BEYOND THE HEADLINES

A Data-Driven Examination of Political Violence Trends Across Nigerian States and LGAs

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PROJECT DESCRIPTION

This project leverages comprehensive data on political violence events and associated fatalities to construct a robust and interactive Power BI dashboard. Moving beyond anecdotal reporting, the initiative aims to provide a granular, data-driven understanding of Nigeria's complex conflict landscape. Through a series of interconnected dashboards, the project will illuminate macro trends, pinpoint geographical hotspots at both state and Local Government Area (LGA) levels, assess the severity and lethality of incidents, and uncover critical temporal and seasonal patterns. The ultimate goal is to empower stakeholders with accessible, actionable insights, fostering a deeper understanding of where, when, and how political violence manifests across Nigeria's diverse geopolitical zone

PROJECT GOALS

The project's core goals are to deliver a comprehensive understanding of Nigeria's political violence landscape. This involves providing a high-level executive overview of national trends and key metrics, coupled with detailed mapping to pinpoint geographical hotspots and assess regional impact at both state and LGA levels. Furthermore, the initiative aims to analyze incident severity through comparative dynamics and uncover crucial temporal and seasonal patterns. By ensuring enhanced data accessibility and interactivity within the dashboard, the ultimate objective is to empower stakeholders with actionable insights that inform strategic decision-making and foster a deeper understanding of the conflict.

DATA DESIGN

- The Dataset was downloaded from the Humanitarian Data Exchange (HDX) website.
- The Initial Exploratory Data Analysis (EDA) was conducted on Excel.
- The Data was then loaded SSMS for further and deeper enquiry in the data .
- The Data was imported into Power Bi after connecting to SQL server to retrieve the data
- The Data was further prepared and shaped in Power Query Editor exploring M language to ensure measures and calculated fields was done ensuring data quality and suitability for analysis and modeling.
- A dedicated Calendar table was created to enable powerful time intelligence functions and establish the necessary relationships between the data tables.
- Key metrics and calculations like Base Measures, Severity Measures, Time Intelligence Measures was done using Data Analysis Expression (DAX) to enable dynamic analysis and insights.
- Three distinct, interactive dashboards was created to present insights from the data, focusing on executive overview, geographical deep dive and severity analysis.

DASHBOARD 1


Executive Overview & Macro Trends
Total Falalities
122K
Affected State
37
Average Attacks
4.24
Affected LGA
765
Total Attack Events
29K
Year
1997
2024
Events by States (Top 5)
1K (10.39%)
5K (45.25%)
1K (12.28%)
2K (13.73%)
2K (18.34%)
Borno
Kaduna
Zamfara
Katsina
Benue
Average of Events by Month
0.12 0.12 0.12 0.12 0.11 0.11 0.11 0.11 0.11 0.10 0.10 0.10
0.10
0.05
0.00
January
April
March
December
May
November
June
February
July
August
October
September
State
All
Fatalities by States (Top 10)
Borno 41.6K
Kaduna 10.7K
Plateau 8.7K
Zamfara 8.3K
Benue 5.2K
Katsina 4.5K
Delta 4.2K
Niger 4.0K
Adamawa 3.9K
Taraba 3.3K
0K
5K
10K
Total Events and Sum of Fatalities by Year
Sum of Events
Sum of Fatalities
10K
5K
0K
2000
2005
2010
2015
2020
Year

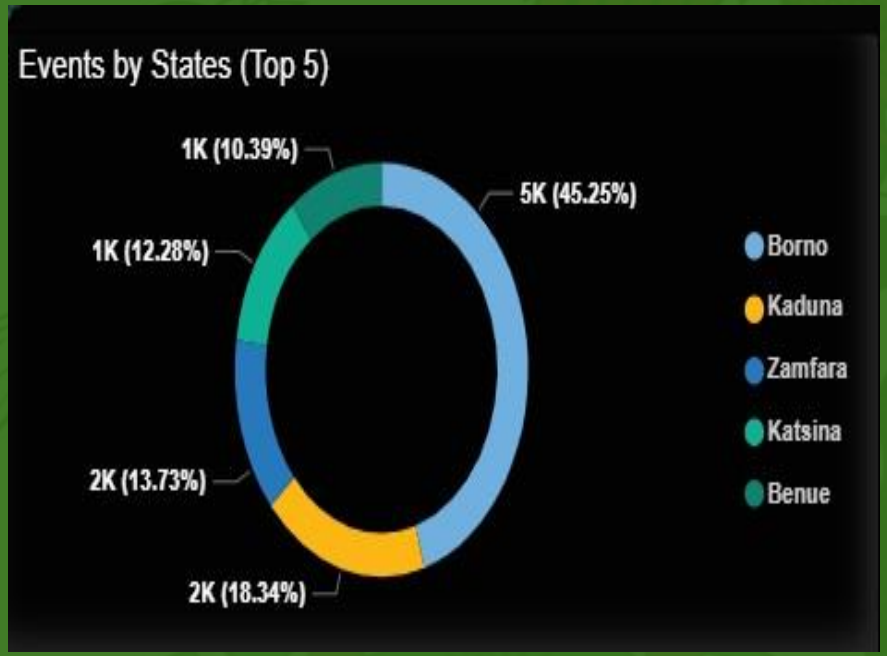
DASHBOARD 2


Geographical
Deep
Dive
Affected LGA
765
Total Attack Events
31K
Total Falalities
128K
LGA
All
Year
All
State
All
State
Attack Events
Fatalities During Attack
2018 338 21
2015 318 76
2016 254 25
2014 252 56
2013 227 23
2025 212 16
2012 187 7
Total 30736 1278
Apply all slicers
Clear all slicers
Fatalities in LGA
Sokoto
Gusau
Kano
Maiduguri
Zaria
Kaduna
Bauchi
Gombe
Jos
Abuja
Garoua
Ilorin
Ibadan
Benin City
Bamenda
CAMEROON
Bertoua
Douala
Malabo
Yaoundé
Ngaoundér
Esri, TomTom, Garmin, FAO, NOAA, USGS
Powered by Esri
Falalities in LGA
Maiduguri Metro 5K
Gwoza 5K
Bama 4K
Kukawa 4K
Damboa 3K
Jos North 3K
Abadan 2K
Konduga 2K
Kaduna North 2K
Guzamala 2K
Yearly Events of Pol. Violence
13.6K
12.6K
11.7K
12.0K
14.5K
11.2K
9.9K
7.5K
8.6K
8.9K
9.0K
8.3K
January
February
March
April
May
June
July
August
September
October
November
December

DASHBOARD 3

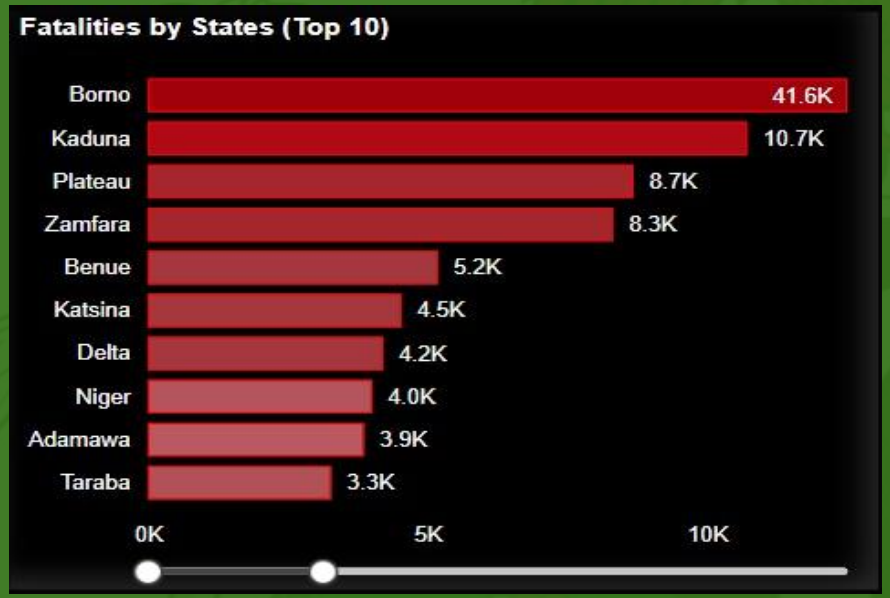
State	Total_Fatalities_Previous_Year	YoY_Fatalities_Change
Borno	40662	6.32%
Kaduna	10420	3.93%
Plateau	8585	5.46%
Zamfara	7875	19.72%
Benue	4983	16.86%
Delta	4158	2.79%
Total	**117946**	**8.36%**

EVENTS (VIOLENCE) BY STATES (TOP 5)



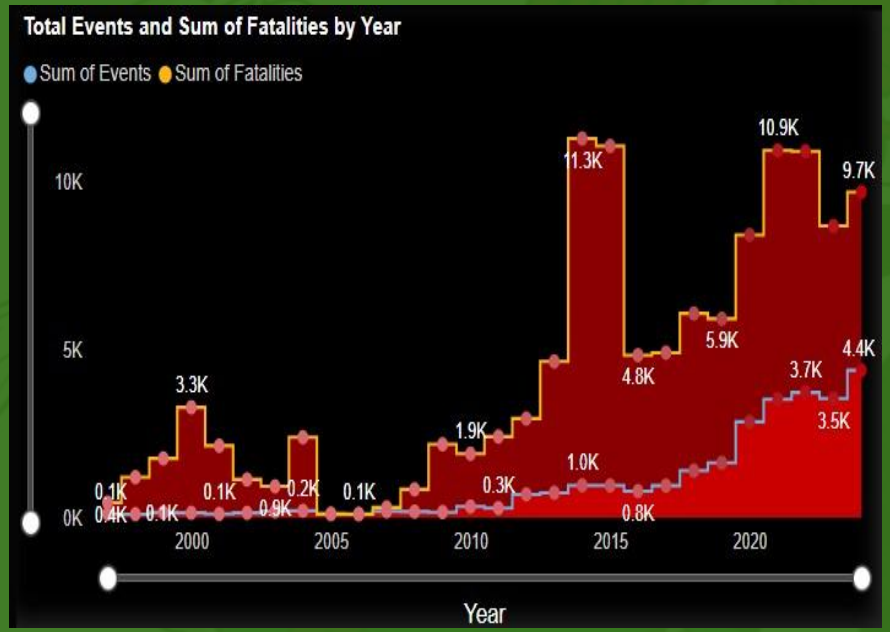
Insight: Events (Violence) by States
This chart effectively pinpoints the five states most affected by political violence events, clearly demonstrating Borno's overwhelming share, followed by significant contributions from Kaduna and Zamfara, and notable impacts in Katsina and Benue. It serves as a strong indicator for prioritizing regions in security and development efforts.

FATALITIES BY STATES (TOP 10)



Insight: Fatalities by States
This Fatalities by States chart vividly illustrates the stark reality of political violence in Nigeria, highlighting Borno as an overwhelming concern in terms of human lives lost, while also drawing attention to other critically impacted states where violence is highly lethal, even if not always the most frequent.

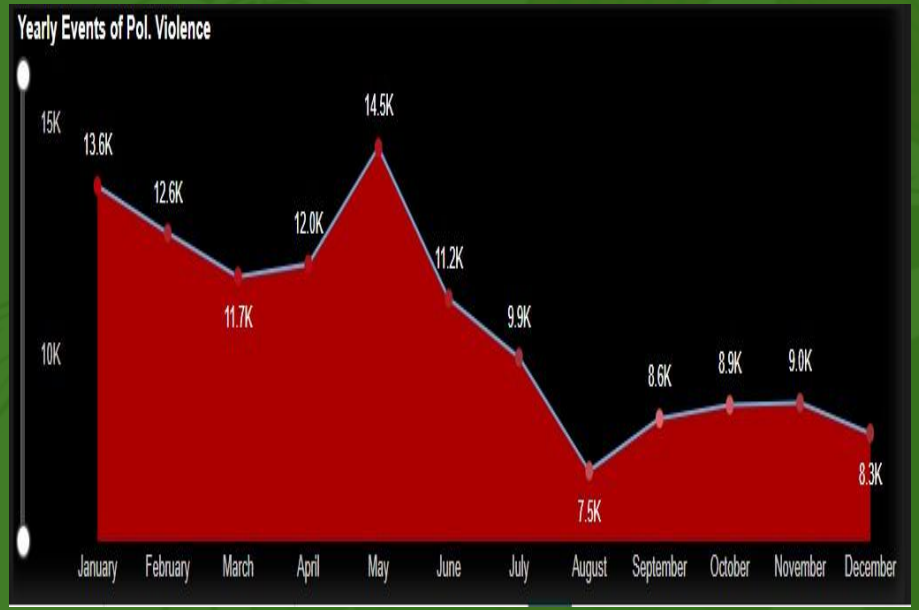
TOTAL EVENTS AND SUM OF FATALITIES BY YEAR



Insight: Total Events and Sum of Fatalities by Year

This chart paints a grim picture of escalating political violence in Nigeria over the past two decades. While the peak of extreme lethality was in 2014, the more recent years show a concerning increase in the frequency of events, indicating that the nation continues to grapple with a pervasive and complex security crisis, even if the average lethality per incident has shifted.

YEARLY EVENTS OF POLITICAL VIOLENCE



Insight: Yearly Events of Political Violence

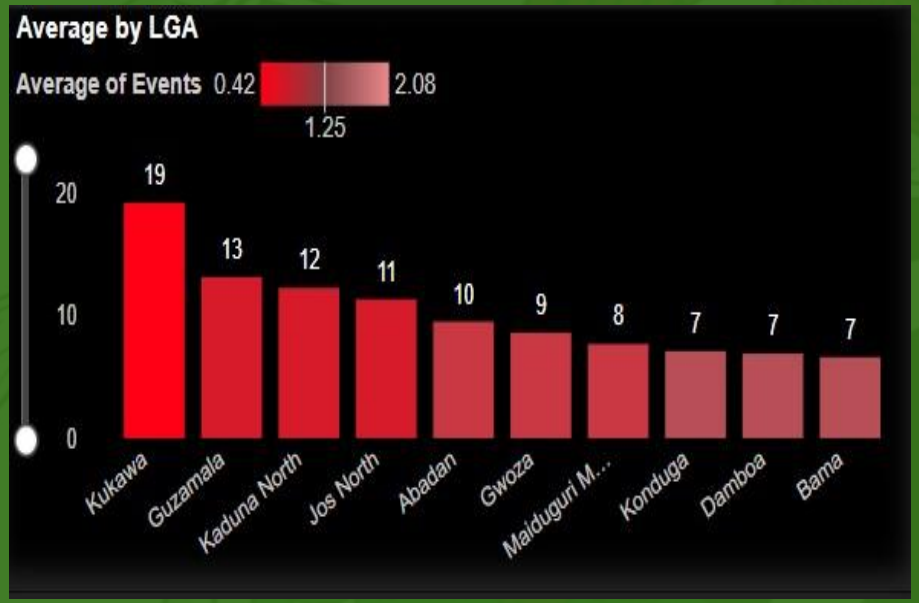
This chart clearly demonstrates a strong seasonal pattern in political violence events in Nigeria, with a pronounced peak in May and the first half of the year generally being more volatile. This predictable cycle offers significant opportunities for proactive and targeted interventions to mitigate conflict.

FATALITIES BY STATE

Insight: Fatalities by States

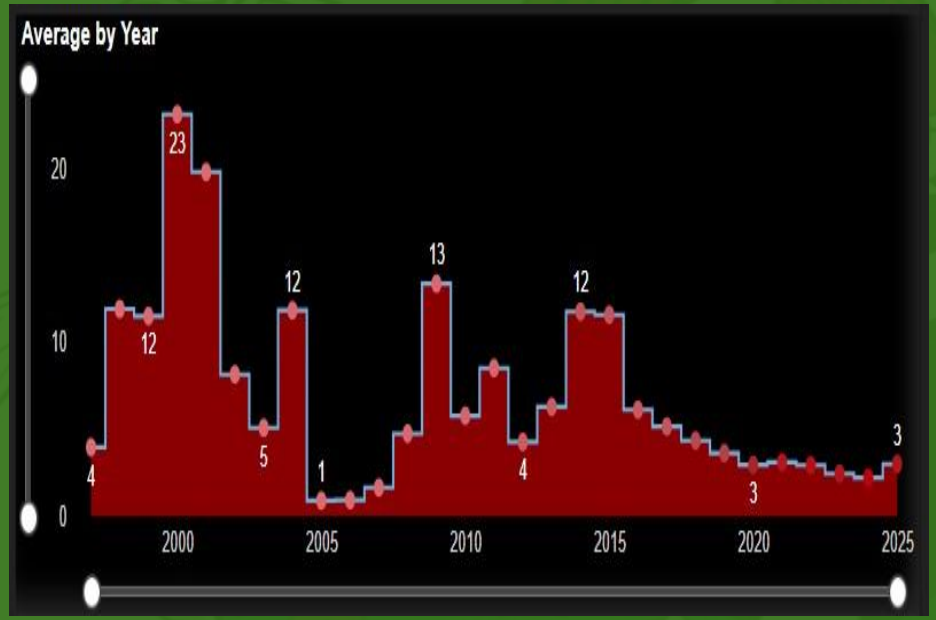
This visual powerfully demonstrate that political violence in Nigeria is highly concentrated geographically, with an overwhelming burden in Borno State. However, it also reveals significant and widespread challenges across various Northern regions and specific pockets of concern in the South, necessitating a differentiated and geographically targeted approach to peace and security.

AVERAGE EVENTS BY LGA



Insight: Average Events by LGA
This chart provides a granular view of political violence event frequency, powerfully demonstrating that Borno State faces an unparalleled challenge, with most of the highest-frequency LGAs located within its borders. It also highlights critical hotspots in Kaduna and Plateau, urging highly localized and specific security and peacebuilding responses.

AVERAGE EVENTS BY YEAR



Insight: Average Events by Year
This chart reveals a fluctuating but overall declining trend in the average intensity or frequency per unit of political violence in Nigeria since the early 2000s, despite some surges. Its interpretation is greatly enhanced when juxtaposed with the charts showing total events and fatalities, as it provides a crucial perspective on the pervasiveness and changing nature of the conflict.

TYPES OF ANALYSIS PERFORMED

- **Temporal Analysis:** It examines trends over time (yearly, monthly), identifying seasonality, and calculating year-over-year changes in key metrics (events, fatalities).
- **Geospatial Analysis:** Identifying geographical hotspots at state and LGA levels, and analyzing the distribution of violence across geopolitical zones using mapping visuals.
- **Descriptive Analysis:** Calculating and presenting aggregates such as total events, total fatalities, average severity, average response time, and counts of affected areas.
- **Severity Analysis:** Focusing on the intensity of violence through the Fatalities per Event measure.
- **Categorical Analysis:** Breaking down data by Event Type, State, LGA, and Outcome.
- **Comparative Analysis:** Directly comparing performance and trends between different states, LGAs, or over different time periods using charts like small multiples and tables with Year on Year (YoY) metrics.

CONCLUSIONS AND FUTURE ENHANCEMENTS

Conclusion

This comprehensive data analysis of political violence in Nigeria reveals critical insights into its evolving landscape. By systematically examining trends, geographical hotspots, and incident severity, we gain a clearer understanding of the multifaceted challenges facing the nation. The interactive dashboard serves as a vital resource to continuously monitor these dynamics, enabling stakeholders to make informed decisions and develop targeted strategies to mitigate the impact of violence.

Potential Future Enhancements:

- Integration of additional data sources: Incorporating demographic data, socio-economic indicators, or conflict drivers to explore correlations.
- More granular geographical data: If available, integrating more precise LGA boundaries for even finer-grained mapping.
- Predictive Analytics: Developing models to forecast future trends or identify areas at high risk of escalation.
- Sentiment Analysis: If textual reports are available, analyzing sentiment around incidents.

RECOMMENDATIONS

Based on the comprehensive analysis of political violence trends in Nigeria, the following recommendations are put forth for consideration by policymakers, security agencies, humanitarian organizations, and other stakeholders:

- **Prioritize Hotspot Intervention:** Focus resources and intervention efforts on consistently high-impact states (e.g., Borno, Kaduna) and specific LGAs identified as persistent hotspots. This includes enhanced security presence, community engagement, and development initiatives.

- **Address Root Causes in High-Severity Areas:** Investigate the underlying factors contributing to the high lethality of events in areas with a high "Fatalities per Event" ratio. This may require targeted strategies beyond general security measures.

- **Develop Seasonally Adjusted Strategies:** Utilize the identified seasonal patterns in violence to pre-emptively deploy resources or implement preventative measures during periods historically associated with higher incident rates.

- **Monitor Year-over-Year Changes Closely:** Continuously track the YoY Fatalities Change to identify emerging areas of concern or states where violence is rapidly escalating, allowing for timely responses before situations deteriorate further.

- **Promote Data-Driven Decision Making:** Encourage the regular use of this dashboard and similar analytical tools to inform policy development, resource allocation, and program design, moving away from anecdotal evidence towards evidence-based strategies.

- **Foster Inter-Agency Collaboration:** Insights from geographical and temporal analysis can facilitate better coordination between different security agencies and humanitarian actors, ensuring a more unified and effective response to the evolving conflict landscape.

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