



## COPING STRATEGIES ADOPTED BY RURAL WOMEN AMIDST HIGH COST OF LIVING IN ADAMAWA STATE, NIGERIA

<sup>1</sup>Stephen, G. \*S., <sup>2</sup>Sini, T. and <sup>3</sup>Christopher, H.

<sup>1</sup>Department of Agricultural Education, School of Vocational and Technical Education  
Adamawa State College of Education, Hong. P.M.B 2237, Yola

<sup>2</sup>Department of Agricultural Education, School of Vocational and Technical Education  
Adamawa State College of Education, Hong

<sup>3</sup>Federal University Wukari, Faculty of Agriculture, Department of Agricultural Economics and Extension

\*Correspondence Email: [gadonstephen@gmail.com](mailto:gadonstephen@gmail.com)

GSM: +2347038817780; +2348167626749

### ABSTRACT

The study examines the coping strategies adopted by rural women in Adamawa State, Nigeria, A descriptive survey design was used, employing structured questionnaires to collect data from 504 respondents across 18 rural communities. Data analysis involved the use of descriptive statistics such as percentages, means, and ranking to assess coping strategies and a constraint-ranking scale. Findings show that non-agricultural strategies such as petty trading (25.2%), casual labor (24.8%), and hairdressing (15.9%) were common. Formal credit access was low (5.3%), while many women modified their diet (37.6%) or skipped meals (9.3%). Agricultural strategies included rainy-season farming (76.1%), poultry (31.4%), and livestock farming (28.3%). Key constraints were lack of finance (76.6%), high farm input costs (75.7%), and transportation expenses (76.1%). Socio-cultural barriers and gender disparities also limited resilience. These findings underscore the urgent need for integrated policy measures that expand access to formal financial services (microfinance and cooperatives), reduce transportation and input costs, and strengthen extension and information delivery systems. The study recommends prioritizing the expansion of affordable formal financial services such as microcredit and cooperative lending and invest in subsidized transport and input supply schemes.

**Keywords:** Agriculture, Economic, Finance, Hardship, Rural, and Women.

### INTRODUCTION

Rural women in developing countries, including Nigeria, face heightened economic hardships due to inflation, currency devaluation, and fuel subsidy removal (Anyagogu & Onuah, 2024). Malek *et al.* (2022) reported that over 71 million people globally fell into poverty within three months due to rising food and energy prices, with Nigeria's inflation reaching 29.9 percent in January 2024 (Julian, 2024). In Adamawa State, insecurity, conflict, and environmental challenges further exacerbate food insecurity (Malek *et al.*, 2022; Amadhu & Ahmed, 2023). Despite agriculture being their primary livelihood (Adamawa State Government, 2016), rural women face barriers such as limited access to land, finances, and information, alongside heavy unpaid care responsibilities (Amadhu & Ahmed, 2023). This study examines their coping strategies amid economic pressures, exploring the non-agricultural strategies, agricultural strategies, and constraints. Given the scarce research on this topic, particularly in Adamawa State, the findings will enhance understanding of gendered economic impacts, inform policies on microfinance, vocational training, and resource access, and support targeted interventions for improving rural women's economic resilience. The study examines the coping strategies of rural women amid economic pressures in Adamawa State, focusing on both non-agricultural and



agricultural approaches, as well as the constraints hindering their adoption. Given the scarce research on this topic, particularly in this region, the findings aim to enhance understanding of gendered economic impacts, inform policies on microfinance, vocational training, and resource access, and support targeted interventions for improving rural women's economic resilience.

## **MATERIALS AND METHOD**

### **The Study Area**

Adamawa State, Nigeria, was selected for this study due to the economic and social challenges faced by rural women. The state covers 38,823 km<sup>2</sup>, with 28,730 km<sup>2</sup> of arable land, and has a tropical wet and dry climate, experiencing a dry season from November to March and a rainy season from April to October (Adebayo, 1999; Adamawa State Government, 2016; FAO, 2019). Annual rainfall varies from 1,600 mm in the south to 700–1,050 mm in the north and northwest (Adebayo *et al.*, 2012; Jamala and Oke, 2013; FAO and ICRISAT, 2019).

The state comprises three agro-ecological zones—Southern Guinea Savannah, Northern Guinea Savannah, and Sudan Savannah—and shares borders with Taraba, Gombe, and Borno States, as well as Cameroon. It has 21 Local Government Areas (LGAs) and a population exceeding 3.17 million (NPC, 2006; Ferlay *et al.*, 2012). With 70–90% of the workforce engaged in subsistence farming (Adamawa State Government, 2016), the state's agricultural dependence and socio-economic hardships make it an ideal setting for studying rural women's coping strategies amid rising living costs.

### **Sampling Techniques and Sample Size**

A multistage sampling technique was used to select respondents. First stage, the three geopolitical zones of Adamawa State (Southern, Central, and Northern) were purposively selected. In the second stage, nine LGAs (three from each zone) were proportionately chosen. In the third stage, two rural communities were randomly selected from each LGA, totaling 18 communities. Finally, 28 rural women were randomly selected from each community, resulting in a total sample size of 504 respondents.

### **Methods of Data Analysis**

Data collection involved use of structured questionnaires. Data were analysed using descriptive statistics (mean scores and ranking). The study used a Likert-type scale to assess the frequency of coping strategies, with responses ranging from Always (4 points) to Never (1 point). The mean cut-off score, calculated as  $(A \times Z) / N$ , classified strategies with mean scores  $\geq 2.5$  as frequently employed and those below 2.5 as infrequent. Constraints were evaluated on a three-point scale (3 = Serious, 2 = Mild, 1 = Not a Constraint) and ranked from highest to least constraint.

## **RESULTS AND DISCUSSION**

### **Non-agricultural coping strategies adopted by the respondents amidst high cost of living**

The result in Table 1 indicated that rural women in Adamawa State had adopted various non-agricultural coping strategies to manage rising living costs. Many had relied on the informal sector for financial stability, with 15.9% engaging in hair plaiting or barbering, 25.2% in petty trading, and 24.8% in casual labor, which reflected broader livelihood diversification trends (World Bank, 2023). Formal credit utilization was low, with only 5.3% consistently accessing microfinance bank loans and 8.9% using cooperatives, while informal sources such as family

(13.5%) and friends (13.3%) were more commonly relied upon, thereby highlighting financial inclusion barriers (Oyadeyi *et al.*, 2024). Many women had adjusted their consumption patterns, with 37.6% frequently modifying their diet and 9.3% skipping meals, which posed long-term health risks (Nigerian Economic Summit Group, 2023). Some had resorted to distress strategies, including selling personal assets (10%) and withdrawing children from school (6%), which threatened long-term economic stability and human capital development (Central Bank of Nigeria, 2021). Additionally, 9.1% had depended on NGO relief materials, which underscored the role of humanitarian aid while also revealing the risks of over-reliance (Oyadeyi *et al.*, 2024). These findings highlighted the need for policies that improved access to formal credit, financial literacy, and small-scale enterprise support. Strengthening social protection programs focused on food security and education was deemed essential for reducing economic hardship and building resilience.

**Table 1: Non-agricultural coping strategies adopted by the respondents amidst high cost of living**

Non-agricultural activities	Always	Occasionally	Rarely	Never	Mean
Plaiting of hair/barbing	72(15.9)	146(32.3)	112(24.8)	122(27.0)	2.63
Credit from MFBs	24(5.3)	88(19.5)	95(21.0)	245(54.2)	3.24
Trading/Petty Trading	114(25.2)	108(23.9)	82(18.14)	148(32.7)	2.58
Credit from cooperative organization	40(8.9)	82(18.1)	104(23.0)	226(50.0)	3.14
Tailoring	64(14.2)	92(20.4)	57(12.6)	239(52.9)	3.04
Relief materials from NGOs	41(9.1)	86(19.0)	106(23.5)	219(48.5)	3.11
Gift from family members	60(13.3)	225(49.8)	80(17.7)	87(19.3)	2.43
Gift from friends	61(13.50)	239(52.9)	100(22.1)	52(11.5)	2.32
Purchasing food on credit	56(12.4)	80(17.7)	143(31.6)	173(38.3)	2.96
Changing diet	170(37.6)	165(36.5)	57(12.6)	60(13.3)	2.02
Loan from local lenders	33(7.3)	105(23.2)	124(27.4)	190(42.0)	3.04
Selling of firewood or charcoal	81(17.9)	52(11.5)	53(11.7)	266(58.9)	3.12
Withdrawing children from school	27(6.0)	59(13.1)	75(16.6)	291(64.4)	3.39
Skipping meal	42(9.3)	134(29.7)	149(33.0)	126(27.9)	2.80
Selling of personal asset	45(10.0)	91(20.1)	104(23.0)	212(46.9)	3.07
Catering	52(11.5)	89(19.7)	82(18.1)	229(50.7)	3.08
Causal labourer	112(24.8)	128(28.3)	120(26.6)	92(20.4)	2.42

Source: Field survey (2025)

### Agricultural coping strategies adopted by the respondents amidst high cost of living

The results in Table 2 showed that 76.1% of rural women in Adamawa State engaged in rainy season crop farming because it required lower investments, making it the most common agricultural coping strategy (Yusuf *et al.*, 2021). Rabbit production (mean = 3.42) and fish farming (mean = 3.31) had low adoption rates, with 71.5% and 65.5% of respondents, respectively, never participating due to high capital and technical expertise requirements, which was similar to the challenges reported in Burkina Faso (Kazianga and Udry, 2006). Poultry (mean = 2.71) and livestock farming (mean = 2.72) exhibited moderate participation, with 31.4% and 28.3% of respondents occasionally engaging, respectively. Rising feed costs had been a major constraint, prompting farmers in South-West Nigeria to adopt cost-saving strategies such as compounded feed and integrated farming (Ojo *et al.*, 2023). Additionally, selling farm waste (mean = 2.52) provided extra income and promoted sustainability, with 34.7% of respondents occasionally involved. To cushion economic challenges, many rural women had supplemented their agricultural activities

with petty businesses and off-farm engagements, a trend that had also been observed among yam farmers in Ekiti State (Yusuf *et al.*, 2021).

**Table 2: Agricultural coping strategies adopted by the respondents amidst high cost of living**

Agricultural activities	Always	Occasionally	Rarely	Never	Mean
Vegetable farming	120(26.6)	128(28.3)	70(15.5)	134(29.7)	2.48
Poultry production	69(15.3)	142(31.4)	92(20.4)	149(33.0)	2.71
Rabbit production	43(9.5)	45(10.0)	41(9.1)	323(71.5)	3.42
Livestock farming	77(17.0)	128(28.3)	90(19.9)	157(34.7)	2.72
Fish farming	49(10.8)	59(13.0)	48(10.6)	296(65.5)	3.31
Selling of farm waste	89(19.7)	157(34.7)	89(19.7)	116(25.7)	2.52
Crop processing	84(18.6)	86(19.0)	136(30.1)	146(32.3)	2.76
Dry season crop farming	48(10.6)	53(11.7)	50(11.1)	301(66.6)	3.34
Rainy season crop farming	344(76.1)	35(7.7)	27(6.0)	46(10.2)	1.50

Source; Field survey, (2025)

### Constraints to coping strategies adopted by the respondents

The major findings in Table 3 revealed that financial constraints were the predominant barrier to adopting diversified coping strategies among rural women. Specifically, lack of finance was identified as the most serious constraint (76.6%), followed closely by the high cost of transportation (76.1%) and high cost of farm inputs (75.7%). These results were consistent with previous research that had documented the critical role of financial limitations in restricting agricultural diversification and the uptake of improved farming practices (Yusuf *et al.*, 2021). Furthermore, the findings indicated that challenges such as lack of access to land (60.4%), limited access to credit facilities (52.4%), and lack of information (51.1%) also played a significant role, though they were not as severe as the direct financial barriers. This aligns with studies that highlighted systemic issues in rural infrastructure and market accessibility as major factors hindering investment in modern agricultural techniques (Akinola and Olayemi, 2019; Olomola, 2022). Gender differences (23.0%) and socio-cultural restrictions (27.4%) were ranked as less critical constraints. While these factors did affect women's land ownership and mobility thus limiting their agricultural participation other research in similar regions had found that economic barriers tended to outweigh socio-cultural ones in determining overall coping strategy adoption (Eze and Nwachukwu, 2020). Overall, these findings underscored the need for policy interventions that focused on enhancing access to formal credit, improving rural infrastructure, and providing targeted financial support. Such measures were deemed essential to reduce economic hardship and to promote sustainable agricultural diversification among rural women, a conclusion that echoed recommendations from other studies and policy briefs in the region.

**Table 3: Constraints to coping strategies adoption by the respondents**

Constraints	Serious	Mild	Not a constraint	Rank
Lack of finance	346(76.6)	77(17.0)	29(6.4)	1 <sup>st</sup>
Lack of information	231(51.1)	176(39.0)	45(10.0)	6 <sup>th</sup>
Lack of access to land	273(60.4)	117(25.9)	62(13.7)	4 <sup>th</sup>
High cost of transportation	344(76.1)	77(17.0)	31(6.9)	2 <sup>nd</sup>
High cost of farm inputs	342(75.7)	86(19.0)	24(5.3)	3 <sup>rd</sup>
Lack of access to credit facilities	237(52.4)	164(36.3)	51(11.3)	5 <sup>th</sup>
Gender differences	104(23.0)	228(50.4)	120(26.6)	8 <sup>th</sup>
Socio-cultural restriction	124(27.4)	171(37.8)	156(34.5)	7 <sup>th</sup>

Source: Field survey (2025)



## CONCLUSION AND RECOMMENDATIONS

The study demonstrated that rural women in Adamawa State had adopted a range of coping strategies both non-agricultural (e.g., petty trading, hair plaiting/barbering, and informal credit from family and friends) and agricultural (predominantly rainy season crop farming) to mitigate the high cost of living. Financial constraints, evidenced by the high percentages of respondents facing lack of finance, high transportation costs, and expensive farm inputs, emerged as the most significant barriers. In addition, limitations in access to land, credit facilities, and information further compounded these economic challenges. Although gender differences and socio-cultural restrictions were also noted, they had a relatively lesser impact compared to direct economic barriers. Based on the findings of the study the following recommendations were made

- i. Policy interventions should focus on enhancing the availability of formal financial services, including microfinance and cooperative lending, to reduce reliance on informal sources.
- ii. Investments are needed to lower transportation and farm input costs, which would support the diversification of agricultural practices.
- iii. Providing comprehensive agricultural extension services and modern farming information could enable rural women to adopt more efficient, diversified practices.
- iv. Programs aimed at increasing financial literacy and supporting small-scale enterprise development would help build economic resilience.
- v. Future studies should explore the underlying factors that limit access to modern agricultural techniques and formal credit., and also the nuanced roles of gender and socio-cultural factors in shaping economic behavior.

## AKNOWLEDGEMENT

We gratefully acknowledge TETFUND Institutional-Based Research (IBR) for its generous financial support, which was instrumental in the successful completion of this study. Their commitment to advancing academic research provided us with the necessary resources to explore our research questions in depth, and we sincerely appreciate the confidence and support they extended throughout the project.

## REFERENCES

- Adamawa State Government. (2016). *Adamawa State development plan (2016–2025)*. Government Press.
- Adebayo, A. A. (1999). *Climate I and II: Resources and environmental issues*. Paraclete Publishers.
- Adebayo, A. A., Onu, J. I. and Olorunfemi, O. D. (2012). Climate change and the rural farming household: Adaptation by small-scale farmers in Nigeria. *African Journal of Agricultural Research*, **7**(25):3626–3634.
- Akinola, M. O. and Olayemi, K. (2019). Land tenure systems and agricultural productivity in Nigeria: Challenges and policy recommendations. *Land Use Policy*, **28**(4):233–248.
- Amadhu, K. and Ahmed, S. (2023). Economic constraints and gendered poverty in northern Nigeria. *Journal of Development and Social Policy*, **15**(3):112–129.
- Eze, C. and Nwachukwu, I. (2020). Gender disparities in agricultural participation: A case study of rural Nigeria. *International Journal of Gender Studies*, **8**(1):78–92.
- Food and Agriculture Organization. (2019). *State of food and agriculture: Climate resilience and sustainability in agriculture*. Food and Agriculture Organization of the United Nations.
- Food and Agriculture Organization and ICRISAT. (2019). *Agro-climatic zones of Nigeria and their implications for agriculture*. Food and Agriculture Organization and International Crops Research Institute for the Semi-Arid Tropics.
- Ferlay, J., Soerjomataram, I., Dikshit, R., Eser, S., Mathers, C., Rebelo, M., Parkin, D. M., Forman, D. and Bray, F. (2012). Cancer incidence and mortality worldwide: Sources, methods, and major patterns in GLOBOCAN 2012. *International Journal of Cancer*, **136**(5):359–386.





- Jamala, G. Y. and Oke, D. O. (2013). Rainfall variability and its impact on crop production in Adamawa State, Nigeria. *Journal of Environmental and Earth Science*, **3**(14):19–23.
- Julian, O. (2024). Economic trends and inflation rates in Nigeria: A review of 2024. *African Economic Review*, **18**(2):77–95.
- Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, **30**(3): 607–610.
- Malek, A., Usman, T., and Bello, R. (2022). Global food crisis and its impact on rural livelihoods in developing nations. *World Development Studies*, **40**(4):201–219.
- Nigerian Economic Summit Group. (2023). *Household economic resilience amid inflation in Nigeria*. NESG Policy Brief.
- National Population Commission. (2006). *Population and housing census of the Federal Republic of Nigeria: Population distribution by sex, state, LGA, and senatorial district*. National Bureau of Statistics.
- Ojo, J. A., Alabi, T. and Oke, R. (2023). The impact of rising feed costs on poultry farming in Nigeria: Coping strategies and policy recommendations. *Journal of Agricultural Science and Policy*, **15**(1):89–102.
- Olomola, A. S. (2022). Access to credit and financial inclusion among smallholder farmers in Nigeria. *Agricultural Finance Review*, **82**(3):270–290.
- Oyadeyi, M., Adeyemo, O. and Salisu, Y. (2024). Financial inclusion and informal credit utilization in Nigeria: An empirical investigation. *Nigerian Journal of Economics and Finance*, **18**(1): 35–50.
- World Bank, (2023). *Economic diversification and household resilience in Nigeria: Trends and policy implications*. World Bank Publications.
- Yusuf, O., Lawal, A., and Fadare, S. (2021). Economic downturns and livelihood diversification among yam farmers in Ekiti State, Nigeria. *Journal of Rural Studies*, **25**(4):150–165.