

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO. 1226
TO BE ANSWERED ON 3RD DECEMBER, 2024

MITIGATING THE IMPACT OF EXTREME WEATHER EVENTS

1226. ADV K. FRANCIS GEORGE:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

(a) the details of fatalities, crop losses, livestock deaths and infrastructure damage marked by extreme weather events, including heatwaves, cyclones, lightning, floods, and landslides, specifically in Kerala (notably the landslide in Wayanad), Madhya Pradesh and Maharashtra;

(b) the specific measures that are being undertaken by the Government to mitigate the impact of these events and to enhance the resilience of communities, agriculture and infrastructure to such extreme weather conditions;

(c) whether the Government is considering a shift from a disaster response model to a proactive approach focused on risk reduction and climate resilience; and

(d) if so, the steps that have been taken or are planned to implement this shift, along with the timeline for achieving measurable outcomes in reducing future risks associated with extreme weather?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण राज्य मंत्री (SHRI BHAGIRATH CHOUDHARY)

(a) & (b): Data on fatalities, crop losses, livestock deaths and infra structure damage marked by extreme weather events is not maintained centrally. However, as per the information received from the Kerala, Madhya Pradesh and Maharashtra, the details of damages in wake of hydrometeorological disasters during 2024-25 are as follows:

S. No.	State	Year		
		2024-25		
		Human Lives lost (No.)	Cattle Lost (No.)	Houses/ huts damaged (No.)
1	2	3	4	5
1	Kerala	359	351	2153
2	Madhya Pradesh	378	1204	8247
3	Maharashtra	206	551	99

The primary responsibility for disaster management rests with the State Governments concerned. The Central Government provides requisite logistics and financial support to the efforts of the State Governments. The State Governments provide financial relief to the affected people in the event of 12 notified natural disasters which includes cyclone and flood, from the State Disaster Response Fund (SDRF), already placed at its disposal, in accordance with approved items and norms of Government of India. However, in the event of disaster of a severe nature, additional financial assistance is extended from the National Disaster Response Fund (NDRF), as per laid down procedure, which includes an assessment based on the visit of an Inter-Ministerial Central Team. The financial assistance provided under SDRF and NDRF is by way of relief and not for compensation.

(c) & (d): Disaster Management is a continuing and evolving process of the governance. After the Disaster Management Act of 2005, there is a shift in the Government approach from a disaster response model to a proactive approach focused on disaster risk reduction through preparedness, capacity building, response, mitigation, recovery & reconstruction. In this regard key measures taken by the Government are listed below:

- i. Government set up a robust institutional mechanisms at the National, State & District level in the country viz. National Disaster Management Authority (NDMA), State Disaster Management Authorities (SDMAs) & District Disaster Management Authorities (DDMAs) respectively to develop appropriate preparedness, coordination and prompt response mechanism for effective management of natural calamity.
- ii. National Institute of Disaster Management has been established to provide capacity building, research and documentation in disaster management.
- iii. NDMA has developed the first National Disaster Management Plan (NDMP) in 2016. The plan was revised in 2019 and is aligned with the Sendai Framework and Prime Minister's ten-point agenda.
- iv. NDMA has issued thirty-eight (38) guidelines for management of hazard specific disaster on various thematic and cross-cutting issues for guidance of the stake holders.
- v. Women's leadership and greater involvement for women empowerment and their leadership role in disaster risk management has been given prominence. Participation of women in disaster risk management is increased through imparting training to women as Aapda Mitra volunteers, maintenance and management of Cyclone Shelter Management & Maintenance Committees (CSMMC) in the country through 50% women participation.
- vi. NDMA has developed a web-based Dynamic Composite Risk Atlas and Decision Support System (Web-DCRA & DSS tool) for cyclone risk mitigation and response planning.
- vii. Government has taken steps to update hazard risk information and make it easily accessible to all infrastructure sectors so that all projects are disaster resilience.
- viii. Flood Hazard Atlas have been developed by National Remote Sensing Centre (NRSC) for flood prone states of West Bengal, Andhra Pradesh, Bihar, Odisha, Assam and Uttar Pradesh and for comparatively less flood affected states such as Jammu & Kashmir, Tamil Nadu, Kerala, Gujarat, Arunachal Pradesh, Karnataka and Maharashtra.

- ix. Building Material & Technology Promotion Council (BMTPC) has developed a digital atlas that captures the vulnerability of various parts of the country to different hazards. All States and UTs have been sensitised to use this information in project preparation.
- x. NRSC has prepared a comprehensive data set of 28,000 glacial lakes in the Indian Himalayan Region.
- xi. National Centre for Seismology has prepared a seismic micro-zonation of Delhi and has supported seismic micro-zonation of several other cities.
- xii. India Metrological Department issues regular and precise weather forecasts & warning bulletins including for cyclones to all the affected/ likely affected States/ UTs.
- xiii. A number of new mobile Applications such as Damini, Mausam, Sachet etc. have been developed for timely dissemination of early warnings and alerts to the common people.
- xiv. NDMA also uses social media channels to update the public on ongoing disaster events and the governments' response to them. The Social Media is also used to amplify the reach of content delivered on print media (such as OpEd written by NDMA officers) and broadcast media (such as "Aapada Ka Samna" programmes).
- xv. The National Cyclone Risk Mitigation Project (NCRMP) has been implemented in 8 coastal states. Multi-purpose cyclone shelters and Early Warning Systems have proved to be of great help in saving lives during various cyclones.
- xvi. 'Common Alerting Protocol (CAP) based 'Integrated Alert System' has been implemented with an outlay of Rs. 354.83 Crore, for dissemination of geo targeted early warnings/alerts related to disasters to the citizens of India for all 36 States/UTs. Over 4300 crore sms alert have been issued so far.
- xvii. Indian Universities and Institutions Network (IUINDRR-NIDM) has been established, under the aegis of National Institute of Disaster Management (NIDM), to highlight the role of education, research and training in disaster resilience and to develop model curricula for DRR with its integration at various levels.
- xviii. In order to deepen disaster preparedness and response capacity at the local level in the country, Aapda Mitra Scheme, with a total outlay of Rs. 369.40 Crore, has been implemented, under which 1,00,000 community volunteers have been trained in disaster rescue in 350 multi-hazards disaster prone districts, covering all States/UTs.
- xix. Mock exercises, School Safety Programme (SSP) and community awareness programmes are regularly conducted by NDMA and NDRF to create awareness among people.
- xx. National Mission for Sustainable Agriculture under the National Action Plan on Climate Change is implemented to make agriculture more resilient to climate change.
- xxi. The Indian Council of Agricultural Research implements National Innovations in Climate Resilient Agriculture (NICRA) to study the impact of climate change on agriculture and to develop climate resilient technologies.
