**Armed conflict in Africa: An exploration of fatalities between 1997 and 2016**

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The Armed Conflict Location and Event Data Project (ACLED) collects information on the locations, dates, perpetrators, and fatalities that have occurred in armed conflicts around the globe. ACLED released a dataset in 2017 that contained conflict data for the continent of Africa. This dataset consists of around 150,000 rows of conflict data spanning two decades from 1997 to 2016. This extensive dataset includes event descriptions, making it a one stop shop for conflict information reported on the continent of Africa.

**Exploring the Data (Methodology)**

The number of fatalities occurring at a specific latitude and longitude can be plotted with a pivot table to show where armed conflict has occurred. This method produces a heatmap of fatalities spread across the continent. Areas that recorded significant amounts of fatalities due to conflict were highlighted with conditional formatting on the map and additional analysis was performed on them to understand what had occurred there.

Conflict changes over time. Sparklines were plotted for each country in the selected areas to display the rate at which fatalities occurred over the span of two decades. This sparkline analysis displays unique chronological trends among the areas involved in armed conflict.

The actors who participate in conflict vary by region. To get a high-level understanding of who had participated in the conflicts, 100% bar charts were plotted to show what proportion of the casualties could be attributed to 4 major groups of actors: government militaries, rebel groups, terrorists, and others (consisting of militias, police forces, riots, etc.). These bar charts display unique actor distributions which provide additional context for the story of conflict in each area.

**Hotspots of Conflict**

Map

Description automatically generatedArmed conflict in Africa is tied to population centers. The map on this page shows great voids in the North and South in the arid deserts of the Sahara and Kalahari. The majority armed conflict occurs in Central Africa. Sadly, there are too many conflict areas to detail on a single chart. A few hotspots that stuck out on the longitudinal analysis are in Angola, Eritrea and Ethiopia, The Dominican Republic of the Congo (DRC), Burundi, and Somalia.

**Angola**

The areas around the city of Kuito in Angola appear as a bright red spot on the map. The map shows vastly more fatalities at this longitude and latitude than any other spot on the continent. The spike in violence here is a consequence of civil war and ethnic cleansing in the area. More than 120,000 people are said to have died because of the conflict. (ACLED, 2017)

**Eritrea and Ethiopia**

The second brightest point on the map is in Eritrea at the areas around the cities of Barka and Maekel. A border dispute occurred here between the forces of Ethiopia and Eritrea. Casualties of the conflict are said to be in excess of 100,000 people. Groups of soldiers massacred each other in the war, civilians were murdered by armed forces, and people continued to step on landmines for years after the conflict. (ACLED, 2017)

**The DRC and Burundi**

The Dominican Republic of the Congo and Burundi were the site of intense fighting between various rebel groups and government forces. Multiple places in the DRC and Burundi are cited for violence, but the greatest number of casualties occurred in Maniema and Orientale. In Maniema, a mass grave containing the residents of a Hutu refugee camp was found that is estimated to contain over 25,000 people. Orientale was the site of intense fighting between various armed groups that included rebel backed violence against civilians. In all, over 89,000 people died in the highlighted region. (ACLED, 2017)

**Somalia**

The last bright spot that appears on the map is in Somalia. Mogadishu, and cities in the surrounding area, were subjected to terrorism from the group Al Shabab. The violence that resulted from these attacks and the counterterrorism response claimed over 17,000 lives in the highlighted area. (ACLED, 2017)

**Conflicts Over Time**

Chart

Description automatically generatedThe conflict information collected by ACLED spans two decades. A time series analysis of violence occurring in these countries shows different patterns of armed conflict. The history of conflict over time is told in the sparkline visualization below.

**Perpetrators of Conflict**

**Chart, timeline

Description automatically generated** There are differences in the perpetrators of conflict among the six countries highlighted for analysis. Understanding the proportion of deaths caused by military, rebel, terrorist, or other groups provides additional context to the conflict occurring in each region. The story of perpetrators is shown in the graphic below.

**Conclusion**

Two decades of armed conflict in Africa has caused more tragedy than can be expressed. Zooming in to a high-resolution version of the Hotspots of Conflict visualization (available in the PowerPoint) will reveal thousands of fatalities in areas like Darfur where violence occurred over a much wider area. A decision was made to focus on telling the story of four areas that involved six countries. It is acknowledged that the limited scope of this research does not do justice to the entire story of armed conflict on the continent of Africa and the countless stories that occurred there.

There is so much sadness in this dataset, but it also contains glimmers of hope. The country of Burundi was involved in extensive armed conflict in the early 2000’s between rebel groups and the government. This conflict helped to saturate the area with fatalities on the heatmap. Successful peace talks between these groups dramatically slowed the rate of conflict in the country. This is visualized by the blunted rise of its sparkline. Leaders engaged in armed conflict should emulate this approach to bring lasting peace to their regions. (BBC News, 2018)

**References**

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