



WCDM DRR AWARDS



**WORLD CONGRESS ON DISASTER MANAGEMENT
DISASTER RISK REDUCTION AWARDS**



WCDM DRR AWARDS

Edited by

Dr. S. Ananda Babu
Ms. Sonam Saroha



PREFACE

Disaster Management Initiatives and Convergence Society (DMICS), is a civil society initiative that was established in the year 2005 in the aftermath of the Indian Ocean Tsunami, to enhance understanding and awareness among the people about the risks of various types and dimensions of disasters. Therefore, DMICS right from its inception has been relentlessly and consistently advocating the necessity of awakening the conscience of all; it imparts and initiates innovative practices, ideas and thoughts through launching new projects, organizing global events on Disaster Management and sharing the best practices that rest on the wellbeing of humanity against natural and manmade disasters.

World Congress on Disaster Management (WCDM) is an initiative of DMICS to bring researchers, policy makers and practitioners from around the world on one platform to discuss various challenges presented on disaster risk management, and in the past years with collaborations from like-minded institutions and various stakeholders of the disaster risk reduction and climate community in India and abroad, the institute has successfully organised five internationally recognized World Congress, with greater impact and significance each year.

World Congress on Disaster Management- Disaster Risk Reduction (WCDM-DRR) Awards 2021: World Congress on Disaster Management (WCDM) has pledged to Honour the stakeholders who have contributed immensely in various facets of the Disaster Management Cycle. The congress envisages recognizing champions in DISASTER RISK REDUCTION (DRR) for rendering their selfless service and bringing innovation in managing the natural and man-made disasters including pandemics and biological disasters and in mitigating their impact on the society.

The award ceremony was solemnized on 22nd June 2022, India International Centre (IIC), New Delhi in the presence of a large gathering of national dignitaries. The Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India, Shri G Kishan Reddy was the Chief Guest. The Convenor and President of WCDM- DMICS, Dr. Ananda Babu presided over the award ceremony. Guests of Honour were Mr. Justice M.M. Kumar, Former Chief Justice of Jammu and Kashmir High Court, Former Judge of the Punjab and Haryana High Court at Chandigarh and currently sitting Member of National Human Rights Commission (NHRC) India; Mr. Justice J.R. Midha, Former Judge Delhi High Court; Mr. Sanjay Kumar, IAS, Secretary, Ministry of Youth Affairs and Sports Government of India and Prof. Nuzhat Parveen Khan, Dean School of law, Bennett University, Times of India Group, Former Dean Faculty of Law, Jamia Millia Islamia.

These awards were conferred by the Chief Guest to those scientists, researchers, policymakers, practitioners and responders at different stages of Disaster Management and Pandemic cycle, who have excelled in their field by way of bringing in new practices, improving the existing ones, upgrading the tools and skills of practitioners and innovating the new areas, besides those who during emergencies have displayed exemplary valour and courage to reach, rescue and save lives, livestock and properties.

Dr S. Ananda Babu
President and Convener



CONTENTS

Preface

Disaster Management Initiatives and Convergence Society (DMICS), is a civil

4

26

Art of Living

We really appreciate Art of Living for its outstanding contribution towards Disaster Management/DRR and COVID-19....

8

Chief Guest Address

Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.

Shri KM Singh

Shri K.M. Singh is the first recipient of the prestigious 'Subhash Chandra Bose Aapda Prabandhan Purashkar'....

28

Guests of Honour Addresses

Address of Hon'ble Mr. Justice M.M Kumar, Former Chief Justice of Jammu and Kashmir High Court, Former ...

11

30

Uttarakhand State Disaster Management Authority

From Arunachal Pradesh in the northeast to Jammu and Kashmir

14

Acknowledgments

DMICS, the organizer of the WCDM DRR Awards, expresses its deep appreciation to its Knowledge and Technical....

Instashield India Private Limited

Ever since Covid -19 had gripped the world last two years

32

Assam State Disaster Management Authority

The Government of Assam has made an outstanding....

16

34

Karnataka State Disaster Management Authority

Karnataka State Natural Disaster Monitoring Centre

18

National Disaster Response Force

Today NDRF is a distinguished, unique Force across the country

Oil and Natural Gas Corporation

ONGC takes all requisite measures for continual

36

Jawaharlal Nehru University

The Special Centre for Disaster Research (SCDR) is a transdisciplinary centre in the Jawaharlal Nehru University

20

38

Shri Anurag Sharma

ONGC has taken various IT (Information Technology) related initiatives for....

22

Centers for Disease Control and Prevention

We applaud the US CDC's Country Office efforts India's to address India's public health...

Jamia Millia Islamia University

40

Oxfam India

Millions of people in India face discrimination on the basis of their gender, caste and economic....

24

42

United Nations International Children's Emergency Fund

Since 2005 when UNICEF stepped-up DRR and

ChildFund India

The true social conscience of any organization becomes more evident in a crisis. And, if the past 2 years are....

44

66

Indian National Centre For Ocean Information Services

India has a vast coastline of about 7500 km with....

46

Dr. Ranjana Nallamalli

This extraordinary situation of pandemic demanded superlative efforts....

Manav Rachna University

Manav Rachna Centre for Peace and Sustainability (MRCPS) is a center of excellence of Manav....

68

District Disaster Management Authority

Disaster Management has undergone a paradigm

48

70

United Way Delhi

United Way Delhi is one of the community service not-for the profit organisations that stepped on the....

50

Central Industrial Security Force

Role of CISF Disaster Management comes under the....

World Vision

World Vision India - a child focused organisation has integrated disaster

72

India Meteorological Department

India Meteorological Department (IMD) is one of the oldest

52

74

Ms. Neelam Makhijani

Ms. Neelam Makhijani is Currently, heading Management Sciences for Health as the Country Director for India...

54

O.P. Jindal Global University

O.P. Jindal Global University advocates for a stronger disaster risk

Geological Survey of India

Geological Survey of India (GSI) has made an incredible contribution working....

76

Caritas India

As a lead humanitarian and development organisation founded....

56

78

Mr. Mahesh Nangia

During the second wave of covid-19 in Nagpur, while people struggled to get....

58

Dr Sanjeev Kumar

DR Sanjeev Kumar Joshi is presently the Deputy Chief Executive Officer....

Bennett University

The Bennett University School of Law established the Centre for Sustainable Development...

80

Goa State Disaster Management Authority

By knowing the fact that, Goa being a small state has

60

82

Institute Of Chartered Financial Analysts Of India

62

Prof. Dr. Muzaffar Ahmed

DR Muzaffar Ahmad is a Public Health Medical expert with more....

Indian Council of Medical Research

83

General Research Category

84

Indian Institute of Technology Delhi

64

Young Researcher Category

86

Photo Gallery

88



Chief Guest

Shri G. Kishan Reddy,

**Hon'ble Union Minister of Tourism, Culture
and Development of North Eastern Region,
Government of India.**

Namaskar Everyone,

Respected Justice M.M. Kumar, Former Chief Justice of Jammu and Kashmir High Court and Sitting Member, National Human Rights Commission (NHRC), Justice J.R. Midha, Former Judge Delhi High Court, Shri Sanjay Kumar, IAS, Secretary, Ministry of Youth Affairs and Sports, Government of India, Prof. Nuzhat Parveen Khan, Dean School of law, Bennett University, Times of India Group, Former Dean Faculty of Law, Jamia Millia Islamia, Dr. Ananda Babu, President and convener DMICS-WCDM and all the esteemed guests.

It is my great pleasure and honour to be a part of this prestigious event, "World Congress on Disaster Management". We always salute the tireless efforts of the frontline volunteers who are working at the forefront in times of disasters to recognise the efforts of organisations and individuals towards Disaster Management, the Government of India has started the Subhash Chandra Bose Apada Prabhandan Puraskar. It is heartening to see that independent bodies and societies are also recognising the efforts of those involved in Disaster Management. Through the Disaster Risk Reduction Awards, we also have an opportunity to recognise the work of the institutions and organisations.

I would like to congratulate the Disaster Management Initiatives and Convergence Society (DMICS) for organising this award ceremony and inviting me. Friends, we are



**CDM DRR
AWARDS**

a country of 135 crore people, where every state has Different weather conditions, Many rivers, Mountains, Long coastlines and Varied topography. On top of this, we have once in a lifetime pandemics such as COVID-19. In such a situation in the last few years, we have been able to create sensitivity among the public and society regarding disaster management, Introduce scientific systems to avoid disasters and, Ensured that the protocols and practices are accessible to the common man.

In 2016, Prime Minister Shri Narendra Modi unveiled a blueprint for the first ever National Disaster Management Plan (NDMP). The Plan provides a framework to deal with all phases of the disaster management cycle such as Prevention, Mitigation, Response and Recovery. As a result of the National Disaster Management Plan (NDMP), India has joined the list of nations that follow the United Nations Sendai Framework for Disaster Risk Reduction 2015-2030.

The Prime Minister has always been sensitive to disasters and those affected by it. In 2014, Kashmir faced the worst ever flood in many decades and Prime Minister Narendra Modi decided to spend Diwali in Srinagar with the flood affected victims. In 2001, as Gujarat Chief Minister, he spent Diwali with the earthquake victims in Bhuj. The Prime Minister's leadership during COVID-19 is an example of 360 degree planning and execution in times of disaster. The vaccination plan from research to administration has now become an international case study. Today we are nearing 200 crore vaccines administered across the country. For the last 2 years free-of-cost food grains at the rate of 5 Kg per person per month to nearly 80 Crore beneficiaries covered under National Food Security Act, 2013 (NFSA). This shows how meticulous planning and attention to detail form an important part of disaster management.

Today, we have a relief centric approach where we are saving lives and livelihoods such as property. A lot of progress been achieved on the scientific program of saving lives and properties based on Early Warning, Proactive Prevention,

Mitigation and Pre-Preparation.

I would also like to highlight the contribution and efforts of the National Disaster Response Force and State Disaster Response Force who have responded on the spot and saved several lives and property. The Government of India also supports the states through the State Disaster Response Fund (SDRF) and the National Disaster Response Fund (NDRF). In 2021-2022, out of the total Rs. 30,000 crores allocated for NDRF and SDRF the Centre's share was Rs. 25,000 crores. This is approximately 85% of total allocation.

Friends, with the proper use of technology we have developed many apps to reduce the disaster created by extreme weather conditions.

For Example:

- ★ The weather app is available for all things like cyclone, heavy rain, heat and cold wave.
- ★ Meghdoot app is made for farmers for weather based agriculture management.
- ★ Damini App is made for lightning alert.

Today many events and programmes are being conducted to celebrate India's 75th year of Independence under Azadi Ka Amrit Mahotsav, I would request the National Disaster Management Authority and the World Congress on Disaster Management to also highlight the many unsung heroes who sacrificed their lives while saving others in various natural disasters.

Once again, I would like to thank the DMICS for bringing researchers, policy makers and practitioners from around the world on one platform to discuss various challenges present in disaster risk management. I wish you all the success in the years to come.

Thank You, Jai Hind.

The less we do to address climate change now, the more regulation we will have in the future.

- Bill Nye





**Address of Hon'ble
Mr. Justice M.M Kumar,
Former Chief Justice
of Jammu and Kashmir
High Court, Former
Judge of the Punjab
and Haryana High
Court at Chandigarh
and Sitting Member,
NHRC**

Hon'ble Shri G. Kishan Reddy, Minister of Tourism, Culture and Development of North Eastern Region, Hon'ble Shri Justice J. R. Midha, Former Judge Delhi High Court, Prof. Nuzhat Parveen Khan, Shri Sanjay Kumar, IAS and Dr. Ananda Babu, the architect of today's function, all brave hearts ladies & gentlemen.

It gives me immense pleasure to address this august gathering on the important subject of disaster management. This function concerning the award ceremony, itself beams testimony regarding the importance of this subject. Natural disasters have posed challenges threatening the lives of hundreds of people, necessitating the development of various techniques and methods to rescue the trapped and endangered lives.

I may share with you my own experience of floods in the city of Srinagar when I was Chief Justice there. Floods took over all buildings on the night in between 7/8 September, 2014. My own house, the Chief Justice Bunglow, was under eight feet water, the High Court building was under ten feet water, and the District Courts building was completely submerged and it was under 18 feet. District Courts were Situated near Lal Chawk. The immediate need was to rescue hundreds of people who were stranded in flood. I was rescued along with my wife and daughter at 2 o'clock in the morning and was taken to Hari Niwas at Government Guest House. The fear gripped all minds that after the water receded then many dead bodies would be found. The team of NDRF did excellent work along with the Army and other volunteer organizations. Luckily there were very new casualties, although property was extensively damaged as the whole market area in Lal Chawk and surrounding markets were in deep flood water.

With persuasion, I decided to set up a makeshift High court and the High Court started functioning from an unoccupied house allotted to a judge and the District Court were also opened in the University building for Northern Srinagar and in a building belonging to the Revenue Department in Southern Srinagar. In the high Court we decided a number of cases, Including insurance cases. The decision in insurance cases proved a boon for the public. We issued directions to the insurance companies that without waiting for the surveyor's report, 50% of the assured amount be disbursed to the assured immediately. It helped all the showroom owners and other shopkeepers to re-establish their business, and they returned to normal life within 30 40 days. I think disaster management involves all segments of society. The judiciary as I said could rehabilitate the flood affected in effective manner and help to advance the interests of the citizens in a meaningful manner.

I Conclude by expressing my sincere thanks to the organizers for granting me the opportunity to share my views with you.



**Address of Hon'ble
Mr. Justice J.R. Midha,
Former Judge Delhi
High Court**

Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India, Mr. Justice M.M. Kumar, Mr. Sanjay Kumar, IAS, Prof. Nuzhat Parveen Khan and Dr. S Ananda Babu, all the esteemed persons who have received the awards at all the guests.

It gives me immense pleasure to address this Award Ceremony on the important subject of Disaster Management and Disaster Risk reduction. Disaster Management is most important in the present time.

I am glad to see so many people who have contributed to the development in this area which is most relevant today. For the last two years, the whole world is struggling against Covid and the Disaster Management Authorities as well as the lot of people contributed to save the world from this pandemic. The awardees have done innovative work and have contributed to control this Covid pandemic. It is a great effort in today's time. We have interfered with nature and are facing its consequences. We should now make out effort to prevent interference with nature.

I am very glad to see the commendable work done by the awardees including various organisations and institutions. I congratulate the Organizers and the Jury who have made a great effort to collect all the data, select the awardees and then organize this function which is an inspiration for all of us. We all should work together to make the planet a more peaceful place.

Thank you,



**Address of Prof.
Nuzhat Parveen Khan,
Dean School of law,
Bennett University,
Times of India, Former
Dean Faculty of Law,
Jamia Millia Islamia**

Hon'ble Minister Shri G. Kishan Reddy, Chief Guest of Today's Event, Mr. Justice M.M Kumar, Mr. Justice J.R Midha, Shri Sanjay Kumar, IAS and Dr. Ananda Babu, President WCDM, All the esteemed guests.

A very warm good evening to all present. It is indeed an Honour and pleasure to be a part of this grand evening we have all gathered here for.

The recently concluded 5th World Congress on Disaster Management in Delhi, saw some very interesting discussions from delegates from various sectors spanning several institutes from across the globe. The World Congress on Disaster Management, being the only largest platform outside the United Nations has time and again emerged as the connoisseur on disaster management and related issues. It has undoubtedly brought researchers, policy makers and practitioners from around the world on the same platform in working on disaster risk mitigation and adaptation challenges.

The key theme of the 5th WCDM focused on the major aspects of Technology, Finance and Capacity for Building Resilience to Disasters in the context of COVID 19 Pandemic. The Congress also saw several discussions on India's vision for the Indian Ocean, summarized by the concept of SAGAR (Security and Growth for All in the Region) and the unending efforts of the Indian armed Forces in Disaster risk management, in addition to many such other interesting deliberations.

The WCDM-DRR Awards is yet another effort of the Institution in recognizing and bringing talents from all walks of life on the same platform. The State Governments of Karnataka, Goa, Delhi, and Uttarakhand have made outstanding contributions in the field of Disaster Management through their best co-ordination and monitoring plans. In addition to this, several Universities have strived for academic excellence towards strengthening capacity and innovative practices and emerging as research think tanks in the field of disaster management. Moreover, there have been constant efforts by individuals, NGOs, Institutions- both public and Private, towards disaster risk management strategies.

This day, therefore, marks a glorious recognition of all the earnest endeavors by active participants across the country.

I am glad to be a part of this wonderful day and on behalf of the entire Bennett University, congratulate everyone in taking a step closer to realizing our goals.

ACKNOWLEDGEMENTS

DMICS, the organizer of the WCDM DRR Awards, expresses its deep appreciation to its Knowledge and Technical Partners who have supported the Awards Ceremony with either earmarked or unearmarked contributions.

DMICS would like to express our deepest appreciation to Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India, for gracing the occasion as the Chief Guest and for presenting the WCDM DRR Awards.

It was an immense pleasure for us to have Guests of honour- Justice Mr. M.M. Kumar, Former Chief Justice of Jammu and Kashmir High Court, Former Judge of the Punjab and Haryana High Court at Chandigarh and currently sitting Member of National Human Rights Commission (NHRC) India; Justice Mr. J.R. Midha, Former Judge, Delhi High Court; Mr. Sanjay Kumar, IAS, Secretary, Ministry of Youth Affairs and Sports, Government of India and Prof. Nuzhat Parveen Khan, Dean, School of law, Bennett University, Times of India Group, Former Dean, Faculty of Law, Jamia Millia Islamia for presiding over this function with their enlightening words.

Through this Book, we highlighted the outstanding contributions of WCDM-DRR Awardees in the field of Disaster Risk Reduction. DMICS expresses its sincere gratitude to all the awardees for honouring the invitation with your gracious presence. I congratulate all the research awardees from various reputed institutions for making the Award ceremony a grand success.

Our special thanks to Dr Muzaffar Ahmad, Maj. Gen. Dr. Naresh Chander Badhani, Mr. Ray Kancherla, Dr. Chandrappa, Dr. A Kishan, Prof. D Gopal Rao, Mr. Bhaskar Rao Volam, Dr. B Ram, Prof. V Prakasam, Dr. A Gayathri Devi, Mr. Mohan Kasthala, Mr. Pavan Parlapalli, Mr. Manish Vishnoi their constant support and remarkable contribution in making the event a huge success. We would also like to convey our heartfelt appreciation and gratitude to the Research Scholars, Ms. Sonam Saroha, Ms. Shraddha Mahajan, Ms. Afiya Bano, Ms. Josephine Nongmaithem, Ms. Neeti Kushwaha, for their strong support.

We sincerely thank our Master of Ceremonies Mr. Aman and Dr. Oly Roy for their efforts towards anchoring. Our sincere gratitude to Dancer Rupali Sharma, Vocalist Rashmi Bhola and her team for their extraordinary Performance in the Award Ceremony.

DMICS would also like to thank Mr. Rakesh Muthyam, Mr. B Dharmender, Mr. Nickel Raju from S R Visual Magics for designing the WCDM DRR Book.

WORLD CONGRESS ON DISASTER MANAGEMENT (WCDM)

The varying degree of geological, hydrometeorological and biological disaster events across the Globe has been increasing at an alarming rate. In the last two years, the entire world has come to a standstill and subjected to several lockdowns due to the global pandemic. WCDM has commissioned a special jury to identify through a rigorous process of screening nominees who have been rendering yeomen service to humanity facing the rigour and ominous impact of disasters.

It is now time to acknowledge the importance of those engaged in the field of Disaster Management and give them due appreciation and recognition to motivate and encourage them further to improve their skills and bring more innovations in all the facets of DM cycle to bring succour to mankind at large.

The DMICS is committed in its values to providing opportunities for experts to help investigate and find innovative approaches and solutions to managing disasters, therefore, this award function will be hosted annually to continue honouring the eminent scientists, researchers, policymakers, practitioners and responders at different stages of Disaster Management, in both natural and human-induced disasters category for the coming years.





ASSAM STATE DISASTER MANAGEMENT AUTHORITY

The Government of Assam has made an outstanding contribution in the field of disaster management through several initiatives, as we know geographically Assam lies on a disaster hotspot impacted by both recurrent and unprecedented hazards of varied types which poses continuous threats to human life and property. In this multi-hazard scenario, vulnerabilities have amplified marginalisation leading to the thinking on defining and determining the nature of intervention to prevent, reduce and mitigate risks. In the immediate past, Assam has performed significantly well in achieving certain degree of success in improving disaster governance at the state and local level and now it is prepared to escalate its vision toward developing a result oriented comprehensive framework for achieving resilience.

Assam State Disaster Management Authority (ASDMA) has been striving towards making the state better prepared and resilient by envisioning and implementing various innovative interventions amongst which the following are highlighted.

INSTITUTIONAL STRENGTHENING THROUGH POLICY DEVELOPMENT AND CAPACITY ENHANCEMENT:

ASDMA established a full-fledged disaster management institution with dedicated man power at State, district, Revenue Circles and Departments for planning, coordination and implementation of disaster management activities. Assam State Disaster Management Authority has been working towards institutionalizing Disaster Risk Reduction in the departmental plans and programmes since 2010. Mainstreaming of DRR requires multi-stakeholder involvement and capacity building on all fronts. ASDMA has pioneered in strengthening departmental capacity by providing manpower support to mainstream DRR into departmental programmes and budget.

Training and Capacity Building: State wide structured training programme conducted for different stakeholders some of which include-

- ★ 1088 officials on in Public Health in emergencies
- ★ 1068 officials in Community Based Disaster preparedness
- ★ 2900 Teachers in School Safety
- ★ 741 Doctors in Mass Casualty Management
- ★ 1146 Paramedics in Mass Casualty Management
- ★ 376 Masons on Safe Construction Practices
- ★ 218 Engineers on retrofitting and earthquake resistant techniques.
- ★ Sensitization Programme on Disaster Management for People with disability and elderly people.

ASDMA has also strengthened its community level activities through enrolment of NGOs under the GO-NGO protocol, engagement of Aapda Mitra volunteers, Circle Quick Response Teams (CQRT), Pratirodhi Bandhu etc.



Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, presented the prestigious DRR Award to the Assam State Disaster Management Authority. Shri Rajeev Chandra Joshi, IAS, Principal Resident Commissioner from the Assam Bhawan is receiving the award on behalf of the Assam Government for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.



ASDMA has also strengthened its bilateral ties with the World Bank, UNICEF, and ADB for strengthening the DRM capacity of the State in terms of achieving Climate resilience, the establishment of end-to-end early warning systems, and resource and manpower augmentation through training & capacity building.

Embracing a comprehensive strategic framework on DRR encompassing short-, medium- & long-term action plan of all the stakeholder & departments towards DRR, preparedness, better response and recovery. ASDMA is venturing into technology enabled disaster management for better equipping the State in terms of swift decision support systems, disaster reporting, surveillance & response.



NATIONAL DISASTER RESPONSE FORCE

NDRF is a multi-skilled, high-tech Force capable of dealing with all types of natural and man-made disaster. They are Self-contained search & rescue teams including, Medics, Engineers, Technicians, dog squad and Rescuers and Fully Occupied in non-disaster times for imparting training of own personnel, Trg of State Disaster Response Forces (SDRF), Civil Defence, community training and preparedness, disaster/vulnerability mapping, mock drills and rehearsals # The trained canines enhance the locating capabilities and act as Force multipliers.

At present, National Disaster Response Force consist of 15 battalions from the BSF, CISF, CRPF, ITBP, SSB and Assam Rifles. Each battalion have 18 self-contained specialist search and rescue teams of 45 personnel each including engineers, technicians, electricians, dog squads and medical/paramedics. The total strength of each battalion is 1,149. All the 15 battalions have been equipped and trained to respond natural as well as man-made disasters. Battalions are also trained and equipped for response during chemical, biological, radiological and nuclear (CBRN) emergencies.

NDRF conducts Mock Exercise with the following Stakeholders:

- ★ NDMA
- ★ SDMA's
- ★ Indian Railways
- ★ Delhi Metro
- ★ Various MAH Units/PSUs
- ★ Schools and Colleges
- ★ Airport Authority of India

In a very short span of time, NDRF has rescued over 1.44 lakh precious human lives and also evacuated more than 7 lakh stranded persons from disaster situations within the country and abroad. The swift and effective response of NDRF during Japan Triple Disaster-2011 and Nepal Earthquake 2015 was acclaimed globally. The force is fulfilling these responsibilities with its rigorous training regime and diligent application of skills on the ground.

A team of National Disaster Response Force (NDRF) from Pune arrived in Palghar in June dawn. The team comprises 20 jawans, 2 officers, with four 30 HP Over Board Motor (OBM) and four Inflatable Rubber Boat (IRB) with a dog squad with a female Labrador named Lovely, said Inspector Arakhita Jena, NDRF, who is leading the operations.

Besides the professionalism shown during rescue operations in floods and cyclones and collapsed structure search and rescue (CSSR) operations, NDRF has also acquired considerable expertise in facing CBRN (Chemical, Biological, Radiological & Nuclear) challenges. The creditable task of NDRF in retrieving Cobalt-60 radiological material at Mayapuri, Delhi, during April



National Disaster Response Force (NDRF) was felicitated by the WCDM- DRR Award, 2021. The award presented by Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region. Sh. Manoj Kumar Yadav, DIG is receiving the award on behalf of National Disaster Response Force (NDRF) for their outstanding achievement in the field of Disaster Risk Reduction.

and May 2010 has been an acid test of NDRF's CBRN capability.

Today NDRF is a distinguished, unique Force across the country functioning under the Ministry of Home Affairs, Government of India, within the overall command, control and leadership of the Director General, NDRF.



NDRF has always led from the front, displayed high level of dedication & commitment, fulfilling our motto आपदा सेवा सदैव सचवत्त which implies Sustained Disaster Response Service under all circumstances. The sincerity, professionalism and devotion displayed by the Rescuers during disasters have popularized NDRF so much among citizens that the NDRF Rescuers have been named “Angels in Disaster” by our fellow citizens.



JAWAHARLAL NEHRU UNIVERSITY

The Special Centre for Disaster Research (SCDR) is a transdisciplinary centre in the Jawaharlal Nehru University (JNU). JNU is a public central university in New Delhi, the capital of India. . It is one of the top universities in the country as per Indian rankings 2022, ranked second in university category and ranked 8 in overall category according to the National Institutional Ranking Framework (NIRF). It is known for leading faculties and research emphasis on liberal arts and applied sciences. Within the university, the SCDR was established as a special Centre in 2018 with the diversified interest including Governance and Legal framework - Instruments for Disasters, Relief and Response; Human Health and Well-being - Public Health, Epidemiology and Emergency Preparedness; Social Science - Geography, Anthropology and Economics, Risk Resilient Communities; and Technology Systems - geospatial, computational intelligence & database systems. Therefore, the curriculum is based on these four rubrics of transdisciplinary social sciences-based hazard/disaster studies. With such a high level of diverse interests, the students earn MA and PhD degrees in Disaster studies. Trans disciplinaryity suggests that the nature of education research would not be confined to strict parent disciplines of social sciences or natural sciences but transcend their boundaries and limitations to absorb both the scientific findings which provoke decision making and social sciences sensitivities to decipher and direct these findings to communities and institutions of decision making.

The Center is outcome of the Disaster Research Program (DRP) with a support of the Ministry of Home Affairs through National Institute of Disaster Management (NIDM) in the year 2015 for the much-wanted research on disasters. As an academic institution, SCDR has been efficiently and effectively addressing the issues concerning Disaster Risk Reduction (DRR) Based on such experiences and interests, the Centre has entered into agreements and MOUs with several institutions to take forward research associated with DRR.

Most notably, since the beginning of Covid-19, the SCDR has organized webinars on various issues concerning Covid-19 to issues related to disasters in general. We have invited scholars, practitioners, government officials, lawyers, regulators, disaster management professionals, doctors, media personalities etc. from different subject areas and fields of concern associated with disasters During second wave of Covid-19 in 2021, SCDR has engaged with civil society organizations to develop modules for providing training of basic medical procedures for volunteers to handle Covid-19 as per the directions issued by the concerned government.



Jawaharlal Nehru University was felicitated by the WCDM- DRR Award, 2021. The Award was presented by Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region. Prof. Pawan Kumar Joshi is receiving the award on behalf of Special Centre for Disaster Research (SCDR), JNU for their outstanding achievement in the field of Disaster Risk Reduction.



SCDR has been actively involved in World Congress on Disaster Management (WCDM) since its inception at the behest of Disaster Management Initiatives and Convergence Society (DMICS). In the fifth WCDM, faculties as well as students of SCDR have been actively involved in the Pre-Congress Seminars, session in the WCDM. We have been academically engaged in developing discourse and understanding associated with DRR.

SCDR through its academic and research programs and interest at large is focusing on how to make research in field of DRR more relevant and vital with respect to policy formulations and how to effectively take forward the work to society to handle disasters more efficiently and thereby contribute to disaster risk reduction.



U.S. CENTERS FOR DISEASE CONTROL & PREVENTION

We applaud the US CDC's Country Office-efforts India's to address India's public health priorities in four core areas: disease surveillance, laboratory strengthening, workforce development, and emergency management, in collaboration with the Government of India (GoI) and Ministry of Health and Family Welfare (MoHFW).

In support of the Government of India to augment and accelerate COVID-19 response CDC supported following emergency management activities:

- ★ CDC conducted online trainings for 1200 medical officers, nursing staff, and paramedical staff on "Preparedness for Biological Disasters with special reference to COVID-19" across the 12 national battalion units of India's National Disaster Response Force and Regional Response Centres.
- ★ In partnership with the National Institute of Health and Family Welfare (NIHFW), and in close collaboration with National Centers for Disease Control (NCDC) and National Disaster Management Authority (NDMA), CDC has conducted nine Rapid Response Team (RRT) trainings and trained a total of 209 master trainers from 23 States and Union Territories

CDC in partnership with the National Centre for Disease Control (NCDC), Ministry of Health and Family Welfare, Government of India and WHO India Country Office produced and published a course for Rapid Response Teams (RRTs) working at the national, sub-national, district and sub-district levels to respond to the COVID-19 outbreak in India. This 120-minute condensed training package is consisting of five learning modules that are adapted from a standard RRT training programmes and more specific to the COVID-19 pandemic. The learning package emphasizes essential elements such as capacity building, case finding and contact tracing, data management, management of laboratory aspects, infection prevention and control (IPC), risk communication and community engagement (RCCE). This online course is available on the platform of OpenWHO. The OpenWHO is an interactive, web-based, knowledge-transfer platform offering online courses to improve the response to health emergencies.

CDC collaborated with National Centre for Disease Control (NCDC), Ministry of Health and Family Welfare (MoHFW), Government of India; National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Government of India and Directorate of Medical Health and Family Welfare, Government of Uttarakhand organized a "Foundational Course on Public Health Emergency and Disaster Management" from June 01-04, 2022, at Dehradun, Uttarakhand. This training course provides a foundation for the Public Health Emergency and Disaster Management principles, concepts, processes, tools, practices and guidance to develop capacity at State and District levels. About 35 participants and 10 mentors from various sectors including Personnel from Integrated Disease Surveillance Programme (IDSP) units of seven districts of Garhwal Mandal, Epidemiologist, Microbiologist,



Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region felicitated the prestigious DRR Award to U.S. Centers for Disease Control and Prevention (CDC), India. Dr. Runa Hatti Gokhale is receiving the award on behalf of CDC India by highlighting the outstanding contribution of CDC in Disaster Risk Reduction.



For over 20 years, the U.S. Centers for Disease Control and Prevention (CDC) has experienced a highly successful technical collaboration with the Government of India (GoI), Ministry of Health and Family Welfare (MoHFW) to address India's public health priorities. As new health threats emerge (e.g., the novel coronavirus COVID-19) CDC and national partners are well-placed to leverage the past successful initiatives and rapidly respond to new public health challenges.

Uttarakhand State Disaster Management Authority (USDMA), Panchayati Raj Institute, Women Empowerment and Child Development Department, Indian Red Cross Society and Medical Colleges participated and were benefited from this course. It was initially piloted in Tamil Nadu (15-16 September 2021) where 40 participants from various sectors were trained.



OXFAM INDIA
ऑक्सफैम इंडिया

Millions of people in India face discrimination on the basis of their gender, caste and economic backgrounds. These interwoven and complex inequalities further divide our societies and make the voices of millions go unheard. Oxfam India works towards creating a society where people are not forced to fight for their right to life and security, but have access to services and facilities to ensure their right to education, health, shelter, food and water.

In the last thirteen years, Oxfam India has delivered more than **45 highly effective humanitarian responses** across the country and supported affected communities of many times greater that size indirectly with DRR interventions.

COVID-19 in India and Oxfam India in Action

As COVID-19 started in India, Oxfam India responded immediately by initiating **Project Protect Secure Preserve (PSP)- 1.0** through which it reached out with food, PPE and Safety Kits, unconditional cash support, and livelihood trainings and inputs support for most vulnerable and excluded communities across 16 states – Delhi, UP, Bihar, Odisha, Tamil Nadu, Assam, Karnataka, Kerala, West Bengal, Gujarat, Jharkhand, Chhattisgarh, Telangana and Maharashtra.

Project Sanjeevani: PSP-2.0 has become the flagship programme by Oxfam India to provide Humanitarian Response, Recovery and Rehabilitation supports to the worst affected and marginalised families during the second wave of COVID 19.

- 1 Emergency Food Security and Vulnerability Livelihoods (EFSVL)** for the worst affected and most vulnerable households to help them gaining back the capacity to initiate their journey towards resilience.
- 2 Ensuring better Water- Sanitation & Health (WASH)** facilities for the disaster affected communities.
- 3 Focus on 'Gender in emergencies'.** Oxfam's Minimum Standards for Gender in Emergencies are used as a tool to ensure a consistent approach for promoting gender equality in humanitarian preparedness and response programming
- 4 Linking Disaster Response with Disaster Risk Reduction (DRR) initiatives.** Under the backdrop of the increasing frequency and intensity of natural disasters in India, this strategy of connecting disaster response and recovery phases with DRR is the most effective methodology for achieving the goal of saving lives and livelihoods of people now and in the future



Oxfam India was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Mr. Pankaj Anand is receiving the award on behalf of Oxfam India for their outstanding achievement in the field of Disaster Risk Reduction.



Oxfam India has achieved a high-level of expertise and experience in the field of humanitarian response and rehabilitation. We believe that responding to the immediate needs does not alone ensure survival of affected communities, but equipping them with knowledge and skills to get organized reduces the impact of future disasters.

Key Activities at a glance (2020-21)

- ★ 432250 people supported with Dry Ration Kits and Cooked Meal Packets
- ★ 67025 people supported with Safety Kits
- ★ 8326 people supported with PPE Kits
- ★ 9481 households supported through Unconditional Cash Transfer (UCT)
- ★ Supported 81 Self Help Groups with training on skill development and input assistance to initiate small-scale income generation activities.



ART OF LIVING

We really appreciate Art of Living for its outstanding contribution towards Disaster Management/DRR and COVID-19 Relief and Rehabilitation, IAHV is AOL's arm for carrying out disaster relief work. The Art of Living was able to reach in 27 states to more than 250 districts across India to provide ration relief, medical equipment, setup Covid care centers and provide other necessary relief during the pandemic. During the two years of Covid, the Art of Living provided for more than 80 million meals and ration kits; more than 3000 Oxygen concentrators, 2 million face masks and 40,000 protective gear kits to the medical staff. The Art of Living also distributed more than 70,000 immunity kits to our security forces and other front line works across India. The International Association for Human Values (IAHV), a partner organization of the Art of Living.

About IAHV

International Association for Human Values (IAHV) was founded to foster a deeper understanding of the values that unite us as a global community. Spread over 156 countries, IAHV focuses on empowering people and communities with inclusive and sustainable development interventions, fostering universal human values and resilience.

- ★ IAHV's initiatives span 11 out of 17 UN Sustainable Development Goals.
- ★ IAHV currently partners with over 60 national and international organizations to design and implement social and development initiatives.

IAHV's Disaster Relief Work

Every disaster, whether natural or man-made poses unique challenges. Through its network of volunteers, International Association for Human Values (IAHV) has been able to respond swiftly to natural and human-made disasters. As a result, today IAHV is established as a vital provider of both short-term and long-term disaster relief and rehabilitation programs in India.

The novel human coronavirus disease COVID-19 was one of the greatest challenges faced worldwide. We faced the worst human and economic crisis of our lifetime, threatening lives and livelihoods. This time, it was not just the poor and vulnerable populations that are impacted but it is everyone across the board.

IAHV provided essential medical supplies to 450 locations throughout 225 districts in 27 states and union territories in India during the second wave of the epidemic that lasted from April 2021 to July 2021:



Art of Living was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Lt. Gen. Ashwani Kumar, PVSM, AVSM, VSM (retd), is receiving the award on behalf of Art of Living for their outstanding achievement in the field of Disaster Risk Reduction.



International Association for Human Values (IAHV) was founded to foster a deeper understanding of the values that unite us as a global community. Spread over 156 countries, IAHV focuses on empowering people and communities with inclusive and sustainable development interventions, fostering universal human values and resilience.

- ★ 3200 Oxygen Concentrators and 171 ventilators were distributed to meet the demand of supplemental oxygen.
- ★ 2 million face masks, 550 immunity kits and 31,000 protective gears were distributed for protection against the virus.

Throughout the pandemic, IAHV has worked on the front lines and has provided relief to thousands of individuals across India.

Shri K.M. Singh is the first recipient of the prestigious 'Subhash Chandra Bose Aapda Prabandhan Purashkar' in individual category in 2020. He was given this award for his visionary initiative and painstaking efforts to raise, train and equip the National Disaster Response Force (NDRF) from scratch to its present shape as a specialist force to deal with disasters, both natural and man-made. In his professional career spanning 46 years (1968-2014), he served as an officer of Indian Police Service (IPS) for 37 years which included nearly three decades in the Intelligence Bureau, a tenure in the Indian High Commission London as Minister (Coordination) and finally as Director General, CISF. Soon after his retirement in 2005, he was appointed a founder member of the National Disaster Management Authority (NDMA) with the status of Minister of State in the Union Govt. In the NDMA, where, he served two tenures (2005-14), he was assigned the responsibility of planning effective disaster response framework in the country, including raising the NDRF.

On account of his whole-hearted efforts and commitment, he was able to raise, train and equip 8 Battalions of NDRF in different parts of the country notwithstanding innumerable teething problems in the initial stages. In a short span of time NDRF was raised as a multi-disciplinary, multi-skilled force trained and equipped as per international standards capable of handling natural and man-made disasters with highest degree of professionalism. NDRF soon became a highly sought-after force by the states and district administration and earned a niche for itself in the community. Under the superintendence and directions of Shri Singh, NDRF delivered commendable response in its nascent phase itself during devastating Kosi floods in 2008 wherein over 1 lakh marooned people were rescued by NDRF with utmost promptitude averting colossal loss of human lives. This initiative earned accolades from the govt and the strength of this young force was raised from 8 to 12 Battalions in 2009. Besides many achievements in search, rescue and relief missions during disasters within the country, NDRF earned a name for its professionalism internationally as well. The first international response mission of NDRF was during the Fukushima nuclear disaster in 2011. The NDRF, which is trained and equipped to handle nuclear emergencies also, was the only international team which continued with its search and rescue operations amidst radiation leakage while all other international teams left the country. Exemplary dedication and compassion of NDRF was widely appreciated by the Government, people and media in Japan. NDRF's promptitude in deployment within 'Golden Hour' was manifested during Kathmandu earthquake (2015) when its teams reached Kathmandu within 5 hours of the occurrence of earthquake. In different disaster response operations in the initial 10 years NDRF saved nearly 1.20 lakhs human lives and evacuated about 6 lakh disaster victims which is an ample testimony of high degree of professionalism of this young force. Envisioning a 3-tier disaster response mechanism, Shri Singh motivated States to raise their own



Shri K.M Singh, IPS (retd.) was felicitated by the WCDM- DRR Individual Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for his outstanding achievement in the field of Disaster Risk Reduction.

“ Shri Singh has also taken pioneering initiative in the field of management of animals in emergencies by organising capacity building programmes of NDRF, SDRF, veterinarians and para- vets etc Protection of animals during disasters is directly related to livelihood issue of rural population and this initiative will have a significant and positive impact on livelihood and sustainability of rural population in areas vulnerable to perennial floods and cyclones.

State Disaster Response Forces. He also utilized the services of NDRF for community capacity building as force multiplier at the grass roots level. NDRF trained about 60 lakhs people as first responders in the initial 10 years. He also prepared a comprehensive report on 'Revamping of Civil Defence' assigning them major role in all 3 phases of disaster management (preparedness, response and recovery). This report was accepted by the Government and led to amendments of the Civil Defence Act by Parliament.



UTTARAKHAND STATE DISASTER MANAGEMENT

From Arunachal Pradesh in the northeast to Jammu and Kashmir in the northwest, Himalaya has always aroused inquisitiveness, mesmerized and attracted travellers, explorers, peace seekers and nature lovers. Lofty snow-clad peaks have challenged mountaineers, trekkers and explorers while lush green picturesque valleys and meadows with fast flowing streams and calm waters of crystal-clear lakes have attracted travellers and tourists.

Uttarakhand is situated on the southern slope of the Himalayas. The climate and vegetation of different cities of this state vary with the height of its location. Glaciers are located at the highest elevations. However, there are dense forests at the lower elevations. The Western Himalayas between 3000–3500 meters are covered with Alpine Shrub and Meadows. Two of India's most important rivers, the Ganges and the Yamuna flow from the glaciers of Uttarakhand. There are also several other lakes and streams in the region. Uttarakhand is divided into two parts, the western half known as Garhwal and the eastern region as Kumaon. Geo – tectonic set up of the region together with its evolutionary history, geomorphology and meteorological characteristics make Uttarakhand prone to a number of natural hazards. The State is prone to severe earthquakes, landslides. In addition, the state is also affected by disaster like floods, epidemics, fire, hailstorm, lightening, road accidents, etc. The state of Uttarakhand is highly vulnerable to multi-hazards viz. earthquake, landslides, flash-floods, avalanches, Dam Burst, drought, but particularly Earthquake, as the state falls in the highest seismic risk zones of the country i.e., Zone V and IV.

The main vision of Uttarakhand State is to initiate coordinated efforts to have an effective disaster management strategy for the State, which will minimize the impact of future disasters. The ultimate vision is to build safer communities through improved disaster risk management. The main initiatives of Uttarakhand State for Disaster Risk Reduction are as follows: –

- ★ Disaster Management Authorities formed at state (SDMA) and district level (DDMAs)
- ★ Introduced disaster management in VI to X standard in the school curriculum
- ★ Emergency Operation Centers operational on 24X7 basis at state and district level
- ★ Disaster Risk Assessment (DRA) of Uttarakhand State to assess the potential threat of earthquake, landslides, flood, flash flood and industrial hazards
- ★ Development of integrated geo-spatial platform, database and application (Decision Support System) for disaster risk management
- ★ Rapid visual screening (RVS) / simplified vulnerability assessment (SVA) / detailed vulnerability assessment (DVA) and seismic retrofitting of lifeline infrastructures.



Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region presented the prestigious DRR Award to the Uttarakhand State Disaster Management Authority (USDMA). Dr. Ranjit Kumar Sinha, IAS is receiving this prestigious DRR Award on behalf of the Uttarakhand State Disaster Management Authority for their outstanding achievement in the field of Disaster Risk Reduction.



The main vision behind the efforts of Uttarakhand State Disaster Management Authority (USDMA) is to initiate coordinated efforts to have an effective disaster management strategy for the State, which will minimize the impact of future disasters with the ultimate vision is to build safer communities through improved disaster risk management.

- ★ Slope stabilization study
- ★ River morphology study
- ★ Strengthening of meteorological network
- ★ Establishment of earthquake early warning system (EWS)
- ★ Building regulation for resilience (BBR)
- ★ Training of community volunteers in search, rescue and first aid
- ★ Adoption of Incident Response System (IRS) and training of officials
- ★ Conduct of mock exercises
- ★ Preparation and dissemination of print and audio-visual IEC material.

Ever since Covid -19 had gripped the world last two years with SARS_COV2 Mutations with about more than 5 variants like Alpha, Gamma, Beta, Delta, Omicron etc and especially the first and second wave have been disastrous with variants like land have changed the way of lives and since then we are living in Challenging times. Unfortunately, Coronavirus is here to stay with more variants with a peak and low situation. Over 90% of 100 immunologists, Virologists & researchers believe that Coronavirus will become endemic and continue to circulate in pockets of the global Population. and the world have to live with Covid fever.

To combat Vaccines are necessary but not sufficient and with masks, social distancing, sanitizers etc and given the current outbreak, consumers are largely expected to be driven to purchase virus battling, prevention and containment technology as an alternative for prevention and as the famous quote says Necessity is mother of invention and one such breakthrough technology had been developed by an Rural Scientist Shri Mandaji Narsimha Chary and post the pandemic of Covid -19 developed an innovative break through electron based technology.

With this solution to the problem of Pandemic disastrous situation a Brand called Instashield had been introduced -a first of its kind CSIR- CCMB approved **"Virus Attenuation device that can disable all kind of Virus including the SARS-CoV2"** with up to 99.9% efficacy in enclosed spaces. Instashield is a plug and play device that delivers the necessary signal to electron emitters that produce hypercharge high velocity electrons, which interact with the negative seeking s-protein of the corona family of viruses. Its hyper charged cannons fire trillions (1-100 trillion electrons of negatively charged ions, creating an electron cloud across closed spaces up to 5000 sf. feet. Tests at CCMB found that Instashield virus attenuation technology reduced the viral load by 17% at 18 minutes and 36% after 54 minutes and likewise in 120 minutes it disinfects accordingly. Apart from the these benefits it has an internal mechanism that generates and emits negative ions that offers other health benefits like depressions symptoms are reduced, lessening of effects of anxiety, strengthening the body 's immunological system, modifying one's sleeping and emotional states, intensifying one's mental agility and boosting the metabolism.

This innovative preventive technology will be enabled to combat for the pandemic Covid challenge so has to save human lives for better health especially post pandemic the bigger challenge the world is facing the mental health and with a device kike Insatshield it's a blessing to the mankind and as India's Vision of Swasth Bharat, Atmanirbhar Bharat, make in India, Local to Global, truly we can contribute to the world in these turbulent times.



Instashield India Private Limited was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region. Mr. Hitesh Patel and Mr. C S Jadha is receiving the Award on behalf of Instashield India Private Limited for their outstanding achievement in the field of Disaster Risk Reduction.



Instashield is patented technology backed by science and has received support from TSIC, ARCI, and is an accredited lab tested and certified by CSIR-CCMB, and other labs like Vimta Labs, EMTAC with CE for exports CDSCO, ISO 13485, thus ensuring 100 % safe for humans and environment.



KARNATAKA STATE DISASTER MANAGEMENT AUTHORITY

Karnataka State Natural Disaster Monitoring Centre (KSNDMC) has played a significant role in Natural Disaster monitoring for more than three decades and has been serving as a common platform to the various stakeholders in the field of Natural Disasters and its management by providing timely proactive & innovative Science and Technology inputs. Karnataka has been subjected to various Natural Disasters, both Hydro-Meteorological and Geological disasters, every year. The management of such Natural Hazards requires a strong Network of Sensors, Forecasting, Monitoring, Early Warning, Early Recognition and providing Advisories to the response players-Governance & Community towards Preparedness and Mitigation measures.

Natural Disaster Monitoring Network of Karnataka:

Leveraging Geospatial Technology in Disaster Management Initiatives:

For the first time under the Disaster Management - Emergency Response Preparedness (ERP) activities conceptualized, developed, trained district officials, and implemented the following projects in Karnataka

GIS-Enabled Weather Dashboards for Karnataka: KSNDMC has developed GIS-based weather dashboards which are interactive data visualization platforms and these convey the weather information by presenting location-based analytics using the data captured at an interval of 15 minutes from the weather and hydrological sensors installed across the state.

- ★ **Disaster Early Warning System (DEWS)** Provides early warning to the vulnerable community and help mitigate the impact of any disaster. To enable this a centralized early warning system through public address system has been designed and deployed to 104 vulnerable Gram panchayaths in Belagavi, Bagalkote & Raichur districts in Karnataka. This Integrated Public Alert and Warning System will provide rapid, reliable and effective communication to the public in case of major emergencies like floods, lightning, heavy water releases, heavy rainfall alerts, heatwave, hailstorms etc.
- ★ **Community Help-Desk For Information Dissemination – Varuna Mitra**
- ★ To disseminate customized GP level weather information, forecast, and advisories, a **24X7 interactive Help Desk 'Varuna Mitra'** is operational. In 2021, the State experienced excess rains in both Southwest and Northeast monsoon seasons over the State, resulting in severe floods in many parts of the State, due to these excessive and continuous rains, Varuna Mitra received 18.69 lakh calls. Further, the number of calls went up to more than 10 thousand in a single day many times during the season.



Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region presented this award to the Karnataka State Disaster Management Authority (KSDMA). Dr. Manoj Rajan, IFS is receiving the Award on behalf of the Karnataka Government for their outstanding achievement in the field of Disaster Risk Reduction.



KSNDMC has taken up pioneering initiatives towards monitoring natural disasters and risk reduction by establishing a network of GPRS enabled and solar-powered Telemetric Rain Gauges (TRGs) at all the 6,500 Gramapanchayaths (25 sq. km each) and 962 Telemetric Weather Stations (TWS) at all the 926 Hoblis (250 sq. km each) in the State.

- ★ **Bengaluru Megha Sandesha (BMS)-**
KSNDMC has developed a mobile Application to directly disseminate the rainfall and flood forecast location-specific dynamic weather information to the public.
- ★ **Drought Monitoring Cell:** The Drought Monitoring Cell at KSNDMC scientifically reviews all the drought indicators and provides technical input to the government weekly.



OIL AND NATURAL GAS CORPORATION LIMITED

ONGC

takes all requisite measures for continual improvement in health and safety through adoption of best procedures

and technologies. By Carrying out Exploration & Production operations in one of the most hazard and risk prone industry. ONGC ensures that disaster and emergency response mechanism is in place for all Installations, Rigs, Units and Operations. Following measures are being taken to enhance the safety in operations and make the systems disaster risk resilient:

- ★ To actively deal with the disasters and emergency, measures are implemented at inception stage itself, with risk control through design & Engineering.
- ★ HAZOP and QRA mandatory for all new installations and modifications. Periodic HAZOP & QRA are carried out for operating installations.
- ★ Studies like Emergency Escape and Rescue Analysis, SIL (Safety Integrity Level), gas dispersion etc. are integral part of installation design. Platforms are designed to international standards like API, SOLAS, NFPA etc. for risk mitigation through Engineering control.
- ★ Safety Critical Equipment (SCE) identified and maintained to ensure engineering controls against Major Accident Hazards (MAHs).
- ★ SCADA (Supervisory Control and Data Acquisition) system is available for real time monitoring of operations
- ★ SAP system leveraged for data updating and analysis.
- ★ Integrated Permit to Work System integrated into SAP for hot, cold and confined space entry jobs following all procedures.
- ★ Well-structured Change Management System is present
- ★ Every Rig/ Installation/Barges have site specific SOPs pertaining to the operations handled by them. SOPs include operation, maintenance, safe start up, shutdown, emergency handling etc.
- ★ Three-tiered Emergency Response & Preparedness Plans are practiced in ONGC depending upon the level of incident/disaster.
- ★ Dedicated Crisis Management Teams, equipped with all the required equipment, are stationed region wise to tackle well control disasters.
- ★ To combat oil spills in offshore areas, ONGC has developed its own Tier-I (up to 700 tons of oil spill) Oil spill response facility on-board Multi Support Vessels (MSVs). For Tier-II (up to 10,000 tons oil spill) Oil spill response ONGC uses its own capabilities as well as mutual aid partners and Indian Coast Guard. To address larger oil spill of Tier-III level (more than 10,000 tons oil spill), ONGC has an Agreement with M/s Oil Spill Response Limited (OSRL), UK which is an expert agency in combating major oil spills.

The analysis is being done work centre wise, operation wise, category wise and cause wise. On the basis of such analysis, periodic reports are being published for awareness of all employees as well as secondary workforce.



Oil and Natural Gas Corporation Limited (ONGC) was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Shri Anurag Sharma and the team is receiving the award on behalf of ONGC for their outstanding achievement in the field of Disaster Risk Reduction.

Operations were continued at all ONGC Assets, employing various control and preventive measures against COVID-19. Necessary trainings were continued during the pandemic and wherever possible, physical training with COVID precautions were restarted. Online webinars and workshops were utilised to reach the personnel in times of pandemic and the same has been adopted in regular practice also which has significantly improved the knowledge and with this there has been an immense improvement in overall accident rates in ONGC.

“ONGC has a very robust system of accident/ incident management. All the incidents and near miss are reported in SAP system, enquired for root cause and timely corrective action is taken. For awareness of all, Safety Alerts consisting of root causes and recommendations, to avoid recurrence of such incidents, are issued on regular basis and widely circulated to all concerned. They carried out data analytics related to all incidents and near misses as well as other activities like Audits/ Inspections, HSE Index, SCE, mock drills, etc.



ONGC has taken various IT (Information Technology) related initiatives for information dissemination to ensure coverage and reach of HSE related information amongst all its employees and secondary workforce. To ease the access and availability of information, a dedicated HSE website and HSE App have been developed making available HSE related policies, rules, regulations, standards, manuals, safety alerts/ advisories, etc., directly on mobiles. ONGC has hired M/s DNV GL Energy India Pvt. Ltd. to carry out Safety Management Assessment for ONGC. The objective of this project is to identify the current gaps in the safety management system, assessment of the overall safety culture of the organization and take actions to mitigate these gaps and improve the safety culture. This is one of the most ambitious initiatives in safety as it is the first time that such a project is being implemented at pan ONGC level. ONGC has implemented SAP based E-PTW (Electronic Permit to Work) which removes requirement of physical approvals, enables monitoring from anywhere, maintains system-based checks & balances, eliminates possibility of bypass of procedures and creates trail of documentation for data analysis. This online tool is serving as an effective measure to ensure that procedures are followed and implemented. HSE Benchmarking of all ONGC installations has been done on various HSE parameters in SAP by designing a HSE Index. HSE Index is an important measure of monitoring safety performance of rigs/ installations.

Above initiatives have been taken in Safety under Director (Onshore)-I/c HSE for improvement in the overall safety in operations and making the structures and operations disaster resilient. Operations were continued at all ONGC Assets, employing various control and preventive measures against COVID-19. Necessary trainings were continued during the pandemic and wherever possible, physical training with COVID precautions were restarted. Under his leadership, there has been an immense improvement in reduction of overall accident rates in ONGC.

Anurag Sharma has regularly monitored the performance of all work centers through monthly Asset review Meets as well as HSE Meets including Key Executives and Senior officers, where not only the issue is discussed but new ideas are brought out for implementation. Issue based committees/ syndicates have been formed which work on a particular issue and way forward for system improvements. Director (Onshore) has emphasised on the improving the safety culture of the organization for which an independent expert agency has also been hired.

This was the first time when an organization wide Safety Perception Survey was organized to understand the safety from the point of view of all personnel, both ONGC and contractual.

Under his leadership, there has been drastic decrease in overall accident rates in ONGC. With the measures being taken under his leadership, there



Shri Anurag Sharma was felicitated by the WCDM- DRR Individual Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for his outstanding achievement in the field of Disaster Risk Reduction.

has been a visible improvement in the safety culture of the organization. There has been improvement on various safety issues through focussed programs, such as for finger injuries in drilling and workover rigs were decreased to zero in quarter-3 of 2021-22.



Shri Anurag Sharma, ONGC's onshore Director, has made a significant contribution to disaster management. Many steps are being taken under his leadership to improve the safety and emergency response system. He held regular mock drills to assess the effectiveness of preparedness and response to various emergency situations. Approximately 17,154 drills were held in 2021-22. He has made significant contributions to the operation of the institution, and he ensures the safety of those who work for ONGC.



JAMIA MILLIA ISLAMIA UNIVERSITY

Jamia Millia Islamia was established in 1920 at Aligarh and shifted to New Delhi in 1925 and to the current location in Okhla in 1935. Jamia was accorded the status of Deemed to be University in 1962 and was declared a Central University by an Act of parliament in 1988. It continues to serve the Nation through quality teaching and research and committed to offering cutting edge learning experience, internationally benchmarked education, intellectual freedom and critical research opportunities in frontier areas of contemporary concern. Jamia got NAAC Accreditation with Grade 'A' in 2015 and further enhanced to A++ in 2022. The MHRD's National Institutional Ranking Framework (NIRF) placed it at the 19th position in the "Overall Ranking" for 2018 and sixth rank among the 'Top 10 Universities' of the country in 2021. Now it figures among top three universities of the nation as per NIRF Rankings 2022.

The teaching of Disaster Management started in 2015 by the Department of Geography as a Self-Finance Evening Diploma Program. Encouraged by the response of the students, the program was upgraded as PG Diploma in Disaster Management (Evening and Self-financed) 2018. Realizing the importance of the teaching and learning of the Disaster management, the university established Center for Disaster management in 2018 and in the very same year introduced a full time self-financed M.Sc. in Disaster Management and Climate Sustainability Studies program. The course consists of four semesters. The first two semesters emphasize on the development of understanding of Geophysical process and climate change. In the third semester, issues and policies of disaster management are taken care of. The strength of the course is the intensive one semester internship with reputed institution/organization like National Remote Sensing Center Delhi and Kolkata, National Center for Seismology, IMD, DRDO, NIDM etc. A large number of students are placed with organizations like, SAAHAS, Paragya, DMI, Sphere India, United way and WCDM etc. Some of the students have opted for higher studies, leading to Ph.D.

The Center under the leadership of the Hon'ble Vice Chancellor Padma Shri Prof. Najma Akhtar is actively engaged in strengthening and spreading the knowledge in the domain of Disaster Risk Reduction. Frequent lectures by eminent personalities on the current issues are organized. The center during a short span of four years has organized an International Conference in collaboration with NIDM and National Remote Sensing Center (NRSC) on "Challenges of disaster: Vulnerability, Adaptation and Resilience". The proceedings have been accepted for publication by Springer. Another Conference is scheduled for November 2022 on "Landslide Assessment in India: Mitigation and Resilience". The center in collaboration with NIDM is organizing a five-day Faculty Development Training program during 1-5 August, 2022 on Disaster Risk Reduction. Besides, the center organized a successful technical session in the 5th World Congress in Disaster Management (WCDM) in November 2021 at IIT Delhi.



Jamia Millia Islamia University was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Prof. Ibraheem and Registrar Nazim Husain Jafri is receiving the award on behalf of Jamia Millia Islamia University for their outstanding achievement in the field of Disaster Risk Reduction.

The Faculty of the Department of Geography, JMI and eminent personalities like Dr. Parvez Hayat, former IPS and Advisor to the Center, Prof. Rafi Ahmad, Prof. Somnath Das Gupta, Prof. Masood Ahmad, and Prof. Shakeel Ahmad have contributed significantly in the strengthening of the Center and the dissemination of knowledge in Disaster Risk Reduction (DRR).



Jamia Millia Islamia University was felicitated by the WCDM- DRR Award, 2021. The Award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Registrar Nazim Husain Jafri is receiving the Award on behalf of Jamia Millia Islamia University for their outstanding achievement in the field of Disaster Risk Reduction.



UNITED NATIONS INTERNATIONAL CHILDREN'S EMERGENCY FUND

Since 2005 when UNICEF stepped-up DRR and humanitarian programming in India, it has been a predictable partner of NDMA, SDMA and various social sector line-departments for capacity development with a system strengthening lens. From long term perspective, UNICEF has supported number of state Governments to develop multi-sectoral, multi-hazard, DRR roadmaps aligned to Sendai Framework for DRR and other global normative frameworks such as SDGs, Paris Agreement etc. Sustained investment in developing long term DRR roadmaps is part of the UNICEF's global approach to risk-informed programming. Going forward, large number of Gram Panchayats are being supported to develop and implement 'Risk-informed Gram Panchayat Development Plans' that help in improving climate resilience of social and productive sectors in the rural context.

Beyond these partnerships to strengthen formal Governance of risk, UNICEF has over two decades of work with communities for Disaster Preparedness and Disaster Risk Reduction in 17 plus states. UNICEF continues to envision strong alignment between the 'formal governance of risk' and the 'social governance of risk'. Way back in 2011, UNICEF provided technical support to the National School Safety Programme. Follow-up on the same, led to institutionalization of school safety programmes through Chief Minister school safety programmes in Bihar, Chhattisgarh etc. Currently UNICEF school safety programmes reaches more than 20,000 schools directly and with over 145,000 schools indirectly through system driven school safety programmes.

Guided by UNICEF's corporate policy 'Core Commitment for Children in Humanitarian Action', UNICEF continues to maintain standing capacity in 17 states to implement multi-sectoral Humanitarian.



United Nations International Children's Emergency Fund (UNICEF) was felicitated by the WCDM- DRR Award, 2021. Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region presented this award. Mr. Sarbjit Singh Sahota is receiving the Award on behalf of UNICEF for their outstanding achievement in the field of Disaster Risk Reduction.



CHILD FUND
INDIA

The true social conscience of any organization becomes more evident in a crisis. And, if the past 2 years are any proof, it is fair to say that ChildFund India has proven true to its values of service to communities, perseverance and constant evolution. ChildFund believes in creating a supportive ecosystem to ensure children have a thriving childhood. When ChildFund India started the COVID-19 response work across 15 states, it had only one goal in mind – TO SAVE LIVES at any cost.

Rehabilitating Lives – Humanitarian Assistance to Vulnerable Children and Families affected by Floods – 2019

In 2019, the states of Assam, Kerala, Karnataka, and Tamil Nadu, Maharashtra, and Gujarat were severely affected by floods; as rivers and tributaries swelled due to continuous rainfalls. These floods wreaked havoc in the lives of many, washed away thousands of hectares of summer-sown crops, and completely damaged: roads, railway tracks, houses, schools, and Early Childhood Development Centers. Additionally, the floods also led to a break-out of deadly water-borne diseases. ChildFund, with the support of the HANS Foundation, worked to bring humanitarian assistance in many areas in Assam, Maharashtra, Karnataka, and Kerala, in a few of the worst affected districts.

In a three-month time, ChildFund extended emergency relief support to help around 4,700 flood-affected families with family relief kits which contained different relief materials that will help the affected families to restore normalcy with dignity. These kits contained a hygiene kit to address the basic water, sanitation, and hygiene needs of a family, especially girls and women, mosquito nets for protection from vector-borne diseases; tarpaulin to create a transition shelter for families; and floor mats. The project directly contributed to SDG 2 – Zero Hunger, SDG 3 – Good health and well-being, and SDG 10 – Reduced inequalities.

Fighting COVID in 6 states together with Project HOPE

Several reports have warned us that children could be the next vulnerable group during the 3rd wave. Therefore, we are providing medical equipment and setting up child-friendly facilities at selected Urban Pediatrics COVID treatment centers. Further, we are developing management protocols to train their health care staff and frontline workers on managing children with COVID. We are also training existing community groups, such as slums health committees and mothers' committees, to manage and mitigate the disease as part of the paediatric COVID care action plan so that our children are protected from this pandemic in a holistic manner.

The project directly contributed to SDG 3 – Good health and well-being, SDG 6 – Clean water and sanitation, SDG 10 – Reduced inequalities and SDG 17 – Partnerships for the Goals.



ChildFund India was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Mr. Chandrashekar Pandey and Mr. Rama Rao Dammala is receiving the award on behalf of ChildFund India for their outstanding achievement in the field of Disaster Risk Reduction.



Crisis tested ChildFund family in numerous ways but ChildFund has collectively demonstrated ability to respond to unprecedented change with humanity, purpose and conviction of a better tomorrow. Through these challenging months, ChildFund has emerged braver and stronger than ever before. No challenge is too big to be addressed and no person is too insignificant to be left behind. ChildFund will continue to move onwards in strength, speed and conviction towards a better tomorrow.

DR. RANJANA NALLAMALLI

This extraordinary situation of pandemic demanded superlative efforts to combat the pandemic. Sensing the need of the hour DRDO stormed into action and used its scientific endeavour to develop multiple products for combatting covid based on technologies as an offshoot of the current work. All round efforts of DRDO needed proper channelization of information and timely update of data for the benefit of all stakeholders involved.

During the pandemic, Dr N Ranjana demonstrated effective co-ordination, real time monitoring, and flawless implementation of DRDO's efforts towards Covid-19 Pandemic. Development, deployment and effective utilisation of developed products/ technologies for Covid-19, necessitated unmatched co-ordination between multitude of agencies like various DRDO labs spread across the country, dealing ministries, medical and health organisations and industry partners. Dr N Ranjana ensured prompt monitoring of the progress of various activities through virtual meetings, extensive reviews and deliberations. Her 24 X 7 tireless and selfless efforts ensured that smooth dissemination of information between various agencies. She ensured co-ordination with DRDO hospitals, ministries and health department for seamless distribution of products received from abroad through various channels and indigenously developed products/ technologies. The record keeping and traceability of all the equipment was maintained to ensure the optimum utilization of equipment at each place of need. The information about DRDO developed products and industry to whom technologies were transferred was updated on website as well communicated through the messaging groups for reaching the end users in time and with direct contacts. Real time updates were communicated to various ministries, chief secretaries of the states and information was routed to media for the public dissemination. Preparation of press releases, verifying the content for dissemination and monitoring of publishing in the media were carried out immaculately.

Her deep involvement in all spectrum of activities, documentation, communication without the availability of any support staff ensured that information collation and dissemination is executed and made operational in record time. Interacting with the construction department, armed forces medical officers, state government officials for operationalisation of the first 1000 bed (250 ICU beds) fully air-conditioned, SVBP Covid-19 Hospital in Delhi Cantt within a record time of 11 days amply states the outstanding professionalism of Dr N Ranjana. Totally unmoved and uninterrupted by the restrictions imposed by the disease and the imposed lockdown, she tirelessly was on the move throughout the pandemic time. Additionally, she mastered the most effective utilisation of virtual platforms to co-ordinate and monitor the activities of all the agencies involved. During this entire period, she did not take even one day off. She planned and conducted an international mega webinar of discussion on science and technology lasting about 3 weeks of almost non-stop discussions with Indian and overseas scientific and academic fraternity under various important scientific and management verticals. The entire documentation of the more than two hundred sessions was completed within the stipulated timeframe and recommendations were submitted comprehensively.



Dr. Ranjana Nallamalli was felicitated by the WCDM- DRR Individual Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for her outstanding achievement in the field of Disaster Risk Reduction.



She kept herself protected While taking care of her near and dears, her tireless round the clock efforts towards synchronising the activities of multitude of agencies is a testimony to her outstanding professionalism and stupendous display of dedication and determination” and left no stone unturned to ensure that the projects are completed and executed well before time. Liaison and co-ordination with various ministries and departments were established for effective distribution of developed / received products and technologies to various hospitals and institutions.



DISTRICT DISASTER MANAGEMENT AUTHORITY

Disaster Management has undergone a paradigm shift in recent years from the earlier approach of response to disasters to the current holistic approach of disaster mitigation and preparedness, which yields long term benefits while minimizing damage due to disasters. Among other natural calamities to which Delhi is prone, the state is most vulnerable to earthquakes. As per the Seismic Map of India the National Capital Region of Delhi falls in Zone IV which is the second most severe seismic zone. Taking all this into consideration the Government of Delhi, District North East has announced a series of initiatives for better disaster management with cooperation of all line departments, voluntary organizations, national and international NGOs and more over the local residents.

It's a common belief of both administrators and the public that disaster management starts with distribution of relief materials and ends with restoration of the damaged infrastructures. But in actual situation, instead of waiting for disasters to get it managed, one should start preparations well in advance so that when hazard comes, it will not trigger as a disaster. Interestingly, even the phase of rescue and relief should be with a developmental touch. There is a paradigm shift from the traditional charity approach of disaster management to a professional way of handling it.

Non-Structural Measures- The entire Delhi state falls in earthquake Zone-IV, which indicates it is at high risk to earthquake. In addition to this fire is also a major concern for the district. The non-structural mitigation is basically framed in such a way that the whole population of the district will be sensitized on disaster management and their capacity shall be developed to cope up with hazardous situations.

Training and Capacity Building - A number of training programmes shall be and are already being organized for specialized groups like, District DMTs, sub division and community level office bearers, school teachers and principals, architects, engineers, doctors, masons, etc. The professionals from all departments and sections shall be trained.

Interventions and Schemes during Covid-19 by DDMA

Vaccination on Wheels- Dedicated full-fledged vaccination bus for wider coverage of vaccination beneficiaries. The bus was used in shelter homes, underprivileged clusters, busy markets and densely populated areas. It was launched and wide coverage was given.

Market Certification Scheme - A unique and novel scheme was launched by New Delhi District administration, targeting prominent Markets of New Delhi District. It involved shop by shop assessment of vaccine coverage and motivating all shopkeepers to get themselves and all staff to get vaccinated.



District Disaster Management Authority, New Delhi was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Mr. Babu Lal Meena is receiving the award on behalf of Delhi Disaster Management Authority for their outstanding achievement in the field of Disaster Risk Reduction.



All the volunteer-based organizations (VBOs) like Civil Défense, NYKS, NSS, NCC, etc., in the district, which have thousands of volunteers working with them will also be sensitized and given training on disaster management. Besides RWAs, NGOs in the district will also be given training on disaster management. All the VBOs, RWAs and NGOs shall also be encouraged and supported to organize awareness campaigns in their areas. These have been identified as organizations which can help percolate the idea deeper into the society.



CENTRAL INDUSTRIAL SECURITY FORCE (CISF)

Role of CISF Disaster Management comes under the mandate of NDRF. A number of State Governments have also raised their own State Disaster Response Forces (SDRFs). 02 battalions of NDRF (at Mundali and Arakkonam) are manned by CISF personnel on deputation. The CISF personnel are trained at Fire Service Training Institute (FSTI), NISA, Hyderabad. DM training started at FSTI/NISA in the year 2003 under Program for Enhancement of Emergency Response (PEER) of United States Agency for International Development (USAID). Since then, the Institute has trained more than 13,000 personnel in disaster management covering diverse subjects such as Medical First Responder (MFR), Collapsed Structure Search & Rescue (CSSR) and Chemical, Biological, Radiological & Nuclear (CBRN) emergencies. In addition to CISF personnel, FSTI has also conducted courses for other organizations including SDRFs, CAPFs, State Police/ Fire Services, Railways, Civil Defence and also personnel from foreign countries such as Nepal & Philippines. In other words, while the mandate for disaster management lies with NDRF and SDRFs, the CISF is playing an important role in capacity building. As a security agency, the CISF is generally called upon to perform the following tasks.

- ★ Access Control & defining safety routes for entry & exit.
- ★ Cordoning of area of incident.
- ★ Intelligence collection.
- ★ Coordination with other agencies as per contingency plan.
- ★ Assistance of law enforcement and other agencies.
- ★ Communication with other stakeholders.

These tasks are essentially security related tasks which will be performed by any security agency. The CISF fire wing, whenever deployed, performs fire protection duties in such contingencies. The role of CISF in industrial disaster management can be broadened at 02 levels- Micro and Macro.

At micro level, the NDRF returned CISF personnel can be deployed in various hazardous industries and their services can be utilized in disaster situations. They need to be provided with requisite PPE, MFR/CSSR, decontamination kit & other equipment and training. The training needs to reorient them to specific requirements of that particular undertaking and should be conducted in the unit itself with the help of experts. This will contribute to value addition to the CISF brand. However, it needs to be noted that CISF DM team should provide assistance as first responder only and the overall responsibility must continue to rest with the Head of the Undertaking and the Safety Department which has the requisite expertise and knowledge of regulatory framework to deal with such issues on long-term basis. The basic security responsibilities of CISF should not be diluted. At the macro level, the CISF can leverage on its USP as the only CAPF with a well-trained Fire Wing deployed in industrial undertakings. The CISF fire wing has much greater exposure to industrial hazards in comparison to State Fire Services. Disaster Management Battalions manned by CISF Fire personnel trained in industrial



Central Industrial Security Force (CISF) was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Shri J.P Azad AIG ADM is receiving the award on behalf of Central Industrial Security Force (CISF) for their outstanding achievement in the field of Disaster Risk Reduction.

disaster management can be established in different hubs. According to NDMA, there are about 1,861 Major Accident Hazard (MAH) industrial units located in different parts of the country.



The CISF fire wing has much greater exposure to industrial hazards in comparison to State Fire Services. Disaster Management Battalions manned by CISF Fire personnel trained in industrial disaster management can be established in different hubs.



INDIA METEOROLOGICAL DEPARTMENT (IMD)

India Meteorological Department (IMD) is one of the oldest scientific Departments of the country. It was established in the year 1875 following the infamous Kolkata cyclone in 1864 and subsequent famines in 1866 and 1871. It is the National Meteorological Service of the country and the principal Government agency in all matters relating to Meteorology and allied subjects. From a modest beginning in 1875, IMD has progressively expanded its infrastructure for meteorological observations, communications, forecasting and weather services.

The Mandate of IMD is:

- ★ To take meteorological observations and to provide current and forecast meteorological information for optimum operation of weather-sensitive activities like agriculture, irrigation, shipping, aviation, offshore oil explorations, etc.
- ★ To warn against severe weather phenomena like tropical cyclones, nor westers, dust storms, heavy rains and snow, cold and heat waves, etc., which cause destruction of life and property.
- ★ To conduct and promote research in meteorology and allied disciplines

The mitigation of weather and climate and water-related disasters remains a high priority of the IMD and consequently a significant progress has been made in monitoring, predicting and managing such disasters over past few decades. IMD issue forecasts and warnings related to extreme weather events and share the same with Disaster Management Authorities as well as general public through various platforms for necessary preparedness and to support mitigation measures.

IMD is implementing Impact Based Forecast which gives details of what the weather will do rather than what the weather will be. It contains the details of impacts expected from the severe weather elements and guidelines to general public about do's and don'ts while getting exposed to severe weather. These guidelines are finalised in collaboration with National Disaster Management Authority (NDMA) and is already implemented successfully for many severe weather elements like cyclone, heat wave, thunderstorm and heavy rainfall.

IMD in collaboration with Indian Council of Agriculture Research and State Agriculture Universities and other institutions is rendering District/Block level Agrometeorological Advisory Services (AAS) for the benefits of farmers in the country. The main emphasis of the existing AAS system is to collect and organize climate/weather, soil and crop information, and to amalgamate them with weather forecast to assist farmers to take decisions on day-to-day farm operations, which can further optimize the application of input resources at farm level during deficient rainfall situation and extreme weather events to reduce monetary loss and to maximize crop yield. IMD supports flood warning services of Central Water Commission by providing observed and forecasted rainfall. Flash Flood Guidance is also issued to support the flood warning services. Forecasts and warning are issued for thunderstorms and related weather phenomena to reduce deaths associated with them. The nowcast



Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region presented the prestigious DRR Award to India Meteorological Department (IMD). Dr. S.D Attri, Scientist G from India Meteorological Department is receiving the Award for their Outstanding Contribution and initiatives in the field of Disaster risk reduction.

for thunderstorms is issued to the public and Disaster managers by IMD about one to three hours in advance. The information is specific up to the district/town of occurrence, and impact expected in cases of severe weather associated with thunderstorm occurrence. For forecasting & warning services for Heat wave, IMD has done a lot of work in collaboration with NDMA in the recent past.

“IMD has one of the best Early Warning Services in the world related to Cyclones. As a result, the vulnerable population gets evacuated from the damage prone areas in a timely manner to safe shelters thereby reducing the human death toll to a bare minimum, in the recent years.



O.P. Jindal Global University advocates for a stronger disaster risk reduction and management, which will ensure different pathways for communities and organisations in disaster recovery lead to sustainable development. In line with this objective, our staff and faculty have been leading in research, teaching, and publications in this field.

With the WHO recognition of frontline health workers like Accredited Social Health Activists (ASHAs), our faculty member Prof. Dr Sneha Krishnan published ***"Exploring female frontline health workers' role and capacities in COVID-19 response in India"*** in the reputed International Journal of Disaster Risk Reduction. This highlighted the leadership role played by the workers but also highlighted key gaps in the financial and policy support they receive. Pursuing the theme on women suffering from impacts of climate change and disasters, especially communities suffering from floods and erosion in Assam, India and cyclones in West Bengal, faculty members have published ***"Gender, disasters and climate: Case of internal displacement in Assam, India"*** and ***"Adaptive capacities for women's mobility during displacement after floods and riverbank erosion in Assam, India"*** in international journals such as Climate and Development by Taylor and Francis. She also co-authored a polyvocal paper titled ***"Cross-country use of participatory research methods in practice to enhance inclusive decision-making"*** in the journal on Disaster Prevention and Management in 2021.

Prof Samrat Sinha from Jindal Global Law School organised special online interactive sessions and guest lectures. For the first webinar, Mr. Sameer Kariya, Emergency Programme Coordinator with the Irish non-profit organization Concern Worldwide in Somalia/Somaliland was invited to speak on "Drought, Conflict and Displacement Crisis in the Horn of Africa in 2022:

O.P. Jindal Global University signed a Memorandum of Understanding with the International Committee of the Red Cross (ICRC). As part of the agreement, JGU hosted the Distinguished Lecture Series on Humanitarian Law, Policy and Action, where Dr Gilles Carbonnier, Vice President, ICRC delivered the Inaugural Lecture titled Principled Humanitarian Action: Rising to the Challenge on 7th February 2022, wherein he gave a global overview of the current humanitarian landscape, the new and developing challenges confronting humanitarian actors, the opportunities these challenges provide and how humanitarian organisations (especially the ICRC) are working in this context. Jindal School of Environment and Sustainability (JSES) also partnered with University of Carleton of Canada to focus on regenerative design principles for designing technological interventions for sustainability and resilience.

The recently established Jindal School of Environment and Sustainability offers various courses on Environmental Hazards and Disaster Resilience, Sociological Perspectives on Environment, Climate Change Adaptation and Policy, as well as on Human Mobility as an impact of Climate Change.



O.P. Jindal Global University was felicitated by the WCDM- DRR Award, 2021. Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region presented the award. Prof. Dabiru Sridhar Patnaik is receiving the award on behalf of O.P. Jindal Global University for their outstanding achievement in the field of Disaster Risk Reduction.

As part of the pedagogical outcome, B.A Environment and Sustainability second year student, Ms Shubda Moond presented on ***"Using creative storytelling as a pedagogic tool for studying disaster resilience"*** at Feminist Geography Conference titled ***"Pushing Boundaries"*** organised by University of Colorado Boulder in 2022.



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**CARITAS
INDIA**

As a lead humanitarian and development organisation founded in 1962, Caritas India has been committed to saving lives and enhancing the human potential for sustainable and inclusive development. This is achieved through implementing community-led interventions in the areas of humanitarian aid and disaster risk reduction, livelihood and food security, climate change adaptation through natural resource management and sustainable agricultural practices, anti-human trafficking, peacebuilding and community mobilisation.

In the past five decades, Caritas India has contributed significantly to nation-building by supporting 22,945 projects to the tune of Rs. 13,730 million. With a shift from charity and welfare mode to a Rights-Based Approach, the strategic role of Caritas India has gone beyond funding the projects to hand-holding hundreds of development organisations to increasing their capacities for achieving great levels of effectiveness whilst upholding organisational autonomy. By recognising Disaster Risk Reduction as a key thrust area, systematic efforts are being taken to analyse and reduce the causal factors of disasters through various programmes in India. Caritas India has developed core competence in Disaster Risk Reduction (DRR) by Linking Relief and Rehabilitation to Development (LRRD).

Learning the people's way of coping with and managing disaster risks has helped Caritas India create an edge in the field of DRR and establish a wide network of partners spread across the country who work on various aspects like DRR, prevention, mitigation, and climate change adaptation and building community resilience. Caritas' DRR interventions are focused on Increasing Disaster Resilience. The community-led actions are aimed at enhancing the coordination between civil society organisations, networks, and state institutions in implementing DRR plans and government policies. The programmes at Caritas India demonstrated environment-friendly, disaster-resistant and climate adaptive solutions to secure livelihoods and protect infrastructure integrated into official DRR plans.

Disaster risk has been rising rapidly throughout the past few decades. The poorest and most vulnerable people are hit hardest. Strengthening resilience is increasingly recognised as the key to breaking this cycle. Current efforts to reduce risk or adapt to climate change are planned in separate sectors and add up to less than the sum of their parts. In addition, there is often a lack of engagement at the local level, where the disasters hit hardest and some of the most effective interventions to reduce risk could be made. Caritas India has recognised the need to change course, urgently.



Caritas India was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Fr. Jolly Lukose is receiving the award on behalf of Caritas India for their outstanding achievement in the field of Disaster Risk Reduction.

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Being a frontline organization in the field of disaster relief, response and risk reduction, Caritas India advocates for rights-based humanitarian assistance, reducing underlying risks and building community resilience.



DR. SANJEEV KUMAR JOSHI



DR Sanjeev Kumar Joshi is presently the Deputy Chief Executive Officer, BrahMos Aerospace and prior to this appointment he significantly contributed as Technology Adviser to Secretary Department of Defence R&D and Chairman DRDO. As Technology Adviser, his outstanding leadership and strong interface capabilities during COVID-19 pandemic have left lasting imprint in strengthening DRDOs capabilities to design and develop indigenous medical devices and counter COVID technologies. As part of Chairman DRDOs core team, Dr Joshi was in the forefront and led multiple techno-managerial initiatives, facilitated inter-laboratory coordination, strengthened synergy with industries, academic institutes, Armed forces and gave thrust to the decision-making processes during the Corona crisis. He effectively coordinated with various clusters and launched pan DRDO exercise to map and boost development of COVID-19 solutions with R&D and scaling up support. He successfully coordinated development of face shields, masks, PPE kits, sanitisers, UVC sanitization systems in coordination with Life Science cluster labs, Private industries, IAF, other cluster labs, State and Central agencies. He was pivotal in establishment of COVID-19 hospitals in different States and ensuring supply chain from availability of raw material to final product to its distribution across the country and fast-tracked commercial production.

Dr Sanjeev Joshi has expertise and pioneered research on snow avalanche initiation and snow crack propagation and release mechanism, crack initiation, propagation and release in glaciated regions leading to flash floods, disaster management during cloud bursts specifically in high Himalayan regions, forest fire, its reasons, surveillance and mitigation techniques. He has done extensive work on avalanche forecasting for the Indian armed forces. He has deeply understood on strength properties of snow, its modelling and has led teams at multiple sites in the western Himalayan region. His critical contributions in Avalanche reconnaissance and Weapon Position Change, strength and microstructure properties of snow and its modelling had a major impact on disaster management. As an expert member, he also contributed in the study and analysis of glacial bursts, flash floods which occurred at Joshi math, Uttarakhand and other natural disasters in the region. He was vital in communicating developments undertaken by various cluster labs of DRDO to counter COVID-19 and his efforts reaffirmed DRDOs commitment as a top scientific institution geared up for combating the pandemic with research driven and indigenous technology-based interventions among various stake holders and general public. He chronicled articles titled Indigenous Tech for India's Defence, Atal Tunnel - a Terrific Boost to National Security, Explaining Flash Floods in Uttarakhand in Science India magazine.

His versatile contributions as Dy CEO, BrahMos Aerospace has been instrumental in strengthening exports, international collaborations facilitating flow of learning across organizational boundaries. As Technology Adviser, he



Dr. Sanjeev Kumar Joshi was felicitated by the WCDM- DRR Individual Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for his outstanding achievement in the field of Disaster Risk Reduction.

has been the driving force for formulation of many apex level policies, defence technology management, industry interface, popularisation of defence R&D through scientific communications thus strengthening the efforts towards indigenous design and development of defence systems across the clusters of DRDO.



The WCDM DRR award is conferred on Dr Sanjeev Kumar Joshi, Deputy CEO, BrahMos Aerospace and former Technology Adviser to Chairman, DRDO for his outstanding techno-managerial contributions and leadership in facilitating activities related to supply chain management, quick development of innovative solutions, testing, evaluation & scaling up production of anti-covid products & establishment of medical infrastructure in a highly time bound manner.



GOA STATE DISASTER MANAGEMENT AUTHORITY

By knowing the fact that, Goa being a small state has 2 Districts namely North Goa and South Goa and it comprises of 12 Talukas. The total area of the state is 3700 Sq. km having a population 14.59 Lakhs with 37.83% living in rural areas and 62.17% of the population residing in urban areas. The coast line of Goa is nearly 108 kilometres with the Terekhol River separating Goa and Maharashtra. In the south Galjibag river is the last river in the Canacona Taluka. The major rivers and ports of the State include: Mandovi, Zuari, Sal, Terekhol, Chapora, Talpona and Mormugao Port & Panjim Port respectively. Goa is vulnerable to the natural calamities like Flood, Cyclonic Storms, Earthquake, Landslide, Mining hazards and Sea Erosion. Apart from these natural hazards there are chances of human induced disasters like major fire, industrial accidents, terrorist attacks etc. To mitigate the impact of these hazards and to prevent the new risks, Government of Goa is committed to enhance and implement the DRR strategies for a disaster resilient State of Goa.

State's achievements in Disaster Risk Reduction (DRR):

(A) AUTHORITIES:

Constitution of Disaster Management Authorities:

Government of Goa on 01/08/2014 constituted Disaster Management Authorities and Committees at State and District level including Goa State disaster Management Authority-SDMA headed by Hon'ble Chief Minister as Chairperson along with 10 other members; State Executive Committee-SEC headed by Chief Secretary of the State with 04 other Members. At district level District Disaster Management Authorities-DDMAs headed by respective District Collectors as Chairpersons.

State Emergency Operation Centre:

Government of Goa has setup a network of State and District level Control rooms for robust and failsafe disaster related coordination and communication. Presently, the SEOC is functional 24x7 in the Secretariat, Porvorim Goa where in 08 Data Entry Operators are manning the SEOC on shift basis. It will be soon shifted to ICCG at IT Hub Building Altinho, Panaji, Goa; wherein, 04 work stations have been allotted for Disaster Management (01 for ERSS Project and 03 for SEOC).

Goa Disaster Management Fund Scheme:

To compensate Disaster Management Victims, Government of Goa notified this particular Scheme in 2008 and has been revised the same in 2021 to increase the cap of compensation for disasters affected people of Goa.

Government of Goa amended the notification on State Specific Disasters as per the instructions of Hon'ble C.M./ Chairperson SDMA in the Pre-Monsoon SDMA meeting held on 28th April, 2022 and issued a new notification covering



Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region has felicitated the DRR Award to the Goa State Disaster Management Authority, Government of Goa for their appropriate preparedness and mitigation measures for an effective and timely response to disasters. Shri Sandip Jaques, IAS, the Secretary, Revenue Department, Government of Goa is receiving the award from the Hon'ble minister on behalf of the Goa Government.

all major disasters that the state is vulnerable to including but not limited to:

Category A: Natural Disasters: Gusty Winds; Heavy Rains; Thunder & Lightning Strikes/ Cloudbursts; Floods; Landslides; Biological Hazards; Heatwave; Tsunami; Earthquakes; Cyclones.

Category B: Human Induced Disasters Fires; Drowning incidents; Landslides (Mining Areas); Industrial hazards; Boat Capsize; Road/Railway/Aircraft Accidents; Terrorism/ Stampede/Riots.



Goa State disaster management Authority was felicitated by the WCDM- DRR Award, 2021. The Award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Shri Sandip Jaques, IAS is receiving the Award on behalf of Goa government for their outstanding achievement in the field of Disaster Risk Reduction.

PROF. DR. MUZAFFAR AHMAD

DR Muzaffar Ahmad is a Public Health Medical expert with more than 28 years' experience having worked in various positions in this field. He has vast experience in the field of Disaster Management, having professionally worked in the Management of Disasters for more than 20 years. Providing medical care during the disasters of Floods, Earthquake, avalanches, landslides, Tsunami, manmade strife (during blasts / grenade attacks), terrorist attacks and the yatra of Shri Amarnathji and during Kargil war & shelling in border areas, Fire accident in Army ammunition depot, Planning monitoring and supervision of National Programs of Health and control of outbreaks and Epidemics.

He is a Post graduate, fellow of International Medical Sciences Academy, fellow of National Academy of Medical Sciences (India). Fellow of Royal college of physicians (Edinburgh). Fellow of Royal college of Physicians (Glasgow) and Royal college of physicians (London) He has written more than six books, besides over 130 publications in reputed National and International journals, presented research papers in Scientific National / International Conferences. He is recipient of medals and awards for distinguished services, besides Sriram Award for best publication by National Academy of Medical Sciences, Dr. R V Rajan Oration Award 2010 by National Academy of Medical Sciences, and Award for outstanding Service for Humanity in Earthquake 2005 by Indian Institute of Public Administration. Dr. MID Sharma Award for contribution in Public Health by Indian Association of Epidemiology, Dr. B C Roy National Award by President of India on 1st July 08.

As Member NDMA at national level ,looked after Public Health Emergencies , Medical Preparedness for Mass Casualty Management, Chemical Industrial Disaster Management, Community Based Disaster Management, NGOs Coordination, School and Hospital Safety and Mitigation at National level .formulated more than 8 national guidelines on disaster management, Hospital Safety, School Safety, .Role of NGO's in disaster management, Community based Disaster Management, Emergency Management Exercises, Retrofitting, Conducted Emergency Management Exercises in various states and capacity development workshops and trainings on Mass casualty Management and Public Health emergencies. Was responsible for planning and launching of National School safety project in India, Member of Core Group of National Disaster Management Authority for preparing National Disaster Management Guidelines on Chemical Terrorism, Medical Preparedness for Mass Casualty Management, Minimum Standards of Food, Drinking Water, Medical Cover and Sanitation for Disaster Relief. He was awarded the award of IKON of disaster management in India by Indian Society of Emergency Medicine at a function during the conference of AMCON at Jaipur on 6th November 2017 at Birla Auditorium by Health Minister of Government of Rajasthan.



Dr Muzaffar Ahmad was felicitated by the WCDM- DRR Individual Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for his outstanding achievement in the field of Disaster Risk Reduction.



Dr Muzaffar Ahmad was felicitated by the WCDM- DRR Individual Award, 2021. The Award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for his outstanding achievement in the field of Disaster Risk Reduction.



INDIAN INSTITUTE OF TECHNOLOGY- DELHI

IIT Delhi is working extensively in disaster risk reduction and forecasting under multi-hazard scenario (earthquakes, wind, landslides, fire, avalanches, floods and blast). Some of the major contributions are in the following areas: structural vibration control using tuned mass dampers, meta-materials and base isolation; structural health monitoring; seismic microzonation studies; landslide hazard zonation maps, performance based design of built infrastructure (buildings, bridges, steel structures, wind turbines, offshore structures, etc.); development of futuristic materials; retrofitting and strengthening of existing structures; policy analysis and risk assessment; Hydro climatological Modelling; liquefaction hazard assessment and mitigation; Radiation Damage and Nuclear-Waste Immobilization; Rare Event Modelling; Risk and Loss Modelling; Flood Forecasting; Climate Change detection and attribution; sea level rise; Abrupt Climate Change; Socio-economic and political consequences of climate variability impacts, Storm surge Modelling;

IIT Delhi has been providing state-of-the-art training in these areas for working professionals to upgrade knowledge and build capacity.



Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region presented the prestigious DRR Award to Indian Institute of Technology (IIT) Delhi. Prof. Ashok Kumar Ganguli the Deputy Director (Strategy & Planning) at IIT Delhi, receiving the DRR Award for the outstanding contribution in the area of Disaster Prevention and Mitigation. The award celebrates their outstanding work in Disaster Risk Reduction.



INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION SERVICES (INCOIS)

India has a vast coastline of about 7500 km with around 15 per cent of Indians living and working near the coast. Oceans have been a primary source of economy and livelihood for coastal communities. Many major metro cities are along the coast, with significant economic activities at ports and harbours like shipping, fishing, and agriculture. The protection and safety of the communities near the coast is a serious cause of concern for the government, especially from natural calamities like cyclones, storm surges, tsunamis and associated coastal flooding. The Indian National Centre for Ocean Information Services (INCOIS), under the Ministry of Earth Sciences (MoES), Government of India, is playing a crucial role in disaster risk reduction by providing the best possible ocean information and advisory services to coastal communities, scientific and industrial researchers and other government agencies. The services are based on onshore and offshore observation networks of heterogeneous sensors and satellite data and are constantly improved through systematic and focused research.

The mitigation of coastal hazards is a major scientific challenge because of their unpredictable nature. Though infrequent, tsunamis cause great destruction and loss of lives within minutes on shores near and far. The unprecedented loss due to the 2004 tsunami in the Indian Ocean exposed the importance of establishing an early warning system for ocean-based disasters. Recognizing the significance, the Ministry of Earth Sciences established the National Tsunami and Storm-surge Early Warning Centre at INCOIS in 2005. Since 2007, the full-fledged tsunami warning centre is capable of issuing Tsunami bulletins in less than 10 minutes after any major earthquake in the Indian Ocean. Considering the tremendous developments that have taken place in the last decade at the warning centre, the Intergovernmental Oceanographic Commission of UNESCO designated the centre as Tsunami Service Provider (TSP) to provide tsunami early warning and advisory services to other Indian Ocean rim countries. Along with the Ministry of Home Affairs (MHA) and the National Disaster Management Agency (NDMA), INCOIS prepared operational guidelines and follow-up tsunami response and awareness plans at national, state and local levels. The East coast of India experiences land-falling tropical cyclones almost every year. These cyclones result in enormous destruction of life and coastal property largely due to storm surge flooding and its inland inundation, accounting for most of the deaths associated with tropical cyclones worldwide. .

The Sendai Framework for Disaster Risk Reduction (2015–2030) focuses on disaster risk management, emphasizing the protection of livelihoods as well as saving people and property through seven global targets. In line with Sendai Framework, INCOIS has been working to reach the global targets by (i) awareness and preparedness activities through regular workshops, trainings, and



Indian National Centre for Ocean Information Services (INCOIS) was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Mr. Pattabhi Ramarao is receiving the award on behalf of Indian National Centre for Ocean Information Services (INCOIS) for their outstanding achievement in the field of Disaster Risk Reduction.

mock drills (ii) providing disaster risk information and assessments for disaster management officials as well as communities at risk, and thus reducing the mortality rate (iii) initiating work towards multi-hazard early warning systems for sustainable development and implementation as well as long-term sustenance of existing observation networks (iv) people-centre early warning systems through "Tsunami-Ready" programme. Through the said targeted disaster risk reduction activities, INCOIS successfully implemented the "Tsunami Ready" programme in India and became the first country in the Indian Ocean region to get recognized.



The Indian National Centre for Ocean Information Services (INCOIS), under the Ministry of Earth Sciences (MoES), Government of India, is playing a crucial role in disaster risk reduction by providing the best possible ocean information and advisory services to coastal communities, scientific and industrial researchers and other government agencies. The services are based on onshore and offshore observation networks of heterogeneous sensors and satellite data and are constantly improved through systematic and focused research. The data is processed in near real-time using high-performance computational facilities available at the centre and disseminated through various communication modes like email, fax, SMS and web-based GIS services.



MANAV RACHNA UNIVERSITY

Manav Rachna Centre for Peace and Sustainability (MRCPS) is a center of excellence of Manav Rachna University which is a visionary step to develop “Peace & Sustainability champions” who we believe, would be influential and leading citizens of Peaceful and Sustainable New Bharat. The University has a strong faith in youth power and their conviction in making a better world. Students through the Peace and sustainability Club work for five verticals namely PARASHAKTI, PRAKARSH, SAHRITA SAMRIDDHA AND SADBHAV focusing on different SDGs.

Manav Rachna University, through MRCPS under the able mentoring of Chairman Padma Vibhushan Dr. Karan Singh, vision of Dr. Prashant Bhalla, resolve of Dr. Amit Bhalla and leadership of Dr. I K Bhat is on the path of peace and sustainability by putting in efforts for prevention and management of disasters that impact the society adversely. MRCPS serves as epi-centre and facilitator of knowledge creation, dissemination and research in the area of development and execution of support processes of SDGs to make an impact in our society. Manav Rachna University through this centre, has made significant contributions in understanding and managing Disaster of all types and trained students in understanding how to mitigate its influence.

MRCPS during the tough times of pandemic, developed several structured and practice oriented extra-curricular programmes for the youth to inculcate values and promote indulgence in art and culture related pursuits to develop a peaceful mind to face the disaster. Resilience is at the core requirement of any Disaster management.

The SADBHAV vertical put in efforts to inculcate attitude of peace and negotiation, develop capacity and competencies to build peaceful organization among youth as Internal human conflicts leads to many man-made disasters like Riots, Arson, War etc. The Centre emphasized on inculcating the attitude of peace among youth to make them peace ambassadors to spread Peace. Environmental degradation which leads to Climate change is at the root cause of any man made or natural disasters. MRCPS puts collaborative efforts of Youth, NGOs, society to bring out Awareness, Capacity building programme, understand causes, and status, suggest solutions, evaluate the effectiveness through research, bring momentum to local actions using youth power. Various short courses and different academic programmes are developed for the undergraduates and professionals. Sustainability is integrated in curriculum in various ways. Many activities like webinars, Rally, Campaign,



Manav Rachna University was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Prof. (Dr.) I.K. Bhat, Vice Chancellor with his team is receiving the award on behalf of Manav Rachna University for their outstanding achievement in the field of Disaster Risk Reduction.

Hackathons, Competitions, seminars, workshops, trainings are arranged at national and international level. University continuously received the guidance of leaders like Dr. Karan Singh, Sister Shivani, Prof. Scott Harriotte, Dr. Muzaffar Ahmad, Dr. Rajendra Shende and Dr. Markandey Rai. etc. to take this goal ahead. The Centre for Peace & Sustainability, MRU is in a constant pursuit of serving the society and teaching the value of social welfare services to our younger generations.

“Through its creative and new approaches, Manav Rachna Centre for Peace and Sustainability is moving toward ensuring sustainable development and peace at local, national and global levels by empowering youth and making them the peace ambassadors who will work on mitigating disasters and restoring peace in the society.



UNITED WAY DELHI

United Way Delhi is one of the community service not-for-profit organisations that stepped on the ground as soon as the coronavirus stuck India. United Way Delhi's belief in living united to overcome problems, motivated the team to strategically respond in the most critical times. United Way Delhi was quick to form its Covid task force that collaborated with governments, corporates and local NGO partners to provide aid in any form that was required and best suited for diverse community stakeholders. UWD has been working in communities on quality education, healthcare, environment, livelihood, and disaster response across the country to advance the common good.

The immediate COVID response to comprised hospital support program, strengthening of front-liners and aid in the development of critical care systems. United Way Delhi reached to more than 8 states in India and collaborated with 35+ hospitals and make-shift centres, and provided aid in the form of RT-PCR Labs, testing Systems, PPE Kits, para monitors, ventilators, oxygen concentrators, BiPap machines and other materials that were required by the medical institutions of India. The first RT-PCR Lab in Gurugram at the Civil Hospital Gurugram was launched in the presence of Shri Manohar Lal Khattar, Chief Minister, Haryana. Some of the hospitals included LNJP, Safdarjung, NITRD, and GTB-Hospital. Civil Hospitals Gurugram, CHCs in Noida and Greater Noida, PHCs in Rudrapur, Uttarakhand and Mewat in Haryana.

With the ongoing COVID response, United Way Delhi reached out to distant vulnerable communities in India to help them overcome the problems due to the no-income situation in the lockdown. With the help of team members and volunteers, more than 5000 family-essential kits were given, comprising groceries and sanitation material lasting for months helped the families to sustain themselves in those times impacting over 25000+ citizens.

The coronavirus pandemic caused the halt, but United Way Delhi took it as a challenge and made spaces to bridge the digital divide through hybrid models of ongoing programmatic interventions. Digital Education Support Program reached out to more than 2000+ students and individuals to resume learning and go beyond the boundaries to explore their hidden talents and hobbies through online learning with tutorials & digital kits, comprising a tab with a 1-year data connection, pen drive and stationery supplies.

United Way Delhi's holistic response to tackle COVID, strengthening the medical and healthcare ecosystem and stabilizing communities involved enormous support from the community members. Youth members from Youth Resource Centres like Karvaan, Aya Nagar and Chetna, Sahibabad actively participated with United Way Delhi's team in creating awareness and mobilising them for following COVID protocols



United Way Delhi was felicitated by the WCDM- DRR Award, 2021. Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region presented the award. Ms. Pallavika Ahlawat and Mr. Prateek Sengupta is receiving the award on behalf of United Way Delhi for their outstanding achievement in the field of Disaster Risk Reduction.

and even registering the names for the vaccinations. Women associated with the Samriddhi Project manufactured low costs masks through their SHGs.

United Way Delhi's journey of unitedly overcoming the problems and making a difference in the lives of individuals, motivates the team to thrive more impactfully than ever. In the fight against COVID, more than 30 lakh individuals were impacted, giving way for new ray of hope.

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**WORLD
VISION**

World Vision India – a child focused organisation has integrated disaster preparedness initiatives in its developmental programmes across 143 districts impacting around 26 lakh children and their families across 24 states and 2 union territories in the country. World Vision India has been part of the Core Committees of the Inter Agency Groups (IAGs), for coordination among NGOs and civil society organisations in the area of disaster management in various states. The organisation has been providing leadership in various joint actions with Sphere India network at the national level and IAGs at sub-national level in disaster response contexts. Community Disaster Preparedness Plans developed with active engagement of the local communities and put in place in 118 Programme areas across 24 states in India, as part of ongoing developmental programmes.

Schools' safety programmes implemented in about 700 schools across the country where about 80,000 children and 3,000 teachers benefitted, and have developed resource materials on school safety for wider use. About 6170 community level task forces trained on disaster preparedness with special skills like early warning, first aid, shelter management, search & rescue and WASH.

About 1,85,000 children sensitized on the issues of climate change and ways towards contributing locally into the larger global efforts in addressing the issues through workshops, audio visual materials, activity books and comic booklets. Children have been provided opportunities to speak about their concerns and suggestions on climate change in different national and international platforms, including the consultations as part of the recently held Global Platform on DRR. The organisation has been working on eco-based DRR and Climate Change Adaptation initiatives like climate smart agriculture, water management, clean energy applications and regeneration of degraded lands.

World Vision India reached about 15,99,846 people as part of the COVID response through cash & voucher Programme, livelihood assistance etc. and about 11,90,140 people reached to sensitize on COVID preventive measures. World Vision India also won the India Today Healthgiri award 2021 for 'Child Care' during COVID response.





World Vision was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Dr. Salmon Jacob is receiving the award on behalf of World Vision for their outstanding achievement in the field of Disaster Risk Reduction.



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MS. NEELAM MAKHJANI



Ms. Neelam Makhijani is Currently, heading Management Sciences for Health as the Country Director for India, Neelam Makhijani has over 25 years of rich experience in journalism, communication, and social development, across the US, UK and Asia. While in the UK, she was awarded as the first Indian Woman Director to head a global organization based in the UK. Over the years, she has built her reputation as a thought leader and expert communicator, by speaking and training at various forums and conferences, in over 30 countries. Inspired, wise, far-sighted, uncompromising of her values, and driven to inspire change for maximum impact – she is considered as a visionary in every sense of the word.

She is one of the 50+ women leaders across India and organisations in the impact sector including NGOs, CSR, foundations, research institutes, intermediaries, funding organisations, social enterprises, and so on, who got featured in the study on Women's Leadership in the Development Sector (WLIDS) in India conducted by Arthan in 2020 in collaboration with The Rockefeller Foundation.

Before joining MSH, she was the Country Director of ChildFund India. During her tenure with ChildFund, ChildFund moved from impacting nearly 1 million children and families annually in 2014-15 to over 4 million in 2020-2021 children and families annually across our operational areas in the country, by bringing meaningful change to their lives and the communities.

Under her leadership, the organization was able to transform lives of millions of children and people, drive innovative programs for better opportunities for children and their families. Through the pandemic, over the last 2 years, the organization was able to impact lives of over 10 million children, young adults and families, communities across 15 Indian states through a multi-pronged COVID response. Within just couple of years of her joining, she revitalized ChildFund India's core operations by strengthening the organization's ability to fulfil its mandate to children throughout India. She has been instrumental in extending ChildFund reach in India, firming its foundations for long-term future development and placing ChildFund in major Networks and Forums as an influencer. While she was with ChildFund, she spearheaded the organization's collaborations with some of the most notable academia, corporates and development agencies in India increasing the organization's reach, impact, and resources.



Ms. Neelam Makhijani was felicitated by the WCDM- DRR Individual Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for her outstanding achievement in the field of Disaster Risk Reduction.



Ms. Neelam Makhijani was felicitated by the WCDM- DRR Individual Award, 2021. The Award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India for her outstanding achievement in the field of Disaster Risk Reduction.



GEOLOGICAL SURVEY OF INDIA

Geological Survey of India (GSI) has made an incredible contribution working in the sectors of natural resource generation, and public good geosciences through the collection as well as the synthesis of vast geoscientific data throughout the country for Centuries. With the enormous baseline data generation, uses of the cutting-edge technologies in the field of landslide studies, geodynamic/seismic studies, engineering geology, environmental geology, remote sensing, marine, glaciology, and polar studies through the present mission mode activities of GSI plays a significant role in the development of multidisciplinary approach of GSI for providing the supports to the stakeholders in planning and execution of the disaster risk reduction strategies.

As a nodal agency, GSI is entrusted with undertaking and coordinating landslide investigations and formulation of mitigation measures by developing strategy/methodology for all types of landslide investigations in the country. In India, 4.34 lakh sq. km areas of hilly/ mountainous region in 18 States/ Union Territories are vulnerable to landslide hazards. The National Landslide Susceptibility Mapping (NLSM) programme has been initiated in 2014-15 to map the above area with an objective to prepare seamless landslide susceptibility map on a 1:50,000 scale. GSI has envisaged a roadmap to build suitable regional Landslide Early Warning Systems (LEWS-Region) for all the landslide-prone States/ UTs in India in phases and started the R&D work in 10 states to develop, validate, implement and operationalize the LEWS-Region prototype models in all those diverse terrains.

The geotechnical/EG studies have always been a forte of GSI. GSI has made a remarkable contribution at different stages of geotechnical investigations for the successful completion of large numbers of Water Resource Projects including hydroelectric, irrigation, and river linking projects within the country and abroad, in a safe and cost-effective manner. GSI has also extended its expertise in the construction of a number of communication projects, thermal power projects, and nuclear power plants and in urban development based on techno-economical and eco-friendly considerations.

GSI has envisioned establishing a state-of-the-art permanent Global Navigation Satellite System (GNSS) or Global Positioning System (GPS) network in India which is used for various geoscientific purposes through 35 Permanent GPS stations in various seismotectonic domains across the country. GSI is planning to support the use of InSAR (Interferometric Synthetic Aperture Radar) space technology. This technology is increasingly being used worldwide in monitoring local and regional scale tectonic deformations, subsidence, landslides, etc. GSI is also maintaining 10 seismic observatories in the country.

The glaciology studies of the glaciers in the Higher Himalayas help to evaluate the potentially vulnerable areas for high Glacial Lake Outburst



Geological Survey of India (GSI) was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Dr Sandip Som, with the team is receiving the award on behalf of Geological Survey of India (GSI) for their outstanding achievement in the field of Disaster Risk Reduction.

Floods (GLOF) risk areas. It provides valuable inputs to the National Disaster Management Authority in executing the mitigation strategies.

Besides, geoscientists of GSI are also engaged in Seismic hazard micro zonation, Active fault mapping, neotectonics studies, etc to provide the inputs to stakeholders for the planning of different infrastructure projects in a safe manner.

“Geological Survey of India (GSI) has made an incredible contribution working in the sectors of natural resource generation, and public good geosciences through the collection as well as the synthesis of vast geoscientific data throughout the country for Centuries.



MR. MAHESH NANGIA



During the second wave of covid-19 in Nagpur, while people struggled to get beds and access to other medical facilities and medicines, getting ambulances for transporting patients had also become impossible. The government ambulances were always busy and the private ones took this as a golden business opportunity and the prices for 10km skyrocketed to up to 10000 from the government advise rate of 1500.

To address this issue, Mr. Mahesh Nangia came up with the idea to start free ambulance services in Nagpur. He reached out to MG Motors to support this cause and they supported generously by providing fully equipped ambulances (with ventilator, oxygen supply, auto loading stretcher) to us. The Nangia group got the full ecosystem ready for a smooth ambulance booking to transporting system. A 24x7 call center was set up and drivers and paramedic staff who were all trained in Advance Life Support were recruited. And hence the free ambulance services began to help people of Nagpur. Sometimes, when finding the bed was difficult, our ambulances with the oxygen supply mechanism came as rescue to patients.

In about 2 months, more than 3000 patients availed the free ambulances services during the covid-19 peak.



Mr. Mahesh Nangia was felicitated by the WCDM- DRR Individual Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Ms. Pankhuri Nangia is Receiving the award on behalf of Mr. Mahesh for his outstanding achievement in the field of Disaster Risk Reduction.



**BENNETT
UNIVERSITY**

The Bennett University School of Law established the Centre for Sustainable Development and Disaster Studies, in 2021 to specifically realize these goals. The Centre was established in early 2021 and was formally inaugurated in September 2021. The most notable achievements of the Centre have been detailed out in the foregoing sections.

Centre for Sustainable Development and Disaster Studies (CSDDS), Bennett University

Key Accomplishments

May 2022

The Department of Natural and Applied Sciences, TERI School of Advanced Studies and University Women Development Cell (UWDC), Centre for Sustainable Development and Disaster Studies (CSDDS), School of Law, Bennett University jointly organized a webinar on the topic “Sustainable and Healthy diets” on May 5, 2022.

November, 2021

School of Law, Bennett University participated in the 5th World Congress on Disaster Management to be held from 24th to 27th November 2021 at IIT, Delhi. Fifth WCDM (WCDM-2021) was organized jointly by the Government of National Territory of Delhi, Indian Institute of Technology (IIT) Delhi and Disaster Management Initiatives and Convergence Society Hyderabad, in collaboration with National Disaster Management Authority, National Institute of Disaster Management, Defence Research and Development Organisation (DRDO) and The Indian Council of Medical Research, New Delhi. The World Congress witnessed addresses from many members of parliament, legislative assemblies and legislative councils who presented their visions of making their countries and constituencies resilient to disasters. This includes Hon'ble Shri Prime Minister Narendra Modi, Shri Amit Shah, Hon'ble Home Minister and Shri Arvind Kejriwal, Chief Minister of Delhi. Bennett University was a knowledge partner in this World Congress and organised a Special Technical Panel on the theme, “Disaster Management Studies in Legal Education”. In the technical session, several papers were presented by the faculty and students of School of Law, Bennett University.

February, 2021

National Institute of Disaster Management (NIDM), Ministry of Home Affairs Government of India conducted a collaborative webinar on ‘Management of crowd at large congregations’ with the Centre for Sustainable Development and Disaster Studies, School of Law, Bennett University, Greater NOIDA, UP on 23.2.2021. 229 participants attended the webinar. Prof. (Dr.) Nuzhat Parveen, Dean School of Law emphasized on the importance of Crowd Management in today's world and its significance in India – A country of celebrations. She welcomed NIDM's effort in this direction. Mr. Shekher Chaturvedi, Assistant Professor, NIDM, shared his knowledge about the characteristics of crowd and how a crowd converts into mob, thereby sharing examples of Naina Devi and Jodhpur Stampede tragedies during his session.



Bennett University was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Prof. (Dr.) Nuzhat Parveen is receiving the award on behalf of Bennett University for their outstanding achievement in the field of Disaster Risk Reduction.

April, 2020

Centre for Sustainable Development and Disaster Studies (CSDDS), School of Law, Bennett University organized a three-day training programme titled 'Basic Principles of Disaster Management' in collaboration with National Institute of Disaster Management (MHA). The programme covered important concepts like risk, vulnerability, hazard, disaster preparedness, resilience, disaster mitigation and legal regime for disaster management.



Bennett University has been consistently working on building and strengthening the framework of Disaster Management actions and policies in the country. They strive to promote institutional mechanisms in resolving to mitigate and adapt to the dangers and perils of both natural and man-made disasters and come forth with better solutions to this challenge. Our goal has been to recognize the need to adapt multi-disciplinary and multi-sectoral approach and incorporation of risk reduction in the developmental plans and strategies.

INSTITUTE OF CHARTERED FINANCIAL ANALYSTS OF INDIA



Institute of Chartered Financial Analysts of India University was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Prof. (Dr.) Vipin Khurana is receiving the award on behalf of ICFAI University for their outstanding achievement in the field of Disaster Risk Reduction.



INDIAN COUNCIL OF MEDICAL RESEARCH (ICMR)

Indian Council of Medical Research (ICMR) is the apex body for the formulation, coordination and promotion of health research in the Country. In its 111-year long journey, ICMR has played a pivotal role in dealing with various health challenges including outbreaks/epidemics and managing natural disasters. In recent past ICMR has been on the forefront in dealing with the outbreak of Nipah, ZIKA and recently the COVID-19 pandemic. The development of pan India laboratory network with state-of-the-art testing facilities linked with Asia's 1st BSL-4 laboratory at ICMR-NIV, Pune and development of diagnostics, reagents/kits and 1st indigenous vaccine the COVAXIN in partnership with Bharat Biotech was monumental in tackling the COVID-19 pandemic and helped in reducing the big disaster. ICMR has always been proactive in dealing with health situations arising from natural disasters like super cyclone, tsunami, excessive rainfall and floods, earthquakes and sudden outbreaks of unknown etiologies like JE/AES and others. On the spot diagnosis, investigations and prompt action has saved the nation on various occasions from health catastrophes. The formulation of guidelines, protocols, training on biosafety and biosecurity and other capacity building programs have helped in disaster reduction over the years. In view of the COVID-19 pandemic, emerging health challenges and make the country future ready for such emergencies, ICMR has recently launched a Mobile BSL-3 laboratory to reach on the spot quickly and save transportation of samples and time to deal the situation quickly. Also, the Council is in the process of setting up of 4 new National Institutes of Virology across the country as well as a separate Institute of One Health in Nagpur along with a Research Platform for southeast Asia Region to combat cross border infections. All these efforts will go a long way to help in disaster reduction and saving the country from various unknown outbreak/epidemics and other health issues.



Indian Council of Medical Research (ICMR) was felicitated by the WCDM- DRR Award, 2021. The award was given by Shri G Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India. Dr Rajni Kant Srivastava is receiving the award on behalf of Indian Council of Medical Research (ICMR) for their outstanding achievement in the field of Disaster Risk Reduction.



GENERAL RESEARCHER CATEGORY



1

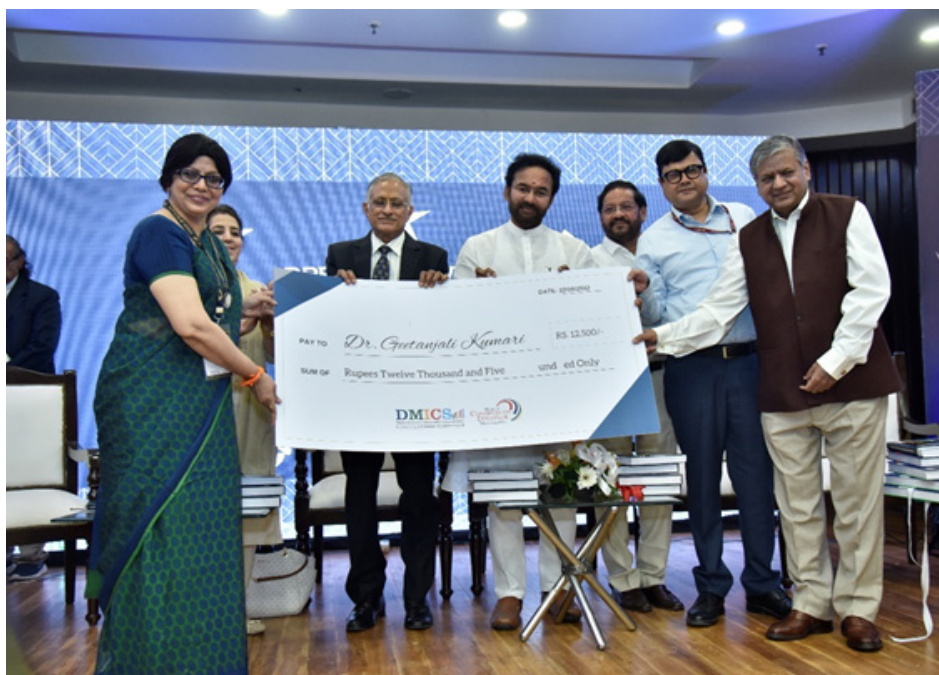
Dr. Geeta Vaidyanathan from Sri Sri University and Dr. Ramani Sankaranarayanan from CT Green Kitchener Ontario, Canada won the best research paper Award in the General Researcher Category for their work titled **"At the Cross-Roads in Cyclone-Prone Odisha - Butterfly's duel with development"** and received a cash prize of Rupees One Lakh by Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.

2

J.R.C. Jimenez, A.A. Sasaki, P.F.M. Simbulas and J.S. Buluran from Mapua University, Philippines bagged the Second Position in the General Research Category for their work titled **"Impact of COVID-19 on the Effectiveness of Safety Practices on Construction Projects: A Comparative Analysis Framework of Health and Risk Assessment"** and received a cash prize of Rupees Fifty Thousand by Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.

3

Dr. Subodh Wagle and Himali Mhatre from IIT Bombay bagged the Third Position in the General Research Category for their work titled **"Building Community Capabilities in Pandemic Response Role of Mental Models held by Lay People of Phenomena related to Covid-19"** and received a cash prize of Rupees Twelve thousand and Five Hundred by *Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.*



Dr. Geetanjali Kumari, Mr. Vivek Kumar Singh and Ms. Amrita Dhimant from Centre of Excellence in Disaster Management (CoEDM), Patna, Bihar and Dr Amritanjali from Computer Science & Engineering, BIT won the third Prize in the General Research Category for their work titled **"Family Preparedness for Disaster Risk Reduction by engaging local Governance and Communities in Bihar (India)"** and received a cash prize of Rupees twelve thousand and Five hundred by *Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.*



YOUNG RESEARCHER CATEGORY



1

Josephine Nongmaithem from Delhi University won the best research paper Award in Young Research Category for her work titled **"A Study of Community Vulnerability and Capacity in the Context of Climate Change in Majuli, Assam"** and received a cash prize of Rupees Fifty Thousand by *Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.*



Amal Sujith, Navaneeth Krishna S, Sagar Sajeev and O.V. Vishnu from Amrita Vishwa Vidyapeetham (Amrita University) bagged the Second Position in Young Researcher Category for their work titled **"Forest Fire Early Detection System using Wireless Beacon Network and UAV based Object Detection"** and received a cash prize of Rupees Twenty five Thousand by Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.

2

3

Ar. Chestha Khurana from ARCOP Associates Pvt. Ltd and Ms. Meghna Chatterji from Dehradun Institute of technology, Dehradun, India bagged the Third position in Young Researcher Category for their work titled **"Vulnerability assessment of a cyclone affected community Kapateswar, Puri Sadar"** and received a cash prize of Rupees Fifteen Thousand by Shri G. Kishan Reddy, Hon'ble Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India.

















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institutional and policy framework. Its vision is to build a safer and resilient world through sustainable
collective efforts, synergy by building capacities and enabling participation.



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Envisioning a Disaster Resilient Future

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