

Conflict Economies, Forced Migration, and Livelihood Adaptation in Zamfara State, Nigeria: Examining the Impact of Gold Mining and Banditry

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Abstract

Conflict economies have emerged in regions where political instability, armed conflict, and weak governance create space for informal and illegal economic activities, with significant implications for forced migration and livelihood systems. This study examines the interrelationship between conflict economies, forced migration, and livelihood strategies in Zamfara State, Nigeria, with particular focus on gold mining and banditry or kidnapping. The study employed a multistage sampling procedure to ensure adequate representation of the study population. Purposive sampling was used to select local government areas with gold-mining activities, and 142 respondents were drawn from internally displaced persons camps in the selected areas. Data obtained through fieldwork and archival records were analyzed using descriptive statistical techniques, including percentages, frequencies, and distribution tables. The findings reveal that corruption (71.8%) constitutes the most prominent economic driver of conflict, while state actors, especially military forces (54.9%), play a significant role in the conflict economy. Among non-state actors, criminal organizations were identified as the dominant group, accounting for 43.7% of responses. The results further show that agriculture

remains the principal livelihood source, with 49.3% of respondents identifying it as their primary occupation, although livelihood systems were generally perceived as weakly adaptive, with none of the respondents rating them as extremely adaptable and only 2.8% considering them adaptable. Financial support programmes (39.4%) emerged as the most prioritized policy response, underscoring the importance of direct economic interventions for livelihood recovery. The study concludes that conflict economies and forced migration significantly disrupt livelihood strategies in Zamfara State, with gold mining and banditry at the center of these challenges. These findings contribute to understanding the socio-economic consequences of conflict in resource-rich but insecure settings and highlight the need for coordinated interventions aimed at curbing illegal economic activities, strengthening governance, promoting peacebuilding, and restoring sustainable livelihoods for long-term stability and resilience.

Keywords: Conflict Economies; Forced Migration; Livelihood Strategies; Gold Mining; Banditry

INTRODUCTION

Conflict economies emerge in regions where political instability, armed conflicts, and weak governance create opportunities for informal and illegal economic activities. It is the processes and institutions that evolve around conflict affected areas or regions. These economies emerge as a result of the extraction and trading of natural resources such as gold, diamonds, oil, or other minerals, which give substantial financial inducements to armed groups or people involved in the conflict. The income generated by these activities fuels the conflicts, sustains bloodshed, and impedes post-conflict reconstruction efforts (Humphreys, 2005, Autesserre, 2014, Zhang, et al 2021, Le, et al 2022).

In Nigeria, the intersection of conflict economies and forced migration has become a critical issue. This situation has been worsened by the discovery of gold deposits and the subsequent rise in artisanal gold mining in Zamfara state and other regions, which has attracted both legitimate and illegitimate actors, including armed bandits (Okwelum, 2023). The exploitation of mineral resources in such contexts often fuels insecurity and contributes to the displacement of communities, disrupting traditional livelihood strategies (Kamta, *et al* 2019).

Zamfara State, located in northwestern Nigeria, is rich in gold reserves, making it a hub for artisanal and small-scale gold mining (ASGM). However, the unregulated nature of mining activities has created opportunities for criminal groups to exploit the sector for economic gain making the region a hotspot for conflict economies, forced migration, and insecurity driven by the intersection of natural resource exploitation, particularly gold mining, and banditry. This volatile situation significantly impacts livelihood strategies, forcing local populations to adapt to severe disruptions in traditional and emerging economic activities.

Mining of gold in Zamfara has fuelled a parallel economy, involving artisanal mining and an informal gold trade, often controlled by criminal networks and armed groups (Onuah, 2019). This "resource curse" dynamic has escalated violence as competing groups struggle for control of mining sites, thereby triggering local instability (Okoli & Aduloju, 2020, Oscar, 2021). The lack of formal regulation and government oversight in the gold mining sector has created fertile ground for illegal activities. Artisanal miners, often working in unsafe conditions, are vulnerable to exploitation by bandits, who impose levies on mining operations. The smuggling of gold through transnational routes deprives the Nigerian government of revenue, perpetuating cycles of poverty and insecurity in the region (International Crisis Group (ICG), 2020).

Consequently, the proliferation of banditry in Zamfara has led to forced migration, with thousands of residents fleeing their communities due to attacks, kidnappings, and extortion. According to the International Organization for Migration (IOM, 2021), many displaced persons now reside in overcrowded camps or migrate to urban centres in search of safety and alternative livelihoods. It is important to note that, violent conflicts, terrorism, and acts of banditry have far-reaching detrimental effects on immediate, short-term, and long-term development and economic growth, as discussed by Kleffmann, *et al* (2024), with implications for the overall well-being and functioning of human societies. It disrupts social cohesion, reduces access to agricultural land, and displaces individuals from their traditional means of subsistence.

Furthermore, the displacement of rural communities creates ripple effects on agricultural production and food security in the state. Many farmers abandon their lands, leading to reduced crop yields and threatening local and regional food supply chains. This situation is compounded by the destruction of rural infrastructure and the disruption of

trade routes (Hassan et al., 2022, Iliya & Achoja 2024). Consequently, livelihood strategies in Zamfara have shifted in response to the twin challenges of conflict and forced migration. The livelihoods of displaced populations are further constrained by limited access to alternative income sources, inadequate social safety nets, and the destruction of infrastructure. Additionally, the reliance on gold mining, often under hazardous and exploitative conditions, raises questions about the sustainability and equity of these livelihoods. Women and children are disproportionately affected, facing unique vulnerabilities in displacement and economic exploitation in informal mining activities. Traditional agricultural activities, which form the backbone of the local economy, have been severely disrupted. Many displaced persons turn to informal labour markets, petty trade, or artisanal mining as alternative sources of income. However, these activities often expose individuals to further exploitation and insecurity (Idris, & Umaru, 2024). Women and children are particularly vulnerable, as they often resort to precarious forms of work to survive. The lack of access to education, healthcare, and social services intensifies the long-term impact of forced migration and conflict on human capital development in the region. In addition, environmental degradation resulting from unregulated mining increase the challenges faced by communities. The contamination of soil and water resources with heavy metals such as lead poisoning poses significant health risks, further undermining the resilience of affected populations.

Despite government efforts, such as bans on illegal mining and military operations to curb banditry, the persistence of these issues highlights the need for a deeper understanding of the relationship between conflict economies, forced migration, and livelihoods in Zamfara State. This study seeks to explore how gold mining and banditry intersect to shape the socio-economic realities of affected communities, focusing on the implications for livelihood strategies and policy interventions.

MATERIALS AND METHODS

Study Area

Zamfara is one of the seven states that form the North-West geopolitical zone of Nigeria. It lies within latitude 10° 50'N and 13° 38'N and longitudes 4 ° 16'E and 7 ° 18'E. With an area of 38,418 square kilometres, it is bordered in the North by Niger republic, to the South by Kaduna State. In the east it is bordered by Katsina State and to the West by

Sokoto and Niger States. It has a population of 3,278,873 people according to the 2006 census and a projected population of 5,833,500 for 2024. and contains 14 local government areas, with Gusau as the state capital.

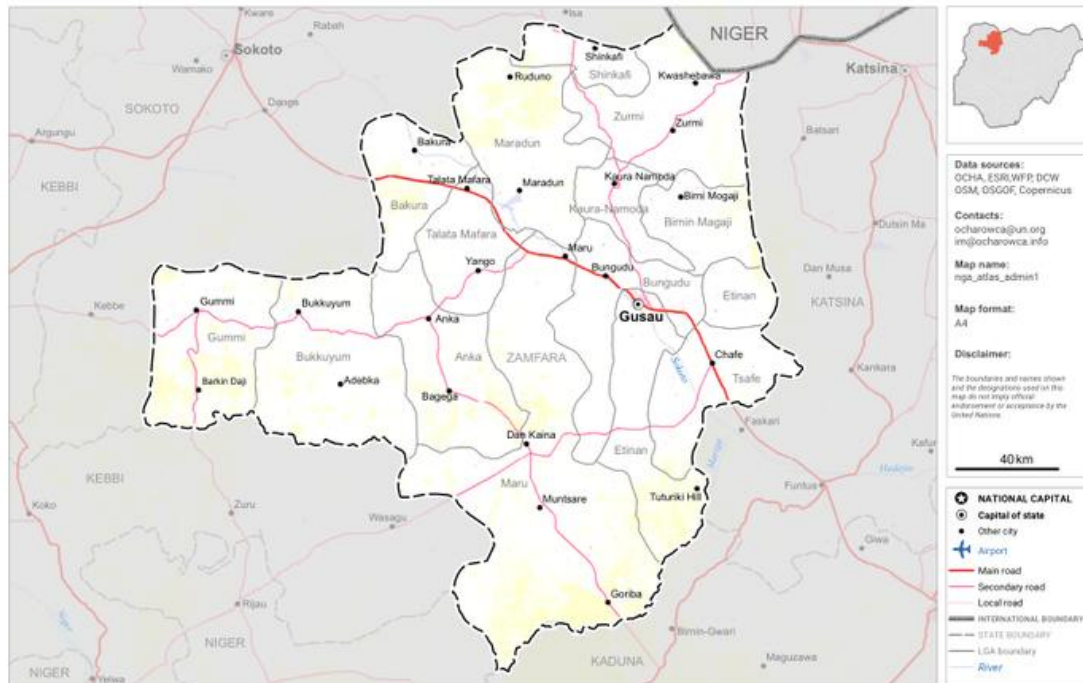


Fig. 1. Zamfara state showing the LGAs

The inhabitants of the state are mainly of Hausa/Fulani and the Zamfarawa people. Anka, Gummi, Bukkuyum, and Talata Mafara local governments are primarily where the Zamfarawa live. Meanwhile, Shinkafi Local Government is inhabited by Gobirawa. Actually, Gobirawa originated in the Gobir Kingdom. Burmawa is located in Bakura, and Fulanis live in Bungudu, Maradun, and Gusau.

The main industries and economic drivers in the state are agriculture and gold mining. Cultivation of cereals and legumes with the support irrigation practice, the phrase “farming is our pride” was coined, and since then, the agricultural produce of the Zamfara people has been contributing to the economic growth of the state. Majority of people (about 80%) work in the agricultural sector and are mostly subsistence farmers. Thus, millet, Guinea corn, maize, rice, groundnuts, cotton, tobacco, and beans are among the main products. The sector provides access to food, raw materials, and work possibilities. Zamfara is widely recognized as one of Nigeria's leading gold-mining states, with significant deposits scattered across its local government areas (LGAs). Artisanal and small-scale gold mining is particularly concentrated in the following areas:

Anka LGA: Known as the epicentre of artisanal gold mining, Anka is home to several mining communities such as Sunke, Bagega, and Abare.

Maru LGA: Contains substantial gold deposits and mining operations in villages like Daki Takwas and Yargalma.

Bukkuyum LGA: A major hub for gold extraction, with mining activities prevalent in areas such as Gummi and Mada.

Gusau LGA: While better known for administrative purposes, some small-scale mining occurs in the outskirts of the state capital.

Zurmi LGA: Hosts pockets of gold mining activities and serves as a transit point for mineral trade.

Methods

The mixed methods design using questionnaire survey, and desk review of archival records was utilised for data collection. The study aimed at the understanding of conflict economies, forced migration and their effects on livelihood strategies in Zamfara state, Nigeria. Questionnaire enabled the collection of direct insights from displaced persons, miners, stockholders and government officials. while archival records, rich in historical or documented information, further deepened the understanding of the subject matter. These combined methods provided a robust framework for thorough analysis and interpretation, providing a multifaceted view of the subject matter.

Data required for this research include information on the mining activities in conflict affected areas, dimensions of forced migration, and the cascading effects on livelihood activities. The key informants will include traditional leaders in the affected areas, religious leaders, leaders of the community institutions, and leaders of peer groups (women association, youth association and community associations) within the area. In addition, Experts in the area of conflict studies in tertiary institutions were interviewed to compare and contrast views of the local knowledge and learned knowledge about the conflict in the area.

A multi-stage sampling technique was employed for selecting elements of the research in order to have good representation of the study population. At the first stage, the purposive sampling technique was used to select the Six (6) local government areas

with gold mining activities which include: Anka, Maru, Bukkuyum, Gusau and Zurmi local government areas. In the second stage, purposive sampling technique was used to select all the internally displaced persons (IDPs) camps in the 6 selected local government areas were considered for the study. A sample of 142 respondents were selected for questionnaire interview. Key informants were selected based on the strength of their understanding and life experience as victims of conflict, personal live-experience, profession and their role in their respective areas.

Information gathered through fieldwork or archival records, specifically quantitative data, was analysed using descriptive statistical methods such as tables and frequencies. These statistical techniques involve the examination and interpretation of numerical data to uncover patterns, trends, and key insights. This analysis helps in summarising the data, allowing for a clearer understanding of the information gathered from the field or historical records.

RESULTS AND DISCUSSION

Socio-Demographic Characteristics

The socio-demographic characteristics of the respondents, as presented in Table 1, provide a comprehensive understanding of the sample population. Out of a total of 142 respondents, the majority (73.2%) were male, while females accounted for 26.8%. The respondents were predominantly within the age range of 26-35 years, representing 47.9% of the sample, followed by those aged 18-25 years (27.5%) and 36-45 years (19.7%). The older age groups, 46-55 years, comprised 4.9%, while none of the respondents were aged 56 years and above.

Table 1 Socio-Demographic Characteristics of Respondents

Variable	Options	Freq n=142	%
Gender	Male	104	73.2
	Female	38	26.8
Age	18-25	39	27.5
	26-35	68	47.9
	36-45	28	19.7
	46 and 55	7	4.9
	56 and above	0	0.0
Marital Status	Divorced	15	10.6

Variable	Options	Freq n=142	%
	Married	67	47.2
	Separated	3	2.1
	Single	46	32.4
	Widowed	11	7.7
Educational level	No formal education	29	20.4
	Primary education	17	12.0
	Secondary education	56	39.4
	Tertiary education	37	25.1
	Vocational training	3	2.1
Employment Status	Academic/Researcher	1.4	1.4
	trader/business	41	28.9
	Government official	28	19.7
	NGO/Non-profit worker	11	7.7
	Retiree	29	20.4
	Student	31	21.8

Source: Fieldwork, 2024

In terms of marital status, married individuals formed the largest group at 47.2%, with singles making up 32.4%. Divorced respondents accounted for 10.6%, widowed individuals represented 7.7%, and those who were separated were the least, at 2.1%. Regarding educational attainment, a significant portion of respondents had secondary education (39.4%), while 25.1% had tertiary education. Those with no formal education comprised 20.4%, followed by primary education at 12.0%, and vocational training at 2.1%.

The employment status of the respondents revealed that traders and business owners constituted the largest group at 28.9%, followed by students at 21.8% and retirees at 20.4%. Government officials represented 19.7%, while workers in NGOs or non-profit organizations made up 7.7%. Academic or research professionals accounted for only 1.4% of the sample. These diverse socio-demographic attributes reflect a varied population, offering insights into the backgrounds, education, and employment of the respondents in the study.

Root Causes of Conflict Economies

The causes of conflict economies in Zamfara State, as presented in Table 2, highlight a complex interplay of economic and historical factors, reflecting broader themes in conflict studies and development discourse. The data reveals that economic causes account for a significant proportion of conflict drivers, with corruption being the most frequently cited, reported by 71.8% of respondents. This aligns with existing literature emphasizing the role of systemic corruption in fostering grievances, eroding public trust, and fueling resource mismanagement in resource-rich regions like Zamfara. Scholars have pointed out that corruption creates inequities in access to wealth and opportunities, often exacerbating tensions in fragile states.

Table 2: Causes of conflict economies

Causes	Options	Freq n=142	%
economic causes	Corruption	102	71.8
	Resource control	2	1.4
	Resource scarcity	4	2.8
	Unequal distribution of resources	28	19.7
	Weak governance	6	4.2
historical causes	Colonial legacies	11	7.7
	Economic exploitation	53	37.3
	Ethnic tensions	49	34.5
	Religious tensions	27	19.0
	Post-colonial state-building	2	1.4

Source: Fieldwork, 2024

Other economic factors, such as unequal distribution of resources (19.7%), weak governance (4.2%), and resource scarcity (2.8%), are also prominent. These findings resonate with theories of resource curse, which argue that unequal wealth distribution, especially in resource-abundant areas, can deepen social divisions and trigger conflicts. Furthermore, weak governance structures in managing resources amplify these challenges, as they fail to address underlying grievances effectively. The marginal representation of resource control (1.4%) might indicate limited localized awareness of control struggles or reflect specific regional dynamics in Zamfara.

Historical causes also significantly contribute to conflict dynamics. Economic exploitation, highlighted by 37.3% of respondents, is a prominent driver. This finding is consistent with literature on the legacies of colonialism, where extractive practices and marginalization entrenched economic disparities that persist into the post-colonial era.

Ethnic tensions (34.5%) and religious tensions (19.0%) further underline the enduring impact of colonial administrative strategies, which often prioritized certain ethnic groups while marginalizing others, sowing seeds of division. These tensions are compounded by weak post-colonial state-building (1.4%), a factor that reflects the inability of many African states to create inclusive national identities and equitable governance structures.

The relatively low emphasis on post-colonial state-building (1.4%) and resource control (1.4%) might suggest that respondents perceive the effects of these factors as indirect or overshadowed by immediate concerns such as corruption and ethnic or economic exploitation. The findings underscore the multidimensional nature of conflicts in Zamfara State, necessitating integrated approaches that address both economic grievances and historical injustices.

Addressing these issues will require reforms aimed at promoting transparency, equitable resource distribution, and effective governance, alongside efforts to mitigate historical legacies of exploitation and division. Such measures are critical for fostering sustainable peace and development in Zamfara State, in line with broader frameworks like the United Nations Sustainable Development Goals (SDGs), particularly Goal 16 on peace, justice, and strong institutions.

The Actors Involved in Shaping Conflict Economies

The interplay of various actors in shaping conflict economies is a complex phenomenon that can. Table 3 presents the key state and non-state actors shaping conflict economies in Zamfara State, highlighting the diverse stakeholders involved in the dynamics of conflict management, security, and socio-economic disruptions. The frequency and percentage distribution provide insight into the relative influence of these actors.

Table 3: The key state and non-state actors involved in shaping conflict economies

Key Actors	Options	Freq n=142	%
key state actors	Government officials/politicians	45	31.7
	Intelligence agencies	9	6.3
	Police forces	8	5.6
	Military forces	78	54.9
	Civil defence	2	1.4
key non-state actors	Community based organisations	0	0.0
	Criminal organisations	82	43.7

Key Actors	Options	Freq n=142	%
	Multinational organisations	6	4.2
	NGOs	23	16.2
	Militia groups	8	5.6
	Rebel groups	43	30.3

Source: Fieldwork, 2024

According to the data, state actors play a significant role, with military forces being the most prominent (54.9%). This aligns with existing literature on conflict economies in Nigeria, where military forces are often deployed as the primary response to insecurity and violent conflicts, particularly in regions experiencing armed banditry and communal clashes. Scholars such as Yagboyaju, and Akinola (2019) argued that the reliance on militarization reflects the state's attempt to assert authority in regions with weakened governance structures. However, the limited representation of other state actors, such as intelligence agencies (6.3%) and police forces (5.6%), raises concerns about the effectiveness of an integrated security approach that leverages both preventive and reactive measures.

Similarly, government officials and politicians, accounting for 31.7% of state actors, underscore their dual role as mediators and, at times, contributors to conflict economies. Research by Obi and Rustad (2011) suggests that political elites in resource-rich regions often influence the dynamics of conflict economies, either through policy interventions or, controversially, through indirect complicity in resource exploitation and patronage networks. The negligible presence of civil defense (1.4%) further highlights the limited involvement of decentralized, community-based security frameworks, which could otherwise enhance resilience at the grassroots level.

Among non-state actors, criminal organizations dominate the landscape, representing 43.7% of responses. This finding reflects the entrenched role of organized crime in perpetuating conflict economies, particularly in Zamfara's context of illegal mining, cattle rustling, and banditry. Studies by Okoli and Ugwu (2020) emphasize how criminal networks exploit governance vacuums and weak law enforcement to sustain illicit economic activities. Rebel groups, accounting for 30.3%, similarly reflect the proliferation of armed groups driven by grievances related to resource access, ethnic tensions, or marginalization, as documented by Humphreys (2005).

Non-governmental organizations (NGOs) represent 16.2% of non-state actors, highlighting their efforts in humanitarian relief, conflict resolution, and advocacy for marginalized communities. However, their relatively lower frequency compared to criminal and rebel groups suggests the limited capacity or reach of civil society interventions in addressing the root causes of conflict. Multinational organizations, accounting for 4.2%, likely represent corporate entities engaged in resource extraction, whose operations may either exacerbate local tensions or contribute to conflict mitigation through corporate social responsibility initiatives.

Forced migration pattern

Forced migration remains a critical challenge in Zamfara State, as evidenced by the analysis of Table 5, which provides insight into the dynamics of displacement and the associated socioeconomic factors. The period of displacement shows that nearly half (45.8%) of the respondents had been displaced for less than six months, indicating a high prevalence of recent displacement events.

Table 5: Forced Migration

Variables	Options	Freq n=142	%
Period of displacement	Less than 6 months	65	45.8
	6 months to 1 year	48	33.8
	1-2 years	17	12.0
	2-5 years	10	7.0
	More than 5 years	2	1.4
Reason for Forced Migration	Armed conflict	12	8.5
	Political persecution	14	9.9
	Ethnic or religious persecution	52	36.6
	Environmental disasters	9	6.3
	Banditry/kidnapping	55	38.7
Current Living Situation	Host community	54	38.0
	Live in conflict prone area	5	3.5
	Refugee camp	2	1.4
	Stay with a relative	8	5.6
	Temporary shelter	13	9.2
	Urban area	60	42.3
Employment status during displacement	Employed	33	23.2
	Business/trader	0	0.0
	Retiree	0	0.0

Source of income	Student	15	10.6
	Unemployed	94	66.2
	Aid assistance	94	21.8
	Employment	14	9.9
	Informal work	31	21.8
Economic Challenges Faced	Business	3	2.1
	Lack of employment opportunities	51	35.9
	Discrimination in the job market	21	14.8
	Insufficient education or skills	48	33.8
	Lack of access to financial services	17	12.0
	Others	5	3.5

Source: Fieldwork, 2024

This trend is consistent with recent studies highlighting the increasing frequency of internal displacement in northern Nigeria, driven by violence, insecurity, and environmental factors (IOM, 2021). The significant proportion of individuals displaced for less than a year (33.8%) further underscores the acute nature of forced migration in Zamfara, linked to the escalation of banditry and armed conflict in the region

The reasons for forced migration reveal that the leading causes are banditry and kidnapping (38.7%), followed by ethnic or religious persecution (36.6%). These findings align with recent literature documenting the intensification of violent banditry in Zamfara State and its devastating impact on communities (Ojewale, 2025). Ethnic and religious persecution also reflects broader issues of intergroup tensions and conflicts in the region, as documented in studies on forced displacement in the Sahel (IDMC, 2023). Environmental disasters, though less prominent (6.3%), still highlight the role of climate-induced challenges such as drought and deforestation in exacerbating forced migration.

In terms of current living situations, a majority of displaced persons are either residing in urban areas (42.3%) or within host communities (38.0%). This urban influx is consistent with urbanization trends observed in displacement contexts, where internally displaced persons (IDPs) often seek relative safety and economic opportunities in cities (UNHCR, 2020). However, the presence of IDPs in conflict-prone areas (3.5%) and temporary shelters (9.2%) highlights ongoing vulnerabilities and the lack of adequate resettlement or housing options. This corroborates the findings of Daodu, *et al* (2024) that displaced persons are facing humanitarian crisis.

The employment status of displaced persons paints a grim picture, with 66.2% of respondents unemployed. This finding is supported by evidence from displacement studies emphasizing the economic marginalization of IDPs, often due to limited access to job opportunities and systemic discrimination. Only 23.2% of respondents reported being employed, with a negligible number engaged in business or trade. For income, aid assistance (21.8%) and informal work (21.8%) are the primary sources, further reflecting economic precarity and dependence on external support.

Economic challenges faced by displaced persons include a lack of employment opportunities (35.9%) and insufficient education or skills (33.8%). These barriers align with the literature emphasizing the role of structural inequities in hindering the socioeconomic integration of IDPs. Discrimination in the job market (14.8%) and lack of access to financial services (12.0%) compound these issues, highlighting the need for targeted interventions to enhance livelihoods and economic resilience.

Overall, the data underscores the complex interplay of armed conflict, insecurity, and socioeconomic vulnerabilities driving forced migration in Zamfara State. Addressing these challenges requires a multifaceted approach, including improved security measures, livelihood support, and policies promoting social cohesion and economic integration for displaced populations.

The Range of Livelihood Strategies Adopted by Forced Migrants

Table 6: Livelihood strategies

Variables	Options	Zamfara state	
		Freq	%/ Rank
primary livelihood strategy	Agriculture/Farming	70	49.3
	Formal Employment	32	22.5
	Informal Labour	8	2.8
	Fishing	0	0.0
	Remote Work/Online Business	2	1.4
	Skill-based Freelancing	5	3.5
	Small Business/Entrepreneurship	25	17.8
Effect on choice of livelihood strategy	Expanded opportunities	18	12.7
	Limited options	114	80.3

	No significant impact	10	7.0
	Unlimited options	0	0.0
effectiveness of current livelihood strategy	Very effective	2	1.4
	Effective	47	33.1
	Neutral	75	52.8
	Ineffective	16	11.3
	Very ineffective	2	1.4
factors that influenced your decision in choosing current livelihood strategy	Skills/qualification	55	2
	Availability of resources	19	3
	Local demand	63	1
	Access to markets	12	4
	Government support	4	7
	Cultural influence	9	6
	Personal preference	10	5

Source: Fieldwork, 2024

The livelihood strategies adopted by individuals in Zamfara State highlight significant reliance on agriculture as the dominant source of income, with 49.3% of respondents identifying it as their primary occupation. This finding aligns with broader trends in rural Nigerian states, where agriculture serves as the backbone of economic activity, providing both food security and employment. Studies corroborate this finding, emphasizing the centrality of agriculture in rural livelihoods despite challenges such as climate variability and limited access to modern farming tools (Ogundele & Okoruwa, 2006, Connolly-Boutin, & Smit, 2016). Formal employment follows as the second most prominent livelihood option (22.5%), indicating limited opportunities for diversified employment in the region.

Interestingly, small businesses or entrepreneurial activities account for 17.8% of livelihood strategies, reflecting a growing interest in informal sector activities and self-employment as adaptive measures in the face of economic challenges. The minimal presence of remote work/online business (1.4%) and skill-based freelancing (3.5%) underscores the digital divide and the region's limited access to technological infrastructure as a barrier to leveraging digital platforms for economic growth.

The choice of livelihood strategies is overwhelmingly shaped by limited options, as reported by 80.3% of respondents. This finding is consistent with the literature on rural poverty and livelihood constraints in Nigeria, which identifies restricted access to

education, markets, and financial services as key barriers to livelihood diversification (Shabu, et al, 2020, Abebe, *et al*, 2021, Habib, *et al* 2023;). Expanded opportunities were cited by only 12.7% of respondents, suggesting that systemic issues, including poor infrastructure and inadequate policy support, continue to stifle livelihood innovation.

Regarding the effectiveness of current livelihood strategies, a significant proportion of respondents (52.8%) expressed neutrality, while 33.1% found them effective. Only 1.4% considered their strategies very effective, indicating dissatisfaction with existing economic activities. This reflects findings by T'choukouang, *et al*, (2024), which highlight the inefficiency of traditional livelihood strategies in addressing contemporary socio-economic challenges, especially in regions vulnerable to climate change and resource depletion.

The factors influencing livelihood choices indicate that local demand (ranked 1st) and skills/qualifications (2nd) play pivotal roles, followed by resource availability. The minimal influence of government support (ranked 7th) highlights gaps in state-driven initiatives to support livelihoods. This aligns with findings by Onyekuru and Marchant (2018), which emphasize the need for policy interventions to address structural issues limiting access to resources and markets.

Overall, the data underscores the need for integrated livelihood support programs that combine agricultural development, vocational training, and digital inclusion to foster economic resilience in Zamfara State.

In recent years, Zamfara State, like many regions in northern Nigeria, has faced significant challenges in maintaining existing livelihood strategies. A key challenge, as indicated by Table 7, is limited access to resources, ranked first with a frequency of 68. This aligns with existing literature that highlights resource constraints such as inadequate access to arable land, water for irrigation, and agricultural inputs as critical barriers to sustaining livelihoods in rural areas across Nigeria. According to studies by Madu. (2012) and Azare et al. (2020), this challenge is compounded by population pressure and environmental degradation, including desertification and deforestation, which are prevalent in Zamfara State.

Resilience and Adaptability of Livelihood Systems in Conflict-Affected Areas

The resilience and adaptability of livelihood systems in Zamfara State, as presented in Table 8, highlight significant challenges and limited capacity for withstanding and adapting to socio-economic and environmental changes. Recent literature indicates the

importance of resilience and adaptability in rural livelihoods, especially in regions vulnerable to climate change, insecurity, and economic fluctuations.

The data indicates that only a small percentage of respondents (1.4%) consider their livelihood systems as "extremely resilient," with 2.8% identifying them as "resilient." A majority, however, are uncertain (64.1%) about the resilience of their systems, while 28.2% consider them "not resilient," and 3.5% believe they are "not at all resilient." These findings resonate with studies emphasizing that uncertainty about resilience often stems from inadequate access to resources, weak institutional support, and a lack of awareness about sustainable practices. The low levels of perceived resilience may also reflect systemic vulnerabilities in Zamfara State, exacerbated by conflict, climate change, and limited socio-economic infrastructure

Table 8: Resilience and Adaptability of Livelihood Systems

Variables	Options	Zamfara state	
		Freq n=142	%
resilience of livelihood system	Extremely resilient	2	1.4
	Resilient	4	2.8
	Not sure	91	64.1
	Not resilient	40	28.2
	Not at all resilient	5	3.5
factors contributing to the resilience of livelihood system	Diversification of income sources	9	
	Access to financial resources	38	1
	Social support networks	27	3
	Government assistance	17	
	Access to education/ skill acquisition training	18	
	Others	35	2
adaptability of livelihood system	Extremely adaptable	0	0.0
	Adaptable	4	2.8
	Not sure	86	60.6
	Not adaptable	45	31.7
	Not at all adaptable	7	4.9
strategies adopted in livelihood system	Changing crops/livestock	8	5
	Seeking alternative markets	19	3
	Relocating business	53	1

	Collaborating with other community members	50	2
	Utilising technology for business operation	10	4
	Others	6	6

Source: Fieldwork, 2024

Factors contributing to the resilience of livelihood systems reveal disparities in the adoption of resilience-building strategies. While 38 respondents highlighted access to financial resources as critical, fewer participants emphasized income diversification (9), social support networks (27), government assistance (17), and education or skill acquisition (18). The predominance of financial resources as a resilience factor aligns with findings by Olutumise, (2023), which indicate that access to credit and savings significantly enhances households' ability to withstand shocks. However, the relatively low recognition of income diversification and education suggests a gap in knowledge and capacity-building efforts, underscoring the need for targeted interventions to strengthen adaptive capabilities in rural communities.

Adaptability appears to be another area of concern. None of the respondents rated their livelihood systems as "extremely adaptable," and only 2.8% described them as "adaptable." Similar to resilience, the majority were unsure (60.6%), while 31.7% and 4.9% considered their systems "not adaptable" and "not at all adaptable," respectively. This aligns with findings of Mnukwa, *et al* (2025) that highlights the challenges rural households face in adapting to dynamic economic and environmental conditions due to limited education, technological access, and institutional support. The high level of uncertainty may also reflect a lack of awareness of potential adaptation strategies or disbelief about their effectiveness.

In terms of strategies adopted to enhance livelihood systems, the most reported approach was relocating businesses (53), followed by collaboration with other community members (50). This preference for relocation could be indicative of socio-political instability or environmental degradation, which are documented drivers of displacement and migration in the region (Eze et al., 2021). Collaboration within communities reflects an acknowledgment of social capital as a coping mechanism, consistent with findings by Dapilah, *et al* (2019) on the role of social networks in building resilience. However, the relatively low adoption of strategies such as changing crops or livestock (8), seeking alternative markets (19), and utilizing technology (10) suggests underutilization of

innovative or market-based solutions to livelihood challenges. The resilience and adaptability of livelihood systems in Zamfara State are markedly low, with significant gaps in the adoption of supportive strategies and mechanisms. This underscores the need for multi-faceted interventions, including capacity building, financial inclusion, improved governance, and access to technology and education, to strengthen rural livelihoods in the face of persistent socio-economic and environmental stressors.

CONCLUSION

Conflict economies and forced migration significantly disrupt livelihood strategies in Zamfara State, Nigeria, with gold mining and banditry at the centre of these challenges. The illegal exploitation of gold has fuelled violence, weakened local governance, and triggered socioeconomic vulnerabilities. Forced migration caused by banditry has displaced thousands, dismantled traditional livelihoods and created a dependency on inadequate relief efforts. These dynamics indicate the urgent need for holistic interventions, including strengthened governance, economic recovery programmes, and sustainable livelihood support. Addressing these issues requires coordinated efforts to curb illegal economic activities, promote peacebuilding, and restore sustainable livelihoods, ensuring long-term stability and resilience in the region.

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