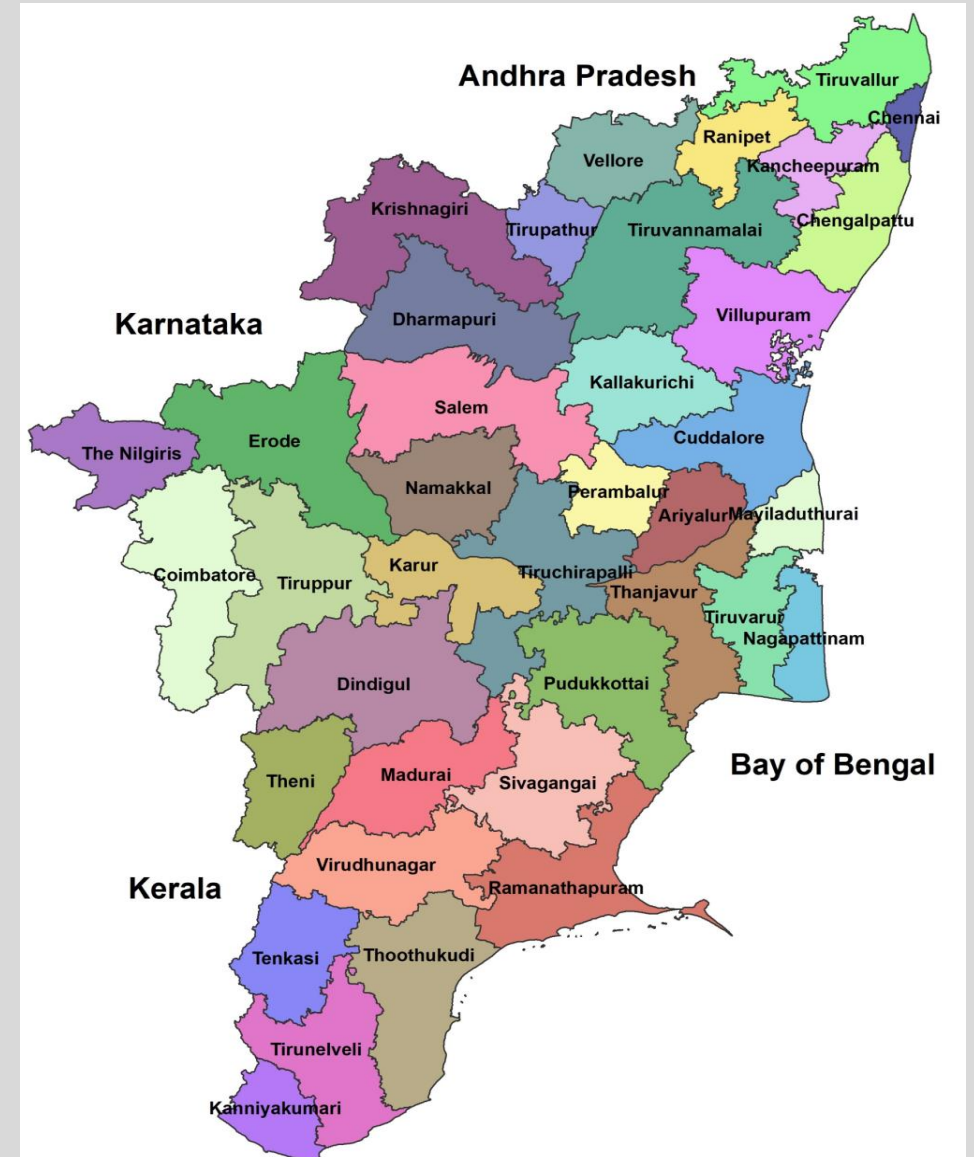


Towards Resilient Tamil Nadu

**K.S.Kandasamy I. A. S.,
Director Disaster Management
Tamil Nadu Disaster Risk Reduction Agency**
Presentation in the Regional Conclave on Disaster Management
8th & 9th March 2022 Chennai

Disaster Risk Profile of Tamil Nadu

- 1076 Kms of Coastline.
- Major natural hazards –
 - Cyclonic storms
 - Floods
 - Periodic Droughts.
 - Covid-19 Pandemic
- Other disasters prevalent in the State –
 - Landslides
 - Earthquake
 - Sea Erosion
 - Sea Water Incursion
 - Heat waves
 - Thunder Storm and Lightning



History of Major Disasters faced by Tamil Nadu during last four decades

Sl. No.	Major Disaster	Year
1.	Flood	1977, 1985, 1996, 1997, 1998, 2005, 2007, 2008, 2010, 2011, 2015 & 2021
2.	Cyclone	1977, 1991, 1992, 1993, 2000, 2008, 2011, 2016, 2017, 2018 & 2020
3.	Drought	1987, 1988, 1995, 2001, 2002, 2003, 2004, 2012 & 2016
4.	Land Slide (Particularly Nilgiris District)	1993, 2009 & 2019
5.	Tsunami	2004

Emerging Disaster Risk Scenario in Tamil Nadu

- Climate Change induced slow on set of Extreme Weather Events like Unseasonal Rains, Cloud Bursts, Inundation of Crop Lands,
- Landslides/Slips in Theni, Dindigul, Salem, Thirupathur & Erode Districts
- **Lightning** – The loss of life of human and animals is on the increase in districts Tiruvannamalai, Villupuram, Kallakurichi
- Sea Level Rise
- Pest Attacks
- Earth Quake - Cascading Disasters
- Chemical, Biological, Radiological and Nuclear
- Pandemics

Risk Governance- Institutional Arrangements

- Tamil Nadu State Disaster Management Authority with Hon'ble Chief Minister as Chair person
- State Executive Committee with the Chief Secretary to Government as the Chair Person
- District Disaster Management Authority with District Collector as the Chair Person
- Revenue and Disaster Management Department
- Commissioner for Revenue Administration /State relief Commissioner

Risk Governance- Institutional Arrangements

- Director, Disaster Management
- Tamil Nadu Disaster Risk Reduction Agency- Executive Agency of the TNSDMA.

Updated Status of SDMP/DDMP

- Tamil Nadu State Disaster Management Perspective Plan

2018-2030

- TNSDMP 2021 Prepared
- DDMP 38 Districts Prepared

NDMA Projects/Schemes

- **Sendai Framework Monitoring** – Senior Consultant appointed, National Disaster Management Information System (NDMIS) is being updated
- **Aspirational Districts** – Consultants have been Appointed, They attending to the tasks assigned
- **Upscaling Aapda Mitra:** for 5,500 Volunteers, covering 15 Districts.
Preliminaries completed. To be launched soon


Common Alert Protocol

सचेत - Integrated Alert System | Welcome tpalani@trsdma

All Warnings | Selected Warning Details | Last updated: 29 Nov 2021, 10:18 AM

Generated by:	Tamilnadu SDMA	Entry Date & Time:	29 Nov 2021, 9:50 AM
Effective Date & Time:	29 Nov 2021, 9:45 AM	Expiry Date & Time:	30 Nov 2021, 9:45 AM
Area Description:	floods- kosasthalayar river flood plain	Area covered:	228.03 Sq. Km (approx.)
Event Description:	Floods	Urgency:	Immediate
Severity:	WARNING	Certainty:	Most Likely

Message Body:
Message in English: Floods is Most Likely to occur over floods- kosasthalayar river flood plain.
Message in Tamil: இன்று 29-11-2021, 8:30 am முதல் நேரத்தைக்கொண்டு உபரிநீர் திறப்பு 1 8000 கனஅடியாக அதிகரிக்கப்படும். கொசல்தலையாற்றின் இடுக்கை வலிக்கும் மக்கள் பாதுகாப்பான பகுதிகளுக்கு செல்ல எச்சரிக்கை.



Media	Name	Status
TSP (SMS)	BSNL	successful
	Vodafone-Idea	successful
	Reliance Jio	successful
	Airtel	successful

Message sent in Tamil language.


Warning Generated By:
 Organisation: Tamilnadu SDMA
 Contact No: 9444446559

सचेत - Integrated Alert System | Welcome tpalani@trsdma

All Warnings | Selected Warning Details | Last updated: 25 Oct 2021, 10:28 AM

Generated by:	Tamilnadu SDMA	Entry Date & Time:	24 Oct 2021, 7:21 PM
Effective Date & Time:	24 Oct 2021, 6:40 AM	Expiry Date & Time:	25 Oct 2021, 6:40 AM
Area Description:	Flood	Area covered:	218.2 Sq. Km (approx.)
Event Description:	Floods	Urgency:	Immediate
Severity:	WARNING	Certainty:	Most Likely

Message Body:
Message in English: Floods is Most Likely to occur over Araniyar Flood Plains.
Message in Tamil: (25.10.2021) அன்று பிச்சாட்டுர் அணைக்கட்டில் உபரிநீர் திறக்கப்படுவதால் ஆரணி ஆற்றின் இடுக்கைக்கொண்டிய விரிமங்களை சேர்ந்த மக்கள் பாதுகாப்பான இடங்களுக்கு செல்லமாறு எச்சரிக்கப்படுகிறார்கள்.



Media	Name	Status
TSP (SMS)	BSNL	successful
	Vodafone-Idea	successful
	Reliance Jio	successful
	Airtel	successful

Message sent in Tamil language.

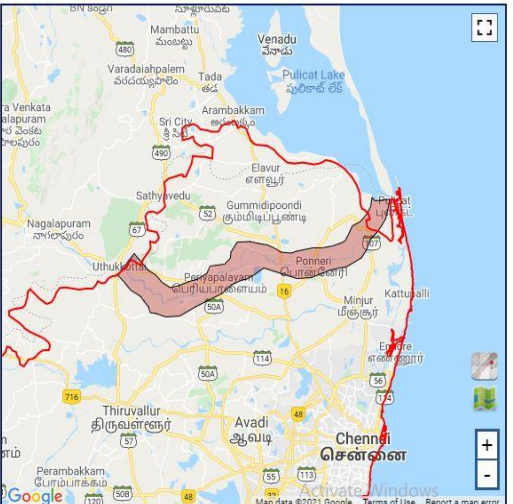
Warning Generated By:
 Organisation: Tamilnadu SDMA
 Contact No: 9444446559

सचेत - Integrated Alert System | Welcome tpalani@trsdma

All Warnings | Selected Warning Details | Last updated: 28 Nov 2021, 6:56 PM

Generated by:	Tamilnadu SDMA	Entry Date & Time:	28 Nov 2021, 6:56 PM
Effective Date & Time:	28 Nov 2021, 6:50 PM	Expiry Date & Time:	29 Nov 2021, 6:50 PM
Area Description:	Flood -Araniyar river flood plain	Area covered:	218.2 Sq. Km (approx.)
Event Description:	Floods	Urgency:	Immediate
Severity:	WARNING	Certainty:	Most Likely

Message Body:
Message in English: Floods is Most Likely to occur over Flood -Araniyar river flood plain.
Message in Tamil: ஆந்திர மாநிலம் பிச்சாட்டுர் அணையிலிருந்து உபரிநீர் 3000 கனஅடி திறக்கப்பட்டுள்ளது இது மேலும் அதிகரிக்கப்படுவதால் ஆரணி ஆற்றின் கரையோரம் வாழும் மக்கள் பாதுகாப்பான இடங்களுக்கு செல்ல எச்சரிக்கை.



Media	Name	Status
TSP (SMS)	BSNL	successful
	Vodafone-Idea	successful
	Reliance Jio	successful
	Airtel	successful

Message sent in Tamil language.

Warning Generated By:
 Organisation: Tamilnadu SDMA
 Contact No: 9444446559

16 Messages During NEM 2021 to 28,91,931 People

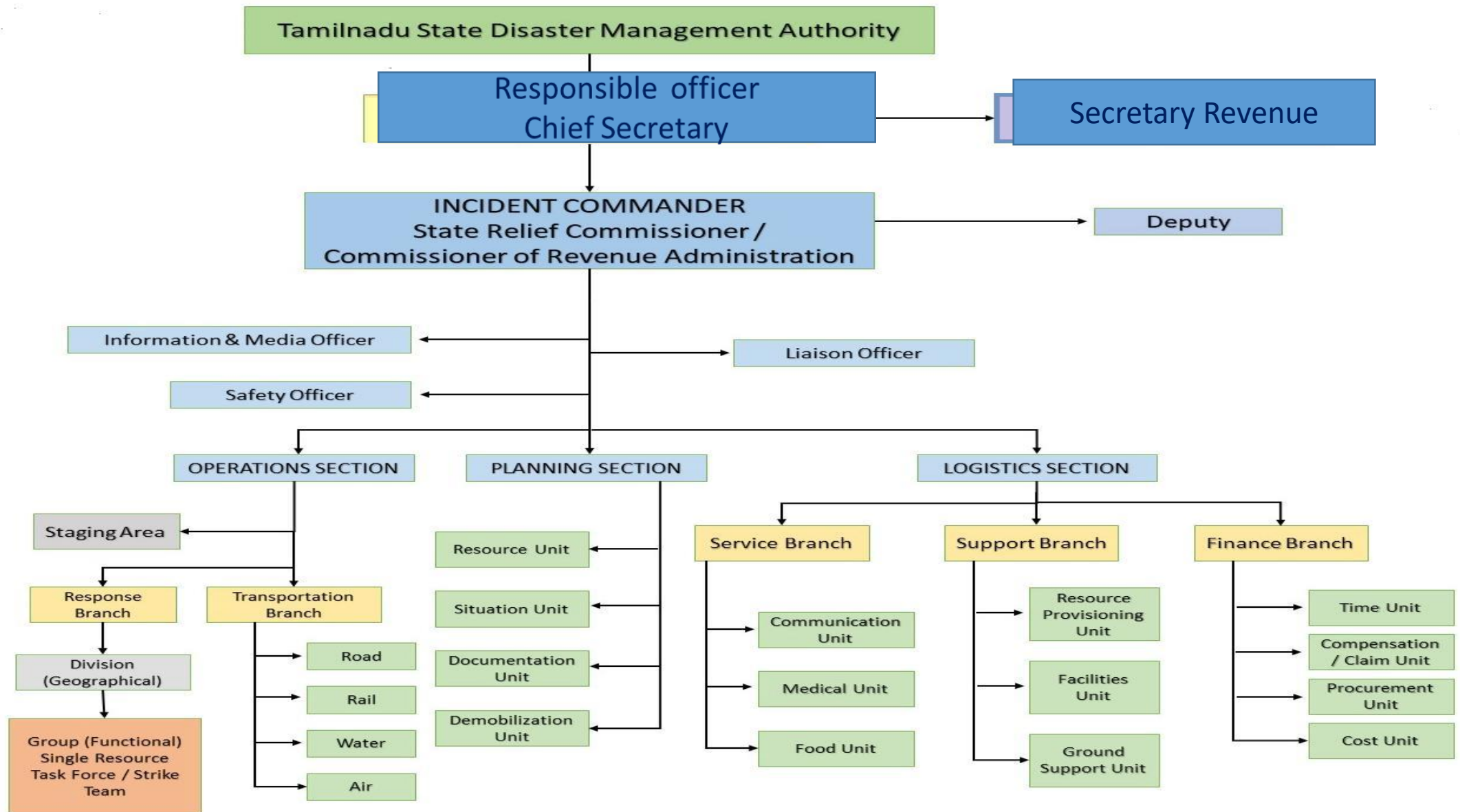
Emergency Response Support Services

- MoU Signed
- C-DAC has visited the State twice
- Gate Way and Server Rack received
- GIS Layers shared to C-DAC
- Man power will be in position
- Expected that C-DAC will supply the Server and Software and commission the system in March 2022.

State Response Forces

- 13th Battalion of State Commando Force has been designated as Tamil Nadu Disaster Response Force.
- They are Stationed in Avadi Chennai and sent to Districts
- Rs 10 Crore was provided to TNDRF for procurement of equipment
- The Tamil Nadu Fire & Rescue Services spread across the entire State is the major Response Force.

Incident Response System –To be notified



DRR Initiatives

- Comprehensive Flood Protection Plan for River Basin Prepared
- Shelf of Projects for Vulnerable and Prioritised River Basin presented to World Bank
- GoTN initiated Flood Mitigation Projects in Chennai Basin Phase I Rs. 100 Crores Completed
- Phase II Rs. 183 Crores Sanctioned – Rs. 160 Crores work completed Two Works under Progress

DRR Initiatives

- Coastal Disaster Risk Reduction Project (CDRRP)
 - 14347 Multi-Hazard Resistant Houses
 - 121 Multi-Purpose Evacuation Shelters
 - 438 Disaster Warning Announcement Systems
 - Replacing conventional power transmission to underground cabling in Cuddalore and Nagapattinam districts
 - Fisheries infrastructure
 - Disaster Management in School syllabus
 - CBDRM in Coastal blocks of 13 districts – 7337 groups -410261 beneficiaries
- Photogrammetric Survey of Coastal Areas with Unmanned Aerial Vehicle in 19 Districts - 18 Districts Completed One District under Progress
- Real Time Flood Forecasting of Chennai basin with Data acquisition systems

Way Forward- Resilient Tamil Nadu

- Multi Hazard Risk Assessments and Mapping (LiDAR/Drone Survey)
- Multi Hazard Early Warning Capabilities
- Strengthening Institutional & Response Mechanisms
- Multi Stakeholder Partnership (Industries, CREDAI, NGO, CSO,
- Establishing State Institute of Disaster Management
- Expanding the coverage of Community Based Disaster Risk Management
- Mainstreaming Disaster Risk Reduction and Climate Change Adaptation

Way Forward- Resilient Tamil Nadu

- Disaster Risk Mitigation (Structural, Non Structural & Nature Based Solutions)
- Restoration of Ecosystem Services
- Enhancing the Livelihood & Coping Capacity of Communities through Social Inclusion
- Revisiting Techno- Legal Regime, Land Use Regulations, Flood Plain Zonation
- Ensuring Business Continuity,
- Expanding Risk Cover for MSME, Small Vendors

Officials	Contact Details
Principal Secretary to Govt Revenue & Disaster Management Department, Chennai 600009	044-25671556 Email: revsec@tn.gov.in
Principal Secretary and Commissioner of Revenue Administration/State Relief Commissioner, Chennai 600005	044-28523299 E Mail: com-ra@nic.in
Director, Disaster Management Chennai 600005	044-28528745 E Mail: Tnsdma.director@gmail.com
Joint Director, Disaster Management Tamil Nadu Disaster Risk reduction Agency	E Mail: tnstateeoc1@gmail.com

Thank You