Report on

Ministry of Earth Sciences (MOES), Govt. of India -sponsored 3-day workshop cum training program on "*Policies And Practices For Managing Climate-Induced Disaster For Sustainable Future*" organized by Amity Institute of Environmental Sciences (AIES,) Amity University Uttar Pradesh, Noida from 17th-19th July 2024.

Amity Institute of Environmental Science (AIES), Amity University Uttar Pradesh, Noida Campus organized a Workshop Cum Training Programme on the topic, "Policies and Practices for Managing Climate-Induced Disaster for Sustainable Future" sponsored by the Ministry of Earth Sciences, Government of India, from 17th -19th July 2024. More than 50 participants including undergraduates, postgraduates, and research scholars, participated in the program. The 3-days program equipped participants with comprehensive knowledge and insights into policy options and strategies for promoting resilience, adaptation, and sustainability in the face of climate-induced disasters. Expert presentations, interactive sessions, and demonstration activities overall expanded our understanding of the complex dynamics of climate change impacts, disaster risk, and sustainable development.

The inauguration of the workshop took place on 17th July 2024 with the Saraswati Vandana and Lightening of Lamp by Prof. D. K Bandyopadhyay, Mentor AIES, Our Guest of Honour Dr. O.P Mishra, Scientist G and Director, National Centre for Seismology, Ministry of Earth Sciences, and Dr. Renu Dhupper, Assistant Director AIES and **other** faculty members.

After this, Dr. Renu Dhupper, Assistant Director AIES gave the welcome address and briefed us about the impacts of climate change on disaster risks, emphasizing the interconnectedness/interrelationship between climate variability, extreme weather events, and societal vulnerabilities.

Later Prof. D K Bandhyopadhay shared his thoughts on the importance of workshop and training program and the role of disaster management in the present scenario of climate variability and climate change. During the inaugural session, Dr. O.P Mishra, scientist G, Director, National Centre for Seismology, Ministry of Earth Sciences shared his thoughts and his experience on the vulnerability of Japan to massive earthquakes and other related disasters like Tsunami, and how the country has learned to live with this kind of disasters through adopting several earthquake-resilient infrastructure technologies.

Day 1, the Afternoon session started with a presentation by **Ms. Swati Grover,** Director, Disaster Resilient & Research Foundation (DRRF), New Delhi. Where she provided an

overview of types of Disasters and their effective management and policy frameworks. Thereafter **Dr. Atul Kumar Srivastava,** Scientist E, Indian Institute of Tropical Meteorology, Ministry of Earth Sciences, Govt. of India, presented his research work on the temporal distribution and abundance of aerosols and black carbon (major air pollutants) over the Indogangetic plain of India. Finally, **Dr. V. P. Sharma**, Chief Scientist, CSIR-Indian Institute of Toxicology Research, Lucknow and Professor, AcSIR through his virtual presence provided an overview of disaster risk monitoring and strategic decision-making.

Day 2, 18th July the session started with a presentation by **Dr. Mukta, Girdhar**, Senior Consultant, Delhi Disaster Management Authority, Delhi. She presented a case study of the Delhi Flood, which occurred in July 2023, she explained the implementation and real-time action plan strategies adopted to control the flood situation and challenges encountered. This was followed by a presentation by Dr. Swati Sharma, Assistant Professor, Amity Institute of Geoinformatics and Remote Sensing on the prevalence of landslides-related disasters in HP and its monitoring and prevention. After the expert presentation, a group exercise was conducted involving the participants. In this exercise, participants in 5 different groups comprising 8 members, made on-the-spot posters/charts on various disasters and presented their posters which were judged by the expert faculty members.

The afternoon session of the 2nd day started with the presentation of **Dr. Swati Grover,** Director, Disaster Resilient & Research Foundation (DRRF), New Delhi, where she presented various nature-based solutions to cope with or mitigate various natural disasters. The information gathered through this presentation was later on applied in the form of group activities, where participants in the group of 8, were given a worksheet, where they were asked to identify any disaster risks and propose a nature-based solution to mitigate these disasters and what kind of challenges they may face to implement these plans. Group representatives presented their plan, which was judged by Dr. Swati Grover and faculty members.

The Third-day activity began with two online presentations, first by Dr. Tirthankar Banerjee, associate professor, at the Institute of Environment & Sustainable Development, BHU and followed by 2nd expert presentation by Dr. Suraj Kumar Singh, associate professor, Suresh Gyan Vihar University, Jaipur Rajasthan. Dr. Banerjee highlighted in his presentation the disaster vulnerability and risk assessment: their challenges, quality and acceptance rate, while Dr. Sigh discussed the role of geospatial technologies for climate adaptation and disaster risk assessment.

The entire 3-day workshop cum training program culminated with a valedictory session, which was held on the afternoon session of the 3rd day. Deliberating upon “Climate Change and

Disaster Practical Approach", **Sr. Program Director, Dr. Prabhjot Sodhi, Circular Economy at Centre for Environment Education, chief guest of the session** averred, "Climate Change can happen due to natural internal processes, external forcings, or human-induced forcings. Extreme weather conditions and rising sea levels are major determinants of climate change. In addition, Green House Gas Emissions and the use of plastic also add to the increasing problem of environmental distress. Apart from the government policies and procedures, each individual must take personal responsibility and be mindful towards safeguarding the environment. Small lifestyle changes such as saving water, electricity, and energy consumption will go a long way in combatting climate change."

Addressing the participants during the Valedictory Session, **Dr. D. K. Bandopadhyay, Mentor, AIES,** said, "Climate change is one of the most pressing challenges of our time, posing significant threats to ecosystems, economies, and human well-being worldwide. This Workshop cum Training Programme delved deep into various aspects of climate-induced disaster management including risk assessment and early warning systems, disaster preparedness and response, recovery and reconstruction efforts as well as long-term adaptation and mitigation strategies. Additionally, the role of sustainable solutions such as nature-based approaches, green infrastructure, and renewable energy in enhancing resilience and reducing vulnerability to climate-induced disasters were also be examined." He called upon the students to take up projects which are of national importance and contribute to a sustainable economy.

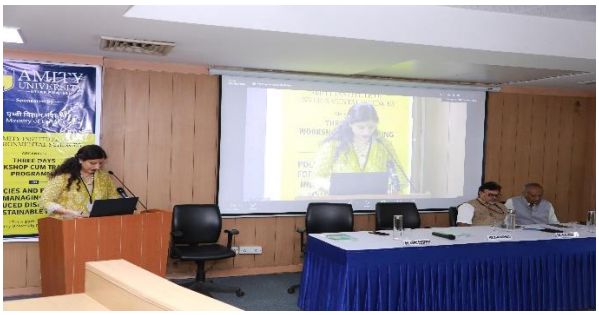
Welcoming the guests on the occasion, **Dr. Renu Dhupper, Assistant Director, AIES,** said, "The primary objective of the Workshop cum Training Programme was to equip participants with comprehensive knowledge and insights into policy options and strategies for promoting resilience, adaptation, and sustainability in the face of climate-induced disasters. Through interactive sessions, practical exercises and expert presentations, the programme aims to deepen participants' understanding of the complex dynamics of climate change impacts, disaster risk and sustainable development."

The Valedictory Session concluded with the Distribution of Certificates to the participants.

During the three-day Programme, Technical Sessions on various topics such as "Understanding Climate Change", "Policy Frameworks, and Risk Assessment for Effective Disaster Management", "Disaster Preparedness and Response Strategies", "Strengthening Infrastructure Resilience through Nature-Based Solutions in Disaster-prone Areas" and "Climate Adaptation Strategies, Practices, and Mitigation Mechanism", were held wherein the experts shared valuable information for the benefit of the participants.

Throughout this workshop, we have had the privilege of learning from experts in the field, sharing experiences, and gaining insights into the latest advancements in the management of climate-induced disasters. The diverse perspectives and expertise that each session brought to the table have enriched our collective understanding and provided us with a comprehensive view of the challenges and opportunities in this critical domain.

Some of the glimpses of the event: **Day 1**

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Disaster Management: Potential Risk Monitoring and Strategic Decision Making
"Policy and Practice for Managing Climate-Induced Disasters for
a Sustainable Future"
(17th – 19th July 2024)
RISK
ASSESSMENT

Day 2:


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Day 3


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DR. PRABHJOT SODHI
PROF. D.K. BANDYOPADHYAY


Practical Approach


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