

A photograph of a man in a small wooden boat on a river, surrounded by a heavy monsoon rain. The man is shirtless, wearing a pink headband and a brown dhoti, and is holding a long wooden pole. Several white goats are in the boat with him. The background shows a lush green forested hillside. The image is partially obscured by a large blue graphic element on the right side of the slide.

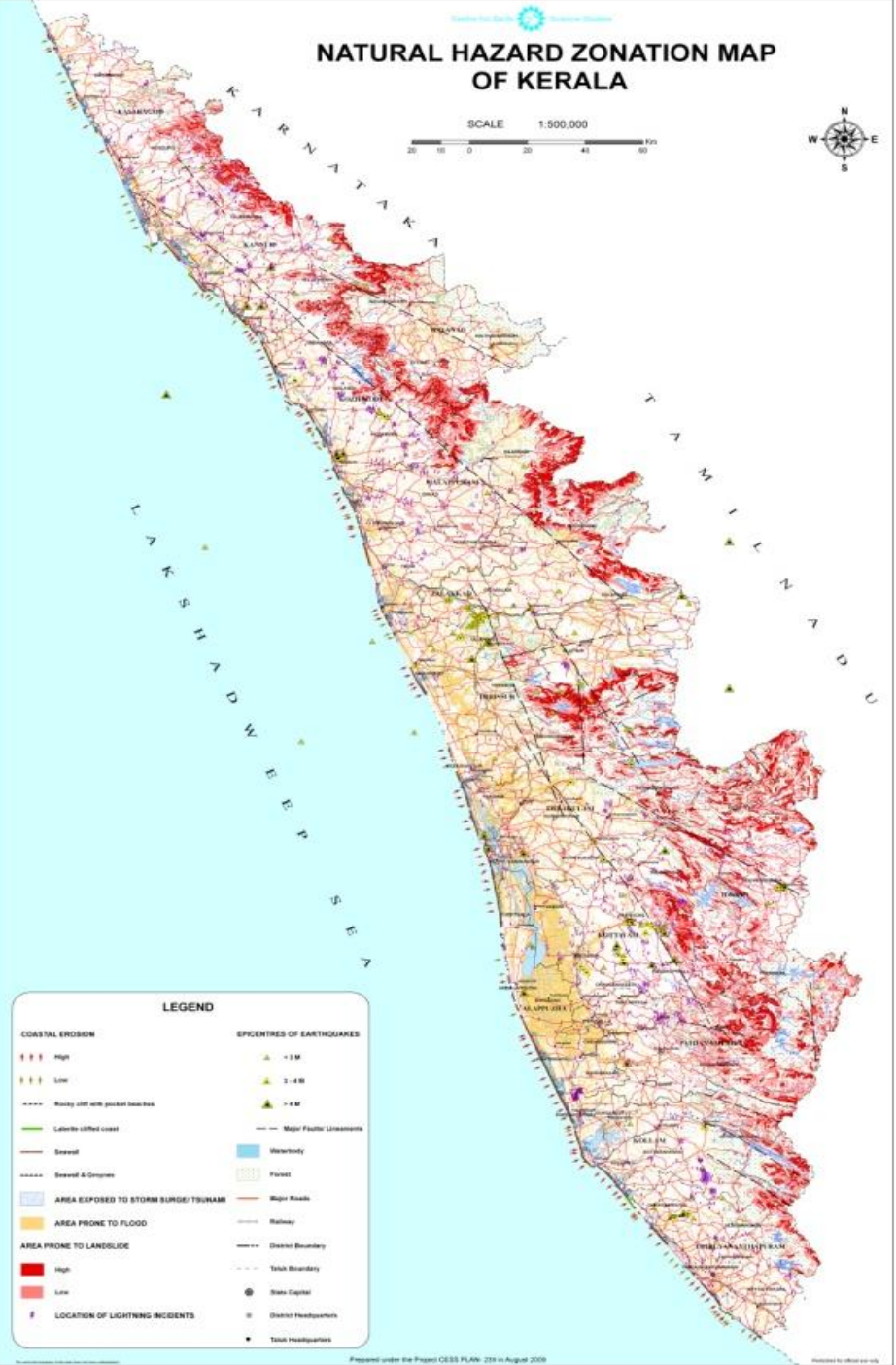
MONSOON PREPAREDNESS

Dinendra Kashyap, IPS

ADGP, Kerala

NATURAL HAZARD ZONATION MAP OF KERALA

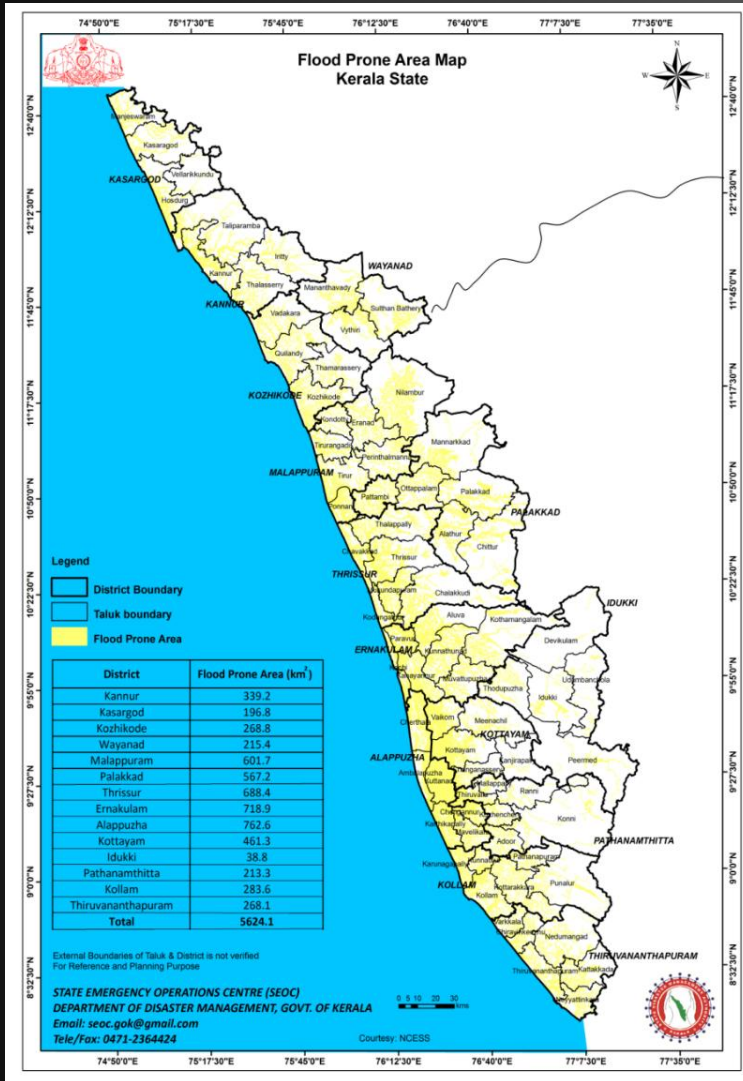
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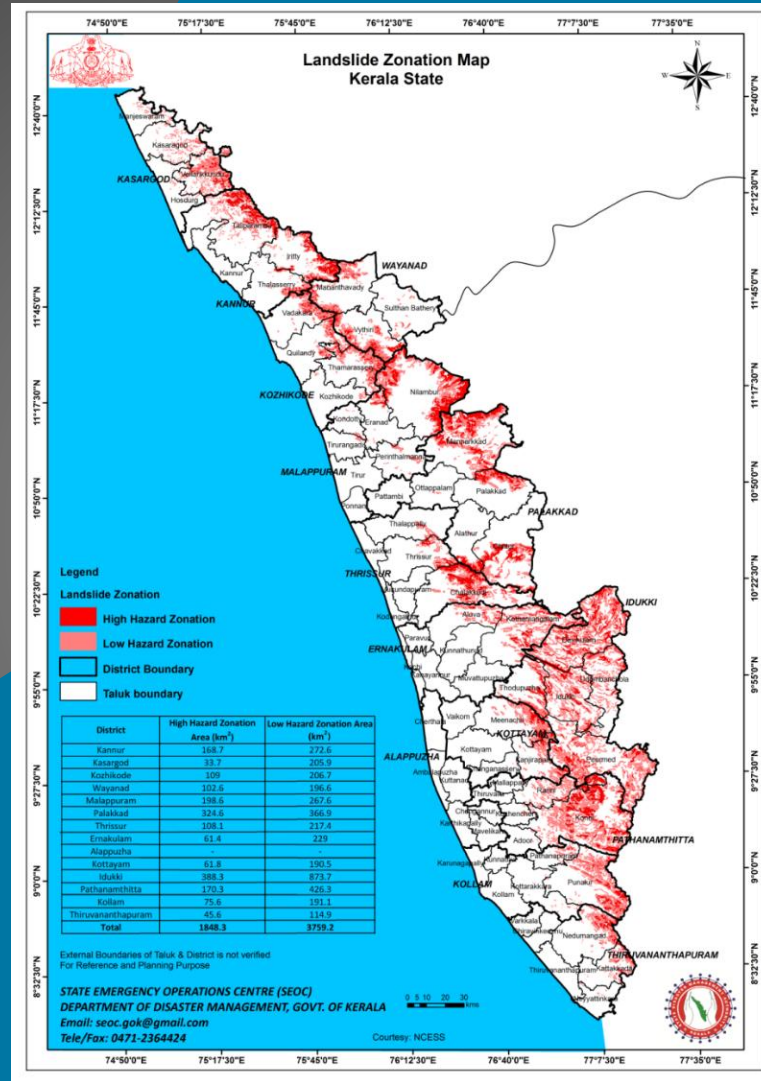
HAZARD PROFILE OF KERALA

- 3rd most densely populated State in the country
- 14.5% of the state is flood prone
- 14.4% of the state is landslide prone
- 55.5% of the coastline prone to coastal hazards
- The state falls in zone 3 in the National Seismic Map
- Lightning causes an average of 4 deaths in year

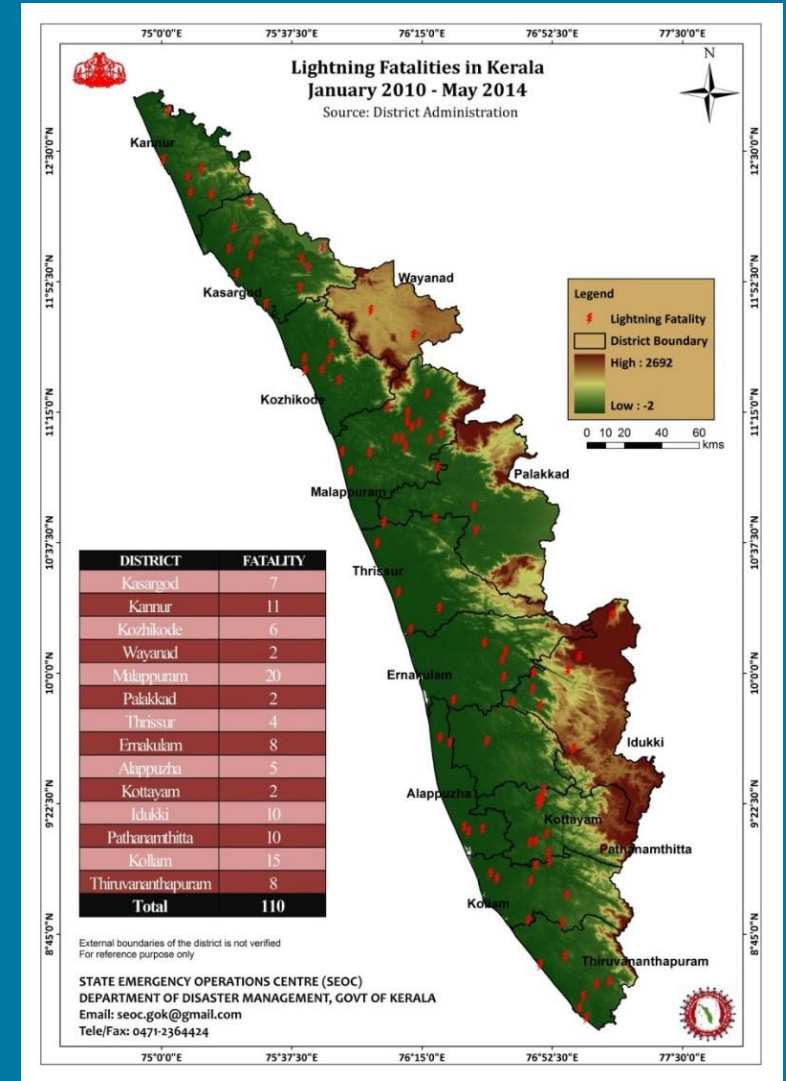
MAPPING OF RISK PRONE AREAS



FLOOD



LAND SLIDE

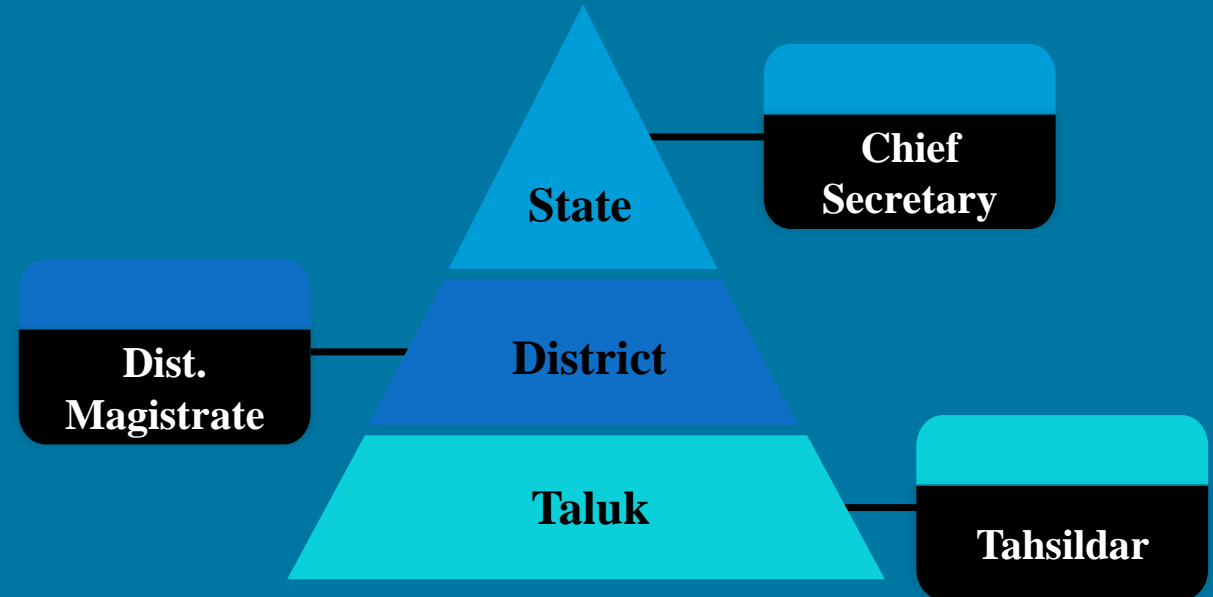


LIGHTNING

IRS (INCIDENT RESPONSE SYSTEM)



- Three tier IRS as per Orange Book.
- Updated Annually.
- Involves all Stake holders
- Regular coordination meetings.



Levels of IRS

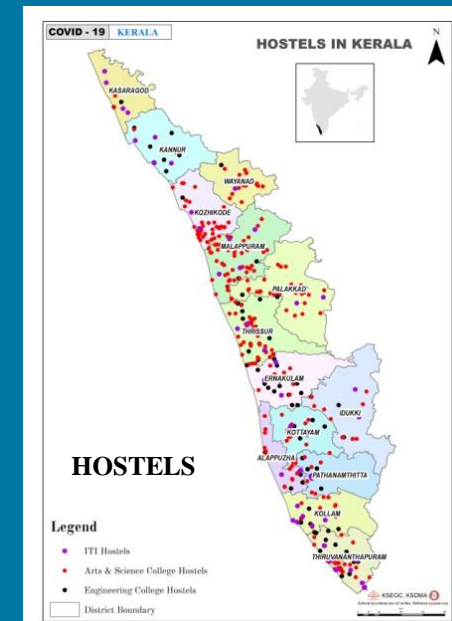
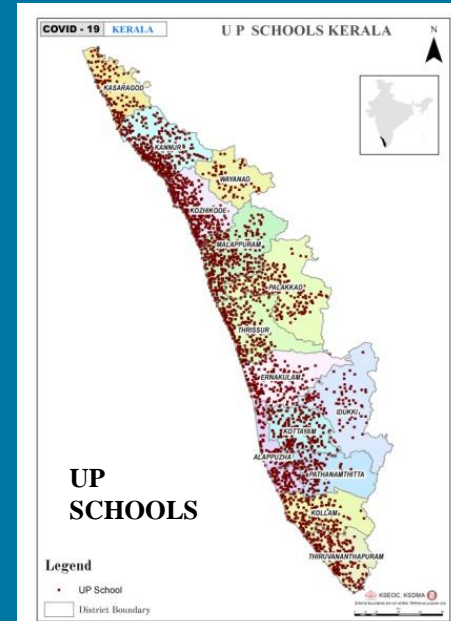
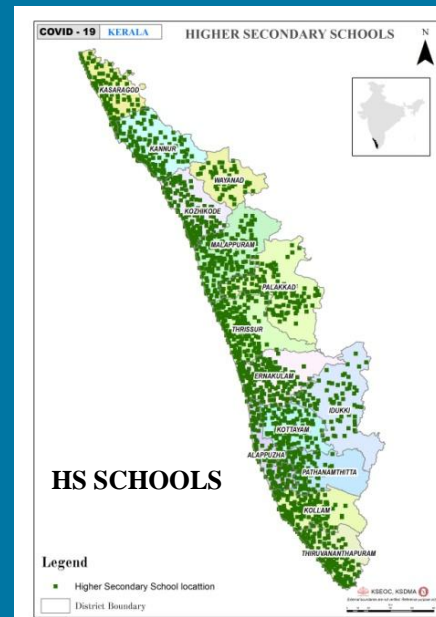
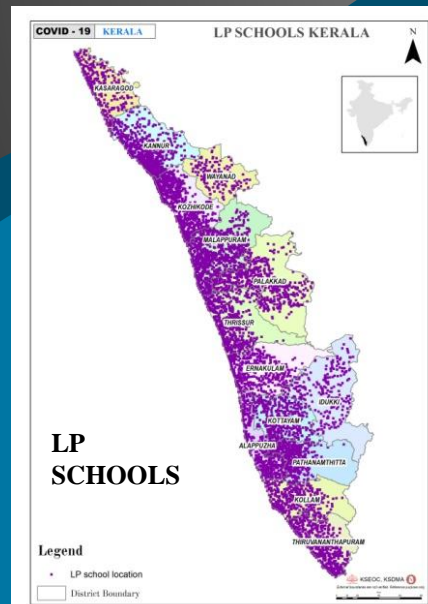
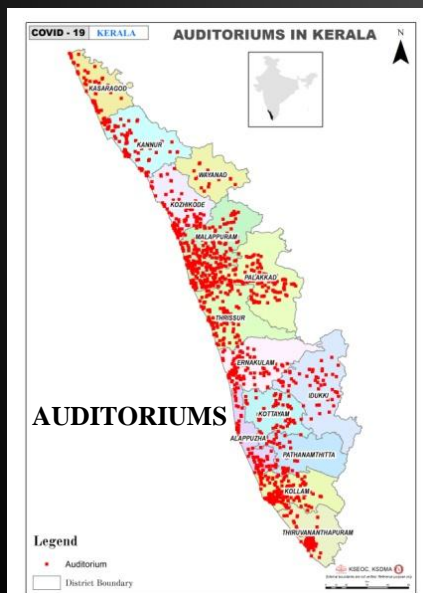
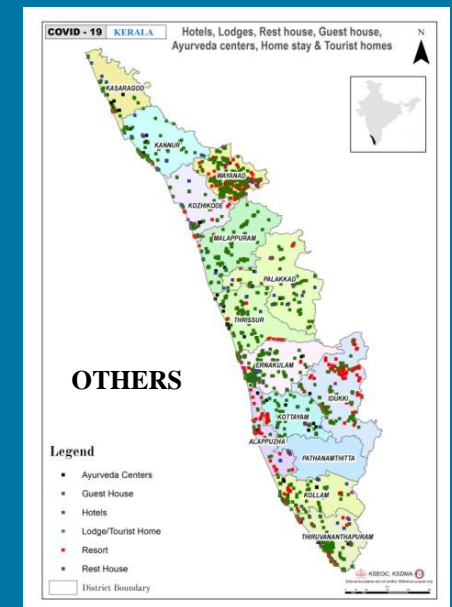
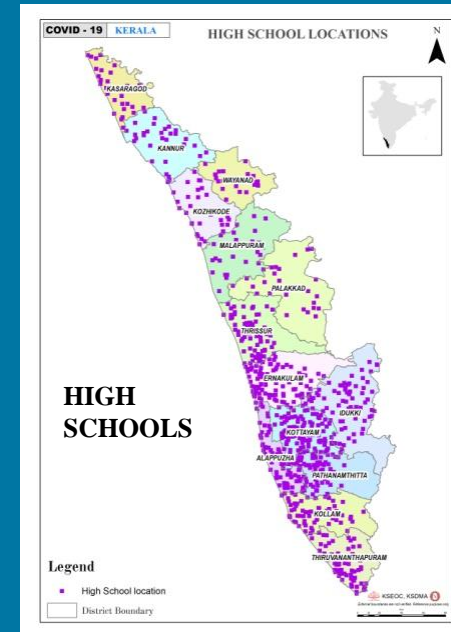
RESOURCE MAPPING

- **Equipment skilled man-power mapping in IDRN.**
- **15,000 Civil Defence Volunteers.**
- **16,000 Aapda Mitra & Yuva Aapda Mitra Volunteers trained by Kerala SDMA.**
- **All LSGDs have Disaster Management plans.**
- **LSGDs have 4 categories of emergency response teams.**
 - **Early warning Teams**
 - **Search and Rescue Team**
 - **First Aid and Medical Support**
 - **Shelter / Camp management**



RESOURCE MAPPING

- 5,00,000 Hospital Bed Facilities Identified.
- 20,000 Shelter Homes.
- 23 Specialized Relief Shelters.




SPECIALIZED FORCES



- **RRRF – Rapid Response Rescue Force of state police is being groomed as a specialized force for emergency responses.**
- **9 NDRF teams to be strategically located as per Orange Book.**
- **Other Armed Forces on call of SDMA.**
- **Co-location / Joint operations by RRRF & NDRF is contemplated.**

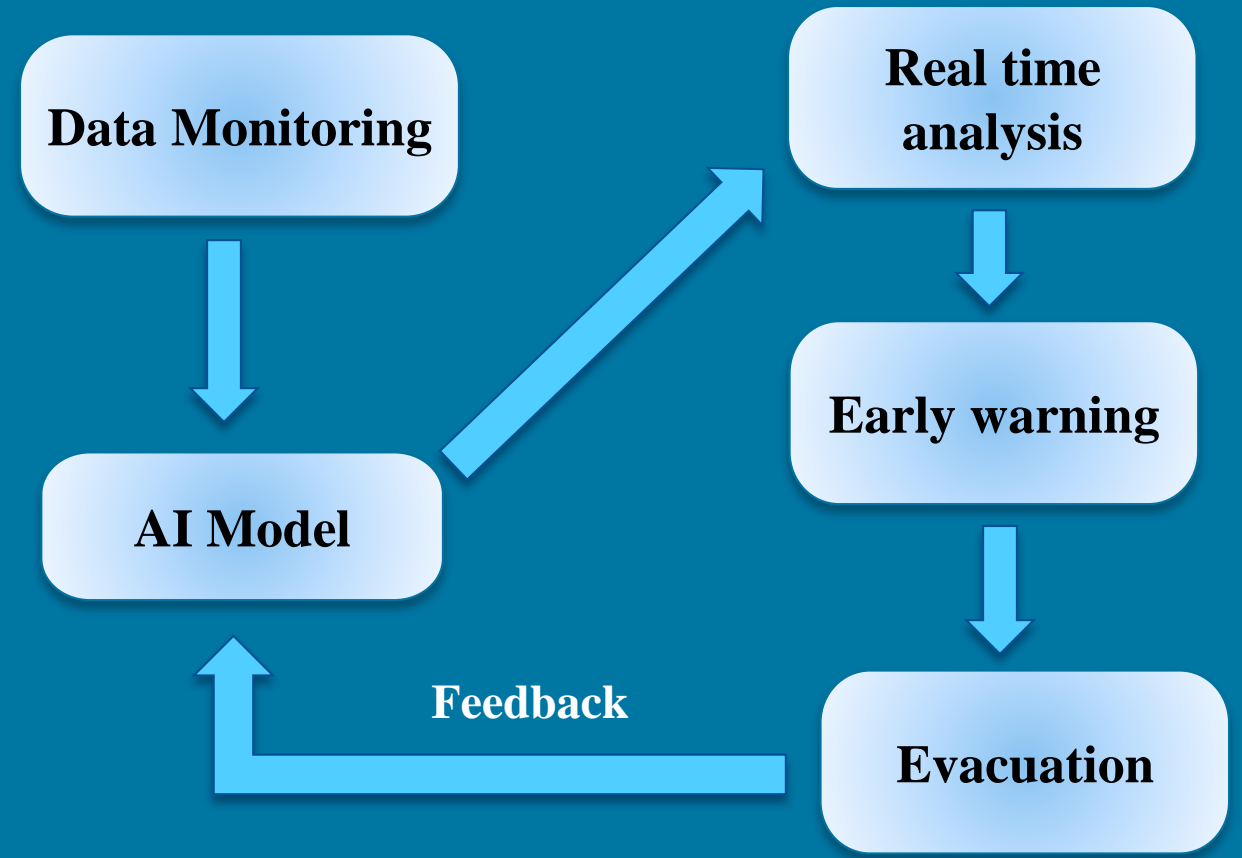
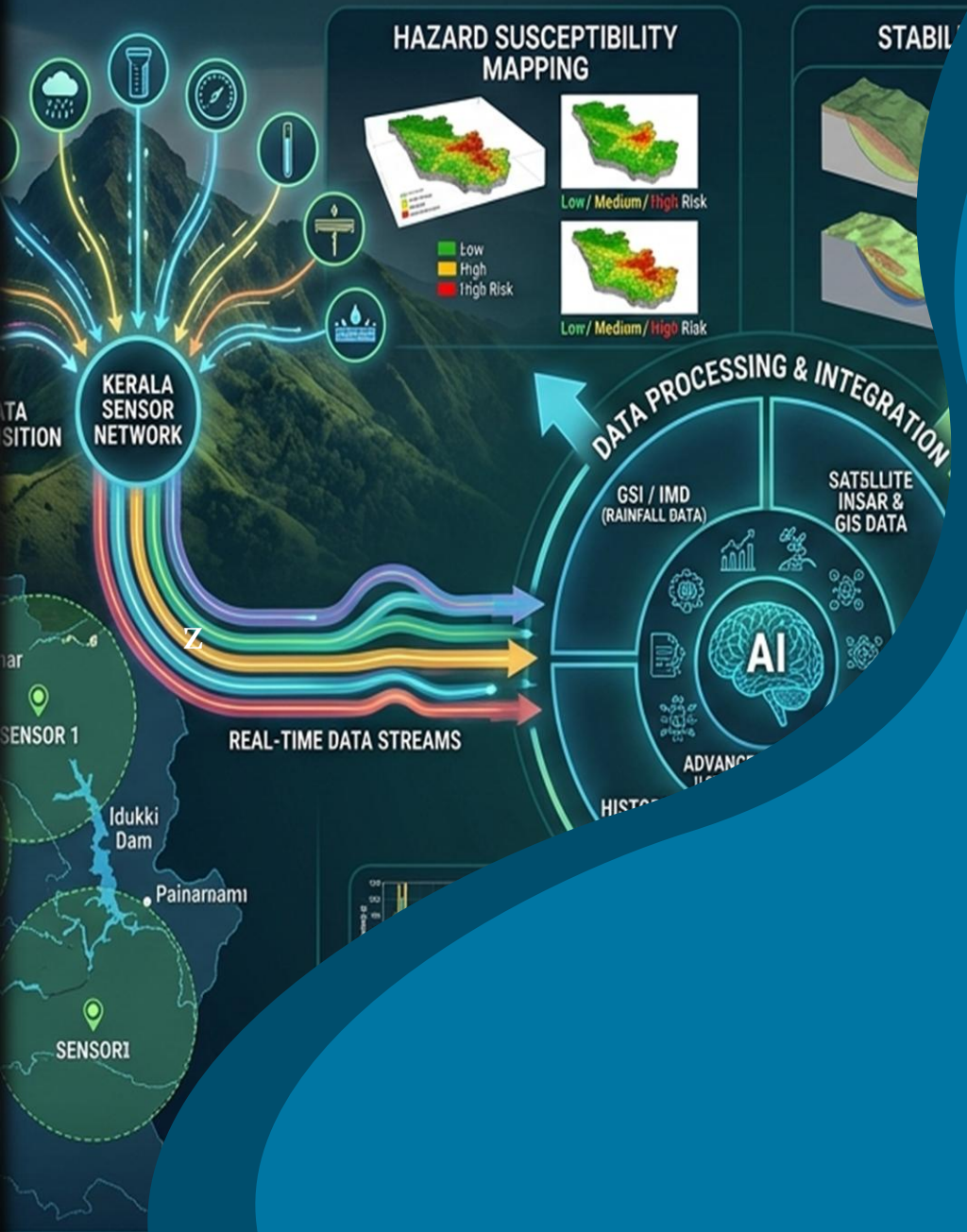


SPECIALIZED TRAINING

- **Rapid Response Rescue Force is raised as a Centre of Excellence in Disaster Management.**
 - **Refresher Training for core contingents from various battalions is scheduled at RRRF from 8 - 28 May.**
 - **SDMA will conduct Monsoon Preparedness Training of all stake holders from 12th to 14th May.**
 - **State Relief Commissions review of preparedness with 31 departments & 10 uniformed forces in May 2026 .**
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USE OF TECHNOLOGY

- Use of technology & PPP for Landslide Early Warning System - IDUKKI MODEL





THANK YOU