





# Preliminary Event Report for the 13<sup>th</sup> Pre-Event of the 3<sup>rd</sup> National Platform for Disaster Risk Reduction (NPDRR-3)



# Disaster Research and Knowledge Management 25<sup>th</sup> February 2023 | Chennai, Tamil Nadu

Organized by:



India Universities and Institutions Network for Disaster Risk Reduction (IUINDRR-NIDM)









### **Background**

Disasters followed by severe humanitarian crisis has emerged as a serious problem that the world has to deal with in the 21<sup>st</sup> century. Indian subcontinent which is vulnerable to a wide range of disasters, every year faces, and deals with a wide range of natural disasters that lead to loss of lives, and livelihood and have an impact on the economy. Under the leadership of the National Disaster Management Authority, there are many efforts at the ground level to increase preparedness, and address relief, and rehabilitation-related concerns. A number of think tanks, Non-Governmental Organisations, and other stakeholders are supporting the efforts. However, there is a gap in sharing information and best practices, technical support, and coordination between various stakeholders. In other words, the knowledge, experience, and practice remain at the institutional level and hence manpower, technical, and financial resources deployed in disaster management are not optimally utilized. The linkages among all organizations working on disaster management need to be reinforced in order to derive the best practices and coping mechanisms so that the communities are equipped with the best suitable coping strategies well in advance.

In countries like India, disaster management and risk reduction follow a top-down strategy hence, knowledge sharing is further restricted. Acknowledging the need for a disaster knowledge networking/ sharing platform to enable interaction and sharing experiences with all related experts dealing with disaster management in India, knowledge management and joint research become important. If a knowledge-sharing network can be developed it will function as a tool to store, retrieve, disseminate, and manage information related to disaster management. It will also ensure a better response, government machinery will be more equipped and prepared, the efforts can be integrated with mainstream development policies, and a better monitoring mechanism can be developed. It will also help promote fair practices/ best practices among disaster management communities. In this context, the proposed workshop aims at bringing multi-stakeholders from various fields including (but not limited to) academicians, researchers, practitioners, administrators, and policy planners to discuss, deliberate, and come up with pragmatic solutions and policy-level initiatives that would help shape a humanitarian response approach to any kind of disasters so that a network of knowledge generation and research in disaster management can be established.

The following are the prominent areas that the workshop addressed:

- 1. The best practices, experiences, and lessons learned by different stakeholders in disaster management and research
- 2. Ways to develop a common platform for disaster management knowledge generation, sharing, and organizing it using a transdisciplinary research focus
- 3. Hurdles, and challenges in knowledge building and research in the disaster management
- 4. Innovative and newer science and technologies available in different phases of the disaster management cycle

The session brought together experts from different regions/ states in India to discuss and explore the problems with regional examples and case studies and focused on innovative solutions, and the role of the trans-disciplinary research approach in disaster management. The workshop also provided training in developing pragmatic methodological ideas for transdisciplinary research, developing networks and practical skills in using existing platforms to reach out to other stakeholders so as to enable knowledge building, sharing, and assimilating in the area of disaster management.

# **Key Takeaways/ Findings**

- 1. Workshop discussed how the era of big data and analytics is opening up new possibilities for disaster management. Bog data, with its ability to visualise, analyse and predict disasters, is changing humanitarian operations and crisis management dramatically.
- 2. The workshop explored evidence-based practices in disaster risk reduction. A lot of case studies were taken up and discussed to identify methods to strengthen disaster preparedness and planning.
- 3. The participants were univocal in acknowledging the importance of collaborating and networking in countering disasters.
- 4. Participants stressed the importance of fostering partnerships in all phases of disaster management, i.e. mitigation, preparedness, response, and recovery. Participants pointed out that this collaboration is only possible through multi-stakeholder partnerships.
- 5. The government, the scientific community, health care systems, engineering, social workers, international organizations and non-governmental organizations need to work together to formulate and implement policies regarding disaster management.
- 6. Vigorous focus on Cross-disciplinary (multidisciplinary, interdisciplinary, or transdisciplinary) research is required to build the foundation for a multi-stakeholder approach.
- 7. The workshop emphasized that crucial alliances between disciplines are necessary for solving complex problems.
- 8. Another aspect that the workshop focussed on was the need to create indigenous research. India should create its own knowledge system regarding disaster preparation and response. Indigenous knowledge can help us to create culturally appropriate and practical solutions.
- 9. The workshop pointed out all these points and concluded that a strong political will is required to materialize these objectives.
- 10. The establishment of NIDM and its collaboration with the universities shows that we are on the right track. Participants hoped to take it further and achieve more.
- 11. The workshop provided a comprehensive analysis of the issues such as climate change, the evolution and implementation of disaster management strategies in the Indian scenario, and ways to advance them.
- 12. Promote transdisciplinary disaster research and education integrating physical, social, economic, environmental, and health aspects.
- 13. Offer peer-reviewed journals and magazines for disaster research in India to accommodate all sorts of disaster research, local/case study-based suggestions, and disseminate disaster risk information/solutions.
- 14. Integrate space and information technologies at the local level of disaster risk management and research.
- 15. Increase the number of institutions to offer disaster programs at different levels (certificate/diploma/UG/PG) under the purview of the national new education policy.
- 16. Develop an open risk data platform to host and share all disaster risk-related information at the micro administrative level for the entire country.

#### **Annexures**

### Annexure 1 - Snapshots













## **Annexure 2 – Participants List** (Resource Persons & Delegates)

- 1. PROF. M KRISHNAN. Honourable Vice Chancellor, CUTN
- 2. **PROF. SULOCHANA SEKHAR**, Registrar (i/c), Dean, School of Earth Sciences & Professor & HOD, Department of Geography, CUTN
- 3. **PROF. SIGAMANI PANNEER,** Dean, School of Behavioural Sciences & HOD, Department of Social Work, CUTN
- 4. **DR. KUMAR RAKA,** Senior Programme Officer, CCDRR Centre, National Institute of Disaster Management, New Delhi
- 5. **DR.BALU I.** CCDRR Centre, National Institute of Disaster Management, New Delhi National Institute of Disaster Management, (Ministry of Home Affairs, Government of India)
- 6. **SHRI. RANJAN KUMAR,** Consultant, CCDRR centre, National Institute of Disaster Management (Ministry of Home Affairs, Government of India)
- 7. **DR. P.G. DHAR CHAKRABARTI IAS (retd)** Swami Vivekananda Chair Professor and HOD Environment and Disaster Management
- 8. **DR. DEEPAK KUMAR,** Research Scientist, University at Albany State University of New York (Online)
- 9. **PROF. A SHAHIN SULTANA,** Professor and Former Head, Department of Social Work, School of Social Sciences and International Studies, Pondicherry University
- Dr. JAYAKUMAR C, Associate Professor at Department of Psychosocial Support in Disaster Management (DPSSDM), National Institute of Mental Health and Nero Sciences (NIMHANS), MoHFW, Govt. of India
- 11. **PROF. KAPIL GUPTA**, Department of Civil Engineering, Indian Institute of Technology Bombay, Powai Mumbai, India
- 12. **PROF. GIRIDHARA R BABU**, Professor, Head-Lifecourse Epidemiology, PHFI & Intermediate Fellow, Wellcome Trust DBT India Alliance (online)
- 13. **PROF. ROBERT WALSH**, Professor of Solar Physics, Academic Lead UCLan Space, SUN STFC/UCLan Partnership Project Lead, Royal Astronomical Society Annie Maunder Medal 2021 (online)
- 14. **DR. KOMALI KANTAMANENI** Coastal Scientist and Environmentalist Senior Research Fellow, School of Engineering Co-Chair -REN (Race Equality Network) Academic Board Member, University of Central Lancashire, Preston PR1 2HE, United Kingdom (online)
- 15. **DR. SIRISH KUMAR RAVAN,** Former Sr Official of the UN office for Outer Space Affairs, Vienna Austria and Coordinator, UN--SPIDER Programme. Visiting Professor, School of Natural Sciences, University of Lancashire, UK and Founder, Earthsight Foundation.
- 16. **PROF. DR. R. R. KRISHNAMURTHY,** Head, Department of Applied Geology, University of Madras
- 17. **DR. BIJU K,** Department of Geography, University of Madras.
- 18. **PROF. ATIQUR RAHMAN**, Department of Geography, Faculty of Natural Sciences, Jamia Millia Islamia,
  - New Delhi-110025
- 19. **DR. BALU I**, CCDRR centre, National Institute of Disaster Management (Ministry of Home Affairs, Government of India)
- 20. DR. BALAMURUGAN GURU, Associate Professor and Head, Department of GEOLOGY, CUTN
- 21. DR. K BALASUBRAMANI K, Associate Professor, Department of Geography, CUTN
- 22. DR. A PRABHU, Guest faculty, Department of Social Work, CUTN.
- 23. DR. VISAKH VISWAMBARAN, Guest faculty, Department of Social Work, CUTN
- 24. DR. SARANYASUNDRARAJU PDF, Department of Social Work, CUTN.
- 25. MS. S NANDHINI, Technical Assistant, Department of Social Work, CUTN
- 26. MR. SAKET VATS, Research Scholar, Department of Social Work, CUTN
- 27. MR. JOSIAH STANELY ROSE, Research Scholar, Department of Social Work, CUTN
- 28. MS. RAHANA SR, Research Scholar, Department of Social Work, CUTN

- 29. MS. FATHIMA SHERIN, Research Scholar, Department of Social Work, CUTN
- 30. MR. KANNAN R. Research Scholar, Department of Geography, CUTN
- 31. MS. SIMRAN SEHRAWAT, Research Scholar, Department of Geography, CUTN
- 32. MS. R. ABARNA, Research Scholar, Department of Geography, CUTN
- 33. MR. RAMESHARAVIND P, Research Scholar, Department of Geography, CUTN
- 34. MR. RAVI PRASANTH S, Research Scholar, Department of Geography, CUTN
- 35. MS. SWETHA S, Research Scholar, Department of Geography, CUTN
- 36. MR. SAMUEL SHIBESHI BIKEKO, Research Scholar, Department of Geography, CUTN
- 37. MR. KISHORE SARAVANA S, Research Scholar, Department of Geology, CUTN
- 38. MS. MADHUMITHA, Research Scholar, Department of Geology, CUTN
- 39. MR. UDITTANGSHU CHAKROBORTY, Research Scholar, Department of Geology, CUTN
- 40. DR. V. GOPAL, Guest Faculty, Department of Applied Geology, University of Madras
- 41. MR. S R SRINIVASAN, Research Scholar, Department of Applied Geology, University of Madras
- 42. **MS M BHUBANESWARI,** Research Scholar, Department of Applied Geology, University of Madras
- 43. MS M N SWETHA, Research Scholar, Department of Applied Geology, University of Madras
- 44. DR. MAYA RATHNASABAPATHY, Faculty, Vellore Institute of Technology (VIT) Chennai
- 45. DR. BINU SAHAYAM D, Faculty, Vellore Institute of Technology (VIT) Chennai
- 46. MS. INDHUMATHI, Research Scholar, Vellore Institute of Technology (VIT) Chennai
- 47. MR. HARIBABU, Research Scholar, Vellore Institute of Technology (VIT) Chennai
- 48. MS. NANDITHA PJ, Research Scholar, Madras School of Social Work
- 49. DR. K L RAO, Chief Social Policy, UNICEF
- 50. MR. JEYKUMAR, Tamil Nadu State Disaster Management Authority TNSDMA
- 51. PROF. R. JAGANATHAN, Head, Department of Geography, University of Madras.
- 52. **MS. SHINY RUTH VALENCIA S**, B.E Geoinformatics at College of Engineering Guindy, Anna University, Chennai.
- 53. **DR. MANIKANDAN**, Department of Geography, University of Madras.
- 54. DR. MANIVEL P, Department of Geography, University of Madras.
- 55. DARSHAN SHYLESH D S, Department of Geography, University of Madras.
- 56. A. SONA, Department of Geography, University of Madras.
- 57. **SHURMILI R V,** Department of Geography, University of Madras.
- 58. **AMAN KUMAR MAURYA,** Department of Geography, University of Madras.
- 59. **NIMISHA N MENON,** Department of Geography, University of Madras.