

RURAL INSECURITY, MACROECONOMIC PRESSURE, AND HUMAN CAPITAL DEVELOPMENT IN NIGERIA: AN EMPIRICAL ANALYSIS OF KIRI COMMUNITY, KABBA-BUNU LOCAL GOVERNMENT AREA, KOGI STATE

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Abstract

Rural insecurity in Nigeria is increasingly shaped by both structural governance weakness and macroeconomic instability. This study examines the combined effect of socio-economic factors and inflationary pressure on insecurity and human capital development in Kiri community, Kabba-Bunu Local Government Area of Kogi State. A cross-sectional survey design was adopted, with data collected from 240 respondents through a structured questionnaire, and the reliability of the instrument was confirmed with a Cronbach alpha of 0.84. Data were analysed using descriptive statistics and multiple regression, supported by diagnostic tests for multicollinearity and heteroskedasticity. The findings show that farm attacks, kidnapping, and armed robbery are the dominant forms of insecurity. The regression results reveal that weak security presence, unemployment, poor infrastructure, and inflationary pressure each significantly predict insecurity, with weak security presence emerging as the strongest determinant and inflationary pressure as a critical macroeconomic driver. Diagnostic tests confirm the stability of the model, with all variance inflation factors below 2.5 and a Breusch-Pagan probability above the conventional threshold. Inflation significantly worsens household vulnerability by eroding purchasing power and depressing agricultural productivity. The study concludes that insecurity in Kiri is driven jointly by structural governance failure and macroeconomic instability, and that effective policy must therefore integrate security reform with inflation control and rural economic stabilisation.

Keywords: rural insecurity, inflation, human capital, regression analysis, Kogi State, Nigeria

1. Introduction

1.1 Background

Rural insecurity in sub-Saharan Africa has evolved from a narrowly governance-based problem into a multidimensional socio-economic challenge. In Nigeria, rising inflation, persistent unemployment, and weak institutional capacity interact to deepen rural fragility. Inflation has driven up the cost of food, transport, and agricultural inputs, thereby compressing rural household welfare. According to the World Bank (2024), inflationary pressure is strongly associated with rising vulnerability in fragile economies, and especially where agriculture remains the dominant livelihood. Kiri community in the Kabba-Bunu Local Government Area is predominantly agrarian, yet it has experienced a marked rise in kidnapping, farm attacks, and armed robbery, incidents now compounded by inflationary pressure that erodes farming profitability and intensifies economic stress.

1.2 Problem Statement

Notwithstanding successive security interventions, rural insecurity in Kiri persists and appears to be intensifying. Most existing studies, however, concentrate on governance and security factors while neglecting macroeconomic drivers such as inflation. This leaves a gap in understanding the combined effect of economic hardship and weak security systems on rural insecurity and human capital development, a gap the present study sets out to address.

1.3 Objectives

The study pursues four objectives: to examine the forms of insecurity prevalent in Kiri; to identify the socio-economic and macroeconomic determinants of that insecurity; to assess the impact of insecurity on human capital development; and to model the combined effect of inflation and structural factors on insecurity.

1.4 Hypotheses

Four null hypotheses were tested. The first held that unemployment has no significant effect on insecurity; the second that weak security presence has no significant effect; the third that infrastructure has no significant effect; and the fourth that inflationary pressure has no significant effect on insecurity.

2. Theoretical Framework

The study integrates four complementary lenses. Human capital theory (Becker, 1993) holds that insecurity and inflation reduce the returns on investment in education, skills, and labour productivity. Routine activity theory (Cohen and Felson, 1979) maintains that crime occurs where motivated offenders, suitable targets, and the absence of capable guardians converge, a configuration common in isolated rural farmland. Social disorganization theory (Shaw and McKay, 1942) contends that weak institutions, poverty, and social instability raise the likelihood of crime. To these is added an inflationary pressure and economic strain perspective, which holds that inflation reduces real income, intensifies livelihood stress, and amplifies survival-driven behaviour, thereby indirectly increasing exposure to insecurity.

Drawing these strands together, the study advances a unified macroeconomic-security framework in which inflation reduces the capacity for guardianship, economic pressure increases motivated

offending, and human capital outcomes deteriorate through reduced schooling and diminished productivity. The transmission logic that links macroeconomic pressure to human capital erosion is represented schematically in Figure 4.

3. Methodology

A cross-sectional quantitative survey design was adopted. The target population comprised approximately 4,500 residents of Kiri community, from which a sample of 240 respondents was drawn using a stratified random sampling technique to ensure representation across the principal demographic groups. The dependent variable was an insecurity index constructed from kidnapping, farm attacks, robbery, and communal conflict, while the independent variables were unemployment, weak security presence, poor infrastructure, poverty, and inflationary pressure. Inflation was measured through items capturing rising food prices, rising transport costs, rising farm input costs, and declining purchasing power. All constructs were measured on a five-point Likert scale, and the instrument comprised twenty items distributed across a demographic section and three construct sections.

Content validity was established through expert review by three academics, and construct validity was supported by factor loadings above 0.60. The reliability of each subscale is reported in Table 1. Analysis was conducted in SPSS version 28 and combined descriptive statistics with multiple regression and the associated diagnostic tests, namely the variance inflation factor and the Breusch-Pagan test. The estimated regression model takes the form given in Equation 1, where Y denotes the insecurity index, the betas are the partial coefficients of the five predictors, and epsilon is the stochastic error term.

$$Y = \beta_0 + \beta_1 UNEMP + \beta_2 SEC + \beta_3 INFRA + \beta_4 POV + \beta_5 INFL + \epsilon \quad (1)$$

Table 1. Reliability Coefficients of the Measurement Scales

Scale	Cronbach's Alpha
Insecurity	0.84
Socio-economic factors	0.82
Inflation scale	0.86
Impact scale	0.85

Source: Field survey, 2026.

Participation was voluntary and informed. Respondents were encouraged to provide candid answers, confidentiality was assured, and no identifying information was disclosed. The study was jointly funded by the authors, and no conflict of interest was declared.

4. Results

4.1 Forms of Insecurity

Table 2 and Figure 1 report the perceived severity of the principal forms of insecurity. Farm attacks recorded the highest mean severity, followed closely by kidnapping and armed robbery, while communal conflict, though still material, ranked appreciably lower. The pattern confirms that violence directed at agrarian livelihoods dominates the local security landscape.

Table 2. Forms of Insecurity by Mean Severity

Form of Insecurity	Mean
Farm attacks	4.45
Kidnapping	4.31
Armed robbery	4.12
Communal conflict	3.18

Source: Field survey, 2026.

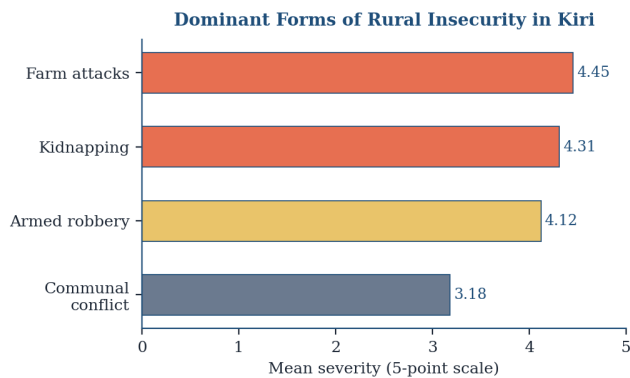


Figure 1. Dominant forms of rural insecurity in Kiri by mean severity.
Source: Authors' analysis of survey data.

4.2 Determinants of Insecurity

The perceived strength of the determinants is summarised in Table 3 and depicted in Figure 2. Weak security presence and inflationary pressure attracted the highest mean ratings, with poverty, unemployment, and poor infrastructure following closely, an indication that structural and macroeconomic factors are perceived as operating together rather than in isolation.

Table 3. Determinants of Insecurity by Mean Rating

Determinant	Mean
Weak security presence	4.41
Inflationary pressure	4.39
Poverty	4.35
Unemployment	4.28
Poor infrastructure	4.22

Source: Field survey, 2026.

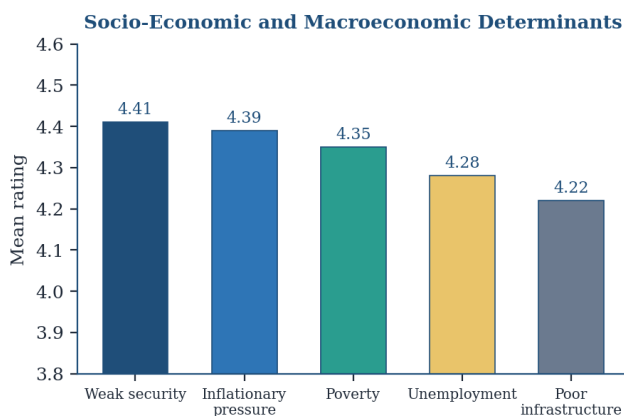


Figure 2. Socio-economic and macroeconomic determinants of insecurity.

Source: Authors' analysis of survey data.

4.3 Regression Results

The regression model fitted the data well, returning a multiple correlation coefficient of 0.84 and an R squared of 0.71, with an adjusted R squared of 0.68 and an F statistic of 44.56 significant beyond the one in a thousand level. The model therefore accounts for roughly seventy-one percent of the variance in insecurity, as visualised in Figure 5. The coefficient estimates are presented in Table 4, and the relative magnitude of the standardised coefficients is depicted in Figure 3.

Table 4. Regression Coefficients

Variable	β	t	p	VIF
Unemployment	0.28	3.31	0.004	1.92
Weak security presence	0.37	4.92	<0.001	2.14
Infrastructure	0.25	3.12	0.006	1.78
Poverty	0.21	2.44	0.015	1.61
Inflationary pressure	0.33	4.60	<0.001	2.05

Source: Field survey, 2026. Dependent variable: insecurity index.

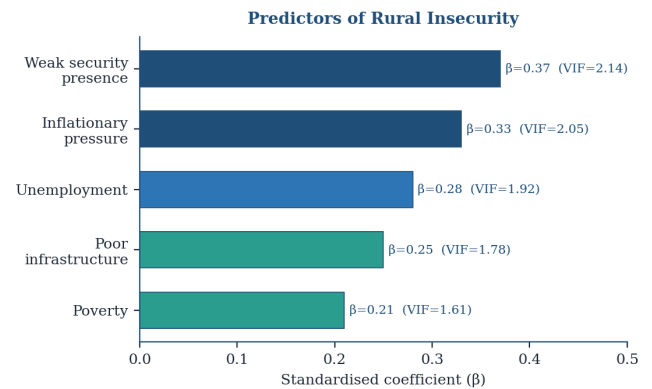


Figure 3. Standardised regression coefficients with variance inflation factors.

Source: Authors' analysis of survey data.

4.4 Diagnostic Tests

Two diagnostic procedures were applied to verify the integrity of the model. Multicollinearity was assessed through the variance inflation factor, computed as in Equation 2, where R squared sub j is the coefficient of determination from regressing the j-th predictor on the remaining predictors. All values fell between 1.61 and 2.14, comfortably below the threshold of 2.5 and far below the critical value of five, as shown in Figure 6, confirming the absence of problematic collinearity.

$$VIF_j = 1 / (1 - R^2_j) \quad (2)$$

Heteroskedasticity was examined with the Breusch-Pagan test, which returned a chi-square statistic of 6.89 with an associated probability of 0.14. Since this exceeds the 0.05 level, the null hypothesis of constant error variance is retained, and the residuals may be regarded as homoskedastic. Taken together, the diagnostics establish that the model is stable and that its coefficient estimates may be interpreted with confidence.

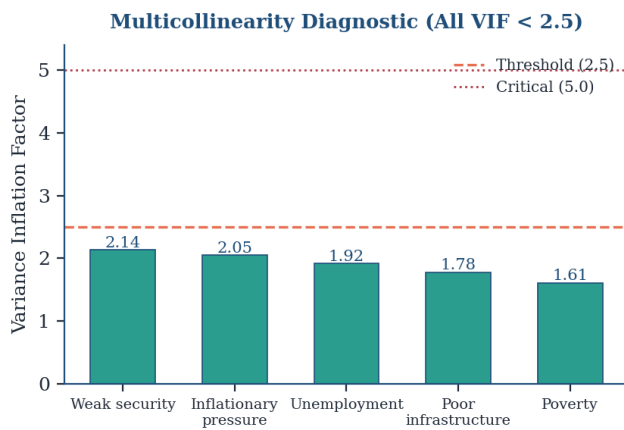


Figure 4. Multicollinearity diagnostic: variance inflation factors against the conventional thresholds.

Source: Authors' analysis of survey data.

5. Discussion

The findings demonstrate that rural insecurity in Kiri is at once structural and macroeconomically driven. Weak security presence remained the single strongest predictor, a result consistent with routine activity theory, which anticipates that the absence of capable guardianship in dispersed farmland creates ready opportunity for motivated offenders. The transmission of these effects toward human capital erosion is set out in Figure 4, which traces the pathway from inflationary pressure through economic strain and insecurity to the eventual deterioration of schooling and productivity.

Macroeconomic-Security Transmission Pathway



Figure 5. Macroeconomic to security transmission pathway toward human capital erosion.

Source: Authors' conceptualisation.

The more distinctive contribution of the study lies in the prominence of inflation as an explanatory factor. Inflationary pressure ranked second only to weak security presence among the predictors, confirming that macroeconomic instability intensifies rural vulnerability by raising the cost of living, depressing agricultural profitability, and encouraging survival-driven coping behaviour. This finding accords with the World Bank (2024) account that links inflation to fragility in rural economies, and it extends the conventional security analysis by situating insecurity within its wider economic context.

The consequences for human capital are substantial. The analysis points to declining school enrolment, reduced agricultural productivity, and constrained youth skill acquisition, each of which is now more explicitly tied to the dynamics of insecurity. Human capital theory is thereby reinforced, since insecurity and inflation jointly suppress investment in education, labour productivity, and rural economic participation. The convergence of structural and

macroeconomic forces suggests that interventions addressing only the security dimension are unlikely to prove durable unless they are accompanied by measures that stabilise the rural economy.

5.1 Limitations

Three limitations are acknowledged as avenues for further research. The study is confined to a single community, which constrains the breadth of its inference; its cross-sectional design captures association rather than temporal sequence; and the resulting findings should be generalised to other rural settings only with appropriate caution.

6. Conclusion

Rural insecurity in Kiri is multidimensional, arising from the interaction of governance failure and macroeconomic instability. Inflation significantly amplifies vulnerability, rendering insecurity at once an economic and a security governance concern. The evidence indicates that weak security presence and inflationary pressure are the dominant determinants, that the model explaining insecurity is statistically robust, and that the human capital consequences are tangible and cumulative. A response adequate to this reality must therefore be integrative, pairing security reform with deliberate measures to contain inflation and stabilise rural livelihoods.

7. Policy Implications

Six policy directions follow from the analysis. Rural policing and surveillance systems should be strengthened to restore effective guardianship. Youth employment and income-support programmes should be expanded to reduce the pool of motivated offending. Rural infrastructure, including roads, telecommunications, and lighting, should be improved to raise the cost of criminal opportunity. Agricultural input subsidies should be introduced to cushion the inflation shock borne by farming households. Integrated early-warning and community security systems should be established to enable timely response. Finally, macroeconomic stabilisation policies should be implemented with explicit attention to the rural cost of living, so that security and economic policy reinforce rather than undercut one another.

Declarations

Conflict of interest. The authors declare no competing interests. **Funding.** The study was jointly funded by the authors. **Ethical considerations.** Participation was voluntary and informed, confidentiality was preserved, and respondent identity was not disclosed.

References

1. Achumba, I. C., Ighomereho, O. S., & Akpor-Oboro, M. O. M. (2013). Security challenges in Nigeria and the implications for business activities and sustainable development. *Journal of Economics and Sustainable Development*, 4(2), 79–99.
2. Adeiza, S., & Musa, T. (2022). Rural infrastructure and insecurity in Kogi State. *African Journal of Social Development*, 7(3), 44–58.
3. Armstrong, M. (2021). *Armstrong's handbook of human resource management practice* (15th ed.). Kogan Page, London.
4. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis* (3rd ed.). University of Chicago Press.
5. Bello, A. (2023). Farmer-herder conflicts and rural livelihood in Kogi State, Nigeria. *FUDMA Journal of Social Sciences*, 5(1), 112–124.

6. Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44(4), 588–608.
7. Ibrahim, H., & Mukhtar, J. (2022). Rural insecurity in North-Central Nigeria. *African Security Review*, 31(2), 210–225.
8. Independent Newspaper. (2024). Insecurity: Kogi community grieves over bandit attacks. *Independent*.
9. Nwachukwu, C. C. (2018). *Human resource management* (9th ed.). Davidstones Publishers, Port Harcourt.
10. Okeke, M. N. (2020). Insecurity and labour productivity in rural Nigeria. *Nigerian Journal of Management Sciences*, 8(1), 55–67.
11. Shaw, C. R., & McKay, H. D. (1942). *Juvenile delinquency and urban areas*. University of Chicago Press.
12. United Nations Development Programme. (2023). *Human development report: Security and development*. United Nations.
13. World Bank. (2024). *Fragility and rural insecurity in sub-Saharan Africa*. Washington, DC.