

Capstone Project - 1

Global Terrorism Database

Exploratory Data Analysis

Team Members

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Exploratory Data Analysis type ?

- **Univariate non-graphical and graphical.** Non-graphical methods don't provide a full picture of the data. Graphical methods are therefore required. Representations like histogram, Bar Plot, etc.

- **Multivariate non-graphical and graphical:** Multivariate data uses graphics to display relationships between two or more sets of data. The most used graphic is a grouped bar plot or bar chart with each group representing one level of one of the variables and each bar within a group representing the levels of the other variable. For example Heat Map.

Global Terrorism Database

- The Global Terrorism Database (GTD) is an open-source database including information on terrorist attacks around the world from 1970 through 2017. The GTD includes systematic data on domestic as well as international terrorist incidents that have occurred during this time period and now includes more than 180,000 attacks. The database is maintained by researchers at the National Consortium for the Study of Terrorism and Responses to Terrorism (START), headquartered at the University of Maryland.

Objectives

- **What does terrorism exactly mean?**
- **What is the nature of this terrorism?**
- **Understand the semantic and development of terrorism.**
- **Who or what is threatened, how, by whom and why?**
- **Addressing some of the myths of terrorism.**



terrorism

Although there is no universally agreed definition but, if broadly defined, threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation.

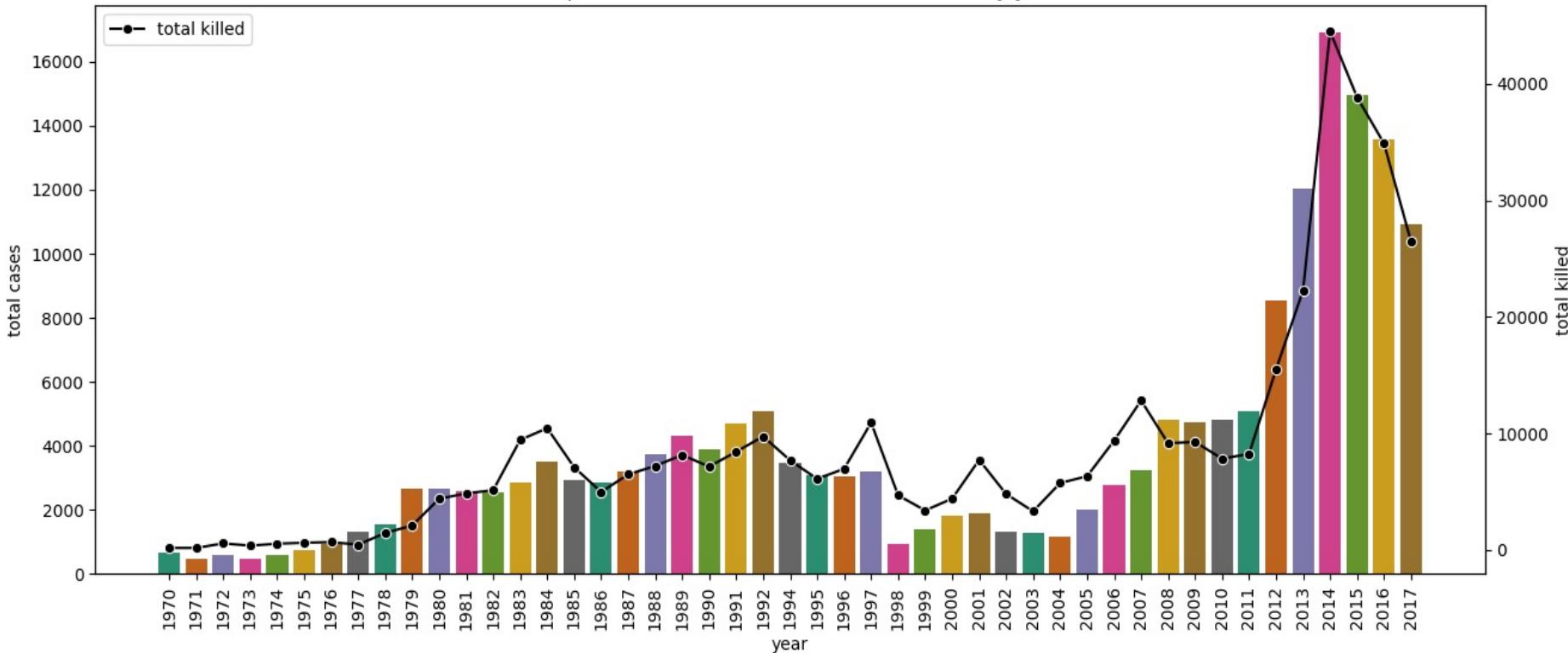
Nature of Terrorism

- Broad distinction - State-Terrorism (that waged by states) and non-state terrorism (that waged by non-state groups).
- Secondary distinction – Strategic Terrorism and Reactive or Retaliatory Terrorism.
 - ❖ The former uses violence or coercive threat is part of a plan to achieve a political goal.
 - ❖ the latter derives from an emotional response to politically-induced grievances, for example, vengeance for confiscation of land or for assassinations of leaders

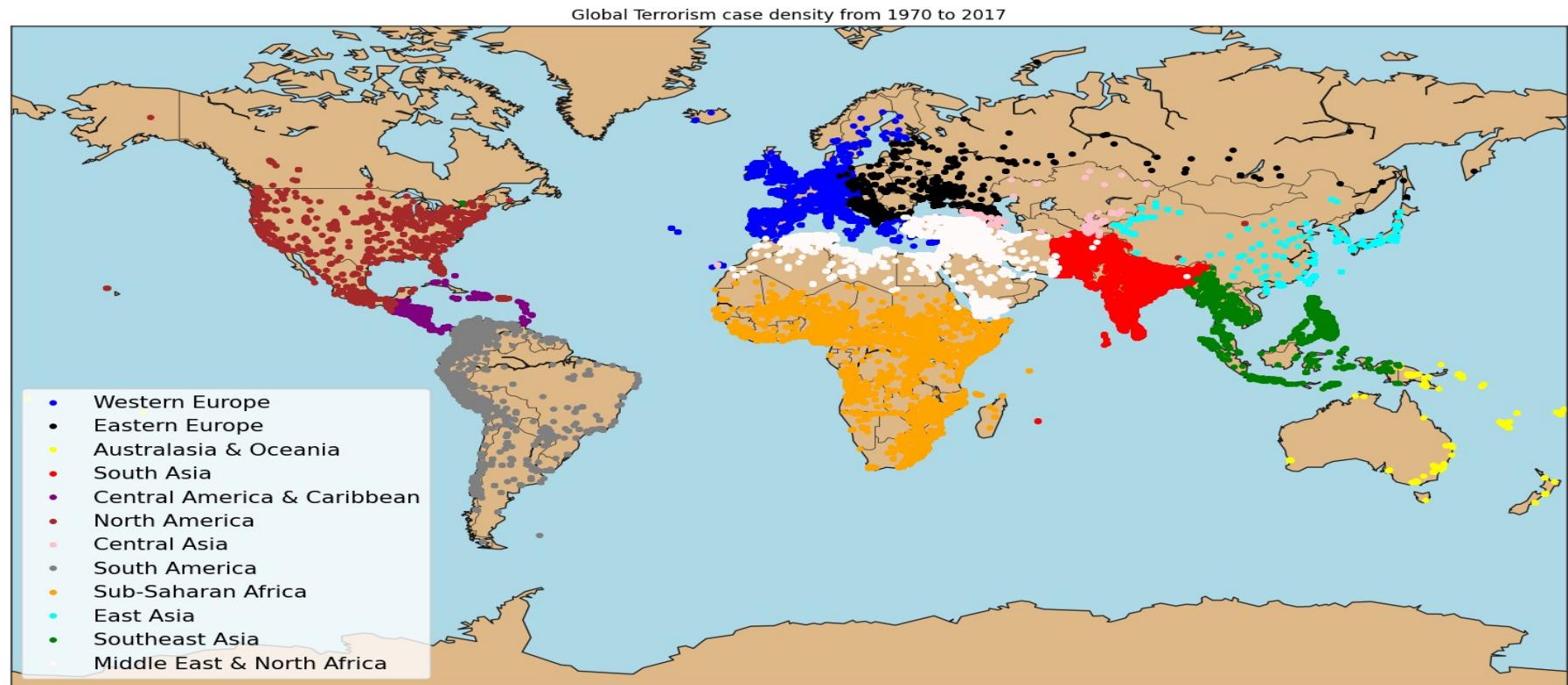
How has terrorism evolved ?



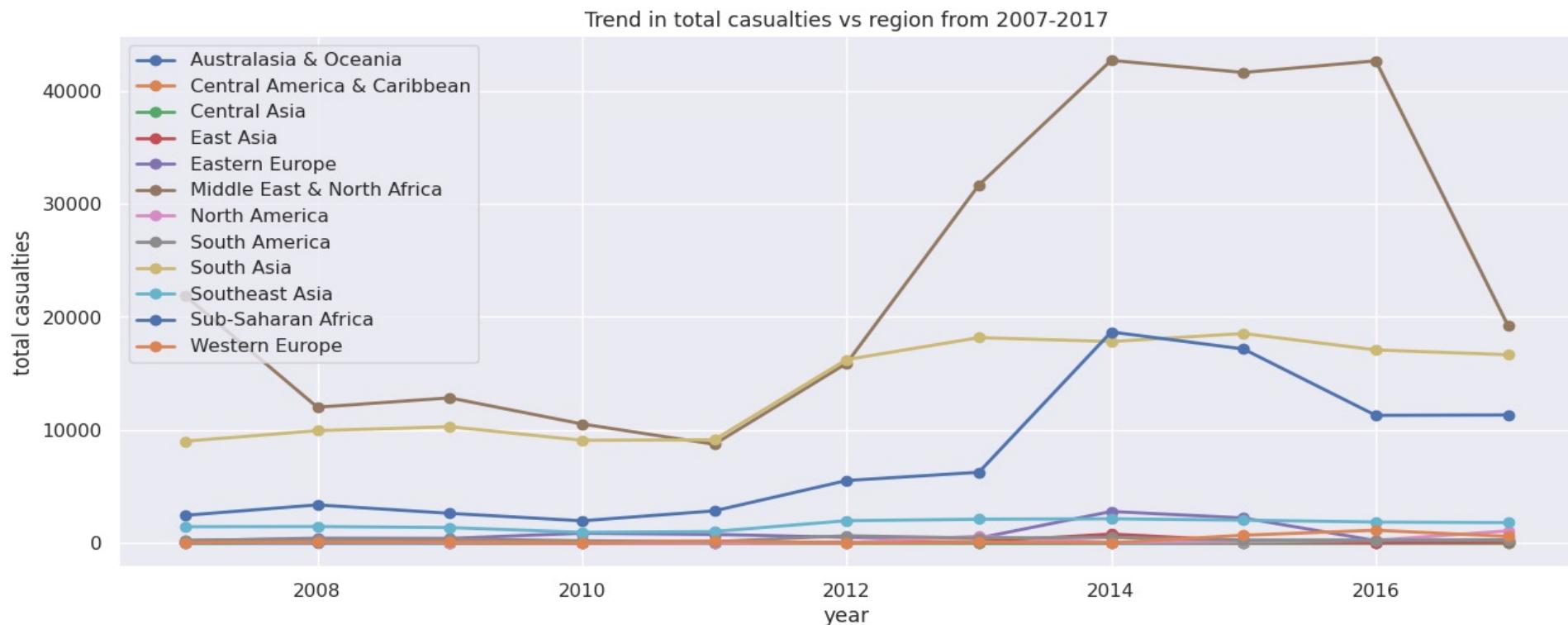
Comparison of total number of cases and kills by year



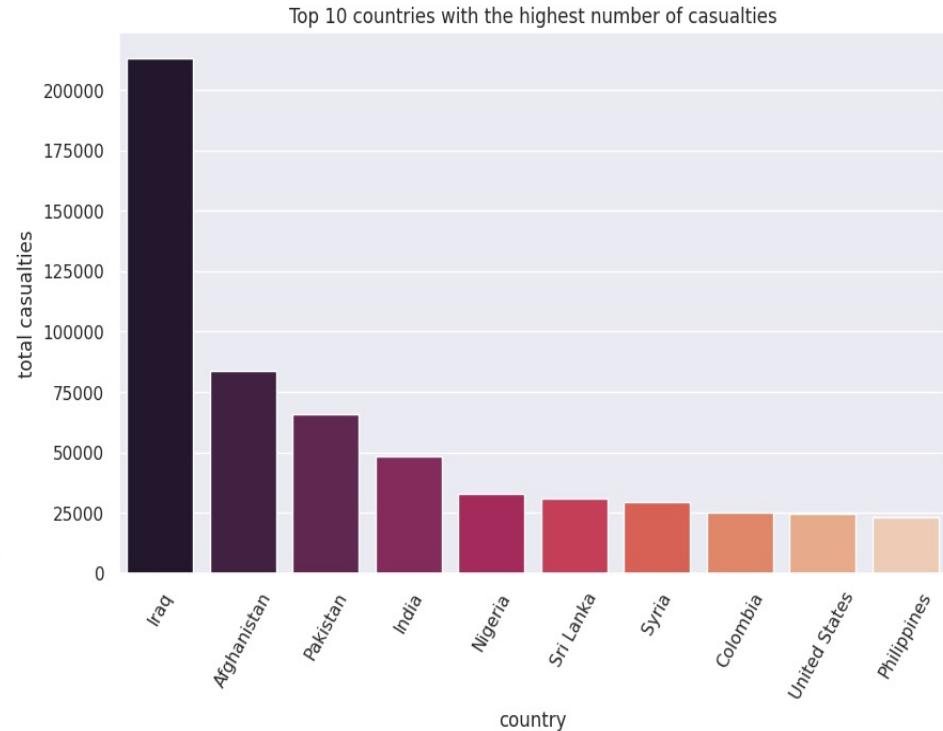
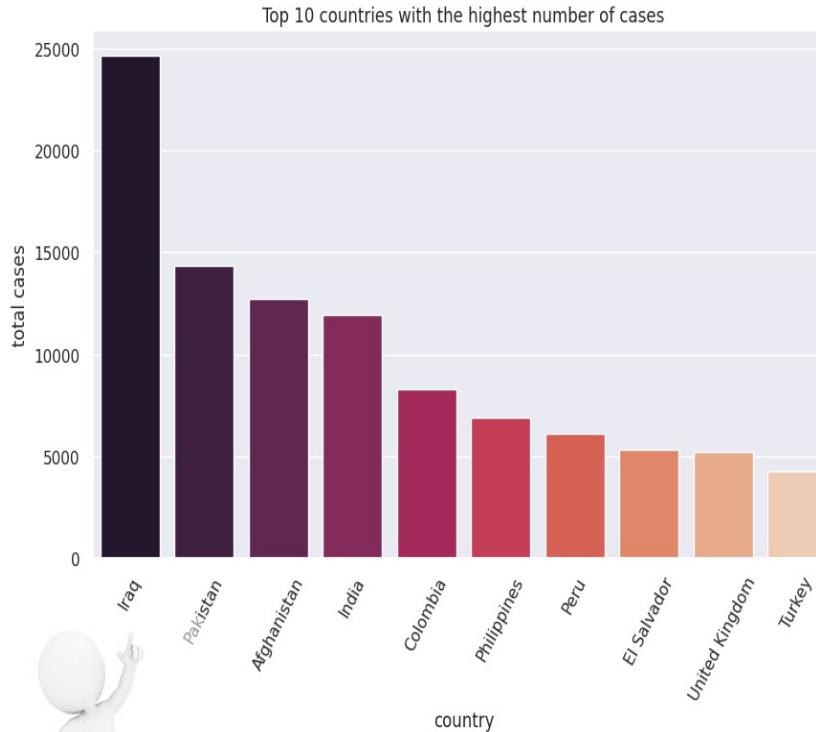
Which region has what type of case density?



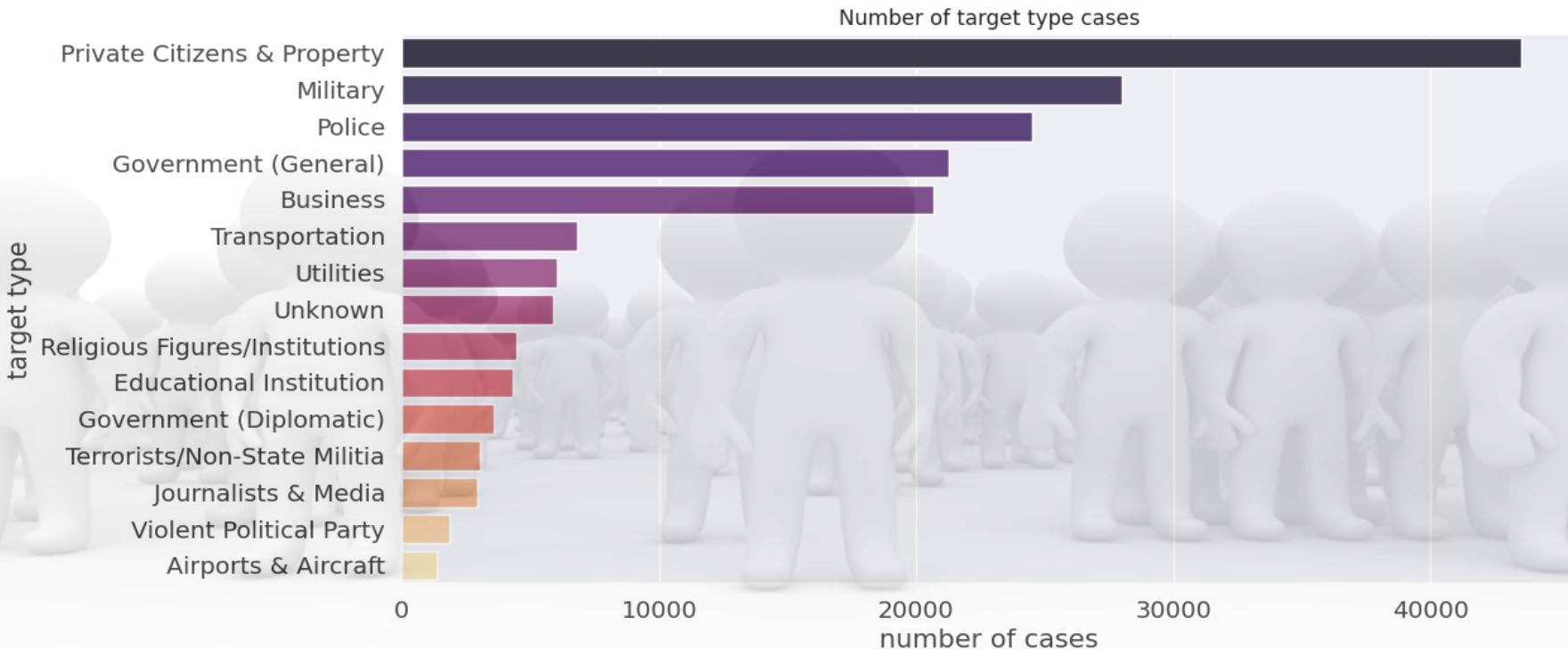
What is the trend in casualties by year across regions ?



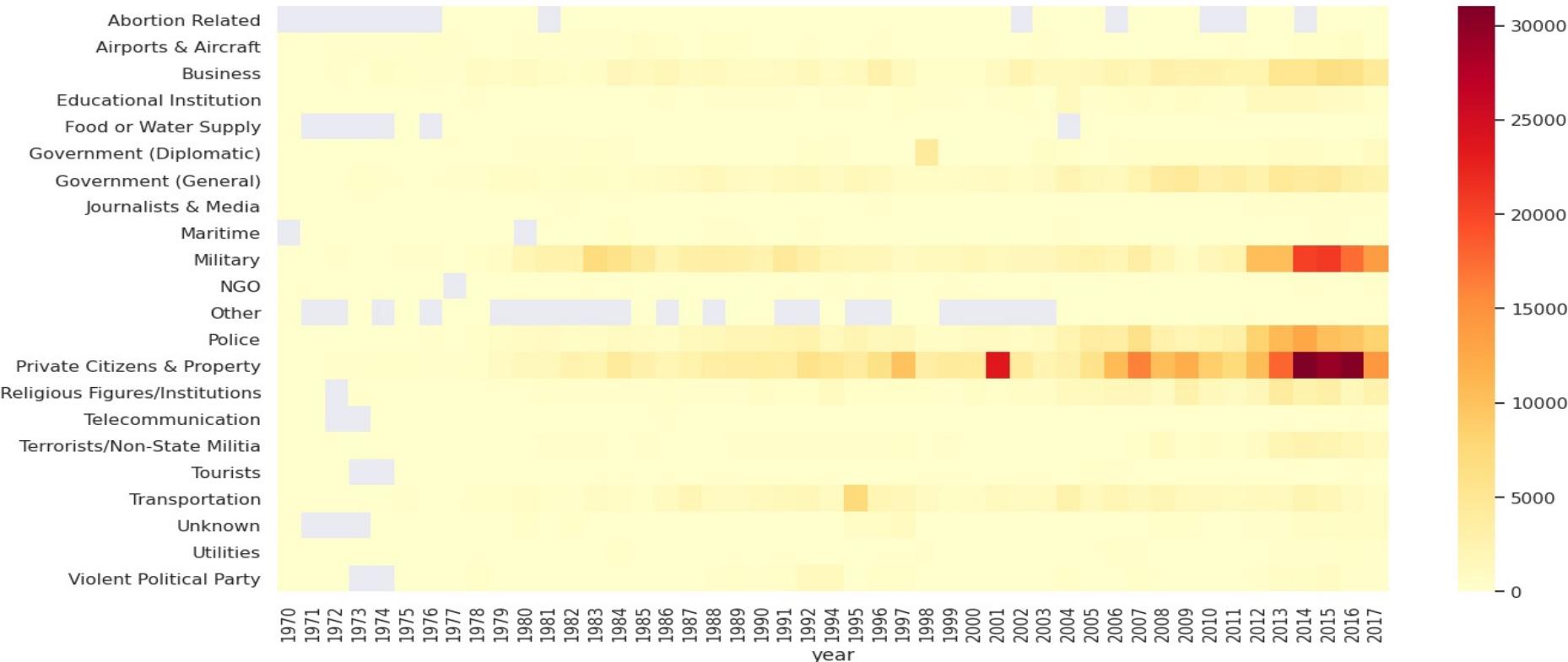
Which country has suffered the most ?

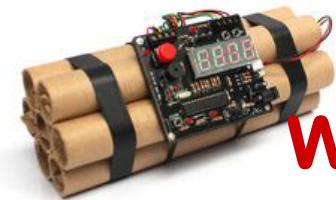


Who has mostly been targeted ?



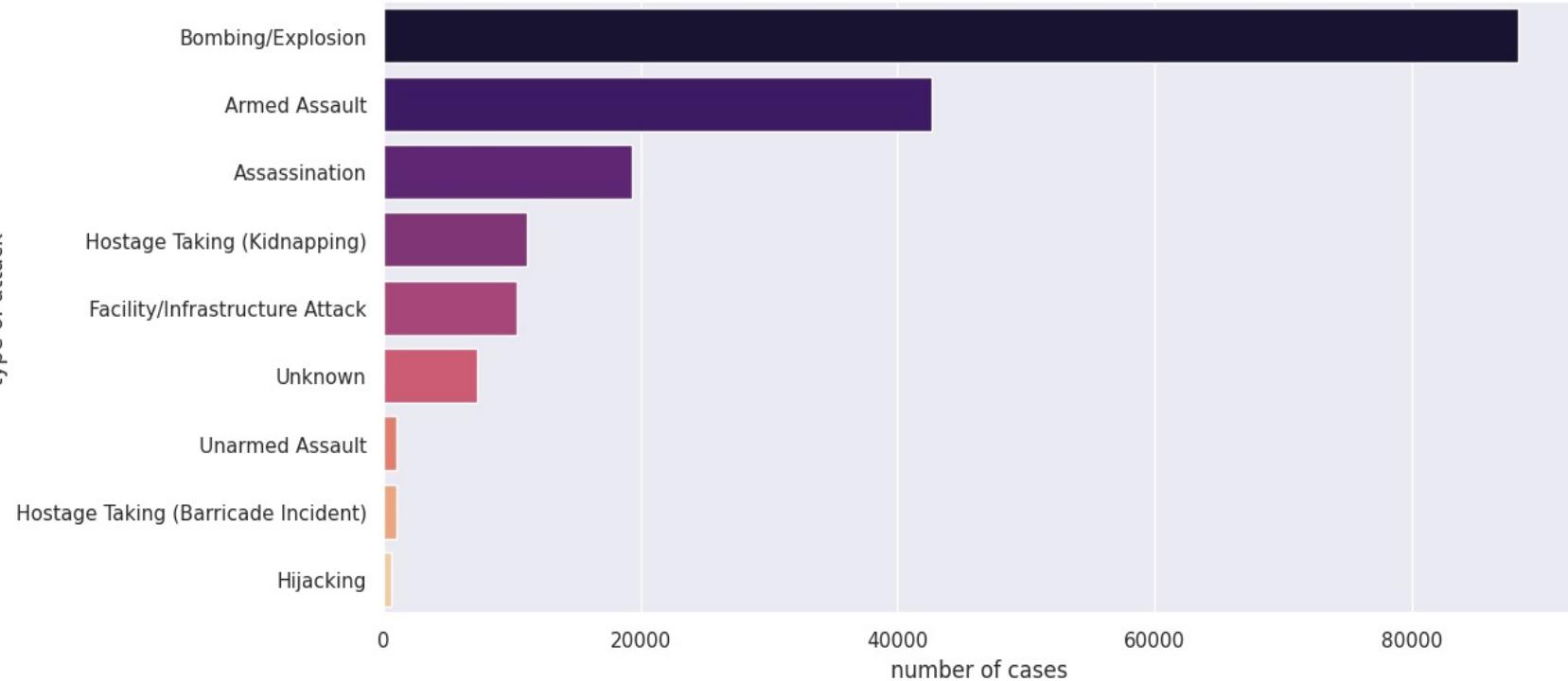
What has been the trend in casualties year by year in respect of victims ?

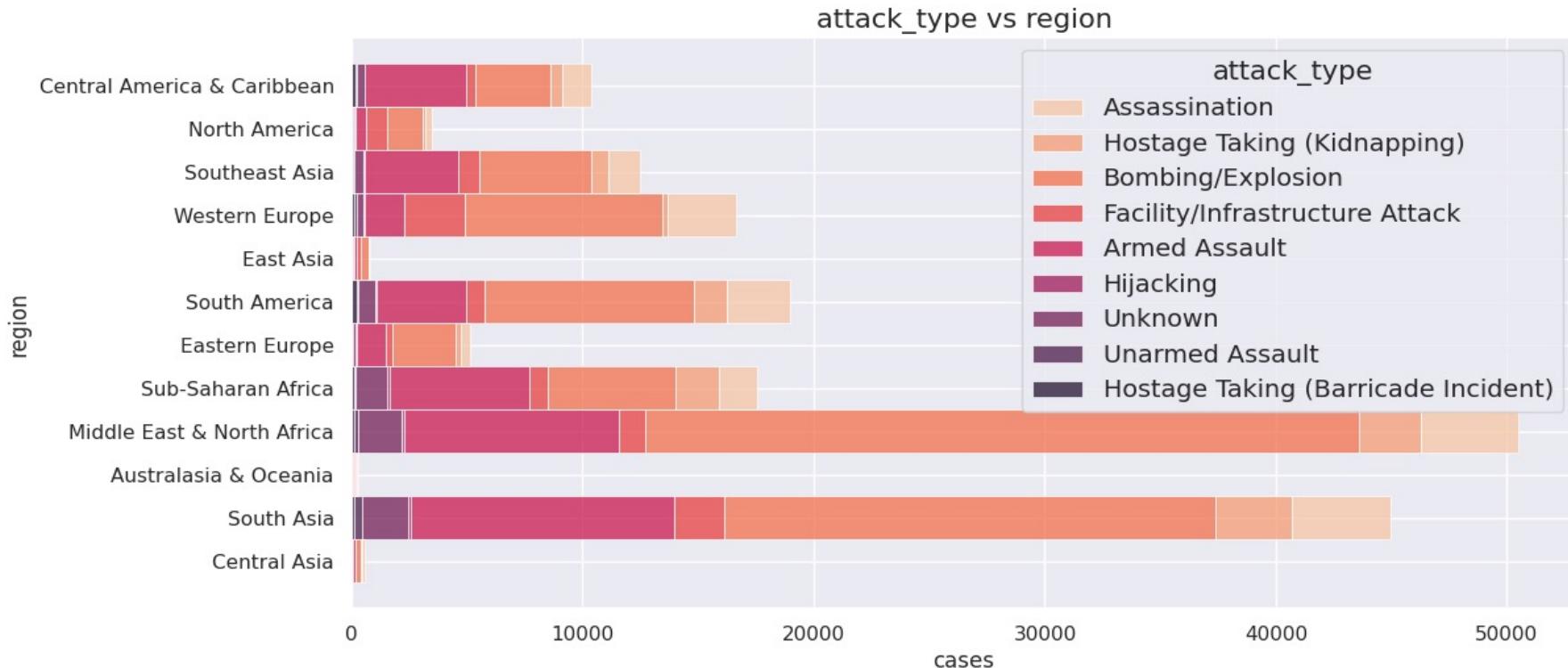




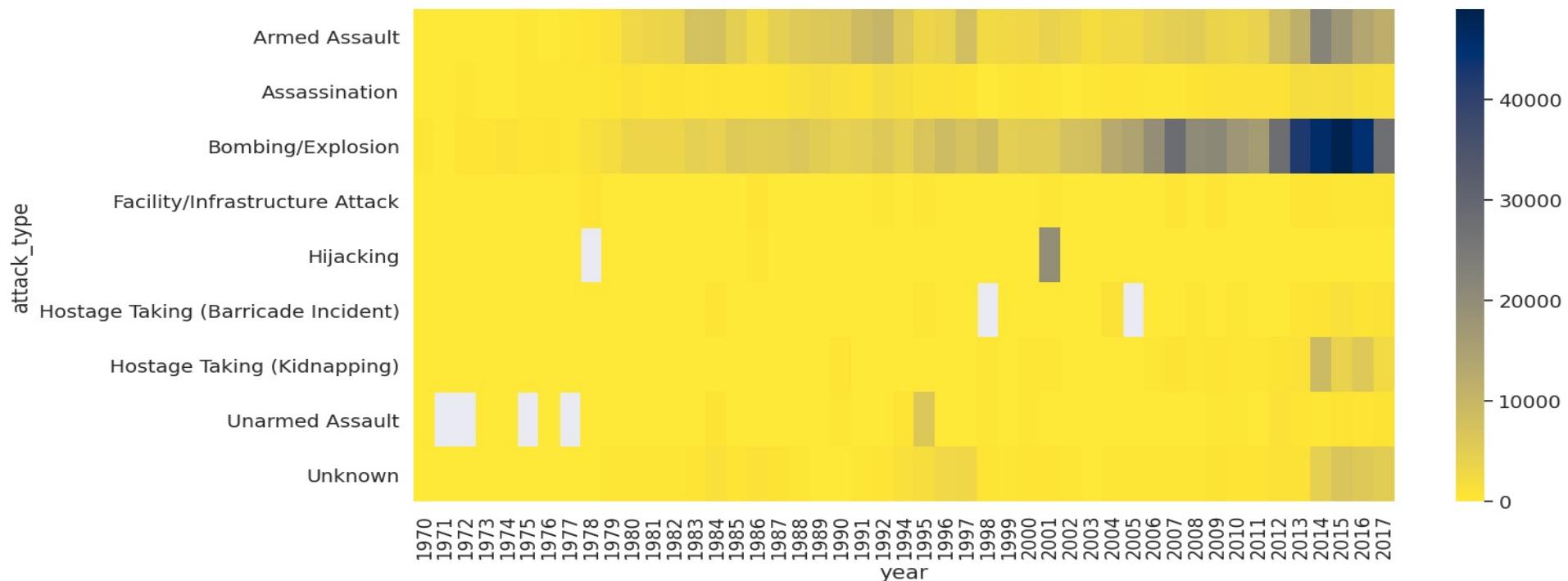
What has been the attacking types ?

type of attack





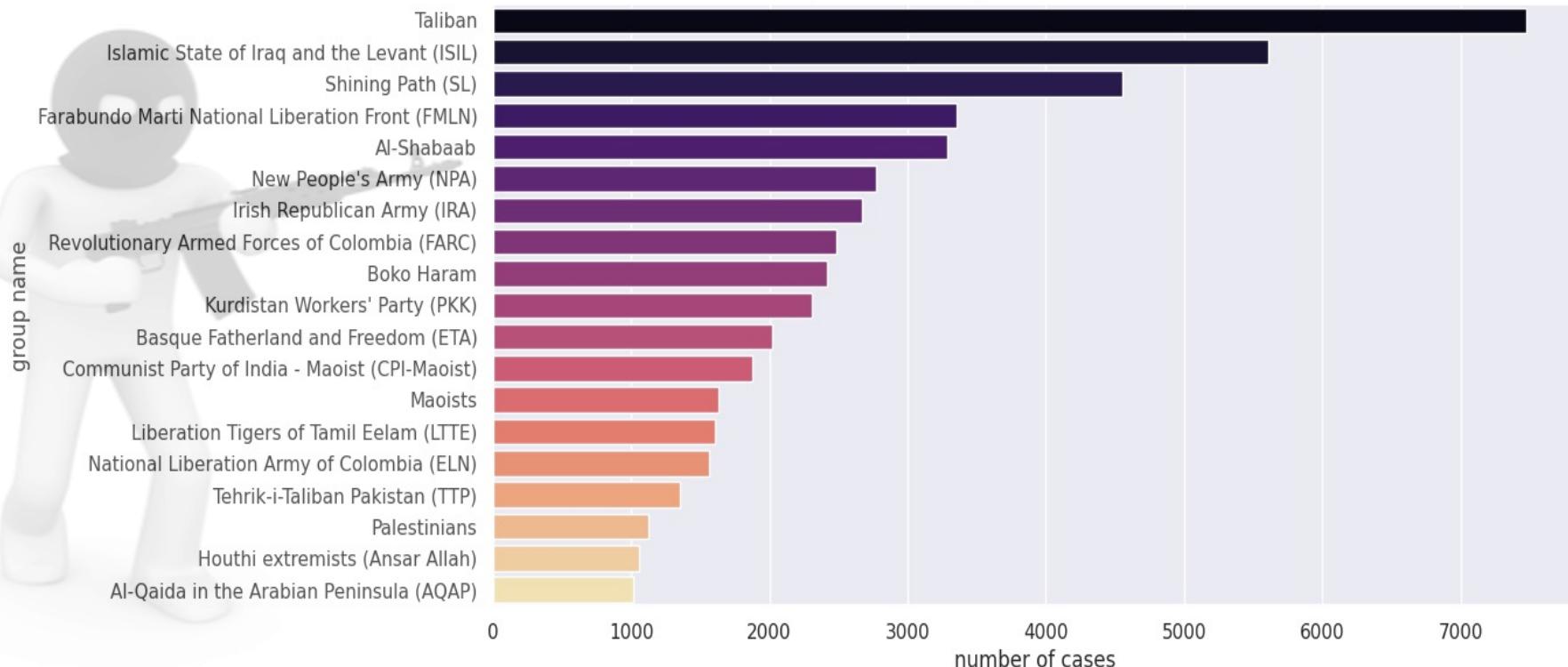
Irrespective of the region Bombings/Explosions are the most favored attack type methods for mushrooming the fear and intimidation.



- With the coming years Armed Assault and Bombing/Explosions have been the reason for the most number of casualties. The standalone block in 2001 for hijacking is the landmark event of 9/11 that took place in US.

By whom are they being targeted ?

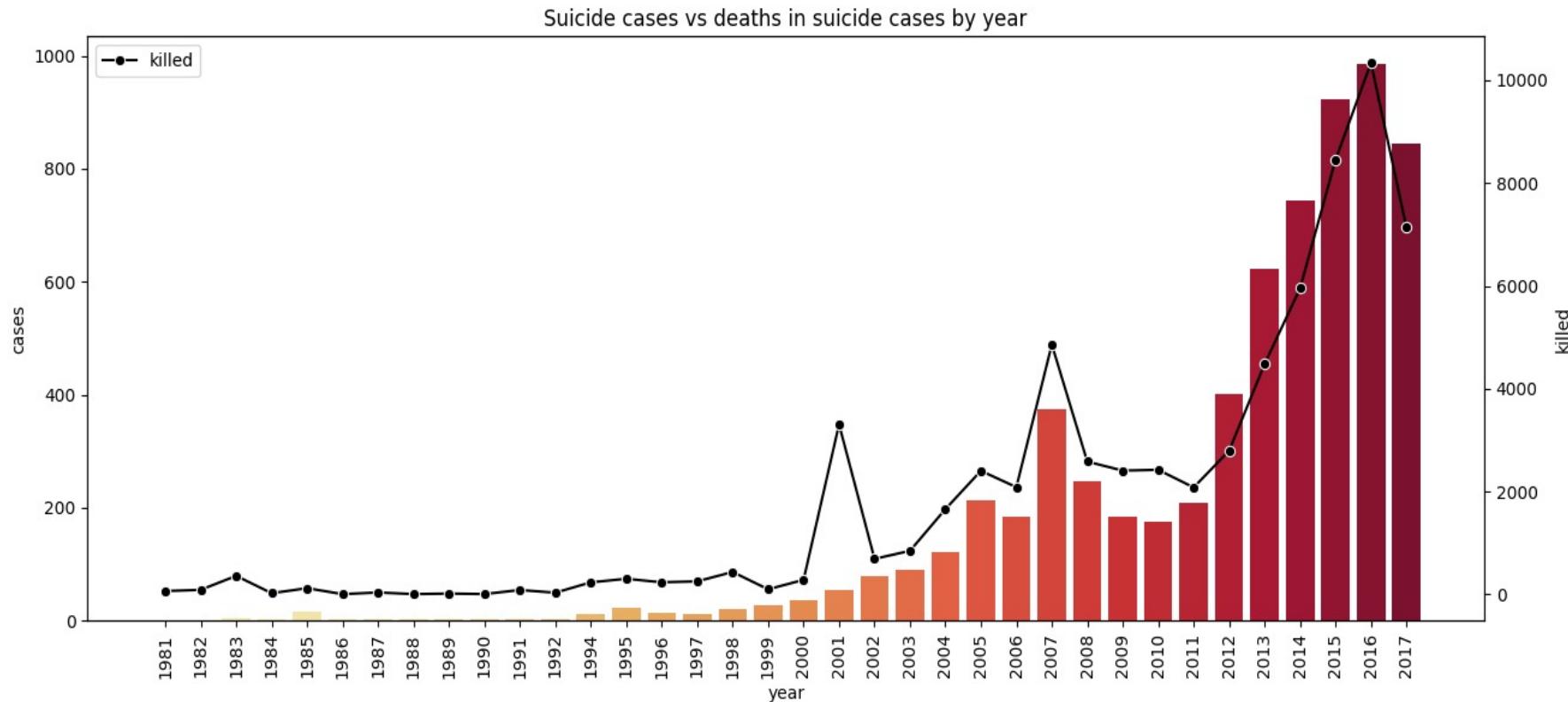
Top 20 terrorists organizations vs number of cases



Which terror group are targeting which country most ?

terror_group	country	country_in_region	total_cases	total_casualties
Taliban	Afghanistan	South Asia	7423	57140.0
Islamic State of Iraq and the Levant (ISIL)	Iraq	Middle East & North Africa	4797	54755.0
Boko Haram	Nigeria	Sub-Saharan Africa	2087	24588.0
Liberation Tigers of Tamil Eelam (LTTE)	Sri Lanka	South Asia	1596	21919.0
Al-Qaida	United States	North America	4	19494.0
Tehrik-i-Taliban Pakistan (TTP)	Pakistan	South Asia	1335	15532.0
Shining Path (SL)	Peru	South America	4541	14625.0
Al-Qaida in Iraq	Iraq	Middle East & North Africa	632	14348.0
Al-Shabaab	Somalia	Sub-Saharan Africa	2867	14201.0
Farabundo Marti National Liberation Front (FMLN)	El Salvador	Central America & Caribbean	3330	12068.0

What about suicides ?



Why Suicide attacks ?

- Kill Ratio: Suicide terrorism on average kills and injures more people with a single attack than any other form of terrorism.
- Smart Bombs: Suicide terrorists are “smart bombs” that can pinpoint their targets, walk into highly secured areas, make last-minute adjustments in their plans, and choose the time of detonation to inflict the greatest damage.
- Suicide terrorists are motivated mainly by political goals usually to end foreign occupation or domestic domination by a different ethnic group. Their “martyrdom” is, however, frequently legitimized and glorified with reference to religious ideas and values.

What urges such terrorist activities ?



Conclusion

- There exists no single root cause of terrorism.
- Terrorists are rational and intentional actors who develop deliberate strategies to achieve political objectives.
- Terrorist attacks are showing a gathering trend that the vast majority of terrorist attacks and deaths have been concentrated in a few regions. The Middle East, Southeast Asia, Central Asia, and Africa could be seen to be the most severe areas of global terrorist events according to the graphs of key areas of terrorist attacks.
- 2014 has been the year with the most number of killings with cases close to 17000 and deaths close to 45000.
- There was a steep rise in the number of cases and deaths from 2011 to 2014.

Conclusion (contd.)

- Iraq, Afghanistan, Pakistan and India are the top countries with the highest number of terrorist attacks as well as casualties.
- Bombing/Explosion has been the most preferred attacking methods irrespective of the region. It has also seen the increase in its usage since 2001 onwards.
- Private citizens, Military, Police, Government and Businesses are the most suffered target types.
- Taliban, Islamic State of Iraq and Levant(ISIL) are the terrorist groups with the highest number of activities with Taliban being active in the Afghanistan and the ISIL in Iraq.
- Suicide cases have also seen an increase since 2011 and so does deaths due to suicides. Suicides alone have almost close to 6700 cases till 2017.



**THANK
YOU**