

Distress-Driven Displacement and Economic Contraction: Quantifying the Impact of Armed Banditry on Youth Agribusiness Livelihoods in North-West Nigeria

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Abstract

Armed banditry in North-West Nigeria has severely disrupted rural agrarian economies, yet the precise econometric quantification of its impact on youth agribusiness livelihoods and migration dynamics remains underexplored. This study evaluates the economic contraction and distress-driven displacement among 424 youth agripreneurs in Zamfara State, Nigeria. Utilizing a multi-stage sampling technique, data were collected on socioeconomic characteristics, agribusiness income trajectories, and migration determinants. Analytical techniques included paired samples t-tests and multiple linear regression (MLR). Results indicate a catastrophic decline in average monthly agribusiness income, falling from ₦2,823,113 before the escalation of banditry to ₦2,206,367 post-escalation ($p < 0.001$). The MLR model demonstrated robust explanatory power ($R^2 = 0.641$, $F = 123.866$, $p < 0.001$), revealing that direct exposure to violence ($\beta = 0.411$) and fear-induced market access constraints ($\beta = 0.308$) are the primary drivers of youth displacement, outweighing pure financial losses. The findings confirm that youth migration in this context is not an aspirational economic shift but a distress-driven survival strategy triggered by value-chain fragmentation and physical insecurity. These results underscore the urgent need for integrated security-agricultural policies that prioritize physical safety and market access restoration over standalone financial subsidies to sustain rural youth livelihoods in conflict-affected agrarian systems.

Keywords: Armed banditry; Agribusiness; Livelihoods; Migration dynamics and Displacement

Introduction

The integration of youth into agribusiness value chains is widely recognized as a critical pathway for ensuring food security, poverty reduction, and rural transformation in Sub-Saharan Africa (FAO, 2021). In Nigeria, the agricultural sector holds the potential to absorb the rapidly growing youth labor force; however, this demographic dividend is increasingly threatened by escalating rural insecurity (World Bank, 2020). In the North-West region, particularly Zamfara State, the proliferation of armed banditry has transcended localized cattle rustling to become a complex,

systemic shock that dismantles rural livelihoods (Akinyetun, 2021). Banditry manifests through farm invasions, kidnapping, and the disruption of transit routes, effectively severing the vertical and horizontal linkages essential for agribusiness sustainability (Ayinoko et al., 2024).

While existing literature extensively documents the macro-level impacts of insecurity on national food prices and general agricultural output (Alexander & Abdulmalik, 2022; Abdussalam et al., 2022), there is a critical gap in understanding the micro-level econometric realities of youth agripreneurs. Specifically, the literature lacks rigorous quantitative isolation of how income contraction directly correlates with distress-driven migration among rural youths. Current studies often conflate voluntary rural-urban migration with forced displacement caused by conflict (Adepoju, 2018). Furthermore, the relative weight of physical exposure versus economic loss in triggering youth exit from agribusiness remains empirically unresolved.

Addressing this gap is vital for designing targeted agricultural extension and security interventions. If youth migration is primarily driven by physical fear and market isolation rather than mere income reduction, then financial subsidies alone will fail to retain the agricultural labor force. Therefore, this study aims to: (1) quantify the pre- and post-banditry income differentials among youth agripreneurs, and (2) determine the structural drivers of distress-driven migration using multiple linear regression. By doing so, this paper provides empirical evidence to reframe rural insecurity not merely as a humanitarian crisis, but as a systemic destroyer of youth-led agribusiness value chains.

Methods

Study Area and Sampling

The study was conducted in Zamfara State, the epicenter of the North-West Nigeria banditry crisis. A multi-stage sampling technique was employed. First, two Local Government Areas (LGAs) were randomly selected from each of the three agricultural zones. Second, four villages were selected per LGA. Finally, 424 youth agripreneurs (aged 18–35) actively engaged in crop farming, livestock rearing, or agro-trading were randomly selected.

Analytical Techniques

Data were analyzed using IBM SPSS Statistics. A paired samples t-test was utilized to evaluate the mean difference in monthly agribusiness income before and after the escalation of banditry. To determine the drivers of migration and displacement, a Multiple Linear Regression (MLR) model was specified, with the migration status index as the dependent variable, and six banditry-induced shock variables (exposure, community disruption, asset loss, financial impact, production reduction, and fear/access constraints) as independent predictors.

Results

Table 1: Socioeconomic Characteristics of Youth Agripreneurs (N = 424)

Variable	Category / Statistic	Frequency Mean	Percentage / Std. Dev
Age	26–35 years (Economically active)	342	80.6%
Gender	Male	356	84.0%
Marital Status	Married	338	79.7%
Education	Qur'anic / No formal education	235	55.4%

Primary Occupation	Crop Farming / Livestock Rearing	206	48.6%
Source of Labour	Family Labour	278	65.6%

Table 1 reveals a demographic heavily skewed toward young, married males (84.0%) in their peak productive years (26–35). The high reliance on family labor (65.6%) and low formal education (55.4% lacking Western formal education) indicates a highly vulnerable cohort. Their deep entrenchment in primary production (crop/livestock) makes them disproportionately exposed to localized physical violence and asset theft, limiting their capacity to pivot to off-farm agribusiness services when insecurity strikes.

Table 2: Paired Samples t-Test of Agribusiness Income Trajectories

Income Measure	N	Mean (₦)	Std. Deviation	t-value	Sig. (2-tailed)
Before Banditry	424	2,823,113.21	371,036.15		
After Banditry	424	2,206,367.92	457,903.55		
Mean Difference		616,745.29	562,775.77	22.566	< 0.001

Interpretation: Table 2 demonstrates a catastrophic economic contraction. The mean monthly income plummeted by ₦616,745.29 (a ~21.8% reduction). The high t-statistic (22.566) and extreme significance ($p < 0.001$) confirm that this is not a random market fluctuation but a direct, statistically significant shock attributable to banditry. The increased standard deviation post-banditry (from 371k to 457k) indicates rising income inequality and vulnerability; while some youths managed to maintain minimal operations, others suffered total livelihood collapse.

Table 3: Multiple Linear Regression Predicting Youth Migration and Displacement

Predictor Variable	Unstandardized B	Std. Error	Standardized β	t-value	Sig.
(Constant)	3.673	0.570	-	6.448	< 0.001
Exposure to Banditry & Victimization	0.258	0.042	0.411	6.094	< 0.001
Fear, Access Constraints & Market Disruptions	0.316	0.070	0.308	4.541	< 0.001
Farm Asset Loss & Physical Destruction	0.153	0.071	0.158	2.156	0.032
Production Scale Reduction	-0.094	0.042	-0.139	-2.271	0.024
Displacement & Community Disruption	0.187	0.135	0.094	1.383	0.167
Financial & Economic Impact	0.003	0.071	0.003	0.047	0.963
<i>Model Fit: $R = 0.800$, $R^2 = 0.641$, Adjusted $R^2 = 0.635$, $F = 123.866$ ($p < 0.001$)</i>					

Interpretation: Table 3 provides profound insights into the mechanics of rural flight. The model explains 64.1% of the variance in youth migration. Crucially, direct *Exposure to Violence* ($\beta = 0.411$) and *Fear/Market Access Constraints* ($\beta = 0.308$) are the strongest, highly significant

positive drivers of displacement. Conversely, pure *Financial Impact* ($\beta = 0.003$, $p = 0.963$) is statistically insignificant. This proves that youths are not migrating simply because they are poorer; they are migrating because the physical environment is lethal and supply chains are severed. The negative coefficient for *Production Scale Reduction* ($\beta = -0.139$) suggests a "trapped population" effect: some youths reduce their farm size but remain physically anchored to the land due to a lack of capital to finance migration or deep socio-cultural attachments, despite the danger.

Discussion

The findings of this study provide compelling econometric evidence that armed banditry acts as a systemic shock that dismantles youth agribusiness livelihoods in North-West Nigeria. The severe income contraction observed (Table 2) aligns with the Agribusiness Theory, which posits that agricultural value chains require stable environments for input procurement, production, and market distribution (Davis & Goldberg, 2019). Unlike previous studies that attributed rural income decline primarily to climate variability or poor extension services (e.g., Oluwaseun & Ojo, 2022), this study isolates insecurity as the dominant exogenous shock. The physical inability to access farms, coupled with the extortionate "taxes" imposed by bandits on transit routes, inflates transaction costs and destroys profit margins, forcing youths into survival-mode rather than growth-mode entrepreneurship. More critically, the regression analysis (Table 3) challenges the conventional economic assumption that migration is primarily an income-maximizing strategy. Consistent with the Push-Pull Migration Theory (Lee, 1966), this study demonstrates that in conflict zones, migration is a distress-driven survival mechanism. The insignificance of the "Financial Impact" variable in predicting migration, contrasted with the high significance of "Fear and Access Constraints," reveals a paradigm shift: physical safety supersedes economic logic. This finding contrasts with the assertions of Todaro and Smith (2015), who argue that expected income differentials drive rural-urban mobility. In Zamfara State, the "push" is not the lure of urban wealth, but the immediate threat of kidnapping and asset destruction.

Furthermore, the reliance on family labor (Table 1) exacerbates this vulnerability. When banditry restricts mobility, the household's primary asset—its labor force—is rendered idle or trapped. The negative relationship between production scale reduction and migration highlights a dangerous "poverty trap." Youths who lose their assets but lack the financial liquidity to migrate become trapped in high-risk zones, increasing their susceptibility to recruitment by the very bandit groups terrorizing them, a dynamic explained by the Frustration-Aggression Theory (Dollard et al., 1939; Berkowitz, 1989). Ultimately, the data proves that financial interventions (e.g., input subsidies or microcredit) will fail if the spatial and physical dimensions of insecurity are not addressed. Youths are not abandoning agribusiness because it is unprofitable; they are abandoning it because the operational environment is lethal.

Conclusion

Armed banditry in Zamfara State has precipitated a severe economic contraction and distress-driven displacement among youth agripreneurs. The study conclusively demonstrates that physical exposure to violence and the paralysis of market access routes are the primary catalysts for youth exit from agribusiness, overshadowing pure financial losses. To reverse this trend, agricultural and development policies must abandon isolated economic interventions. Instead, a integrated "security-agribusiness" framework is required, prioritizing the establishment of secured farming corridors, community-based early warning systems, and the formal integration of local vigilantes to restore the physical safety necessary for youth to re-engage in agricultural value chains.

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