

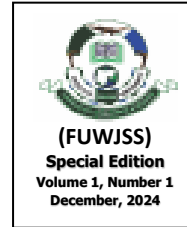
# INSURGENCY, HUNGER AND FERTILITY IN NORTH-EAST NIGERIA

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## **Abstract**

The study examines the relationship between insurgency, poverty, hunger and high fertility rates in North-East Nigeria. Guided by the Resource Conflict Theory, the study explains how fertility rates contribute to the prevalence of hunger and insurgency in the region. A mixed-methods approach was employed, with quantitative data emerging from a sample of 400 respondents while qualitative data emerged from 15 key informant interviews in Borno, Adamawa, and Yobe States. The study's findings reveal that insecurity, poverty and hunger significantly influence fertility behaviours among residents of North-East Nigeria as uncertainties of dieing soon due to insurgency, poverty and hunger influence sexual behaviour of residents to procreate and have more children in order to replace parents when they eventuall die of insecurity, poverty or hunger. The study concludes that high fertility rates in North-East Nigeria favourably serve insurgent groups who exploit the reality of poverty and hunger in the region to recruit new members. The study recommends integrated development programmes that strengthen governance structures and enhance reproductive health services to be implemented in North-East Nigeria as measures to address the root causes of insurgency, poverty and hunger in the region.

**Keywords:** Fertility rate, insurgency, vulnerable populations, reproductive health services

## **Introduction**

The North East region of Nigeria has been witnessing issues of hunger, high fertility rates, and insurgency for decades. Fertility rate is a crucial demographic indicator that measures the average number

of children that a woman of childbearing age is expected to have during her reproductive years. In Nigeria, particularly in the North East region, the fertility rate has been significantly higher than the national average, with some estimates suggesting it to be around 6.3 children per woman (UNFPA, 2019). This high fertility rate is attributed to various factors, including cultural, religious, and socio-economic determinants such as poverty, hunger, lack of access to family planning services, and low levels of education among women.

Compounding these issues is the alarming state of food insecurity in Nigeria. According to UNICEF (2023), around 25 million Nigerians are currently at high risk of food insecurity, with the Northeast region suffering particularly from these issues. The Integrated Food Security Phase Classification (IPC) identifies this region as experiencing severe levels of hunger, designated as Phase 3 or worse—meaning that many individuals face acute food shortages (UNICEF, 2023). Food insecurity is closely linked to poverty, as reported by the World Bank (2023), which states that approximately 70% of Nigerians live below the poverty line, severely limiting their ability to access food. This escalates hunger levels and leads to stratified access to resources, disproportionately affecting vulnerable populations.

Surprisingly, the North East region of Nigeria has been a hotspot for insurgency, particularly Boko Haram. The insurgency has been a significant security challenge in the region, leading to widespread violence, the displacement of populations, and the destruction of public infrastructure. The most common case of insurgency in the region is the Boko Haram insurgency, which has had devastating consequences on socio-economic development, escalating poverty and humanitarian crises (Akinyemi, Afolayan & Adebawale, 2016). Drawing from the study by Akinyemi, Afolayan, and Adebawale (2016), the relationship between population growth and insurgency in North East Nigeria is complex and multidimensional. These authors clarified that high population rates can contribute to the emergence and perpetuation of conflicts and insurgencies in several ways. Firstly, rapid population growth can lead to a large youth bulge, straining economic resources and heightening poverty and unemployment. Food insecurity plays a critical role here, as a lack of access to

nutrition drives families deeper into poverty, creating a fertile ground for recruitment into insurgent groups. Unemployed and disenfranchised youth become more susceptible to radicalization and manipulation by extremist organizations (Akinyemi, Afolayan & Adebowale, 2016).

Besides, high population growth and escalating fertility rates impact education and health outcomes for children in the region. As families struggle with limited resources due to both high fertility and food insecurity, education and healthcare systems become strained, resulting in poor educational outcomes and limited access to healthcare services. This cycle not only fosters a higher mortality rate among children but also perpetuates a culture of poverty and insecurity, making children growing up in such environments more vulnerable to recruitment into insurgent groups (Chukwunke & Nwobodo, 2018).

Interestingly, population growth and fertility rates are closely related demographic concepts, yet they represent different aspects of population dynamics. While population growth, according to UN (2015), denotes a change in the size of a population over a specific period of time, fertility rate specifically focuses on the average number of children born to a woman of childbearing age within a population (Bongaarts, 2002). This distinction underscores the need to explore how these demographic factors interact with issues of hunger and conflict.

Despite the existing understanding of the effects of population growth on the rise of insurgency, very few studies have captured how hunger and high fertility in North East Nigeria contribute to the escalating cases of insurgency in the region. Therefore, this study aims to examine how hunger and fertility rates contribute to the increased cases of insurgency in the Northeastern Region of Nigeria.

### **Prevalence of Hunger, High Fertility Rate and Insurgency in North East Nigeria**

The North East region of Nigeria faces a complex crisis characterized by high fertility rates, widespread hunger, and the ongoing issue of insurgency, particularly from the Boko Haram group.

These issues significantly impact the lives of people in the region, affecting their health, economic stability, and social structure.

Fertility rates in North East Nigeria are alarmingly high, with women averaging around 6.3 children per woman, which is significantly above the national average (Nigeria Demographic and Health Survey, 2018). Several studies highlight factors contributing to these high rates. For instance, Ajaegbu and Chinonso (2019) emphasize that many women in the region have limited access to education and reproductive health services. Cultural norms often favor large families, which also play a crucial role in perpetuating this trend (Chenu, 2016). The correlation between education and fertility is evident, as women with less education are typically less aware of family planning options (Ezeh, Mberu, & Emina, 2017). The high fertility rate places additional strain on families, making it difficult to provide adequate food and resources for children. According to Adeyemi and Ogunleye (2018), the violence and instability caused by insurgency have disrupted agricultural activities, leading to food shortages. The United Nations has reported that millions are in need of humanitarian assistance in this area, with many communities grappling with severe food insecurity. Families with many children often struggle to provide enough food, which leads to malnutrition, particularly among young children. This situation creates a vicious cycle where high fertility rates contribute to hunger, which in turn affects child health and development.

Furthermore, the Boko Haram insurgency has had devastating effects on North East Nigeria and directly influences both fertility rates and hunger. Insurgency leads to violence, displacement, and a breakdown of social structures. As revealed by Mohammed and Ali (2016), the conflict has resulted in declining fertility rates in certain areas, as families cope with the unpredictability of life during conflict and the challenges of displacement. Many families are forced to abandon their homes and agricultural livelihoods, leading to an increase in vulnerability and hunger among displaced populations (Akindele, Ibrahim & Okoye, 2019).

Besides, the insurgency limits access to healthcare services, making reproductive health care less available. This lack of access compounds the challenges of high fertility rates, as women cannot

obtain the necessary resources for family planning or maternal health thus escalating family size and inadequate food provision (Ibrahim & Abdullahi, 2017). Suffice to say that the fear surrounding insurgent activity can also deter families from seeking healthcare, further compounding the issues of fertility and hunger.

Therefore, the connection between high fertility rates, hunger, and insurgency in North East Nigeria creates a complicated situation where each factor influences the others. As highlighted by Chukwunke and Nwobodo (2018), addressing these issues holistically can improve outcomes for families and communities. Thus, it is essential to provide better access to education, healthcare, and nutritional support, especially for women, as they play an important role in making decisions about family size and health. These efforts could help in managing instances of conflicts and ensure that families can return to their agricultural livelihoods and secure better futures for them.

### **Theoretical Framework**

This study is guided by the Resource Conflict Theory propounded by Paul Collier in (2000), which focuses on how competition over scarce resources can lead to conflicts, including civil wars and insurgencies. The theory assumes that when there is inadequate access to resources such as land, water, or economic opportunities, groups within a society may resort to violent means to secure these resources, leading to conflicts and instability. In this study, the Resource Conflict Theory provides a relevant framework for understanding how competition over limited resources may be contributing to both high fertility rates and insurgency in this region of the country. Specifically, the theory suggests that in areas where there is fierce competition for resources, such as in the North East region affected by Boko Haram insurgency, individuals and communities may face economic deprivation and limited access to basic services. This, in turn, can lead to high fertility rates as families may perceive having more children as a form of social security or support in resource-constrained environments. Besides, the theory posits that the competition for resources can also fuel grievances and tensions within communities, ultimately escalating into conflicts such as insurgencies.

In the case of Nigeria, the Resource Conflict Theory helps to explain how the intersecting issues of high fertility rates and insurgency may be rooted in underlying resource competition and economic inequalities. Hence, applying the Resource Conflict Theory to the study, the researchers can explore how factors such as limited access to education, healthcare, and economic opportunities intersect with fertility behaviors and conflict dynamics. This could provide valuable insights into the underlying mechanisms driving the relationship between fertility rates and insurgency in Nigeria, and inform policy interventions aimed at addressing these complex challenges.

### **Research Methodology**

The study adopted a mixed-methods approach by combining quantitative and qualitative research methods. The study focuses on North Eastern part of Nigeria particularly Borno, Adamawa, and Yobe states. These states within the region have a high fertility rate and are heavily impacted by insurgency, making them relevant areas for exploration. The total population in this study is 14,663,200 according to NPC (2022) population projection representing the combined population of the three states under study. A sample size of 400 was determined using the Taro Yamane (1967) sample size determination method  $\{TY: n=N/(1+N(e)^2)\}$ . Simple random sampling was employed to select the respondents from the target population, additionally, 15 key person interviews were conducted with personnel from the National Population Commission (NPC) and Nigeria Demographic and Health Survey (NDHS). These interviewees were selected purposively to provide expert insights and perspectives to supplement the quantitative data collection. Both primary and secondary data sources were utilized in this study allowing for a more comprehensive analysis. For the quantitative data collected from respondents, descriptive analysis method was used to summarize and interpret the information. For the qualitative data obtained from the key person interviews, conceptual/thematic analysis was employed to identify patterns, themes, and underlying meanings in the responses.

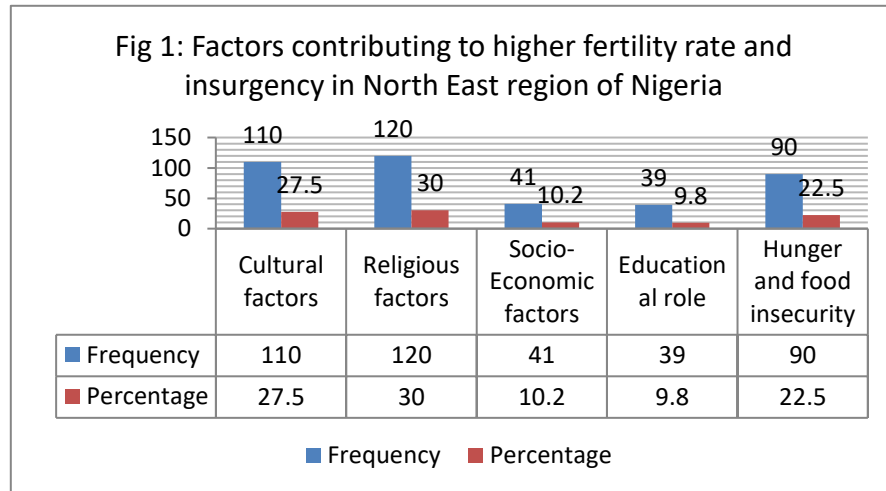
Table 1: Socio-Demographic Characteristics of Respondents

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b><i>Gender</i></b>		
Male	210	52.5%
Female	190	47.5%
<b><i>Age</i></b>		
Under 18	30	7.5%
18-25	100	25%
26-35	150	37.5%
36-45	80	20%
Over 45	40	10%
<b><i>Educational Level</i></b>		
No formal Edu.	160	40%
Primary Edu.	100	25%
Secondary Edu.	50	12.5%
Higher Edu.	40	10%
<b><i>Occupation</i></b>		
Unemployed	241	60.2%
Employed	159	39.8%
<b>Total</b>	<b>400</b>	<b>100%</b>

*Source:* Field Survey, 2024.

The demographic data obtained from the study are presented in Table 1 above. The table presents the frequencies and corresponding percentages for various demographic variables, including gender, age, educational level, and occupation. When it comes to Gender, the table shows that Males were represented by 210 (52.5%) while Females stood at 190 (47.5%). This shows a relatively balanced distribution of gender among the respondents, with a slight majority of males. In terms of age, the largest proportion falls within the 26-35 age range with a 150 (37.5%) respondents, followed by the 18-25 age group with 100 (25%) respondents. Meanwhile, 36-45 age range stood at 80

(20%), Over 45years where represented by 40 (10%) participants while under 18years were 30 (7.5%). Educationally, a significant proportion of respondents have no formal education with a staggering 160 (40%) participants acknowledging this fact, primary education however had 100 (25%) representation, Secondary education with 50 (12.5%) respondents and those who attained higher education stood at 40 (10%). Regarding occupation, a majority of respondents are unemployed standing at 241 (60.2%) while a notable portion is employed with 159 (39.8%) representation. The demographic profile of the respondents reflects a diverse range of backgrounds, which is important for understanding the perspectives and experiences related to fertility rates and insurgency in North East Nigeria. The data provides a foundation for further analysis and interpretation of the study findings, shedding light on the characteristics of the population involved in the research.



Source: Field Survey, 2024

### Dynamics of Hunger, High Fertility Rates and Insurgency in North East Nigeria

Fig 1 above account for the factors contributing to higher fertility rates in North East region of Nigeria. The chart reveals that Cultural factors, including the influence of traditional beliefs promoting large

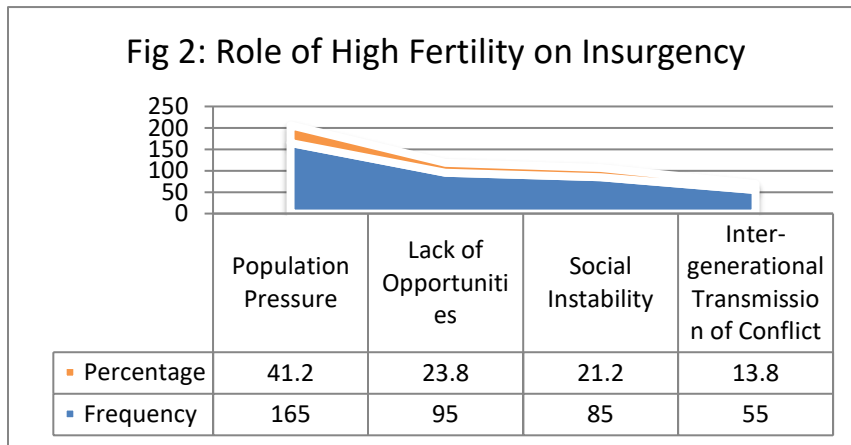


families, were reported by 110 participants, representing 27.5% of the responses. Religious factors, such as restrictions against contraceptives use and norms around childbearing/fertility, were mentioned by 120 participants, making up 30% of the responses. Equally, Socio-economic factors like poverty, unemployment, and limited healthcare services were identified by 41 participants, accounting for 10.2% of the responses. While the educational role shows that respondents with higher education were linked to lower fertility rates and those with lack of education correlate with higher fertility rates. This was acknowledged by 39 participants, representing 9.8% of the responses. The issues of hunger and food insecurity were also strongly mentioned by 90 (22.5%) of the respondents, suggesting that beyond the aforementioned factors, hunger is a crucial conversation when discussing insecurity issues in the region.

To corroborate this quantitative data, excerpts from the qualitative insights suggested that hunger is a product of the over population in the region, according to this interviewee;

My comments may sound hypothetical but it is the reality. The truth is that, the higher the fertility rate, the more chances of hunger situation. Because, as the people have more children than they can cater for, the instances of hunger will increase and these hungry population are vulnerable to exploitation by insurgent groups, it's simple logic. KPI Participant/NDHS personnel/male/aged 41yrs.

These findings are in line with the research by Akindele, Ibrahim, and Okoye (2019), which emphasizes the impact of demographic dynamics on conflict vulnerability. Akindele, Ibrahim, and Okoye (2019) highlight how socio-cultural factors, such as traditional beliefs and norms, can influence fertility rates and contribute to increased population growth, ultimately affecting socio-economic conditions and conflict dynamics in the region.



Source: Field Survey, 2024.

Following objective 2 which set out to examine the relationship between high fertility rates and the prevalence of insurgency in the North East region of Nigeria., Fig 2 revealed that population pressure was identified by 165 participants, representing 41.2% of the responses as critical impact of fertility rate on insurgency since fertility rate is a major indicator of population growth. On the other hand, lack of opportunities was cited by 95 participants, making up 23.8% of the responses. This is to say that as fertility rates continue to increase, there is a compounded pressure in available opportunities in the region. Though, social instability was also acknowledged by 85 participants constituting 21.2% of the responses. On the other hand, intergenerational transmission of conflict was reported by 55 participants, accounting for 13.8% of the responses.

While the questionnaire data has captured mostly the factors, indicators and the role of fertility rate to insurgency and insurgency to fertility rates, this interview went further to complement these findings and provide further expert opinion and perceptions regarding the interconnectedness of the variables. While most studies have found that insurgency is responsible for the high fertility rates in the region owing to the fear, destructions of healthcare facilities by the

insurgent groups amongst other factors as captured in Fig 2 above, one of our interviewee expressed different opinion. According to her:

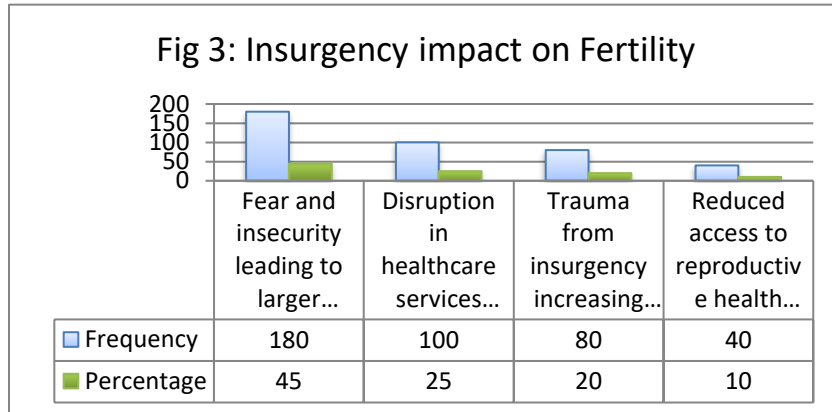
High fertility rates in the region leads to rapid population growth, which can strain available resources such as land, employment opportunities, and social services. This population growth then contributes to economic challenges, youth unemployment, and competition for scarce resources, creating conditions that are conducive to social unrest and conflict. KPI Participant/NDHS personnel/female/aged 51yrs.

This viewpoint diverges from the common notion that insurgency leads to high fertility rates in the region. It equally corroborates the findings of Akindele et al. (2019) on the demographic dynamics and conflict in Nigeria. The study explores the relationship between population growth, resource scarcity, and conflict vulnerability, particularly in conflict-affected regions like the North East. Akindele, Ibrahim and Okoye (2019) which emphasized how high fertility rates can contribute to rapid population growth, leading to strained resources and exacerbates socio-economic challenges, ultimately creating conditions conducive to social unrest, conflict and subsequently, insurgency. In a similar way, another interviewee noted that:

High fertility rates can also escalate existing social and economic inequalities, particularly in a situation where access to education, healthcare, and employment opportunities may be limited. This disparity can create grievances and marginalization among certain segments of the population, which can be exploited by insurgent groups to recruit followers and fuel their cause. KPI Participant/NDHS personnel/female/aged 49yrs.

The disparity in socioeconomic opportunities in the face of existing high fertility rates can lead to grievances and marginalization among certain population segments according to this interviewee, this can be exploited by insurgent groups to recruit followers and further fuel their cause. This viewpoint resonates with the findings of a study by Ojo and Aliyu (2017) on the interplay between demographic factors and insurgency in Nigeria. The study examines how social and

economic disparities resulting from high fertility rates can create conditions ripe for exploitation by insurgent groups in conflict-affected regions. Ojo and Aliyu (2017) emphasize how limited access to essential services and opportunities, exacerbated by demographic pressures, can contribute to the marginalization of certain population groups, making them vulnerable to recruitment and radicalization by insurgent groups.



Source: Field Survey, 2024.

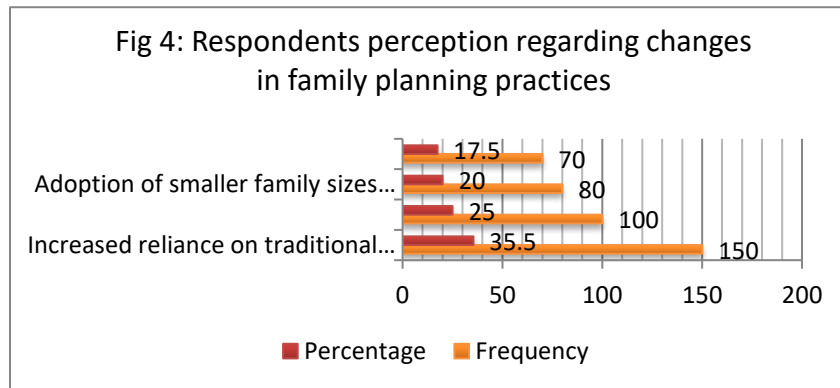
Objective 3 set out to ascertain the role of high fertility rate on insurgency, however the chart in Fig 3 captures a reverse to show to show the impact of insurgency on fertility rate in the region. It is evident in the chart as revealed that about 180 (45%) of the population expressed fear and insecurity as a leading cause of having a larger family size in the region, this is to enable them have some kind of counter force against insurgents. Additionally, 100 (25%) of the respondents identified disruption in healthcare services by these insurgent groups as a concerning factor impacting family planning access resulting in higher fertility rate thus escalating hunger challenges. Furthermore, 80 (20%) of the population identified trauma from insurgency as a contributing factor to increasing fertility outcome as a coping strategy. Meanwhile, reduced access to reproductive health services due to insecurity was mentioned by 40

(10%) of the respondents indicating the interconnectedness of the phenomenon under study.

While these findings are quite revealing, an interviewee noted that insurgent groups not only leverage on the existing population size but creates an enablement of hunger in order to exploit the people. According to this interviewee;

You know, these people sometimes come to recruit our young men into their groups, but if they cannot do that, they attack our farm lands, destroy our crops, knowing fully well that the people will become helpless, hungry and vulnerable to exploitation. KPI Participant/NDHS personnel/female/aged 41 yrs.

This opinion highlight how insurgents can heighten social and economic inequalities through attacks on livelihood sources, thus fostering grievances and disenfranchisement that their groups exploit for recruitment purposes. This perspective aligns with the research findings from Ojo and Aliyu (2017), which points out the vulnerability of marginalized populations to recruitment and radicalization by insurgent groups due to limited opportunities and disparities resulting from high fertility rates.



Source: Field Survey, 2024.

When asked about participant’s perception regarding changes in family planning practices in the face of insurgency, Fig 3 above expressed an increased reliance on traditional methods due to disruptions in healthcare as highlighted by 150 participants, making up 37.5% of the responses. Moreover, more awareness and use of

contraceptives for spacing births were acknowledged by 100 participants, representing 25% of the responses. Additionally, adoption of smaller family sizes for easier mobility during conflicts was reported by 80 participants, constituting 20% of the responses. While a Shift towards prioritizing children's quality of life over quantity was mentioned by 70 participants, accounting for 17.5% of the responses.

In line with the quantitative findings and expert opinions regarding the interconnectedness of high fertility and insurgency, the study went on to examine comprehensive strategies that can be employed to address the phenomenon under study among which one of our interviewee suggested implementing integrated development initiatives that address issues of hunger, high fertility rates and insurgency challenges simultaneously. To this participant,

This approach could involve programs that combine family planning services, healthcare access, education, vocational training, and economic opportunities targeted at vulnerable populations in conflict-affected areas. I believe that by addressing the root causes of hunger such as poverty, high fertility rates and social grievances that fuel insurgency, these initiatives can promote stability, empowerment, and socio-economic development in the region. KPI Participant/ NPC Personnel/Male/aged 54years.

This participant's suggestion aligns with the recommendations of Ajaegbu and Chinonso (2019) in highlighting the potential effectiveness of integrated development initiatives in addressing the intertwined challenges of high fertility rates and insurgency in Nigeria. By implementing such strategies, stakeholders can work towards fostering peace, stability, and socio-economic progress in the insurgency ravaged areas. Additionally, another expert suggestion was on strengthening governance and social service delivery. In her words,

Doing this entails improving access to quality healthcare, education, water, sanitation, and other essential services that are critical for human development and well-being. In any case, strengthening governmental institutions, promoting accountability, and combating corruption can also contribute to

building trust, legitimacy, and stability within communities which will in turn help in ameliorating the instances of taking advantage of the available population to recruit them into insurgent groups. KPI Participant/NDHS personnel/male/aged 43yrs.

This interviewee's emphasis on the role of governance and social service delivery aligns with the findings of Adigun and Yusuff (2018) when they advocate for governance reforms and enhanced service provision to address the root causes of high fertility rates and insurgency in Nigeria. Adigun and Yusuff argued that enhancing governance structures, promoting accountability, and combating corruption can contribute to building trust, legitimacy, and stability within communities.

### **Conclusion and Recommendations**

This study has provided valuable insights into the complex relationship between insurgency, poverty, hunger and high fertility rates in North East region of Nigeria. The findings from both the questionnaires and interviews have highlighted the significant roles played by cultural, religious, and socio-economic factors in shaping fertility behaviors, as well as the impact of hunger, fear, insecurity, and trauma on fertility rates. The interplay between high fertility rates and insurgency has been identified, showcasing how hunger, social and economic inequalities heightened by high fertility rates can be exploited by insurgent groups for recruitment purposes. The study therefore concludes that the existing practice of high birth rates otherwise known as fertility rate as well as hunger heighten the vulnerability of residents of North-East Nigeria to insurgency. Based on this, there is need to develop and implement integrated development programs that target vulnerable populations in conflict-affected areas, focusing on promoting stability, empowerment, and socio-economic development. These initiatives should address the root causes of hunger, high fertility rates and insurgency by providing access to education, healthcare, and livelihood opportunities.

There is need to enhance governance structures and social service delivery mechanisms to improve accountability, transparency, and service provision in conflict-affected communities. This includes

promoting trust, legitimacy, and stability within these areas to address the socio-economic disparities that contribute to high fertility rates and vulnerability to insurgency.

There is need to increase access to quality reproductive health services, including family planning, maternal healthcare, and counseling, to empower individuals to make informed decisions about their fertility choices. This can help reduce high fertility rates and contribute to overall community well-being.

There is need to ensure that development programs take into account the conflict-sensitive context of the region and incorporate peacebuilding and reconciliation components to address the underlying grievances that fuel insurgency. This holistic approach can contribute to long-term stability and resilience in conflict-affected areas.

There is need to encourage active participation and engagement of community members, especially women and youth, in decision-making processes and development initiatives. By involving local populations in planning and implementing strategies to address hunger, high fertility rates and insurgency, a sense of ownership and empowerment can be fostered, leading to more sustainable and impactful outcomes.

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