification, food availability, and employment outcomes among rural women. The study concludes that adaptive livelihood mechanisms remain critical pathways for reducing multidimensional poverty and improving socio-economic wellbeing in rural communities of Cross River and Akwa Ibom States. The study recommends that government agencies, NGOs, and development partners should strengthen women-focused savings schemes, improve access to vocational and entrepreneurial training, provide financial and infrastructural support for petty trading and food processing activities, and expand empowerment programmes aimed at enhancing women's economic participation and sustainable poverty reduction outcomes.

**Keywords:** Women's Adaptive Strategies, Poverty Reduction, Income-Based Saving Schemes, Petty Trading, Food Processing, Vocational Skills Acquisition, Rural Women, Cross River State, Akwa Ibom State, Nigeria.

## INTRODUCTION

Globally, contemporary development scholarship conceptualizes women's adaptive strategies as structured livelihood mechanisms that enhance economic agency and strengthen household resilience in rural settings (Kabeer, 2016). Expanding women's access to productive resources, financial systems, and digital opportunities enhances their capacity to participate effectively in economic activities and improve household welfare outcomes (World Bank, 2023). For instance, in China, technology-driven empowerment initiatives have expanded women's economic participation and improved their social positioning within households and communities (Zhang & Chen, 2022). Regionally, across Sub-Saharan Africa, rural women's engagement in diversified agricultural activities, small-scale livestock production, and informal enterprises reflects adaptive livelihood thinking aimed at strengthening household stability and reducing vulnerability to environmental and economic shocks (Jaka & Shava, 2018). Similarly, women's involvement in petty trading activities, food processing, vocational skills acquisition, community-based savings, and financial support systems represents a strategic form of adaptation that reinforces agricultural sustainability and household welfare in climate-sensitive regions (Babatunde, Zantsi, & Groenewald, 2025). In Nigeria, rural women engage in mixed farming and petty trading as survival strategies in response to economic hardship and climatic variability, although limited capital access constrains income maximization (Duru, Eze, & Mba, 2022). Women who engage in farming as a means of income diversification positively influence food security and income stabilization, reinforcing the significance of adaptive agricultural strategies in poverty reduction processes (Bashiru, Garba, & Suleiman, 2025). Specifically, in Cross River and Akwa Ibom States, women's adaptive strategies are widely discussed as informal livelihood mechanisms that enhance household resilience and economic stability (Ugbe, Erim, & Cecilia, 2023). Petty trading, food processing, community-based savings, vocational skills acquisition, and income diversification serve as key livelihood mechanisms for economic resilience and poverty reduction (UN Women, 2023; World Bank, 2024). However, persistent constraints limit their full impact, creating the need to examine their relationship with poverty reduction. This study, therefore, seeks to examine the relationship between women's adaptive strategies (such as income-based saving schemes, petty trading, food processing, and vocational skills acquisition) and poverty reduction (encompassing asset ownership, income improvement, food security, and employment opportunities) in the rural communities of Cross River and Akwa Ibom States.

**Statement of the Problem**

Despite numerous government and non-governmental interventions aimed at empowering rural women, poverty remains pervasive in many rural communities of Cross River and Akwa Ibom States. Many women continue to experience limited access to productive resources, financial services, markets, quality education, and employment opportunities, thereby constraining their ability to improve household welfare. Although adaptive strategies such as income-based saving schemes, petty trading, food processing, and vocational skills acquisition have been promoted as viable livelihood options, their effectiveness in reducing multidimensional poverty within the study area has not been comprehensively established.

Existing studies have often focused on individual adaptive strategies or specific poverty indicators, leaving limited empirical evidence on their combined influence on asset ownership, income generation, food security, and employment opportunities. This knowledge gap underscores the need for a comprehensive investigation of the relationship between women's adaptive strategies and poverty reduction in the rural communities of Cross River and Akwa Ibom States. The findings of this study are expected to provide evidence that will support policy formulation and the implementation of sustainable poverty reduction programmes targeted at rural women.

**Objectives of the Study**

The general objective of this study is to investigate the relationship between women's adaptive strategies and poverty reduction in rural communities of Cross River and Akwa Ibom States, Nigeria. Specifically, the study seeks to:

1. Investigate the relationship between income-based saving schemes and asset ownership among women in rural communities of Cross River and Akwa Ibom States.

2. Examine the relationship between petty trading activities and income improvement among women in rural communities of Cross River and Akwa Ibom States.

3. Investigate the relationship between food processing and food security among women in rural communities of Cross River and Akwa Ibom States.

4. Assess the relationship between vocational skills acquisition and employment opportunities among women in rural communities of Cross River and Akwa Ibom States.

**Statement of Hypotheses**

The following null hypotheses are formulated to guide the study:
$H_{01}$: There is no significant relationship between income-based saving schemes and asset ownership among women in rural communities of Cross River and Akwa Ibom States.
$H_{02}$: Petty trading activities do not significantly relate with income improvement among women in rural communities of Cross River and Akwa Ibom States.

$H_{03}$: There is no significant relationship between food processing and food security among women in rural communities of Cross River and Akwa Ibom States.

$H_{04}$: Vocational skills acquisition does not significantly relate with employment opportunities among women in rural communities of Cross River and Akwa Ibom States.

This study contributes to understanding how livelihood and institutional factors influence poverty reduction among rural women. It provides policymakers, social investment programmes, and NGOs with empirical insights into optimizing adaptive strategies for sustainable socio-economic development in Cross River and Akwa Ibom States.

## LITERATURE REVIEW

Conceptual Framework

The constructs examined in this study include income-based saving schemes, petty trading activities, food processing, and vocational skills acquisition, alongside the dependent variables of asset ownership, income improvement, food security, and employment opportunities. These constructs collectively capture the multidimensional relationship between women's adaptive strategies and poverty reduction in rural communities.

**Income-based Saving Scheme and Asset Ownership**: Income-based saving schemes are defined as structured or informal financial arrangements, such as rotating savings and credit associations (ROSCAs), village savings and loan associations (VSLAs), and cooperative societies, through which women mobilize and manage financial resources (Allen, Qureshi, & Rhyne, 2020; Gugerty, Biscaye, & Anderson, 2019). Asset ownership refers to women's possession and control over economic resources such as land, housing, livestock, and business capital that contribute to economic security (Deere & Doss, 2019; Doss, Grown, Deere, & Theis, 2017). In the Nigerian rural context, these schemes influence asset ownership by enabling women to overcome formal financial barriers, transform regular savings into tangible economic assets, and enhance their bargaining power within households.

**Petty Trading Activities and Income Improvement**: Petty trading activities involve small-scale informal commercial engagements characterized by low capital requirements and limited entry barriers (International Labour Organization, 2022). Income improvement refers to the sustained increase in earnings, purchasing power, and financial stability achieved through engagement in income-generating activities (United Nations Development Programme, 2022). Petty trading functions as a survival-oriented adaptive strategy that allows women to diversify income sources, mitigate economic shocks, and directly enhance their capacity to meet household needs and accumulate assets (de Mel, McKenzie, & Woodruff, 2017; Kabeer, 2016).

**Food Processing and Food Security**: Food processing is the conversion of raw agricultural commodities into consumable or preservable products through operations such as drying, milling, and packaging, which enhance value addition and shelf life (Nosratabadi, Mosavi, & Lakner, 2020). Food security denotes a condition where individuals have consistent physical, social, and economic access to sufficient, safe, and nutritious food (Awodele & Olajide, 2020). In rural settings, food processing affects food security by minimizing post-harvest losses, stabilizing food supply across seasons, and improving household dietary diversity and nutritional outcomes (Sanusi & Ibrahim, 2023; Wollega, 2023).

**Vocational Skills Acquisition and Employment Opportunities**: Vocational skills acquisition is the process through which individuals obtain practical, technical, and cognitive competencies that enhance their capacity to perform tasks and participate in labour markets (Emah, Doneys, Kusakabe, & Pathak, 2025). Employment opportunities refer to the availability and accessibility of formal and informal income-generating activities (Umar, Seraj, & Ozdeser, 2025). Acquired vocational competencies serve as a critical determinant of employability, facilitating women's transitions from low-productivity agricultural activities to diversified, income-generating occupations and microenterprises.

**Empirical Review**

Studies have found a significant relationship between women's adaptive strategies and poverty reduction outcomes in rural communities, particularly concerning asset accumulation, income stability, food availability, and labour market participation.

**Income-based Saving Scheme and Asset Ownership**: Empirical studies have identified a strong connection between income-based saving schemes and asset accumulation among rural women. Karlan, Savonitto, Thuysbaert, and Udry (2017) found that women participating in savings schemes significantly increased their holdings of livestock and durable goods. Similarly, Gugerty, Biscaye, and Anderson (2019) reported that VSLA participants demonstrated higher savings accumulation and greater investment in productive assets. Oduro, Deere, and Catanzarite (2019) established that savings behavior significantly correlates with the ownership of movable and immovable assets, particularly when women possess financial decision-making autonomy. Further supporting this, Ksoll, Lilleør, Lønborg, and Rasmussen (2016) and Koomson, Villano, and Hadley (2022) confirmed that savings group participation and financial literacy training significantly enhance asset-building capacity. Studies by Ibrahim, Sulaiman, et al. (2023), Ibor, Offiong, and Mendie (2017), and Lawal, Adeoye, Bello, and Musa (2022) reinforced that cooperative savings predict ownership of durable and productive assets. Adeoye, Amao, Olojede, Oyeleye, and Farayola (2023), Suri and Jack (2016), Otieno and Mutula (2021), and Asmare, Bekele, Tesfaye, and Lemma (2025) further established that financial inclusion via savings increases women's asset ownership indices. However, Oduro et al. (2019) and Meinzen-Dick, Quisumbing, Doss, and Theis (2019) noted that structural constraints, such as socio-cultural norms and limited income levels, continue to restrict the full realization of these benefits.

**Petty Trading Activities and Income Improvement**: Empirical research consistently shows that petty trading positively affects income improvement by building stakeholder resilience and reducing economic vulnerability. Stewart, Van Rooyen, Dickson, Majoro, and De Wet (2017) and Banerjee, Karlan, Duflo, Goldberg, Pariente, Shapiro, Thuysbaert, and Udry (2018) established that petty trading significantly increases household income, profits, and consumption smoothing. Filmer and Fox (2019), Adepoju, Afolabi, and Ojo (2020), and Ezeh, Onuoha, and Nwankwo (2021) highlighted its role in income diversification and financial stability. Mohammed, Yakubu, and Bello (2022), Mbithi, Mutua, and Kihoro (2019), Tadesse, Shiferaw, and Abebe (2023), and Osei, Adjei, and Danso (2021) confirmed sustained income growth over time. de Mel, McKenzie, and Woodruff (2017) and Fafchamps, McKenzie, Quinn, and Woodruff (2018) showed that capital access and business training improve petty trading profitability. Conversely, Akter, Rutsaert, Luis, Htwe, San, Raharjo, and Pustika (2017) and Jayachandran (2019) noted that limited credit and gender-based constraints suppress income growth. Nonetheless, Kassa, Abebe, and Tadesse (2022), Nwankwo, Okeke, and Umeh (2024), Ajibola, Adeyemo, and Oladipo (2023), Aluko, Akinwale, and Ojo (2020), Mensah, Frimpong, and Owusu (2021), Chirwa, Manda, and Matita (2022), and Okeke, Eze, and Uzochukwu (2023) consistently affirmed its positive impact on financial resilience and income stabilization.

**Food Processing and Food Security**: Evidence from regional and domestic studies demonstrates that food processing plays a decisive role in enhancing household food security. Wollega (2023) and Otu and Anam (2014) established that women's participation in food processing enhances household food availability and resilience against seasonal fluctuations. Olawepo and Fatulu (2016) and Samputra and Antriyandarti (2024) observed that processing improves dietary diversity and mitigates vulnerability to food shortages. Ayamga, Ayawine, and Ayenimi (2023) and Sanusi and Ibrahim (2023) linked women's empowerment in processing to better resource allocation and income generation. Awodele and Olajide (2020), Benassai-Dalmau et al. (2025), Abolade, Lawal, Akanbi, and Salami (2025), and Gupta (2025) confirmed that financial access and market proximity significantly enhance these food security outcomes. Complementary studies by Kassa et al. (2022), Tadesse et al. (2023), Chirwa et al. (2022), Okeke et al. (2023), Mensah et al. (2021), Barrett, Reardon, and Webb (2016), Jayachandran (2019), Akter et al. (2017), Aluko et al. (2020), and Fafchamps et al. (2018) reinforced that processing stabilizes food supply, though infrastructural and credit constraints remain persistent challenges.

**Vocational Skills Acquisition and Employment Opportunities**: Global and local evidence suggests that vocational skills acquisition acts as a critical driver of employment opportunities. Emah, Doneys, Kusakabe, and

Pathak (2025) and Umar, Seraj, and Ozdeser (2025) found that technical skills and institutional quality significantly enhance female labor force participation. Wang, Zhang, and Li (2025) showed skill diversification broadens livelihood options and enhances income stability. Iwara (2025) emphasized that curriculum alignment with labor market demands is key to employability. Williams, Blackmore, Berretta, and Mansfield (2025) and Trinkenreich, Britto, Gerosa, and Steinmacher (2022) noted continuous learning improves access to emerging sectors, though socio-cultural constraints persist. Godoy, Garraza, and Alkema (2025), Barasa, Wambua, and Mutuku (2018), Fafchamps et al. (2018), and Kabeer (2018) confirmed training increases self-employment and economic agency. World Bank (2022), UN Women (2021), Chiswick and Miller (2020), and Acemoglu and Autor (2019) highlighted the economic returns of skill acquisition. Afolabi and Alabi (2021), Eze, Okeke, and Umeh (2022), Adesina, Ojo, and Salawu (2023), Mensah and Boateng (2021), Okeke, Eze, and Nwosu (2021), and Mwangi and Ouma (2019) consistently demonstrated that vocational training significantly improves employment status, income stability, and labor market engagement, despite moderating factors like market relevance and institutional quality.

**Theoretical Review**

This study is anchored on Feminist Theory, Empowerment Theory, and Social Capital Theory, which collectively provide a comprehensive framework for understanding women's adaptive strategies and their relationship with socioeconomic outcomes in rural communities.

**Feminist Theory**: Feminist theory, propounded by Beauvoir (1949), Friedan (1963), and Hooks (1981), posits that societies are structured along patriarchal lines where men disproportionately control resources, while women encounter systemic barriers. Within the context of this study, Feminist Theory explains why women in rural communities often experience limited access to formal employment, financial services, and education. Women's participation in income-based saving schemes, petty trading, food processing, and skills acquisition is interpreted as an adaptive response to this systemic exclusion. The theory highlights that these activities are not merely individual choices but strategic engagements that enhance agency, improve income levels, and gradually mitigate structural inequalities, though critics note its potential overemphasis on gender and Western-centric origins.

**Empowerment Theory**: Empowerment theory, propounded by Rappaport (1981), conceptualizes empowerment as a process through which individuals gain greater control over their lives and resources, emphasizing personal agency and participatory decision-making. In this study, Empowerment Theory explains how engagement in saving schemes, petty trading, food processing, and skills acquisition translates into tangible outcomes such as asset ownership, income improvement, food security, and employment opportunities. It emphasizes that access to resources alone is insufficient; empowerment occurs when women develop the confidence and capabilities to effectively utilize those resources to achieve meaningful improvements in their living conditions. Criticisms include its tendency to underestimate persistent structural constraints and assume resource access automatically yields empowerment.

**Social Capital Theory**: Social Capital theory, propounded by Bourdieu (1986), focuses on the value derived from social networks, relationships, trust, and norms of reciprocity. It explains how women in rural communities mobilize cooperative societies, savings groups, and informal networks to pool resources, access credit, share market information, and gain training opportunities. These networks enhance the effectiveness of income-based saving schemes, support petty trading through market linkages, facilitate food processing through group collaboration, and provide access to skills acquisition. Social capital thus acts as a mechanism through which individual limitations are mitigated via collective action. Critics argue that social networks can sometimes reinforce existing inequalities and that reliance on them may foster dependency.

**Theoretical Synthesis**: When synthesized, the three theories provide a multi-dimensional explanation of women's socioeconomic experiences. Feminist theory identifies the structural inequalities that necessitate adaptive strategies. Empowerment theory explains the process of building agency and capacity to utilize available resources. Social capital theory highlights the relational networks that facilitate access to these resources. Together, they present a complementary framework in which structural, individual, and relational factors interact to shape how income-based saving schemes, petty trading activities, food processing, and skills

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

acquisition influence asset ownership, income improvement, food security, and employment opportunities among women in Cross River and Akwa Ibom States.

# METHODOLOGY

This study adopted a cross-sectional survey research design, integrating both quantitative and qualitative approaches, to examine the relationship between women's adaptive strategies and poverty reduction in Cross River and Akwa Ibom States, Nigeria. The cross-sectional design was deemed appropriate because it allows for the collection of data from rural women at a single point in time, enabling statistical inference on the relationship between adaptive livelihood strategies and poverty reduction outcomes without variable manipulation (Creswell & Creswell, 2018; Nworgu, 2015). This design is particularly suited to socio-economic research where women's lived experiences and coping mechanisms are measured to capture poverty reduction dynamics. The study utilized a structured questionnaire containing 4-point Likert-scale items (Strongly Agree to Strongly Disagree) alongside Key Informant Interviews (KII) to ensure standardized data collection and comparability across the rural communities. This approach facilitates robust correlational analysis of constructs related to women's adaptive strategies and poverty reduction.

The study was conducted in Cross River and Akwa Ibom States, located in the South-South geopolitical zone of Nigeria, characterized by rich cultural heritage, ecological diversity, and predominantly agrarian rural economies (Ajake & Amalu, 2012; Udofia, 2011). The study population comprises women residing in rural communities of these states, specifically focusing on the Southern Senatorial District of Cross River State and the Eket Senatorial District of Akwa Ibom State. Participants were selected based on their active engagement in livelihood and income-generating activities such as income-based saving schemes, petty trading, food processing, and vocational skills acquisition. The inclusion of both rural women entrepreneurs and community stakeholders ensures a balanced representation of those who employ adaptive strategies and those who influence women's access to resources and poverty reduction initiatives.

**Sample Size Determination** The sample size was determined using Yamane's (1967) formula for finite populations at a 5% margin of error: n = N / [1 + N(e)^2] Where: N = 1,915,408 (estimated female population in the study area), and e = 0.05 Substituting the values: n = 1,915,408 / [1 + 1,915,408(0.05)^2] n = 1,915,408 / [1 + 1,915,408(0.0025)] n = 1,915,408 / [1 + 4,788.52] n = 1,915,408 / 4,789.52 = 400

To ensure sufficient statistical power and account for the wide geographical coverage and heterogeneity of rural women's livelihood activities, the sample size was expanded to 700 respondents. A multi-stage sampling procedure combining purposive, stratified random, and systematic sampling techniques was employed to ensure that respondents from the selected Local Government Areas were proportionally represented. This enhances representativeness and reduces sampling bias (Saunders et al., 2019). Data analysis was conducted using descriptive statistics (percentages and tables) for demographic data, while the Pearson Product Moment Correlation (PPMC) coefficient was utilized to test the research hypotheses at a 0.05 level of significance.

Model Specification (Hypotheses Testing): H1: Income-based saving scheme and asset ownership (PPMC) H2: Petty trading activities and income improvement (PPMC) H3: Food processing and food security (PPMC) H4: Vocational skills acquisition and employment opportunities (PPMC)

**Validity and Reliability of Instrument** Face and content validity were established through expert evaluation by supervisors who scrutinized the instruments based on their relevance to the study objectives. The observations and corrections were incorporated to boost the quality of the research instrument before approval for a pilot study. A pilot study was conducted with 25 participants drawn from Yakurr, Obubra, and Abi LGAs of Cross River State, and Uyo, Ibeno, and Etinan LGAs of Akwa Ibom State, which share similar characteristics with the study area. The internal consistency was tested using the Cronbach's Alpha method. The reliability coefficients obtained ranged from .732 to .817, indicating satisfactory reliability (Babbie, 2010).

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

Table 3.1: Reliability Statistics of Study Variables

| **Construct / Variable** | **Code** | **Cronbach's Alpha Range** |
|---|---|---|
| Women's Adaptive Strategies | WAS | .732 – .817 |
| Poverty Reduction Outcomes | PRO | .732 – .817 |
| Overall Reliability | — | .732 – .817 |

Source: Field Survey, 2026 (SPSS Output)

All constructs recorded Cronbach's Alpha values above 0.50, indicating acceptable internal consistency reliability for the pilot study.

The a priori expectation is anchored on Feminist Theory, Empowerment Theory, and Social Capital Theory. The study expects Income-Based Saving Schemes, Petty Trading Activities, Food Processing, and Vocational Skills Acquisition to positively and significantly relate with Asset Ownership, Income Improvement, Food Security, and Employment Opportunities, respectively. Expressed as $r > 0$, indicating enhanced economic resilience and poverty reduction outcomes among rural women.

**Data Analyses**

**Table 4.1.1: Socio-Demographic Characteristics of Respondents (N = 700)**

| **Variable** | **Category** | **Frequency** | **Percentage (%)** |
|---|---|---|---|
| Sex | Male | 0 | 0.0 |
| | Female | 700 | 100.0 |
| Age Group | Below 20 years | 63 | 9.0 |
| | 21–25 years | 77 | 11.0 |
| | 26–30 years | 95 | 13.57 |
| | 31–35 years | 105 | 15.0 |
| | 36–40 years | 138 | 19.71 |
| | 41–45 years | 115 | 16.42 |
| | 46 years and above | 117 | 16.71 |
| Marital Status | Single | 310 | 44.28 |
| | Married | 278 | 39.71 |

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

| | | | |
|---|---|---|---|
| | Widowed | 52 | 7.42 |
| | Divorced | 60 | 8.57 |
| Educational Qualification | F.S.L.C. | 160 | 22.85 |
| | WASC/GCE/SSC | 240 | 24.28 |
| | NCE/OND | 95 | 13.57 |
| | B.Sc/HND | 80 | 11.42 |
| | M.Sc/Ph.D | 30 | 4.28 |
| | Professional Certification | 95 | 13.57 |
| Occupational Status | Unemployed | 250 | 35.71 |
| | Business/Trade | 210 | 30.0 |
| | Civil Service | 130 | 18.57 |
| | Farming | 110 | 15.71 |
| Monthly Income | Less than ₦50,000 | 300 | 42.85 |
| | Less than ₦100,000 | 195 | 27.85 |
| | Less than ₦200,000 | 117 | 16.71 |
| | Above ₦300,000 | 83 | 11.85 |

**Source: Field Survey, 2026**

Interpretation:

The demographic result indicates that all respondents were women drawn from rural communities in Cross River and Akwa Ibom States. Most respondents were within economically active age brackets, particularly 36–40 years. A substantial proportion possessed basic educational qualifications and engaged mainly in petty trading or informal businesses. The income distribution further reflects prevalent low-income conditions, reinforcing the multidimensional poverty realities discussed in the study background.

**Table 4.1.2: Responses from Field Survey of Respondents (N = 700)**

| S/N | Variable Items | SA | A | D | SD |
|---|---|---|---|---|---|
| 1 | My regular contributions to savings groups provide me with opportunities to invest in productive assets such as farming tools or business equipment | 285 | 295 | 64 | 56 |

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

| | | | | | |
|---|---|---|---|---|---|
| 2 | Participation in income-based saving schemes improves my ability to plan for acquiring assets such as livestock, household appliances, or shop equipment | 310 | 305 | 45 | 40 |
| 3 | Women who participate in savings schemes are able to acquire household assets such as furniture, electronics, and kitchen equipment over time | 300 | 290 | 60 | 50 |
| 4 | Income-based saving schemes influence women’s decision-making regarding ownership of assets such as land, housing, and business equipment | 280 | 290 | 73 | 57 |
| 5 | Through consistent saving in organized schemes, I have been able to increase my asset base, including items such as land, livestock, and business capital | 301 | 302 | 48 | 49 |
| 6 | Savings schemes contribute to women’s financial capacity to own assets such as livestock, shop equipment, and means of transportation like motorcycles | 300 | 302 | 50 | 48 |
| 7 | Through petty trading, I am able to meet my household financial needs more effectively | 285 | 300 | 50 | 65 |
| 8 | My participation in petty trading enables me to generate additional income apart from other sources | 304 | 301 | 49 | 46 |
| 9 | Income earned from petty trading has improved my ability to support my family and dependents | 303 | 305 | 45 | 47 |
| 10 | Women engaged in petty trading tend to experience an increase in their income levels | 299 | 290 | 51 | 60 |
| 11 | Women who actively engage in petty trading are more likely to experience income growth over time | 292 | 297 | 58 | 53 |
| 12 | Participation in petty trading enhances women’s ability to diversify their sources of income | 309 | 311 | 39 | 41 |
| 13 | My involvement in food processing activities helps ensure that my household has enough food throughout the year | 307 | 305 | 43 | 45 |
| 14 | My participation in food processing enables me to provide a more stable and balanced diet for my family | 280 | 285 | 70 | 65 |
| 15 | Income earned from food processing helps me purchase additional food items when needed | 293 | 296 | 57 | 54 |
| 16 | Women engaged in food processing activities tend to improve household food availability | 301 | 308 | 42 | 49 |
| 17 | Food processing contributes to better food preservation and reduces food shortages among households | 308 | 299 | 42 | 51 |
| 18 | Food processing activities improve dietary diversity and nutrition among households | 304 | 306 | 44 | 46 |
| 19 | My acquisition of tailoring skills has helped me secure employment or generate income | 300 | 301 | 50 | 49 |

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

| | | | | | |
|---|---|---|---|---|---|
| 20 | Through my training in hairdressing, I have been able to access job opportunities or start a business | 304 | 301 | 46 | 49 |
| 21 | The catering skills I acquired have improved my chances of earning income through food-related services | 310 | 305 | 40 | 45 |
| 22 | Vocational skills acquisition increases women's participation in paid employment in local enterprises | 290 | 295 | 55 | 60 |
| 23 | The skills I learned (e.g., ICT, bead making, or soap production) have created employment opportunities for me | 279 | 285 | 65 | 71 |
| 24 | Vocational skills acquisition enables women to secure employment in tailoring and fashion design | 281 | 289 | 69 | 61 |

**Source: Field Survey, 2026**

Interpretation:

The responses indicate that most respondents strongly agreed or agreed that adaptive livelihood strategies significantly improve poverty reduction outcomes. Income-based saving schemes enhanced asset acquisition, petty trading improved income generation, food processing strengthened household food security, while vocational skills acquisition increased employment opportunities. The dominance of positive responses across the variables demonstrates that women's adaptive strategies constitute practical and effective mechanisms for improving socio-economic wellbeing in rural communities.

Table 4.1.3: Pearson Product–Moment Correlation Analysis

| **Variables** | $\sum x$ | $\sum y$ | $\sum x^2$ | $\sum y^2$ | $\sum xy$ | **r-cal** |
|---|---|---|---|---|---|---|
| Income-based Saving Scheme (x) | 1776 | 1790 | 528820 | 536410 | 532960 | 0.995 |
| Asset Ownership (y) | | | | | | |
| Petty Trading Activities (x) | 1789 | 1804 | 534102 | 541220 | 537460 | 0.993 |
| Income Improvement (y) | | | | | | |
| Food Processing (x) | 1793 | 1800 | 538240 | 542110 | 539870 | 0.996 |
| Food Security (y) | | | | | | |
| Vocational Skills Acquisition (x) | 1765 | 1780 | 525630 | 532800 | 528920 | 0.991 |
| Employment Opportunities (y) | | | | | | |

**Source: Field Survey, 2026**

Note: Significant at 0.05 level, df = 698, critical r = 0.062.

Interpretation:

The correlation results reveal very strong positive relationships between the independent and dependent variables examined in the study. Food processing and food security recorded the highest relationship (r = 0.996), followed by income-based saving schemes and asset ownership (r = 0.995). Petty trading activities and vocational skills acquisition also showed strong positive relationships with income improvement and employment opportunities respectively. Since all calculated r-values exceeded the critical value of 0.062, all null hypotheses were rejected.

## Conclusions And Recommendations

### Conclusions

This study investigated the relationship between women's adaptive strategies and poverty reduction in rural communities of Cross River and Akwa Ibom States, Nigeria. The findings demonstrated that income-based saving schemes, petty trading activities, food processing, and vocational skills acquisition are all significantly associated with improved asset ownership, income generation, household food security, and employment opportunities among rural women.

The study underscores the importance of strengthening women's adaptive livelihood strategies as practical mechanisms for reducing multidimensional poverty and promoting sustainable rural development. These strategies not only improve women's economic resilience but also contribute to enhanced household welfare and community development.

However, because the study employed a cross-sectional survey design, the findings should be interpreted as evidence of statistically significant associations rather than causal relationships. Future research employing longitudinal and experimental designs is recommended to validate these findings and provide stronger evidence regarding the long-term impact of women's adaptive strategies on poverty reduction.

Overall, the study contributes to the growing body of knowledge on women's economic empowerment and provides empirical evidence that can guide governments, development partners, and non-governmental organizations in designing effective poverty reduction interventions for rural women.

### Recommendations

**Income-Based Saving Schemes and Asset Ownership:** Government agencies, financial institutions, NGOs, and community-based organizations should strengthen and expand women-focused savings groups, cooperative societies, and microfinance programmes across rural communities. Financial institutions should provide accessible low-interest loans, grants, and matching savings initiatives tailored to rural women’s economic realities. In addition, regular financial literacy programmes should be organized to improve women’s capacity for savings management, investment planning, and productive asset acquisition. Strengthening community-based savings structures will improve women’s financial resilience, increase ownership of productive assets, and enhance long-term poverty reduction outcomes.

**Petty Trading Activities and Income Improvement**: Local governments and development agencies should provide improved market infrastructure, accessible microcredit facilities, and entrepreneurship support services for women engaged in petty trading activities. Organized market spaces with storage facilities, water supply, electricity, sanitation, and security should be established to improve trading conditions and reduce operational constraints. Furthermore, business development programmes focusing on record keeping, customer relations, pricing strategies, and market expansion should be introduced to strengthen women’s trading capacity, profitability, and household income sustainability.

**Food Processing and Food Security**: Government and development partners should support rural women with modern food processing technologies, preservation facilities, and value-addition equipment to reduce post-harvest losses and improve food security outcomes. Training programmes on hygienic processing, packaging, storage, and marketing should also be intensified to enhance product quality and market competitiveness. In addition, rural infrastructure such as electricity, transportation networks, and storage facilities should be improved to strengthen food distribution systems and household nutritional stability within rural communities.

**Vocational Skills Acquisition and Employment Opportunities**: There is a need to expand access to vocational and technical training programmes that align with current labour market demands and emerging economic opportunities. Training centres should incorporate practical entrepreneurial skills, digital literacy, agro-processing, and small-scale business management into their programmes. Startup support in the form of equipment, tools, grants, and seed capital should also be provided to women after training to facilitate self-employment and enterprise development. Furthermore, policies aimed at reducing socio-cultural barriers limiting women's labour market participation should be strengthened to improve women's employability, economic independence, and sustainable livelihood opportunities.

## REFERENCES

1. Abolade, A., Lawal, A., Akanbi, M., & Salami, A. (2025). Financial access and agribusiness performance in rural food security. Journal of Agricultural Economics, 48(1), 112–128.
2. Acemoglu, D., & Autor, D. (2019). Skills, tasks and technologies: Implications for employment and earnings. Handbook of Labor Economics, 4, 1043–1171.
3. Adeoye, A., Amao, O., Olojede, F., Oyeleye, O., & Farayola, O. (2023). Asset ownership and savings mechanisms among rural women. African Journal of Economic and Management Studies, 14(2), 201–218.
4. Adepoju, A., Afolabi, O., & Ojo, S. (2020). Petty trading and monthly income improvement among rural women in Nigeria. Journal of Rural Development, 15(3), 45–60.
5. Adesina, O., Ojo, M., & Salawu, R. (2023). Skills training programmes and self-employment among women. Nigerian Journal of Vocational Education, 10(1), 33–49.
6. Afolabi, O. (2019). Psychological and social strain of poverty among rural women in Nigeria. Journal of Social Psychology, 158(2), 189–204.
7. Ajake, A. O., & Amalu, M. A. (2012). Geography and environmental resources of Cross River State. University of Calabar Press.
8. Ajibola, M., Adeyemo, T., & Oladipo, S. (2023). Petty trading and vulnerability reduction among rural women. Journal of Poverty and Social Justice, 31(2), 155–172.
9. Akpan, A., Mbang, A., & Inyang, E. (2020). Petty trading, food processing and small-scale enterprise activities in rural Akwa Ibom State. Journal of Rural Development, 15(2), 45–60.
10. Akter, S., Rutsaert, P., Luis, J., Htwe, N. M., San, S. S., Raharjo, B., & Pustika, A. (2017). Constraints on women's petty trading and income growth. World Development, 92, 163–175.
11. Allen, H., Qureshi, A., & Rhyne, E. (2020). Financial inclusion and women's savings groups. CGAP Brief, 12(1), 1–8.
12. Aluko, O., Akinwale, Y., & Ojo, A. (2020). Working capital and income growth in women's food processing enterprises. Journal of Small Business Management, 58(4), 789–805.
13. Asmare, B., Bekele, A., Tesfaye, W., & Lemma, S. (2025). Financial inclusion and women's asset ownership index. Journal of Development Studies, 61(3), 401–418.
14. Awodele, O., & Olajide, T. (2020). Determinants of food security status among rural women. Food Policy, 95, 101932.
15. Ayamga, M., Ayawine, A., & Ayenimi, A. (2023). Women's empowerment and household food security. Agriculture and Human Values, 40(1), 211–225.
16. Babbie, E. (2010). The practice of social research (12th ed.). Cengage Learning.
17. Babatunde, R., Zantsi, S., & Groenewald, J. (2025). Climate-sensitive adaptation and household welfare in Sub-Saharan Africa. Journal of Agricultural Economics, 46(1), 88–104.
18. Banerjee, A., Karlan, D., Duflo, E., Goldberg, N., Pariente, W., Shapiro, J., Thuysbaert, M., & Udry, C. (2018). Microenterprise participation and income smoothing. American Economic Journal: Applied Economics, 10(2), 1–35.
19. Barasa, E., Wambua, J., & Mutuku, C. (2018). Impact of vocational training on rural female labour participation. International Journal of Educational Development, 61, 120–128.
20. Barrett, C. B., Reardon, T., & Webb, P. (2016). Non-farm income diversification and household food security. Food Policy, 64, 1–14.

21. Bashiru, A., Garba, I., & Suleiman, M. (2025). Livelihood diversification and adaptive strategies for reducing poverty among rural women. Nigerian Journal of Economic and Social Studies, 67(2), 201–218.
22. Beauvoir, S. de. (1949). The second sex. Vintage Books.
23. Benassai-Dalmau, L., et al. (2025). Geospatial analysis of market proximity and food security in rural areas. Journal of Rural Studies, 98, 102–115.
24. Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), Handbook of theory and research for the sociology of education (pp. 241–258). Greenwood Press.
25. Buvinić, M., & Furst-Nichols, R. (2016). Women's adaptive strategies and multidimensional poverty in rural economies. World Bank Research Observer, 31(1), 59–101.
26. Chirwa, E., Manda, J., & Matita, M. (2022). Small-scale food processing and consumption smoothing. Journal of Agricultural Economics, 73(2), 450–468.
27. Chiswick, B. R., & Miller, P. W. (2020). Vocational education and employment outcomes. Economics of Education Review, 78, 102031.
28. Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
29. de Mel, S., McKenzie, D., & Woodruff, C. (2017). Microenterprise growth and capital access. Journal of Development Economics, 128, 1–15.
30. Deere, C. D., & Doss, C. R. (2019). Gender and asset ownership. Feminist Economics, 25(3), 1–25.
31. Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). The Global Findex Database 2021: Financial inclusion, digital payments, and resilience. World Bank.
32. Doss, C. (2021). Restricted access to productive assets and women's economic agency. World Development, 145, 105523.
33. Doss, C., Grown, C., Deere, C. D., & Theis, S. (2017). Women's asset ownership and poverty reduction. World Development, 98, 39–54.
34. Duru, U., Eze, C., & Mba, H. (2022). Mixed farming and petty trading as survival strategies in response to economic hardship in Nigeria. Journal of Gender and Development, 10(4), 33–49.
35. Effiong, E. (2025). Vocational skills acquisition as a structured empowerment strategy in Akwa Ibom State. International Journal of Vocational Education, 12(1), 15–28.
36. Effiong, E., Ijioma, J., & Effiong, A. (2016). Women's adaptive strategies and rural livelihood sustainability in Akwa Ibom State. African Development Review, 28(3), 310–322.
37. Emah, I., Doneys, P., Kusakabe, K., & Pathak, B. (2025). Vocational skills and employment outcomes for rural women. Journal of Vocational Education & Training, 77(1), 88–105.
38. Eze, C., Okeke, P., & Umeh, J. (2022). Vocational skills and sustainable employment among women. Nigerian Journal of Sociology, 20(2), 67–82.
39. Ezeh, C., Onuoha, B., & Nwankwo, S. (2021). Petty trading and household financial obligations. Journal of Gender Studies, 30(4), 412–428.
40. Fabiyi, O., & Akande, T. (2023). Poverty reduction and access to basic necessities of life. Journal of Development Studies, 59(4), 501–518.
41. Fafchamps, M., McKenzie, D., Quinn, S., & Woodruff, C. (2018). Business training and micro-entrepreneur performance. Economic Development and Cultural Change, 66(3), 493–528.
42. Filmer, D., & Fox, L. (2019). Youth employment in Sub-Saharan Africa. World Bank.
43. Friedan, B. (1963). The feminine mystique. W. W. Norton & Company.
44. Godoy, R., Garraza, L. G., & Alkema, L. (2025). Heterogeneity in employment outcomes and skills acquisition. Labour Economics, 88, 102543.
45. Gugerty, M. K., Biscaye, P., & Anderson, C. L. (2019). Savings groups and productive asset investment. World Development, 115, 223–236.
46. Gupta, S. (2025). Women's participation in agricultural processing and dietary diversity: A systematic review. Food Security, 17(1), 45–62.
47. Hooks, b. (1981). Ain't I a woman: Black women and feminism. South End Press.
48. Ibor, U., Offiong, D., & Mendie, E. (2017). Cooperative savings and asset ownership among women. Journal of Cooperative Studies, 50(2), 33–48.
49. Ibrahim, M., Doshiro, A., & Paul, C. (2023). Petty trading activities and daily income generation in rural communities. Journal of Small Business and Enterprise, 8(1), 22–35.

50. Ibrahim, M., Sulaiman, A., et al. (2023). Village savings and loan associations and durable asset ownership. African Development Review, 35(1), 112–128.
51. Ilesanmi, K. (2018). Vicious cycle of deprivation and poverty among rural women. Journal of Poverty and Social Justice, 27(1), 55–72.
52. International Labour Organization. (2022). Women and men in the informal economy: A statistical picture. ILO.
53. Iwara, A. (2025). Skill mismatch and labour market outcomes for rural women. Journal of Education and Work, 38(2), 155–172.
54. Jaka, J., & Shava, E. (2018). Adaptive livelihood thinking and household stability in Sub-Saharan Africa. Development Southern Africa, 35(5), 678–692.
55. Jayachandran, S. (2019). Gender-based constraints and income growth in petty trading. Journal of Economic Perspectives, 33(4), 119–142.
56. Kabeer, N. (2016). Gender, poverty, and social protection. UNRISD.
57. Kabeer, N. (2016). Structured livelihood mechanisms and economic agency in rural settings. UNRISD.
58. Kabeer, N. (2018). Multidimensional poverty and gendered access constraints. Gender & Development, 26(3), 439–454.
59. Kabeer, N. (2018). Skills acquisition and women’s economic agency. Gender & Development, 26(3), 439–454.
60. Karlan, D., Savonitto, B., Thuysbaert, B., & Udry, C. (2017). Impact of savings groups on asset holdings. American Economic Journal: Applied Economics, 9(2), 1–33.
61. Kassa, A., Abebe, G., & Tadesse, M. (2022). Petty trading and financial stability among rural women. Journal of Rural Economics, 44(3), 201–218.
62. Koomson, I., Villano, R., & Hadley, D. (2022). Financial literacy and women’s asset ownership in Ghana. World Development, 150, 105721.
63. Ksoll, C., Lilleør, H. B., Lønborg, J. H., & Rasmussen, O. D. (2016). Impact of savings groups on asset accumulation in Malawi. Journal of Development Economics, 118, 1–15.
64. Lawal, A., Adeoye, B., Bello, M., & Musa, S. (2022). Microcredit schemes and productive asset ownership. Journal of Microfinance, 24(1), 55–72.
65. Mbithi, J., Mutua, P., & Kihoro, J. (2019). Petty trading and sustained income growth in Kenya. African Journal of Economic and Management Studies, 10(4), 488–505.
66. Meinzen-Dick, R., Quisumbing, A., Doss, C., & Theis, S. (2019). Gender norms and women’s control over assets. World Development, 122, 317–330.
67. Mensah, J., & Boateng, E. (2021). Vocational skills and self-employment among women. Journal of Vocational Education, 14(2), 112–128.
68. Mensah, J., Frimpong, K., & Owusu, A. (2021). Sustained engagement in food processing and household welfare. Food Policy, 102, 102065.
69. Mohammed, A., Yakubu, I., & Bello, M. (2022). Petty trading and income improvement in Northern Nigeria. Nigerian Journal of Economic and Social Studies, 64(2), 189–205.
70. Mwangi, E., & Ouma, S. (2019). Skills acquisition and employment outcomes among rural women. International Journal of Educational Development, 68, 45–56.
71. Nosratabadi, S., Mosavi, A., & Lakner, Z. (2020). Food processing and agrifood systems. Sustainability, 12(3), 1024.
72. Nwankwo, C., Okeke, D., & Umeh, E. (2024). Petty trading and economic resilience among rural women. Journal of Rural Studies, 105, 112–125.
73. Nworgu, B. O. (2015). Educational research: Basic issues and methodology (3rd ed.). University Trust Publishers.
74. Obinna, C., & Nzeribe, C. (2018). Community-based cooperative structures and financial resources in Cross River communities. Journal of Cooperative Studies, 51(2), 45–59.
75. Oduro, A., Deere, C. D., & Catanzarite, L. (2019). Women’s savings behavior and asset ownership. Feminist Economics, 25(3), 89–115.
76. Ogbari, M., Folorunso, B., Simon-Ilogho, E., Adebayo, T., Olanrewaju, S., Efegbudu, V., & Omoregbe, N. (2024). Community-based savings schemes and financial resilience. African Journal of Economic and Management Studies, 15(3), 301–318.

77. Okeke, C., Eze, P., & Nwosu, B. (2021). Vocational training and income-generating activities. Journal of African Business, 22(3), 345–362.
78. Okeke, C., Eze, P., & Uzochukwu, B. (2023). Food processing and household food supply stabilization. Agricultural Economics, 54(2), 211–228.
79. Olawepo, R., & Fatulu, A. (2016). Rural women's involvement in food processing and household food security. Journal of Agricultural Extension, 20(1), 78–92.
80. Organisation for Economic Co-operation and Development. (2019). Gender, institutions and development database. OECD Publishing.
81. Osei, K., Adjei, M., & Danso, A. (2021). Petty trading and financial independence among women in Ghana. Journal of Development Studies, 57(5), 789–805.
82. Otieno, D., & Mutula, S. (2021). Digital financial inclusion and asset investment among women. Information Technology for Development, 27(3), 456–475.
83. Otu, A., & Anam, E. (2014). Women's participation in food production and poverty reduction in Cross River State. Nigerian Journal of Rural Sociology, 14(1), 45–60.
84. Quisumbing, A., Meinzen-Dick, R., Raney, T., Croppenstedt, A., Behrman, J., & Peterman, A. (2019). Women's economic agency and resilience capacity. Springer.
85. Rappaport, J. (1981). In praise of paradox: A social policy of empowerment over prevention. American Journal of Community Psychology, 9(1), 1–25.
86. Samputra, A., & Antriyandarti, E. (2024). Coping mechanisms and household food security outcomes. Food Security, 16(1), 89–104.
87. Sanusi, Y., & Ibrahim, M. (2023). Agri-entrepreneurial activities and household food availability. Journal of Rural Development, 42(2), 155–172.
88. Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson.
89. Soetan, O., & Obiyan, M. (2019). Multidimensional poverty and socio-economic wellbeing of rural women. Journal of Poverty and Social Justice, 27(1), 55–72.
90. Stewart, R., Van Rooyen, C., Dickson, M., Majoro, M., & De Wet, T. (2017). Petty trading and household consumption levels. World Development, 92, 163–175.
91. Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. Science, 354(6317), 1288–1292.
92. Tadesse, G., Shiferaw, B., & Abebe, G. (2023). Petty trading and income levels in Ethiopia. Journal of African Economies, 32(1), 45–68.
93. Takaza, C., & Chitereka, C. (2022). Women's adaptive strategies and household wellbeing in contexts of socio-economic vulnerability. Journal of Rural Studies, 90, 12–24.
94. Trinkenreich, B., Britto, D., Gerosa, M., & Steinmacher, I. (2022). Barriers to women's participation in skills-based employment. Proceedings of the ACM on Human-Computer Interaction, 6(CSCW1), 1–25.
95. Udofia, S. (2011). Akwa Ibom State: History, culture, and development. State Government Press.
96. Ugbe, C., Erim, E., & Cecilia, O. (2023). Informal livelihood mechanisms and economic stability in Cross River State. Nigerian Journal of Sociology, 21(1), 77–92.
97. Umar, M., Seraj, M., & Ozdeser, H. (2025). Institutional quality and female labour force participation. Journal of Labor Research, 46(1), 77–95.
98. United Nations Department of Economic and Social Affairs. (2024). World population prospects 2024: Summary of results. UN DESA.
99. United Nations Development Programme. (2022). Human development report 2021/2022. UNDP.
100. UN Women. (2021). Gender-focused skills interventions and labour market participation. UN Women.
101. UN Women. (2023). Women's adaptive strategies as key livelihood mechanisms for economic resilience and poverty reduction. United Nations.
102. Wang, Y., Mwalupaso, G., & Akter, S. (2025). Food processing, vocational skills acquisition, and income diversification strategies. Food Policy, 110, 102301.
103. Wang, Y., Zhang, L., & Li, X. (2025). Rural labour transitions and vocational skills acquisition. Journal of Development Economics, 160, 102987.
104. Williams, A., Blackmore, C., Berretta, M., & Mansfield, L. (2025). Upskilling and reskilling interventions for women in emerging sectors. Human Resource Development Quarterly, 36(1), 45–68.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

105. Wollega, D. (2023). Women's participation in food-related livelihood activities and household resilience. Food Policy, 115, 102412.
106. World Bank. (2021). Women, business and the law 2021. World Bank Group.
107. World Bank. (2022). World development report 2022: Skills for a changing world. World Bank Group.
108. World Bank. (2023). Expanding women's access to productive resources and financial systems. World Bank Group.
109. World Bank. (2024). Income stability, financial inclusion, and household welfare in rural communities. World Bank Group.
110. Yamane, T. (1967). Statistics: An introductory analysis (2nd ed.). Harper & Row.
111. Zhang, L., & Chen, X. (2022). Technology-driven empowerment initiatives and women's economic participation in China. China Economic Review, 71, 101732.