Role of Media in Disaster Risk Reduction: A Few Essential Tips



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July 2023







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About this document

This document can be considered as a handbook for media personnel for disaster risk reduction. The document provides some essential of disaster risk reduction and a few tips during, before and after the disasters. We do not call it "Dos and Don'ts", since it is very much context specific. Rather, the document tries to provide a few basic principles and gives some tips, including safety of reporters and ethics during reporting.

Potential users

The primary users of the document are the media personnel who does disaster reporting. The document can be useful ever for the administrators and managers of the media group. We think that the aspiring journalist, the students of mass media will also be benefitted from this document.

THE TEAM

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Preface

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Preface

India is the second largest producer of newspapers and periodicals in the world. The press is a powerful media in India with nearly 8000 newspapers in English and 23,775 in regional languages. The total claimed circulation is close to 120 million. The space that is dedicated to disasters in a newspaper is difficult to calculate. Disaster events are reported like an event of the day and each get less than a fortnight of attention. Every year flood grips about one fourth of the total land of India affecting more than 30 million people. But the newspapers or magazines does not devote a single cover to this theme. The general perception is that within the domain of nature, it is the nature that determines a disaster. Identifying the disaster as the natural phenomenon, it becomes obvious to blame the nature and mention it as a natural calamity in the reporting of disasters. The attempt to attribute a disaster to a natural cause is tried even where the link is not apparent. The conviction in reporting disasters as "natural" and nature being the cause of a disaster runs so deep that every other explanation does not get the importance. It can be seen from the headlines of the stories on disasters that they all emphasize the point that it is the energy of the natural phenomenon that is responsible. A common consensus among the journalists reporting disasters is that it is the nature that is "tyrannical". The media plays a critical role in informing the public during disasters. Reporting has also generally been confined to during and just after a disaster event (response and early recovery). There is little, if any, coverage, of risk reduction aspects during non-disaster times. Journalists need to be sensitised on the critical role they play in a disaster scenario; in issuing early warnings; and in spreading awareness to help preparedness and mitigation. They need to be made conscious of the possible positive implications or negative fallouts of a disaster report. Basic tenants of journalism need to be re-evaluated and examined against this backdrop. The vocabulary that is used often leads to a general hype and misconception. While scientists describe an earthquake in terms of pre and aftershocks that is because of the faults, shear and tension creating a rent through the land, the journalists says it is a "killerquake, a deathquake, Prithivi ka prakop (rage of the earth). Phrases such as "a disaster hit the city" and "cyclones kill and destroy" needs rethinking. The flood is measured in terms of overspill or a spread, while the media reports it as untamed river, angry wave or a drought situation as "traunt rain."

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Chapter 1

Essential Disaster Terminologies and Concepts

Key Role Media Can Play at Each Stage

Preparation:

Early warning; educating the public on various disaster components; reporting on initiatives and plans to address vulnerabilities.

Response:

Immediate impact on affected areas; playing a role in projecting core needs of communities and in informing affected people of where they can access aid; and tracking ongoing initiatives.

Recovery:

Accountability in usage of aid; lessons to be learnt; success stories; sustainable construction practices and material usage in recovery; alternate livelihood options.

Mitigation:

Reporting on and influencing larger policy and development agendas; connections to climate change. Mainstreaming DRR discussion into topics such as water, construction, food security, health, livelihood and women and child welfare.

The media coverage of disasters is a direct dissemination of information to the government, donors and the people at large. This coverage actually shapes opinions of the people on the ground situation. In fact, such coverage also influences donor policy and various government policies for the affected region. Thereby, it is essential that the coverage of disaster situations in done efficiently and accurately.

(Source: NIDM, 2014)

Defining a Disaster:

"**Disaster**" is derived from the Latin word "*astrum*" which means "an event from an unfavourable constellation of stars" (Kapur, 2010). Disasters are often referred as "*uncertainty*, *chance or even an accident*". The Webster dictionary defines "a disaster as, a sudden calamitous event producing great material damage, loss and distress." The International Federation of the Red Cross Society addresses a situation as "a situation or event, which overwhelms local capacity, necessitating a request to national or international level for external assistance. It causes serious disruption of the functioning of a society with widespread human, material, environmental losses which can exceed the ability of affected community or area to cope using its own resources. "Natural" disasters involve largely geological and climatic hazards. In human-made disasters, the principal direct causes are identifiable human actions. Disasters in India are a part and parcel of the daily life. The planetary processes, earthquake, flood, drought, cyclone and for that matter cold and heat waves are neither alien nor recent to India.

- 1. Hazard is a process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. Hazards may be natural, anthropogenic or socio-natural in origin.
 - **Natural hazards** are predominantly associated with natural processes and phenomena.
 - Anthropogenic hazards, or human-induced hazards, are induced entirely or predominantly by human activities and choices. This term does not include the occurrence or risk of armed conflicts and other situations of social instability or tension which are subject to international humanitarian law and national legislation.
 - Several hazards are **socio-natural**, in that they are associated with a combination of natural and anthropogenic factors, including environmental degradation and climate change. Hazards may **be single**, **sequential or combined** in their origin and effects. Each hazard is characterized by its location, intensity or magnitude, frequency and probability.
 - **Biological hazards** are also defined by their infectiousness or toxicity, or other characteristics of the pathogen such as dose-response, incubation period, case fatality rate and estimation of the pathogen for transmission. Multi-hazard means (1) the selection of multiple major hazards that the country faces, and (2) the specific contexts where hazardous events may occur simultaneously, cascadingly or cumulatively over time, and taking into account the potential interrelated effects.

Hazards include (as mentioned in the Sendai Framework for Disaster Risk Reduction 2015-2030, and listed in alphabetical order) biological, environmental, geological, hydro-meteorological and technological processes and phenomena. Biological hazards are of organic origin or conveyed by biological vectors, including pathogenic microorganisms, toxins and bioactive substances. Examples are bacteria, viruses or parasites, as well as venomous wildlife and insects, poisonous plants and mosquitoes carrying disease-causing agents.

- **Environmental hazards** may include chemical, natural and biological hazards. They can be created by environmental degradation or physical or chemical pollution in the air, water and soil. However, many of the processes and phenomena that fall into this category may be termed drivers of hazard and risk rather than hazards in themselves, such as soil degradation, deforestation, loss of biodiversity, salinization and sea-level rise. Geological or geophysical hazards originate from internal earth processes. Examples are earthquakes, volcanic activity and emissions, and related geophysical processes such as mass movements, landslides, rockslides, surface collapses and debris mud or flows. Hydrometeorological factors are important contributors to some of these processes. Tsunamis are difficult to categorize: although they are triggered by undersea earthquakes and other geological events, they essentially become an oceanic process that is manifested as a coastal water-related hazard.
- Hydrometeorological hazards are of atmospheric, hydrological or oceanographic origin. Examples are tropical cyclones (also known as typhoons and hurricanes); floods, including flash floods; drought; heatwaves and cold spells; and coastal storm surges. Hydrometeorological conditions may also be a factor in other hazards such as landslides, wildland fires, locust plagues, epidemics and in the transport and dispersal of toxic substances and volcanic eruption material.
- **Technological hazards** originate from technological or industrial conditions, dangerous procedures, infrastructure failures or specific human activities. Examples include industrial pollution, nuclear radiation, toxic wastes, dam failures, transport accidents, factory explosions, fires and chemical spills. Technological hazards also may

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arise directly as a result of the impacts of a natural hazard event. (Hazard definition and classification review, Technical Report (2020) United Nations Office for Disaster Risk Reduction, International Science Council)

- 2. Emergency is sometimes used interchangeably with the term disaster, as, for example, in the context of biological and technological hazards or health emergencies, which, however, can also relate to hazardous events that do not result in the serious disruption of the functioning of a community or society.
- **3. Disaster damage** occurs during and immediately after the disaster. This is usually measured in physical units (e.g., square meters of housing, kilometres of roads, etc.), and describes the total or partial destruction of physical assets, the disruption of basic services and damages to sources of livelihood in the affected area.
- 4. Disaster impact is the total effect, including negative effects (e.g., economic losses) and positive effects (e.g., economic gains), of a hazardous event or a disaster. The term includes economic, human and environmental impacts, and may include death, injuries, disease and other negative effects on human physical, mental and social well-being. For the purpose of the scope of the Sendai Framework for Disaster Risk Reduction 2015-2030 (para. 15), the following terms are also considered:
 - Small-scale disaster: a type of disaster only affecting local communities which require assistance beyond the affected community.
 - Large-scale disaster: a type of disaster affecting a society which requires national or international assistance.
 - Frequent and infrequent disasters: depend on the probability of occurrence and the return period of a given hazard and its impacts. The impact of frequent disasters could be cumulative, or become chronic for a community or a society.
 - A slow-onset disaster is defined as one that emerges gradually over time. Slow-onset disasters could be associated with, e.g., drought, desertification, sea-level rise, epidemic disease.
 - A sudden-onset disaster is one triggered by a hazardous event that

emerges quickly or unexpectedly. Sudden-onset disasters could be associated with, e.g., earthquake, volcanic eruption, flash flood, chemical explosion, critical infrastructure failure, transport accident.

((Hazard definition and classification review, Technical Report (2020) United Nations Office for Disaster Risk Reduction, International Science Council)

5. Disaster Event: A natural or human-made event that can cause a disaster with severe negative effects on human life, property, and activities.

| Disaster Category | Disaster Category |
|--------------------------|---|
| Sudden Onset | Tsunami, Flood, Earthquake, Hurricane, Wildfire, Volcanic Eruption, Landslide Disaster Category |
| Slow | Disaster CategoryDrought, Famine, Environmental Degradation, Desertification, Deforestation, Pest Infestation |
| Industrial/Technological | System Failure/Accident (wreck, derailment), Spillage, Explosion, Fire |
| Wars & Civil Strife | Terrorism, Insurgency, Armed Aggression |
| Epidemics, Pandemics | Water/Food-Borne Diseases, Person-To- Person Diseases, Vector-Borne Diseases |

6. Vulnerability or Risk: A vulnerability exposes the population to threats. A threat is a malicious or negative event that takes advantage of vulnerability. Finally, the risk is the potential for loss and damage when the threat does occur. Vulnerability is simply a weakness existing in the society that exposes people to threats.

According to UNDRR Report, it can be stated as the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

(Hazard definition and classification review, Technical Report (2020) United Nations Office for Disaster Risk Reduction, International Science Council)

i) **Risk** refers to the potential for destruction, damage, or loss of data or assets, resulting from a hazard. The combination of the probability of an event and its negative consequences.

ii) Threat is what magnifies the chances of an adverse event and exposes the vulnerability of the situation.

The measure of the negative cultural, social, economic, and environmental factors and

| Phases | Description |
|----------------|--|
| Preparation | Activities designed to plan for high-risk disasters, minimize loss of life and damage, plan for the temporary removal of people and property from a threatened location, facilitate timely and effective rescue, relief, and recovery. It also includes education, training, and certification, communications systems, and other preparation activities. |
| Disaster Event | The time period during which the disaster happens. It may be days, weeks, or, in rare situations, months. Preparation |
| Emergency | The time-frame when extraordinary measures are taken to search and find survivors; provide medical assistance; support human needs of shelter, water, and food; and protect property. |
| Relief | The operations for clean-up of structures and roads, restoration of communications and power, and removal and disposal of debris. |
| Mitigation | Actions taken prior or after a disaster to identify risks, take risk reduction activities such as zoning flood plains for park land and wildlife habitat areas, clearing debris from streams and rivers, modifying or moving buildings. After a disaster, mitigation may impact where and how rebuilding activities are undertaken. |
| Recovery | Actions taken to re-establish a community after a period of rehabilitation subsequent to a disaster - including construction of permanent housing, full restoration of services, complete resumption of the pre-disaster state. |

7. **Disaster Management**: The policy and administrative decisions and operational activities which pertain to the various stages of disaster at all levels.



Present Structure of Disaster Management in India

Disaster Risk Reduction

Disaster risk reduction is a process that leads to the safety of communities and nations. The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to 11 hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. **(UNISDR terminology on disaster risk reduction (2009), United Nations Office for Disaster Risk Reduction)**

Climate Change Adaptation

Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects. It refers to changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change. In simple terms, Role of Media in Disaster Risk Reduction: A Few Essential Tips

countries and communities need to develop adaptation solutions and implement actions to respond to current and future climate change impacts.

Adaptation actions can take on many forms, depending on the unique context of a community, business, organization, country or region. There is no 'one-size-fitsall-solution'-adaptation can range from building flood defences, setting up early warning systems for cyclones, switching to drought-resistant crops, to redesigning communication systems, business operations and government policies. Many nations and communities are already taking steps to build resilient societies and economies. However, greater action and ambition will be needed to cost-effectively manage the risks, both now and in the future. Successful adaptation not only depends on governments but also on the active and sustained engagement of stakeholders, including local communities, national, regional, multilateral and international organizations, public and private sectors, civil society and other relevant actors, as well as an effective management of knowledge. Parties to the UNFCCC and its Paris Agreement recognize that adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions. Adaptation is a critical component of the long-term global response to climate change to protect people, livelihoods and ecosystems. Parties acknowledge that adaptation action should follow a countrydriven, gender-responsive, participatory and fully transparent approach,



Adaptation policy cycle and support offered under the UN Climate Change regime.

considering vulnerable groups, communities and ecosystems. Adaptation should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into socioeconomic and environmental policies and actions.

(UNFCC (2023), Adaptation and Resilience, The Big Picture, United Nations Climate Change)

Climate change adaptation refers to policies and programs, steps and actions that reduce the adverse impact of climate change. It involves adjusting policies and actions because of observed or expected changes in climate.

Complex Risk Landscape

We are living in a complex risk landscape, which is becoming even more complex day by day. In the recent Global Risk Report (2023), five environmental risks become prominent among the top 10 future risks of the world: climate action failure, extreme weather, biodiversity loss, human environmental damage and natural resource crisis. In addition to this, there is energy crisis, cost of living etc. which has higher impacts. In the same report of 2022, three societal risks got its position in 10 top future risks: social cohesion erosion, livelihood loss and infectious disease. This is interesting to note that infectious disease is considered as a societal risk, and this possibly reflects the nature of social issues and impacts we have seen over past 3+ years during COVID-19 crisis. It is also required to note that digital inequality and cyberspace failure are also considered as two prominent risks, which have widened the disparity between countries and communities. Although we talk about the slogan "leave no one behind" in the Sustainable Development Goals (SDG) framework, however in the technology advancement we fail to address the equitable access of technology without a digital divide. Therefore, our key challenge here is to think about how with the advancement of science and technology can reduce the gap between urban or rural or developed or developing countries or aged population or gender etc.

Shaw R., in Kanbara S., Shaw R., Kato N., Miyazaki H. and Morita A. (2022): Society 5.0, Digital Transformation and Disasters: Past, Present and Future, Springer, 217 pages

Health Emergency Disaster Risk Management (H-Edrm)

Health-EDRM is an academic paradigm that is actively being developed and evolved since 2009. The discipline aims to examine health and disaster risks and

applies public health tools to engage in the management of health and disaster risk. In contrast to the traditional medical emergency and disaster approaches that are often response-based, the Health-EDRM paradigm targets systematic analysis and management of health risks. It emphasises emergency preparedness and disaster risk reduction by adopting the preventive public health approach that addresses risks to reduce potential adverse impact and harm for all hazard throughout the emergency cycle (WHO). An emphasis on prevention can also provide opportunities for research infrastructure building in normal times. Research and actions in Health-EDRM identify relevant health risks associated with a context, emergency and disaster situation. Its actions implement scientific evidence-based solutions and adopt policies that support preparedness, response and rehabilitation capacity building to enhance the resilience of a health system and its associated supporting systems.

(Chan E. and Shaw R. (2020): Public health and disasters: health emergency and disaster risk management in Asia, Springer, 343 pages.)

Ecosystem Based Disaster Risk Reduction (Eco-Drr)

Ecosystems act as a buffer against hazards, preventing disaster and reducing disaster impact on people, critical infrastructure and basic services. Conservation, restoration and the sustainable use and management of land, wetlands, ocean, and other natural resources strengthen disaster and climate risk management. The most vulnerable people in many countries rely on ecosystems for their livelihoods and resilience. Recognizing the interdependency between human well-being, ecosystems, and changing risk patterns, ecosystems also build local socio-economic resilience against disasters by sustaining livelihoods and providing important products to local populations in times of crises. Eco-DRR defines the approach and interface of ecosystem and disaster risk reduction.

(UNDRR, 2020, Ecosystem-Based Disaster Risk Reduction: Implementing Naturebased Solutions for Resilience, UNDRR AP, Policy Paper)

Systemic, Complex And Cascading Risk

Compound risk is defined as "Two or more extreme events occurring simultaneously or successively, combinations of extreme events with underlying conditions that amplify the impact of the events, or combinations of events that are not themselves extremes but lead to an extreme event or impact when combined. (IPCC SREX Report). Cascading risk can be understood as the risk posed by sequential occurrences of two or more events where the first event triggers one or more events. Compound risk is the interaction of simultaneous or successive multiple hazards or events that combine to produce extreme disasters capable of generating widespread losses. (IPCC and UNDRR). Systemic risk is characterized by linkages and interdependencies in a system, where the failure of a single entity or cluster of entities can cause cascading impacts on other interlinked entities. Systemic risk is endogenous to, or embedded in, a system that is not itself considered to be a risk and is therefore not generally tracked or managed, but which is understood through systems analysis to have a latent or cumulative risk potential to negatively impact overall system performance when some characteristics of the system change.

(UNDRR and IPCC Definition)

NaTECH

Natural hazards such as earthquakes and floods can initiate events which challenge the safety and operation at hazardous installations. Accidents triggered by such events are known as 'Natech' – (Natural Hazards Triggering Technological Accidents). Many natural disasters have led to major damages to hazardous installations, releases of hazardous substances, fires and explosions, resulting in potential health effects, environmental pollution, and economic losses. These impacts can also have a transboundary dimension. Natural hazards considered minor, such as lightning or freeze, have also been found to cause Natech accidents. **(OECD Definition of NATECH)**



Chapter 2

Ten Essential Tips

Tip 1: Ensure Your Own Safety as the First Priority



Image Credit: The SAFE TEAM, 2010

Things to Avoid

- Serious Injury
- Hilly areas
- Damaged Buildings
- Trees
- Objects that can collapse
- Carrying a weapon
- Wearing fancy shoes
- Entering disaster site without permission.

What to Use

- Learn first aid, especially how to stop bleeding.
- Plan escape routes with maps.
- Bottled Water
- Fully stocked first aid kit.
- Battery operated torches.
- Solar charger

Reason to be Careful

- Cyclones can be followed by landslides.
- Never walk under or over a landslide. Always walk around it.
- The water can get contaminated
- Wear shoes that you can run in when covering potentially dangerous situations.

What to Use

- Drinking water and food supplies
- Warm clothes
- Preparations to sleep outside in extreme situations (tent, sleeping bag)
- Wear a bracelet or tag indicating your blood group in case you are wounded.
- Prepare yourself mentally and emotionally for what you are about to encounter at the disaster site.
- Identify who is in charge of rescue operations.

Reason to be Careful

- You might be confronted with severe destruction and human suffering.
- Make yourself aware of how this stress and anxiety might affect you.
- Only enter areas that have been cleared by first responders.



| SELF-AWARENESS | TO FOLLOW | TO AVOID |
|--|--|---|
| Understanding the ambience post-disaster | Recognise when the speaker is uncomfortable/traumatized Make a conscious effort to recognise which participants are quiet or shy and encourage them to contribute. Speak clearly, so that each person can hear you. Pause for questions at the end of every main point. Empathize more and develop listening skills. | Never project yourself up as the master. The participants are adult learners and deserve the respect of their age and experience. Do not avoid asking about their consent. Do not ask questions without acknowledging their previous answers. |
| Behaviour | Be warm, friendly and enthusiastic. Listen also when participants talk to each other. | Try not not interrupt when they are getting emotional. Do not show your frustrations if not getting a direct answer. |
| Voice tone and language | Speak clearly, at a reasonable pace. Be loud enough for all participants to hear. Use expression (a monotone voice will turn participants off). | Do not rush people unless extremely necessary Do not use complex languages or difficult words. |

Tip 2: Protect the Privacy and Sentiments of Affected People

| SELF-AWARENESS | TO FOLLOW | TO AVOID | |
|----------------|---|--|--|
| | 3. The most important part is getting the concepts across to them. | 3. Try not to be too quick with the information as they may be translating from their mother tongue. | |
| Body language | Make frequent eye contact, but do not stare. Make sure you look around often and use your peripheral vision to ensure that all participants are noticed. Use simple gestures such as leaning and nodding which makes them feel heard. | 1. Do not stand next to people when you are moving around, rather than in front of them. This can be seen as aggressive. | |
| Posture | Stand straight; slumping makes you look tired, as if you would rather not be there. Move for a reason: to make a point, to talk to a particular group, to check if people need your help. | It is considered rude in most cultures to point with a finger or stand with your hands on your hips. Often, folding (crossing) your arms is also unacceptable. | |

(Source: Compiled from Re-examining principles of Disaster Reporting (2014), NIDM)



Tip 3: Respect Local Culture and Customs During Reporting

Image Source: Houston et al. (2019)

Precautions:

- Situational Awareness: Be aware of local laws.
- Understand the **political**, **racial**, **religious or other conflicts** within a region.
- Try to **change daily routes** while covering disasters.
- Learn and respect local customs.
- Avoid words that may be interpreted as **hostile**.
- Care needs to be taken **not to compromise local sensitivities** by avoiding naming actual individuals, organizations or political and religious authorities.
- When dealing with sensitive topics, always ensure that people's **safety is not compromised**.
- Any reporting you do **must consider potential impact** on individuals, a group within the community or the area as a whole. Ensure your own safety.
- The community may be put at risk in trying to accompany or rescue you when you are doing a dangerous report. **Weigh the consequences** to others before taking this call.

(Source: NIDM, 2014)

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Tip 4: Validate and Check the Information Properly before Dissemination Background Information on the Area and Community

Things to consider include:

- 1. Vulnerability profile and past disasters
- 2. Major livelihoods and way of life
- 3. Economic background
- 4. Social mix of the community
- 5. Types of buildings (construction type and materials)

Facts and figures

Things to consider include:

- 1. When there are many different facts and figures, ensure that you clarify which source you are using.
- 2. Where there is misinformation, what can be done to clarify it?

Word choice There are many words that are commonly used or used interchangeably. This changes the perspective of the audience and can often result in sending across the wrong message. Some key examples include:

| AVOIDABLE | PREFERABLE | REASON |
|------------------|------------|---|
| Disaster | Hazard | A hazard is a flood, drought, cyclone, landslide, earthquake or tsunami. A hazard turns into a disaster due to (mostly manmade) vulnerabilities. |
| Natural disaster | Disaster | There is no such thing as a 'natural disaster'. There are natural hazards, but they turn into disasters due to human action. Again, implication over time becomes that this is 'natural'; that there is nothing we can do to prevent it. |

| AVOIDABLE | PREFERABLE | REASON |
|------------------|----------------|--|
| Changing climate | Climate Change | Climate change is a scientific term that refers to actual degree change in the average temperature of the planet. Changing climate can refer to any unusual weather activity that has occurred in the area.Again, implication over time becomes that this is 'natural'; that there is nothing we can do to prevent it. |
| Victim | Survivor | Depending on the context, the use of one of these words over the other can change the tone of the reporting. |
| Riot | Conflict | The word 'riot' suggested a law-and- order problem during food or relief distribution that may blow it out of proportion. The word should be used with caution. |
| Backward | Marginalised | Backward has a socially imposed implication which is often derogatory. Poor is a purely economic description and marginalised can be used to refer to groups that live on the fringes of that community and are generally left out. |

(Source: Compiled from Technical Services-Knowledge Links, NIDM, 2014)

Tip 5: Understand, Investigate and Report Local Variation for Climate Related Hazards

The assessment of local/spatial scale:

- 1. The geographical knowledge of the affected area is important while report ing on a disaster.
- 2. Quantification and visualization of the distribution of climatic risk at the regional, state, and local levels, standardizing the risk values based on the census tracts within the administrative boundaries is necessary.
- 3. This helps to illustrate how the choice of scale affects the pattern of risk indices.

Hot spot Analysis

- 1. It is important to determine whether, and to what extent, climatic hazards and social vulnerabilities have patterns of clustering throughout the region.
- 2. The hot spots help in identifying the vulnerability of a hazard.

Calculating Risk

- 1. Climate risk index for the study region that numerically incorporates both the probability of hazards occurring and the degree of social vulnerability among the census tract exposures .
- 2. Demonstrating the influence of the choice of scale on identification of highurisk populations
- 3. Calculations of the climatic risk index and hot spot analyses are scale dependent and thus are relative to the geographic area of interest.

Identifying the Vulnerable Areas and Population

- 1 A disaster happens when hazard meets vulnerability.
 - 2. Identifying the social vulnerabilities of a region is necessary as the magni tude of devastation will differ from region to region owing to varying scale of social vulnerability.

Identifying the Distribution of Hazards:

- 1. The frequency of all climatic hazards varies over all temporal time scale.
- 2. Individual hazards also have marked different spatial variation.
- 3. It is important to understand that the hazards do not follow political boundaries and are natural processes.

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Tip 6: Ensure Basic Principles of Humanity and Dignity in Disaster Reporting: Ethical Reporting

Explain the causes:

- 1. Poor building code leading to earthquakes.
- 2. Under-investment in preparedness.
- 3. Institutions that expose marginalized communities to harm.
- 4. Identifying the organizations, political decisions and institutional structures that allow for risks to be created and fail to provide protection can help to make sense of a disaster by contextualizing events.
- 5. Do not over simplify. (For example, climate change can be an important causal factor to intensification and frequency of cyclone formation, but it is not the only factor.)

Identify the affected populations

- 1. Certain population groups are more highly affected when disasters hit than others due to factors such as where they live and their access to resources as a result of existing level of inequality.
- 2. In our digitally connected world, journalists have more tools available to them to find eyewitnesses who are able to present these perspectives to audiences.

Stop perpetuating myths and tropes

- 1. Disaster myths are : they result in anarchy, or looting, or they bring out the worst in people. Instead of looting, people sometimes come .
- 2. Reporting seems to lay open the invitation for people to watch extreme forms of survival as entertainment. It also might falsely convey the idea that a simple charitable donation can make suffering disappear.

Stick around

- 1. A disaster story does not always end when smoke disappears, or floodwaters retreat.
- 2. Recovery processes can be long and unfold after a hazard strikes. In some cases, individuals and communities never truly recover instead the traumas they suffer can manifest in that are passed down over generations.
- 3. Covering the period after the hazard hits can help capture a fuller story.

(Source:https://www.preventionweb.net/news/journalism-can-helpcommunities-these-five-pillars-ethical-disaster-reporting)

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Tip 7: Consult Experts in the Appropriate Field for Subject Knowledge

- 1. They are more **focussed** on their area of study.
- 2. They have better **insights and background knowledge** and **perspective**.
- 3. They maintain a **broad and cutting-edge mastery** of their field, they can help educate others and help **understand the dynamics of the process at hand.**
- 4. They can also leverage their knowledge and experience to guide specific **decisions** on field and can influence administrative roles.
- 5. Highly qualified experts have **better analytical power** which can make the data analysis in hand easy to understand and less complex while reporting.
- 6. They are more likely to **spot effective solutions** to the problems you are facing, as they likely **encountered similar challenges before.**
- 7. They can give you a **fresh perspective**. They can spot the problems in your report that you have missed being immersed in it.
- 8. Research professionals can provide **critical perspectives** and contribute to **improving analysis and measurement of your data**.



Tip 8: Utilize Citizen Journalists with Proper Validation and Prior Registration / Training

- 1. Verification of information and the maintenance of security that must be taken into consideration in order to sufficiently engage with citizens in crisis management¹.
- 2. Fake images and questionable images needs to be censored before publication.
- 3. Citizen journalism should include eyewitness statements, a survivor's diary, pictures, videos and detailed accounts.
- 4. Citizen journalists have placed themselves **in danger** while trying to record evidence (or potentially ignoring their civic duty to lend aid to others)³
- 5. Technologies such as **crowdsourcing**, **remote sensing and data mining** offer new opportunities to enable officials and first responders the ability to gather information and optimize their response efforts.
- 6.**Misuse of information, unequal access to informational sources** and means of communication are among some of the main obstacles against the achievement of the potential that stakeholders' engagement with social media and the activities of citizen journalists promises.
- 7. The difficulties associated **with inaccurate information**, such as the possibility of the wider circulation of rumors leading to insecurity and potentially panic.
- 8. The **dissemination of inaccurate information** could also lead to the further complication of disaster management, for example, by **hindering or slowing response efforts.**
- 9. It also is necessary to consider that there may be a **digital divide** in the use of information and communications technology in an emergency, and thus there may be some that do not necessarily have the knowledge and tools to share and access digital-based information.

10. Sensationalisation of information leading to **panic must be avoided**.

(Source: Chung Hong Tse (2021) Do institutional citizen journalism outlets provide newsworthy content? Comparison of news values between PeoPo and Public Television Service in Taiwan

Citizen journalism is defined as newsworthy content (text and audiovisual elements) that is produced and disseminated by citizens who did not receive professional journalistic training

(Source: https://www.govtech.com/em/safety/citizen-journalism-emergencymanagement.html) Role of Media in Disaster Risk Reduction: A Few Essential Tips

Tip 9: Be Aware of Fake News Utilizing Information from Social Media

- 1. Social media can be accessible and is low cost for information publication¹.
- 2. The **complexities of managing official website content** as well as official and unofficial social media accounts, and additional journalists staff may be necessary to keep up with this demand.
- 3. **Mobile access** in a post-disaster environment that allows them to upload or view online content needs fact checking.
- 4. **Multiple risks associated** with the use of social media during a disaster, including the **utilisation of unverified information from the public**.
- 5. Social media is **helpful in procuring information in a timely matter**, but one should **never quote someone's tweet** without talking to them to make sure they weren't joking or they weren't exaggerating.
- 6. Fact-checking or verification is essential when using social media.
- 7. It actually can be **dangerous to re-tweet** some people or to **highlight some people** because if they say something other people don't like, it could become the internet's most hated person of the hour.
- 8. Using photographs without giving credit can also prove to be undermining the trust

Source: ¹Houston et al (2019) Disaster journalism: fostering citizen and community disaster mitigation, preparedness, response, recovery, and resilience across the disaster cycle.



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Tip 10: Incorporate Scientific Data and Research Results as much as Possible

- 1. Scientific journalists are the ones who bridge the gap between those who do not understand something and making it understandable to others.
- 2. Science reporters also have to remember that they are **journalists first**, **and scientists second**.
- 3. Journalists have to work on what is **best known at the time of writing**, and clearly state that to readers while scientists can wait before publishing their findings.
- 4. The kind of scientific research that journalists should trust are from **official sources**.
- 5. **Credibility:** There are journals that we know are credible, then there are those that are more or less copycats, which just exist because of the funding they receive.
- 6. Journalists report on what is happening and scientists write about why it is happening and how it is happening. It is important for the journalists to not come at a conclusion without a proper reference of a scientific report or publication.
- 7. The quotes that are published from subject experts often do not get represented as they are but are **interpreted in a different manner** to suit the heading of the reporting but a lot of understanding is misinterpreted and is lost in translation.
- 8. While reporting on disasters, it is necessary to be **careful when transforming studies** and reports into top news stories.
- 9. It is advised to not only read the conclusion and the findings to cite the source but also read the main objectives of the paper, data sources, its methodology and previous work done and funding agencies.
- 10.It is also necessary to understand **what to report and which section of the finding to highlight.** Policy related issues and disasters related to climate change issues needs to be monitored and read widely.

Role of Media in Disaster Risk Reduction: A Few Essential Tips

TEN STEPS FOR EFFECTIVE COMMUNICATION

- 1. Collect **data** regarding the risk
- 2. Understand the **scientific basis** of the risk
- 3. Understand the **negative impacts** that may occur
- 4. Understand **public perception** of the risk
 - Surveys, interviews, and focus groups reveal perception
- 5. Expect varying reactions to the message
- 6. Risk comparisons:
 - If similar risks have been faced before, **risk comparison** can be effective
 - **Do not compare** a new, unfamiliar risk to a previous risk faced
- 7. Understand the importance of emotional factors
 - Using logic alone is not effective, **an emotional appeal** can be convincing
- 8. Treat the public as a partner
 - Describe the risk and impacts calmly, honestly, and in an understandable way
- 9. Do not deny concerns
 - Others' concerns are legitimate and should be heard to facilitate better decision-making
- 10.Collaborate with other trusted sources

Compiled from presentation "Understanding Disaster for Reporting" by Himadri Maitra for Press Club, Kolkata



Chapter 3

Examples of different types of media and DRR: Japanese Perspective

Broadcasting Media and DRR

At the time of the Great Kanto Earthquake od 1923, radio broadcasting was being tested in Japan. The loss of telephone, postal, and mass communication functions led to the spread of erroneous information, and there was a growing momentum for the practical application of radio broadcasting, which quickly transmits accurate information in the event of a disaster. As a result, radio broadcasting began in 1925 in 3 cities: Tokyo, Osaka and Nagoya. The following year, these three broadcasting stations merged into a single entity and NHK (Nippon Hoso Kyokai) was formed. Thus, Japanese broadcasting stations were born with the role of disaster broadcasting (NHK,2011). In 1958, NHK started broadcasting on TV. In September 1959, a major typhoon hit Japan, causing tremendous damage to 5,098 people who died or went missing. This disaster led to the establishment of "Disaster Countermeasures Basic Act" in 1961. The "Disaster Countermeasures Basic Act" stipulates the government's disaster prevention system, disaster prevention plans, responsibilities of local governments and measures to protect disaster victims. BOSAI is the Japanese term for disaster prevention through preparedness. NHK not only does lots of reporting during a disaster, it also shares education stories and programs before and after a disaster. Following website titled "Bosai: an educational journey" provides the link to the educational program on different types of hazards like earthquake, tsunami, typhoon, flood, nuclear accident etc. This program serves as a message from Japan to the world. [https://www3.nhk.or.jp/nhkworld/en/ondemand/program/video/bosai/]











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Print Media and DRR

Print media also plays an important role in disaster reporting. The smaller disasters are often reported to the local newspapers, which are not published nationally. Thus, to understand the local disasters, it is essential to look at the local newspapers. In an attempt by SEEDS Asia (www.seedsasia.org) under the Kyoto Kashi Partnership project (funded by Ministry of Foreign Affairs, Government of Japan), a local media analysis was done. The first step was the collection of past media reports on disasters published in three English and Hindi language mainstream newspapers published in Varanasi. The articles spanned three decades, starting from 1986 to 2016, and resulted in the collection of 800 newspaper articles. The articles were analyzed through the World Cloud Application to identify the most commonly covered disasters in the media. The results points to the fact that journalists wrote extensively on the effect of seasonal disasters on people and infrastructure. The most popular covered disasters were heat strokes, urban flooding, fog and dust that have dangerous consequences especially on the poorer sections of the society. Other findings indicated that journalists have increased their coverage in response to the intensifying impact of disasters on the city that is creating more suffering and loss. Journalists in their reports referred to the history of these catastrophes such as the past episodes to show the rising threat and its causes. Their stories also spotlighted the human suffering among vulnerable populations while describing the economic losses from the disaster applicable for individuals and communities. This example highlights the importance of local disaster reporting and analysis of those media reporting to understand the trends in local disaster events.





Social Media and DRR

Social media has now become part of day-to-day life. While it is easy to spread the knowledge through social media, its authentication is often questioned, and therefore the issue of fake news becomes a key challenge. We have seen extensively how social media has played mixed roles during the

COVID-19 pandemic. This media can be linked properly with traditional media and can play an important role, provided the source of information and its authenticity is made clear. For example, during the COVID-19, WHO (World Health Organization) has used extensively twitter, Facebook, Instagram and TikTok to spread the safety information in different languages. Trust in media is a very important issue for disaster risk reduction. The trust can be gained through science-based media coverage, highlighting the grass-root / people's vulnerability issues, and timely early warning system. Popular media anchors can also be effective in gaining people's trusts. During the 2011 East Japan Earthquake and Tsunami, newly popular social media such as Twitter and Facebook served as a lifeline for directly affected individuals, a means of information sharing, and a way for people inside and outside Japan to volunteer and to provide information-based support to affected individuals. Social media was used to perform vital relief functions such as safety identification, displaced-persons locating, damage information provision, support for disabled individuals, volunteer organization, fund-raising, and moral support systems. The figure below is the result of a survey conducted after the disaster (Peary et al. 2012). It shows differential use of social media based on the location of the person (whether in the affected areas or outside).

Further information on social media use can be found from: https://www.adjustersinternational.com/newsroom/the-importance-of-socialmedia-before-during-and-after-a-disaster



Community Radio and DRR

In general, a community radio station has low output frequency which covers a smaller area where the signal can be received. The first community radio station was established in Bolivia in 1947. Over last 75+ years, it has grown in numbers, and Asia Pacific region has now one of the largest numbers of community radio stations. In most cases, it is rooted in the local culture, needs and priorities. It is said that for community radio, it is 90% community, 10% radio, which means that the core of community radio is the community activities.

When a major disaster occurs in Japan, community radios play the role of disaster radios, or emergency disaster radios are set up in the affected area. In this way, victims can obtain the information they need to overcome the disaster. What is more, besides what has already been said, the role of community radios in disaster management is not confined to providing disaster information only. The presence of the community radio in every phase of a disaster; 'disaster mitigation', 'preparation', 'early warning', 'response', 'recovery and revitalization', is essential for the exchange and sharing of information and dialogue among residents, as well as the enhancement the community's capability and of self-government ability. That is, the community radio is the ideal tool because it has deep roots in the community, has built bonds among the people, and maintains a community identity.

For further information on community radio tips, please download these two documents:https://rajibshaw.org/wpRS/wp-content/uploads/2018/09/

Community-radio.pdf and https://rajibshaw.org/wpRS/wp-content/uploads/ 2018/09/ Natoraji.pdf



References

- Adjusters International: Social Media and disaster risk reduction: https://www.adjustersinternational.com/newsroom/the-importance-ofsocial-media-before-during-and-after-a-disaster
- Chan E. and Shaw R. (2020): Public health and disasters: health emergency and disaster risk management in Asia, Springer, 343 pages.
- Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters. New Delhi: SAGE Publications India Pvt Ltd, 2010. Sage Knowledge, 30 Jun 2023, doi: https://doi.org/10.4135/9788132105428.
- Houston JB, Schraedley MK, Worley ME, Reed K, Saidi J. Disaster journalism: fostering citizen and community disaster mitigation, preparedness, response, recovery, and resilience across the disaster cycle. (2019) Disasters. Jul;43(3):591-611. doi: 10.1111/disa.12352. Epub 2019 Apr 16. PMID: 30990926.
- Maitra H. (2023): Understanding disaster for reporting: in Workshop of disaster and climate risk communication, Press Club, Kolkata, India
- NIDM (2014) Re-examining principles of disaster reporting: A Training course for Senior Journalists, PIOs and PROs
- NIDM (2014) India Disaster Report https://nidm.gov.in/PDF/pubs/IDR2014-17.pdf
- NHK (2019) Bosai: an educational journey https://www3.nhk.or.jp/nhkworld /en/ondemand/program/video/bosai/]
- OECD (2019): https://www.oecd.org/chemicalsafety/chemicalaccidents/risks-from-natural-hazards-at-hazardous-installations.htm
- Peary B., <u>Shaw</u> R. and Takeuchi Y. (2012): Utilization of social media in the East Japan Earthquake and Tsunami and its effectiveness, accepted for publication in *Journal of Natural Disaster Science*, Volume 34, Number 1, 3-18.
- Shaw R. (2012) Community Radio Accessed from: https://rajibshaw.org/wpRS/wp-content/uploads/2018/09/Communityradio.pdf
- Shaw R. (2012) Natoraji Accessed from: https://rajibshaw.org/wpRS/ wp-content/uploads/2018/09/Natoraji.pdf

Role of Media in Disaster Risk Reduction: A Few Essential Tips •

- Shaw R., in Kanbara S., Shaw R., Kato N., Miyazaki H. and Morita A. (2022): Society 5.0, Digital Transformation and Disasters: Past, Present and Future, Springer, 217 pages
- Shaw R., Kakuchi S. and Yamaji M. (2021): Media and disaster risk reduction: advances, challenges and potentials, Springer, 249 pages.
- Tse, C. H. (2022). Institutional citizen journalism outlets as news? News Values comparison between Peopo and Public Television Service in Taiwan
- UNDRR (2020) Ecosystem-Based Disaster Risk Reduction: Implementing Nature-based Solutions for Resilience, UNDRR AP, Policy Paper)
- UNDRR (2020): Hazard definition and classification review, Technical Report, United Nations Office for Disaster Risk Reduction, International Science Council. Accessed from: https://www.undrr.org/publication/hazarddefinition-and-classification-review-technical-report
- UNISDR terminology on disaster risk reduction (2009) Accessed from: https://www.undrr.org/publication/2009-unisdr-terminology-disasterrisk-reduction
- UNFCC (2023), Adaptation and Resilience, The Big Picture, United Nations Climate Change



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<u>Annexure</u>

Govt. of West Bengal Disaster Management Set up Important Contacts

| STATE HEAD QUARTERS: KOLKATA | | | | | |
|------------------------------|-------------------|----------------------------|-------------------------------|--------------------------------|--|
| Sl No | LOCATION | DESIGNATION | MOBILE NO | | |
| 1 | Kolkata | Emergency Operation Centre | +91 86979 81070/033- 22535185 | | |
| 2 | Kolkata | Additional Secretary | 033-2250-1080 | | |
| 3 | Kolkata | Joint Secretary | | 8017824282 | |
| 4 | Kolkata | Special Commissioner | | 033-2250-1080 | |
| 5 | Kolkata | Deputy Secretary | | 8637065545 | |
| DIS | TRICT: HOOGHLY | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | |
| 1 | Hooghly | DDMO, Hoogly | 9073936743 | ddmo.hoogly@gmail.com | |
| 2 | Chinsurah (Sadar) | SDDMO, Chinsurah | 9073937456 | sdosadarhug479@gmail.com | |
| 3 | Chandannagar | SDDMO, Chandannagar | 9073937474 | sdochandannagore@gmail.com | |
| 4 | Srirampur | SDDMO, Srirampur | 9073937537 | cgrsdo_election@yahoo.com | |
| 5 | Arambagh | SDDMO, Arambagh | 9073937567 | sdoserampore@gmail.com | |
| DIS | TRICT: WEST MEDIN | NIPUR | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | |
| 1 | Medinipur | DDMO, West Medinipur | 9073936744 | ddmopaschimmedinipur@gmail.com | |
| 2 | Medinipur | SDDMO, Kharagpur | 9073937575 | kharagpursdo@gmail.com | |
| 3 | Medinipur (Sadar) | SDDMO, (Medinipur Sadar) | 9073937637 | medinipursadar@gmail.com | |
| 4 | Ghatal | SDDMO, Ghatal | 9073937676 | sdoghatalgen@gmail.com | |
| DIS | TRICT: EAST MEDIN | IPUR | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | |
| 1 | Purba Medinipur | DDMO, Purba Medinipur | 9073936746 | ddmopmdn@gmail.com | |
| 2 | Tamluk | SDDMO, Tamluk | 9073937711 | sdotamluk@gmail.com | |
| 3 | Egra | SDDMO, Egra | 9073937733 | sdoegra2014@gmail.com | |
| 4 | Contai | SDDMO, Contai | 9073937737 | contaisdo@gmail.com | |
| 5 | Haldia | SDDMO, Haldia | 9073937744 | sdohaldia@gmail.com | |
| DIS | TRICT: PURULIA | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | |
| 1 | Purulia | DDMO, Purulia | 9073936747 | ddmopurulia@gmail.com | |
| 2 | Purulia (Sadar) | SDDMO, Purulia (Sadar) | 9073937766 | sdosadareast2005@gmail.com | |
| 3 | Raghunathpur | SDDMO, Raghunathpur | 9073937770 | sdoraghunathpur@gmail.com | |
| 4 | Manbazar | SDDMO, Manbazar | 9073937771 | sdomanbazar@gmail.com | |
| 5 | Jhalda | SDDMO, Jhalda | 9073937772 | sdojhalda6417@gmail.com | |

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| DIS | DISTRICT: BANKURA | | | | | |
|-------|-----------------------|--|------------|---------------------------|--|--|
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Bankura | DDMO,Bankura | 9073936748 | dmd.bankura@gmail.com | | |
| 2 | Bankura (Sadar) | SDDMO, Bankura (Sadar) | 9073937773 | sdosadarbankura@gmail.com | | |
| 3 | Khatra | SDDMO, Khtara | 9073937774 | sdokhatra@gmail.com | | |
| 4 | Bishnupur | SDDMO, Bishnupur | 9073937775 | sdobsp@gmail.com | | |
| DIS | STRICT: EAST BURDW | /AN | | | | |
| Sl No | DISTRICT | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Burdwan | DDMO, Purba Burdwan | 9073936749 | ddmo.burdwan@gmail.com | | |
| 2 | Burdwan | SDDMO, Kalna | 9073937778 | sdokalna@gmail.com | | |
| 3 | Burdwan | SDDMO, Katwa | 9073937779 | sdo_katwa@nic.in | | |
| 4 | Burdwan Sadar (North) | SDDMO, Burdwan Sadar (North) | 9073937786 | sdosadarn@gmail.com | | |
| 3 | Burdwan Sadar (South) | SDDMO, Burdwan Sadar (South) | 9073937788 | sdosadars@gmail.com | | |
| DIS | STRICT: BIRBHUM | | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Birbhum | DDMO, Birbhum | 9073936751 | dmd.birsuri@gmail.com | | |
| 2 | Suri (Sadar) | SDDMO, Suri (Sadar) | 9073937789 | sdo_suri@yahoo.co.in | | |
| 3 | Bolpur | SDDMO, Bolpur | 9073937799 | sdoblp@gmail.com | | |
| 4 | Rampurhat | SDDMO, Rampurhat | 9073937837 | sdmrph@gmail.com | | |
| DIS | STRICT: PASCHIM BU | RDWAN | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Burdwan | DDMO, Paschim Burdwan | 9073936750 | ddmopaschimbdm@gmail.com | | |
| 2 | Burdwan | SDDMO, Asansol | 9073937776 | sdoasansol@gmail.com | | |
| 3 | Burdwan | SDDMO, Durgapur | 9073937777 | sdodurgapur@gmail.com | | |
| DIS | STRICT: COOCH BEHA | AR | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Coochbehar | DDMO, Coochbehar | 9073936731 | dismancbr@gmail.com | | |
| 2 | Coochbehar | SDDMO, Coochbehar (sadar) | 9073936932 | sdosadarbankura@gmail.com | | |
| 3 | Coochbehar | SDDMO, Dinhata | 9073936933 | sdodinhata@gmail.com | | |
| 4 | Coochbehar | SDDMO, Mathabhanga | 9073936934 | sdomtb2016@gmail.com | | |
| 5 | Coochbehar | SDDMO, Toofanganj | 9073936935 | sdotufangunj@gmail.com | | |
| 6 | Coochbehar | SDDMO, Mekhliganj | 9073936936 | sdomkg@gmail.com | | |
| DIS | STRICT: JALPAIGURI | | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Jalpaiguri | DDMO | 9073936732 | ddmsjal@gmail.com | | |
| 2 | Jalpaiguri | SDDMO, Jalpaiguri, Jalpaiguri (Sardar) | 9073936738 | sdosadarjal@gmail.com | | |

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| 3 | Jalpaiguri | SDDMO, Mal | 9073936739 | sdomal09@gmail.com | | |
|---|---|---|---|---|--|--|
| DISTRICT: ALIPURDUAR | | | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Alipurduar | DDMO, Alipurduar | 9073936733 | dmsapd20@gmail.com | | |
| 2 | Alipurduar | SDDMO, Alipurduar | 9073936937 | sdoalipurduar@gmail.com | | |
| DIS | STRICT: DARJEELING | | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Darjeeling | DDMO, Darjeeling | 9073936734 | ocdmdarj@gmail.com | | |
| 2 | Darjeeling | SDDMO, Darjeeling (Sadar) | 9073936940 | sdodarjeeling2012@gmail.com | | |
| 3 | Darjeeling | SDDMO, Kurseheong | 9073936942 | sdokurseong@gmail.com | | |
| 4 | Darjeeling | SDDMO, Siliguri | 907393943 | siliguri.sdo1@gmail.com | | |
| 5 | Kalimpong | SDDMO,Mirik | 9073936944 | sdomirik@gmail.com | | |
| DIS | STRICT: KALIMPONG | | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| 1 | Kalimpong | DDMO | 9073937878 | dmkalimpong2017@gmail.com | | |
| 2 | Kalimpong | SDDMO | 9073936941 | sdokalimpong@gmail.com | | |
| DIS | DISTRICT: UTTAR DINAJPUR | | | | | |
| | | | | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | | |
| Sl No 1 | LOCATION Uttar Dinajpur | DESIGNATION DDMO, Uttar Dinajpur | MOBILE NO 9073936735 | EMAIL ID disastermanagementud@gmail.com | | |
| Sl No 1 2 | LOCATION Uttar Dinajpur Islampur | DESIGNATION DDMO, Uttar Dinajpur SDDMO, Islampur | MOBILE NO 9073936735 9073936945 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com | | |
| Sl No 1 2 3 | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) | DESIGNATION DDMO, Uttar Dinajpur SDDMO, Islampur SDDMO, Raiganj (Sadar) | MOBILE NO 9073936735 9073936945 9073936946 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com | | |
| Sl No 1 2 3 DIS | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) STRICT: DAKHSHIN D | DESIGNATION DDMO, Uttar Dinajpur SDDMO, Islampur SDDMO, Raiganj (Sadar) | MOBILE NO 9073936735 9073936945 9073936946 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com | | |
| Sl No 1 2 3 DIS Sl No | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) STRICT: DAKHSHIN D LOCATION | DESIGNATION DDMO, Uttar Dinajpur SDDMO, Islampur SDDMO, Raiganj (Sadar) INAJPUR DESIGNATION | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936946 MOBILE NO 9000000000000000000000000000000000000 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com EMAIL ID | | |
| Sl No 1 2 3 DIS Sl No 1 | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) STRICT: DAKHSHIN D LOCATION Dakshin Dinajpur | DESIGNATION DDMO, Uttar Dinajpur SDDMO, Islampur SDDMO, Raiganj (Sadar) HAJPUR DESIGNATION DDMO, Dakshin Dinajpur | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936946 MOBILE NO 9073936736 9073936736 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com EMAIL ID ddmobalurghat@gmail.com | | |
| Sl No 1 2 3 DIS Sl No 1 2 | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) TRICT: DAKHSHIN D LOCATION Dakshin Dinajpur Balurghat (Sadar) | DESIGNATIONDDMO, Uttar DinajpurSDDMO, IslampurSDDMO, Raiganj (Sadar)NAJPURDESIGNATIONDDMO, Dakshin DinajpurSDDMO, Balurghat (Sadar) | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936946 9073936736 9073936736 9073936947 9073936947 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com EMAIL ID ddmobalurghat@gmail.com s_m_cbr@yahoo.co.in | | |
| Sl No 1 2 3 DIS Sl No 1 2 3 | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) TRICT: DAKHSHIN D LOCATION Dakshin Dinajpur Balurghat (Sadar) Gangarampur | DESIGNATIONDDMO, Uttar DinajpurSDDMO, IslampurSDDMO, Raiganj (Sadar)DESIGNATIONDDMO, Dakshin DinajpurSDDMO, Balurghat (Sadar)SDDMO, Gangarampur | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936736 9073936736 9073936947 9073936948 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com EMAIL ID ddmobalurghat@gmail.com s_m_cbr@yahoo.co.in sdogmp@bsnl.in | | |
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| SI No 1 2 3 DIS SI No 1 | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) LOCATION LOCATION Dakshin Dinajpur Balurghat (Sadar) Gangarampur LOCATION LOCATION Malda | DESIGNATION DDMO, Uttar Dinajpur SDDMO, Islampur SDDMO, Raiganj (Sadar) IDASIGNATION DDSIGNATION DDMO, Dakshin Dinajpur SDDMO, Balurghat (Sadar) SDDMO, Gangarampur IDASIGNATION SDDMO, Balurghat (Sadar) SDDMO, Gangarampur IDASIGNATION IDASIGNATION | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936736 9073936947 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com ddmobalurghat@gmail.com sdogmp@bsnl.in EMAIL ID EMAIL ID ddmmaldace11@gmail.com | | |
| SI No 1 2 3 DIS SI No 1 2 | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) LOCATION LOCATION Dakshin Dinajpur Balurghat (Sadar) Gangarampur TRICT: MALDA LOCATION Malda Chancol | DESIGNATION DDNO, Uttar Dinajpur SDDMO, Islampur DSDDMO, Raiganj (Sadar) DESIGNATION DDSIGNATION DDNO, Dakshin Dinajpur SDDMO, Gangarampur DESIGNATION DDSIGNATION | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936736 9073936947 9073936947 9073936948 9073936947 9073936947 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 | EMAIL ID disastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com CHAPPAIL ID ddmobalurghat@gmail.com sdogmp@bsnl.in EMAIL ID ddmmaldace11@gmail.com sdochanchal@gmail.com | | |
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| SI No 1 2 3 DIS SI No 1 2 3 DIS | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) LOCATION LOCATION Dakshin Dinajpur Balurghat (Sadar) Gangarampur TRICT: MALDA LOCATION Malda Chancol Malda (Sadar) | DESIGNATION DDNO, Uttar Dinajpur SDDMO, Islampur DDNO, Raiganj (Sadar) DDSIGNATION DDSIGNATION DDNO, Dalarganapur DDNO, Gangarampur DDNO, Malda SDDMO, Chancol SDDMO, Malda (Sadar) | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936947 9073936947 9073936947 9073936947 9073936947 9073936947 9073936948 9073936948 9073936948 9073936948 9073936948 9073936948 9073936949 90739369494 9073936950 | EMAIL ID idisastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com EMAIL ID ddmobalurghat@gmail.com sdogmp@bsnl.in EMAIL ID Addmmaldace11@gmail.com sdochanchal@gmail.com | | |
| SI No 1 2 3 DIS SI No SI No | LOCATION Uttar Dinajpur Islampur Raiganj (Sadar) TRICT: DAKHSHIN D Dakshin Dinajpur Dakshin Dinajpur Balurghat (Sadar) Gangarampur IGANGATION Alda Chancol Malda (Sadar) TRICT: JHARGRAM LOCATION | DESIGNATION DDMO, Uttar Dinajpur SDDMO, Islampur SDDMO, Raiganj (Sadar) DESIGNATION DDAO, DASIGNATION DDMO, Balurghat (Sadar) SDDMO, Gangarampur DDMO, Gangarampur SDDMO, Gangarampur SDDMO, Malda SDDMO, Chancol SDDMO, Maldata(Sadar) SDDMO, Maldata(Sadar) SDDMO, Maldata(Sadar) SDDMO, Maldata(Sadar) SDDMO, Maldata(Sadar) | MOBILE NO 9073936735 9073936945 9073936946 9073936946 9073936947 9073936947 9073936947 9073936947 9073936947 9073936948 9073936948 9073936948 9073936949 90739369494 90739369494 90739369494 9073936950 9073936950 | EMAIL ID idisastermanagementud@gmail.com sdo.islampur@gmail.com sdo.raiganjsadar@gmail.com GMAIL ID dddmobalurghat@gmail.com sdogmp@bsnl.in EMAIL ID ddmmaldace11@gmail.com sdochanchal@gmail.com sdo.maldasadar@gmail.com EMAIL ID | | |

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| 2 | Jhargram | SDDMO, Jhargram | 9073937678 | | |
|-----------------------|---------------------|-------------------------|------------|-------------------------------|--|
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| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | |
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| 2 | Krishnanagar | SDDMO, Krishnanagar | 9073936969 | sdo.sadar.nadia@gmail.com | |
| 3 | Kalyani | SDDMO, Kalyani | 9073937000 | sdokly123@gmail.com | |
| 4 | Ranaghat | SDDMO, Ranaghat | 9073937012 | sdorgt01@gmail.com | |
| 5 | Tahatta | SDDMO, Tahatta | 9073937037 | sdonadiatehatta@gmail.com | |
| DIS | STRICT: NORTH 24 PA | ARGANAS | | | |
| Sl No | LOCATION | DESIGNATION | MOBILE NO | EMAIL ID | |
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| 5 | Bongaon | SDDMO, Bongaon | 9073937171 | sdobongaon@gmail.com | |
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| 1 | South 24 Parganas | DDMO, S 24 Pgs | 9073936741 | south.24pgs.relief@gmail.com | |
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| 8 | Howrah (Sadar) | SDDMO, Howrah (Sadar) | 9073937373 | sdohwh@gmail.com | |
| 9 | Uluberia | SDDMO, Uluberia | 9073937437 | sdoulu.dev@gmail.com | |

Key Messages on Disaster Risk Reduction

- 1. Disasters are not "natural"; hazards are. Disasters can often be prevented and their impact mitigated.
- 2. Prevention pays and has an immediate return. Prevention is not a cost, it is an investment.
- 3. Disasters do not only cause immediate human suffering and destruction but impede long-term development by keeping people trapped in a vicious spiral of poverty.
- 4. Disaster risk reduction is about saving lives and livelihoods by changing people's mindsets. It is about shifting from response to prevention and reducing communities' vulnerability.
- 5. People have a right to live in safety and with dignity. It is the state's responsi bility to protect its citizens. It is therefore vital that disaster risk reduction policies are systematically integrated into sustainable development strategies at all levels, national to local.
- 6. Hospitals, schools, and all critical infrastructure safety are essential for reducing societies' vulnerability. Governments have a responsibility to protect critical buildings such as schools and hospitals, making communities more resilient to disasters.
- 7. Early warning systems can save lives. If alarms are sounded before disaster strikes, human loss can be avoided.
- 8. Educate to build a culture of prevention. People need to be provided with knowledge, skills, and resources to protect themselves from disaster risk, same as in health or traffic.
- 9. A safe and healthy environment is vital. It is everybody's responsibility to protect the environment to mitigate the impact caused by natural hazards.
- 10. Climate change adaptation starts with disaster risk reduction. Climate change is predicted to increase the frequency and intensity of storms, floods and droughts. Communities need to be prepared to be able to deal with the impact of climate related hazards

Source: United Nations International Strategy for Disaster Reduction (UNISOR)







Role of Media in Disaster Risk Reduction: A Few Essential Tips



Press Club, Kolkata India Japan Laboratory, Keio University, Japan

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