

1. **Snowfall:** Snow is formed from condensed water on the atmosphere. Water vapour in clouds condenses to form droplets. Cold air then freezes the water to form ice crystals. As these ice crystals bind with more water vapour they become heavier. Eventually, the ice crystal falls from the cloud, collecting more water vapour as it falls. As the ice crystal descends and the air temperature increases, the ice crystal can melt slightly. This melting can cause crystals to bind together to form larger flakes. Snow will remain on the ground if the temperatures are cold enough to keep it from melting. Snowfall is another hydrological hazard as a large amount of snow can affect transport routes, crops, and people. The secondary risks of snowstorms include vehicle accidents, hypothermia, infections from frostbite and possibly fires, and carbon monoxide poisoning due to the use of alternate heat sources.

Annual Disaster Weather Report published by India Meteorological Department reports the snowfall cases over India that caused hazards in terms of human death. Though it starts in some parts of the country in November month in some years, the disaster data shows that the damages and casualties happened during the months of December to February. For each of three month and annual scale, there are maps showing the total number of snowfall days that caused casualties to humans. In addition Normalized Vulnerability Index is being calculated for each district as per formula mentioned in equation 1.