

# ADRIIMP

*Association for Disaster Risk Management Professionals*



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**This is an official publication of  
ADRIIMP**

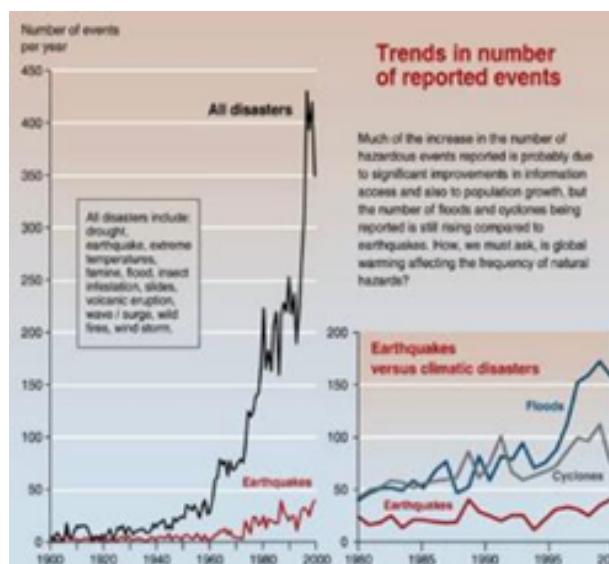
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## Increasing Disaster Trends and Climate Change

A changing climate leads to changes in the frequency, intensity, spatial extent, duration, and timing of weather and climate extremes.

Past climate trends based on historical data provide evidence of changing climate conditions.

Atmospheric scientists attempt to find answers regarding the future climate by relying on global climate models that include future concentrations of greenhouse gases and other pollutants in the atmosphere and emission scenarios.



Most Natural Disasters (more than 90%) are related to Climate during recent past

## Expected Future Climate



At the current levels of global warming

- moderate risks from increased dryland water scarcity, soil erosion, vegetation loss, fire damage,
- coastal degradation and crop yield decline
- At 2°C of global warming the risk of food system instability is very high.
- At 3°C of global warming the risk of vegetation loss, fire damage, and dryland water scarcity also becomes very high.

**Global exposure to multi-sector risk quadruples between 1.5°C and 3°C warming**

IPCC Special report on Ocean and Cryosphere in a changing climate reports

- Changing snow cover, sea ice and fresh water ice-ocean and atmospheric circulation and climate feedbacks
- Extreme ENSO events and other modes of variability
- Changes in tracks, intensity, and frequency of tropical and extra-tropical storms
- During the 20th century, the global mean sea level rose by about 15cm.
- Sea level is reaching up to 1.10m in 2100 if emissions are not sharply reduced.
- To date, the ocean absorbs > 90% of the excess heat in the climate system. By 2100, the ocean will absorb 2 to 4 times more heat if global warming is limited to 2°C and up to 5 to 7 times at higher emissions.
- Ocean Acidification
- Shifts in fish populations – affects food security.
- Reducing other pressures such as pollution will further help marine life deal with changes in their environment.
- Ocean warming reduces mixing between water layers.

Due to climate change

- an increase in the frequency of extreme rainfall and temperature events
- increase of heavy rainfall events leading to an increase of floods, landslides, soil erosion, more runoff and less infiltration
- increased frequency of dry periods and droughts and
- increase in temperature and extremes are expected

This will lead to

- More energy demand
- More heat related health issues
- More evapo-transpiration, water
- loss from soil, water bodies and plants



**Marine heatwaves (MHWs) – anomalously warm water events that may last many months and extend over thousands of square kilometres. Marine heat waves are becoming more frequent and severe in future affects corals, kelp forests and the distribution of marine life.**

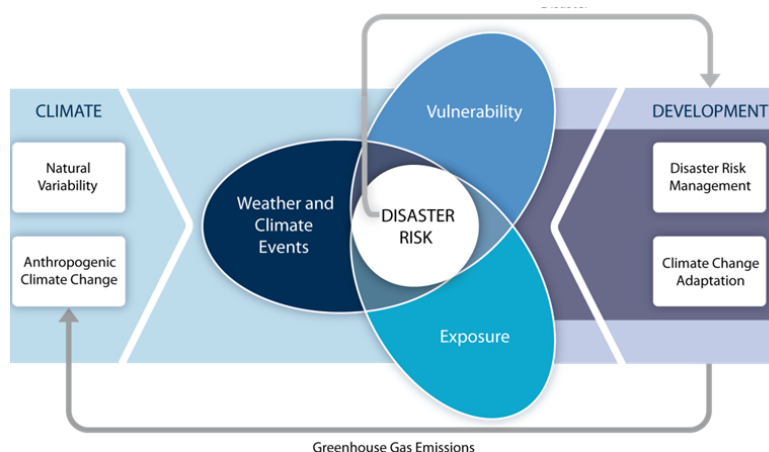


Based on a presentation by  
Dr Shiromani Jayawardena, Meteorologist  
and Deputy Director at the Dept. of  
Meteorology

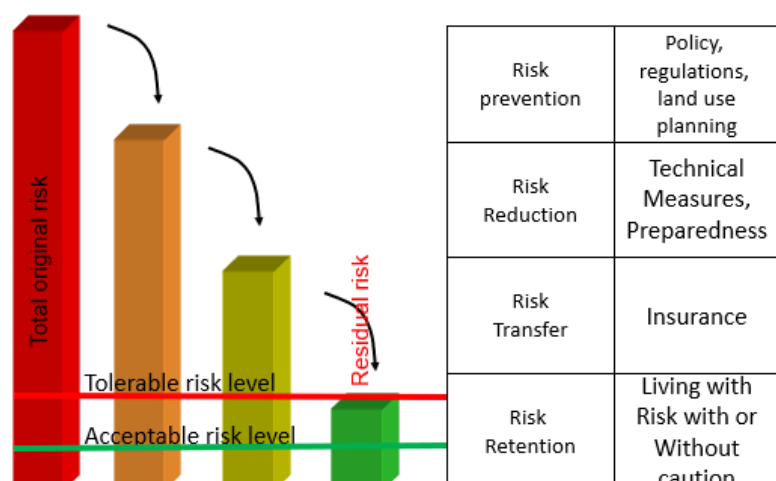


# Mitigation and Preparedness for Disaster Risk Reduction

Disaster risk management and climate change adaptation can influence the degree to which extreme events translate into impacts and disasters



## Disaster Risk Reduction



## Key investment areas in Mitigation and Preparedness

- Climate Resilience Improvement
- Catchment Water Management
  - Introducing Dual Irrigation Systems)
  - Crop diversification in Irrigated Agriculture
  - Introducing new technologies in micro irrigation
  - Micro catchment water management
  - Rainwater harvesting and establishing minor irrigation systems
- Improving collection and dissemination of weather related information
- Establishing a regional early warning system of climatic risks/disasters
- Promoting insurance for climatic risk management
- Strengthening pest surveillance and forecasting mechanisms
- Facilitating establishment of community partnership in food, forage and seed banks
- Implementing strategies for water conservation and use efficiency
- Managing coastal ecosystems
- Increasing the penetration of resource conserving technologies
- Exploiting the irrigation and manure potential of treated wastewater
- Forests management



Based on a presentation by  
Ms Anoja Seneviratne, Director Mitigation  
Research and Development, Disaster  
Management Center

## About ADRiMP

In Sri Lanka, recognition of disaster risk reduction (DRR) as a core competency of professional disciplines is yet to be achieved. This is also the ground reality in South Asia as well. Realizing this, the SAARC Disaster Management Centre initiated a process to bring together a multi-disciplinary team of professionals to serve its member countries to provide policy advice and facilitate capacity building services including strategic learning, research, training, system development, expertise promotion and exchange of information for effective disaster risk reduction. Within Sri Lanka, such expertise is scattered in silos of professional disciplines and not utilized in the current realm of DRR.

The commencement of the Association of Disaster Risk Management Professionals of Sri Lanka (ADRiMP) aspires to address this need. ADRiMP is an assembly of professionals representing varied disciplines to nurture a culture of safety in Sri Lanka from the impact of disasters and provides a platform for dialogue to achieve effective implementation of the Sendai Framework for Disaster Risk Reduction (2015-2030) and the Paris Agreement (2015-2030) for combating climate change and advocacy for policy initiatives and related matters thereof.

ADRiMP was launched under the patronage of HE The President of Sri Lanka as the Chief Guest at the BMICH on 23rd August 2019. Since the initiation, ADRiMP has been an active participant in leading disaster risk reduction forums and discussions.

### A few key links:

- SENDAI monitoring indicators:  
<https://www.dropbox.com/s/1sg7nebnpuck6x7/SENDAI%20Monitoring%20Indicators.pdf?dl=0>
- Global Assessment Report on Disaster Risk Reduction 2019: The fifth edition of the United Nations Global Assessment Report on Disaster Risk Reduction.  
<https://www.dropbox.com/s/sp0oltc2y6yquzr/GAR%202019%20Report.pdf?dl=0>
- Nature Based Solutions in Nationally Determined Contributions: Nature based solutions have a vitally important role to play in addressing both the causes and consequences of climate change.  
<https://www.dropbox.com/s/g0sndn5varizuh4/Nature%20Based%20Solutions%20to%20improve%20NDCs%202019.pdf?dl=0>
- 2018 Review of Disaster Events: In 2018, there were 281 climate-related and geophysical events recorded in the EM-DAT (International Disaster Database).  
<https://www.dropbox.com/s/pnzwcenvijaz7dxr/Review2018%20Disaster%20events%20by%20EM%20DAT.pdf?dl=0>
- The Global Risks Report 2019 - World Economic Forum: The collaborative and multi-stakeholder ethos of the World Economic Forum.  
[https://www.dropbox.com/s/ts6icyco2ii6aor/WEF\\_Global\\_Risks\\_Report\\_2019.pdf?dl=0](https://www.dropbox.com/s/ts6icyco2ii6aor/WEF_Global_Risks_Report_2019.pdf?dl=0)

## objectives of ADRiMP

- Providing a Forum for discussion of matters of professional interest and for consideration of all matters related to disaster and climate risk management in the country by recognizing and maintaining standards and ethics of disaster risk management professionals.
- Fostering of participation by the disaster risk management professionals in matters of national and regional interest for disaster and climate risk management and promoting such
- interest by co-operation with both Governmental and non- Governmental Organizations.
- To serve as a knowledge hub for promoting research in disaster and climate risk management.
- To serve as a think-tank and an advisory body for the promotion of a culture of safety and integration of national endeavors with regional and global initiatives.
- The provision of such facilities and services that are conducive to furthering of the objectives of the Association

## Membership

ADRiMP, a legally registered entity, currently has 160 registered members. Membership categories include Ordinary, Associate, Student, Honorary Member and Corporate Membership. To join please visit [www.adrimp.org.lk](http://www.adrimp.org.lk)

We will be reaching out to our current members to compile a membership directory.