



Kerala's New Protocols for Managing Disasters

Picking up valuable lessons from the Cyclone 'Ockhi' disaster and the 2018 floods, the Kerala State Disaster Management Authority (KSDMA) has updated Standard Operating Procedures (SOP), '**Orange book of disaster management - Kerala - SOP and emergency support functions plan**', and adopted new protocols for disaster management in the State - '**Monsoon preparedness and emergency response plan**'.

Key Points

- Containing information on emergency response assets available across the State, the orange book explains the SOP for flood, cyclone, tsunami, high waves (swell waves, storm surges, 'Kalla Kadal'), petrochemical accidents and even mishaps caused by space debris.
- It describes incidence response mechanisms to be adopted at the State, district and taluk level.
- The 'Monsoon preparedness and emergency response plan' is season-specific and meant to be strictly complied with during the south-west and north-east monsoon seasons (June to December).
- It lists the roles of the State emergency operations centre, central agencies, district disaster management authorities, etc. Earlier, no single document had clarified the responsibilities of individual government departments.
- The Monsoon preparedness plan is a season-specific dynamic sub-plan of the Orange book of disaster management. It will be updated every year after receiving the first long-range forecast of the India Meteorological Department on Monsoon.

State Disaster Management Authority (SDMA)

- State Disaster Management Authorities are statutory bodies constituted under the Disaster Management Act, 2005.
- The Disaster Management Act established the National Disaster Management Authority (NDMA), headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers, to spearhead and implement a holistic and integrated approach to disaster management in India.

Kalla Kadal

- In Kerala, fishermen use the term 'Kalla Kadal' to refer to the **unusual occurrence of high swell waves during good weather**. It is often triggered by storms as far away as the Antarctic region.
- Travelling thousands of kilometres across the ocean basin, the swell **amplifies when it encounters a coastal current**, a phenomenon known as **remote forcing**.
- 'Kalla Kadal' is known to **occur along the southern coast of India**, mainly **during the pre-monsoon period**, in April and May, marked by clear weather. The flooding turns severe on the days of a spring tide.
- The term Kalla Kadal has been recognised by the UNESCO, the World Meteorological Organisation and the Intergovernmental Oceanographic Commission to explain the unusual occurrence of high swell waves.

