

WCDM



Knowledge Partner



5<sup>th</sup>

# WORLD CONGRESS ON DISASTER MANAGEMENT

24-27 November, 2021 • New Delhi • India

**Session on**  
*"Climate Resilience and Sustainability in Disaster Management"*

**Seminar Organized by**  
Amity Mega Centre for Natural and Man-made Calamities,  
Global Warming and Climate Change Cluster, Amity University

**November 24, 2021, 2:30 – 4:00 PM**  
Virtual Deliberations



Government of India  
Capital Territory of Delhi



NDMA



Disaster Management, Initiatives and Convergence Society  
Envisioning a Disaster Resilient Future



IIT Delhi



Resilient India - Disaster free India



DRDO



ICMR



WCDM



Knowledge Partner

5<sup>th</sup>

**WORLD CONGRESS**  
ON  
**DISASTER MANAGEMENT**

24-27 November, 2021 • New Delhi • India

**Session on**

***"Climate Resilience and Sustainability in Disaster Management"***

**Seminar Organized by**

**Amity Mega Centre for Natural and Man-made Calamities  
Global Warming and Climate Change Cluster, Amity University**

**November 24, 2021, 2:30 – 4:00 PM  
Virtual Deliberations**

**SESSION ORGANISER**

**Prof. Tanu Jindal,  
Group Additional Pro Vice Chancellor (R&D)  
Director, AIETSM, ACARS, AIOAS  
Amity University Uttar Pradesh**

**KNOWLEDGE PARTNER**



**AMITY  
UNIVERSITY**

**Eminent Speakers**

**Dr. Satheesh Shenoi  
Former Director  
Indian National Centre for Ocean Information  
Services (INCOIS)**

**Dr. P. Manjusree  
Scientist 'SG' & Head  
Special user Flood & Landslide Monitoring Division  
Disaster Management Support Group NRSC/ISRO,  
Govt. of India**

**Maj Gen M.K. Bindal  
Executive Director  
National Institute of Disaster  
Management (NIDM)**

**Dr. S. D. Pawar  
Scientist F  
Indian Institute of Tropical Meteorology (IITM)**

**Shri Kunal Satyarthi  
Joint Secretary, PP  
National Disaster Management Authority (NDMA)**

**Engr. Ludwig O. Federigan  
Head  
Information and Knowledge Management Division**

**Panel Discussion by Dr. W. Selvamurthy, President of Amity Science, Technology and Innovation Foundation (ASTIF) & DG of Amity Directorate of Science & innovation (ADSI),  
Chancellor, Amity University Chhattisgarh**

**Link for Joining:** <https://us02web.zoom.us/j/87871374042?pwd=dnIR0RudVJTS253SVV2WXV0cWUydz09>

**AMITY INSTITUTE OF ENVIRONMENTAL TOXICOLOGY, SAFETY AND MANAGEMENT**

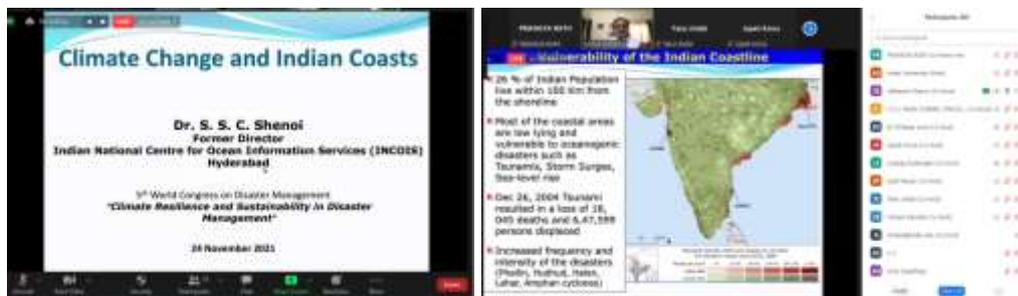
AMITY UNIVERSITY, UTTAR PRADESH, SECTOR-125, NOIDA

Contact: 0120-4392604 | <http://amity.edu/aietsm/> | Email ID: [tjindal@amity.edu](mailto:tjindal@amity.edu)

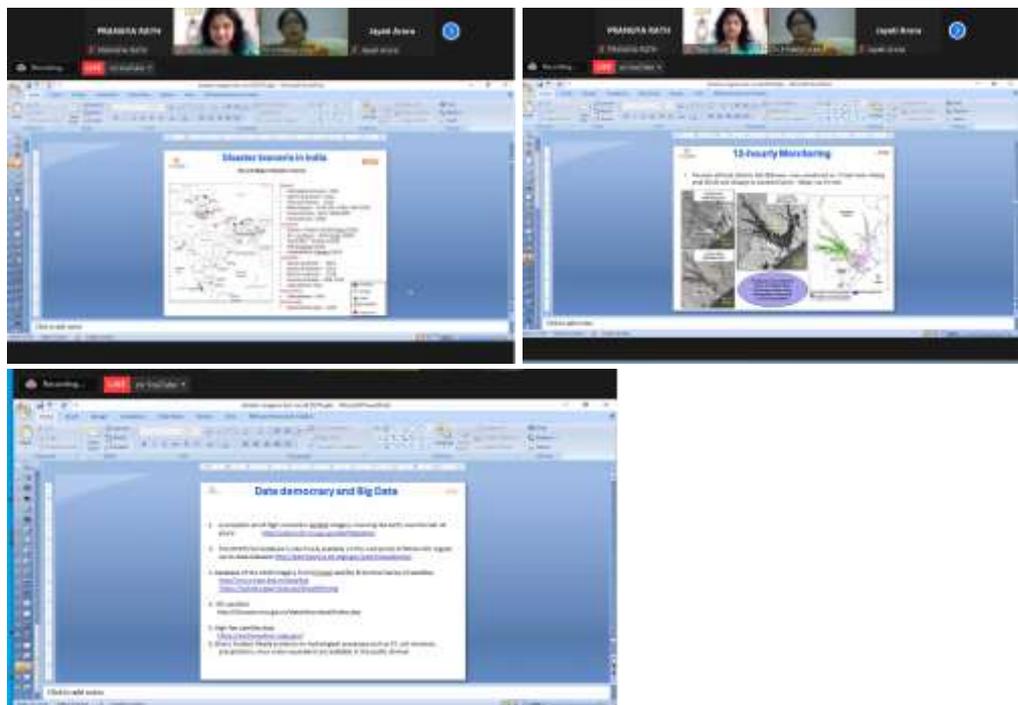


The chairman of the session was **Dr. Sateesh Sheno**.

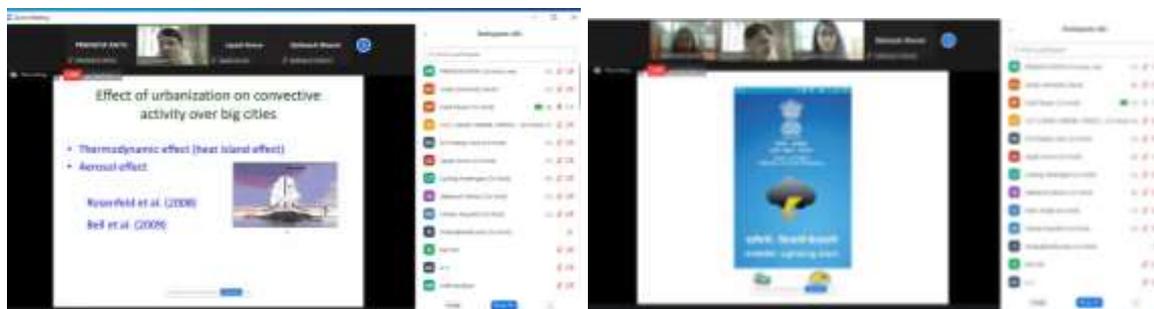
**Speaker1:- Dr. Sateesh Sheno**, Former Director Indian National Centre for Ocean Information Services (INCOIS) and & National Institute of Ocean Technology (NIOT), addressed the platform with his presentation on **Climate Change and Indian Coasts**. He gave an outlook of the increase in heat accumulation in world oceans from 1971-2020; and the negative impacts on the coasts such as degraded ecosystems, cyclones, deteriorating water quality. Vulnerability of Indian coastline for disasters was explained.



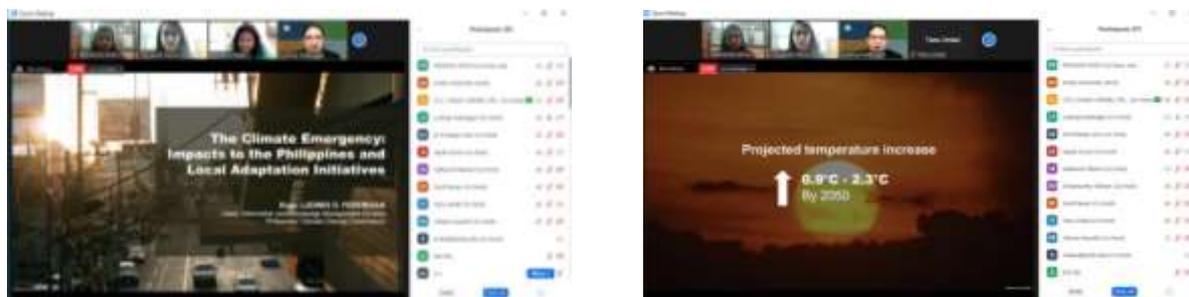
**Speaker 2:- Dr. P. Manjusree**, Scientist 'SG' & Head, Special user Flood & Landslide Monitoring Division Disaster Management Support Group NRSC/ISRO, Govt. of India, gave an elaborate and very informative presentation on '**Advanced Technology interventions for disaster risk reduction in India**'. She highlighted about the disaster scenarios in India from 2013-2021, global distribution of natural disasters, and disaster management cycle. Importance of the use of satellites for disaster management, data collection, and their monitoring techniques were mentioned. Also gave an overview of the websites containing more detailed information of satellites and ISRO's initiatives at national level on impact of disasters.



**Speaker 3:- Dr. S.D. Pawar**, Scientist F, Indian Institute of Tropical Meteorology (IITM), started his talk on **“Lightning a natural disaster”**. He gave a view of effect of urbanization on convective activities over big cities. Discussed about lightening awareness programmes and also important **“Do’s and Don’t”** during a thunderstorm. He also gave an outline about the **“Damini”** lightening alert app.



**Speaker 4:- Engr. Ludwig O. Federigan**, Head of the Information and Knowledge Management Division, Philippines presented on **“The Climate Emergency: Impacts to the Philippines and Local Adaptation Initiatives”**. He gave a brief about the COP26 Climate Change 2021 and its recommendations. He also talked about the programmes and action plans of the Philippines government relating to climate change and how coordination monitoring and evaluation of the same are conducted. Initiatives of local/societal level works such as rain water harvesting, reducing waste (plastics), community gardening, building adaptive capacities of communities, etc. were also presented.



The presentations were then followed by panel discussion, headed by **Dr. W. Selvamurthy**, President – Amity Science, Technology & Innovation Foundation (ASTIF), & Chancellor, Amity University Chhattisgarh. Dr. W. Selvamurthy elaborate in the field of Disaster Management. He emphasized on collaborative research looking into current thrust areas in the Disaster Management and he also elaborate Amity Initiatives. All the eminent speakers shared their views on the policies, technologies, education, awareness, preparedness that are required in the present times. Also bringing together agencies, institutions, R&D at national levels for project collaborations were encouraged. Dr. Shenoj focussed on prioritising research for mitigation strategies, and right adaptation to such conditions by using sustainable solutions. Dr. Manjushree talked about increasing ground instrumentation and mentioned the two schemes:- **“Research in disaster management by IARS, and Respond projects by ISRO”**. Dr. Pawar mentioned on research on preparedness strategies for lightening and drainage

systems. Engr. Ludwig emphasised on increasing knowledge and capacity building, and local climate change action plan.



After an interesting and intriguing panel discussion, the event ended by ‘Vote of Thanks’ by Ms. Prangya Rath (PhD scholar).

Prof. Tanu Jindal thanked Honorable Founder President, Dr. Ashok K. Chauhan, for his vision on “Global Warming and Climate Change” Cluster which is of utmost importance in current context. She also thanked Respected Chancellor, Dr. Atul Chauhan for dynamic leadership and Vice Chancellor, Dr. Balvinder Shukla for immense support. She further thanked Dr. W. Selvamurthy and Dr. D.K. Bandyopadhyay for their constant encouragement.





**AMIT SHAH**  
Prime Minister of India

## MESSAGE

I am pleased to note that Fifth World Congress on Disaster Management (WCDM-2021) is being held at Indian Institute of Technology, Delhi, on November 24-27, 2021 in collaboration with Disaster Management Initiatives and Convergence Society (DMICS) Hyderabad, NDMA, NDM along with other scientific, technical and academic institutions.

I am glad to observe that deliberations shall focus on technology, finance and capacity, which would identify the challenges, brainstorm every issue and recommend measures for the successful implementation of global agendas of building resilience across sectors.

I convey my good wishes and success to all the stakeholders organising the WCDM-2021.

(Amit Shah)



**MAMI MIZUTORI**  
Special Representative of the  
UN Secretary-General on Disaster Risk Reduction

## MESSAGE

I extend my congratulations to the Government of the National Capital Territory of Delhi, the Indian Institute of Technology (IIT) Delhi and the Disaster Management Initiative and Convergence Society (DMICS) in organising the Fifth World Congress on Disaster Management (WCDM), in collaboration with our partners in India's National Disaster Management Authority (NDMA) and the National Institute of Disaster Management (NIDM).

The three priority topics of the WCDM, namely technology, finance, and capacity, are all critical to building disaster resilience and in achieving the targets and priorities of the Sendai Framework for Disaster Risk Reduction 2015-2030. I am particularly pleased to learn that the WCDM will examine these topics in the context of the impact and lessons of the COVID-19 pandemic.

While the pandemic has presented unprecedented challenges for governments and the international community, it has also provided countries with an opportunity to re-think their approaches to managing risk and their efforts to build resilient systems towards more proactive and prevention-centric approaches. The need to integrate biological hazards into disaster risk reduction strategies is one clear lesson from the pandemic. However, ambitions should be raised to improve disaster risk governance systems that not only mitigate the occurrence of another pandemic, but can guard against all types of hazards, including human-induced hazards. This requires the adoption of risk reduction approaches that are multi-sectoral, multi-hazard, gender-responsive and inclusive.

Moreover, as the focus for this year's International Day for Disaster Risk Reduction is focused on Target 11 of the Sendai Framework, which calls for increased international cooperation, it is important that countries leverage opportunities, such as the WCDM, to strengthen cooperation including north-south and triangular cooperation in disaster risk reduction. This includes the sharing of data and challenging lessons learned, good practices and expertise, both at the regional and global levels.

I look forward to learning about the outcomes of the WCDM and wish you a successful event.

Mami Mizutori