

Project Title: **Humanitarian Impact Assessment: Gaza and West Bank**

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Role: Junior Data Analyst

Tools Used: Microsoft Excel, Pandas (Python), Plotly

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Introduction

This report analyses the humanitarian impact of the conflict in Gaza and the West Bank from October 2023 to early 2024. It integrates data on daily casualties, journalist fatalities, and infrastructure damage to identify patterns and escalation phases. The aim is to provide data-driven insights that support humanitarian decision-making and accountability.

Objective

To assess and summarise the extent of civilian casualties, press fatalities, and damage to public infrastructure. The findings are intended to inform humanitarian organisations, policymakers, and the broader public.

Methodology

Four datasets were analysed:

- Daily casualty reports (Gaza and West Bank)
- Journalist fatality records
- Infrastructure damage reports

Data was cleaned using Pandas:

- Standardised date formats (YYYY-MM-DD)
- Removed redundant columns
- Handled missing values
- Renamed columns for consistency

Exploratory data analysis and visualisation were performed using Plotly and Tableau Public.

Key Findings

Casualties

- Sharp increases in casualties were observed in Gaza during late October and mid-November 2023.
- Gaza reported higher average daily casualties compared to the West Bank throughout the analysis period.

Journalist Fatalities

- Deaths of journalists clustered around major escalation dates, especially in October and December 2023.
- The data indicates high risk to press personnel during active conflict operations.

Infrastructure Damage

- Most affected sectors included hospitals, schools, and residential buildings.
- Damage patterns mirrored those of casualty spikes, with Gaza experiencing the highest levels of infrastructure loss.

Discussion and Insights

The overlap between peaks in casualties and infrastructure damage suggests periods of high-intensity conflict with widespread impact. The timing of journalist fatalities further underscores the risks faced by media personnel in the region. These insights highlight the need for increased international monitoring and civilian protection measures.

Recommendations

1. Enhance independent monitoring during conflict escalation periods.
 2. Secure humanitarian corridors in highly affected areas, particularly Gaza.
 3. Investigate journalist fatalities through impartial bodies.
 4. Prioritise rebuilding critical infrastructure, including schools and hospitals.
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Conclusion

The conflict in Gaza and the West Bank has resulted in extensive human and infrastructural losses. Through data analysis, this project presents a factual basis to support humanitarian efforts, advocate for civilian protection, and promote accountability. It underscores the importance of timely and coordinated responses guided by transparent data.