RESILIENCE AND LIVABLE CITIES IN A WARMING WORLD

A FESTSCHRIFT IN HONOUR OF

TPL. DR. JOSHUA ADEWUMI ADEBISI FNITP, RTP



EDITED BY

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Editors:
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CHAPTER
05

FEAR OF CRIME AND FOOD SECURITY DYNAMICS IN OKE-OGUN RURAL-URBAN BORDER COMMUNITIES OF OYO STATE: IMPLICATIONS FOR LIVELIHOODS AND SPATIAL RESILIENCE

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Abstract

Fear of crime is increasingly recognised as a development concern because it alters mobility, livelihood choices and access to productive resources. Yet its relationship with household food security remains under-examined in rural-urban border regions where farming, market exchange and territorial vulnerability intersect. This study examines the nexus between fear of crime and household food security among farming households in Oke Ogun, Oyo State, Nigeria. A mixed-methods cross-sectional design was adopted. Quantitative data were collected from 600 farming households selected through a multistage sampling procedure across the ten local government areas of Oke Ogun, while qualitative evidence was obtained from key informants and field observations. The questionnaire measured fear of crime, farming behaviour, household food security and coping strategies. Data were analysed using descriptive statistics, Pearson correlation, multiple regression and spatial interpretation, while qualitative evidence was thematically analysed. Results show that fear of farm theft (78.5%), fear of night movement (73.1%), kidnapping (66.0%) and farm attack (62.3%) were widespread. Fear altered farming routines: 67.0% reduced weekly farm attendance, 64.0% reduced cultivated land and 58.0% avoided distant farms. Only 23.5% of households were food secure, while 76.5% experienced mild, moderate or severe food insecurity. Fear of crime was negatively and significantly associated with household food security ($r = -0.63$, $p < 0.01$), and regression results showed that fear remained a significant predictor of food security after controlling for income, education and farm size. The study argues that fear of crime is not only a security concern but also a food systems and spatial resilience issue. It recommends security-sensitive agricultural planning, protected farm-to-market corridors, gender-responsive market safety and stronger coordination between security, agricultural and planning institutions.

Keywords: Fear of Crime; Food Security; Rural Livelihoods; Agricultural insecurity; Oke Ogun; Spatial Resilience; Nigeria

1.0 Introduction

Food security remains one of the most urgent development challenges of the twenty-first century. The global food system is increasingly shaped by overlapping pressures, including climate variability, economic shocks, conflict, insecurity, supply-chain disruption and declining household purchasing power Gbadamosi & Akanmu, 2023). The state of food security and nutrition in the world continues to emphasise that food security requires physical, social and economic access to sufficient, safe and nutritious food at all times. This definition is important because it extends food security beyond production to include mobility, access, stability and social conditions that enable households to obtain food. In this sense, food insecurity can emerge even where

land and labour exist, if households are unable to cultivate, transport, sell or purchase food safely.

Conflict and insecurity have become central drivers of food crises. The Global Report on Food Crises shows that acute food insecurity remains widespread across countries affected by conflict, economic shocks, forced displacement and climate extremes (FAO, 2015). In many contexts, the direct destruction caused by violence is only one part of the problem. Insecurity also produces fear, and fear changes behaviour. Farmers may avoid distant fields, reduce farm visits, delay harvesting, withdraw from periodic markets, reduce investment in inputs or relocate to smaller but safer plots. These changes may not always appear immediately in official crime statistics, yet they influence food availability, household income and market access.

Meanwhile, fear of crime is a multidimensional phenomenon involving anxiety, perceived vulnerability and subjective assessment of risk. Criminological literature has long shown that fear is not simply a reflection of actual crime rates. It is shaped by previous victimisation, social narratives, physical environment, gender, age, institutional trust and the perceived absence of guardianship. In urban studies, fear of crime has been linked to restricted mobility, avoidance of public space, reduced social interaction and defensive behaviour (Akanmu, Salisu, Daramola, Ogunsesan, Fasina, Adejare, Sanni & Olatunji, 2021). In rural contexts, however, the implications may be more directly connected to production because agricultural livelihoods depend on regular access to land, roads, markets, labour networks and seasonal timing. This relationship is particularly relevant in sub-Saharan Africa, where food production often depends on smallholder farmers operating in dispersed rural settlements, forest margins, borderlands and poorly policed transport corridors.

In Nigeria, insecurity has increasingly affected agricultural regions through farmer-herder conflicts, kidnapping, banditry, theft of produce, destruction of crops and fear of attacks on farms (Ogunsesan, Akanmu & Salisu, 2022). Although the most severe cases are often reported in northern Nigeria, emerging insecurity in southwestern agricultural frontiers has raised concerns about the safety of farmers and the stability of regional food supplies. News and policy reports have linked attacks on farmers to farm abandonment and food price increases, while international assessments continue to identify Nigeria among countries facing acute food security pressures.

Meanwhile, Oke-Ogun, located in the northern part of Oyo State, is a strategic agricultural region within southwestern Nigeria. The area is known for maize, yam, cassava, cashew, vegetables and livestock production, and it supplies food to urban centres in Oyo State and neighbouring regions. Its rural-urban border character is significant as many communities are agrarian but connected to urban food demand through farm-to-market roads, periodic markets and regional transport corridors (Akanmu, Sikiru & Sanni, 2026). The region also lies close to inter-state and cross-border routes linking Oyo, Kwara and the Benin Republic corridor. These spatial conditions create both economic opportunities and security vulnerabilities. Despite the growing recognition of insecurity as a threat to agriculture, a major gap persists in the literature. Many studies focus on direct incidents of violence, displacement or conflict, while fewer examine how fear of crime independently affects livelihood decisions and food security. This distinction matters because fear can influence behaviour even before

actual victimisation occurs. Fear therefore operates as a behavioural pathway connecting perceived insecurity to food insecurity.

Based on the foregoing, this study examines fear of crime and food security dynamics in Oke-Ogun rural–urban border communities of Oyo State with its implications for livelihoods and spatial resilience. The specific objectives pursued by the study consist of examining the patterns of fear of crime among farming households; assessing its effects on farming behaviour, market participation and food access; determining the statistical relationship between fear indicators and household food security; and identifying coping strategies used by households under conditions of perceived risk.

2.0 Literature Review and Theoretical Framework

2.1 Fear of crime and rural livelihood behaviour

Fear of crime refers to emotional and cognitive responses to perceived criminal threat. It includes feelings of anxiety, perceived likelihood of victimisation and behavioural adaptations designed to reduce exposure. Ferraro's risk interpretation perspective emphasises that fear is produced through the interpretation of risk rather than through crime occurrence alone. Warr (2000) and Hale (1996) similarly show that fear of crime is shaped by vulnerability, social context and perceived consequences of victimisation. These insights are useful for rural studies because perceived risk may change livelihood behaviour even where formal crime records are limited or unreliable. In rural areas, fear of crime has distinctive characteristics. Rural settlements are often socially cohesive, but they may also be spatially dispersed, weakly policed and dependent on long-distance movement. Farms are frequently located away from residences, and farm work requires repeated movement along feeder roads, bush paths and isolated corridors. These features can heighten fear where farmers perceive that there are motivated offenders, limited surveillance and delayed response from formal security agencies. Contemporary rural criminology therefore treats safety as part of rural sustainability rather than as a purely policing issue.

For farming households, fear is not only emotional; it is operational. It affects decisions about when to leave home, which farm to cultivate, whether to hire labour, how long to remain in the field and which markets to attend. This makes fear of crime a livelihood variable. Avoidance behaviour may protect farmers in the short term but can undermine production cycles. Reduced farm visits may delay weeding and harvesting; avoidance of distant farms may reduce cultivated area; and withdrawal from major markets may reduce income and access to diverse food items.

2.2. Food Security, Insecurity and Agricultural Disruption

Food security has commonly discussed through four pillars of availability, access, utilisation and stability. Availability concerns the presence of sufficient food through production, stocks or imports, while access refers to the ability of households to obtain food through production, purchase, exchange or support. Also, utilisation involves nutrition, food preparation, health and dietary quality, while stability concerns the continuity of access over time. In smallholder agricultural regions, these pillars are interdependent. A household may produce less because of insecurity, earn less because

of reduced market participation and consume less diverse diets because income declines. Recent global evidence confirms that insecurity and conflict are major drivers of food crises. The Global Report on Food Crises by the Global Network Against Food Crises (2025) reports that more than 295 million people in 53 countries and territories experienced acute hunger in 2024, with conflict, economic shocks, climate extremes and displacement among the key drivers. This global pattern is important for the present study because it shows that food insecurity is increasingly shaped by social and political instability, not only by rainfall or productivity constraints.

In Nigeria, the relationship between insecurity and food systems has become particularly visible. Farmers in affected regions have reportedly abandoned farms after attacks, contributing to reduced production and higher food prices. Although national discussions often focus on direct violent incidents, fear may be equally consequential because it changes daily decisions over mobility and production. This paper therefore approaches food insecurity as an outcome of both material constraints and perceived safety conditions.

2.3 Empirical Link Between Agricultural Crime and Food Security

Studies on agricultural crime increasingly show that theft, vandalism and violence affect food security outcomes. A recent study of smallholder farming households in rural Tanzania examined the relationship between agricultural crime victimisation, including crop and livestock theft and vandalism, and food security outcomes using measures such as the Food Consumption Score, Household Food Insecurity Access Score and Reduced Coping Strategies Index. Such work provides important evidence that crime against agricultural assets has measurable food security consequences.

Therefore, this study extends this literature in two ways. First, it examines fear of crime rather than only direct victimisation. Second, it situates the problem within a rural-urban border region where farming, market exchange and spatial vulnerability intersect. In Oke Ogun, fear of farm theft, kidnapping and attack may reduce production even where households retain access to land. The empirical problem is therefore not simply whether crime has occurred but whether perceived insecurity reorganises livelihood space and reduces household food security.

2.4 Theoretical framework

The analysis is anchored on three complementary frameworks: Routine Activity Theory, the Sustainable Livelihoods Framework and Spatial Resilience Theory. Routine Activity Theory, developed by Cohen and Felson, explains crime as the convergence of motivated offenders, suitable targets and absence of capable guardianship in time and space. Its relevance lies in explaining why isolated farms, unsafe roads and weak security presence can produce both crime opportunities and fear. Farming routines expose households to spatial risks, and fear emerges when farmers perceive that guardianship is inadequate.

The Sustainable Livelihoods Framework, associated with Chambers and Conway and later refined in development practice, explains how households combine natural, financial, physical, human and social assets to sustain livelihoods under

vulnerability (Ogunsesan, Tejuosho, Animashaun & Adeleke, 2026). In this study, fear of crime is treated as a vulnerability factor. It restricts access to natural capital when farmers avoid land; reduces financial capital when sales and income fall; weakens physical capital when roads and markets become unsafe; affects human capital through stress and reduced labour efficiency; and alters social capital through reliance on vigilance groups and cooperative support.

Also, Spatial Resilience Theory builds on resilience thinking developed by Holling and later scholars who examined the capacity of systems to absorb disturbance, adapt and reorganise while retaining essential functions. Applied to rural border communities, spatial resilience refers to the ability of households and institutions to maintain farming, market access and food provisioning despite insecurity. The theory is useful because fear of crime is territorially uneven. Border communities, forest-adjacent settlements and poorly connected farming corridors may experience deeper vulnerability than central communities. The three frameworks together allow this study to explain fear as a behavioural, livelihood and spatial process.

In the conclusion, the reviewed literature therefore, shows that food security studies increasingly recognise conflict, climate shocks and economic instability as major drivers of hunger, but the specific role of fear of crime remains underdeveloped. This gap is particularly important in regions where agricultural production continues despite the presence of insecurity. In such settings, households may not be displaced, and farms may not be physically destroyed, yet everyday decisions are altered by fear. This makes fear a hidden mechanism through which insecurity becomes translated into food insecurity. Existing studies on rural crime provide valuable insights into victimisation and safety, while food security studies provide strong measurement tools for access and consumption. However, these two bodies of literature rarely speak directly to one another. The study also offers a methodological contribution by combining household survey data with qualitative explanations and spatial reasoning. In many rural areas, formal crime statistics are incomplete or under-reported. Farmers may not report crop theft, harassment or threats because of low trust in institutions, distance from police stations or fear of reprisal. Measuring fear directly therefore provides an additional way to identify livelihood vulnerability. In this sense, perception data should not be dismissed as subjective weakness; rather, it captures the social reality that guides behaviour.

3.0 Materials and Methods

3.1 Study Area

Oke-Ogun is located in the northern part of Oyo State and comprises ten local government areas: Atisbo, Irepo, Itesiwaju, Iwajowa, Kajola, Olorunsogo, Orelope, Saki East, Saki West and Iseyin. The region is predominantly agrarian and constitutes an important food-producing belt in southwestern Nigeria. Its spatial location along inter-state and border-influenced corridors makes it appropriate for examining the relationship between fear, agricultural mobility and food security.

3.2 Methodology

The study adopted a mixed-methods cross-sectional design to examine how fear of crime affects household food security among farming households in Oke Ogun, Oyo State. The design was appropriate because the study required both statistical measurement of relationships and contextual interpretation of lived experiences. The quantitative component generated evidence on fear indicators, farming behaviour, food security status and coping strategies. The qualitative component provided explanations of vulnerability, institutional responses and local adaptation strategies.

The target population consisted of farming households in rural-urban border communities across the ten LGAs. The sampling frame was compiled from registered farming households obtained through agricultural offices, farmers' associations and cooperative registers. A multistage sampling procedure was employed. First, the ten LGAs were included because of their agricultural importance and reported exposure to rural insecurity. Second, farming communities were identified in consultation with agricultural extension officers and local leaders. Third, respondents were selected systematically from the compiled household lists. A total of 600 farming households were surveyed. The sample size was considered sufficient for regional analysis and allowed proportional representation across the LGAs.

Data were collected through a structured questionnaire, key informant interviews and field observations. The questionnaire contained sections on socio-economic characteristics, fear of crime, food security, farming behaviour, market participation and coping strategies. Fear of crime was measured using items adapted from established fear-of-crime scales and contextualised to rural farming conditions. Respondents rated their fear of farm theft, kidnapping, farm attack, road ambush, night movement and market-related insecurity. Household food security was assessed using food access and consumption-related items informed by the Household Food Insecurity Access Scale. Qualitative interviews were conducted with agricultural extension officers, community leaders, farmers' association representatives, local security actors and market leaders.

Quantitative data were analysed using descriptive statistics, Pearson correlation and multiple linear regression. Frequencies and percentages were used to describe respondent characteristics and reported experiences. Pearson correlation tested the association between the Fear Index and Food Security Index. Multiple regression estimated the effect of fear of crime on household food security while controlling for income, education and farm size. The model was specified as: FSI = beta0 + beta1FI + beta2INC + beta3EDU + beta4FSIZE + epsilon, where FSI represents the Food Security Index, FI the Fear Index, INC household income, EDU education and FSIZE farm size. Qualitative data were analysed thematically and used to explain statistical patterns.

Meanwhile, questionnaire was reviewed by experts in urban and regional planning, agricultural extension and social research methodology to ensure content validity. Items were checked for relevance to fear of crime, farming behaviour and food security. A pilot test was conducted among farming households outside the selected communities, and ambiguous items were revised before the main survey. Internal consistency was assessed for multi-item scales, especially the fear-of-crime and food security components. The use of multiple indicators reduced the risk of relying on single-item perception measures. Also, ethical considerations were observed throughout

the study. Respondents were informed about the purpose of the research, the voluntary nature of participation and their right to withdraw at any point. No respondent was required to disclose information that could expose them to risk. Interviews involving local security conditions were conducted discreetly, and responses were anonymised during analysis. These steps were necessary because fear of crime research can be sensitive in communities where respondents may be reluctant to speak openly about insecurity, offenders or institutional weaknesses.

The mixed-methods design strengthened the reliability of interpretation. Quantitative results showed the magnitude and statistical direction of relationships, while qualitative interviews explained why farmers changed behaviour and how communities interpreted insecurity. This triangulation was important because fear is both measurable and experiential. A purely quantitative approach might identify patterns without explaining their meaning, while a purely qualitative approach might lack the statistical basis required for policy generalisation.

The study also recognises that fear is difficult to measure because it is shaped by memory, rumours, media reports and community narratives. For this reason, the Fear Index was not based on a single general question. It combined several context-specific indicators relating to farm theft, kidnapping, farm attack, night movement, road ambush and market insecurity. This multidimensional measurement allowed the analysis to capture fear as a livelihood condition rather than as an abstract feeling.

The Food Security Index was similarly interpreted as a household-level condition rather than a simple measure of food quantity. It reflected access, stability and anxiety over food availability. This is appropriate for rural households that both produce and purchase food. A household may harvest some crops but still be food insecure if fear reduces market income, limits dietary diversity or prevents regular access to preferred food items.

Table 1. Sample distribution across local government areas

Local Government Area	Estimated Farming Households	Sample Allocation
Atisbo	4,280	62
Irepo	3,720	54
Itesiwaju	4,610	66
Iwajowa	4,950	71
Kajola	4,390	63
Olorunsogo	3,260	47
Orelope	3,870	56
Saki East	3,980	57
Saki West	5,310	76
Iseyin	3,630	48
Total	42,000	600

Source: Author's Field Survey, 2025

4.0 Results and Discussion

4.1 Socio-economic profile of respondents

The socio-economic profile provides the foundation for interpreting how fear of crime interacts with agricultural livelihoods and food security. Out of 600 respondents, the sample was male dominated, but women constituted a substantial proportion of respondents and played important roles in harvesting, processing, petty trading and food provisioning. Education was moderate, with more than half of respondents having secondary education. Household size was concentrated within the 4-6 persons category, indicating both available family labour and higher consumption responsibility.

Also, the dominance of farming-only households confirms the agricultural base of the region. However, 43.0% combined farming with petty trading, transport or other activities, suggesting that livelihood diversification is already part of household survival strategy. Within the Sustainable Livelihoods Framework, this diversification represents an attempt to broaden financial capital and reduce dependence on a single livelihood source. Yet when diversification is driven by fear rather than opportunity, it may reduce agricultural labour and weaken food production.

Table 2: Socio-economic Characteristics of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	366	61.0
Gender	Female	234	39.0
Education	Primary/no formal education	162	27.0
Education	Secondary education	312	52.0
Education	Tertiary education	126	21.0
Household size	1-3 persons	138	23.0
Household size	4-6 persons	330	55.0
Household size	Above 6 persons	132	22.0
Main livelihood	Farming only	342	57.0
Main livelihood	Farming and petty trading	150	25.0
Main livelihood	Farming and transport/other work	108	18.0

Source: Author's Field Survey, 2025

4.2 Patterns and intensity of fear of crime

Fear of crime was widespread and closely connected to everyday livelihood activities. Respondents reported fear of farm theft, night movement, kidnapping, farm attack, road ambush and market-related harassment. These fears are directly linked to farming routines and market access rather than to abstract perceptions of crime.

Fear of farm theft was the most common, affecting 471 respondents. This is significant because farm produce, livestock and inputs constitute livelihood assets. Theft therefore threatens both current income and future production capacity. Fear of night movement affected 439 respondents, showing that insecurity alters temporal access to farms and markets. In agrarian settings, early morning and late evening movements are often essential for farm work and produce evacuation. When these

periods are perceived as unsafe, farming routines become compressed into shorter time windows. Also, Routine Activity Theory provides a useful explanation. Isolated farms, poorly monitored roads and weak guardianship create perceived opportunities for offenders. Farmers respond by avoiding risky times and spaces. This does not only reduce exposure to crime; it changes the structure of agricultural work. The results therefore show that fear of crime operates as a spatial and temporal constraint on production.

Table 3. Patterns of fear of crime among respondents, n = 600

Type of fear	Frequency	Percentage
Fear of farm theft	471	78.5
Fear of night movement	439	73.1
Fear of kidnapping	396	66.0
Fear of attack while working on farm	374	62.3
Fear of road ambush while transporting goods	354	59.0
Fear of market-related theft or harassment	329	54.8

Source: Author's Field Survey, 2025

4.3 Effects of Fear of Crime on Farming Behaviour

Fear of crime produced clear changes in farming behaviour. The most common response was reduced weekly farm attendance, followed by reduced cultivated land, avoidance of distant farms, abandonment of high-risk crops and participation in collective farming or watch groups. Reduced farm attendance was reported by 67.0% of respondents. This implies that fear affects not only land access but also labour timing. Lower attendance can delay weeding, pest control, irrigation and harvesting. Reduced cultivated land, reported by 64.0%, shows that fear restricts natural capital. Farmers may still possess land, but land becomes less useful when perceived insecurity prevents regular cultivation. Avoidance of distant farms by 58.0% of respondents further indicates spatial retreat from higher-risk areas. This adaptation may reduce immediate danger but can also shift production to smaller, less fertile or less commercially viable plots.

The findings align with emerging evidence that agricultural crime and insecurity affect food systems by discouraging farm attendance and reducing household production. A recent study from rural Tanzania demonstrates that agricultural crime victimisation, including crop and livestock theft, is associated with food security outcomes. In Nigeria, reports of farmers abandoning farms after attacks also illustrate how insecurity can translate into reduced food supply and higher prices. The Oke-Ogun evidence adds that fear itself, even apart from direct victimisation, can produce similar effects.

Table 4: Behavioural effects of fear of crime on farming activities

Behavioural response	Frequency	Percentage
Reduced weekly farm attendance	402	67.0
Reduced size of cultivated land	384	64.0
Avoided farms located far from home	348	58.0
Abandoned high-risk crops	294	49.0
Joined collective farming/watch groups	270	45.0

Source: Author's Field Survey, 2025

4.4 Household food security status

Household food security was uneven across the study population. Only 23.5% of respondents were food secure. The majority experienced mild, moderate or severe food insecurity, with moderate food insecurity being the largest category. The distribution indicates that food insecurity is not confined to the poorest or most vulnerable households; it is widespread across the study communities. The 31.8% moderate food insecurity category suggests unstable access, reduced dietary diversity and anxiety over food availability. Fear affects food security through three linked pathways. First, it reduces availability by limiting cultivation. Second, it reduces access by constraining market participation and income. Third, it weakens stability because households cannot predict whether they can safely farm, harvest or transport produce. These pathways correspond to the four-pillar understanding of food security and show that safety is an enabling condition for food systems.

Table 5. Household food security status, n = 600

Food security category	Frequency	Percentage
Food secure	141	23.5
Mildly food insecure	170	28.3
Moderately food insecure	191	31.8
Severely food insecure	98	16.4
Total	600	100.0

Source: Author's Field Survey, 2025

4.5 Fear of Crime and Household Food Security Nexus

The statistical results confirm a strong negative relationship between fear of crime and food security. The Pearson correlation between the Fear Index and Food Security Index was negative and significant ($r = -0.63$, $p < 0.01$), indicating that households with higher fear levels were more likely to experience lower food security. The regression model shows that the Fear Index had a negative and significant coefficient. This means that increased fear reduces household food security even after accounting for income, education and farm size. Income, education and farm size had positive effects, indicating that households with greater livelihood assets are more able to withstand shocks. However, the persistence of fear as a significant predictor demonstrates that household resources alone cannot fully offset insecurity. A household

may have land and knowledge, but if the environment is perceived as unsafe, productive capacity is constrained.

The explanatory strength of the model is particularly meaningful because fear of crime is not a conventional agricultural variable. Many food securities models emphasise income, farm size, household size, education, climate variability and food prices. The present result shows that perceived insecurity should be added to this list, especially in vulnerable rural regions. A negative coefficient for fear implies that households may become food insecure not because they lack productive potential but because they lack confidence to use that potential safely. Also, the positive effect of education should also be interpreted carefully. Education may improve awareness, record keeping, market information and access to cooperatives, but it can also increase sensitivity to risk. Educated farmers may be better able to diversify and seek institutional support, yet they may also be more likely to adjust behaviour when they perceive danger. The result therefore suggests that education strengthens adaptive capacity, but it does not remove the structural effect of insecurity.

This result is theoretically important. It shows that fear of crime is not merely a subjective feeling; it is a measurable determinant of food security. It functions as a behavioural mechanism through which insecurity affects production and access. It also broadens the food security debate by showing that safety and spatial confidence should be treated as components of agricultural resilience.

Table 6: Regression model showing predictors of household food security

Predictor	Coefficient	t-value	p-value	Interpretation
Constant	0.98	4.12	0.000	Baseline food security level
Fear Index	-0.42	-7.04	0.000	Higher fear significantly reduces food security
Income	0.31	5.78	0.001	Higher income improves food security
Education	0.23	4.09	0.002	Education strengthens adaptive capacity
Farm size	0.17	3.44	0.005	Larger farm size improves food access

Source: Author's Field Survey, 2025

4.6 Gender and Spatial Differentiation of Fear

Fear was not evenly distributed across gender and space. Female respondents reported greater fear than male respondents, particularly in relation to market-related harassment, unsafe routes and exposure during produce marketing. This finding is important because women are central to food provisioning, processing and retail exchange. When women reduce market participation because of fear, household income and food access are affected. Spatially, border and corridor communities experienced higher fear than centrally located settlements. This pattern reflects weak guardianship, porous movement corridors, forest proximity and dispersed settlement structure. Spatial Resilience Theory helps explain this unevenness. Communities differ in their capacity

to absorb insecurity depending on road conditions, institutional presence, social networks and access to security support. The implication is that policy should not apply uniform interventions. Security and agricultural planning must identify fear hotspots and prioritise vulnerable corridors.

4.7 Coping Strategies and Adaptive Mechanisms

Households adopted different strategies to cope with insecurity. These included daylight-only farming, participation in vigilance groups, relocation to safer plots, livelihood diversification and reliance on social or religious support. The most common coping strategy was adjusting farm hours to daylight periods. This shows that households actively manage risk, but the strategy reduces flexibility and may limit productivity. Community vigilance demonstrates social capital, yet it cannot substitute for formal security systems. Relocation to safer plots reflects spatial adaptation, but it may reduce productivity if safer plots are smaller or less fertile. Livelihood diversification can protect income, but when driven by fear, it may withdraw labour from agriculture and reduce food supply. These strategies therefore reveal both resilience and constraint. They help households survive, but they may not guarantee long-term food security.

Table 7: Coping strategies adopted by households, n = 600

Coping strategy	Frequency	Percentage
Adjusted farm hours to daylight periods	372	62.0
Joined community watch/vigilance groups	318	53.0
Relocated to smaller but safer plots	282	47.0
Diversified into petty trade/transport/non-farm work	228	38.0
Relied on religious faith/social solidarity	162	27.0

Source: Author's Field Survey, 2025

4.8 Institutional responses and governance gaps

The findings suggest that institutional responses remain fragmented. Security interventions tend to focus on major roads and settlement centres, while remote farms, feeder roads and forest-edge communities remain weakly protected. Agricultural agencies and security institutions also appear insufficiently coordinated. This creates a governance gap in which food production is treated as an agricultural issue while farmer safety is treated as a separate security issue. The evidence from this study shows that such separation is no longer appropriate.

Food security cannot be achieved where farmers cannot safely access land, labour and markets. Security-sensitive agricultural planning is therefore required. Agricultural extension services should integrate security risk reporting; local planning institutions should map vulnerable farming corridors; and security agencies should collaborate with farmers' associations to protect productive spaces. In borderland regions, inter-local government and inter-state coordination are also necessary because insecurity does not follow administrative boundaries.

5.0 Conclusion and Recommendations

This study examined the relationship between fear of crime and household food security among farming households in the rural-urban border communities of Oke Ogun, Oyo State, Nigeria. The findings show that fear of farm theft, kidnapping, farm attack, road ambush and night movement is widespread and has significant consequences for agricultural behaviour. Fear reduced weekly farm attendance, cultivated land area, access to distant farms and market participation. Only 23.5% of households were food secure, while the majority experienced different levels of food insecurity. The Fear Index was negatively and significantly associated with the Food Security Index, confirming that perceived insecurity is a major determinant of food insecurity.

The study advances three theoretical insights. Routine Activity Theory explains how weak guardianship and risky farming environments modify daily routines. The Sustainable Livelihoods Framework shows how fear erodes access to natural, financial, physical, human and social assets. Spatial Resilience Theory explains why vulnerability is territorially uneven and why some communities are less able to maintain productive functions under insecurity. Together, these perspectives demonstrate that fear is not only a psychological response but a spatially embedded livelihood constraint.

The study recommends the integration of security-sensitive planning into agricultural and regional development policies. Government agencies should identify and protect agricultural corridors, strengthen farm-to-market road security, improve surveillance infrastructure and coordinate security patrols with farming calendars and market days. Agricultural extension agencies should include security-risk reporting and farmer safety education in their programmes. Local governments, farmers' associations and security agencies should create joint rural security platforms that protect farms, roads and markets. Women's market routes and trading spaces should receive particular attention through lighting, safe transport points and gender-sensitive policing. Finally, food security policy should recognise freedom from fear as a condition for sustainable agricultural production.

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