

Preface

It is with immense pride and profound gratitude that we present this commemorative coffee table book, marking the exceptional contributions and milestones celebrated at the **Sixth World Congress on Disaster Management (WCDM), Dehradun and the WCDM-Disaster Risk Reduction (DRR) Awards 2025, New Delhi**. This book not only serves as a tribute to the outstanding individuals and organizations dedicated to disaster management but also captures the essence of the journey toward building a resilient, safer, and more secure world in the face of an ever-evolving array of challenges.

Founded in 2005 in the wake of the devastating Indian Ocean Tsunami, the Disaster Management Initiatives and Convergence Society (DMICS) set forth a single mission: to enhance global awareness, understanding, and action around disaster risks. Over the years, DMICS has steadfastly worked to strengthen disaster preparedness, response, and recovery strategies, always to empower communities, governments, and organizations to confront the risks posed by both natural and man-made disasters.

From its inception, DMICS has been committed to bridging knowledge and action by creating an interdisciplinary platform where experts, practitioners, policymakers, scientists, and communities come together. The World Congress on Disaster Management (WCDM) has been a flagship initiative in this effort, providing a global stage for the exchange of groundbreaking research, best practices, and innovative solutions. Since its inaugural event in 2008, inaugurated by the late Dr. A.P.J. Abdul Kalam, former President of India, WCDM has grown to become one of the most prominent forums for disaster risk reduction. Each edition of the Congress has witnessed increased participation from global experts, government leaders, non-governmental organizations (NGOs), the media, and the private sector. From the highly impactful 6th WCDM in Dehradun to the upcoming 7th edition in Goa, WCDM continues to evolve, serving as a dynamic catalyst for change.

In line with this spirit of progress, the WCDM-DRR Awards were established in 2021 to honour those whose remarkable contributions have led to significant advancements in disaster risk reduction, climate resilience, and disaster management practices. These awards recognize the selfless dedication, bravery, and innovation displayed by individuals and organizations working at various stages of the disaster management cycle. Whether through pioneering new disaster risk management tools, creating effective policies, or displaying extraordinary courage during emergencies, the DRR Awards spotlight those whose efforts go above and beyond to safeguard humanity from the devastating effects of disasters.

On January 15, 2025, the WCDM-DRR Awards ceremony was held at the esteemed Constitution Club of India in New Delhi.

The ceremony was graced by distinguished guests, including the Hon'ble Union Minister of Commerce and Industry, **Shri Piyush Goyal**, who served as the Chief Guest. Dr. Ananda Babu, the Convener and President of WCDM, presided over the event, along with esteemed Guest of Honours **Shri. Justice M.M. Kumar**, Former Chief Justice of Jammu and Kashmir High Court, and **Shri. Sanjay Kumar, IAS**, Secretary, Department of School Education and Literacy, Government of India. The awards were presented to an inspiring group of scientists, researchers, policymakers, practitioners, defence & police personnel's and emergency responders who have dedicated their lives to improving disaster management practices and mitigating the impacts of both natural and man-made disasters.

This coffee table book serves as a lasting tribute to their accomplishments. It highlights not only the awardees but also the collaborative spirit and transformative work being done in the field of disaster management. It captures the pioneering research, the innovative approaches, and the tireless efforts of those who have shaped the landscape of disaster risk reduction and management. Their stories and contributions serve as a beacon of hope and inspiration for the future.

The World Congress on Disaster Management and the DRR Awards reflect a collective commitment to enhancing disaster resilience, fostering global partnerships, and creating a world that is better prepared to face the challenges of the 21st century. The ongoing initiatives, such as the nationwide school safety program and seismic safety efforts in Northeast India, are just a few examples of DMICS's active involvement in shaping a safer future for all.

As we turn the pages of this book, we are reminded of the profound importance of unity in the face of disaster. This volume not only celebrates the achievements of the individuals and organizations honoured here but also emphasizes the need for continued collaboration, knowledge-sharing, and innovation in the fight against the global threats posed by disasters.

On behalf of the Disaster Management Initiatives and Convergence Society (DMICS), I extend our heartfelt appreciation to all the distinguished guests, awardees, supporters, and partners who have contributed to our mission. Your efforts, passion, and dedication have been instrumental in making a lasting impact on the global disaster risk management landscape. Together, we will continue to build a safer, more resilient world for future generations.

Dr. S. Ananda Babu
President & Convener
DMICS-WCDM



Chief Guest :

Shri Piyush Goyal

Hon'ble Union Minister of Minister of Commerce and Industry, Government of India.

First and foremost, I would like to thank Justice M.M. Kumar for giving me this opportunity today. I must admit, when you first reached out, I had no idea we would be honoring such distinguished individuals. Yet, I accepted your invitation spontaneously, and now I feel truly honoured to be a part of this significant event. Dr. Ananda Babu, Sanjay Kumar Ji, all the awardees, distinguished guests, and friends from the media, it is indeed a wonderful initiative by DMICS and WCDM to recognize and award our nation's hidden jewels.

We've all experienced the impact of disasters. In the past, large-scale casualties were often assumed to be a natural consequence of such events. If a few hundred or even a few thousand people lost their lives or faced significant economic hardship, the rest of the country might not even give it a second thought. However, today's focus on disaster resilience, disaster-ready infrastructure, and creating ecosystems designed to anticipate and mitigate such tragedies is truly inspiring.

Take, for example, the dramatic decrease in casualties from cyclones in Odisha, Andhra Pradesh, and the entire eastern belt compared to 10, 15, or even 20 years ago. A large part of this improvement can be credited to the outstanding work of our meteorological department. Just yesterday, we celebrated the 150th foundation day of the India Meteorological Department (IMD), with the Honourable Prime Minister in attendance. It's a point of pride that the IMD has evolved into one of the most modern meteorological organizations, capable of accurately mapping natural disasters and providing timely warnings for earthquakes, floods, and extreme weather events.

The whole-of-government approach that has been taken is evident in the diverse group of awardees we are recognizing today. By honoring contributions from various aspects of disaster management and resilience, you have not only acknowledged their role in nation-building but have also sent a powerful message to the many unsung heroes who work tirelessly behind the scenes to save lives, protect communities, and minimize losses — whether it's loss of life, injuries, or economic devastation.

There was also mention of insurance, which is an area that requires much more awareness. We need to create seamless systems for faster claims processing. I sincerely hope no one will

ever have to approach the high court to get relief, and that such processes will be made more efficient. Trust is key in this area, and it must go both ways. While insurance companies must trust the insured, we too have to be cautious and avoid exaggerated claims. Accurate and honest assessments will significantly speed up the claims process and ensure relief reaches those who truly need it.

I would also like to take a moment to recognize the extraordinary work done by our armed forces. Whether it's the army, navy, air force, or paramilitary, they are always ready to make sacrifices in the most difficult circumstances to save our fellow citizens. Their courage and dedication are truly commendable. On this Indian Army Day today, let us all give a round of applause to our brave soldiers and personnel from all services who serve our nation with unparalleled devotion.

I'd like to mention a book titled *Resilient India*, published by Blue Craft, which highlights how India is evolving in disaster management. The book illustrates how, in times of crisis, we see our Honourable Prime Minister leading from the front, proactively addressing issues such as strengthening electricity grids, improving road and rail infrastructure, and swiftly restoring essential services. It reflects a unified, all-encompassing approach that the Prime Minister has consistently championed. We are also privileged to have leaders like Dr. P K Mishra, the Principal Secretary to the Prime Minister, who is a pioneer in the field of disaster management. Dr. Mishra's leadership is internationally respected, and it's an honour to have him as a guiding force in this area.

At DMICS, Mr. Anand Babu has done a commendable job in conceptualizing this initiative. I hope that you will continue to serve as a bridge between the government, disaster management personnel, and those involved in predictive analysis. With the advancements in artificial intelligence, there is so much potential to better anticipate and prepare for disasters, ensuring we can minimize their impact on our people and our nation.

Thank you very much, ladies and gentlemen, for your attention. I do want to apologize for the delay in starting the program today. We are juggling multiple responsibilities right now — elections, trade talks, and welcoming senior dignitaries from across the world. I promise that next time, I will ensure the program runs on schedule. Thank you once again.





Guest of Honour :

Shri Sanjay Kumar, IAS
Secretary, Department of School Education and Literacy, Government of India

Honourable Union Minister of Commerce and Industry Shri Piyush Goyal Ji, Honourable Justice Shri M. M. Kumar, Shri S. Ananda Babu from DMICS, all the awardees who have come from various parts of the country, ladies and gentlemen, and my friends from the media,

The Disaster Risk Reduction Awards are a significant reminder that disaster preparedness is something we all must embrace. Justice Kumar shared his experiences from his time as the Chief Justice of the Jammu and Kashmir High Court, highlighting how various government agencies come together to assist ordinary citizens in times of crisis. His intervention helped alleviate the suffering of residents who had faced irreparable losses and also sparked an important conversation: citizens must start considering ways to mitigate future risks, for example, the basic idea of insuring one's property.

I will be brief, but I'd like to mention a few examples we're encountering in the field of school education related to disaster risk reduction. Last year, in September, schools in Assam had to shut down due to the intense heat. It was surprising to think that in September, schools had to close because of the weather. The larger point I want to make is that increasingly schools are being shut down due to weather-related exigencies. We typically work around 220 days a year, but if schools are closed for 20-25 days annually, over a decade, the loss of learning due to weather events is equivalent to almost a year of education. This is a significant concern. We need to create situations where schools are the least disturbed part of society.

Can we do that? This is what we are grappling with. The essential idea of being prepared for disasters needs to be ingrained in us. DMICS and WCDM have played a crucial and responsible role in raising awareness about disaster risk reduction across the country. They have brought this issue into the public eye, making it an important consideration for government officers, colleagues, and ordinary citizens alike.

We need to acknowledge the reality that disasters can strike us, and we must be prepared for them. In Indian culture, I've observed that we often shy away from considering disaster risks because we tend to think that bad things happen to others, not to us. But when disaster strikes, we realize that no one is immune. We must implement robust practices and structures to safeguard ourselves against the increasing frequency of disasters, particularly in light of the undeniable realities of global warming and climate change..

With that, I would like to express my sincere gratitude to the Honourable Minister for being here with us today, and for graciously presenting the awards. I also take this opportunity to thank Honourable Justice Kumar for his invaluable association with this vital movement across the country.

Lastly, my heartfelt congratulations to Dr Ananda Babu for leading this important initiative nationwide.

Thank you.



Guest of Honour:

Shri. Justice M. M. Kumar, Former Chief Justice, Jammu & Kashmir High Court
Chair, Jury Committee, WCDM-DRR Awards, 2025

Honourable Shri Piyush Goyal,
Union Minister of Commerce and Industry,

Shri Sanjay Kumar IAS, Secretary,
Department of School Education and Literacy,

Dr Ananda Babu, President & Convener of DMICS-WCDM

It is truly a privilege to address this distinguished gathering today. We are joined by an iconic personality, our Union Minister, Shri Piyush Goyal, along with other eminent figures like Shri Sanjay Kumar, who is playing an innovative role in education, and Dr Ananda Babu, who, as a professor and the heart and soul of the DMICS World Congress, has been instrumental in driving this initiative.

I extend a warm welcome to the Honourable Minister, Shri Sanjay Kumar, and Shri Ananda Babu. I also wish to extend my congratulations and a hearty welcome to all the awardees present today, including the Chief Secretary of the Disaster Management Department of Bihar, the DGP of UT, Leh and Ladakh, the CMD of Power Grid Corporation of India, the CMD of Housing and Urban Development Corporation, the CMD of Engineers India Limited, the Chairman of the Airport Authority of India, the CMD of Konkan Railway Corporation Limited, and many others. It is not possible to name everyone, but each of you has made significant contributions to the field of disaster management.

Honourable Minister, you are one of the most influential figures in the realm of climate policy. Our country has been repeatedly impacted by various forms of disasters, leading to the tragic loss of human life and infrastructure. In response, we have proactively built institutional structures like the National Disaster Management Authority (NDMA), chaired by the Honourable Prime Minister himself. These structures are designed to ensure that we have prompt, holistic, and effective disaster management systems in place.

To share a personal experience, I was a victim of the devastating floods in Srinagar back in September when I was serving as the Chief Justice of Jammu and Kashmir. In the early hours of September 8th, my family and I were rescued from our home

when the water levels had reached Badami Bagh in Srinagar. By morning, my house was submerged under eight feet of water. We were moved to Hariniwas, and I contacted the Chief Minister to request an alternative location for the High Court, as the High Court building was submerged in 12 feet of water. The district court in Lal Trunk was in 18 feet of water. The entire system had collapsed. However, the administration was unable to find a location to temporarily operate the High Court or District Court.

In the face of this, we decided to temporarily run the High Court from an unoccupied house allotted to a newly appointed judge. I requested the Gunner to issue a notification, but they expressed their inability to act. So, I issued a handwritten notification declaring the new address of the High Court. Despite these challenges, we were able to continue handling time-bound cases, including those related to medical and engineering college admissions, which had a fixed deadline of September 30th.

More importantly, we addressed the issue of insurance claims. In the aftermath of the floods, people were facing significant losses, with their homes and businesses submerged in water. Insurance companies initially stated that it would take at least two years to assess the damages before any compensation could be issued. To expedite the process, we took the unprecedented step of ordering that 50% of the insured amount be immediately paid out. This decision resulted in the distribution of approximately 500 crores to commercial entities and residents of Srinagar. As a result, insurance participation in the region grew significantly, with 25% of the population now insured, compared to just 5% before the disaster.

Moving on, I would like to highlight the process by which these awardees were selected. For the first time, the Disaster Risk Reduction (DRR) awards were decided through a jury system, which I had the honour of chairing. The jury was composed of five distinguished members, including Dr. Muzaffar Ahmad, Former Director-General of Health Services and Former Member, NDMA ; Lieutenant General S. Ravi Shankar, Former DG, Border Road Organization ; Prof. Vinod K. Sharma, Senior Professor, IIPA, New Delhi and Prof. Chandan Ghosh, Former Professor at the National Institute of Disaster Management, New Delhi. After much deliberation, we established the criteria for the awards, which were publicly displayed on the DMICS

website. Personal letters were sent out, inviting nominations from institutions across the country.

We received 84 entries, from which a core committee selected 54 to be reviewed by the jury. Selecting the final 39 awardees from these 54 was no easy task, as all had shown remarkable contributions to disaster management. We categorized the awards into three segments: pre-disaster, during-disaster, and post-disaster. After careful consideration, the 39 awardees were chosen.

It is important to note that those who were not selected are no less deserving, but the jury had to make tough decisions. Today,

we are here to honor those 39 individuals, and I extend my heartfelt congratulations to them.

In conclusion, I would like to express my deep gratitude to the authorities for granting me the opportunity to chair the jury and announce these prestigious awards. Thank you for your patient attention, and I look forward to the awards being presented by the Honourable Minister.

Thank you.

1. Disaster Management Department, Government of Bihar

The Disaster Management Department is the nodal department of the Government of Bihar for effective management of both natural and human-induced disasters in the State. It is responsible for prevention, mitigation, response, relief, rehabilitation, and reconstruction. The Department is also responsible for legislation, policy making, and capacity building regarding disaster management. The Department also plays an important role in mainstreaming disaster risk reduction in the development plans of concerned departments.

Vision: The vision of the Disaster Management Department is to build a safe and disaster-resilient Bihar through the development of a comprehensive, proactive, multi-hazard, and technology-driven disaster management strategy. This will be achieved by strengthening existing efforts and fostering a culture of prevention, mitigation, and preparedness, with a particular focus on the most vulnerable communities. The overarching goal is to integrate disaster management into the state's governance structure through collective efforts and innovation.

Bihar has emerged as a trailblazer in disaster management by being the first state in India to develop a 15-year Disaster Risk Reduction (DRR) roadmap for the period 2015-2030, in alignment with the global Sendai Framework. To further enhance its disaster management capabilities, Bihar entered into a Memorandum of Understanding (MoU) with the Asian Disaster Preparedness Centre (ADPC) in Bangkok to support the implementation of this roadmap. Notably, Bihar has also established itself as a leader in disaster response by setting up clear disaster response protocols, including a provision for providing ex-gratia payments to the families of deceased individuals within 24 hours.

In a pioneering move, the state established a full-time battalion of the State Disaster Response Force (SDRF) under the administrative control of the Disaster Management Department, marking a first in India. Additionally, Bihar has actively worked on updating its Standard Operating Procedures (SOPs) for disaster management, including new protocols for earthquake and cyclone management. The state's proactive response to the 2019 floods, which affected over 11.9 million people, serves as an example of its preparedness and operational efficiency. The floods impacted 4,225 villages across 28 districts, and Bihar successfully evacuated 125,000 individuals to safer locations. The state opened 1,351 relief camps and established 2,867 community kitchens that provided daily meals to 7.4 million people, alongside medical facilities, clean drinking water, and gender-sensitive sanitation facilities.

The SDRF, operational since 2010, has significantly enhanced local disaster preparedness, reducing reliance on the National Disaster Response Force (NDRF) and bolstering the state's capacity to manage disasters independently. Bihar has also integrated the Sendai Framework into its Disaster Risk Reduction (DRR) strategy and signed MoUs with ISRO and NRSC for conducting multi-hazard risk assessments, particularly focusing on the health and agriculture sectors. Further enhancing community preparedness, the state launched the Indravjara mobile app to provide real-time early warning of lightning strikes.

Future Planning: Looking ahead to 2030, Bihar aims to implement robust policies to mitigate livelihood risks associated with agriculture and small-scale industries, focusing on risk avoidance, transfer, sharing, and compensation. This forward-looking strategy will ensure that vulnerable communities are well-equipped to adapt to the impacts of climate change and other environmental challenges. Furthermore, the state plans to integrate disaster risk management into both rural and urban habitat planning processes, with land zoning and development planning prioritizing disaster risk reduction. These initiatives will foster safer, more resilient communities.

Moreover, the state will reinforce all public and private buildings, both new and existing, to withstand a range of multi-hazard risks, thereby enhancing the safety and resilience of the state's infrastructure. These collective efforts will not only reduce the risk of disasters but will also empower Bihar to build a future where communities are better prepared and resilient to the ever-evolving challenges posed by disasters.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious WCDM-DRR Award to the, Disaster Management Department, Government of Bihar . Shri Nadeem Ahmad, IAS, Joint-Secretary Disaster Management Department, Government of Bihar is receiving the award on behalf of the Disaster Management Department Government of Bihar for their marvellous achievement in the projects and interventions for Disaster Risk Reduction.

2. Department Of Disaster Management, Relief And Rehabilitation, Government Of Maharashtra

Introduction to Disaster Risk Management in Maharashtra

The Disaster Risk Management (DRM) Program, launched in 2003 in collaboration with the United Nations Development Programme (UNDP), marked a critical milestone in enhancing disaster preparedness and response systems in India, with a special emphasis on Maharashtra. Initially covering 17 states and 169 districts, the program focused particularly on 14 multi-hazard-prone districts in Maharashtra. This initiative laid the foundation for the establishment of key disaster management frameworks, such as the Maharashtra State Disaster Management Authority (MSDMA), the State Executive Committee, the upgradation of the State Emergency Operation Center (SEOC), and the formulation of Disaster Management Plans in collaboration with Yashada.

Expansion of the Maharashtra Disaster Risk Management Program (MDRM)

In June 2009, as the DRM program concluded, the Maharashtra Disaster Risk Management Program (MDRM) was launched. This expanded program widened its scope to include all districts of Maharashtra, as well as the Mumbai Municipal Corporation. The MDRM focuses on three primary components: Planning, Capacity Building, and Awareness Generation. These pillars are essential for strengthening disaster preparedness, enhancing institutional and community capacities, and fostering awareness on disaster risks and mitigation strategies. The program's overarching objective is to ensure that Maharashtra is well-equipped to manage disasters of varying scales, from local incidents to large-scale emergencies.

Institutional Framework and Financial Commitment

The Maharashtra State Disaster Management Authority (MSDMA) was formally established in 2006 under the Disaster Management Act, with the Chief Minister of Maharashtra serving as its chairperson. The creation of MSDMA was a crucial step in bolstering the state's disaster management framework. Further reinforcing the state's commitment to enhancing disaster preparedness and response, the Maharashtra government has allocated Rs. 23,737 crores to the Maharashtra State Disaster Risk Management Fund. This investment will be utilized over five years (2021-2026) to strengthen disaster management efforts, ensuring that the state is better prepared for future risks and capable of responding effectively when disasters strike.

Identification of Additional Disasters and the Role of State Disaster Management Plans

In recognition of the diverse range of hazards that affect the state, Maharashtra has identified six additional disasters beyond the 12 recognized by the Central Government. These include unseasonal

rainfall, heavy rainfall, accidental fires, incessant rain, lightning, and storm surges. The proactive identification of these additional risks demonstrates the state's comprehensive approach to disaster risk reduction. The State Disaster Management Plan (SDMP) plays a pivotal role in this framework, providing clear guidelines for disaster preparedness, response, and mitigation, ensuring a coordinated and effective approach to tackling various risks.

Key Past Disasters and Their Impact

Maharashtra has faced a series of devastating disasters, including the Latur Earthquake (1993), the Mumbai Floods (2005), and Cyclone Phyan (2007). These catastrophic events underscored the urgent need for an integrated, systematic approach to disaster management. The impact of these disasters highlighted the importance of prevention, effective mitigation strategies, and coordinated response efforts to reduce the loss of lives and property. The lessons drawn from these past tragedies have been instrumental in shaping Maharashtra's contemporary disaster risk management strategies, improving preparedness, and strengthening response frameworks across the state.

Current Initiatives and Future Plans

As part of its ongoing efforts to enhance disaster resilience, Maharashtra is preparing a comprehensive Landslide Management Plan, expected to be completed by 2024. This plan is part of the state's broader commitment to developing multi-hazard strategies that integrate technology and scientific data to improve disaster forecasting and early warning systems. By focusing on prevention, mitigation, and preparedness, the state aims to minimize loss of life, protect property, and reduce environmental degradation caused by disasters. Furthermore, Maharashtra is committed to ensuring that its disaster management initiatives align with global best practices, utilizing cutting-edge technology to stay ahead of emerging threats.

Building a Resilient Future

The ultimate goal of Maharashtra's disaster risk management efforts is to create a safe, disaster-resilient state capable of withstanding the impacts of diverse hazards. The state's approach is holistic and proactive, incorporating technological advancements and evidence-based strategies to tackle both natural and human-made disasters. Key priorities include saving lives, minimizing infrastructure and property damage, and ensuring environmental sustainability. A robust disaster management plan ensures that there is a clear, coordinated response mechanism at the state, district, and local levels, with defined roles and responsibilities for all stakeholders. This approach guarantees that resources are effectively mobilized and that disaster management activities are seamlessly coordinated.

By cultivating a culture of preparedness and resilience, Maharashtra aims to protect its citizens and communities from the destructive impacts of disasters, while continuously improving its disaster management infrastructure to build a more resilient future.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious WCDM-DRR Award to the, Maharashtra State Disaster Management Authority, Dr. Sonia Sethi, IAS, Additional Chief Secretary Disaster Management, Relief & Rehabilitation, Revenue & Forest Department, Government of Maharashtra is receiving the award on behalf of the Maharashtra State Disaster Management Authority for their marvellous achievement in the projects and interventions for Disaster Risk Reduction.

3. SHRI SHIV DARSHAN SINGH, IPS

Director General of Police (DGP), Ladakh Police of. U.T Ladakh

Dr. Shiv Darshan Singh's Contribution to Disaster Management in Ladakh

Dr. Shiv Darshan Singh, the Director General of Police (DGP) for Ladakh Police, has made significant contributions to disaster management, particularly in the Union Territory of Ladakh. With a Ph.D. in "Biological Weapons and India - Challenges, Threat Perception, and Preparedness" from the University of Jammu, Dr. Singh has a deep understanding of both security and disaster management issues. His extensive career spans key roles in the Intelligence Bureau, the Ministry of External Affairs, and as a Counsellor at the High Commission of India in Colombo, Sri Lanka.

Since 2007, Dr. Singh has been closely involved with the National Disaster Management Authority (NDMA), where he is a member of the steering committee responsible for formulating the Biological Defence Plan for India. His expertise in disaster management has been instrumental in shaping policies and actions at both the national and regional levels. Dr. Singh has also been at the forefront of implementing disaster precautionary and preventive measures in Ladakh, a region that is highly susceptible to both natural and man-made disasters.

A key achievement of Dr. Singh's tenure in Ladakh is his role in supervising and coordinating various rescue and search operations. He played an essential part in the establishment and implementation of the Emergency Response Support System (ERSS) in the region, significantly enhancing the region's disaster response capabilities. His leadership has contributed to improving disaster preparedness, response mechanisms, and resilience in Ladakh, a region prone to a wide range of hazards.

The District Administration of Leh, where Dr. Singh's influence has been pivotal, began developing a District Disaster Management Plan (DDMP) in 2011. The plan was updated in 2019-20, with a particular focus on integrating Disaster Risk Reduction (DRR) strategies and the Sendai Framework into the region's disaster management plans. The updated DDMP seeks to strengthen the disaster response framework in the region by improving early warning systems, rescue protocols, and the preparedness of local communities and authorities to respond to different types of disasters.

Following the creation of Ladakh as a Union Territory on October 31, 2019, the administration continues to build on the region's disaster management capabilities. Ladakh consists of the Leh and Kargil districts, located in the Ladakh Himalayan region. This region is particularly challenging due to its remoteness and harsh climatic conditions. Leh, one of the most remote districts in India, is accessible by land only during the summer months, while aerial connectivity is the only mode of transportation in the winter. The extreme winter conditions and a short summer season limit the region's working period and its agricultural productivity, which is largely subsistence-based. As a result, most essential supplies are brought in from outside the district, making the region highly dependent on external resources and vulnerable to supply disruptions in times of crisis.

Ladakh, and particularly Leh, is classified as a multi-hazard-prone area, which significantly increases its vulnerability to natural disasters. These include earthquakes, cloudbursts, floods, landslides, avalanches, wind storms, cold waves, snow storms, droughts, and locust invasions. Additionally, the region faces man-made threats such as war, chemical hazards, road accidents, fires, and conflict. Leh is situated within Seismic Zone-IV, a high-risk area for earthquake damage, as it lies along a strike-slip fault running through the Zanskar and Ladakh ranges. The combination of extreme climatic conditions, geographical challenges, and a variety of disaster risks makes Leh particularly vulnerable, requiring a well-coordinated and effective disaster management strategy.

Dr. Singh's work in Ladakh has contributed significantly to building a more resilient and prepared community in a region facing complex challenges. His efforts in disaster management, along with his strategic leadership, have greatly enhanced the region's ability to respond to and recover from a wide range of natural and man-made disasters, thereby ensuring the safety and security of the people of Ladakh.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Shiv Darshan Singh Jamwal, IPS. DGP UT of Ladakh. Dr. Shiv Darshan Singh Jamwal, is receiving the award for their marvellous achievement in the projects and interventions for Disaster Risk Reduction.

4. Power Grid Corporation of India Limited

Pioneering India's Power Transmission and Renewable Integration

The Power Grid Corporation of India Ltd. (POWERGRID) has been a cornerstone of India's power transmission infrastructure, playing a key role in ensuring the reliable and efficient delivery of electricity across the country. The origins of POWERGRID trace back to 1980 when the Rajadhyaksha Committee on Power Sector Reforms recommended extensive reforms in India's power sector. This led the Government of India to make a policy decision in 1981 to form a National Power Grid to facilitate the integrated operation of both the central and regional transmission systems. This vision materialized on October 23, 1989, with the establishment of the National Power Transmission Corporation Limited under the Companies Act of 1956, tasked with planning, executing, operating, and maintaining the high-voltage transmission systems in India. The corporation's name was changed in October 1992 to Power Grid Corporation of India Limited (POWERGRID), a name it continues to bear today.

Since its inception, POWERGRID has achieved remarkable milestones that have significantly shaped India's power sector. A landmark achievement for the company was the development of the National Grid, which interconnected regional grids across India and has a total transfer capacity of 118,740 MW. This interconnected grid has played a pivotal role in optimizing electricity generation and distribution across the country, ensuring greater reliability, load balancing, and reduced transmission losses. POWERGRID's transmission network has grown substantially, comprising a vast Inter-State Transmission Network that includes 179,594 circuit kilometers of transmission lines, 546 GVA of capacity, and 280 substations. Remarkably, the company maintains an impressive 99.75% availability rate, underscoring its reliability and efficiency.

As part of its vision for a sustainable future, POWERGRID has proactively embraced renewable energy integration into its operations. In alignment with global sustainability trends and India's renewable energy goals, the company has focused on developing Green Energy Corridors and Renewable Energy Management Centers. These initiatives are designed to facilitate the efficient integration of renewable energy sources like solar and wind power into the national grid, addressing the challenges of intermittent generation and ensuring that renewable energy is seamlessly transmitted across the country. POWERGRID's efforts in this direction have positioned it as a

leader in enabling India's transition to a low-carbon energy system.

In addition to its focus on renewable energy integration, POWERGRID has been at the forefront of technological advancements in power transmission. The company developed Asia's first multi-terminal ±800 kV High Voltage Direct Current (HVDC) system, a key breakthrough in long-distance and high-efficiency power transmission. The development of the 1200 kV Ultra High Voltage Alternating Current (UHVAC) transmission system further exemplifies POWERGRID's leadership in technological innovation. The company has also been a pioneer in Flexible AC Transmission Systems (FACTS), Gas Insulated Substations (GIS), and Voltage Source Converter (VSC) HVDC systems, all of which contribute to the modernization and optimization of power transmission across India.

While its primary focus remains on high-voltage transmission through its EHVAC and HVDC systems, POWERGRID has diversified its operations to support India's growing telecommunications and consulting needs. Recognizing the potential of its extensive pan-India transmission network, POWERGRID ventured into the telecom sector by stringing Optical Ground Wire (OPGW) for telecommunications across its transmission lines. This strategic move has provided a robust, secure, and scalable communication infrastructure, serving not only the power sector but also enabling broader connectivity across the country.

Moreover, POWERGRID offers a wide range of consultancy services both domestically and internationally. Drawing from its decades of experience in power transmission, sub-transmission, distribution management, load dispatch, and communication systems, the company provides expert advisory and engineering solutions to clients in India and abroad. Its consulting services support the development of energy infrastructure, helping countries and organizations build and manage their power transmission systems efficiently and sustainably.

Through its extensive contributions to the power transmission sector, technological innovations, and commitment to renewable energy integration, POWERGRID continues to be a key player in India's energy landscape. Its efforts not only support the country's growing demand for electricity but also contribute to India's broader goals of energy security, sustainability, and economic growth.



Shri Piyush Goyal, Hon'ble Union Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to The Power Grid Corporation of India Ltd. Shri R K Tyagi, CMD Power Grid Corporation of India Ltd is receiving the award on behalf of The Power Grid Corporation of India Ltd for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

5. Housing and Urban Development Corporation Limited (HUDCO)

The Housing and Urban Development Corporation Limited (HUDCO): A Cornerstone of India's Urban Development

The Housing and Urban Development Corporation Limited (HUDCO) is a significant Central Public Sector Enterprise (CPSE) under the Ministry of Housing & Urban Affairs (MoHUA), playing a pivotal role in the growth and development of urban infrastructure and housing in India. Established as "The Housing and Urban Development Finance Corporation Private Limited" on April 25, 1970, the organization was renamed to its present title in 1974. With its deep roots in the country's urban development sector, HUDCO was notified as a public financial institution in 1996, marking a milestone in its growth trajectory. In 2001, the corporation received its certificate of registration from the National Housing Bank (NHB), enabling it to operate as a housing finance institution with greater authority and reach.

HUDCO's mission is to provide financial solutions and credit facilities for the housing and infrastructure sectors, with a particular emphasis on urban development. Its broad spectrum of activities includes financing housing projects, urban infrastructure, and even new or satellite town developments, both within India and internationally. By contributing significantly to the planning and construction of sustainable urban spaces, HUDCO supports the government's goal of improving living conditions and creating efficient, self-sustaining cities. It is also involved in subscribing to debentures and bonds issued for the development of these sectors, and it plays a role in financing industrial enterprises linked to building materials, a key component for urban growth. Furthermore, HUDCO is entrusted with administering funds from the Government of India and other sources to support the development of housing and infrastructure projects nationwide.

In addition to providing financing, HUDCO is actively engaged in the promotion and establishment of housing and infrastructure solutions, offering consultancy services to domestic and international clients. The corporation's reach extends into innovative areas such as participation in Alternative Investment Funds (AIFs), Real Estate Investment Trusts (REITs), and Infrastructure Investment Trusts (InvITs) that focus on housing and infrastructure projects. HUDCO's exploration into these emerging sectors demonstrates its commitment to staying ahead of the curve in an ever-evolving industry. Moreover, the corporation is contemplating the creation of its own mutual fund, specifically focused on the housing and infrastructure sectors, which would provide further investment opportunities and contribute to long-term growth in these fields.

As a key player in the Government of India's flagship urban development initiatives, HUDCO plays a critical role in implementing and advancing programs aimed at improving urban living conditions and expanding housing access. It is actively involved in prominent government schemes like Housing for All, the Pradhan Mantri Awas Yojana – Urban (PMAY-U) 2.0, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), and the Smart Cities Mission. In these capacities, HUDCO acts as the technical arm of MoHUA, lending its expertise in planning, financing, and managing urban infrastructure projects. Its contributions to these programs are vital for the realization of the Government's vision of creating inclusive, sustainable, and technologically advanced cities that offer a high quality of life to all citizens.

HUDCO is also keenly focused on aligning its efforts with the broader national vision for a developed India, especially with the goal of achieving a "Viksit Bharat" by 2047. The organization is committed to enhancing its resource base, improving liquidity, and reducing the cost of funds, all while focusing on the creation of world-class infrastructure. By working to expand its financial and technical capacity, HUDCO aims to support the government's ambitious infrastructure development goals, ensuring long-term sustainable growth in the housing and urban sectors.

Looking toward the future, HUDCO plans to broaden its presence in international markets to facilitate competitive lending rates for infrastructure projects. This global expansion will enable the corporation to contribute to sustainable infrastructure development in other nations while continuing to support India's infrastructure needs. With its extensive experience in urban development, HUDCO is poised to expand its operations, improve its consultancy services, and initiate capacity-building projects that will support both domestic and international clients in creating resilient and sustainable urban spaces.

Ultimately, HUDCO strives to evolve into a 360° solution provider for the housing and infrastructure sectors, addressing the capital requirements, technological needs, and capacity-building challenges of the industry. By offering comprehensive solutions that span financing, technical expertise, and consultancy, HUDCO is helping shape the future of India's urban infrastructure. Through its ongoing efforts, the corporation continues to play an instrumental role in realizing the Government's vision of sustainable urbanization and improving the quality of life for all citizens.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to **The Housing and Urban Development Corporation Limited (HUDCO)**. Shri Sanjay Kulshrestha, CMD Housing & Urban Development Corporation (HUDCO) Limited is receiving the award on behalf of The Housing & Urban Development Corporation (HUDCO) Limited for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

6. Engineers India Limited (EIL)

Engineers India Limited (EIL), a leading Public Sector Global Energy Consultancy under the Ministry of Petroleum & Natural Gas (MoPNG), Government of India, has established itself as a prominent player in the energy and infrastructure sectors. The company's expertise spans across a wide range of services, including alternate fuels, water and waste management, fertilizers, and infrastructure development. Under the leadership of Vartika Shukla, EIL has made significant strides in expanding into emerging green energy sectors by forging strategic collaborations with industries and academia. One of the company's key goals is to achieve Net Zero carbon emissions by 2035, reinforcing its commitment to environmental sustainability.

EIL's core values center around excellence, customer relationships, innovation, integrity, and continuous learning. The organization prioritizes quality in all aspects of its operations and fosters a collaborative environment that thrives on cross-functional teamwork and a sense of ownership. As a result, EIL has built a reputation for delivering cost-effective and environmentally sustainable solutions, especially in the areas of resource and waste management. EIL works with both industries and state municipalities to address challenges related to solid and hazardous waste management, resource conservation, liquid effluent treatment, industrial emissions management, and more. The company is at the forefront of solving waste management issues by commercializing innovative technologies and cleaner processes, ensuring better conservation of the environment and ecosystem.

EIL's engineering philosophy has evolved to focus on long-term sustainable growth, considering the economic, social, and environmental impacts of its operations. The company has redefined its business models to develop environmentally acceptable energy solutions that benefit from the cost-effectiveness of hydrocarbons, while simultaneously advancing technology for renewable and sustainable energy forms. EIL's environmental policy emphasizes compliance with environmental regulations, promotes green technologies, and encourages the adoption of the "reduce, reuse, recycle" philosophy in all operations. The company is dedicated to fostering environmental awareness among employees and stakeholders alike.

In its role as a leading consultant in India, EIL specializes in conducting Environmental Impact Assessments (EIA) and preparing Environmental Management Plans (EMP) for new projects. Through detailed EIA studies, EIL helps predict and assess the environmental and socio-economic impacts of proposed facilities, ensuring that any negative impacts are mitigated and sustainability is achieved. The company also conducts environmental health risk assessments, enabling its clients to understand the effects of pollutants on the health of local communities. Furthermore, EIL is a pioneer in the deployment of state-of-the-art technologies for effluent recycle/reuse, zero liquid discharge (ZLD) requirements, carbon management, hazardous and solid waste management, and energy-efficient processes.

With its dedication to sustainability, cutting-edge technology, and proactive environmental stewardship, Engineers India Limited continues to set benchmarks for excellence in the energy and infrastructure sectors, contributing significantly to a cleaner, greener, and more sustainable future.

In the Alternative Fuels space, EIL is foraying into Bio-fuels sector as they are a promising alternative for supplementing fossil fuels towards a sustainable energy future. The Company has forged a strategic alliance with CHEMPOLIS OY, Finland for 2G Ethanol technology and is collaborating with CSIR-IIP to develop Bio-Jet Fuel processes to produce Bio-Aviation Turbine Fuels (Bio-ATF).

EIL provides a wide spectrum of services in the Green Hydrogen sector such as Feasibility Studies, Basic Design and Engineering Packages for:

- Electrolyser based Green Hydrogen plant with limited support from the Electrolyser Manufacturer
- Green Hydrogen Storage
- Green Hydrogen Transportation through pipeline



Shri Piyush Goyal, Hon'ble Union Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Engineers India Limited (EIL) for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

7. Airports Authority of India (AAI)

Shri Vipin Kumar, IAS, the current Chairman of the Airports Authority of India (AAI), bringing with him an extensive career spanning over 32 years in the aviation and infrastructure sector. Dr. Kumar has made significant contributions to the development of India's aviation industry, particularly in the construction, maintenance, and modification of airports across the country. His expertise and leadership have left a lasting impact on several key airports.

Dr. Kumar began his career with AAI in 1990 at Jammu Airport, marking the beginning of his long association with airport management. Over the years, he held crucial roles at various airports, including those in Mumbai, Delhi, Goa, Jabalpur, Nagpur, and Sikkim. This wide-ranging experience in airports of varying scales allowed him to drive strategic initiatives, improve operational efficiencies, and enhance the overall functioning of the aviation sector.

One of his key achievements was his leadership at Biju Patnaik International Airport in Bhubaneswar and Srinagar International Airport, where he served as the Airport Director. During his tenure, both airports saw seamless operations and enhanced services, which contributed to the growth of air travel in these regions. His work in these airports helped establish a solid foundation for the continued growth and modernization of India's aviation infrastructure.

In addition to his operational contributions, Dr. Kumar has been a thought leader in the aviation industry. He has served as a keynote speaker at numerous aviation seminars, both within India and internationally. His insights into airport management, aviation policy, and the future of the industry have shaped discussions and contributed to the evolution of global aviation practices.

Throughout his career, Dr. Kumar has been instrumental in raising operational and safety standards at airports across India.

His deep understanding of airport infrastructure has been crucial in improving passenger experience, optimizing processes, and ensuring safety and security. Under his leadership, numerous airport modernization projects have been successfully completed, increasing the capacity and efficiency of airports throughout the country.

Dr. Kumar's influence extends beyond airport operations to include shaping national aviation policy and planning. He has been actively involved in the development and implementation of policies concerning airport operations, air traffic management, and infrastructure development. His expertise in regulatory frameworks and industry trends has made him a key figure in India's evolving aviation landscape.

Another of Dr. Kumar's notable contributions is his commitment to sustainability and environmental responsibility in aviation. He has played a pivotal role in implementing green initiatives across airports to minimize the environmental impact of aviation activities while promoting sustainable development practices. His efforts in this area have been recognized by industry peers and environmental advocacy groups alike.

Dr. Kumar's leadership style is characterized by collaboration and relationship-building. He has successfully fostered strong partnerships with government agencies, industry stakeholders, and international aviation organizations. His ability to work with diverse teams and align their goals with global best practices has been crucial in positioning India as a leading player in the global aviation sector.

In addition to his professional achievements, Dr. Kumar continues to serve as a mentor to aspiring aviation professionals, inspiring the next generation of leaders in the sector. His legacy of dedication, leadership, and innovation continues to influence the future of aviation in India.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Airports Authority of India for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

8. Konkan Railway Corporation Limited (KRCL)

- Konkan Railway Corporation Limited (KRCL) is a distinguished public sector undertaking (PSU) under the Ministry of Railways, Government of India. Established with the primary objective of providing connectivity along the West Coast of India, KRCL plays a pivotal role in linking the coastal states of Maharashtra, Goa, and Karnataka. Spanning over 700 kilometers, the railway corridor facilitates both passenger and freight transportation, serving as a vital link for economic activities, tourism, and regional connectivity.
- The Konkan Railway line is renowned for traversing some of the most challenging terrains in India, particularly the rugged Western Ghats. Due to the region's difficult topography, the route is marked by more than 2,000 bridges and over 90 tunnels. The engineering feat required to navigate such terrain was groundbreaking, with the construction of the railway line in the early 1990s marking a significant achievement in India's infrastructure development. KRCL's ability to manage and operate a railway in such demanding conditions highlights its technical expertise and the scale of innovation involved in the project.
- In addition to operating trains, KRCL has become a major player in the field of railway infrastructure development. The corporation has developed substantial capabilities in laying tracks, constructing bridges, building stations, and modernizing the rail network. Beyond its core responsibility of running trains, KRCL has been involved in multiple high-profile infrastructure projects that contribute to the modernization of India's railway system. This includes the development of freight corridors connecting key industrial hubs and ports, enhancing the efficiency and capacity of the railway network across the western region.
- One of the most notable achievements of KRCL is the construction of the Chenab Railway Bridge, a world record-holder as the highest railway bridge in the world. Standing at an impressive 359 meters (1,178 feet) above the Chenab River, this bridge surpasses the height of the Eiffel Tower. It forms a key part of the Udhampur-Srinagar-Baramulla Rail Link (USBRL) project, aimed at providing a crucial rail connection to the Kashmir region, which has historically been isolated due to its challenging geographical conditions. The bridge not only represents a significant engineering milestone but also underscores KRCL's ability to execute large-scale infrastructure projects that push the boundaries of modern engineering.
- The construction of the Chenab Railway Bridge faced numerous technical challenges, including extreme weather conditions, seismic activity, and rugged terrain. Despite these obstacles, KRCL successfully completed the project using cutting-edge materials and innovative engineering techniques, ensuring the stability and safety of the bridge. This remarkable structure is expected to enhance regional connectivity, foster economic development, and improve transportation access to remote areas.
- Beyond major infrastructure projects, KRCL continues to invest in the modernization of its operations. The corporation has made strides in improving safety standards, enhancing operational efficiency, and exploring sustainable practices. For instance, KRCL has been actively integrating solar energy into its operations to reduce its environmental footprint and promote greener, more energy-efficient services. These initiatives reflect KRCL's commitment to creating a sustainable and technologically advanced railway system.

As KRCL expands its network and takes on more infrastructure projects, it continues to play a key role in shaping the future of India's rail transport. The corporation's work along the West Coast, particularly its ground-breaking infrastructure projects such as the Chenab Railway Bridge, ensures that it will remain an integral player in India's transportation landscape. With its proven track record of executing complex projects, KRCL is well-positioned to continue its legacy of excellence in operational management, infrastructure development, and innovation in the years to come.



Shri Piyush Goyal, Hon'ble Union Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Konkan Railway Corporation Limited (KRCL). **Shri Santosh Kumar Jha, IRTS CMD** Konkan Railway Corporation Ltd. is receiving the award on behalf of The Konkan Railway Corporation Ltd. for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to MECON LIMITED. Shri Umesh Kumar Vishwakarma, Executive Director MECON Ltd.. is receiving the award on behalf of MECON LIMITED for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

9. MECON LIMITED

MECON LIMITED, established in 1959 as the Central Engineering and Design Bureau (CEDB), has grown to become India's leading Design, Engineering, Consultancy, and Contracting organization. It offers a full range of services necessary for setting up both Greenfield and Brownfield projects from concept to commissioning, including Engineering, Procurement, and Construction (EPC) execution. Over its six decades of operation, MECON has garnered significant experience and expertise, having completed over 4,000 consultancy and EPC assignments for various clients in India and abroad. With a Pan India network of offices, MECON is a multi-disciplinary organization composed of skilled engineers, scientists, and technologists dedicated to driving innovation and excellence in infrastructure development.

MECON has played a pivotal role in the growth and expansion of India's Iron and Steel industry. The company has been instrumental in designing and executing major steel plants, providing consultancy and engineering solutions that have been central to the modernization of the sector. MECON's leadership and technical expertise have made it a trusted partner for steel manufacturers in both domestic and international markets.

The company is ISO 9001:2015 certified and has established numerous technological collaborations with leading global organizations across various sectors. These partnerships strengthen MECON's capabilities, enabling it to offer cutting-edge solutions in multiple areas of industry.

Areas of Activities:

Metals: MECON offers comprehensive services to the metals industry, particularly in the development of steel plants and facilities. The company's expertise spans:

- **Raw Materials & Mining Beneficiation:** Providing solutions for efficient extraction and processing of raw materials.
- **Coke Ovens, By-Product Plants:** Engineering coke oven plants to meet industry standards.
- **Agglomeration:** Implementing agglomeration processes for improving material handling.
- **Iron Making & Steel Making:** Offering solutions for iron and steel production facilities, including steel casters.
- **Rolling Mills:** Design and implementation of rolling mills for the production of steel products.

- **Non-Ferrous and Auxiliary Facilities:** Engineering facilities for non-ferrous metals and associated auxiliary infrastructure.

Energy: MECON has a significant presence in the energy sector, providing end-to-end solutions across oil, gas, and power generation. Key areas include:

- **Oil & Gas:** Including long-distance hydrocarbon pipelines, compressed natural gas (CNG) stations, city gas distribution (CGD) networks, and more.
- **Petroleum and Gas Projects:** Such as POL terminals, LPG bottling plants, gas processing plants, and LNG/L-CNG works.
- **Power:** MECON offers expertise in thermal, hydel, and solar power generation, as well as transmission and distribution. The company is also involved in energy management, waste heat recovery, and energy audits.
- **Hydrogen Projects:** Engineering solutions for hydrogen production and infrastructure.

Infrastructure: MECON has a strong track record in the design and execution of infrastructure projects across various sectors:

- **Institutional and Green Buildings:** Development of eco-friendly buildings and structures for educational institutions, offices, and public services.
- **Healthcare:** Designing and constructing healthcare facilities and hospitals.
- **Ports and Material Handling:** Providing solutions for port infrastructure, logistics, and material handling systems.
- **Defence and Sports Complexes:** Designing specialized infrastructure for defence and sports facilities.
- **Water Management and Desalination:** Expertise in water supply, treatment, desalination, and wastewater management projects.
- **Roads & Bridges:** Design and construction of roads, highways, and bridges for improved connectivity.
- **Telecom:** Infrastructure development for telecommunications, ensuring seamless communication networks.

MECON's diversified portfolio of projects in metals, energy, and infrastructure allows it to remain a key player in India's industrial development. With its broad capabilities in EPC, consultancy, and project management, MECON continues to contribute to the growth of critical sectors such as steel, energy, and infrastructure, both domestically and internationally. The company's focus on innovation, quality, and sustainability has earned it widespread recognition and numerous awards in the fields of infrastructure and technological advancement.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Bharat Earth Movers Limited. Shri Ranvir Singh Chopra CGM(Offg) Regional Manager - Delhi BEML Limited. is receiving the award on behalf of BEML for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

10. Bharat Earth Movers Limited

The company in focus is a leading manufacturer of heavy equipment with a specialized focus on sectors such as mining, construction, defense, and railways. Its core products include state-of-the-art machinery and equipment designed to support large-scale infrastructure development, defense projects, and industrial operations. The company has carved out a strong presence in the manufacturing of equipment that is integral to the construction, transportation, and defense industries, contributing significantly to the growth of these critical sectors in India and abroad.

Primarily, the company operates across four key sectors: **mining, defense, rail, and aerospace**. In the **mining sector**, it manufactures heavy-duty equipment such as excavators, loaders, and dump trucks that are essential for large-scale mining operations. These machines are designed to perform under the most challenging and rugged conditions, ensuring optimal productivity and safety. In the **defense sector**, the company plays a crucial role in the production of military-grade vehicles, weapons systems, and other high-tech defense equipment, further enhancing India's defense capabilities. The **rail sector** is another critical area where the company excels, producing advanced railway infrastructure equipment, including locomotives, coaches, and track-laying machines, contributing to the modernization and expansion of the Indian railway network. Furthermore, the **aerospace** division specializes in the manufacturing of precision-engineered components and assemblies for aircraft and spacecraft, supporting the country's growing aerospace sector.

With a global presence, the company exports its products to over 68 countries across the world. Its international operations demonstrate the company's capacity to meet diverse market needs, adapting its products to different regulatory standards

and operational environments. Its products are widely used in infrastructure projects, military applications, and industrial operations worldwide, reinforcing its reputation as a trusted supplier of high-quality, durable equipment.

Technological advancements are a core focus for the company, as it continuously invests in research and development to supply cutting-edge equipment for defense, mining, and infrastructure projects. The company employs advanced engineering techniques, robotics, automation, and digital technologies in the design and manufacturing processes. Its focus on innovation ensures that its products meet the highest standards of performance, efficiency, and safety. Additionally, the company collaborates with global technology providers and defense agencies to stay at the forefront of technological progress in its industries.

Known for its significant contribution to both **infrastructure development** and **defense manufacturing** in India, the company has earned recognition for its role in transforming key sectors. Its products are central to large infrastructure projects across India, from road construction and power generation to large-scale mining operations. Moreover, its defense manufacturing capabilities have bolstered the country's defense preparedness, enabling India to become more self-reliant in critical defense technologies.

In summary, the company's reputation as a leading manufacturer of heavy equipment and its diverse presence across sectors like mining, defense, rail, and aerospace have solidified its position as a key player in India's industrial and defense landscape. Through technological innovation, global reach, and a commitment to quality, the company continues to shape the future of critical sectors both domestically and internationally.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Prof. G. Ravi, Vice Chancellor Alagappa University. Prof. G. Ravi, is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

11. Prof. G. Ravi, Vice Chancellor Alagappa University

Dr. G. Ravi, who has assumed office as the 11th Vice-Chancellor of Alagappa University, possesses a distinguished academic profile with 27 years of teaching and research experience. Born in 1965 into a progressive agriculturist's family, he completed his school education in Sirkali. As a consistently meritorious student, he obtained his P.G. and Doctoral degrees from Bharathidasan and Anna Universities, respectively. He further pursued Post-Doctoral research at the world-renowned Materials Science Laboratory at NIMS, Japan, under the prestigious JSPS Award.

Dr. Ravi began his academic journey at Alagappa University in 1995 as a Lecturer in Physics, eventually rising to the position of Vice-Chancellor through hard work and significant research contributions. He holds a D.Sc. in Physics from Alagappa University. Over the years, he has served in several key leadership roles at the University, including Dean of Industry and Consultancy, Chairperson of the School of Physical Sciences, Head of the Department of Physics, Director of the Internal Quality Assurance Cell (IQAC), and Chairman of various academic boards.

Dr. Ravi has made substantial contributions to research, publishing approximately 421 papers in Scopus-indexed international and national journals, with an average impact factor of 4.35. His works have attracted 8,521 citations, resulting in an h-index of 45 and an i-10 index of 217. His research has led to the development of technologies such as Electro Optical Modulators for Optical Communication, Optical Memories for Data Storage, Supercapacitors, Sensors, and Solar Cells, which have significant practical applications for society. Notably, he holds 8 patents and has guided 25

Ph.D. scholars in their research. Dr. Ravi's efforts have resulted in him publishing 1/12th of the total research output of Alagappa University.

Dr. Ravi's leadership has been recognized through 22 prestigious awards, including the Young Scientist Award, JSPS Fellow Award, and Fellowships such as FRSC (U.K.) and FASCH. He was honored with the Dr. A.P.J. Abdul Kalam Lifetime Achievement Award in 2021. Additionally, he has visited 23 countries across all continents to present 375 research papers at international and national conferences. His academic positions also include serving as a JSPS Fellow at NIMS, Japan, and as a Visiting Professor and Honorable Guest Professor at Shizuoka University, Japan.

In terms of research funding, Dr. Ravi has successfully completed 11 major projects worth Rs. 403.1 Lakhs, funded by agencies such as UGC, DST, AICTE, and TNSCST. During his tenure as Head of the Department of Physics, he facilitated MoUs between the department and prominent institutions like Stanford University, USA, Western Norway University, Norway, and GRT, Singapore, allowing students to receive valuable international training. Under his leadership, the Department's infrastructure was significantly upgraded, with numerous sophisticated instruments procured and installed, some of which are being extended to other institutions. The department also earned Rs. 140 Lakhs through consultancy charges. As a result of Dr. Ravi's constant encouragement, the department has published 600 quality research papers, leading to a remarkable increase in the department's h-index from 28 to 67 in just six years.

Dr. Ravi's contributions have had a profound impact on the University's research capabilities and its reputation as an institution of excellence



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Prof. Ina Aditya Shastri, Vice Chancellor Banasthali Vidyapeeth. Prof. Ina Aditya Shastri, is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

12. Prof. Ina Aditya Shastri Vice-Chancellor, Banasthali Vidyapeeth

Prof. Ina Aditya Shastri is the Vice Chancellor of Banasthali Vidyapeeth and a dynamic leader known for her exceptional work in various sectors, including disaster management, community empowerment, and education. Her leadership has been pivotal in research, capacity development, and fostering innovation, particularly in the realm of disaster management with a focus on drought resilience. By addressing the vulnerability of farmers, she has facilitated sustainable solutions to combat the adverse effects of climate change on agriculture.

As an active member of prominent academic and policy committees, she has significantly contributed to the development of educational standards and initiatives within India. Prof. Shastri's vision of empowering marginalized communities is evident in her establishment of Radio Banasthali 90.4 FM, which has become Rajasthan's first community radio station. This initiative plays a crucial role in supporting rural women, providing them with a platform for social initiatives, awareness campaigns, and skill development. Prof. Shastri continues to drive progress at Banasthali Vidyapeeth, pushing boundaries in academic excellence and social impact.

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Key Highlights of Prof. Ina Aditya Shastri's Work:

- **Vice Chancellor, Banasthali Vidyapeeth:** Leading the institution with a focus on innovation, research, and academic excellence.
- **Research and Capacity Development in Disaster Management:**
 - Focused on developing drought resilience strategies for farmers.
 - Conducted extensive research to mitigate the impact of climate change on agriculture.
 - Initiated capacity-building programs aimed at equipping rural farmers with tools to tackle drought conditions.
- **Start-up Incubation:**
 - Spearheaded initiatives to support startups in the field of disaster management and agriculture, promoting sustainable farming solutions.
- **Member of Various Academic and Policy Committees:**
 - Active participation in organizations like AIU (Association of Indian Universities), EPSI (Education Promotion Society for India), SNA (Sangeet Natak Akademi), and UGC (University Grants Commission).
 - Engaged with the Government of Rajasthan in shaping policies related to education, rural development, and disaster management.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Prof. K Sekar, Retired Professor NIMHANS, Bangalore. Prof. K Sekar, is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

13. Dr. K. Sekar Retired Professor, NIMHANS

Dr. Kasi Sekar is a distinguished professor and the Head of the Centre for Psycho-Social Support in Disaster Management at the National Institute of Mental Health and Neuro Sciences (NIMHANS) in Bangalore, India. With over four decades of experience, Dr. Sekar is recognized as one of the leading experts in psychosocial support and mental health services, particularly in the context of disaster management. His primary focus has been on providing psychosocial support for disaster survivors, mental health rehabilitation for individuals with mental disorders, and disability management.

Dr. Sekar has contributed significantly to the field through his research and academic endeavors, with over 250 publications in both international and Indian journals. His work spans a broad range of topics, including disaster psychosocial support, community mental health, strength-based social work practices, and the care of children in difficult circumstances. He has collaborated with numerous international organizations, including the UN, WHO, and INGOs, and has played a critical role in shaping disaster management strategies at the national and state levels.

Dr. Sekar is also an active member of several prestigious committees and task forces, including the National Disaster Management Authority (NDMA) and the National Task Force on Psychosocial Support and Mental Health Services for COVID-19. He is well-regarded for his contributions to developing psychosocial intervention paradigms for disaster survivors, focusing on solution-oriented approaches. Additionally, his leadership in developing training programs for professionals and his role in various academic councils highlight his impact on social work education and practice.

Key Highlights of Dr. Kasi Sekar's Work:

- **Current Position:**
 - Professor of Psychiatric Social Work and Head of the Centre for Disaster Management at NIMHANS, Bangalore (Institute of National Importance).

- Associated with NIMHANS for over 40 years, serving as former Registrar and Head of the Department of Psychiatric Social Work.
- **Areas of Expertise:**
 - Disaster Psychosocial Support and Mental Health Services.
 - Service-based research in strength-based social work practice.
 - Focus on children in difficult circumstances, community mental health, and family care in the context of international classifications on functionality.
- **Contributions to Disaster Management:**
 - Core group member of the National Disaster Management Authority for the **National Guidelines on Psychosocial Support and Mental Health Services in Disaster Management**.
 - Developed a **normalizing paradigm** of psychosocial interventions focused on solution-oriented care for disaster survivors.
 - Secretary for the **National Task Force on Psychosocial Support and Mental Health Services for COVID-19**, Ministry of Health and Family Welfare, 2020.
 - Extensive involvement in major disaster response projects across India for over 35 years.
- **Training and Capacity Building:**
 - Conducts regular capacity-building programs and Fellowship Programs on psychosocial support in disaster management.
 - Focuses on strengthening social work practices and developing innovative approaches for mental health services in disaster

Dr. Kasi Sekar's work continues to have a profound influence on disaster management, mental health services, and social work practice, particularly in disaster-affected areas. His multi-faceted approach—combining research, practice, and training—has greatly advanced the field of psychosocial support, and his contributions have impacted policy development and practical interventions in the mental health sector both within India and internationally.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Prof. Anil Kumar Gupta, Professor (Policy-Strategies & Capacities) ICARS - IIT Roorkee. Prof. Anil Kumar Gupta, is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

14. Prof. (Dr.) Anil Kumar Gupta
Integrated Centre for Adaptation, Resilience, and Sustainability (ICARS), IIT Roorkee

Prof. (Dr.) Anil Kumar Gupta is a distinguished academic and researcher who has made significant contributions in the field of disaster management, climate resilience, and sustainability. Currently, he serves at the **Integrated Centre for Adaptation, Resilience, and Sustainability (ICARS)** at the **IIT Roorkee Gr. Noida Campus**, a joint Centre of Excellence (CoE) supported by the Department of Science and Technology (DST), Government of India (GOI). Prof. Gupta has over 30 years of leadership experience in **Disaster Risk Reduction (DRR)**, capacity building, and policy development. His work focuses on creating resilient systems and infrastructure that can withstand the challenges posed by climate change, ensuring that communities are better equipped to manage and recover from disasters.

As a leader in the field, Prof. Gupta has played a crucial role in establishing Centre of Excellence dedicated to disaster management, climate resilience, and health. Prof. Gupta's expertise and leadership have earned him global recognition, culminating in the prestigious **UN-PEDRR Outstanding Contribution Award (2024)**. This award acknowledges his outstanding contributions to the development of global and national policy frameworks related to disaster risk reduction and climate resilience. His ongoing commitment to enhancing disaster preparedness and fostering sustainable, climate-resilient communities continues to have a profound impact both in India and globally.

Key Highlights of Prof. (Dr.) Anil Kumar Gupta's Work:

- Over 30 years of leadership in **Disaster Risk Reduction (DRR)**, **climate resilience**, and **capacity building**.
- Instrumental in creating institutional frameworks that integrate **climate change adaptation**, **disaster risk management**, and **sustainable development**.
- **Leadership in Key Initiatives:**
 - Led impactful initiatives such as:
 - **HighCAP**: Focuses on **resilient infrastructure** and **climate adaptation** in vulnerable communities.
 - **Her-CAP**: A gender-inclusive program promoting **resilience-building** for women in disaster-prone regions.
 - **CAP-RES**: A **disaster risk reduction (DRR)** initiative aimed at strengthening community resilience and infrastructure to reduce vulnerability to climate-related disasters.
- **Capacity Building and Policy Development:**
 - Developed and led capacity-building programs that have empowered **local communities**, governments, and organizations to improve their **disaster preparedness** and **response strategies**.
 - His work has influenced national and international **disaster management policies** and frameworks.

Prof. (Dr.) Anil Kumar Gupta's work continues to shape the future of disaster management, climate resilience, and sustainability, both in India and globally. Through his leadership in key initiatives and his role in policy development, he has created a lasting impact on communities vulnerable to climate-related disasters, ensuring that future generations are better prepared to face the challenges of a changing climate.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Sarat Chandra Sahu, Director Centre for Environment & Climate Siksha 'O' Anusandhan Bhubaneswar. Dr. Sarat Chandra Sahu, is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

15.Dr. Sarat Chandra Sahu Siksha 'O' Anusandhan (SOA), Bhubaneswar

Dr. Sarat Chandra Sahu, associated with **Siksha 'O' Anusandhan (SOA), Bhubaneswar**, is part of a university that has been consistently ranked among the **top 25 universities in India** by the **National Institutional Ranking Framework (NIRF)** for **five consecutive years**. The institution stands out for its **notable research in Atmospheric Science**, particularly in the areas of **thunderstorm and lightning prediction** for the state of **Odisha**, in collaboration with prestigious organizations such as **IITM (Indian Institute of Tropical Meteorology)**, **Earth Network (USA)**, and **NRSC (National Remote Sensing Centre)**.

The **Centre for Environment & Climate** at the university plays an active role in **conducting awareness programs** regarding meteorological hazards, including **thunderstorms, lightning, heat waves**, and weather forecasting for major events. The university also engages with schools, colleges, and NGOs to spread awareness about **climate-related risks**.

On the meteorological data front, **surface meteorological parameters** like **temperature, relative humidity, wind direction and speed, rainfall, evaporation, dew point temperature, and station-level pressure** are recorded at the **ITER Centre** daily at **08:30 and 17:30 IST**. These parameters are also recorded continuously using **autographic instruments**.

The **Weather Research and Forecasting (WRF) Model** is remotely run through IITM's **ADITYA server** to generate **72-hour weather forecasts** for **Odisha** and its neighboring regions. The university integrates data from the **WRF model** and other **global forecasting models** to prepare weather forecasts for significant events, which are provided to **registered users**. Additionally, **nowcasting** of thunderstorms and lightning on a **block-wise** basis is done using **lightning detection systems (LDS)** from **IITM, Earth Network**, and **NRSC**. These nowcasts are shared with registered users via **WhatsApp**.

At the doctoral level, students are conducting vital research in **meteorology**, focusing on topics such as **climate change, climate variability, thunderstorms and lightning prediction, monsoon variability, and the analysis of past tropical cyclones**.

Bullet Points:

- Expert in Meteorology: Focuses on thunderstorm and lightning prediction.
- Collaborations: Works with IITM, Earth Network (USA), and NRSC on meteorological research.
- Centre for Environment & Climate: Leads awareness programs on weather hazards and forecasting.
- Ph.D. Supervision: Mentors research on climate change, monsoon, and tropical cyclones.

Climate Awareness: Engages with schools, colleges, and NGOs on **climate risks**.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Piyush Rautela, Former Executive Director, DMMC-USDMA Government of Uttarakhand,.Dr.Piyush Rautela, is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

16. Dr. Piyoosh Rautela
Former ED, DMMC-USDMA, Government of Uttarakhand

Dr. Piyoosh Rautela is a distinguished alumnus of the University of Allahabad, mentored by Padma Shri Dr. V.C. Thakur, former Director of the Wadia Institute of Himalayan Geology (WIHG). Joining the Uttarakhand State Government in 2002, he has been instrumental in advancing disaster management in the region, focusing on hazard and vulnerability assessments with an emphasis on the traditional disaster management practices of indigenous communities in Uttarakhand.

As the Executive Director of the Disaster Mitigation and Management Centre (DMMC) and the Uttarakhand State Disaster Management Authority, Dr. Rautela has played a significant role in improving the state's disaster preparedness and response mechanisms. Key Highlights:

- Early Career and Government Service:
 - Dr. Rautela began his career in the Uttarakhand State Government in 2002, where his work focused on improving disaster resilience in the region, particularly given the state's vulnerability to natural hazards like floods, landslides, and earthquakes.
- Pioneering Research:
 - His research on hazard and vulnerability assessment has been particularly innovative in integrating scientific methodologies with traditional knowledge of indigenous communities in Uttarakhand. This research helped shape more community-centered disaster management strategies.
- Policy Contributions:
 - Dr. Rautela contributed to shaping disaster management policies in Uttarakhand, with a

focus on integrating climate change adaptation and disaster risk reduction into development planning. His work has influenced the state's disaster response framework.

- Community Engagement and Education:
 - He has been a strong advocate for local community involvement in disaster preparedness, leading awareness programs and workshops. Dr. Rautela has helped communities understand how to leverage their traditional knowledge for disaster resilience.
- Risk avoider - Platform for Awareness:
 - Dr. Rautela's Riskavoider platform, which includes both a blog and YouTube channel, aims to bridge the gap between scientific disaster management and public understanding. Through these channels, he provides resources on everything from basic disaster preparedness to advanced risk mitigation techniques.
- Training and Capacity Building:
 - He has been involved in designing training programs for government agencies, emergency responders, and local communities to improve their disaster preparedness and response capacity.
- Awards and Recognition:
 - Over the years, Dr. Rautela has been recognized for his outstanding contributions to disaster management in Uttarakhand, and he continues to be a leading figure in disaster risk reduction in the state.

This additional information highlights his contributions in disaster management, community engagement, policy shaping, and his focus on integrating traditional knowledge with modern disaster risk reduction strategies.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Rajat Subhra Chatterjee, Scientist G & Head Geosciences & Disaster Management Group Indian Institute of Remote Sensing. Dr. Rajat Subhra Chatterjee is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

17. Dr. Rajat Subhra Chatterjee
Scientist 'G'
Group Director Geosciences & Disaster Management Group, Indian Institute of Remote Sensing (IIRS)

Dr. Rajat Subhra Chatterjee is a Scientist 'G' and Group Director at the Geosciences & Disaster Management Group of the Indian Institute of Remote Sensing (IIRS), which operates under the Indian Space Research Organisation (ISRO) in Dehradun. Throughout his career, Dr. Chatterjee has significantly contributed to the research and application of space technology for disaster management and geoscience studies. ISRO, under his guidance, has continued to advance its mission of leveraging space-based technologies for the betterment of society, contributing to various fields including communications, weather forecasting, disaster management, and geospatial applications.

Dr. Chatterjee's primary focus lies in geological hazards, disaster risk assessment, and predictive modelling. He has pioneered innovative approaches in geospatial analysis by integrating spaceborne remote sensing, geodetic data, and hydrometeorological observations for more accurate disaster monitoring and early warning systems. His leadership has been instrumental in scientific investigations like the IIRS Microwave Remote Sensing Working Group and the ISRO Inter-centre Team for Long-term Active Deformation Study. These collaborations have further advanced the understanding of geological hazards and contributed to disaster resilience in India.

Dr. Chatterjee's research expertise spans a variety of fields within remote sensing and geosciences. He has made notable contributions in microwave remote sensing for geological and geo environmental studies, particularly in terrain characterization, land surface deformation, and the detection of subsurface anomalies such as coal fires. His work in thermal remote sensing has helped in detecting and analyzing high-temperature objects and their spatiotemporal dynamics. Additionally, Dr. Chatterjee's research also includes groundwater monitoring, mining-induced land subsidence, and planetary exploration through remote sensing technologies.

Key Research Areas:

- **Microwave Remote Sensing for Geosciences:**
 - Geological feature extraction, terrain characterization, and land surface deformation analysis using SAR, InSAR, and PolSAR data.
- **Thermal Remote Sensing:**
 - Detection of high-temperature objects like coal fires and their spatiotemporal dynamics.
- **Geospatial Observations for Himalayan Geodynamics:**
 - Studies on active tectonics and land subsidence using space-based remote sensing and geodetic data.
- **Groundwater & Mining Subsidence:**
 - Monitoring and modeling land subsidence caused by groundwater extraction and mining activities.
- **Planetary Exploration Studies:**
 - Remote sensing-based studies for planetary exploration and understanding extra-terrestrial geological features.

Contributions and Achievements:

- **Geological Hazard Studies:** Led the research and development of geological hazard assessment methods to improve early warning and disaster mitigation strategies.
- **Disaster Risk Assessment & Predictive Modelling:** Extensive research into predictive models for disaster management and risk reduction, particularly in the context of geological hazards.
- **Leadership in Inter-Centre Collaboration:** Spearheaded teams for long-term active deformation studies, contributing to the understanding of tectonic movements and their implications on disaster preparedness.
- **Development of Geospatial Tools for Disaster Management:** Instrumental in integrating space-based technologies into disaster management systems, enhancing the response and preparedness for natural disasters in India.

Dr. Chatterjee's work significantly enhances the integration of space-based data for earth observation and disaster management, providing essential tools for better environmental monitoring, hazard prediction, and mitigation.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Ajay Chourasia, Chief Scientist & Group Head Structural Engineering Division, CSIR- Central Building Research Institute. Dr. Ajay Chourasia is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

18. Dr. Ajay P. Chourasia
Chief Scientist
Group Leader, Structural Engineering Department
Central Building Research Institute (CBRI)

Dr. Ajay P. Chourasia is the Chief Scientist and Group Leader of the Structural Engineering Department at the Central Building Research Institute (CBRI), a premier research institution under the Council of Scientific and Industrial Research (CSIR). With over 28 years of experience in research and development (R&D), Dr. Chourasia is a recognized leader in the field of seismic-resistant design, retrofitting, and disaster risk reduction (DRR). His work has been pivotal in advancing the resilience of buildings and infrastructure to natural hazards, particularly earthquakes.

Dr. Chourasia has led numerous experimental investigations and field-based studies on building health monitoring systems, focusing on assessing the structural performance of buildings during and after natural disasters. His contributions have resulted in innovative seismic design methodologies and retrofitting techniques aimed at strengthening existing buildings in earthquake-prone regions. This research has been instrumental in the development of national building codes and standards for earthquake-resistant construction across India.

In addition to his research, Dr. Chourasia has played an essential role in disseminating knowledge on disaster-resistant construction practices through training initiatives for engineers, architects, and government officials. His work has not only shaped national policies on disaster management but has also helped position India as a global leader in disaster risk reduction (DRR).

Dr. Chourasia's leadership has facilitated international collaborations aimed at improving disaster resilience and seismic risk management, further solidifying India's role in the global DRR community. His continued work emphasizes the importance of early detection of structural weaknesses and implementing cost-effective solutions to mitigate the impacts of natural disasters.

Key Highlights and Contributions:

- Building Health Monitoring Systems:
 - Led experimental investigations on real-time monitoring of building health, assessing structural integrity during natural disasters.
- Training & Knowledge Dissemination:
 - Led training programs for professionals in the field of earthquake-resistant construction and disaster risk reduction.
- Contributions to National Building Codes:
 - Instrumental in the development of national building codes and disaster-resilient infrastructure standards in India.
- Impact on Policy & Practical Solutions:
 - Shaped national policies and practical solutions for creating disaster-resilient infrastructure.

Dr. Chourasia's research, leadership, and innovations in seismic safety and disaster recovery have made a significant impact on structural engineering and disaster management. His expertise continues to help develop safer, more resilient infrastructure in earthquake-prone regions, making a vital contribution to both national and international disaster resilience efforts.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Prof. Devesh Walia, Dean School of Human & Environmental Studies North-Eastern Hill University (NEHU). Prof. Devesh Walia is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

19. Prof. Devesh Walia

Dean

School of Human & Environmental Studies
North-Eastern Hill University (NEHU)

Prof. Devesh Walia is a distinguished academic and researcher with over 33 years of experience in teaching, research, and administration in the fields of Geological Sciences, Environmental Sciences, and Disaster Studies at North-Eastern Hill University (NEHU). He has been actively involved in research projects funded by prominent agencies such as the North-Eastern Council, Department of Science and Technology, Ministry of Earth Sciences, and BARC-BRNS. Prof. Walia's academic and research collaborations extend internationally, including affiliations with Institute of Physics of the Earth in Moscow, the Earth Observatory of Singapore, and the Indian Institute of Geomagnetism.

Additionally, he has supervised seven Ph.D. candidates on topics ranging from geophysical studies of deep crustal structures to seismicity studies and groundwater quality assessment in Meghalaya.

Key Highlights and Contributions:

- Extensive Research and Teaching Experience:
 - Over 33 years of experience in Geological Sciences, Environmental Sciences, and Disaster Studies.
- Pioneering Research:
 - Focused on deep crustal geoelectric configurations, magnetotellurics, radon emanation studies, and micro-seismology to

enhance earthquake forecasting and understanding of seismic activity.

- Geological and Tectonic Studies:
 - Conducted research on the structure and tectonics of the NE Indian region, with contributions in earthquake forecasting, seismic disaster management, and active tectonics.
- Ph.D. Supervision and Contributions:
 - Supervised 7 Ph.D. candidates on topics related to seismicity, groundwater management, hydrogeochemical studies, and tectonics.
- International Academic Collaborations:
 - Affiliated with global institutions such as the Institute of Physics of the Earth, Moscow; Earth Observatory of Singapore, NTU; Indian Institute of Geomagnetism; and the National Geophysical Research Institute.
- Research Funding:
 - Completed several research projects funded by agencies like the Department of Science and Technology, Ministry of Earth Sciences, BARC-BRNS, and others.
- Administrative Leadership:
 - Held leadership roles, including Head of the Department of Geology and Department of Environmental Studies at NEHU and served as an NCC Officer with the 20 Miz Indep Coy NCC.

Prof. Walia's interdisciplinary work has been instrumental in shaping disaster preparedness and management strategies in the region, particularly in seismic hazard and groundwater studies. His contributions have significantly impacted both academic research and practical applications in geological and environmental sciences.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Col. (Prof.) Sanjay Kumar Srivastava (Retd.), Chairman cum Chief Scientist Climate Resilient Observing System Promotion Council (CROPC) Professor of Practice, TERI School of Advanced Studies (SAS). Col. (Prof.) Sanjay Kumar Srivastava (Retd.) is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

**20. Col. Prof. Sanjay Kumar Srivastava
Chairman of the Climate Resilient Observing
Systems Promotion Council (CROPC)**

Col. Prof. Sanjay Kumar Srivastava is the Chairman of the Climate Resilient Observing Systems Promotion Council (CROPC) and a Professor of Practice at the TERI School of Advanced Studies. A distinguished leader with a deep understanding of climate change and disaster management, he has made significant contributions in developing innovative solutions to address climate-related challenges, particularly focusing on disaster preparedness, response, and risk management.

One of his landmark achievements is his instrumental role in the implementation of India's Single Emergency Number 112, which consolidated emergency response services across the country, offering a streamlined and accessible platform for citizens to call for help during crises. Beyond emergency systems, Col. Srivastava has also developed systems like the Lightning Early Warning System and Safe Grid Systems, which help communities protect themselves from lightning strikes, a frequent natural hazard.

As the founder and chairman of CROPC, Col. Srivastava has led several key initiatives in disaster resilience. These include the establishment of India's first Earthquake Early Warning System and Cyclone Risk Management System, both of which are crucial for mitigating the risks posed by seismic and cyclonic activities.

Col. Srivastava is also known for his work in disaster risk financing, particularly focusing on innovative insurance solutions and risk transfer mechanisms to effectively manage and reduce disaster-related financial burdens. His advocacy for

improving the efficiency of disaster response is underscored by his contributions to benchmarking disaster response strategies, making them more effective and organized during emergencies.

Key Highlights

- Climate Resilience Leadership: Col. Srivastava has been a leading advocate for climate-resilient infrastructure, emphasizing the integration of modern technologies in disaster management.
- Risk Mitigation Expertise: He has worked on various climate change adaptation projects aimed at reducing vulnerability and enhancing preparedness for extreme weather events.
- International Collaborations: His work has fostered global partnerships with organizations to improve disaster management frameworks across regions vulnerable to climate risks.
- Policy Advocacy: He has played a significant role in shaping disaster management policies at national and international levels.
- Sustainability Initiatives: He has promoted sustainable urban planning and smart city initiatives as part of disaster risk reduction and climate change adaptation.

Col. Prof. Sanjay Kumar Srivastava's leadership at CROPC has had a profound and lasting impact on India's disaster management systems and climate resilience, advancing early warning systems, technology integration, and disaster preparedness across the nation.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Comdt, MEG & Centre Indian Army. Brig Ajay Singh Thakur, Comdt, MEG & Centre Indian Army. is receiving the award on behalf of The Comdt, MEG & Centre Indian Army. for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

21.HQ MEG & Centre, Indian Army

Located in Bangalore, Karnataka, the **Military Engineering Group (MEG) and Centre** is one of the premier training institutes of the Indian Army. Under the leadership of **Brigadier Ajay Singh Thakur**, the MEG & Centre plays a crucial role in developing and training soldiers, particularly **Agniveers**, in **combat and field engineering**. The center also focuses on upskilling soldiers in essential military engineering skills, including those from foreign nations.

Founded in **1780** as the **Madras Pioneers**, the unit later transformed into the **Madras Sappers and Miners** in 1830. Over the years, it has earned a prestigious reputation for contributing to the Indian Army's engineering operations. The unit's rich history spans involvement in various pivotal conflicts, from the **Indo-Pak War of 1947** to the **Kargil War of 1999**, where it played a key role in ensuring the Army's strategic capabilities.

MEG's contribution to the Indian Army has earned it several prestigious awards, including 1 **George Cross**, 2 **Maha Vir Chakra**, 13 **Vir Chakra**, 23 **Shaurya Chakra**, and numerous others. These accolades reflect the unit's indomitable spirit and dedication to serving the nation.

Beyond its military prowess, the MEG & Centre has also made significant contributions to humanitarian efforts. The unit has been actively involved in **disaster relief operations**, notably during the **2004 Tsunami**, the **2015 Chennai floods**, and other national calamities. This commitment to service underscores

the broader role the unit plays in the national and international arena.

Key Bullet Points:

- **Training Excellence:** The MEG & Centre is a leading institution for **combat engineering** and **field engineering** training within the Indian Army.
- **International Engagement:** MEG trains soldiers not only from India but also offers training opportunities for **foreign military personnel**.
- **Legacy of Service:** Over **240 years of history** as an integral part of the Indian Army's engineering corps.
- **Strategic Role:** Known for its specialized **combat engineering support** during **wartime operations**, ensuring infrastructure and logistical efficiency in conflict zones.
- **Key Operations:** Contributed significantly to **border management**, **bridge construction**, and **mine-clearing operations** during conflicts.
- **Modernization:** Continuously adapts to **technological advancements** in engineering, incorporating the latest techniques and machinery for training and operations.
- **Disaster Management:** A critical player in **disaster response** across India, providing engineering solutions during natural calamities.

Unit Motto: The motto of the unit, "**Sanskrit for "Victory Through Engineering**," reflects its mission of achieving success through superior engineering skills.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to **33 Corps HQ**, Engineers Branch, Indian Army. Brig Nitin Kumar, CE, HQ 33 Corps Indian Army. is receiving the award on behalf of **33 Corps HQ**, Engineers Branch, Indian Army.. for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

22. HQ, 33 Corps, Indian Army

The **33 Corps**, also known as **Trishakti Corps**, was raised on **10 May 1960** at **Shillong**, under the leadership of **Lieutenant General Umrao Singh**. Its primary headquarters is located in **Sukna**, near **Siliguri**, with its area of responsibility covering **North Bengal** and **Sikkim**. The corps plays a critical role in the defense and security of the strategically important regions of the Indian Himalayas, especially the border areas with **China** and **Bhutan**.

One of the most recent and notable operations undertaken by the **Trishakti Corps** occurred on the **night of 4 October 2023**, when a catastrophic breach in the **South Lhonak Glacier Lake** resulted in massive flooding in the **Teesta Valley**. The floodwaters caused extensive damage to infrastructure, disrupted **road connectivity**, and led to landslides, further exacerbating the situation. This natural disaster caused significant distress, as **essential services** were disrupted, and **tourists** were stranded in the affected areas.

Under the leadership of the **General Officer Commanding (GOC) 33 Corps**, the **Trishakti Sappers** swiftly mobilized to mitigate the impact of the disaster. The engineers focused on **restoring connectivity**, evacuating **stranded tourists**, and providing essential relief. Their efforts were critical in ensuring the **restoration of foot connectivity to North Sikkim**. As the situation stabilized, the focus shifted to the **restoration of full road connectivity** to North Sikkim, enabling essential services and support to reach the affected areas.

Key Bullet Points:

- **Named "Trishakti Corps":** The name Trishakti symbolizes the strength and unity of the Indian Army's engineering and combat forces.

- **Area of Operation:** The 33 Corps covers the strategically vital sectors of **North Bengal** and **Sikkim**, with a significant emphasis on **border defense** and **infrastructure management**.
- **Multi-Role Capability:** In addition to defense duties, the corps plays a critical role in **disaster relief operations**, **civil infrastructure repair**, and **humanitarian assistance** during crises.
- **Highly Experienced Engineering Corps:** Known for its robust **combat engineering expertise**, especially in challenging environments, like the **mountainous terrain of North Bengal and Sikkim**.
- **Strategic Border Security:** Regularly engages in **surveillance** and **engineering operations** to strengthen **border defenses** and ensure connectivity along India's northern frontier.
- **Training Excellence:** The corps is involved in specialized **mountain warfare** and **engineering** training, preparing personnel for operations in high-altitude regions.
- **Historical Significance:** Over six decades of service, the 33 Corps has been at the forefront of **military operations** and **peacekeeping efforts** in various strategic sectors.
- **Disaster Management and Rescue:** Known for its swift **response time** and **proficiency** in managing **natural calamities** like **earthquakes**, **floods**, and **landslides** in the Eastern Himalayan region.

Technological Integration: The corps has embraced **modern engineering tools** and **technology** to aid in **infrastructure development** and **disaster management** in the region.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to 52 Engineers Regiment, Indian Army. Col Vaseem Hiroli, CO, 52 Engineer Regiment Indian Army. is receiving the award on behalf of 52 Engineers Regiment, Indian Army. for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

23. 52 Engineers Regiment, Indian Army

The **52 Engineers Regiment** of the Indian Army, led by **Col. Vaseem Hiroli**, has a proud history of service, marked by its invaluable contributions in critical military and humanitarian operations. The regiment has participated in several significant wars, including the **Indo-China War (1962)**, the **India-Pakistan Wars (1947, 1965, 1971)**, and the **Kargil War (1999)**. In each of these conflicts, the regiment demonstrated exceptional skills in military engineering, including the construction of vital infrastructure in hostile and challenging environments.

A remarkable achievement of the regiment is the **construction of the World's Highest Suspension Bridge** in the **Ladakh Region**, which stands as a testament to their **engineering expertise** in difficult terrains. In addition, they played a crucial role in the **reconstruction of the Iran Bridge** on **NH-33**, which significantly enhanced **road connectivity** in the region. The regiment also played an active role in **rehabilitating the earthquake-stricken people of Sikkim in 2011**, showcasing their commitment to both military and humanitarian operations.

In more recent times, during the **July 2023 flood relief operations**, the regiment's engineers were at the forefront of **rescue missions**. They successfully rescued **144 individuals**, provided **healthcare services**, and distributed over **2000 kgs of relief aid** to the affected population. Their continued dedication to serving the nation has earned them numerous awards and accolades over the years, reflecting their capability and determination to make the **impossible possible**.

Key Bullet Points:

Operational Expertise and Roles:

- Known for providing **engineering support in military operations**, including **bridge construction, road repair**, and **logistical support** in difficult terrains.
- Specializes in **combat engineering**, including **mine clearing** and **demolition** tasks in conflict zones.

- Plays a vital role in **establishing and maintaining infrastructure** in areas with limited access, particularly in **border and high-altitude regions**.

Humanitarian Contributions:

- Actively involved in post-disaster recovery efforts, including **setting up temporary shelters, drinking water facilities**, and **sanitation solutions**.
- Participates in **community outreach programs** and **civic assistance projects**, particularly in **remote and underserved areas**.

Training and Development:

- Regularly conducts **training programs** in specialized **combat engineering, disaster management**, and **survival techniques**.
- Regimental personnel** are trained for operations in **extreme conditions**, such as **high-altitude warfare** and **cold-weather engineering**.

Technological Integration:

- Continuously integrates **modern technology** in their operations, including **drones for surveying, advanced mapping tools**, and **state-of-the-art construction equipment** for quick mobilization and deployment.
- Works closely with **military innovation units** to incorporate cutting-edge technology in **engineering projects** and **rescue operations**.

Regiment Legacy:

- The **52 Engineers Regiment** has a proud tradition of **excellence in both military and engineering domains**, with a history of adapting to evolving challenges in both peace and wartime situations.

The regiment is renowned for its **commitment to national service** and **supporting the Indian Army's broader objectives** across various operational theaters.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to 33 Bn, Assam Rifles. Col. Radha Krishan, Commandant 33 Assam Rifles. is receiving the award on behalf of 33 Bn, Assam Rifles. for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

24. Assam Rifles

The Assam Rifles, often called the "Oldest Paramilitary Force in India," holds a significant place in the nation's security apparatus. Established in 1835, it is one of the primary forces tasked with maintaining law and order in the northeastern regions of India. With an approximate strength of 68,000 personnel, the Assam Rifles is engaged in various duties, including border security, counterinsurgency operations, and disaster relief missions. The force's dedication to safeguarding the nation's borders and providing support in times of crises has earned it immense respect.

The 33rd Battalion of Assam Rifles (33 Bn), presently under Colonel Radha Krishan's command, was raised in Zakhama, Nagaland. Colonel Radha Krishan is a dedicated officer currently commanding the unit stationed in Imphal, Manipur. Under his leadership, the unit has been involved in numerous critical operations, particularly during emergencies. In May 2024, Colonel Radha Krishan and his team were at the forefront of a major rescue operation, successfully rescuing around 6,500 people. On one particular day, 137 individuals were rescued, showcasing the unit's quick response and ability to handle large-scale crises efficiently.

The Assam Rifles operates under the leadership of the Director General (DG AR), a position held by Lieutenant General Vikas Lakhera, who is appointed by the Government of India and reports directly to the Minister of Home Affairs. The DG AR oversees the operational and administrative aspects of the

force, ensuring that the Assam Rifles remains at the forefront of maintaining peace and security in the challenging terrain of India's northeastern states. The force's ongoing commitment to humanitarian efforts, peacekeeping, and national security continues to strengthen its legacy as an indispensable arm of India's defense and law enforcement agencies.

- **Unit Function:** Primarily tasked with maintaining security in the northeastern region, particularly along the India-Myanmar border.
- **Disaster Relief:** Actively involved in providing assistance during natural disasters and humanitarian emergencies.
- **Operational Excellence:** Known for its swift response in crisis situations, such as rescue and relief operations during floods, landslides, and insurgency-related incidents.
- **Community Engagement:** Frequently conducts community outreach programs to maintain positive relations with local populations in sensitive areas.
- **Training:** Equipped with specialized training to handle difficult terrains and insurgency operations in challenging environments.

Recognition: Regularly receives commendations for outstanding performance in maintaining law and order and undertaking rescue operations in remote areas.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to 201 ENGR REGT. Col. Dhirender Joshi, 201 Engineer Regiment Indian Army. is receiving the award on behalf of 201 ENGR REGT for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

25. 201 Engineer Regiment, Indian Army

The **201 Engineer Regiment** of the **Madras Engineer Group (MEG)** is a distinguished unit within the Indian Army, renowned for its remarkable contributions to humanitarian assistance and disaster relief operations. The regiment has consistently displayed exceptional expertise in responding to natural calamities and providing aid in challenging environments. Over the years, the unit has demonstrated unparalleled skill, courage, and dedication in executing rescue and relief operations during some of the most severe disasters in India's history.

The regiment's involvement in critical rescue operations includes notable interventions during the **1990 Orissa cyclone**, the **2006 Rajasthan floods**, the **2012 Bhopal floods**, and the **2015 Assam deluge**. These operations have earned them national recognition for their prompt and effective response. Most recently, in **2023**, the regiment successfully rescued **41 workers** trapped in the **Silkyara tunnel disaster**. Despite being trapped for **16 days**, the workers were safely rescued on **28 November 2023**, highlighting the regiment's resolve and expertise in handling complex rescue operations.

Under the leadership of **Colonel Dhirender Joshi**, the **Commanding Officer**, the regiment continues to set high standards in disaster management and rescue operations, contributing significantly to the well-being of affected communities during calamities.

Key Highlights in Bullet Points:

- **Part of Madras Engineer Group (MEG):** One of the oldest and most distinguished regiments in the Indian Army.
- **Specialization:** Known for its expertise in engineering tasks, humanitarian assistance, and disaster relief operations.
- **Key Role:** Plays a critical role in rescue and relief during natural disasters, ensuring timely and effective assistance.
- **Disaster Relief Operations:** Successfully involved in major operations like:
 - **Orissa Cyclone 1990**
 - **Rajasthan Floods 2006**
 - **Bhopal Floods 2012**
 - **Assam Deluge 2015**
 - **Silkyara Tunnel Disaster 2023**
- **Commanding Officer:** Colonel Dhirender Joshi, under whose leadership the regiment continues to excel in various missions.
- **Reputation:** Recognized for its quick-response capabilities, effective disaster management, and rescue operations in challenging situations.
- **Unit Legacy:** Known for consistently setting high standards in engineering excellence and humanitarian efforts within the Indian Army.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Comdt. Shri Ratan Singh Sonal, 11 Bn, Indo-Tibetan Border Police (ITBP). Ratan Singh Sonal, along with Sh. Hari Singh, Second-in- 13th Bn, ITBP Disaster Command and Insp/Gfr Arjun Vishnu Koli (13th Bn) are receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

26. Indo-Tibetan Border Police (ITBP) 11 Bn & 13 Bn

The **Indo-Tibetan Border Police (ITBP)** plays a pivotal role as a first responder during natural disasters, particularly in the challenging and high-altitude regions of the Himalayas. The force is renowned for its resilience and swift response in rescue operations. A notable example of their heroism was during the **2013 Char Dham Yatra rescue operation** in Uttarakhand, where ITBP successfully saved **33,009 pilgrims** over the course of **15 days**. However, the operation was not without sacrifice, as **15 Himveers** (ITBP personnel) lost their lives in a tragic **helicopter crash on 25th June 2013** while conducting rescue efforts.

ITBP personnel are stationed at **Border Outposts (BOPs)** located at altitudes ranging from **9,000 ft to 18,750 ft**, where they face extreme challenges, including temperatures dropping as low as **-45°C**. These outposts are crucial in maintaining the security of India's borders with China and ensuring safety in remote, high-altitude regions.

In addition to their disaster relief and security duties, ITBP has made significant contributions to environmental conservation in the Himalayas, especially the **Inner Himalayas**. The force has taken major steps to **green the region**, contributing to the

preservation of the delicate balance of flora and fauna in these remote areas.

Key personnel like **Sh. Ratan Singh Sonal (Commandant of 11th Bn)**, **Sh. Hari Singh (Second-in-Command of 13th Bn)**, and **Inspector Gfr Arjun Vishnu Koli (13th Bn)** exemplify the leadership and courage that ITBP has demonstrated in these challenging and often hazardous conditions.

Key Highlights in Bullet Points:

- ITBP is the primary first responder for natural disasters in the Himalayas.
- In the **2013 Char Dham Yatra rescue operation**, ITBP saved **33,009 pilgrims** over **15 days**.
- **15 ITBP personnel (Himveers)** lost their lives in a helicopter crash on **25th June 2013** during the **Uttarakhand rescue operation**.
- ITBP has been instrumental in **greening the Himalayan regions**, with a special focus on the **Inner Himalayas**.

ITBP is responsible for maintaining the balance of **flora and fauna** in remote and high-altitude areas.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Bharat Petroleum Corporation Limited. Shri Asavadi Rajeswara Rao, Sr. Manager, Corporate HSSE Bharat Petroleum Corporation Limited. is receiving the award on behalf of Bharat Petroleum Corporation Limited for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

27.SHRI RAO RAJESWARA ASAVALI

Corporate HSSE Division, Bharat Petroleum Corporation Ltd. (BPCL)

Shri Asavadi Rajeswara Rao is a seasoned Senior Manager in the Corporate HSSE Division at Bharat Petroleum Corporation Ltd. (BPCL), with specialized expertise in industrial safety, including OSHA standards, NEBOSH IGC, and Process Safety Management. He has made significant contributions to enhancing safety practices within BPCL, particularly in the areas of fire and industrial safety engineering. His in-depth knowledge and leadership played a pivotal role in developing and implementing the Disaster Management Plan for the Ministry of Petroleum and Natural Gas, which was subsequently approved by the National Disaster Management Authority (NDMA).

Shri Rao is also an accomplished author, having written two highly regarded textbooks: *"Fire Safety Engineering"* and *"Industrial Safety Engineering."* These authoritative works reflect his profound understanding of safety management, offering valuable insights to professionals in the field. Throughout his career, Shri Rao has been instrumental in strengthening BPCL's safety approach, ensuring compliance with international standards, and fostering a culture of safety across operations. His efforts continue to influence the broader industrial safety landscape, contributing to both national and organizational safety advancements.

Key Bullet Points:

- Expertise in implementing and overseeing safety programs in high-risk industrial environments.
- Led initiatives that improved workplace safety standards, reducing the risk of accidents and enhancing operational safety.
- In-depth knowledge of regulatory frameworks, ensuring BPCL's compliance with national and international safety standards.
- Proven track record in risk assessment, hazard analysis, and safety audits to identify and mitigate potential safety concerns.
- Active involvement in the development and implementation of safety training programs to enhance employee awareness and preparedness.
- Key contributor to BPCL's safety strategy, focusing on continuous improvement and innovation in safety management practices.
- Collaborated with government agencies and industry bodies to align BPCL's safety protocols with best practices and regulatory requirements.
- Played an instrumental role in emergency response planning and management to ensure effective handling of potential industrial disasters.
- Advocates for a proactive safety culture, focusing on prevention, preparedness, and rapid response to mitigate risks.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Prof. (Dr.) Ashutosh Mohanty, Professor OSOU, G.M. University Campus, Odisha. Prof. (Dr.) Ashutosh Mohanty is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

28.Prof. (Dr.) Ashutosh Mohanty OSOU, G.M. University Campus, Odisha

Prof. (Dr.) Ashutosh Mohanty is a distinguished academic and researcher in the field of Geoscience, currently serving as a General Manager at the University of Sambalpur. He also holds the position of Visiting Faculty at Palacký University in the Czech Republic and Beijing Normal University in China, contributing to global academic exchange in his field. Dr. Mohanty is the coordinator for the Himalayan University Consortium, which comprises 42 universities across eight countries and operates under the auspices of ICIMOD (International Centre for Integrated Mountain Development) in Nepal. This role reflects his commitment to fostering international collaboration on environmental and geoscience research.

Dr. Mohanty has led significant research projects, including a marine pollution study for CSIRO-Australia, focusing on pressing global environmental challenges. His expertise extends to disaster risk management and climate change, where he served as the Deputy Team Leader for the Asian Development Bank's (ADB) Disaster Risk Programme in South Asia. Additionally, he has held the position of Director for Disaster Management & Climate Change at Shoolini University, where he led initiatives aimed at addressing environmental sustainability and climate resilience. Dr. Mohanty's academic and professional contributions continue to shape research and policy on disaster risk reduction, climate change adaptation, and environmental protection on both regional and global scales.

Key Points :

- Actively involved in cross-border collaborations and international research projects, contributing to global discourse on environmental protection and disaster resilience.
- Played a key role in establishing collaborative networks between universities and institutions across Asia, Europe, and Australia to address regional geoscience and climate challenges.
- Extensive experience in managing large-scale research projects and leading multi-disciplinary teams across various geoscience and environmental domains.
- Led initiatives to integrate disaster risk management with climate change adaptation strategies, strengthening resilience in vulnerable communities.
- Contributed to global policy discussions on the impact of climate change on mountain ecosystems and disaster-prone regions.
- Expertise in developing educational programs on geoscience, environmental sustainability, and disaster management, influencing both academic and practical approaches.
- A recognized leader in disaster risk management, particularly in the context of South Asia's unique environmental challenges, such as floods and landslides.

Demonstrated expertise in integrating environmental data analysis with risk modeling and disaster management frameworks for better decision-making.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Prof. Dhanya CT, Professor Department of Civil Engineering IIT-Delhi. Prof. Dhanya CT is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

29. Prof. Dhanya CT, Department of Civil Engineering IIT-Delhi

Prof. Dhanya C T is the Rama Kanta Chair Professor for research in the environmental, social, and governance (ESG) area at the Indian Institute of Technology (IIT) Delhi. Her research contributions focus on hydrological extremes, improving hydrological modeling for early warning systems, and developing adaptation policies for sustainable water resources management. With a primary focus on water security in the National Capital Territory (NCT) of Delhi, a region with a population of 17 million and an area of 1483 sq.km, her work addresses the region's increasingly uncertain water future.

Prof. Dhanya has made significant contributions in developing generic tools for understanding context, data collection, analysis, and capacity building. Her research outcomes are widely disseminated through platforms like the JalSuraksha Portal, which showcases decision-making tools such as climate information systems, urban flood early warning systems, the AAB PRAHARI mobile application, and Yamuna water quality status. Her work emphasizes the growing stress on the water sector due to the compounding effects of climate change, population growth, and globalization, with serious implications for food-water-energy security, ecology, critical infrastructure, and emergency preparedness.

Her research aims to improve scientific understanding of hydrological extremes by examining the nonlinear physical linkages between global climatic factors and extreme events. Prof. Dhanya is a Professor in the Department of Civil Engineering at IIT Delhi, having joined in 2011 after

completing her doctoral research in Hydro-climatological Modeling using Data Mining and Chaos Theory at the Indian Institute of Science (IISc), Bangalore.

Key Bullet Points:

- **Expert in Hydro-climatology** with a focus on the impact of climate change on hydrological extremes like floods and droughts.
- Research aims to bridge the gap between **scientific understanding** of hydrological extremes and the development of **practical solutions** for early-warning systems and policy-making.
- Focus on **sustainable water resources management**, addressing both regional challenges and broader environmental impacts.
- Developed **tools for urban flood forecasting**, integrating climate data with **real-time early-warning systems** for better preparedness and response.
- **Emphasis on data-driven approaches** for hydrological modeling, utilizing **chaos theory and data mining** techniques for more accurate predictions.
- **Leader in water security research** for high-population urban regions, particularly in the context of the **National Capital Territory (NCT) Delhi**.
- Works to **raise awareness** of the compounding effects of **globalization, climate change, and population growth** on water security, especially in megacities.

Extensive background in **interdisciplinary research**, collaborating across civil engineering, environmental science, and social governance for comprehensive water security solutions.



Shri Piyush Goyal, Hon'ble Union Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Abhilash S, Associate Professor & Hon. Director Department of Atmospheric Sciences, CUSAT. Dr. Abhilash S is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

30.Dr. Abhilash S

Cochin University of Science and Technology (CUSAT)

Dr. Abhilash S is a distinguished expert in Atmospheric Sciences with a PhD from Cochin University of Science and Technology (CUSAT), awarded in 2008. His pioneering research has significantly advanced meteorological predictions, particularly in the use of radar technologies and advanced predictive models for tropical storm dynamics and weather forecasting. Dr. Abhilash has contributed to dynamic assessments and predictive modeling for tropical storm damage and loss, focusing on improving weather prediction accuracy for high-impact weather events. He has collaborated extensively with global institutes such as the National Center for Atmospheric Research (NCAR) and the University of Miami, enhancing the understanding of atmospheric and climate sciences.

In his career, Dr. Abhilash has held various prestigious roles, including Senior Research Scientist at Flagstone Reinsurance Bermuda, Scientist at the Indian Institute of Tropical Meteorology, and Visiting Scientist at the University of Miami and NCAR. He was awarded the SAARC Scientist Medal for his research on radar wind observations in mesoscale models and the Indian Meteorological Society (IMS) Award for Weather and Climate Services in 2017. Dr. Abhilash also received the Best Young Faculty-Researcher Award at CUSAT in 2019.

His innovative work includes the development of an indigenous coupled multi-model ensemble prediction system for the Indian region, which incorporates Doppler Weather Radar observations to improve convective storm predictions. He also developed improved cyclogenesis parameters for predicting tropical cyclones. Additionally, Dr. Abhilash played

a key role in the design and implementation of operational forecasting systems, enhancing prediction capabilities for short, medium, and extended range weather events.

Dr. Abhilash has over 75 peer-reviewed publications and co-authored more than 15 books and book chapters. He has also been a prominent advocate for popularizing climate science through over 117 public lectures, contributing to the field's outreach via print and visual media. He has chaired numerous sessions at both national and international conferences and organized several significant seminars and symposiums.

Key Bullet Points:-

- **Led significant research collaborations** with international institutions such as NCAR and the University of Miami, elevating global research in atmospheric sciences.
- Recognized for work in **impact-based weather forecasting**, focusing on translating meteorological data into actionable information for disaster management.
- **First Rank and Distinction** in MSc Meteorology from CUSAT (2001), laying the foundation for his distinguished career in atmospheric sciences.
- **An innovator in tropical storm dynamics research**, emphasizing the understanding of complex weather systems and their societal impacts.
- Contributed to the **global understanding of tropical storms** through his extensive research on their dynamics and predictive modeling.
- Active in **scientific mentoring**, guiding new researchers, and contributing to the academic growth of the atmospheric sciences community.
- Developed **localized forecasting tools** tailored to the unique weather patterns of the Indian region, improving the precision of forecasts for extreme weather events.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Sutapa Das, Associate Professor Dept. of Architecture & Planning IEST-Shibpur. Dr. Sutapa Das is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

31. Dr. Sutapa Das

Indian Institute of Engineering Science and Technology, Shibpur

Dr. Sutapa Das is an accomplished building technologist and Associate Professor in Architecture & Planning at the Indian Institute of Engineering Science and Technology, Shibpur, West Bengal. With over 16 years of experience, she has worked with leading technical universities and industries in India, Germany, and Singapore. Prior to her current role, Dr. Das served as a full-time faculty member at the Indian Institute of Technology Kharagpur, where she contributed to the Department of Architecture and the School of Infrastructure for nearly a decade. She also held the position of Post-Doctoral Fellow at the National University of Singapore.

- Her research interests span **Building Information Modeling (BIM)**, **climate-responsive infrastructure planning**, **critical infrastructure protection**, **disaster management**, and **sustainable and resilient building technology**. Dr. Das has received **11 national and international awards** for her work, and has published **93 technical articles**. She has also mentored numerous students, guiding **3 Ph.D. scholars**, **20 postgraduate theses**, and **17 undergraduate projects**, with her students contributing to over **40 published articles**. In addition to her academic achievements, Dr. Das serves as a **regular reviewer** for several internationally indexed journals and conferences.
- Dr. Das has been instrumental in bridging the gap between **industry and academia**, collaborating with government bodies and global organizations to drive research and development in the field of **building technology** and **disaster resilience**. She has been involved in various **multi-disciplinary projects** and has contributed to the development of **sustainable infrastructure policies** at both the national and

international levels. Dr. Das is a strong advocate for **climate-resilient infrastructure** and continues to work towards **innovative solutions** for disaster risk reduction and climate adaptation in the built environment.

- Her passion for advancing knowledge in the field is reflected not only in her extensive research and publications but also in her **commitment to the professional development** of her students and colleagues, ensuring a **future-ready** generation of architects and planners.

Key Bullet Points

- Dr. Sutapa Das has worked with **7 top technical universities** and industries in **India, Germany, and Singapore**, bringing a global perspective to her work.
- She has been recognized for her research with **11 national and international awards**, reflecting her expertise in sustainable building technologies and disaster resilience.
- Her research focuses on **climate-responsive infrastructure planning** and **sustainable building technology** to promote resilience in the built environment.
- She has expertise in **disaster management**, focusing on creating strategies for **critical infrastructure protection** and **climate adaptation**.
- Dr. Das serves as a **regular reviewer** for various **indexed international journals** and conferences, contributing to academic growth and quality assurance.

Dr. Das is passionate about the intersection of **academic research** and **industry practice**, especially in **disaster risk reduction** and **sustainable infrastructure**



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Odisha State Disaster Management Authority (OSDMA). Mr. Meghanad Behera, Sr. DRR Consultant Odisha State Disaster Management Authority (OSDMA). is receiving the award on behalf of Odisha State Disaster Management Authority (OSDMA) for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

32. Odisha State Disaster Management Authority (OSDMA)

The **Odisha State Disaster Management Authority (OSDMA)**, represented by **Shri Meghanad Behera**, functions as a pivotal autonomous body dedicated to enhancing disaster management capabilities across the state of Odisha. With its mandate to coordinate and implement comprehensive disaster management strategies, OSDMA focuses on the full disaster management cycle, including **prevention, mitigation, response, and recovery**. The authority is crucial in ensuring that Odisha, a state prone to various natural disasters like cyclones, floods, and droughts, is well-prepared to manage these risks effectively.

OSDMA acts as a **central repository of disaster-related data**, collecting, analyzing, and disseminating critical information regarding potential risks and vulnerabilities. This research and data collection enable informed decision-making and facilitate the formulation of disaster management policies that are both proactive and adaptive to the state's changing needs. The authority has played a significant role in **disaster risk reduction** by identifying hazard-prone areas and recommending preventive measures to minimize damage during disasters.

A major part of OSDMA's work involves **training and capacity-building initiatives** for government agencies, local

authorities, NGOs, and communities. These programs focus on enhancing the knowledge and skills required to manage and respond to disasters efficiently, ensuring that all stakeholders are equipped with the right tools and resources. This has helped in creating a **culture of preparedness**, with communities and individuals becoming more resilient and proactive in disaster situations.

OSDMA is also instrumental in the **implementation of disaster response and relief operations**, providing immediate aid in the aftermath of major disasters. This includes the establishment of relief camps, distribution of essential supplies, and coordination with national and international aid organizations. Additionally, the authority regularly **updates and revises disaster management plans**, incorporating lessons learned from previous disasters to improve future responses and recovery efforts.

Furthermore, OSDMA collaborates with national agencies like **NDMA (National Disaster Management Authority)** and international organizations to strengthen disaster resilience. It also works on **early warning systems** and **community-based disaster risk management (CBDRM)**, ensuring that vulnerable communities are given the tools to better prepare for and respond to disasters. Through its comprehensive approach, OSDMA contributes significantly to the **safety and security** of the people of Odisha, making the state more resilient to the growing impacts of climate change and natural hazards.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Anil Balakrishnan, Southern Regional Head, CSR, Adani Foundation and Mr. Jesuraj R Program Manager, CSR, Adani Foundation, Kattupalli, Chennai. Dr. Anil Balakrishnan and Mr. Jesuraj R are receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

33. Adani Foundation

Dr. Anil Balakrishnan, the **Southern Regional Head** at the **Adani Foundation**, brings over **17 years of experience** in the social development sector, with specialized expertise in **Disability & Inclusive Development, Skill Development, Disaster Relief & Response, Organic Farming, Climate Action, and CSR (Corporate Social Responsibility) Implementation**. As a **Program Manager** at the Adani Foundation, Dr. Balakrishnan plays a pivotal role in overseeing and managing **CSR programs** across **Tamil Nadu**, focusing on initiatives that foster sustainable social development.

The **Adani Foundation**, the social welfare arm of the **Adani Group**, is dedicated to creating long-term, positive impacts through **sustainable social investments**. The Foundation's core focus areas include **Education, Health & Nutrition, Sustainable Livelihoods, Climate Action, and Community Development**. The Foundation's initiatives empower **marginalized communities**, including **children, women, youth**, and other vulnerable groups, by improving their access to essential resources and opportunities for development.

Operating in **6,769 villages** across **19 states in India**, the Adani Foundation directly impacts **9.1 million lives**, focusing on improving the lives of individuals and families in underserved regions. The Foundation's strategies are designed to align with **national priorities** and the **global Sustainable Development Goals (SDGs)**, ensuring that its interventions contribute to a more **inclusive, equitable, and sustainable future** for all. Through Dr. Balakrishnan's leadership, the Foundation has strengthened its impact, fostering community-driven initiatives that make meaningful and lasting changes across rural and urban India.

Mr Jesuraj R, Program Manager at the **Adani Foundation**, is responsible for overseeing and implementing **CSR programs** that focus on **community development** and **empowering marginalized groups**. His work includes managing initiatives in **education, healthcare, skills training, and environmental sustainability**. He also plays a key role in promoting **organic farming, climate action, and disaster relief**, particularly in rural areas. Jesuraj ensures that all programs align with **national priorities** and the **Sustainable Development Goals (SDGs)**, fostering long-term **socio-economic empowerment** and **sustainable development** for vulnerable communities.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Global Infrastructure Risk Model & Resilience Index (GIRI)

Ms. Swapnil Saxena, Sr. Specialist, GIRI & Ms. Aishwarya Raj, Analyst, GIRI are receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

34. Global Infrastructure Risk Model & Resilience Index (GIRI), CDRI

The **Global Infrastructure Risk Model & Resilience Index (GIRI)**, developed by the **Coalition for Disaster Resilient Infrastructure (CDRI)**, is a ground-breaking initiative aimed at strengthening infrastructure resilience against **climate change** and **disaster risks**. Led by experts like **Ms. Swapnil Saxena** and **Ms. Aishwarya Raj**, GIRI is designed to provide detailed, data-driven insights into the **vulnerability** of infrastructure to **geological** and **climate-related hazards**. By being **fully probabilistic**, GIRI helps forecast risk scenarios based on current data and trends, allowing for more accurate **hazard assessments** and **impact predictions** across diverse regions.

GIRI's **hazard coverage** includes natural events such as **earthquakes**, **tsunamis**, **floods**, **cyclones**, and **heat waves**, among others. It calculates potential risks to **critical infrastructure systems**, including energy, transportation, water, and communication networks, essential for maintaining societal functioning during and after disasters. This helps identify **vulnerable infrastructure systems** and prioritize investments in **resilience-building measures**, enabling governments and stakeholders to plan for and mitigate future risks.

One of the key innovations of GIRI is its **publicly available** nature, which democratizes access to infrastructure risk data for

countries and organizations worldwide. By making this tool accessible to both **developed** and **developing nations**, it fosters **global collaboration**, allowing countries to share knowledge and strategies for building more resilient infrastructure. The model also supports **national and international efforts** to meet the **Sustainable Development Goals (SDGs)**, particularly those related to building resilient infrastructure and promoting inclusive and sustainable industrialization (SDG 9).

GIRI also enhances **decision-making processes** by providing policymakers and infrastructure planners with evidence-based tools for **long-term strategic planning** and **risk reduction**. It guides the integration of **disaster risk reduction** into **infrastructure policies**, **urban planning**, and **construction standards**, helping cities and communities better prepare for unforeseen events.

In summary, GIRI represents a powerful tool in advancing the **global agenda for resilient infrastructure**, contributing to the **sustainability** of infrastructure systems and enabling nations to face the growing threats posed by climate change and natural disasters with confidence. By improving the **resilience** of infrastructure, the GIRI initiative plays a crucial role in ensuring the continued well-being and development of societies in the face of increasing disaster risks.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Kala Venkata Uday, Associate Professor School of Civil and Environmental Engineering IIT Mandi. Dr. Kala Venkata Uday is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

35. Dr. K.V. Uday IIT-Mandi

Dr. K.V. Uday, Associate Professor at IIT Mandi, is a leading expert in **climate change and disaster management**, particularly focusing on the Himalayan region. He is the **Founding Chairperson of the Centre for Climate Change and Disaster Management** at IIT Mandi, where he has made significant contributions to the field of **landslide disaster risk reduction**. Dr. Uday pioneered **innovative, cost-effective methods** to monitor and reduce landslide risks in the region, which is highly susceptible to landslides due to its unique geological conditions.

Through his **start-up, Intiot Services Pvt. Ltd.**, Dr. Uday has successfully developed and deployed **over 60 low-cost landslide monitoring systems** in **Himachal Pradesh** and **Uttarakhand**, helping local communities and government authorities effectively track landslide risks in real-time. His systems offer **affordable, scalable solutions**, making landslide risk management accessible to vulnerable communities that otherwise lack the resources for expensive monitoring infrastructure.

Dr. Uday's work emphasizes **community-centric solutions**, ensuring that disaster management strategies are not only technically sound but also adaptable to local contexts and sustainable in the long term. His research and innovations have played a vital role in improving the resilience of **Himalayan communities** to landslides, contributing to both **disaster risk reduction** and **climate change adaptation**.

Additionally, Dr. Uday serves as a member of various **national and international committees** on landslide disaster risk reduction. He is dedicated to translating his innovative research into **practical solutions** that can be scaled across different regions, ensuring that disaster management strategies are both effective and replicable. His contributions are helping shape the future of **disaster risk management** by integrating cutting-edge technology with community empowerment, ensuring that vulnerable areas are better prepared for the challenges posed by landslides and other natural disasters.

Dr. K.V. Uday has also been instrumental in **advancing research and policy development** in the field of disaster

resilience in the Himalayan region. His work extends beyond just **landslide risk reduction**; he has contributed to the **holistic understanding** of the region's vulnerability to multiple hazards, including **floods, earthquakes, and climate-induced disasters**. Through his leadership at the **Centre for Climate Change and Disaster Management at IIT Mandi**, Dr. Uday has led interdisciplinary research that integrates **environmental science, engineering, and community development** to craft innovative strategies for **disaster preparedness, mitigation, and resilience building**.

He is actively involved in **capacity-building initiatives**, training local communities, government officials, and disaster management professionals to handle landslide risks more effectively. His approach emphasizes **local knowledge** and **participatory practices**, ensuring that communities play an active role in disaster preparedness and response. This community-driven approach is critical in a region like the Himalayas, where local populations are often the first responders to natural disasters.

Dr. Uday's expertise has led to collaborations with **international organizations** and **government agencies**, where his contributions have influenced **disaster risk reduction policies** at both national and regional levels. He has been a part of **policy dialogues** and **disaster resilience frameworks** aimed at strengthening infrastructure and enhancing the adaptive capacity of vulnerable communities in the **Himalayan belt**.

Furthermore, Dr. Uday is a **pioneer in using technology for disaster management**, with his **low-cost, scalable monitoring systems** being adopted by various state and national agencies for real-time landslide prediction and monitoring. His work is enabling **data-driven decisions** that improve response times and enhance **disaster forecasting**, minimizing the loss of lives and property during critical events.

Through his pioneering efforts, Dr. Uday is helping build a more **resilient future** for the **Himalayan region**, ensuring that **sustainable disaster risk management practices** are ingrained in local, national, and global frameworks. His emphasis on **affordable solutions, community engagement, and interdisciplinary research** positions him as a leading figure in the field of **climate change adaptation and disaster management**.



Shri Piyush Goyal, Hon'ble Union Minister of Minister of Commerce and Industry, Government of India, presented the prestigious DRR Award to Dr. Neeraj Sharma, Scientist-F DRDO-DGRE. Dr. Neeraj Sharma is receiving the award for their Marvellous achievement in the projects and interventions for Disaster Risk Reduction.

36. Dr. Neeraj Sharma DRDO-DGRE

Dr. Neeraj Sharma is a leading expert in the field of **Defense Geoinformatics**, currently serving at the **Defense Geoinformatics Research Establishment (DGRE)**. With a deep understanding of **Industry 4.0 technologies**, Dr. Sharma has played a pivotal role in designing and implementing **cutting-edge solutions** tailored to meet the specific needs of the **Defense sector**. His work revolves around **advanced system development**, where he integrates **IoT, AI, and Big Data** to enhance the capabilities of **defense operations**.

Dr. Sharma's expertise extends into **disaster mitigation** and **emergency response**, with a focus on tackling the unique challenges posed by **high-altitude natural disasters**. His research and solutions are crucial in ensuring **rapid response** and **minimizing damage** during **extreme weather events** in challenging terrains, especially in mountainous regions. This includes developing specialized tools for **monitoring, forecasting, and rapid response**, vital for the military and emergency services operating in **disaster-prone zones**.

In addition to his technical expertise, Dr. Sharma is also highly skilled in **crisis management** and **conflict resolution**, making him a critical asset in **high-stakes and stressful environments**. His ability to manage complex and rapidly evolving situations is a cornerstone of his contributions to both **disaster management** and **defense operations**. Through his innovative work, Dr. Sharma continues to significantly improve the effectiveness of **emergency response systems** and **disaster mitigation efforts** in high-risk areas, thus enhancing the overall resilience of defense operations and national security.

Dr. Neeraj Sharma has made significant contributions to the **advancement of Geoinformatics technologies** in the **defense sector**, focusing on the integration of **Industry 4.0 innovations** into operational defense strategies. He is at the forefront of leveraging **cutting-edge technologies** such as

artificial intelligence, machine learning, geospatial analytics, and **remote sensing** to develop systems that enhance **situational awareness** and **strategic decision-making** in defense and disaster management. His expertise has been instrumental in creating advanced **predictive models** and **early warning systems** for a wide range of **natural disasters**, particularly in the **high-altitude regions** that pose unique challenges due to their remote and rugged terrains.

Dr. Sharma's work in **disaster mitigation** extends beyond traditional approaches, as he focuses on developing **innovative solutions** that bridge the gap between **defense and disaster management**. This includes creating **integrated disaster response frameworks** that leverage **real-time geospatial data** for accurate assessment, resource allocation, and efficient coordination during **emergencies**. His efforts have significantly improved the **readiness and effectiveness** of military and disaster response teams in coping with **mountainous natural disasters** such as avalanches, landslides, and flash floods.

With a keen understanding of **crisis management** and **conflict resolution**, Dr. Sharma has also contributed to **training programs** for military personnel and **emergency responders**. These programs are focused on enhancing **decision-making** under pressure, enabling responders to quickly adapt to **complex disaster scenarios**. His leadership in **high-pressure environments** is a testament to his ability to manage **critical operations**, ensuring that the most effective course of action is taken to save lives and protect property.

Dr. Sharma's research and applications in **geospatial technologies** and **defense systems** continue to support **national security**, providing the Defense sector with the necessary tools to respond to **emergencies and disasters** with speed, accuracy, and resilience. His work is instrumental in fostering greater **collaboration** between **geoinformatics** and **disaster management**, creating solutions that are not only technically advanced but also highly adaptable to **real-world crisis situations**.