

**Three days Training Programme**  
**On**  
**“Climate Resilience and Sustainability in Disaster Management”**

**(Day 1 ) March 17, 2021 (2:30 PM to 5:30 PM)**

A Training programme is being organised by Amity Institute of Environmental Toxicology, Safety and Management (AIETSM) and Amity Institute of Environmental Sciences (AIES) on "**Climate Resilience and Sustainability in Disaster Management**" in association with National Institute of Disaster Management (NIDM) on March 17, 2021 virtual mode with the vision of Founder President **Dr. Ashok K Chauhan**. Under the dynamic leadership of our Chancellor **Dr. Atul Chauhan**, and Additional President and Chancellor **Dr. Aseem Chauhan**, the activities of Amity Environmental Domain are taken forward, inviting eminent scientists, policymakers to work on latest technologies, research projects and discussion forums for sustainable development.

Climate Change is the defining issue of our time and we are at a defining moment. From shifting weather patterns that threaten food production, to rising sea levels that increase the risk of natural disasters, the impacts of climate change are global in scope and unprecedented in scale. Climate change is more than just one of the 17 SDGs specified in the 2030 Agenda for Sustainable Development. It is a threat multiplier with the potential to worsen some of humanity's greatest challenges, including health, poverty and hunger. The need for increased climate action at all levels of society have led to our initiatives of webinar to gather and discuss with national and international experts for actions today, adapting to these impacts and ensuring a sustainable future.

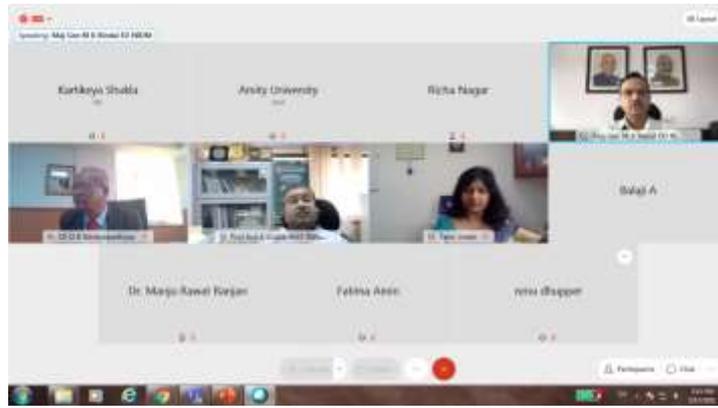
The Inaugural Session started with the introduction to the theme by **Prof. Tanu Jindal, Group Add Pro Vice Chancellor (R&D), Amity University and Director Amity Institute of Environmental Sciences and Amity Institute of Environmental Toxicology Safety and Management**. She gave the insight on the most burning topic of climate change and the need for a sustainable future. She emphasized on the disaster risk reduction and more robust development planning are crucial in adapting to the increasing risks associated with climate change. She added, disaster

preparedness is required to lessen the impact of disaster as it helps in alleviating the chaos wrought by the unexpected crisis, save mankind, infrastructure, and nature.

Chief Guest, **Maj. Gen MK Bindal, Executive Director, National Institute of Disaster Management**, presented the overview of the training program on “Climate Resilience and Sustainability in Disaster management”. He discussed about the relation between climate change and increased events of disaster. He explained how climate change will affect disaster risks in two ways: firstly, through the likely increase in weather and climate hazards and effects of sea-level rise; and, secondly, through the increases in vulnerability of communities to natural hazards resulting from ecosystem degradation, reductions in water and food availability and changes to livelihoods. Climate change will thus add another stress to those of environmental degradation and rapid, unplanned urban growth, further reducing communities, abilities to cope with even the existing levels of weather hazards. He also stressed on the need to mitigate the effects of climate change.



**Dr. D K Bandhopadhyay, Chief Advisor FPO / Mentor – AIES** shared encouraging thoughts towards climate change and disaster management. He said that it is the need of the hour to be preprepared for any natural disaster which will help in achieving goals of sustainability.



The theme speaker, **Prof. (Dr.) Anil K. Gupta, Head, ECDRM, NIDM** presented his talk on '**Climate Science Popularization for Public Safety**'. He mentioned that a slight increase in the global temperature will affect people, economies and ecosystems. The climate change is affecting the physical, mental and community health which may result in disastrous situations. It is need-of-the hour to have provisions for the public safety in context to livelihood, health, hygiene, food, transport, emergencies, animal life, ecosystem services etc. so as to achieve the goals of sustainability.

The second speaker, **Dr. Saon Ray, Senior Fellow, Indian Council for Research on International Economic Relations (ICRIER)** delivered the lecture on '**Disaster Risk Resilience Strategy**'. She said 'A comparative analysis of existing approaches of financial management of disaster risks in select countries. Map the evolution and status of disaster risk financing in India. Critically analyse applicability of popular instruments for emerging economies, role of private sector and their appetite, challenges to implementation. Research into the potential benefits of international cooperation and management of risk financing mechanisms and analysis of various approaches. Examine the amount of risk that is/or can be exported from other countries.'



The inaugural session ended with thanks from Prof. Tanu Jindal to all the speakers and dignitaries for very worthy information to combat climate change and manage natural disasters effectively for achieving sustainable future.

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

**(Day 2) March 18, 2021 (2:30 PM to 5:30 PM)**

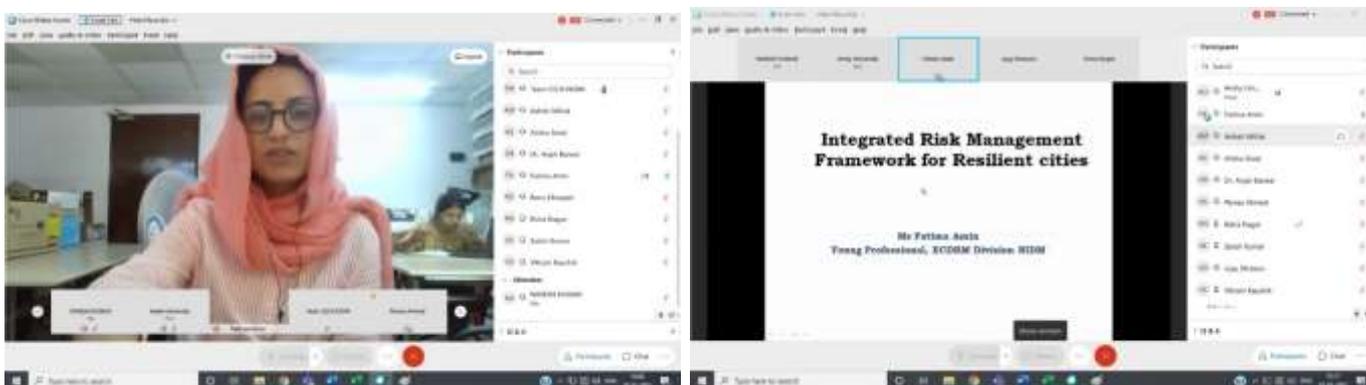
The second day of Online Training Programme organised by Amity Institute of Environmental Toxicology, Safety and Management (AIETSM) and Amity Institute of Environmental Sciences (AIES) on "**Climate Resilience and Sustainability in Disaster Management**" in association with National Institute of Disaster Management (NIDM) started with the welcome of the speakers by Prof. Tanu Jindal, Group Add Pro Vice Chancellor (R&D), Amity University and Amity Institute of Environmental Toxicology Safety & Management.

The first speaker of the day was Dr. Vijay K. Dhawan, Forestry Expert, Forest Research Institute, Dehradun. He gave his views on 'Forest Fires & Disaster Risk Reduction'. He submitted that around 50% of the forests of India are fire prone and several parts of the world forest experiencing forest fires round the globe. Each year about 15-20 thousand forest fires are reported in India affecting huge loss of property and lives in Himalayas and the north eastern states. Most of these events are because of anthropogenic activities intentional or unintentional. This damages to the protective power of forests besides the damage to the wildlife. He suggested a massive

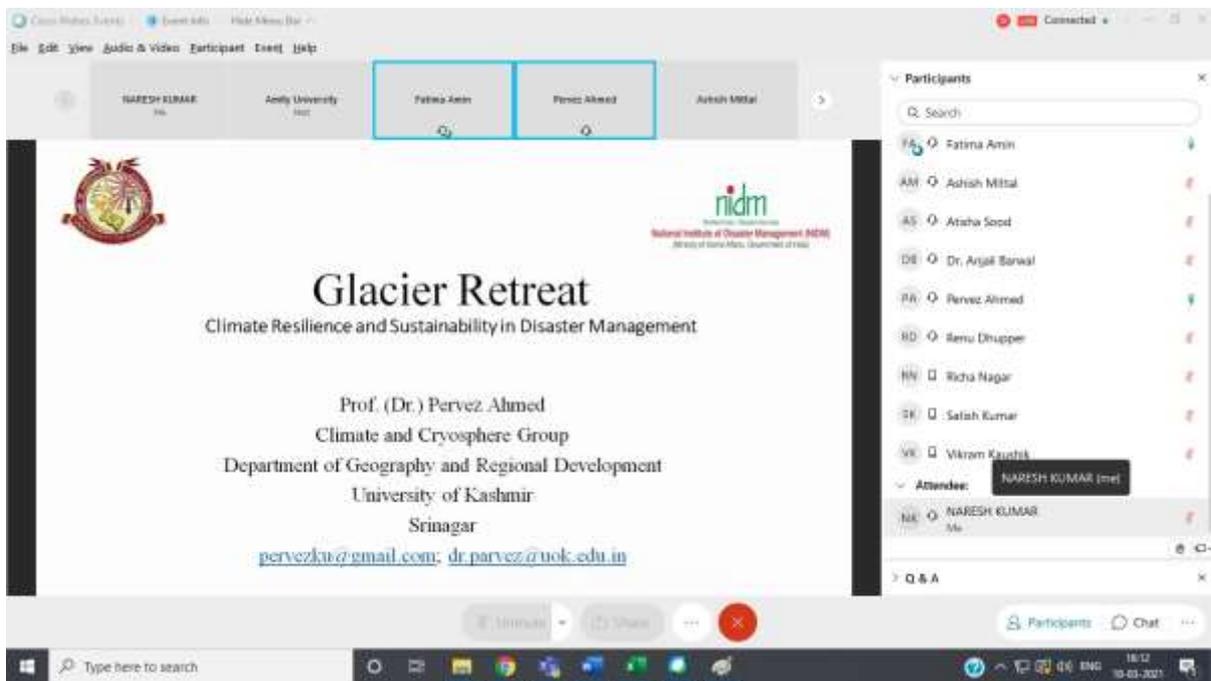
requirement of awareness of rural masses towards significance of the forest ecosystems besides having preparedness for any such event with capacity building and training for the stakeholders.



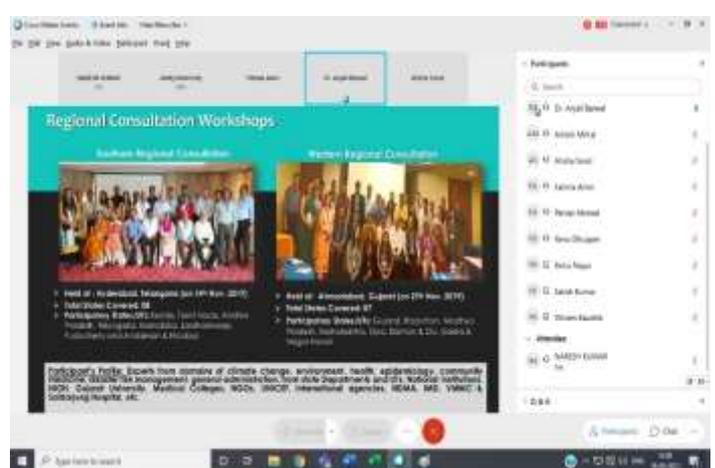
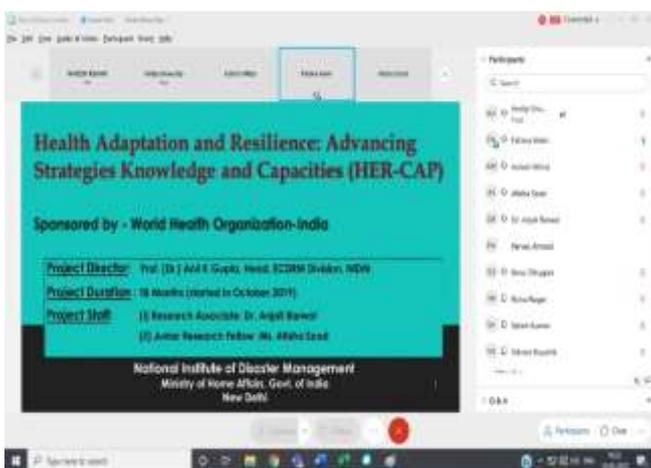
The second speaker was Ms. Fatima Amin, Young Professional, NIDM. Her lecture was with the theme on 'Integrated Risk Management Framework for Resilient Cities'. She gave the overview on personal preparedness for risk management for resilient communities and suggested to turn disasters into opportunities with integrated action.



A lecture on "Glacier Retreat" by Prof Pervez Ahmed, Professor, Department of Geography and Regional Development, University of Kashmir, Srinagar shared experiences about the Earth's Climate System complex and focused over glacier movements that may result into disaster events. He provided with certain views in combating them.



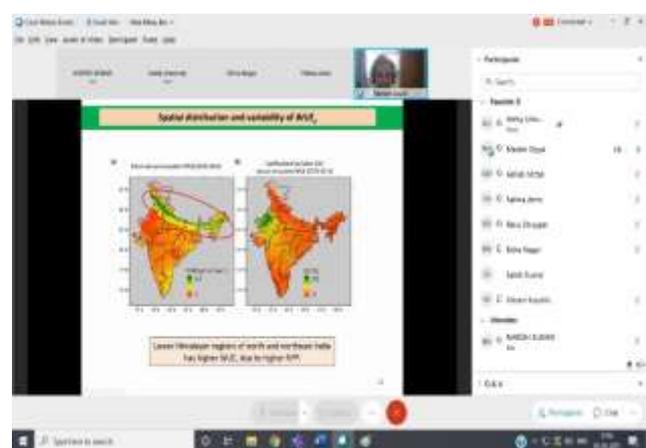
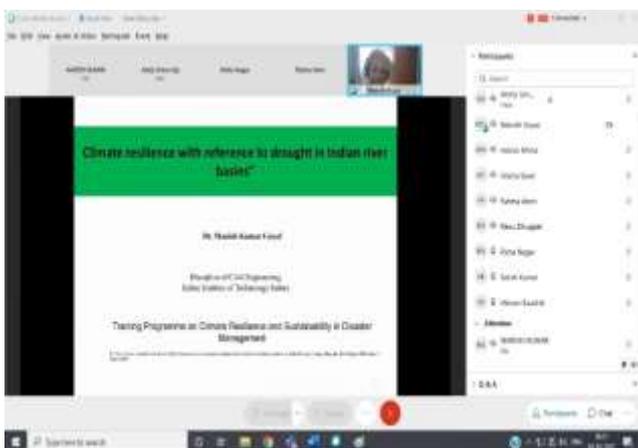
Followed by presentation by CAP-RES Project and NADMP Project Team. The team delivered the talk on 'Health Adaptation and Resilience: Advancing Strategies Knowledge and Capabilities (HER-CAP)'. The team presented the overview of the efforts of NIDM towards risk mitigation and adaptation roadmap building.



Ms. Atisha Sood, Research Fellow, HER-CAP Project, NIDM delivered her talk on 'NHAP for Disaster related Illnesses & Training Manual on Health Adaptation & Resilience to Climate Risks'. She briefed about development of resilient health services and systems to mitigate and manage the health effects of climate change related disasters.



Lecture was delivered on “Climate resilience with reference to drought river basins on India” by Dr. Manish Kumar Goyal, Associate Professor, Civil Engineering Department, IIT, Indore. His focus was on the disturbances that lead to occurrence of drought which is anticipated to increase the probability of climate change. He also said that it is important to identify the regions in the country that are not resilient to droughts to have a proper planning and preparations against the disasters.

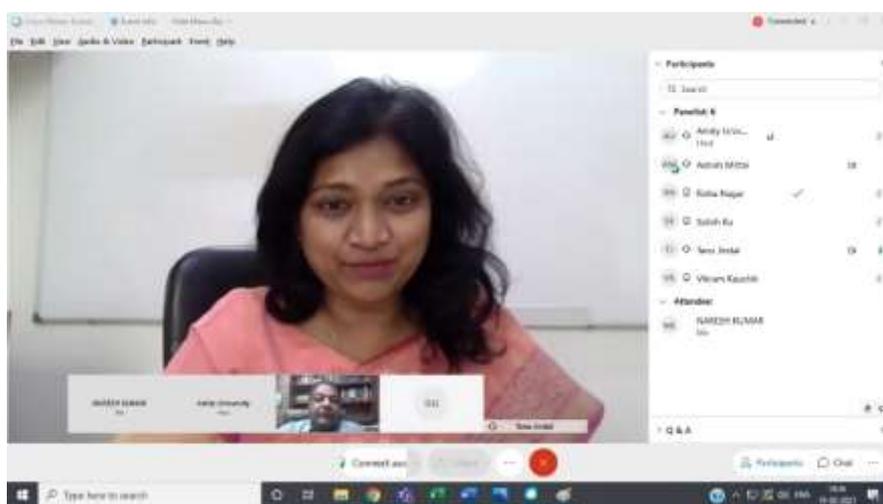


The session ended with vote of thanks from Prof. Tanu Jindal to all the speakers and dignitaries for worthy information for achieving disaster free sustainable future.

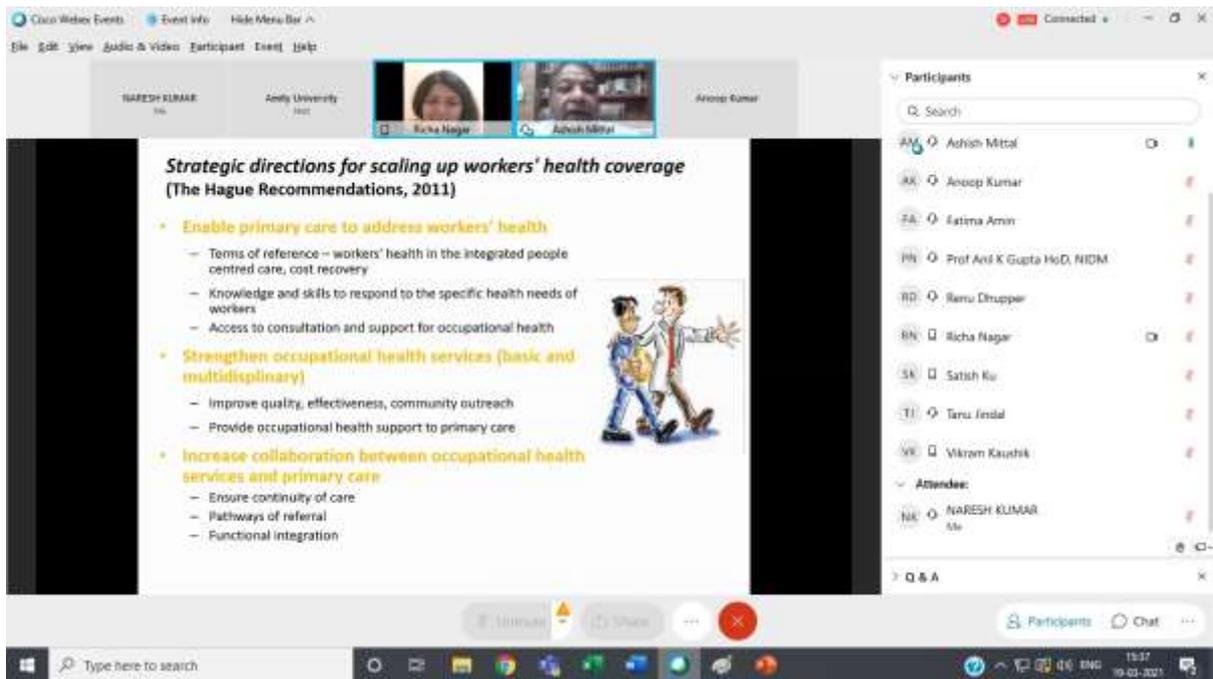
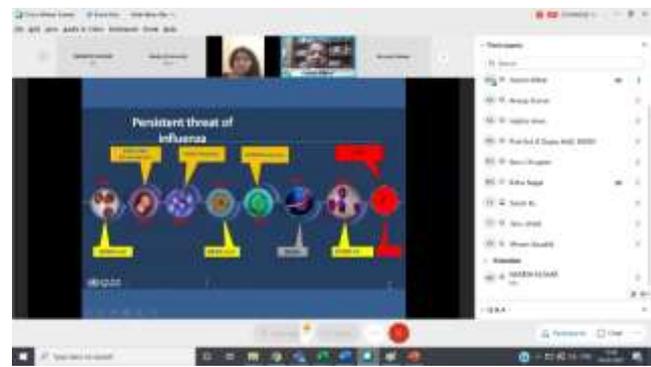
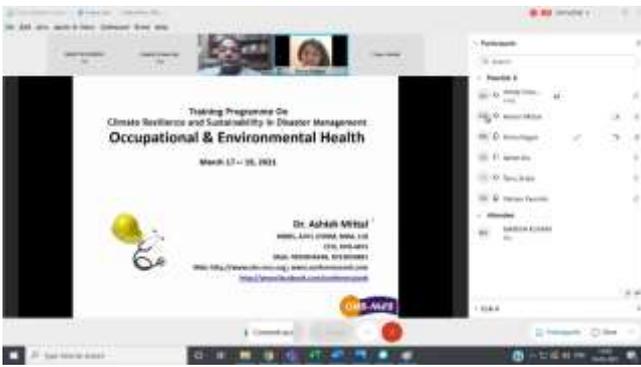
## Climate Resilience and Sustainability in Disaster Management

**(Day 3) March 19, 2021 (2:30 PM to 5:30 PM)**

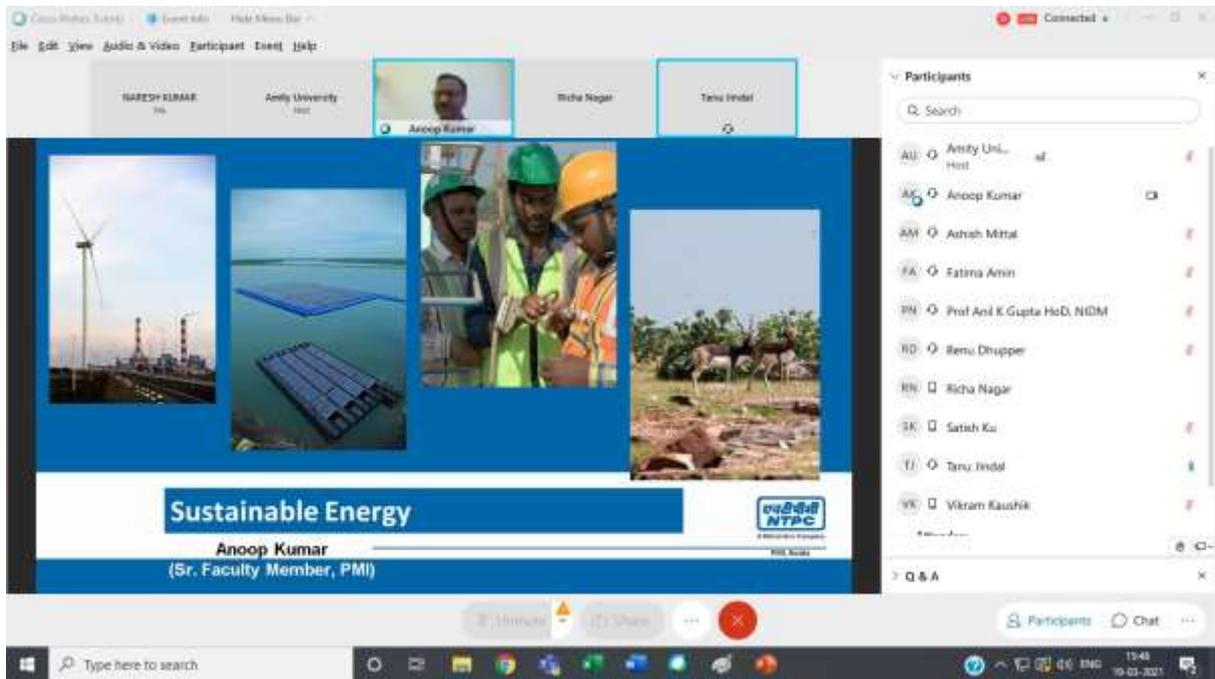
This was the third day of Online Training Programme organised by Amity Institute of Environmental Toxicology, Safety and Management (AIETSM) and Amity Institute of Environmental Sciences (AIES) on "**Climate Resilience and Sustainability in Disaster Management**" in association with National Institute of Disaster Management (NIDM) started with the welcome of the speakers by Prof. Tanu Jindal, Group Add Pro Vice Chancellor (R&D), Amity University and Amity Institute of Environmental Toxicology Safety & Management.



The training program started Dr. Richa Dave Nagar welcomed by Dr. Ashish Mittal, CEO, OHS-MCS on the topic "Occupational and Health Environmental". He covered the topics like causes of low safety in India for labors, advent of occupational health, labour laws, burden of occupational diseases, occupational health, India- labour, occupational injuries and barriers for delivery. He talked about identification and modification of the adverse effects of the workplace and non-occupational environment on the health of individuals and populations. He mentioned significant environmental disease burden attributable to risks including poor ambient and indoor air quality, unsafe water, poor sanitation & hygiene, exposure to toxic chemicals and climate change. He concluded with The Hague Recommendations 2011 which pointed "Strategic directions for scaling up workers' health coverage" – enable primary care to address workers' health; strength occupational health services (basic and multidisciplinary) and increase collaboration between occupational health services and primary care.



After this knowledgeable talk, Dr. Anoop Kumar, Sr. Faculty Member, PMI. His deliberation was focused on increased use of renewable sources of energy though it is yet in the process of development over the past few years. About 16% of global energy comes from renewable resource that needs a significant increment. He focused on sustainable energy where he covered the topics like global energy scenario, power generation, the need for energy transition, the coal shares, etc. Also, he showed us how other countries are targeting the net zero carbon emission goals and how India has succeeded in it.

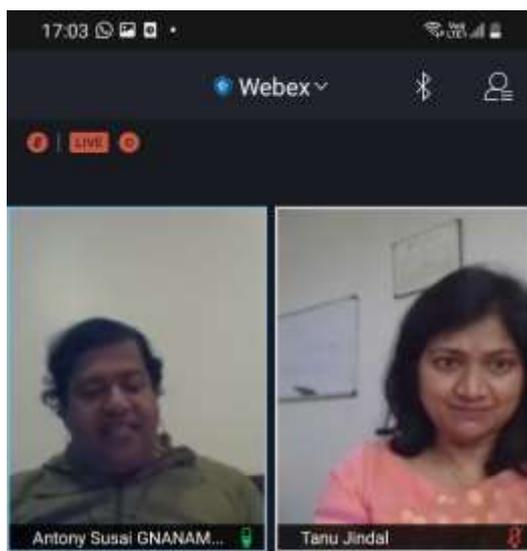


The program commenced with the Valedictory Session, where Dr. D K Bandyopadhyay talked about the importance of the climate and the disaster management.

Thereafter, Dr. A K Goyal gave his insight about the status of disaster management in India.



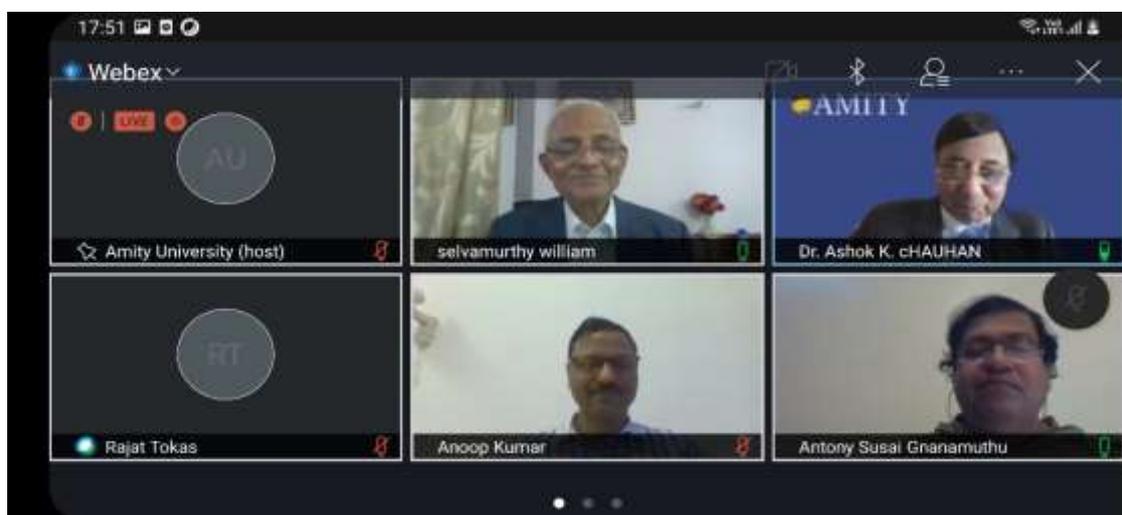
Dr. Antony Susai Gnanamuthu followed with his ideas about India lagging in disaster management, about the alarming facilities and the need to take the mitigation measures with more emphasis.

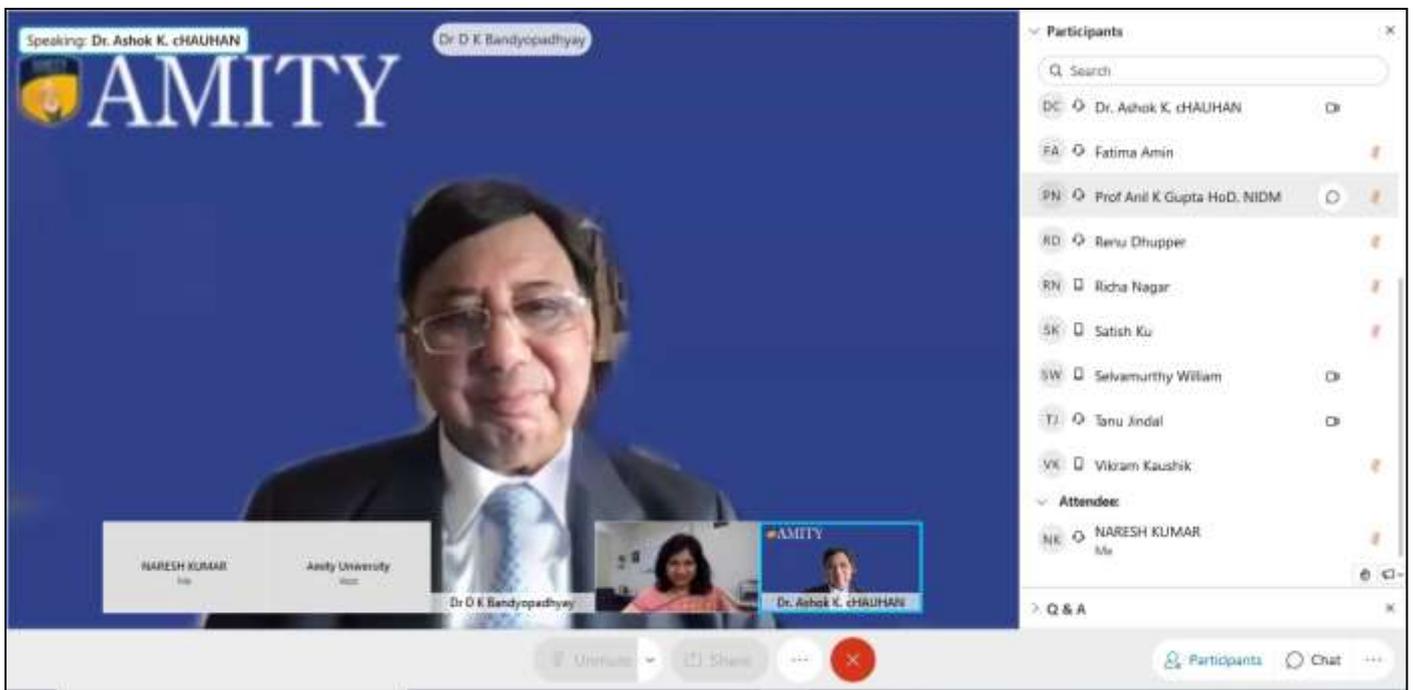


Later, Dr. W. Selvamurthy expressed his views about the preparedness and the response through policies, restoration, etc. for a disaster.

Towards the end, our Honorable Founder President Sir, Dr. Ashok K Chauhan gave his views about the importance and usefulness of the three days on rigorous discussion and enlighten over Climate Resilience and Sustainability in Disaster Management issue round the globe. With his encouraging and motivational words, he proposed to have an International Conference on the theme to integrate global scientists and environmentalists on one platform to deal with the issue.

This was followed by a question-and-answer session where the questions were answered by the panelists.





The session ended with vote of thanks from Dr. Renu Dhupper, Joint Coordinator- Amity Institute of Environmental Sciences to all the speakers and dignitaries for worthy information in context to Climate Resilience and Sustainability in Disaster Management