

The background of the image is a dark blue and purple night sky filled with numerous white stars of varying sizes. In the foreground, there is a silhouette of a forest of evergreen trees. The overall aesthetic is serene and wintery.

TOPIC OF THE WEEK

JANUARY'20 (09 to 15 JAN)

Natural Catastrophe

Is Australia prepared for the potential risks of climate change? Major natural catastrophes are a heavy burden even to successful economies like Australia's. Data from 2017 indicates that 97% of disaster funding is spent on post-disaster relief and recovery, with only 3% is invested in mitigating a disaster before it happens. Record-breaking temperatures and months of severe drought have fuelled a series of massive bushfires across Australia. Around 1,000 tourists and residents were eventually evacuated by the Australian navy and taken further down the coast. The military has sent troops, ships and aircraft to the region to help relocation and firefighting efforts. Humans are sometimes to blame for starting the fires, but they are also often sparked by natural causes, such as lightning striking dry vegetation. Once fires have started, other areas are at risk, with embers blown by the wind causing blazes to spread to new areas. Bush fires themselves can also drive thunderstorms, increasing the risk of lightning strikes and further fires.

Natural disasters have a long historical record. Plato in his dialogue *Timaeus* and *Critias* (360 BC) described that

Atlantis (the island of Atlas) sank into the ocean in 9000 BC “in a single day and night of misfortune.” This information was confirmed by reading the Egyptian hieroglyphs and was disseminated by the lawmaker Solon.

Coming to the main point-Natural disasters have a significant impact on the public health and well-being of populations affected. Negative health impacts can be direct (e.g., injuries) or indirect (e.g., malnutrition and increase in infectious diseases). In the aftermaths of a natural disaster, these health issues are compounded by the damage done to health systems, water and sanitation infrastructure, and the displacement of communities affected. Displacement is quite common after major natural disasters due to increased homelessness. Natural disasters also cause a huge economic burden. In terms of health and economic losses, low-income countries are disproportionately affected by natural disasters. Even though high-income countries have higher industrial damage when natural disasters occur, the proportion of losses in relation to the gross national product demonstrates a higher financial burden for low-income countries. This increases foreign aid dependency for low-income countries since they

need additional funding for reconstruction and economic recovery efforts. These challenges illustrate the need to link emergency disaster response efforts to long-term development projects to sustain recovery.

The prediction of disasters has been one of the main themes for many research works in social and natural sciences. Ongoing improvement in data quality may lead to increased disaster prediction accuracy. Though, disaster issues have been investigated by both natural and social scientists (mainly economists, sociologists, and political scientists) in an interdisciplinary way. Trends like population growth and rising urbanization are driving losses in vulnerable regions. Up to 1.4 million people are moving into cities every week, with much of this growth – up to 90 percent through 2050 – happening in Africa and Asia. At the same time, climate change threatens push 100 million more people into poverty by 2030. Examples like these make it clear that disaster risk isn't static, but rapidly evolving.

More governments, communities, and international organizations are learning that smart investments in preparedness and resilience can keep natural hazards from becoming human catastrophes. These investments can also have other benefits, like spurring jobs and

economic growth, more educational opportunities, improved gender equality, environmental protection and can help meet demanding development goals by 2030. With major advances in technology and research which are both accessible and more affordable, this is an opportunity for policy makers, development practitioners, and communities to equip themselves with information on how to best prepare for a hazard. As climate change threatens to increase disaster risk and wash away important development gains, it's well past time to take an even more active and serious approach to smart disaster risk management.

For reference:-

- <https://www.smh.com.au/national/nsw/millions-in-australia-s-east-face-natural-disaster-risk-20190101-p50p31.html>
- <https://www.nationalgeographic.com/environment/natural-disasters-weather/>
- <https://www.bbc.com/news/world-australia-50951043>
- <https://www.theverge.com/2020/1/3/21048891/australia-wildfires-koalas-climate-change-bushfires-deaths-animals-damage>

Additional Readings:-

- <https://www.theguardian.com/international>
- <https://economictimes.indiatimes.com/blogs/et-editorials/woods-that-arent-dark-or-lovely-enough/>
- <https://economictimes.indiatimes.com/blogs/et-editorials/fiscal-discipline-isnt-a-small-deficit/>

Suggested Refresher Book:-

Quakeland

Book by Kathryn Miles (Author)