

TECHNOVATE

Tech Shield

OVERVIEW

Innovate solutions for real life problems that are sustainable and cost-effective and explain why your idea is a notch above the rest.

Topic: Utilization of Technology for Disaster Management (for all its aspects)

Abstract:

The United Nations defines disaster as '*a serious disruption of the functioning of a community or a society.*' A simple classification of disaster can be made by its perpetrator - Natural or Human-induced. The National Disaster Management Authority of the Government of India (NDMA) includes the following events under Natural disasters -

1. Earthquakes
2. Floods
3. Landslides
4. Cyclones
5. Tsunamis
6. Urban Floods
7. Heat-Wave

In India, the NDMA is primarily concerned with detection, prevention, mitigation and taking adequate post disaster measures. It works with the vision '*To build a safer and disaster resilient India by a holistic, pro-active, technology driven and sustainable development strategy that involves all stakeholders and fosters a culture of prevention, preparedness and mitigation.*'

The Indian Space Research Organization (ISRO) currently claim that about 60% of India's landmass is prone to earthquakes of various intensities, over 40 million hectares of land is prone to flood, over 5700 km of India's 7516 km long coastline is prone to cyclones and 68% of cultivable land is susceptible to droughts. The ISRO, on this note has initiated its own Disaster Management Support Programme, with the vision same as that of the NDMA and the topic under study.

The International Community has also emphasized on the development of technologies to play a role in disaster management. It has been highlighted in the Sustainable Development Goals of the United Nations Development Programme (UNDP) and during the adoption of Conference of Parties' 21st meet (COP 21) in Paris, explicitly with their third preambulatory clause - "*Welcoming* the adoption of United Nations General Assembly resolution A/RES/70/1, '*Transforming* our world: the 2030 Agenda for Sustainable Development', in particular its goal 13, and the adoption of the Addis Ababa Action Agenda of the third International Conference on Financing for Development and the adoption of the Sendai Framework for Disaster Risk Reduction"

Keeping in mind the goals envisioned and the agendas set up by the NDMA and the International Community, and with a hope of finding out altruistic ideas for tackling the problem at hand, K.J. Somaiya College of Engineering, through this event, calls upon students to present their ideas for:

"The use of technology for prevention, preparedness and mitigation of Natural Disasters".

RULES

- There should be 1 team per department.
- Teams can be from any year.

- There must be 2 people per team.
- This event comprises of 3 rounds:

Round 1: Plan Presentation
(5 minutes per team)

In this allotted time, the team that has the floor must introduce themselves and their solution. An entire summary of their solution along with the Cost Analysis, implementation and merit over the existing technologies must be made during this time. If the time is exhausted, the floor will automatically be yielded back to the chair and the event proceeds to the next round. If the presentation terminates before the end of 5 minutes, the floor will be open for questions from the audience.

Round 2: Points of Information from the Teams
(8 minutes)

After the allotted time for Plan Presentation is exhausted, the floor will be open for Points of Information (Pol) from the other participating teams. Each team gets 2 minutes to ask Pol and have necessary follow-ups for rebuttals. The adequate decorum as followed in an open debate must be maintained.

Round 3: Concluding Remarks
(2 minutes per team)

At the end of the Pol round, the presenting team shall summarize their stance and replies to all the issues and challenges put forth by the other participating teams and audience (if any).