Capstone Project Topic and Research

Topic: Disasters

Background Research

What is a disaster?

A disaster is a hazard that can cause environmental changes or destruction.

Two types of disasters is

Natural Disasters and Manmade disasters

What is a Natural Disaster?

A natural disaster is the effect of a natural hazard, examples of this occurrence include floods, hurricanes, tornadoes, landslides, and earthquakes etc.

Cyclones- A cyclone is an area of closed, circular fluid motion. It has low pressure on the inside and high pressure on the outside.

The center of the storm is called the eye and it has the calmest water and the lowest pressure.

Cyclones turn counter-clockwise in the northern hemisphere and clockwise in the southern hemisphere. This is because it follows the rotational movement of the earth.

The biggest cyclone recorded in the Bhola cyclone. It hit the coast of today’s Bangladesh in 1970 with a death toll of around 500,000.

Earthquakes - it is the result of a sudden release of energy from the earth’s crust that creates seismic waves. They are measured using seismographs.

Earthquakes - The Valdivia earthquake also known as the great Chilean earthquake is the biggest earthquake ever recorded. It hit Chile on May 22, 1960 with a magnitude of 9.5 and a death toll of around 6000.

Tornados - A tornado is a violently rotating column of air that is touching both the ground and a cumulonimbus cloud

Tornado conditions are caused when different temperatures and humidity meet to form thunder clouds• “Twisters” can attain speeds up to 100 miles an hour

The biggest tornado recorded was the Hallam, Nebraska tornado on May 22, 2004. It was around 2.5 miles big and had a death toll of around 160. The deadliest tornado recorded occurred in and Santeria, Bangladesh on April 26th, 1989. 1300 recorded dead and 12,000 injured.

Volcanic Eruption A volcano is an opening in a planet’s surface which allows hot magma to escape from below the surface.

Study of volcanos is called Volcanology and volcanic eruptions are measured using Volcanic Exclusivity Index

The biggest volcanic eruption was Mount Tambura on April 10, 1815, it heard over 2000 km away and had a death toll of around 71,000.

Tsunami means harbor wave and is caused by the displacement of a large body of water normally an ocean or a large lake.

The biggest tsunami ever happened at Lituya Bay, Alaska on July 9, 1958. The mega tsunami was around 150 meters tall. The tsunami caused by 2004 Indian Ocean earthquake, is the 6th deadliest Natural disaster in recorded history with a death toll of 230,210 – 280,000.