

Date	02 November 2022
Team Id	PNT2022TMID46941
Project Name	Natural Disasters Intensity Analysis and Classification using Artificial Intelligence
Marks	2 Marks

OBJECTIVES:

Integrating frontier technologies including Artificial Intelligence (AI) into existing emergency systems can harness the potential of existing data streams and improve hazard mitigation and disaster management.

When using AI to detect extreme events such as avalanches or earthquakes, the availability of data can be a limiting factor. AI-based methods can be very effective if a training dataset covers very large events. However, the availability of such data is limited because of the rarity of these events.

The objectives of disaster management are:

- Safeguard and make available vital materials
- supplies and equipment to ensure the safety and recovery of records from predictable disasters
- Identifying the hazard and its cause.
- Assessing, reviewing and controlling the risk.
- Reduce the risk of disasters caused by human error, deliberate destruction, and building or equipment failures
- Be better prepared to recover from a major natural catastrophe
- The objectives of disaster management are as follows:
- Improving tolerance.
- Preventing losses and dangers.

- Providing relief to the affected people.
- Preparing for actions to be taken at the time of disaster.
- Assessing the damage caused.
- Arrangement of rescue for the affected.
- Rehabilitation and rebuilding the affected area.

Artificial intelligence (AI), in particular machine learning (ML), is playing an increasingly important role in disaster risk reduction (DRR) – from the forecasting of extreme events and the development of hazard maps to the detection of events in real time, the provision of situational awareness and decision support, and beyond.