FOREWORD

We live in a fast changing global environment where peril and risk to human society abound. Disaster has the ability not only to destroy the life of people but also they do damage the property and the environment. Hence, one must always remember that it is not always possible to completely eliminate a risk, vast experience and practice in the past have demonstrated that the damage caused by any disaster can be minimized largely by meticulous planning, mitigation and prompt action.

In this context, a dedicated effort has been made by the District Disaster Management Authority, Kancheepuram to prepare a comprehensive District Disaster Management Plan-2024. The DDMP has been prepared under the authority of the Disaster Management Act, 2005 and as per the objectives of Sendai Framework to provide a comprehensive framework for holistic and comprehensive disaster management within Kancheepuram District. The plan is designed to enhance the District's disaster management capacity by ensuring the necessary strategies to all-agencies or state holders including the involvement of local community. It provides a comprehencive approach for Prevention/Mitigation, Preparedness, Response and Recovery in a coordinated manner.

This plan has identified around 72 vulnerable locations across the district and the same has been categorized as very high vulnerable, high vulnerable, medium vulnerable, and low vulnerable area. Moreover, inter-departmental zonal teams headed by an officer not below the rank of Deputy Collector has been formed specially to monitor these vulnerable locations across the district. Besides 974 First Responders were trained at firka level, Division level and District level and 500 Volunteers were trained under Aapta Mithra Scheme in Kancheepuram District. The zonal team along with community played vital role in easing the sufferings of people at large.

We would like to further invite relevant stakeholders to join in contributing to Disaster Risk reduction since Disaster Management is and will always be everybody's business.

I sincerely hope that this District Disaster Management Plan of Kancheepuram District will increase the Disaster Mitigation efforts of the district and enhance the capability of Disaster Management that will minimize the loss of life and property during the disasters in future.

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District Collector and Chairperson,
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Kancheepuram District.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The National Disaster Management Act, 2005 (NDM Act 2005) establishes the institutional and coordination mechanisms for effective Disaster Management (DM) at the national, state, district, and local levels. It creates a multi-layered institutional system consisting of the State Disaster Management Authority (SDMA), headed by the Honourable Chief Minister, and the District Disaster Management Authorities (DDMA), led by the District Collector or District Magistrate, and co-chaired by the Chairperson of the local bodies. These institutional arrangements have been established in line with the paradigm shift from a relief-centric approach of the past to a proactive, holistic, and integrated approach for Disaster Risk Reduction (DRR) through enhanced disaster mitigation, preparedness, and response.

1.2 DEFINITION

A "disaster" is defined as a catastrophe, mishap, calamity, or grave occurrence in any area, arising from natural or manmade causes, or from accidents or negligence, which results in substantial loss of life, human suffering, damage to or destruction of property, or degradation of the environment. Such an event is of a nature or magnitude that exceeds the coping capacity of the affected community (Sec 2(d) of the DM Act 2005).

According to the revised terminology of the United Nations Office for Disaster Risk Reduction (UNISDR), Disaster Management (DM) refers to "the organizing, planning, and application of measures for preparing for, responding to, and recovering from disasters," while Disaster Risk Management (DRM) involves "the application of disaster risk reduction policies and strategies to prevent new disaster risks, reduce existing risks, and manage residual risks, thereby strengthening resilience and reducing disaster losses" (UNISDR 2016a). The term "disaster management" as used in the DM Act, 2005, encompasses elements of

DM, Disaster Risk Reduction (DRR), and DRM without strictly distinguishing between them.

1.3 VISION

To create a safer community and improve the quality of life in the district through holistic and comprehensive state-of-the-art disaster management services. The priority is to save lives and minimize losses to property and environmental degradation. In this context, a well-defined plan enhances disaster management by establishing a systematic and productive approach, developing a well-coordinated response mechanism, effectively mobilizing resources, and ensuring clarity regarding the roles and responsibilities of district and local authorities.

1.4 OBJECTIVES OF THE PLAN:

- To assess various hazards, vulnerabilities, capacities, and risks associated with the district.
- To establish measures and guidelines for prevention and mitigation.
- To outline preparedness measures for all stakeholders.
- To promote community-based disaster management.
- To integrate disaster management concerns into the developmental planning process.
- To develop an efficient, streamlined, and rapid disaster response and relief mechanism within the district.
- To provide clarity on the roles and responsibilities of all stakeholders involved in various phases of disaster management.
- To ensure coordination and promote productive partnerships with all agencies related to disaster management.
- To initiate recovery programs as opportunities to build back better in the event of future disasters, incorporating community involvement.
- To build capacities and promote changes in administrative systems, procedures, and personnel that facilitate efficient and effective pre- and post-disaster activities through the following strategies:

- ✓ Preparing the district administration for future disasters based on prior warnings and notifications issued by the NDMA, SDMA, and other allied agencies such as the IMD.
- ✓ Issuing alert messages and warnings to the general public residing in identified vulnerable areas.
- ✓ Maintaining sufficient stock of personnel and materials in safe locations adjacent to vulnerable areas.
- ✓ Mobilizing official machinery to affected areas to expedite relief and rescue operations.

1.5 THEMES:

Themes underpinning the Plan

- Vulnerability assessment of various disasters in the district.
- Measures to be taken for the prevention, mitigation, preparedness, and response to disasters.
- Steps to be adopted for mainstreaming disaster considerations into development plans, programs, and projects.
- Importance of addressing capacity building and preparedness measures.
- Clear delineation of roles and responsibilities of each government department and stakeholders.
- Regular updating and reviewing of the disaster management annually.

1.6 DISTRICT DISASTER MANAGEMENT AUTHORITY (DDMA)

- The District Disaster Management Authority (DDMA) is an institution established under the Disaster Management Act, 2005, at the district level to ensure effective management and response to any disaster.
- The District Disaster Management Committee serves as a high-powered body at the district level, responsible for overseeing disaster management and emergency response efforts

DDMA STRUCTURE

Sl.No	Organization & Designation	Designation in DDMA
1	The District Collector/ District Magistrate	Chairperson
2	The President, District Panchayat	Vice -Chairperson
3	District Revenue Officer / The Additional District Magistrate (CEO)	Member

4	The Superintendent of Police	Member
5	The Deputy Director of Health Services	Member
6	The District Fire Officer	Member
7	The Joint Director, Agriculture	Member

1.7 IMPLEMENTATION OF DISTRICT DISASTER MANAGEMENT PLAN:

The Disaster Management Act, 2005, Section 23(1), states: "There shall be a plan for disaster management for every state, to be called the State Disaster Management Plan." In addition to the legal requirements, the hazard profile and disaster history of the state necessitate a comprehensive State Disaster Management Plan for coordinated and streamlined disaster management.

The Hyogo Framework for Action served as the global blueprint for Disaster Risk Reduction efforts between 2005 and 2015. Following this, three international agreements established new guiding frameworks that define a sustainable approach to Disaster Risk Reduction. The Government of Tamil Nadu has developed a State Disaster Management Perspective Plan for 2018-2030, incorporating indicative timelines for Disaster Risk Reduction in alignment with these three international frameworks.

In accordance with Section 30(1) of the Disaster Management Act, 2005, the District Authority shall serve as the planning, coordinating, and implementing body for disaster management within the district. It shall take all necessary measures for disaster management in accordance with the guidelines established by the National Authority and the State Authority.

The DDMP aims at :

- Preventing the loss of human life and property damage.
- Studying, analyzing, and evaluating disasters.
- Identifying vulnerable locations and conducting vulnerability and risk analysis.
- Improving preparedness, prevention, and mitigation at the district level.
- Ascertaining the status of existing resources and facilities available.
- Recommending appropriate strategies and responses to address future disasters.
- Familiarizing concerned departments with their roles and responsibilities.
- Properly undertaking all scheduled pre-disaster activities.
- Identifying and involving new agencies/organizations working in disaster management.
- Understanding the functioning of the emergency communication system &

identifying any issues.

- Knowing the response mechanism in terms of time management and available resources.
- Organizing capacity-building training, awareness programs, and mock drills as per the requirements of the plan.

The term "Disaster Management," as used in the NPDM 2009 and the DM Act 2005, encompasses all aspects of disaster risk reduction, disaster risk management, disaster preparedness, disaster response, and post-disaster recovery. This document utilizes the term with the same meaning as defined in the DM Act 2005, which describes disaster management as a continuous and integrated process of planning, organizing, coordinating, and implementing necessary measures for the following:

1. Prevention of any disaster-related dangers or threats.
2. Mitigation or reduction of disaster risks, severity, or consequences.
3. Capacity-building.
4. Preparedness to address any disaster.
5. Prompt response to any threatening disaster situation or disaster.
6. Assessing the severity or magnitude of the effects of any disaster.
7. Evacuation, rescue, and relief efforts.
8. Rehabilitation and reconstruction.

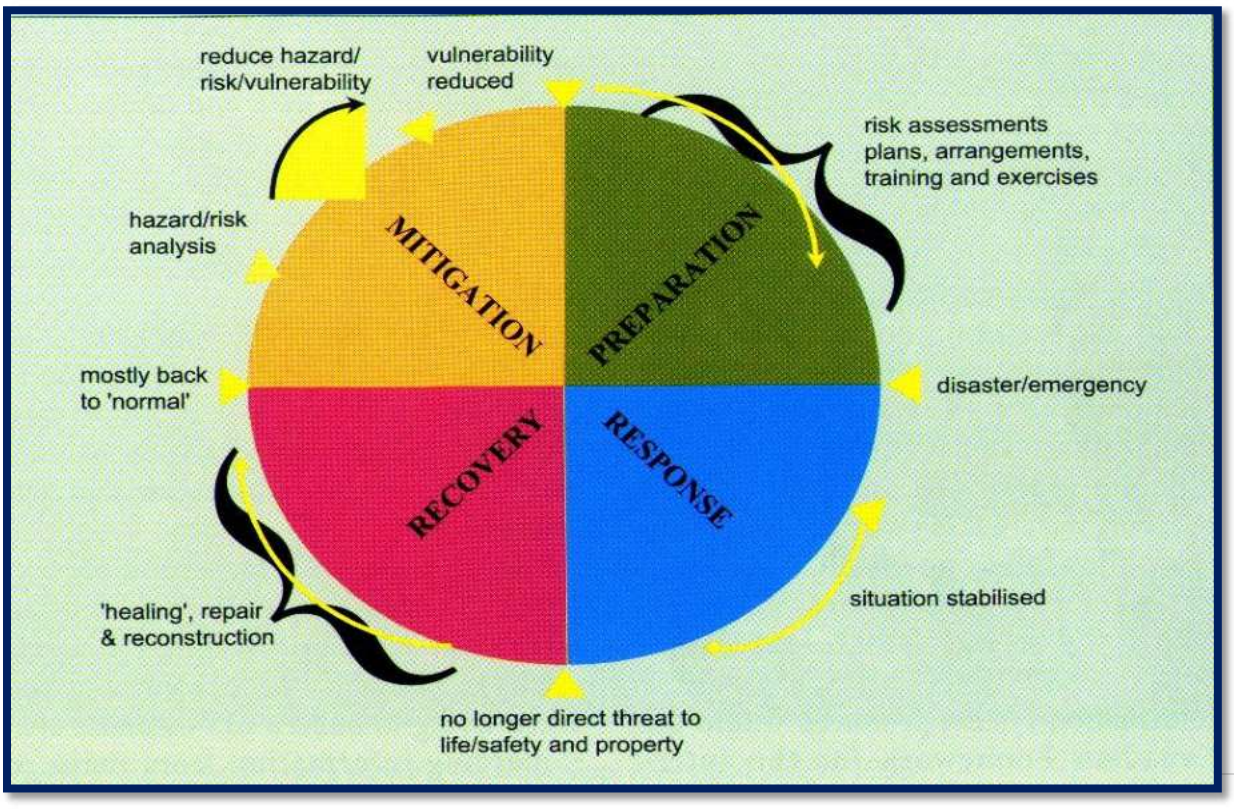
1.8 APPROACH AND STRATEGY

Disaster management covering all phases of managing disasters such as,

- **Pre Disaster phase** - prevention, mitigation and preparedness.
- **Disaster response phase** / during disaster.
- **Post Disaster phase** – recovery (rehabilitation and reconstruction).

1.9 TYPES OF DISASTER

S.NO	CLASSFICATION	TYPES OF DISASTER
1	Naturally Triggered/ Weather Related	✓ Flood ✓ Tsunami ✓ Coastal erosion ✓ Thunder and lightning ✓ Cyclone ✓ Drought
2	Geological	✓ Earthquakes ✓ Landslides
3	Biological	✓ Epidemics ✓ Cattle epidemics ✓ Food poisoning ✓ Pest attack



4	Anthropogenically/ Technologically triggered	✓ Industrial explosions ✓ Petro-chemical transportation ✓ Oil spill ✓ Fireworks accidents ✓ Road accidents ✓ Human triggered forest fire ✓ Stampede ✓ Building collapse ✓ Boat capsizing ✓ Tourism related drowning ✓ Air and rail accidents ✓ Hooch accident

❖ PRIMARY EFFECTS

These occur because of the process itself. For example, water damage during a flood or collapse of buildings during an earthquake, a landslide, or a hurricane.

❖ SECONDARY EFFECTS

These arise as a consequence of primary effects. For instance, fires ignited by earthquakes, disruptions to electrical power and water services caused by an earthquake, flood, or hurricane, or flooding triggered by a landslide into a lake or river.

❖ TERTIARY EFFECTS

These are long-term effects resulting from a primary event. Examples include loss of habitat caused by a flood, permanent changes in the position of a river channel due to flooding, and crop failure resulting from a volcanic eruption.

❖ Disasters are primarily triggered by natural hazards, human-induced factors, or a combination of both. Human-induced factors can significantly exacerbate the adverse impacts of natural disasters. On a global scale, the UN Inter-Governmental Panel on Climate Change (IPCC) has demonstrated that human-induced climate change has notably increased both the frequency and intensity of extreme weather events. Although heavy rains, cyclones, and earthquakes are natural occurrences, their impacts are often worsened by various factors associated with human activity. Extensive industrialization and urbanization raise both the probability of human-induced disasters and the potential damage to life and property from both natural and human-induced disasters. Additionally, society is vulnerable to Chemical, Biological, Radiological, and Nuclear

(CBRN) disasters.

LEVELS OF DISASTERS:

High-Power Committee on Disaster Management, in its 2001 report, categorized disaster situations into three levels: L1, L2, and L3. The period of normalcy, termed L0, should be utilized for disaster risk reduction.

- **Level-L1**:

This level of disaster can be managed within the capabilities and resources available at the district level. However, state authorities will remain on standby to provide assistance if necessary.

- **Level-L2**:

This level signifies disaster situations that require assistance and active mobilization of resources at the state level, along with the deployment of state-level agencies for disaster management. Central agencies must remain vigilant for immediate deployment if requested by the state.

- **Level-L3**:

This level corresponds to a nearly catastrophic situation or a large-scale disaster that overwhelms both state and district authorities.

CHAPTER 2

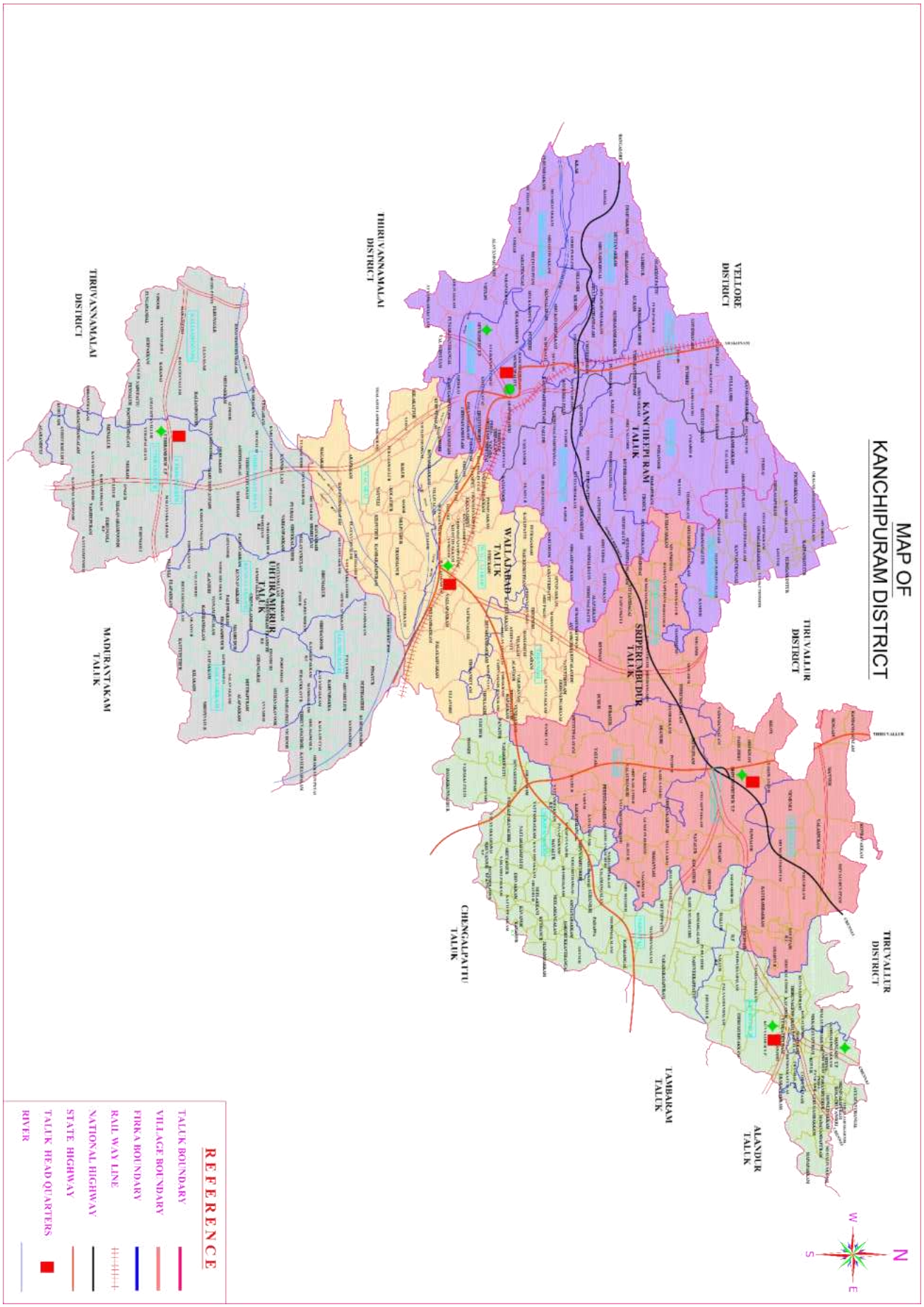
DISTRICT PROFILE

Kancheepuram district is located near Chennai city and is bordered to the west by Ranipet and Tiruvannamalai districts, to the north by Thiruvallur and Chennai districts, to the south by Tiruvannamalai district, and to the east by Chengalpattu district. It lies between 11° 00' to 12° 00' North latitude and 77° 28' to 78° 50' East longitude. The district covers a total geographical area of **1,655.94** square kilometers, with Kancheepuram, known as the temple town, serving as the district headquarters.

For administrative purposes, the district is divided into two revenue divisions comprising five taluks and 526 revenue villages. For developmental purposes, it is further divided into five development blocks with 274 village panchayats.

2.1 ADMINISTRATIVE SET-UP

Revenue Divisions	**2**
Revenue Taluks	**5**
Blocks	**5**
Corporation	**1**
Municipalities	**2**
Villages	**526**
Town Panchayats	**3***
Village Panchayats	**274**


MAP OF
KANCHIPURAM DISTRICT
VELLORE DISTRICT
THIRUVANNAMALAI DISTRICT
TIRUVANNAMALAI DISTRICT
TIRUVALLUR DISTRICT
KANCHEEPURAM TALUK
WALLAJABAD TALUK
SRIPERUMBUDUR TALUK
UTHIRAMERUR TALUK
MADURANTAKAM TALUK
CHENGALPATTU TALUK
TAMBARAM TALUK
ALANDUR TALUK
TIRUVALLUR DISTRICT
REFERENCE
TALUK BOUNDARY
VILLAGE BOUNDARY
FIRKA BOUNDARY
RAIL WAY LINE
NATIONAL HIGHWAY
STATE HIGHWAY
TALUK HEAD QUARTERS
RIVER
N
W
E
S

KANCHEEPURAM DISTRICT PROFILE AT A GLANCE		
S.No	**Facts**	**Data**
1	**District:**	**Kancheepuram**
2	**No. of Revenue Divisions**	**2**
3	**Number of Taluks**	**5**
4	**Number of Revenue Villages**	**526**
5	**Number of Municipal Corporation**	**1**
6	**Number of Municipalities**	**2**
7	**Number of Panchayat Blocks**	**5**
8	**Number of Town Panchayats**	**3***
9	**Number of Village Panchayats**	**274**
10	**Number of Firkas**	**25**
11	**Area in sq.km.:**	**1655.94 Sq.Kms**
12	**Total Population: ***	**1156680**

2.1 WATER RESOURCES

No.of MI Tanks	**381**
Minor Irrigation Tanks	380
River Basins	PALAR CHENNAI
Sub Basins	LOWER PALAR CHEYYAR-KILIYAR VEGAVATHY COOVUM ADAYAR
Lake	CHEMBARAMPAKKAM (under the control of Kosasthalaiyar Division, Thiruvallur)
Check Dam	Ullavur Village across Palar, Irumaram Village across Puthali
Channels	Kambakkal Channel Damal Channel
Ponds	2112

There are Five Major Rivers running across the district.

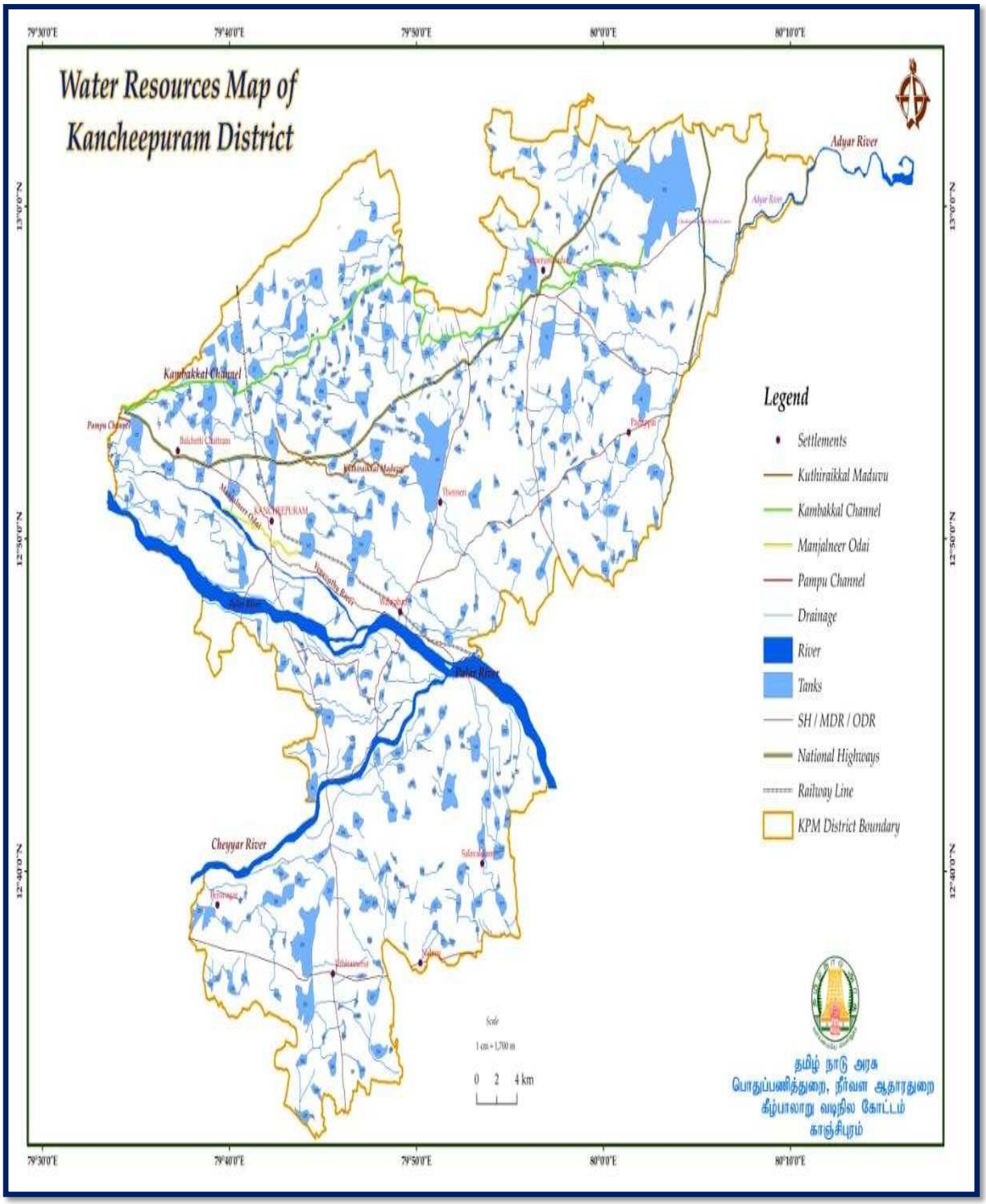
1. Adayar River,
2. Palar River,
3. Cheyyar River,
4. Vegavathy River,
5. Coouvam River

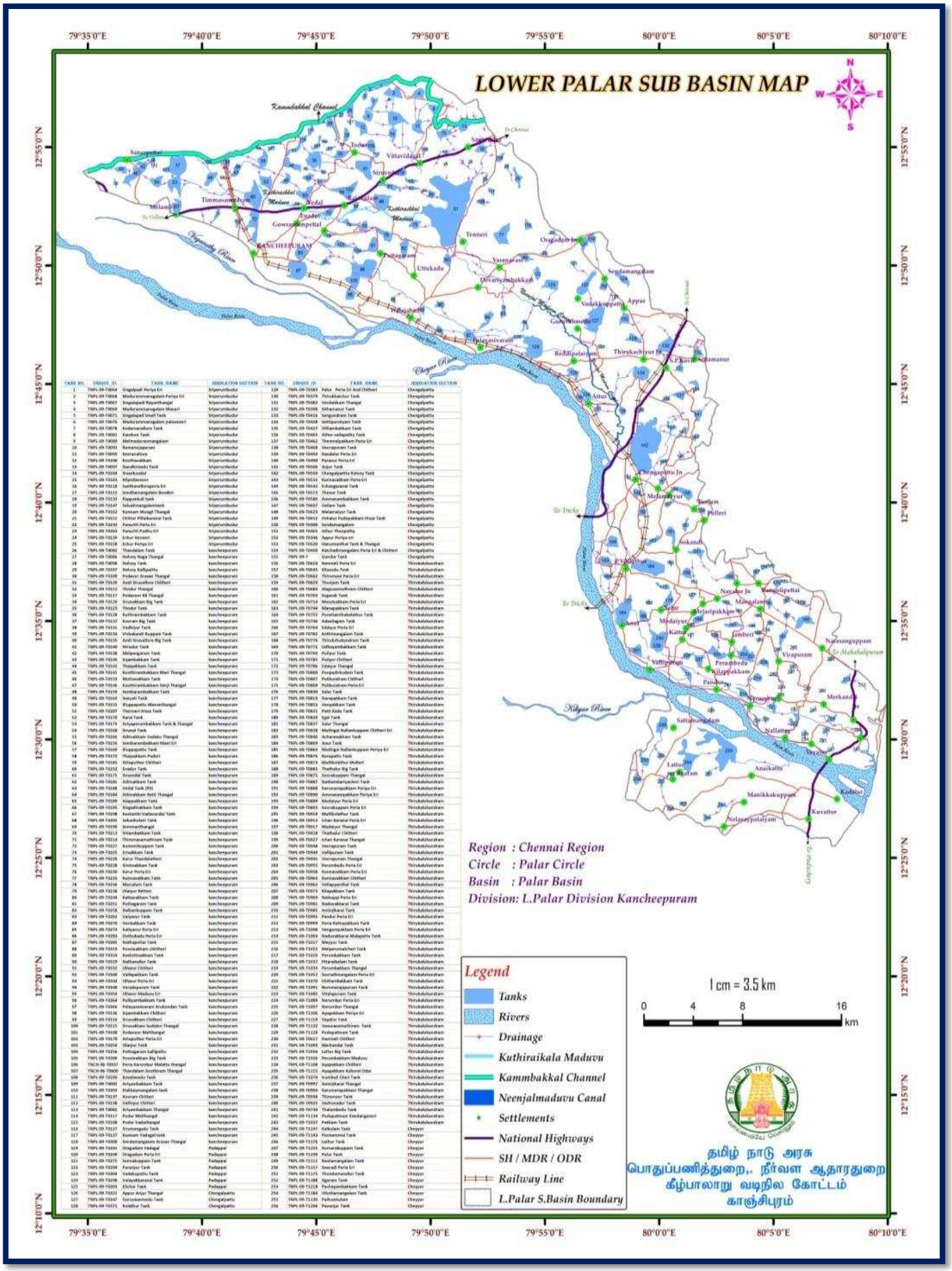
District Covered by the sub basin

1. Adayar Sub Basin
2. Lower Palar Sub Basin
3. Cheyyar – Kiliyar Sub Basin
4. Coouvam Sub Basin
5. Vegavathy Sub Basin

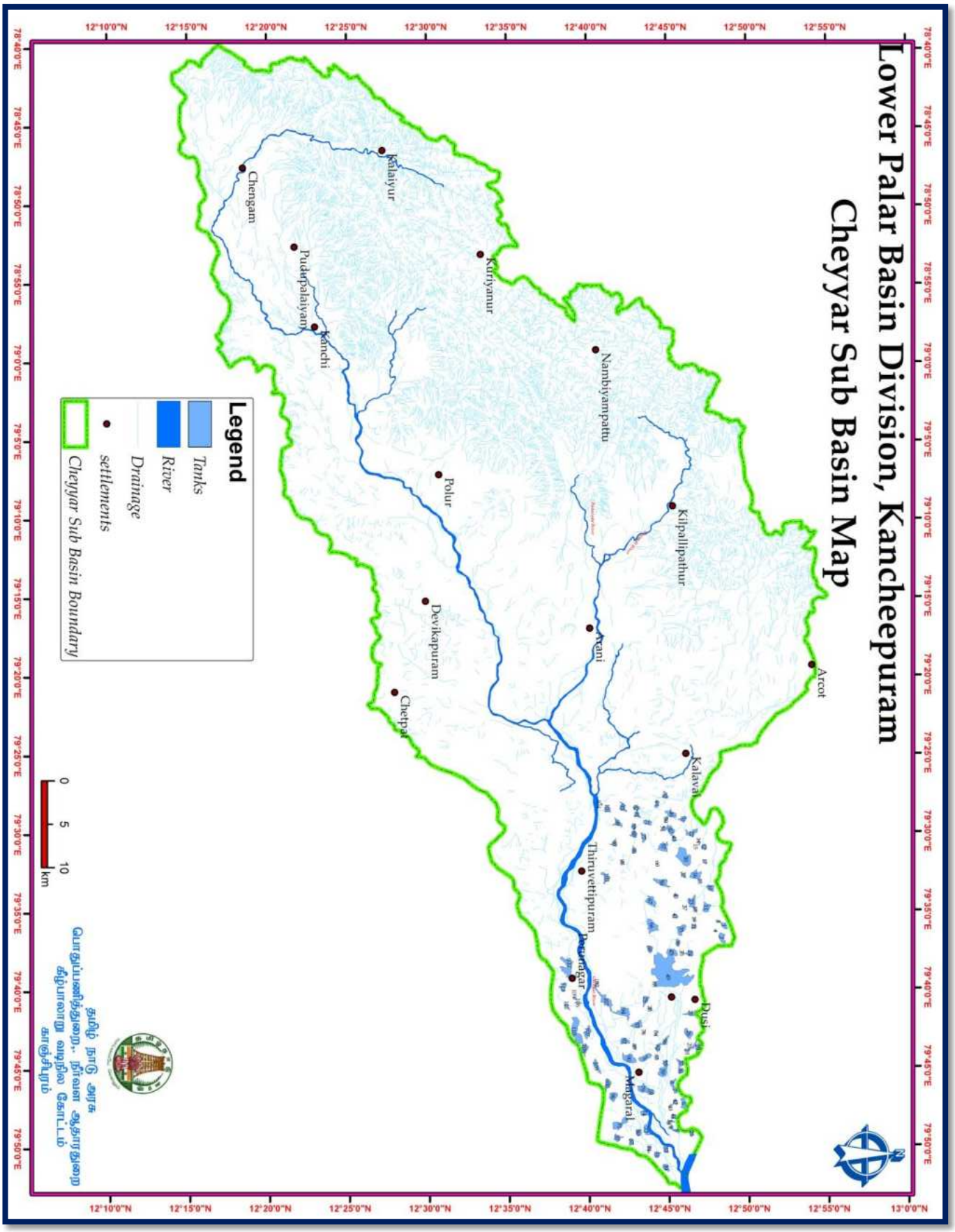
Total Draining Area of the above rivers covered in Kancheepuram District is 1448 Sq.Kms.

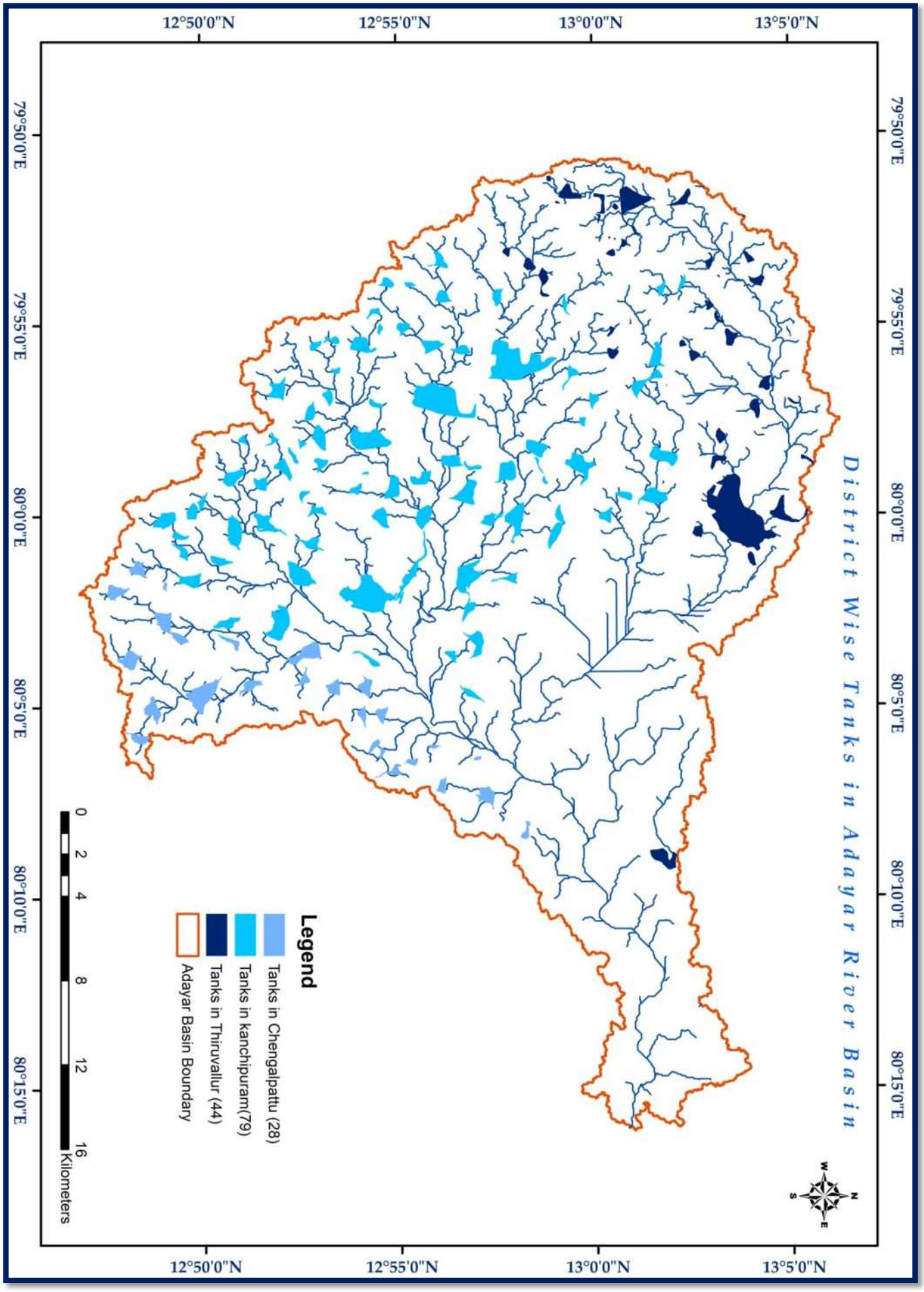
Total Numbers of MI Tanks	**381 Nos**
System Tanks	**92 Nos**
Non-System Tanks	**289 Nos**
Number of Anaicuts	**04 Nos**
Number of Check Dams	**02 Nos**


Water Resources Map of
Kancheepuram District
79°30'0"E
79°40'0"E
79°50'0"E
80°0'0"E
80°10'0"E
13°0'0"N
12°50'0"N
12°40'0"N
Adyar River
Kambakkal Channel
Pampu Channel
Palar River
Cheyyar River
Legend
Settlements
Kuthiraikkal Maduvu
Kambakkal Channel
Manjalneer Odai
Pampu Channel
Drainage
River
Tanks
SH / MDR / ODR
National Highways
Railway Line
KPM District Boundary
Scale
1 cm = 1,700 m
0 2 4 km
தமிழ் நாடு அரசு
பொதுப்பணித்துறை, நீர்வள ஆதாரதுறை
கீழ்பாலாறு வடிநில கோட்டம்
காஞ்சிபுரம்



TANK NO.	UNIQUE_ID	TANK_NAME	IRRIGATION SECTION	TANK NO.	UNIQUE_ID	TANK_NAME	IRRIGATION SECTION
1	TNPL-09-73064	Singalpadi Periya Eri	Sriperumbudur	129	TNPL-09-73183	Palur Periya Eri And Chitheri	Chengalpattu
2	TNPL-09-73068	Maduramevanagalam Periya Eri	Sriperumbudur	130	TNPL-09-73579	Thirukkalathur Tank	Chengalpattu
3	TNPL-09-73067	Singalapadi Rayanthangal	Sriperumbudur	131	TNPL-09-73582	Vendakkam Thangal	Chengalpattu
4	TNPL-09-73069	Maduramevanagalam Mavuri	Sriperumbudur	132	TNPL-09-73598	Sithamanur Tank	Chengalpattu
5	TNPL-09-73071	Singalapadi Small Tank	Sriperumbudur	133	TNPL-09-73416	Sengundram Tank	Chengalpattu
6	TNPL-09-73076	Maduramevanagalam palaveneri	Sriperumbudur	134	TNPL-09-73418	Sattiyanniyam Tank	Chengalpattu
7	TNPL-09-73078	Kadamanallure Tank	Sriperumbudur	135	TNPL-09-73427	Vilhambakkam Tank	Chengalpattu
8	TNPL-09-73083	Kavalavai Tank	Sriperumbudur	136	TNPL-09-73483	Athur vadapathy Tank	Chengalpattu
9	TNPL-09-73088	Melmadaramangalam	Sriperumbudur	137	TNPL-09-73462	Theennilpakkam Periya Eri	Chengalpattu
10	TNPL-09-73093	Kemangiyanam	Sriperumbudur	138	TNPL-09-73468	Veeraporam Tank	Chengalpattu
11	TNPL-09-73099	Kemaralloore	Sriperumbudur	139	TNPL-09-73494	Kandalur Periya Eri	Chengalpattu
12	TNPL-09-73100	Koothavakkam	Sriperumbudur	140	TNPL-09-73499	Paranur Periya Eri	Chengalpattu
13	TNPL-09-73097	Nandhimadu Tank	Sriperumbudur	141	TNPL-09-73506	Ayyur Tank	Chengalpattu
14	TNPL-09-73104	Sivankondal	Sriperumbudur	142	TNPL-09-73555	Chengalpattu Kshoy Tank	Chengalpattu
15	TNPL-09-73103	Kilpodaveoor	Sriperumbudur	143	TNPL-09-73533	Vannavalkkam Peria Eri	Chengalpattu
16	TNPL-09-73118	Ilanthavelangeria Eri	Sriperumbudur	144	TNPL-09-73542	Echangaranai Tank	Chengalpattu
17	TNPL-09-73123	Sirudhamangalam Boodoi	Sriperumbudur	145	TNPL-09-73573	Thenur Tank	Chengalpattu
18	TNPL-09-73133	Poyyenkuli tank	Sriperumbudur	146	TNPL-09-73580	Ammanambakkam Tank	Chengalpattu
19	TNPL-09-73147	Selvalmangalamtank	Sriperumbudur	147	TNPL-09-73607	Vellaiyn Tank	Chengalpattu
20	TNPL-09-73162	Kamam Mungil Thangal	Sriperumbudur	148	TNPL-09-73623	Melamaiyur Tank	Chengalpattu
21	TNPL-09-73151	Chittur Pillaikaranai Tank	Sriperumbudur	149	TNPL-09-73652	Ezhalur Podupakkam Hisse Tank	Chengalpattu
22	TNPL-09-73233	Panuttli Peria Eri	Sriperumbudur	150	TNPL-09-73309	Sendamangalam	Chengalpattu
23	TNPL-09-73084	Panuttli Pudhu Eri	Sriperumbudur	151	TNPL-09-73665	Athur Thonpathy	Chengalpattu
24	TNPL-09-73139	Echur Venneri	Sriperumbudur	152	TNPL-09-73546	Appur Periya eri	Chengalpattu
25	TNPL-09-73158	Echur Periya Eri	Sriperumbudur	153	TNPL-09-73520	Hanumanthal Tank & Thangal	Chengalpattu
26	TNPL-09-73082	Thandalam Tank	Sriperumbudur	154	TNPL-09-73450	Katchadrangalam Periya Eri & Chithari	Chengalpattu
27	TNPL-09-73096	Nalvoy Naga Thangal	kancheepuram	155	TNPL-09-7	Gandur Tank	Chengalpattu
28	TNPL-09-73098	Nalvoy Tank	kancheepuram	156	TNPL-09-73624	Nanmali Peria Eri	Thirukalukundram
29	TNPL-09-73107	Nalvoy Kalipathy	kancheepuram	157	TNPL-09-73585	Ellavedu Tank	Thirukalukundram
30	TNPL-09-73109	Podavur Arasan Thangal	kancheepuram	158	TNPL-09-73662	Thirunanai Peria Eri	Thirukalukundram
31	TNPL-09-73120	Andi Siruvellore Chitheri	kancheepuram	159	TNPL-09-73653	Thunjam Tank	Thirukalukundram
32	TNPL-09-73112	Thodur Thangal	kancheepuram	160	TNPL-09-73665	Rajasoonathiran Chitheri	Thirukalukundram
33	TNPL-09-73117	Podavoor Kil Thangal	kancheepuram	161	TNPL-09-73703	Suganti Tank	Thirukalukundram
34	TNPL-09-73119	Sirusekkam Big Tank	kancheepuram	162	TNPL-09-73714	Minnivakkam Peria Eri	Thirukalukundram
35	TNPL-09-73123	Thodur Tank	kancheepuram	163	TNPL-09-73744	Manapakkam Tank	Thirukalukundram
36	TNPL-09-73128	Kuthiranbakkam Tank	kancheepuram	164	TNPL-09-73755	Poruttamillakkolkkoi Tank	Thirukalukundram
37	TNPL-09-73137	Kavaran Big Tank	kancheepuram	165	TNPL-09-73746	Adeelagam Tank	Thirukalukundram
38	TNPL-09-73132	Vadhiyur Tank	kancheepuram	166	TNPL-09-73764	Edaiyur Peria Eri	Thirukalukundram
39	TNPL-09-73154	Vishakandi Kuppam Tank	kancheepuram	167	TNPL-09-73782	Kothiranagalam Tank	Thirukalukundram
40	TNPL-09-73135	Andi Siruvellore Big Tank	kancheepuram	168	TNPL-09-73776	Thirukalukundram Tank	Thirukalukundram
41	TNPL-09-73140	Nirakkai Tank	kancheepuram	169	TNPL-09-73772	Udhiyambakkam Tank	Thirukalukundram
42	TNPL-09-73138	Melpangaram Tank	kancheepuram	170	TNPL-09-73794	Puliyur Tank	Thirukalukundram
43	TNPL-09-73145	Injambakkam Tank	kancheepuram	171	TNPL-09-73785	Puliyur Chitheri	Thirukalukundram
44	TNPL-09-73142	Thalpakkam Tank	kancheepuram	172	TNPL-09-73786	Edaiyur Thangal	Thirukalukundram
45	TNPL-09-73141	Kuthiranbakkam Mari Thangal	kancheepuram	173	TNPL-09-73800	Ponpadrikudam Tank	Thirukalukundram
46	TNPL-09-73153	Mothavakkam Tank	kancheepuram	174	TNPL-09-73807	Pulikundram Chitheri	Thirukalukundram
47	TNPL-09-73148	Kuthiranbakkam Ismji Thangal	kancheepuram	175	TNPL-09-73809	Pulikundram Peria Eri	Thirukalukundram
48	TNPL-09-73159	Sembarambakkam Tank	kancheepuram	176	TNPL-09-73830	Salai Tank	Thirukalukundram
49	TNPL-09-73164	Seyyati Tank	kancheepuram	177	TNPL-09-73833	Nangalakkam Tank	Thirukalukundram
50	TNPL-09-73155	Illuppapattu Manamthangal	kancheepuram	178	TNPL-09-73853	Venpakkam Tank	Thirukalukundram
51	TNPL-09-73207	Thoiveri Hissa Tank	kancheepuram	179	TNPL-09-73831	Patti Kadu Tank	Thirukalukundram
52	TNPL-09-73170	Karai Tank	kancheepuram	180	TNPL-09-73838	Egai Tank	Thirukalukundram
53	TNPL-09-73174	Ariyaperumbakkam Tank & Thangal	kancheepuram	181	TNPL-09-73837	Salai Thangal	Thirukalukundram
54	TNPL-09-73168	Sirunai Tank	kancheepuram	182	TNPL-09-73838	Methigal Nallanilappam Chitheri Eri	Thirukalukundram
55	TNPL-09-73166	Athivakkam Vellalsi Thangal	kancheepuram	183	TNPL-09-73840	Achareekkanc Tank	Thirukalukundram
56	TNPL-09-73156	Sembarambakkam Mari Eri	kancheepuram	184	TNPL-09-73869	Anur Tank	Thirukalukundram
57	TNPL-09-73169	Illuppapattu Tank	kancheepuram	185	TNPL-09-73864	Methigal Nallanilappam Periya Eri	Thirukalukundram
58	TNPL-09-73172	Thalpakkam Pudiri	kancheepuram	186	TNPL-09-73876	Koraipattu Tank	Thirukalukundram
59	TNPL-09-73185	Athapuliyur Chitheri	kancheepuram	187	TNPL-09-73874	Mathkolathur Mutheri	Thirukalukundram
60	TNPL-09-73192	Eradur Tank	kancheepuram	188	TNPL-09-73883	Thathalur Big Tank	Thirukalukundram
61	TNPL-09-73175	Sirunellai Tank	kancheepuram	189	TNPL-09-73871	Soorakuppam Thangal	Thirukalukundram
62	TNPL-09-73181	Athivakkam Tank	kancheepuram	190	TNPL-09-73887	Nathambariyacheri Tank	Thirukalukundram
63	TNPL-09-73188	Vedal Tank (Pt)	kancheepuram	191	TNPL-09-73886	Karumarrapakkam Periya Eri	Thirukalukundram
64	TNPL-09-73184	Athivakkam Ketil Thangal	kancheepuram	192	TNPL-09-73890	Ammanarapakkam Periya Eri	Thirukalukundram
65	TNPL-09-73189	Alapputtam Tank	kancheepuram	193	TNPL-09-73889	Modaliyur Peria Eri	Thirukalukundram
66	TNPL-09-73195	Singadhakkam Tank	kancheepuram	194	TNPL-09-73893	Soorakuppam Peria Eri	Thirukalukundram
67	TNPL-09-73198	Kadambi Vallavandal Tank	kancheepuram	195	TNPL-09-73918	Mullikolathur Tank	Thirukalukundram
68	TNPL-09-73202	Iekambolam Tank	kancheepuram	196	TNPL-09-73915	Ichan Kanaval Peria Eri	Thirukalukundram
69	TNPL-09-73199	Sivnnanthangal	kancheepuram	197	TNPL-09-73917	Modaliyur Thangal	Thirukalukundram
70	TNPL-09-73213	Irilambakkam Tank	kancheepuram	198	TNPL-09-73918	Thathalur Chitheri	Thirukalukundram
71	TNPL-09-73214	Thimmasamuthiram Tank	kancheepuram	199	TNPL-09-73927	Ichan Kanaval Thangal	Thirukalukundram
72	TNPL-09-73227	Kommirikuppam Tank	kancheepuram	200	TNPL-09-73948	Veeraporam Tank	Thirukalukundram
73	TNPL-09-73225	Eriadikkam Tank	kancheepuram	201	TNPL-09-73949	Vellipuram Tank	Thirukalukundram
74	TNPL-09-73226	Karur Thandalamuri	kancheepuram	202	TNPL-09-73945	Veeraporam Thangal	Thirukalukundram
75	TNPL-09-73228	Sinnivakkam Tank	kancheepuram	203	TNPL-09-73955	Perambedu Peria Eri	Thirukalukundram
76	TNPL-09-73230	Karur Peria Eri	kancheepuram	204	TNPL-09-73958	Kannarambakkam Peria Eri	Thirukalukundram
77	TNPL-09-73235	Kannavakkam Tank	kancheepuram	205	TNPL-09-73963	Kannavakkam Chithari	Thirukalukundram
78	TNPL-09-73236	Marutham Tank	kancheepuram	206	TNPL-09-73962	Vellapputhal Tank	Thirukalukundram
79	TNPL-09-73234	Olaiyur Rettery	kancheepuram	207	TNPL-09-73973	Kilayakkkarai Tank	Thirukalukundram
80	TNPL-09-73244	Kattavakkam Tank	kancheepuram	208	TNPL-09-73969	Nathappi Perie Eri	Thirukalukundram
81	TNPL-09-73251	Pothagaram Tank	kancheepuram	209	TNPL-09-73981	Nakkavakkarai Tank	Thirukalukundram
82	TNPL-09-73258	Nalhanilappam Tank	kancheepuram	210	TNPL-09-73985	Anniyilkarai Tank	Thirukalukundram
83	TNPL-09-73262	Valiyanur Tank	kancheepuram	211	TNPL-09-73995	Pandur Perie Eri	Thirukalukundram
84	TNPL-09-73270	Vendukkam Tank	kancheepuram	212	TNPL-09-73999	Perie Kathipakkam Tank	Thirukalukundram
85	TNPL-09-73274	Kaliyanur Perie Eri	kancheepuram	213	TNPL-09-73998	Vengampakkam Perie Eri	Thirukalukundram
86	TNPL-09-73283	Oothukadu Perie Eri	kancheepuram	214	TNPL-09-71003	Naduratkarai Malapathi Tank	Thirukalukundram
87	TNPL-09-73285	Nathapettai Tank	kancheepuram	215	TNPL-09-73017	Meyyur Tank	Thirukalukundram
88	TNPL-09-73318	Poonkekkam chitheri	kancheepuram	216	TNPL-09-73022	Melperumalcheri Tank	Thirukalukundram
89	TNPL-09-73324	Kedattivakkam Tank	kancheepuram	217	TNPL-09-73029	Perundakkam Tank	Thirukalukundram
90	TNPL-09-73329	Nathenellor Tank	kancheepuram	218	TNPL-09-73037	Pthanlollaeri Tank	Thirukalukundram
91	TNPL-09-73332	Ulavur Chitheri	kancheepuram	219	TNPL-09-73035	Perundakkam Thangal	Thirukalukundram
92	TNPL-09-73330	Vellapakkam Tank	kancheepuram	220	TNPL-09-73057	Soorudimangalam Perie Eri	Thirukalukundram
93	TNPL-09-73344	Ulavur Perie Eri	kancheepuram	221	TNPL-09-73079	Chithambakkam Tank	Thirukalukundram
94	TNPL-09-73348	Varadapuram Tank	kancheepuram	222	TNPL-09-73091	Nemmanpuram Tank	Thirukalukundram
95	TNPL-09-73354	Ulavur Maduvu Eri	kancheepuram	223	TNPL-09-73085	Vilalpuram Tank	Thirukalukundram
96	TNPL-09-73364	Pallyambakkam Tank	kancheepuram	224	TNPL-09-73089	Nerumbur Perie Eri	Thirukalukundram
97	TNPL-09-73366	Palayanoorain Arukandan Tank	kancheepuram	225	TNPL-09-73097	Nerumbur Thangal	Thirukalukundram
98	TNPL-09-73136	Injambakkam Chitheri	kancheepuram	226	TNPL-09-71106	Ayapakkam Periya Eri	Thirukalukundram
99	TNPL-09-73116	Sirusekkam Chitheri	kancheepuram	227	TNPL-09-71119	Veyalur Tank	Thirukalukundram
100	TNPL-09-73115	Sirusekkam Sudukkiri Thangal	kancheepuram	228	TNPL-09-71132	Veeravanamthiram Tank	Thirukalukundram
101	TNPL-09-73108	Podavoor Mettithangal	kancheepuram	229	TNPL-09-71129	Pudupattiram Tank	Thirukalukundram
102	TNPL-09-73178	Athapuliyur Perie Eri	kancheepuram	230	TNPL-09-70617	Veeranil Chitheri	Thirukalukundram
103	TNPL-09-73232	Olaiyur Tank	kancheepuram	231	TNPL-09-71095	Markandai Tank	Thirukalukundram
104	TNPL-09-73234	Puthagaram kalipathi	kancheepuram	232	TNPL-09-71094	Lathur Big Tank	Thirukalukundram
105	TNPL-09-73090	Poovinakkam Big Tank	kancheepuram	233	TNPL-09-71026	Perumbakkam Madavu	Thirukalukundram
106	TNCH-06-70937	Pona Karumbur Malathu thangal	kancheepuram	234	TNPL-09-71108	Ayapakkam Chitheri	Thirukalukundram
107	TNCH-06-70600	Thandalam Sivathiram Thangal	kancheepuram	235	TNPL-09-71115	Ayapakkam Kolorai Odai	Thirukalukundram
108	TNPL-09-73156	Kovalimedu Tank	kancheepuram	236	TNPL-09-71074	Irumbedi Oori Tank	Thirukalukundram
109	TNPL-09-73082	Ariyambakkam Tank	kancheepuram	237	TNPL-09-70997	Annojikarai Thangal	Thirukalukundram
110	TNPL-09-73093	Kakkaynangalam tank	kancheepuram	238	TNPL-09-70984	Karumarrapakkam Thangal	Thirukalukundram
111	TNPL-09-73137	Kavrani Chitheri	kancheepuram	239	TNPL-09-70936	Thimmanam Tank	Thirukalukundram
112	TNPL-09-73138	Vathiyur Chitheri	kancheepuram	240	TNPL-09-70925	Vachuvadur Tank	Thirukalukundram
113	TNPL-09-73082	Ariyambakkam Thangal	kancheepuram	241	TNPL-09-70730	Thalambedu Tank	Thirukalukundram
114	TNPL-09-73117	Podur Mettithangal	kancheepuram	242	TNPL-09-71134	Pudupattinam Kondangiyeri	Thirukalukundram
115	TNPL-09-73108	Podur Vadathangal	kancheepuram	243	TNPL-09-71037	Pakkam Tank	Thirukalukundram
116	TNPL-09-73127	Sirunangatty Tank	kancheepuram	244	TNPL-09-71147	Kelkolam Tank	Cheyyur
117	TNPL-09-73127	Kannam Vadagal tank	kancheepuram	245	TNPL-09-71143	Ponnammal Tank	Cheyyur
118	TNPL-09-73090	Sirudarangalam Arasan Thangal	kancheepuram	246	TNPL-09-71175	Lathur Tank	Cheyyur
119	TNPL-09-73041	Oragadam Vadagal	Padappai	247	TNPL-09-71225	Kunnakkuppam Tank	Cheyyur
120	TNPL-09-73039	Oragadam Perie Eri	Padappai	248	TNPL-09-71199	Palur Tank	Cheyyur
121	TNPL-09-73075	Sonnakuppam Tank	Padappai	249	TNPL-09-71111	Neelamangalam Tank	Cheyyur
122	TNPL-09-73094	Panaiyur Tank	Padappai	250	TNPL-09-71137	Seevadi Perie Eri	Cheyyur
123	TNPL-09-73084	Vallakkuathu Tank	Padappai	251	TNPL-09-71171	Pandakarankuzhu Tank	Cheyyur
124	TNPL-09-73098	Valayakkarainai Tank	Padappai	252	TNPL-09-71188	Agaram Tank	Cheyyur
125	TNPL-09-73091	Elichur Tank	Padappai	253	TNPL-09-71218	Pachayandakkam Tank	Cheyyur
126	TNPL-09-73025	Appur Anjur Thangal	Chengalpattu	254	TNPL-09-71184	Vilvitamangalam Tank	Cheyyur
127	TNPL-09-73047	Suruvasemmidu Tank	Chengalpattu	255	TNPL-09-71130	Pathanalukuru	Cheyyur
128	TNPL-09-73075	Kolathur Tank	Chengalpattu	256	TNPL-09-71206	Pavanjur Tank	Cheyyur


Lower Palar Basin Division, Kancheepuram
Cheyyar Sub Basin Map
Legend
Tanks
River
Drainage
settlements
Cheyyar Sub Basin Boundary
Chengam
Kalaiyur
Kuriyanur
Pudupalaiyam
Kanchi
Nambiyampattu
Polur
Kilpallipathur
Devikapuram
Arani
Chetpat
Arcot
Kalavai
Thiruvettipuram
Dusi
Mogaral
0
5
10
km


12°50'0"N
12°55'0"N
13°0'0"N
13°5'0"N
79°50'0"E
79°55'0"E
80°0'0"E
80°5'0"E
80°10'0"E
80°15'0"E
District Wise Tanks in Adayar River Basin
Legend
Tanks in Chengalpattu (28)
Tanks in kanchipuram(79)
Tanks in Thiruvallur (44)
Adayar Basin Boundary
0 2 4 8 12 16
Kilometers
N
W
E
S

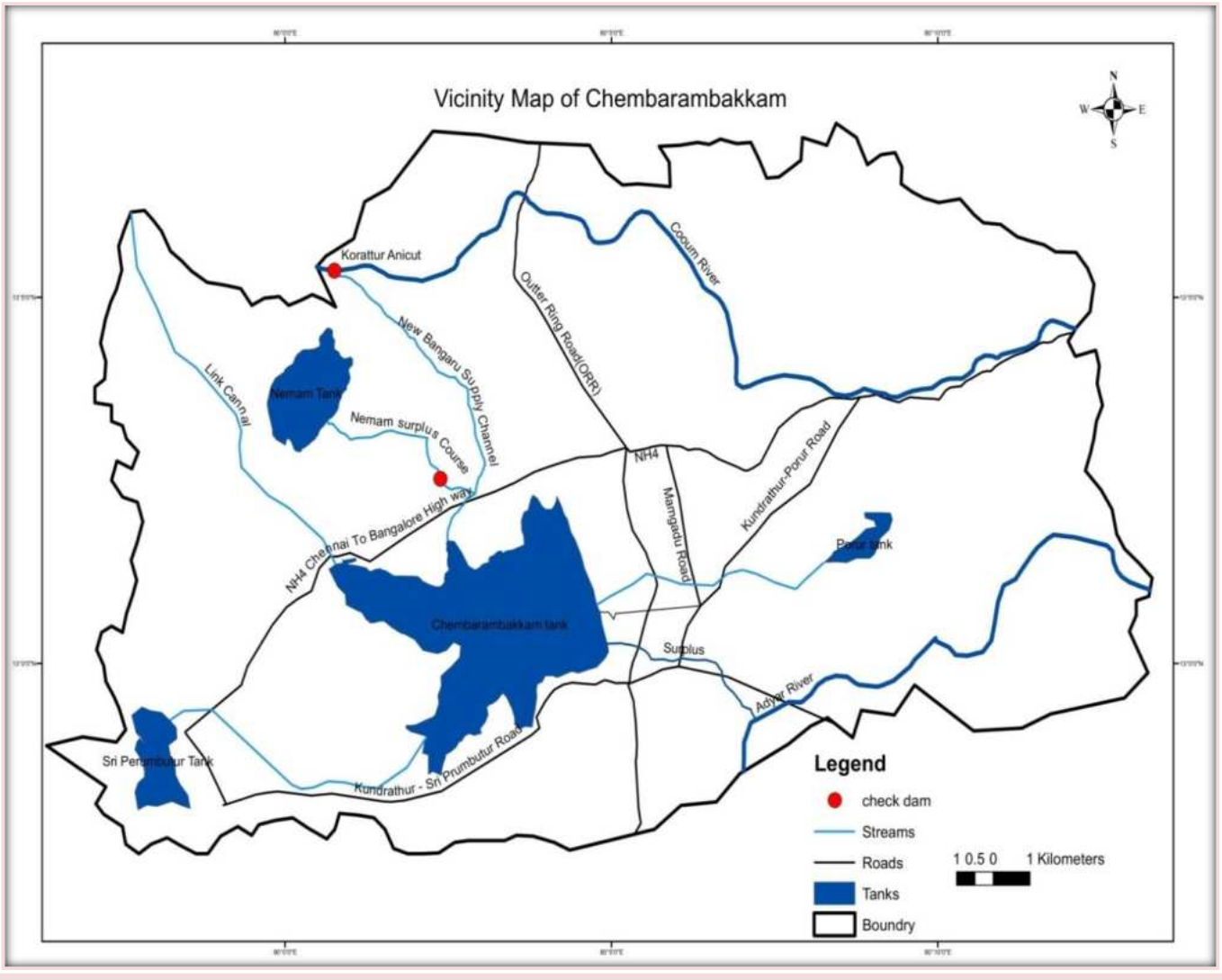

Vegavathy Sub Basin
Legend
Tanks
River
Manjalneer_Channel
Drainage
SH / MDR / ODR
Boundary
Scale
1 cm = 1,500 m
Manjalneer Channel
Vegavathy River
Palar River
Vegavathy Confluence River

Chembarambakkam tank

The Chembarambakkam Tank is located in Chembarambakkam village of Kundrathur Taluk in Kancheepuram District. This zoned embankment tank was constructed during the Pallava period, over 400 years ago (around 1620 AD). Initially built for irrigation purposes, the tank is currently utilized primarily for supplying drinking water to Chennai city due to urbanization. The present ayacut of the tank is 886.31 acres (358.67 hectares) compared to the original ayacut of 13,223 acres (5,351.16 hectares).

The tank is fed by the Chowdrikkal surplus channel, which conveys surplus water from the Sriperumbudur tank, the terminal tank of the Palar anicut system. Additionally, it receives water from the Cooum River, diverted from the Korattur anicut. The surplus water from this large tank flows into the Adayar estuary, which traverses through South Chennai. The Chembarambakkam Tank consists of both earth and masonry portions, with a bund length of 8,310~ meters and a foreshore bund length of 305 meters. It features eight sluices, with only sluices 1, 2, and 3 currently operational; the remaining five sluices (4, 5, 6, 7, and 8) are not operational due to urbanization. The tank also includes two weirs and a surplus regulator with 19 vents and 5 vents, designed for a total flood discharge capacity of 33,060 cubic feet per second (936.17 cubic meters per second). The 19-vent regulator is designed for a discharge capacity of 12,650 cubic feet per second (358.21 cubic meters per second), while the 5-vent regulator has a discharge capacity of 20,410 cubic feet per second (577.96 cubic meters per second).

CHEMBARAMBAKKAM TANK AERIAL VIEW



CHEMBARAMBAKKAM CONFLUENCE POINT

LEFT BANK VILLAGES

1. Kundrathur
2. Natham
3. Kavanur
4. Sirukalathur
5. Thirumudivakkam
6. Vazhuthalambedu
7. Tharapakkam
8. Irandam Kattalai
9. Gerugampakkam
10. Kolapakkam

RIGHT BANK VILLAGES

Right Bank Villages pertains to Chengalpattu District

❖ Minor Irrigation Tanks under Rural Development:-

S.No	Blocks	MI Tanks
1	Kancheepuram	54
2	Walajabad	53
3	Uthiramerur	130
4	Kundrathur	59
5	Sriperumbudur	84
Total		380

2.2 ROAD INFRASTRUCTURE

SL.NO	Classification of Roads	Length in KM
1	SH	280.890
2	MDR	117.740
3	ODR	711.591
4	ODR(Sugarcane)	27.200
Total		1137.421

2.3 DEMOGRAPHICS

According to 2011 Census, Kancheepuram district had a population of 1166401 with a sex-ratio of 986 females for every 1,000 males, much above the national average of 929.

Area	**1655.94 sq kms**
Population	As per 2011 census, 1156680 a) Male Population : 581792 b) Female Population : 574888 c) Rural Population : 1459916 (Combined Kancheepuram & Chengalpattu districts) d) Urban Population : 2538336 (Combined Kancheepuram & Chengalpattu districts)
Population Density	**928** (Combined Kancheepuram & Chengalpattu districts)

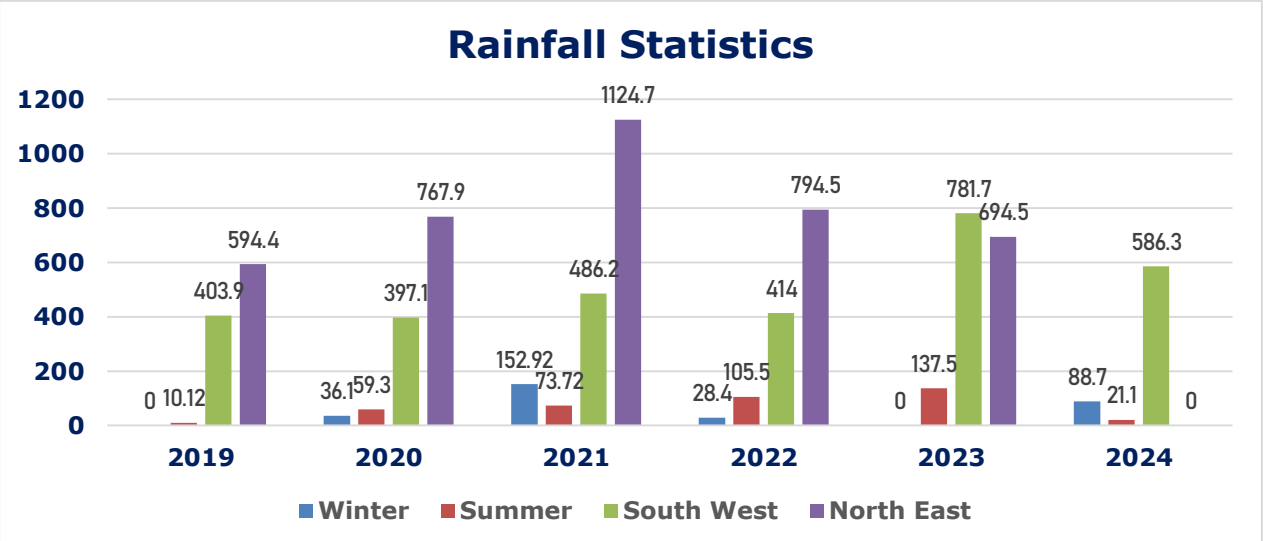
2.4 CLIMATE & RAINFALL

The Kancheepuram District experiences nearly uniform pre-monsoon rainfall across its area. The district primarily relies on seasonal rains, and distress conditions often arise in the event of rain failures. The Northeast and Southwest monsoons are the major contributors to the total annual rainfall, accounting for 54% and 36% of the total precipitation, respectively.

Season	Maximum	Minimum
Summer	36.6° C	21.1° C
Winter	28.7° C	19.8° C

SEASON-WISE RAINFALL OF THE DISTRICT FOR PAST 5 YEARS

Year	WINTER (JAN-FEB) DIST AVG	SUMMER (MARCH-MAY DIST AVG	SOUTH WEST MONSOON (JUNE-SEP) DIST AVG	NORTH EAST MONSOON (OCT-DEC) DIST AVG
2019	0.00 mm	10.12 mm	403.92 mm	594.47 mm
2020	36.10 mm	59.30 mm	397.10 mm	767.92 mm
2021	152.92 mm	73.72 mm	486.2 mm	1124.7 mm
2022	28.4 mm	105.5 mm	414.0 mm	794.5 mm
2023	0.00 mm	137.5 mm	781.7 mm	694.5
2024	88.7 mm	21.1 mm	586.3 mm (Upto Sep 13)	-



RAINGAUGE STATION- SRG's

SL.NO	NAME OF THE STATION	TALUK	STARTED ON	STATUS
1	Kancheepuram Taluk Office	Kancheepuram	1994-01-01	Working
2	Uthiramerur Taluk Office	Uthiramerur	2009-01-01	Working
3	Walajabad Taluk Office	Walajabad	2017-01-01	Working
4	Sriperumbudur Taluk Office	Sriperumbudur	2007-01-01	Working
5	Chembarambakkam Tank	Kundrathur	1990-01-01	Working
6	Kundrathur Taluk Office	Kundrathur	2020-11-06	Working

2.5 AGRICULTURE:

- Agriculture is the primary occupation in Kancheepuram District, with over 45% of the population dependent on it. Paddy is the predominant crop cultivated in the region, along with groundnut, sugarcane, millets, and pulses.
- The district features various soil types, including clayey soil, red sandy/red loamy soil, red sandy brown clayey soil, and alluvial soil.
- This district is situated in the tropical dry climatic zone, Kancheepuram relies primarily on North-East Monsoon rains as its major source of rainfall. The average annual rainfall is approximately distributed as follows: 61% from the North-East Monsoon, 31% from the South-West Monsoon, and the remaining 8% from winter and summer seasons. Maximum precipitation typically occurs due to cyclonic low-pressure systems in the Bay of Bengal during the latter part of the year.

Sl. No	Crop	Normal Area (Ha)			
		Sornawari	**Samba**	**Navarai**	**Total**
1	**Paddy**	**8413**	14534	25489	**48436**
2	**Pulses**		**Kharif**	**Rabi**	**Total**
	Pulses – Blackgram		162	374	**536**
	Greengram		38	386	**424**
	Cowpea		1	27	**28**
	Total Pulses		**201**	**787**	**988**
3	**Oilseeds - Groundnut**		747	1239	**1986**
	Gingelly		52	279	**331**
	Total Oilseeds		**799**	**1518**	**2317**
4	Sugarcane		**123**	**497**	**620**

2.7 HORTICULTURE:

Major horticultural crops in Kancheepuram district

Mango	955 ha
Banana	140 ha
Guava	104 ha
Bhendi	177 ha
Brinjal	126 ha
Chillies	121 ha
Cashew	70 ha
Jasmine	125 ha
Tuberose	25 ha

CHAPTER 3

DISASTER MANAGEMENT GOALS

Disaster Risk Reduction of post-2015

Post 2015, there has been a significant shift from the approach of Managing Disasters to Managing Risk. The three landmark global agreements viz. the Sendai Framework for Disaster Risk Reduction 2015–30 (SFDRR), Sustainable Development Goals (SDG) and the Paris Agreement (COP21) set the stage for future global action on DRR, sustainable development and climate change.

Prime Minister's Ten Point Agenda for Disaster Risk Reduction

1. All development sectors must integrate the principles of Disaster Risk Management (DRM).
2. Risk coverage should encompass all entities, from poor households and small, medium, and micro enterprises to multinational corporations and nation-states.
3. Women's leadership and greater involvement must be central to DRM initiatives.
4. Invest in risk mapping globally to improve global understanding of Nature and disaster risks.
5. Leverage technology to enhance the efficiency of disaster risk management efforts.
6. Develop a network of universities to work on disaster-related issues.
7. Utilise the opportunities provided by social media and mobile technologies for DRR.
8. Build on local capacity and initiative to enhance DRR.
9. Make use of every opportunity to learn from disasters and to achieve that, there must be studies on the lessons after every disaster
10. Bring about greater cohesion in international response to disasters.

This 10-point agenda serves as a roadmap for Disaster Risk Management, guiding us toward climate-resilient and sustainable development.

3.1 SENDAI FRAMEWORK:

The Sendai Framework for Disaster Risk Reduction 2015–2030 was adopted at the Third United Nations World Conference on Disaster Risk Reduction, held from 14 to 18 March 2015 in Sendai, Miyagi, Japan. During this conference, states reaffirmed their commitment to addressing disaster risk reduction and building resilience with a renewed sense of urgency within the contexts of sustainable development and poverty eradication. They pledged to integrate disaster risk reduction and resilience-building into policies, plans, programs, and budgets at all levels, considering both within relevant frameworks. Reducing disaster risk is a cost-effective investment that helps prevent future losses and supports sustainable development.

According to the United Nations Office for Disaster Risk Reduction (UNISDR), resilience is defined as "the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate to, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions." It is critical to anticipate, plan for, and reduce disaster risk to effectively protect individuals, communities, and nations, along with their livelihoods, health, cultural heritage, socioeconomic assets, and ecosystems, thereby strengthening their resilience.

There is a pressing need for enhanced efforts to reduce exposure and vulnerability, thereby preventing the creation of new disaster risks and holding accountable those responsible for such risks.

More dedicated actions must focus on addressing underlying disaster risk drivers, including poverty, inequality, climate change, unplanned urbanization, poor land management, demographic changes, weak institutional arrangements, non-risk-informed policies, and limited technology availability. Strengthening good governance in disaster risk reduction strategies at national, regional, and global levels is essential, along with improving preparedness, national coordination for disaster response,

rehabilitation, and reconstruction. The principle of "Build Back Better" should guide post-disaster
recovery and reconstruction, supported by strengthened modalities of international cooperation.

Disaster risk reduction practices must be multi-hazard and multi-sectoral, inclusive, and accessible to be effective. While recognizing their regulatory and coordinating roles, governments should engage relevant stakeholders—including women, children, youth, persons with disabilities, marginalized communities, and volunteers—in the design and implementation of policies, plans, and standards.

There is a need for public and private sectors, civil society organizations, and academic institutions to collaborate more closely and create opportunities for partnership, enabling businesses to integrate disaster risk into their management practices.

To effectively reduce disaster risk, it is vital to address existing challenges and prepare for future ones by focusing on monitoring, assessing, and understanding disaster risk and sharing such information. This includes strengthening disaster risk governance and coordination across relevant institutions and sectors and ensuring the full participation of relevant stakeholders.

Investments should be made in the economic, social, health, cultural, and educational resilience of individuals and communities, as well as the environment, through technology and research. Enhancing multi-hazard early warning systems and improving preparedness, response, recovery, rehabilitation, and reconstruction are also crucial.

This framework applies to the risk of both small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters caused by natural or man-made hazards, along with related environmental, technological, and biological risks.

Its aim is to guide the multi-hazard management of disaster risk in development across all levels and sectors.

Revised Goals for Kancheepuram District

1. Reduce the outbreak of vector-borne and water-borne diseases by ensuring the availability of safe drinking water and encouraging the public to maintain clean surroundings and adopt healthy habits, such as segregation and proper disposal of garbage.
2. Mitigate flooding by rehabilitating settlements near all types of water bodies and converting kutcha surplus courses into micro and macro drains.
3. Conserve water by increasing the capacity of watercourses through systematic desilting and restoring system tanks and channels by 2030.
4. Improve soil quality by encouraging farmers to adopt organic methods, discouraging the use of chemical fertilizers and pesticides, and promoting other sustainable agricultural practices.
5. Encourage water conservation methods in both urban and rural areas by involving community members and ensuring systematic enforcement.
6. Increase the water table and prevent drainage of water during the rainy season by constructing check dams across the Palar River.
7. Prepare farmers to adopt various agricultural techniques, such as changing crop patterns based on water availability, using mulching to avoid surface water evaporation, and implementing drip irrigation during periods of water scarcity to mitigate extreme drought conditions by 2030.
8. Provide flood regulators in all major tanks to manage the quantity of water flow during heavy rain and construct concrete retaining walls on both sides of the Adyar River in Varadarajpuram Village to reduce the impact of flooding.
9. Ease flood flow conflicts by widening the left bank of the Chembarambakkam surplus course to convert the existing 'T' type confluence into a 'Y' type confluence for effective flood flow management.
10. Minimize losses during severe crop failures caused by various calamities, such as floods and droughts, by encouraging the entire agricultural community to insure their crops.

3.2 GLOBAL TARGETS

To attain the expected outcome, the following goal must be pursued:

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience.

The seven global targets are:

(a) Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rates in the decade 2020–2030 compared to the period 2005–2015;

(b) Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015;

(c)Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030;

(d)Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030;

(e) Substantially increase the number of countries with national and local disaster risk Reduction strategies by 2020;

(f) Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030;

(g) Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.

Disaster risk reduction and management depends on coordination mechanisms within and across sectors and with relevant stakeholders at all levels, and it requires the full engagement of all State institutions of an executive and legislative nature at national and local levels and a clear articulation of responsibilities across public and private stakeholders, While the drivers of disaster

risk may be local, national, regional or global in scope, disaster risks have local and specific characteristics that must be understood for the determination of measures to reduce disaster risk; In the post-disaster recovery, rehabilitation and reconstruction phase, it is critical to prevent the creation of and to reduce disaster risk by "Building Back Better" and increasing public education and awareness of disaster risk;

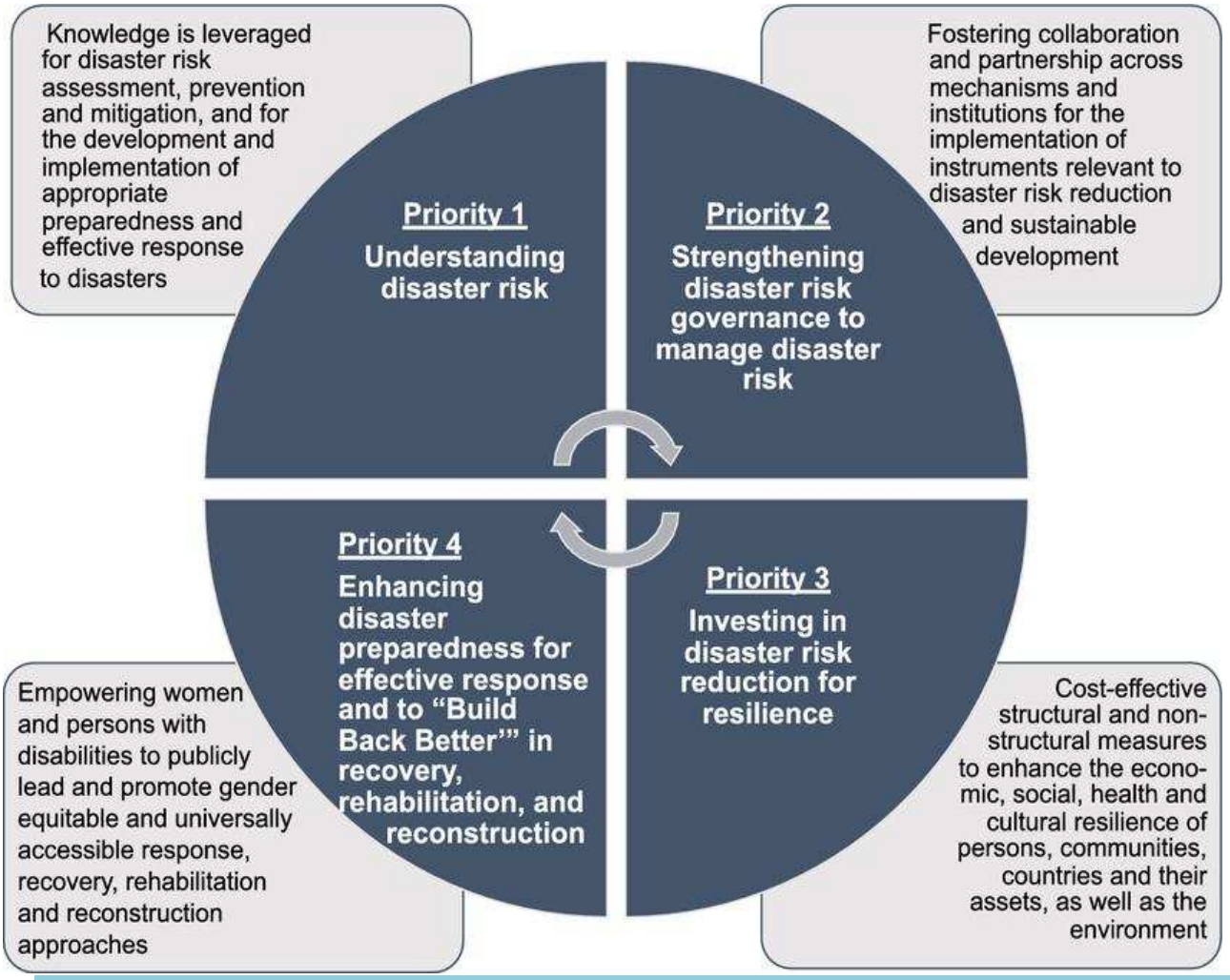
Taking into account the experience gained through the implementation of the Hyogo Framework for Action, and in pursuance of the expected outcome and goal, there is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas:

Priority 1: Understanding disaster risk.

Priority 2: Strengthening disaster risk governance to manage disaster risk.

Priority 3: Investing in disaster risk reduction for resilience.

Priority 4: Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.



3.3 Sustainable Development Goals (SDG) and Disaster Resilience

The Sustainable Development Goals (SDGs), consisting of 17 Global Goals and 169 targets, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The 17 Goals build on the successes of the Millennium Development Goals (MDGs), while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another.

There are several targets across the 17 SDGs that are related to DRR. Conversely, all seven global DRR targets of the Sendai Framework are critical for the achievement of the SDGs.

The focus on strengthening resilience is expected to protect development gains and ensure people to have the resources and capacities to

better reduce, prevent, anticipate, absorb and adapt to a range of shocks, stresses, risks and uncertainties. The chart below depicts how the coherence and mutual reinforcement of the SDGs and Sendai Framework are reflected in outcomes and targets.

COP21 Paris Agreement on Climate Change Action and Disaster Risk Reduction

The agreement aims at "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre - industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change". Article-7 dwells on establishing "the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change".

There is significant convergence between the problems that DRR and climate change adaptation seek to address. The regions already exposed to climate-related hazards and effects will be at greater risk due to a projected increase in the frequency and/or intensity of those hazards and effects because of global climate change.

CHAPTER 4

PREVIOUS INCIDENTS OF DISASTER IN KANCHEEPURAM DISTRICT

1.MOULIVAKKAM BUILDING COLLAPSE - 2014

On the evening of June 28, 2014, one of the twin towers (Block-B), an eleven-story building under construction and nearing completion at No. 52, Porur-Kundrathur Road in Moulivakkam near Porur, collapsed. This tragedy resulted in the loss of 61 lives and injuries to 27 individuals. In response, the government appointed an inquiry commission headed by Justice Thiru R. Ragupathi.

After a thorough investigation, the inquiry commission concluded that the primary cause of the disaster was related to the construction of the building. The execution of the building plan deviated significantly from the design approved by the authorities.

Furthermore, after reviewing reports from various professional inspection committees, the inquiry commission identified several contributing factors to the collapse, including the use of substandard materials, inadequate raft thickness, and structural failures due to poorly designed columns.

The commission also highlighted the deliberate violations of regulations and significant deviations from the approved plan by the builder and his associates.

Block-A, the remaining tower, is surrounded by schools, residential areas, various business establishments, and a major traffic road. Given that Block-A was constructed using the same materials and deviated plans as the collapsed building, the government determined that there was an imminent danger to public safety. Consequently, it was decided to demolish the remaining Block-A to mitigate any risks to the community.

2.FLOOD 2015

Kancheepuram District is also popularly known as "Erikal Mavattam" due to presence of large number of Irrigation tanks spread throughout the District. There are 1995 number of Traditional Irrigation Water Bodies available in this District out of which 912 tanks are Major Irrigation tanks under the maintenance of PWD and rest of the Tanks are vested with Panchayat union. This one major water supply Reservoir viz., Chembarambakkam and 16 major irrigation tanks each catering irrigation water supply for aycut more than 1000 Acres.

Kancheepuram District houses 5 Major River Basins namely Palar Basin, Adyar Basin, Cheyyar Sub- Basin, Ongur Basin and Kiliyar Sub-Basin. Besides, there are numerous minor & major streams and channels criss-crossing the entire district. This District also has 57km of coastal line, which normally receives 30% higher rainfall than Inland. The Pallikaranai swamp and Buckingham canal drainage system is very sensitive and its fringe areas are always flood prone.

Under this topographical setting, the north-east monsoon up to 10.11.2015 was normal and the first spell of rainfall between 12.11.2015 to 24.11.2015 has created considerable damage to Public and private infrastructural facilities like tanks, anicuts, roads, buildings, water supply and drainage system etc., During the first spell almost all the tanks and reservoirs were filled to the full capacity and all water bodies are at brim.

Under this circumstances, the rainfall from 25.11.2015 to 10.12.2015 is very severe and highly critical also devastating by causing major damages to allinfrastructure facilities, agriculture, live-stocks, men and material in the District. Especially River Adyar which is drainage to 198 tanks from five tributaries namely Mannivakkam branch, Adanur branch, Orathur branch, Manimangalam branch and Malaipattu branch has received peak flood discharge from all branches simultaneously tune to 17800 cusecs against its flood carrying capacity of 9200 cusecs. At the same period, the Adyar River

also received peak surplus discharge from Chembarambakkam reservoir tune to 29000 cusecs.

The River Palar, River Ongur and Neenjal Maduvu has pecking with flood discharge and flooding of adjacent area neccesating major evacuation and relief work taken up at war footing.

During North East Monsoon 2015, Kancheepuram District recorded 297% higher rainfall than the average rainfall of 567.70 mm. On 13.11.2015 alone 342 mm Rainfall was recorded in Kancheepuram Taluk. On 02.12.2015 494 mm rainfall was recorded in Tambaram Taluk. Thirukazhukundram Taluk recorded a maximum rainfall of 441.4 mm on a single day (Now Chengalpattu District).

3.VARDAH CYCLONE - 2016

On December 11, 2016, at 08:30 hours, the Indian Meteorological Department issued a warning for a very severe cyclonic storm, VARDAH. The report indicated that VARDAH was centered 480 km northeast of Chennai and warned that the system was likely to cross the north Tamil Nadu coast between Chennai and Pulicat by the afternoon of December 12, 2016.

The southern wings and whirl of the severe VARDHA cyclone passed over Kancheepuram District, causing extensive damage to various infrastructures, as well as electrical and telecommunication installations, significantly impacting both flora and fauna.

The cyclone produced gale winds recorded at over 100 km/hr, and the average rainfall in the district was 126.16 mm, with a peak rainfall of 283.10 mm recorded in Kancheepuram District on December 13, 2016.

4.DROUGHT in 2016- 17

In 2016, Kancheepuram District received a total annual rainfall of approximately 979.45 mm, which is around 182 mm below the average. Notably, the rainfall recorded up to November 2016 was about 687.13 mm. Historically, an average of 468 mm of rainfall is recorded during October and November. However, in 2016, the district experienced an abysmally low

rainfall of only 55.53 mm during these two months, resulting in a shortfall of 412.47 mm.

The crops sown in anticipation of the northeast monsoon suffered water stress during the critical flowering and panicle initiation stages (particularly for paddy) due to the inadequate rainfall in October and November, leading to significant crop damage. Although Cyclone Vardah brought around 126 mm of rainfall on December 12, 2016, this heavy downpour and strong winds could not fully alleviate the moisture stress on standing crops and led to the lodging of paddy crops in many areas. Nonetheless, these rains helped revive moisture-stressed crops in approximately 45% of the affected villages.

Typically, Tamil Nadu receives northeast monsoon rains from October to December. Unfortunately, the northeast monsoon failed from October 1 to November 30, 2016, for a continuous period of 60 days, resulting in damage to around 4,736 hectares of 60-day Samba paddy crops due to water stress.

The Agriculture Department officials of Kancheepuram District initially identified the affected areas. To address the moisture stress, the Agriculture Department advised farmers to spray potassium chloride (KCl) and Pink Pigmented Facultative Methylotrophs (PPFM) bacteria to revive the crops and prevent further drying.

On November 25, 2016, the Zonal Officer deputed by the Director of Agriculture visited the drought-affected blocks of Sriperumbudur and Walajabad. The District Monitoring Officer inspected the moisture-stressed areas in Walajabad and Sriperumbudur blocks on November 26, 2016, conducting a detailed assessment of crop conditions and water availability in the villages of Siruvallur, Maduramangalam, and Ramanujapuram.

The District Administration assessed crop damages due to water stress in November 2016, documenting the crop conditions and water situation. A review by the Monitoring Officer led to directions for desilting water bodies under MGNREGS/CSR initiatives, as well as the creation of sunken pits and

recharge wells to improve their holding capacity and facilitate groundwater recharge in case of rain in December.

Additionally, the District Administration developed a comprehensive plan for desilting all major irrigation tanks, including inlet and outlet channels in the drought-affected villages. Drought Monitoring Centres were established to conduct studies and devise short-, medium-, and long-term strategies for managing disasters, with a particular focus on droughts and floods.

5. Kanthachavadi Building Collapse

On July 21, 2018, a shed of a hospital under construction collapsed near Perungudi, Kanthachavadi.

6. NIVAR & BUREVI CYCLONE 2020

According to the Indian Meteorological Department (IMD) forecast, the Very Severe Cyclonic Storm "Nivar" crossed the coastal Tamil Nadu and made landfall near Puducherry on November 25, 2020, with wind speeds of 120-140 km/hr.

This tropical cyclonic storm impacted portions of Kancheepuram district on November 26, 2020, bringing heavy to extremely heavy rainfall throughout the district.

The average rainfall recorded over three days (November 25 to November 27, 2020) was 351.9 mm, with a single-day average of 111.91 mm recorded on November 26, 2020.

7. MANDOUS CYCLONE 2022

A remnant upper air cyclonic circulation from the South China Sea developed over the South Andaman Sea, adjoining the equatorial Indian Ocean and the Strait of Malacca on December 4, 2022. Under its influence, a low-pressure area formed over the South Andaman Sea and its vicinity on December 5, 2022. This system became a well-marked low-pressure area over the Southeast Bay of Bengal on December 6, 2022, and subsequently intensified into the cyclonic storm "Mandous" over the southwest Bay of Bengal around midnight on December 7, 2022. It further intensified into a severe cyclonic storm in the evening of December 8, 2022, with peak wind speeds reaching 85-95 km/h, gusting up to 95 km/h.

According to the IMD forecast, the deep depression over the Southwest and adjoining Southeast Bay of Bengal intensified into a Very Severe Cyclonic Storm “Mandous,” pronounced as “Man-Dous.” It was expected to move west-north-westward and cross the north Tamil Nadu, Puducherry, and adjoining south Andhra Pradesh coast between Puducherry and Sriharikota, with maximum sustained wind speeds of 65-75 km/h, gusting to 85 km/h.

The storm made landfall near Mamallapuram on December 9, 2022, with wind speeds of 85-100 km/h. It crossed portions of Kancheepuram district on the same day, bringing heavy to extremely heavy rainfall throughout the area, resulting in significant damage to infrastructure and livelihoods.

- 133.7 mm average rainfall recorded on a single day (10.12.2022)

8. MICHAUNG CYCLONE 2023

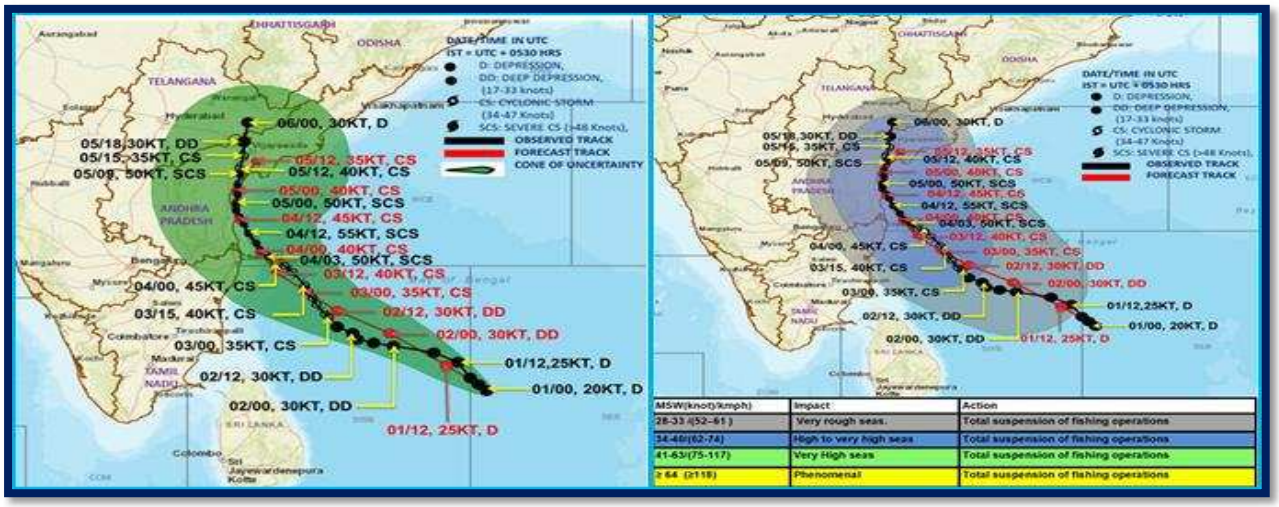
A low-pressure area formed over the South Andaman Sea and the adjoining Malacca Strait at 05:30 hours IST (00:00 UTC) on November 27, 2023. This system developed into a well-marked low-pressure area over the Southeast Bay of Bengal and the adjoining South Andaman Sea by the early morning of November 29, 2023.

As it moved westward, the system concentrated into a depression over the Southeast and adjoining Southwest Bay of Bengal. It continued on a west-northwest trajectory and intensified into a deep depression over the Southwest Bay of Bengal at 05:30 hours IST (00:00 UTC) on December 2, 2023. The system further intensified into a cyclonic storm named "MICHAUNG" (pronounced as MIGJAUM) over the Southwest Bay of Bengal at 05:30 hours IST (00:00 UTC) on December 3, 2023.

Following this, the storm moved north westward and intensified into a severe cyclonic storm over the West-central and adjoining South-west Bay of

Bengal off the south Andhra Pradesh and adjoining north Tamil Nadu coasts at 08:30 hours IST (03:00 UTC) on December 4, 2023.

Ultimately, the system moved nearly northward, closely paralleling the south Andhra Pradesh coast, and crossed the south Andhra Pradesh coast between Nellore and Machilipatnam, near the southern part of Bapatla, between 12:30 and 14:30 hours IST (07:00-09:00 UTC) on December 5, 2023. The storm made landfall as a severe cyclonic storm with maximum sustained wind speeds of 90-100 km/h, gusting up to 110 km/h.110 kmph.



Identification of Vulnerable Areas as per Vulnerability

Identifying the most vulnerable locations is the foremost action in disaster management. A digital map of the district, incorporating both spatial and non-spatial data, shall be prepared at appropriate scales. These maps will be supplemented with information relating to specific and individual disasters.

Details regarding the actions to be taken, agencies involved, and the resources and funds required will also be documented. A database utilizing GIS and GPS technologies will be developed.

Based on North East Monsoon activities and analysis of legacy data, a total of 72 areas have been identified throughout the district, classified into four categories as follows:

- Very High Vulnerable-03
- High Vulnerable- 21
- Medium Vulnerable-26
- Low Vulnerable-22

YEAR	NO. OF VULNERABLE AREAS IDENTIFIED
2015-16	**1128**
2017-18	**667**
2018-19	**515**
2019-20	**126**
2020-2021	**126**
2021-2022	**78**
2022-2023	**72**

FLOOD PRONE VULNERABLE

AREAS IDENTIIFED (as per 2021)

Sl. No	Name of the Taluk	Source of Vulnerable	Details of Vulnerable Area
1.	**Kancheepuram**	Low	Ekambaranathar North Mada Street
2.		Low	Krishnan Street
3.		Low	Vaikunda Perumal Extn
4.		High	Upperikulam
5.		High	Vellakulam

6.	**Kancheepuram**	High	Avakuttai
7.		Very High	Barathi Nagar
8.		Low	Venkatesapalayam
9.		Low	Poiyakulam
10.		Low	Mullankuttai
11.		High	Kasim Nagar , Kamarajar Nagar, Nathapettai
12.		Medium	Arunthathiyar palayam,
13.		Medium	Kavarai Street,
14.		Medium	Balaji Nagar
15.		Very High	Varadarajapuram back Street
16.		Low	Magaliamman koil Street
17.		Very High	Pachaiyappan Slum area
18.		Low	Karukinil Amarthaval koil street Slum area
19.		High	Nagaloothu medu
20.		Low	Nagaloothu manthavelli street
21.		High	KMV Nagar
22.		Low	C.S. Chetty Street
23.		High	Sithivinayagar Poonthootam
24.		Low	Mottai Kulam Slum Area
25.		High	Thenambakkam Indira nagar
26.		High	Anna Nagar
27.		High	MGR Nagar
28.		High	Annai Sathya Nagar, MGR Nagar
29.		High	Kamachiyaamman Colony
30.		High	Sadavaram
31.		High	Orikkai, Vasantham nagar, Asiriyar Nagar, Appavu Nagar, Gandhi Nagar, Anna Nagar, Mullai Nagar, Velingapattarai
32.		High	Bakkiyalakshmi Nagar
33.		Low	Gandhi Nagar, Anna Nagar
34.		High	V.M.S. Nagar, Adhiyaman Nagar, Sadasivam Nagar.
35.		Medium	Jem nagar,
36.		Medium	Arunachalam Nagar
37.		Low	Karur palla colony
38.		Low	Marutham
39.		Low	Bharathi nagar, Vaiyavur colony
40.		Low	Enathur
41.		Medium	Ozhaiyur
42.		Medium	Min Nagar
43.		Medium	Ashok Nagar
44.		Medium	Indira Nagar
45.		Medium	Pudhunagar

46.	**Kancheepuram**	Low	Erivakkam
47.		Low	Kallankamdanpattadai
48.		Low	Kolathur
49.		Low	Nelveli
50.		Low	Asoor
51.	**Sriperumbudur**	Low	Indira Nagar
52.		Low	Echoor
53.		Low	Vadakal
54.		Low	Ettikuttimedu
55.		Medium	Reddiyar Street, Mevalurkuppam
56.		Medium	Kalaingnar Street,
57.		Low	Puduperpallam
58.		Medium	Pillaiyar Koiul Street, Perumal Koil street, Karunagaracherry,
59.		Very High	Sethupattu & Irular Colony
60.		Medium	Pazhanthandalam
61.		Very High	Gajalakshmi Nagar
62.		Very High	Ambedkar Nagar
63.		Very High	Adhanur Village
64.		Medium	Korukanthangal
65.		Medium	Amanambakkam
66.		Medium	Chinna Theru,
67.		Medium	Rajiv Gandhi Street.
68.	**Uthiramerur**	Medium	MGR Nagar
69.		Low	Muthu Krishna Avenue
70.		Medium	Kattupakkam
71.		Medium	Kaliyampoondi Colony
72.		Medium	Kaliyampoondi Lander Colony
73.		Medium	Karanai
74.		Medium	Thinaiyampoondi
75.		Medium	Puthali
76.		Medium	Azhisoor
77.		Medium	Vayalakavur
78.		Medium	Rettamangalam
79.		Medium	Vadathavur
80.		Medium	S.Mambakkam
81.		Medium	Pullambakkam
82.		Medium	Thiruvanaikoil
83.		Medium	Karumbakkam
84.	**Walajabad**	Low	Bharathi Nagar
85.		Low	Chinnasamy Nagar
86.		Low	Thazhampattu
87.		Low	Kattavakkam

88.	**Walajabad**	Low	Thenneri
89.		Low	Muthiyalpettai, Erivoy, Valluvapakkam, Bharathai Nagar
90.	**Kundrathur**	Low	Rajeswari Nagar
91.		Low	Jaganathan Nagar, Sampanthan nagar
92.		Medium	Ondi Colony
93.		Medium	Manachery Iswaryam Nagar
94.		Medium	Sekizhar Nagar
95.		High	M.G.R Nagar,
96.		High	Kanniyappan Nagar
97.		High	Thiruvalluvar Nagar
98.		High	Periyar Nagar
99.		Very High	Manikandan Nagar Metrostar City
100.		Very High	Metha nagar, Aandankuppam
101.		High	Om Sakthi nagar,
102.		High	Janani Nagar
103.		High	Srinivasan nagar
104.		High	Kirubanadha Variyar Nagar
105.		High	Ambal Nagar,
106.		High	Kamatchi Nagar
107.		Low	Kamachi Nagar Extension & Narivanam Salai
108.		Low	Selvaganapathy Nagar
109.		Medium	Perumal Koil street
110.		Medium	Samathuvapuram
111.		Medium	Ambedkar Nagar
112.		Low	Ambedkar Nagar, Thiruvalluvar Nagar
113.		Low	Mariyamman koil Street, Lakshmi Nagar, Athanncheri
114.		Low	Periyar Nethaji David Nagar
115.		Very High	Mahalakshmi nagar, Bhuvaneswari Nagar, Astalakshmi nagar
116.		Very High	Royappa Nagar, santhi Niketan Nagar
117.		Low	Thandalam Manimedu
118.		Low	Samayapuram
119.		Low	Tharapakkam Perumal Koil Street.
120.		High	Malayambakkam Thangal
121.		Very High	Ayyappanthangal Mettu colony
122.		Very High	Koluthuvancheri Village & colony
123.		High	Mowlivakkam Village (Pattu Mangadu Main Road)
124.		High	Srinivasapuram
125.		Medium	Paraniputhur Colony & Nagar
126.		Medium	Chinnapanicheri Colony

As per instruction from CRA vide reference, D.O Letter no. NC1(4)/3770/2021 dated: 26.08.2021, the vulnerable areas have being reduced from 126 to 78 Areas and further it have been reduced to 72 Areas after ground verification

S. No	Type	Details	No.of Areas
1	Areas of very high vulnerability	a. Where inundation of water was more than 5 feet or b. Where rescue operations were carried out with the help of Central forces / State Disaster Response Force (SDRF), or c. Which were cut-off and became inaccessible, or d. Where loss of lives was reported or large-scale evacuation was carried out.	3
2	Areas of high vulnerability	Where inundation of water was from 3 to 5 feet	21
3	Areas of Medium vulnerability	Where inundation of water was from 2 to 3 feet	26
4	Areas of low vulnerability	Where inundation of water was below 2 feet	22
Total			**72**

Very High Vulnerable Areas

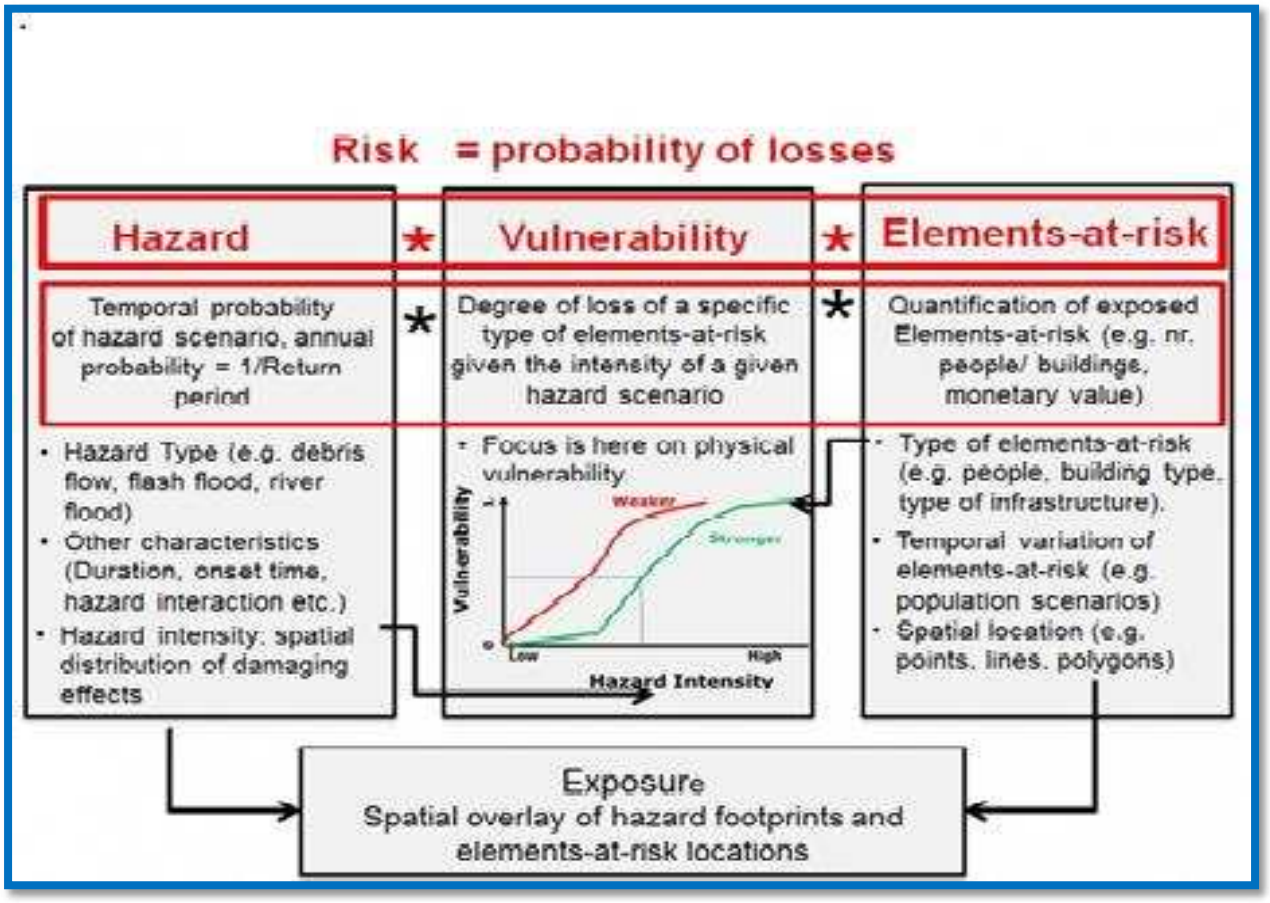
S.No	Local Body	Vulnerable Areas
1	Kundrathur Block - 3	Mahalakshmi nagar, Bhuvaneswari Nagar, Astalakshmi nagar
2		Royappa Nagar, santhi Niketan Nagar
3		Koluthuvancheri Village & colony

High Vulnerable Areas		
S.No	**Local Body**	**Vulnerable Areas**
1	Kancheepuram Corporation ward 1-51 -12	Barathi Nagar
2		Upperikulam
3		Vellakulam
4		Avakuttai
5		Nagaloothu medu
6		KMV Nagar
7		Sithivinayagar Poonthootam
8		Thenambakkam Indira nagar
9		Anna Nagar
10		MGR Nagar
11		V.M.S.Nagar, Adhiyaman Nagar, SadasivamNagar.
12		Kamachiyamman Colony
13	Walajabad Block	Thimmayanpettai, Andavar Nagar, Kumaran Nagar
14	Walajabad Town Panchayat	Walajabad Town
15	Kundrathur Block	Sethupattu Irular colony
16		Ambedkar Nagar
17		Mowlivakkam Village (Pattu Mangadu Main Road)
18		Malayambakkam Thangal
19	Mangadu Municipality	Janani Nagar
20		Srinivasan nagar
21		Kamatchi Nagar

Medium Vulnerable Areas		
S.No	Local Body	Vulnerable Areas
1	Kancheepuram Municipality - 3	Arunthathiyar palayam,
2		Kasim Nagar , Kamarajar Nagar, Nathapettai
3		Annai Sathya Nagar, MGR Nagar
4	Kanchipuram Block - 4	Min Nagar
5		Ashok Nagar
6		Indira Nagar
7		Pudhunagar
8	Uthiramerur Block - 8	Kaliyampoondi Colony
9		Kaliyampoondi Lander Colony
10		Puthali
11		Azhisoor
12		Rettamangalam
13		Vadathavur
14		S.Mambakkam
15		Alapakkam
16	Kundrathur Block - 09	Perumal Koil street
17		Ambedkar Nagar
18		Korukanthangal
19		Amanambakkam
20		Adhanur Village
21		Srinivasapuram
22		Chinnapanicheri Colony
23		Paraniputhur Colony & Nagar
24		Pink City Poonthandalam
25	Kundrathur Municipal Area - 1	Manachery Iswaryam Nagar
26	Mangadu Municipal Area - 1	Om Sakthi nagar

Low Vulnerable Areas		
S.No	**Local Body**	**Vulnerable Areas**
1	Kanchipuram Block -4	Erivakkam
2		Kallankamdanpattadai
3		Enathur
4		Bharathi nagar Vaiyavoor
5	Walajabad Block-2	Muthiyalpettai, Erivoy, Valluvapakkam, Bharathai Nagar
6		Periyanatham Village
7	Uthiramerur Town Panchayat -1	Muthu Krishna Avenue
8	Sriperumbudur Block-2	Ettikuttimedu
9		Puduperpallam
10	Kundrathur Block -10	Gajalakshmi Nagar
11		Pazhanthandalam
12		Samathuvapuram
13		Pillaiyar Koil Street, Perumal Koil street, Karunagaracherry
14		Ambedkar Nagar, Thiruvalluvar Nagar
15		Orathur Rajiv gandhi street
16		Orathur Chinna theru,
17		Thandalam Manimedu
18		Samayapuram
19		Tharapakkam Perumal Koil Street.
20	Kundrathur Municipal Area- 2	Jaganathan Nagar, Sampanthan nagar
21		Kanniyappan Nagar,Kundrathur MC
22	Mangadu Municipal Area - 1	Selvaganapathy Nagar

HAZARD,RISK & VULNERABILITY ANALYSIS



4.1 HAZARD & VULNERABLE ANALYSIS:

Kancheepuram District is susceptible to various major disaster hazards, including floods, cyclones, industrial hazards, and droughts.

The Kancheepuram District Disaster Management Authority has developed a comprehensive classification of hazard and vulnerability areas within the district.

A systems-based approach is employed, emphasizing the importance of risk identification and assessment at the systemic level. This is essential for implementing significant interventions related to prevention, mitigation, preparedness, and response.

The district is exposed to both natural and man-made hazards of diverse types and varying intensities, with the primary hazards being cyclonic storms and periodic droughts.

The identification, assessment, and mapping of risks are conducted by considering legacy data and the geomorphological characteristics of the district.

The District is vulnerable to disasters of different types with varying intensity as indicated below:

Water and Climate Related	✓ Drought, ✓ Thunder Storm Surge, ✓ Lightning, ✓ Flash Floods, ✓ Floods and Cyclones
Geophysical Related	✓ Earthquake, ✓ Tsunami
Chemical and Industrial	✓ Industrial Fires, ✓ Gas and Chemical Leakages, Oil spills
Accidents Related	✓ Forest fires, ✓ Electrical fires, Urban and Village fires, ✓ Building Collapses, Festival/ Fair /Temple Stampedes, ✓ Road, Rail and Air based Accidents/ Boat capsizing, ✓ Fire Accident
Biological Related	✓ Epidemics, ✓ Pest attacks, ✓ Food poisoning, ✓ Water Contamination

RISK ASSESSEMENTS IN THE DISTRICT:

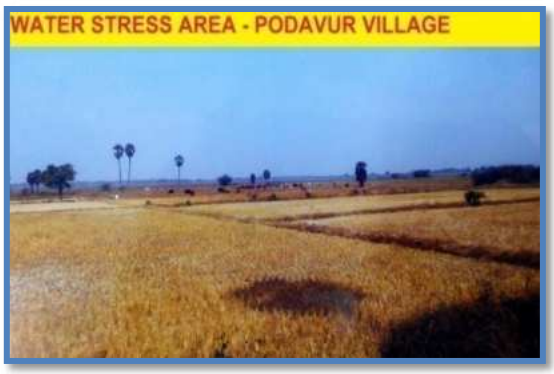
The vulnerability of the district to the above disasters is narrated below

Drought Vulnerability

The district's vulnerability to drought is primarily attributed to low rainfall and the erratic behaviour of the monsoon. Drought can have a devastating impact on the community, affecting a significant portion of the population. Variability in drought conditions directly and significantly impacts food production and the overall economy.

Water scarcity during the summer is evident in the dry rivers and the lowering of the water table, adversely affecting both rural and urban drinking water supplies. Drought conditions are most recurrent from June to September. For instance, in 2016, Kancheepuram District experienced an abysmally low rainfall of only 55.53 mm during October and November, resulting in a shortfall of 412.47 mm.

The failure of the North East Monsoon from October 1 to November 30, 2016, for a continuous period of 60 days, resulted in approximately 4,736 hectares of Samba Paddy crops being damaged due to water stress. This situation had severe repercussions for both the agricultural sector and the availability of drinking water.



Cyclone /Heavy Rainfall Vulnerability:

The geographical setting of Kancheepuram district renders it susceptible to various natural disasters, including cyclones, floods, and earthquake-induced tsunamis. On average, the district experiences one or two cyclonic events during the Northeast monsoon period. Additionally, even outside the cyclonic phase, the district can receive sudden and intense spells of incessant rain during the formation of low-pressure systems or deep depressions in the Bay of Bengal.These low-pressure systems and deep depressions often lead to flooding and inundation in vulnerable areas. Cyclonic storms can be accompanied by gale-force winds exceeding 140 km/h, which can wreak havoc on public infrastructure, particularly power systems. Such extreme weather events not only result in significant damage to housing and agricultural properties but also pose a risk to human lives.

Cyclone	Year	Speed in Km/hr
Nisha Cyclone	**2008**	85 -100
Jal Cyclone	**2010**	100-110
Thane Cyclone	**2011**	140-165
Nilam Cyclone	**2012**	85-100
Vardha Cyclone	**2016**	130-155
Gale wind	**2019**	-
Nivar Cyclone	**2020**	120-130
Burevi Cyclone	**2020**	45-55
Mandous Cyclone	**2022**	85-100
Michaung Cyclone	**2023**	90-100

*No impact of Ockhi and Gaja Cyclone for Kancheepuram District

Damages occured due to Mandous Cyclone 2022










Damages occured due to Michaung Cyclone 2023











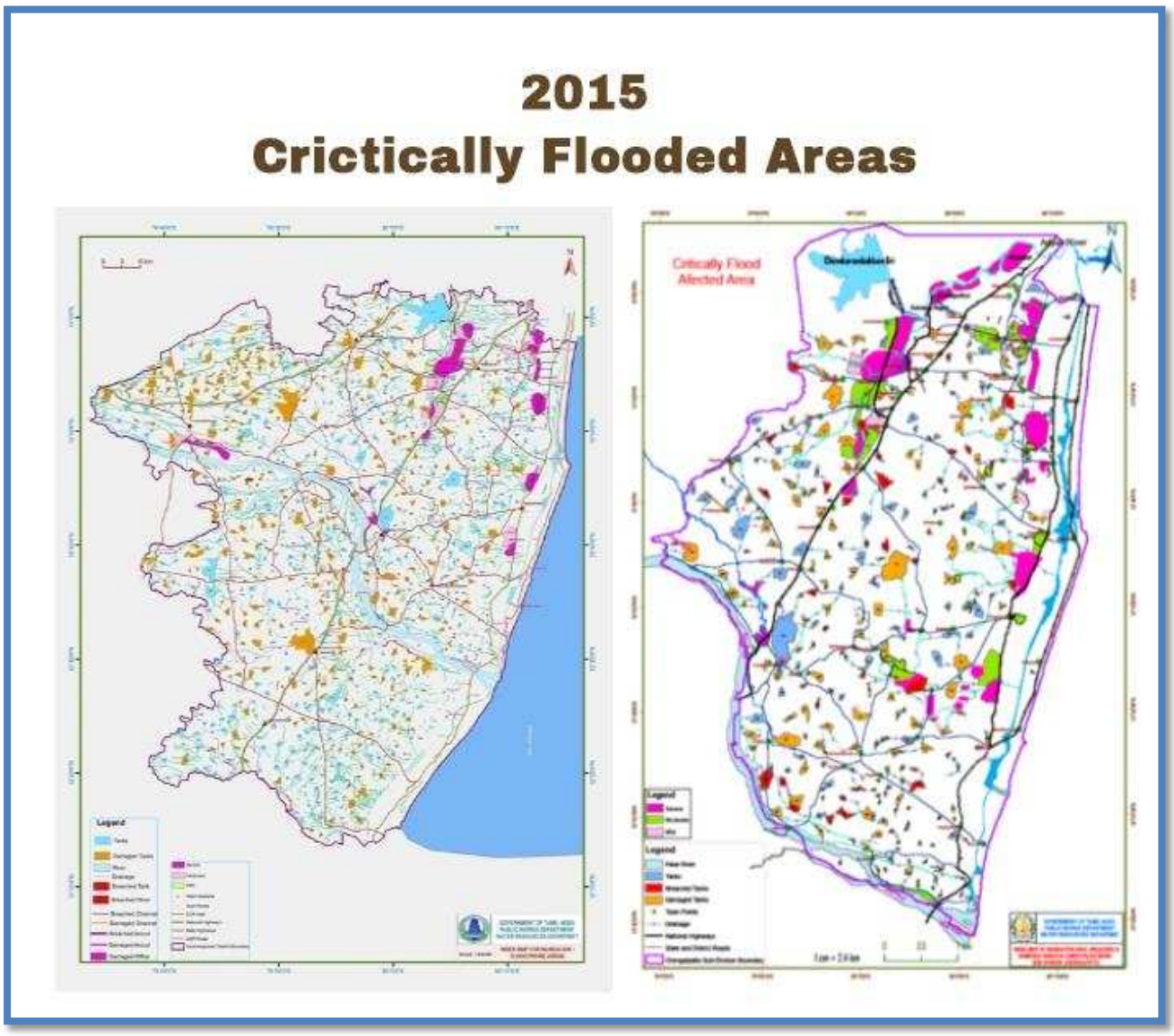

Kanchipuram District – Kundrathur Block - Varatharajapuram Drone Picture


Flood Vulnerability :

Kancheepuram District, commonly referred to as "Erikal Mavattam," is characterized by a large number of irrigation tanks distributed throughout the area. The district encompasses five major river basins.

2015 Floods:-

During the North East Monsoon of 2015, Kancheepuram District recorded rainfall that was 297% higher than the average of 567.70 mm. On November 13, 2015, Kancheepuram Taluk experienced 342 mm of rainfall in a single day. On December 2, 2015, Tambaram Taluk recorded 494 mm of rainfall, while Thirukazhukundram Taluk (now part of Chengalpattu District) saw a maximum rainfall of 441.4 mm on one day.



2017 Incessant Rains:-

In continuation of the 2015 floods, Kancheepuram District experienced continuous incessant rains during the North East Monsoon of 2017. These rains caused severe flooding, leading to the inundation of houses and damage to infrastructure throughout the district.

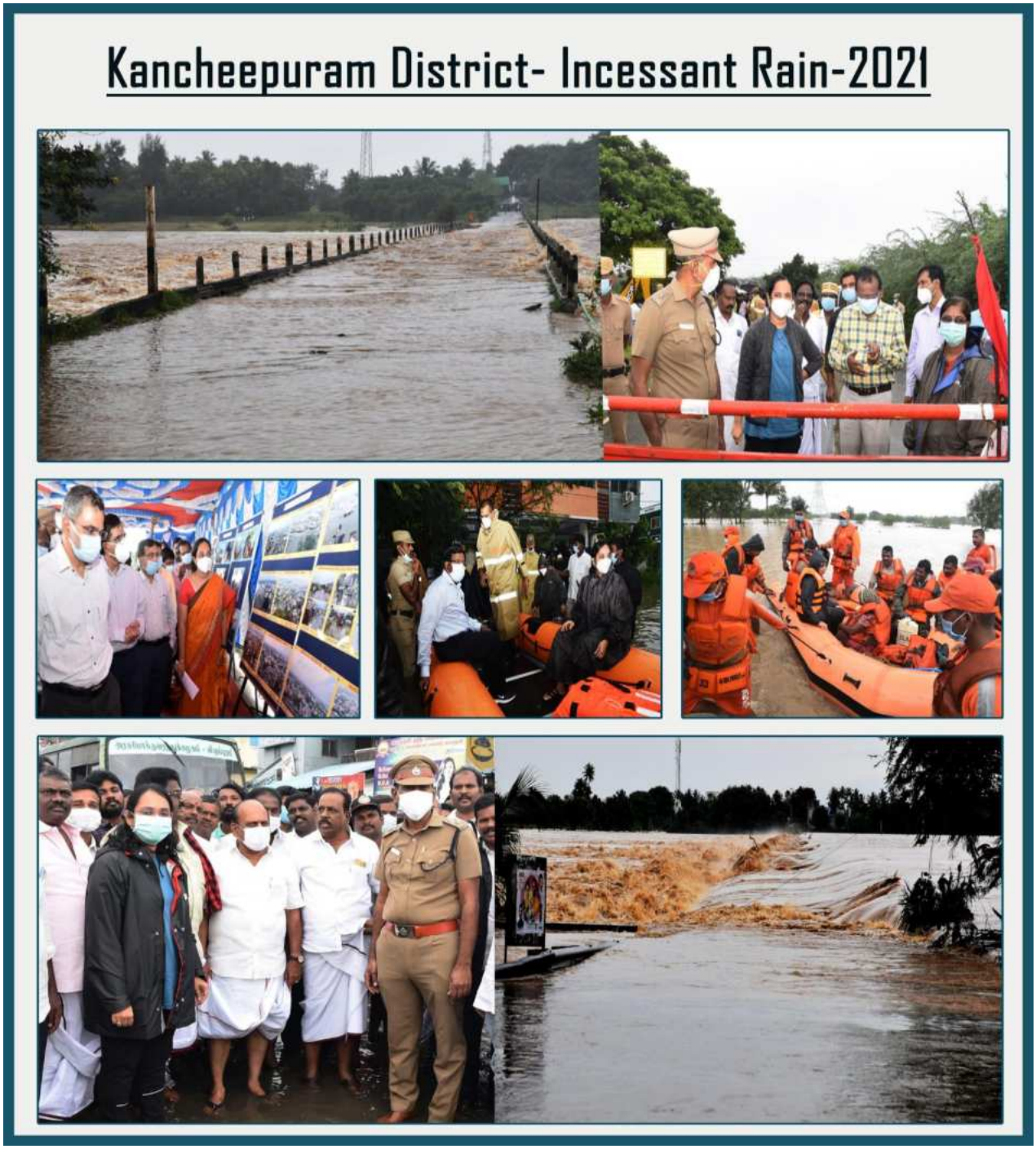
2021 Incessant Rains:-

- During the North East Monsoon of 2021, the first spell of rain commenced on November 7, 2021. A low-pressure area formed on November 9, 2021, over the Southeast Bay of Bengal, which intensified into a depression and crossed the Tamil Nadu coast on November 11, 2021.
- The highest rainfall recorded on a single day, November 11, 2021, was as follows:

✓ Kundrathur	139.6
✓ Chembrambakkam	135

✓ Sriperumbudur	101.5

- The heavy rainfall resulting from the low-pressure area led to a substantial inflow into reservoirs and tanks.
- As a result, PWD and MI tanks reached their full storage capacities, with the Chembarambakkam tank nearly at full capacity.
- This incessant rain caused significant inundation across the district, particularly in Varadarajapuram Panchayat, where ten streets were heavily affected.
- Additionally, fallen trees obstructed roads, and electrical poles and transformers were damaged, along with roads and bridges.



Heat Waves Vulnerability:

A heat wave is defined as a period of abnormally high temperatures, exceeding the normal maximum temperature during the summer season (hot weather). A heat wave is considered to occur only when the maximum temperature at a station reaches at least 40°C. Heat waves typically occur between March and June.

In Kancheepuram District, heat wave warnings issued by the IMD have occurred on the following dates:

Date	Time	Degree C
14.04.2016	11 AM	38 to 41
30.04.2017	3.00 PM	38 to 41
16.06.2018	01 PM -03 PM	40
20.06.2018	03.30 PM	38 to 41
28.06.2018	12 PM -03 PM	34 to 38
2020	NIL	-
June 2021	01 PM -03 PM	40
May & June 2022	01 PM -03 PM	40
May & June 2023	01 PM -03 PM	40 to 41
April, May & June 2024	01 PM -03 PM	41

Lightning & Thunderstorm Vulnerability:

Thunderstorms, lightning, and strong winds have become significant weather hazards in recent years. Kancheepuram District has shown increased vulnerability to lightning and thunderstorms over the past years. These events have resulted in various damages, including human loss, cattle deaths, and infrastructure damage throughout the district.

Year	Human Loss	Human Injury
2019	**6**	**4**
2021	**2**	**1**
2022	**4**	**1**
2023	**2**	**-**

2024	**2**	**1**

FLOOD VULNERABLE ANALYSIS with sample map:

Hazard, vulnerability, and risk assessment is a comprehensive process that quantifies the spatio-temporal return probabilities of various hazards, the expected degree of damage that specific elements or sets of elements at risk may face, and the anticipated monetary losses when a given area is exposed to hazards over a specified time period. A disaster occurs when the threat of a hazard materializes, impacting a vulnerable society.

Kancheepuram District is susceptible to major disaster hazards, including floods, cyclones, lightning, industrial hazards, and droughts. The Kancheepuram District Disaster Management Authority has developed and classified these hazards based on the State Hazard Vulnerability Risk Assessment (HVRA) study conducted in the district.

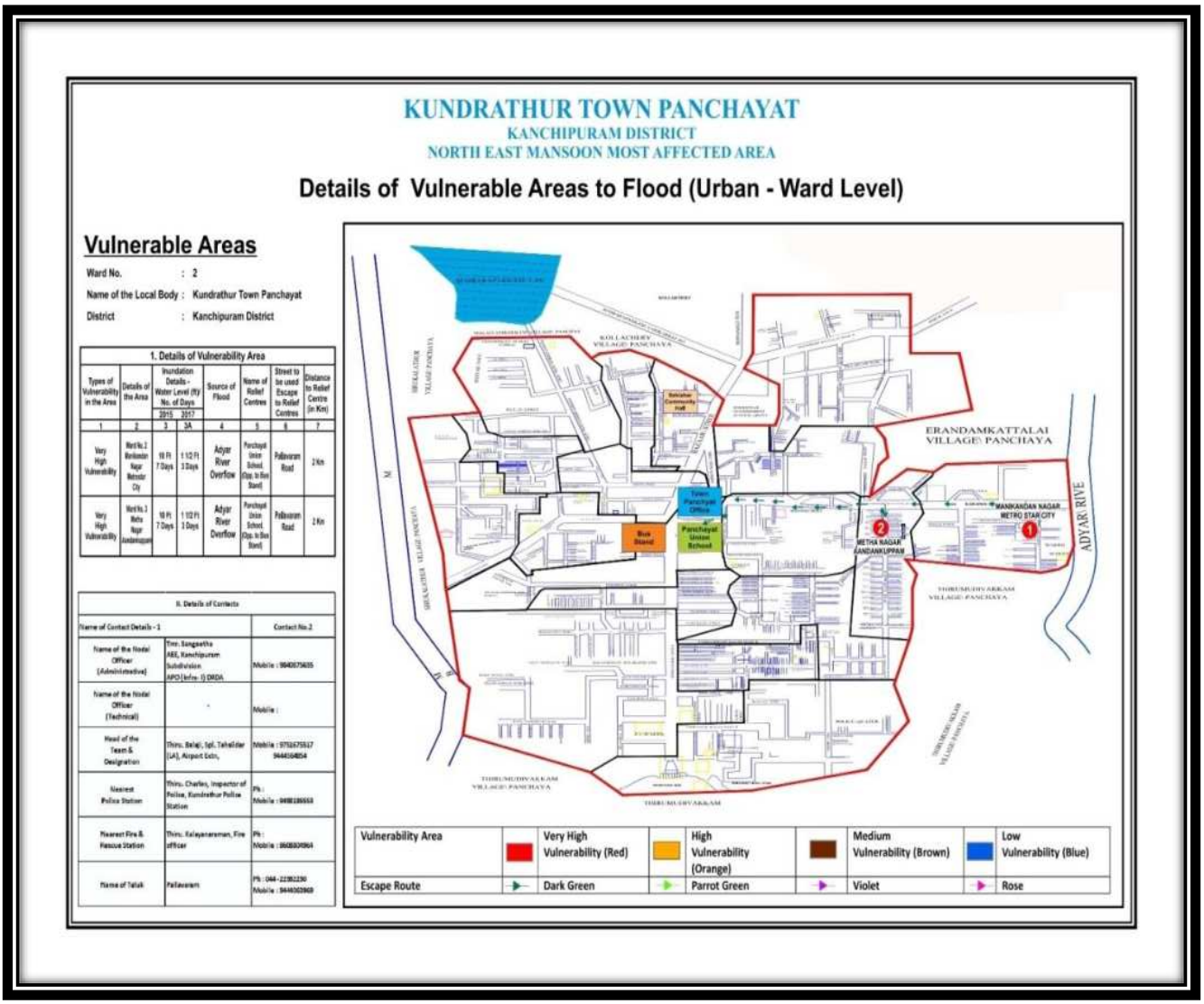
In accordance with the guidelines issued by the Additional Chief Secretary (ACS) / Chief Risk Advisor (CRA), vulnerability mapping has been carried out following an extensive analysis of past occurrences, with input from stakeholders.

VERY HIGH VULNERABLE AREAS	❖ Where inundation of water was more than 5 feet, or ❖ Where rescue operations were carried out with the help of Central forces/State Disaster Response Force(SDRF), or ❖ Which were cut-off and became inaccessible, or ❖ Where loss of lives was reported or large-scale evacuation was carried out.
HIGH VULNERABLE AREAS	Where inundation of water was from 3 to 5 feet.

MEDIUM VULNERABLE AREAS	Where inundation of Water was from 2 to 3 feet.
LOW VULNERABLE	Where inundation of water was below 2 feet.

Vulnerability mapping has been conducted following an extensive analysis of previous occurrences, utilizing inputs received from stakeholders. The mapping of vulnerable areas has been prepared at the firka level (for rural areas) and the ward level (for urban areas) with a focus on vulnerability analysis for floods, based on legacy data. These maps were created in AutoCAD format and subsequently converted into digital formats.

Digital maps of all vulnerable areas have been prepared, with a maximum of three vulnerable areas represented on a single map at the firka (rural) or ward (urban) level. These maps incorporate vulnerability analysis, details of escape routes, and relief centers. In the Kancheepuram District Vulnerability Map, the areas identified as vulnerable are highlighted as follows:



Map Details	
TABLE 1	Details of Vulnerability area
TABLE 2	Details of Nodal officers both Administrative & Technical, Interdepartmental Teams, Police Station, Fire Stations with Contact numbers
TABLE 3	Source and Causes of Flooding, Temporary Measures and Permanent measures taken up in that area
TABLE 4	Details of First Responders

In Kancheepuram District, vulnerable areas have been identified based on previous occurrences and are specified with exact latitudes and longitudes in geometric coordinate systems. This approach allows for easy and accurate identification of these areas.

It is the simplest way to find out the areas easy and accurate. Therefore nearby

- Escape routes,
- Relief shelters,
- Hospitals,
- Fire stations,
- Police stations,
- Responders in that locality,
- Service providers,
- Medical shops
- Traffic diversion route
- Industries and
- Ration shops

can be easily located and effectively utilized during disaster or emergency situations.

VULNERABLE AREAS WITH GEOMETRIC CO-ORDINATES


Decimal DMS
Latitude 13.03088 13°1'51" N
Longitude 80.106406 80°6'23" E


Unnamed Road, Uttiramerur, Tamil Nadu 603406, India
Decimal DMS
Latitude 12.61294 12°36'46" N
Longitude 79.761962 79°45'43" E


GPS Map Camera
Mudichur, Tamil Nadu, India
48, Asthalakshmi Nagar, Mudichur, Royappa Nagar, Tamil Nadu 600045, India
Lat 12.91689°
Long 80.068305°
04/10/24 04:32 PM GMT +05:30
Google


GPS Map Camera
Mudichur, Tamil Nadu, India
Bus Stop, 2, Manimangalam Rd, near PTC Quarters, Vijaynagar, Varadharajapuram, Mudichur, Tamil Nadu 600048, India
Lat 12.91698°
Long 80.061957°
04/10/24 05:00 PM GMT +05:30
Google


GPS Map Camera
Mudichur, Tamil Nadu, India
48, Asthalakshmi Nagar, Mudichur, Royappa Nagar, Tamil Nadu 600045, India
Lat 12.91692°
Long 80.068344°
04/10/24 05:36 PM GMT +05:30
Google


GPS Map Camera
Mudichur, Tamil Nadu, India
48, Asthalakshmi Nagar, Mudichur, Royappa Nagar, Tamil Nadu 600045, India
Lat 12.916764°
Long 80.068347°
04/10/24 05:35 PM GMT +05:30
Google

CHAPTER 5

INSTITUTIONAL MECHANISM

The disaster management framework is established at all levels, from national to local. This institutional mechanism is essential for facilitating activities ranging from policy formulation to execution throughout the entire disaster management cycle.

Disaster Management Act 2005

The Disaster Management Act, 2005 (DM Act 2005) establishes an institutional and coordination framework for effective disaster management at the national, state, district, and local levels. These entities are designed to facilitate a shift from a previously relief-centric approach to a more proactive, comprehensive, and integrated strategy that enhances disaster preparedness, mitigation, and emergency response.

5.1 NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA)

The Government of India established the National Disaster Management Authority (NDMA) in 2005, under the leadership of the Honorable Prime Minister. As the apex body for disaster management, the NDMA is tasked with formulating policies, plans, and guidelines to ensure a timely and effective response to disasters, in accordance with the provisions of the Disaster Management Act, 2005.

AGENCIES	ROLES & RESPONSIBILITIES
National Disaster Management Authority (NDMA)	❖ Apex body in GoI for Disaster Management ❖ Lays down policies, plans and guidelines for disaster management ❖ Coordinates their enforcement and implementation ❖ Takes measures for the prevention, mitigation, preparedness, capacity building or for dealing with a disaster ❖ Oversees the provision and application of funds for mitigation and preparedness measures. ❖ Has power to authorize the departments or authorities concerned, to make emergency procurement of provisions or materials for rescue and relief

	❖ Provides support to other countries in times of disasters ❖ States keeps in touch with the NDMA for implementing various centrally funded projects / schemes ❖ States appraises the NDMA about the action taken by the State Government regarding preparation of DM plans and implementation of guidelines issued by NDMA for various hazards from time to time.
National Executive Committee (NEC)	❖ Executive committee of the NDMA ❖ Assists the NDMA in the discharge of its functions and also ensure compliance of the directions issued by the Central Government ❖ Coordinates the response in the event of any threatening disaster situation or disaster. ❖ Monitors the implementation of guidelines issued by NDMA
National Institute of Disaster Management (NIDM)	❖ Develops and builds capacity through training, research, documentation ❖ Develops national level information base ❖ Functions within the broad policies and guidelines laid down by the NDMA
National Disaster Response Force (NDRF)	❖ Provides specialized response and emergency search & rescue to a threatening disaster situation ❖ The general superintendence, direction and control of this force is vested in and exercised by the NDMA ❖ Command and supervision of the force is vested in the Director General of Civil Defence and National Disaster Response Force ❖ Imparts basic training to all the stakeholders identified by the state governments in their respective locations ❖ There are rescue teams available at Arakonam, each team consists of 45 personnel

5.2 STATE DISASTER MANAGEMENT AUTHORITY (SDMA)

Tamilnadu State Disaster Management Authority- (TNSDMA/TNDRRA)

The Honorable Minister for Revenue serves as the Chairperson of the Governing Council, while the Chief Secretary to the Government acts as the Vice-Chairperson. Fourteen Secretaries to the Government are members of the General Council, and the Commissioner of Revenue Administration/State Relief Commissioner serves as the Convener.

The Tamil Nadu State Disaster Management Authority (TNSDMA) has been renamed the **Tamil Nadu Disaster Risk Reduction Agency (TNDRRA)** and will hereafter be referred to as TNDRRA.

TNDRRA operates under the direct supervision of the Commissioner of Revenue Administration and State Relief Commissioner, who also serves as the Chairperson of the Executive Council. The Commissioner (Disaster Management) acts as the Member Secretary and Convener of the Council.

1.	**HONOURABLE CHIEF MINISTER**	**CHAIRPERSON**
2.	**HONOURABLE MINISTER OF REVENUE**	**Member**
3.	**Chief Secretary , Ex- Officio**	**Member**
4.	**Secretary, Revenue**	**Member**
5.	**Secretary, Finance**	**Member**
6.	**Secretary, Home**	**Member**
7.	**Commissioner of Revenue Administration**	**Member**
8.	**The Director, Centre for Disaster Management & Mitigation, Anna University –Chennai**	**Member**

9.	**The Head of Department , Civil Engineering, IIT, Chennai**	**Member**

AGENCIES	ROLES & RESPONSIBILITIES
Tamilnadu State Disaster Management Authority (TNSDMA/ TNDRRA)	❖ Promotes an integrated and coordinated system of disaster management including prevention or mitigation of disaster by the State, local authorities, stakeholders and communities. ❖ Collect/cause to be collected data on all aspects of disasters and disaster management and analyze it and further cause and conduct research and study relating to the potential effects of events that may result in disasters. ❖ Acts as a repository of information concerning disasters and disaster management ❖ Lays down the policies and plans for disaster management in the State. ❖ Promotes or causes to promote awareness and preparedness, advices and trains the community and stakeholders
State Institute of Disaster Management (SIDM)	❖ Provides training related to disaster management in close coordination with NIDM. ❖ Undertakes activities for human resource development, public education and community awareness, safety etc. in disaster education and management
State Disaster Response Force (SDRF)	❖ Provides specialized response and emergency search & rescue to a threatening disaster situation ❖ Providing of Relief materials and dispatch to respective camps ❖ Mobilize people to go to identified/ safer shelters ❖ Evacuate people of marooned areas and administer

	emergent relief

State Emergency Operation Centre (SEOC)

A State Emergency Operations Centre (SEOC) operates under the command of the Commissioner of Revenue Administration and the State Relief Commissioner. The SEOC serves as a communication hub for disseminating all early warnings and alerts received from the India Meteorological Department (IMD), Central Water Commission (CWC), Indian National Centre for Ocean Information Services (INCOIS), and other agencies.

During disaster periods, the Centre functions around the clock, utilizing the expertise of senior officers from State and Central agencies for the prompt dissemination of alerts. Individuals in distress can access the Centre by calling the toll-free number 1070. The SEOC also collects information from forecasting nodal agencies regarding rainfall, cyclones, floods, droughts, and earthquakes, which is then disseminated to the District Administration, Line Departments, State Government, and the Government of India.

Equipped with state-of-the-art communication facilities, the SEOC maintains connectivity with District-level operations and is linked to the National Emergency Operations Centre (NEOC) and other national and state disaster warning facilities. Officials from Revenue Administration, Police, Fire Services, National Disaster Response Force (NDRF), Public Works Department (PWD), and Chennai Corporation (specifically for Chennai) staff the SEOC under the direct supervision and control of the Commissioner of Revenue Administration and the State Relief Commissioner during disaster situations.

Hon'ble Chief Minister inaugurates Upgraded version of SEOC at Ezilagam in Chennai for Disaster management

DISTRICT DISASTER MANAGEMENT AUTHORITY (DDMA)

As per Section 25(1) of the Disaster Management Act, 2005, a Disaster Management Plan must be established for every district in the State. The District Authority is responsible for preparing the District Plan, which the District Disaster Management Authority shall review and update annually in consultation with local authorities, ensuring alignment with the National Plan and State Plan, and obtaining approval from the State Authority.

DDMA -Roles and Responsibility :

1. Identify areas within the district that are vulnerable to disasters and ensure that measures for disaster prevention and mitigation are undertaken by government departments at the district level, as well as by local authorities.
2. Ensure adherence to the guidelines for disaster prevention, mitigation, preparedness, and response, as established by the National Authority and the State Authority, by all government departments at the district level and local authorities.
3. Promote capacity building and preparedness measures necessary for government departments and local authorities to respond effectively to potential disaster situations.
4. Implement measures for the prevention and mitigation of disasters by government departments at the district level and local authorities.
5. Direct various authorities at the district level and local authorities to take additional measures for disaster prevention or mitigation as needed.

6. Establish guidelines for disaster management plans to be followed by government departments and local authorities at the district level.
7. Monitor the implementation of disaster management plans prepared by government departments at the district level.
8. Organize and coordinate specialized training programs for officers, employees, and voluntary rescue workers at different levels within the district.
9. Facilitate community training and awareness programs for disaster prevention and mitigation in collaboration with local authorities, government agencies, and NGO's.
10. Establish, maintain, review, and enhance mechanisms for early warnings and the dissemination of accurate information to the public.

DDMA Structure:-

The District Collector/ District Magistrate	**Chairman**
The President, District Panchayat	**Vice -Chairperson**
District Revenue Officer /The Additional District Magistrate	**Member**
The Superintendent of Police	**Member**
Additional Collector Development	**Member**
Personal Assistant General	**Member**
The Deputy Director of Health Services, Kancheepuram	**Member**
The District Fire Officer	**Member**
The Joint Director, Agriculture	**Member**

DISTRICT CRISIS MANAGEMENT GROUP

- The District Crisis Management Group serves as the core decision-making body during emergency situations. This group convenes meetings in response to emergencies within the district and operates with a level of confidentiality.
- In the event of a disaster, the group meets frequently to perform the following functions:
  - Assess the current situation and its impact.
  - Assist the incident commander in making informed decisions for effective disaster management.
  - Determine the immediate operational strategies for disaster relief and rehabilitation efforts.

Any other as per the need of the time **District Crisis Group**	❖ Apex body in district to deal with major disaster and provide expert guidance ❖ Assists in the preparation of the district off-site emergency plan ❖ Reviews all the on-site emergency plans prepared by the occupier of Major Accident Hazards

	installation ❖ Assists the district administration in the management of Disaster within the district ❖ Ensures continuous information flow from the district to the Centre and State Crisis Group regarding accident situation and mitigation efforts ❖ Conducts at least one full scale mock-drill of a chemical accident at a site each year and forward a report of the strength and the weakness of the plan to the State Crisis Group.

EMERGENCY OPERATION CENTRE

- The Emergency Operation Centre (EOC) serves as the central hub for the coordination and control of relief efforts during disaster situations.
- Upon the occurrence of a disaster, the district-level EOC must be activated.
- The primary function of the EOC is to ensure the smooth flow of disaster relief activities, acting as a crucial link between the State and Central governments.
- Kancheepuram District will have a dedicated Emergency Operation Centre located at the District Headquarters, which will operate around the clock with adequate personnel and state-of-the-art equipment.
- This Centre is designed to coordinate all disaster-related activities in the district, encompassing preparedness, response, rehabilitation, and reconstruction.
- The EOC will be equipped with dedicated telephone lines and other communication facilities to facilitate effective operations.

LOCATION OF DEOC WITH ADDRESS	CONTACT / HELPLINE NUMBER
■ DISTRICT EMERGENCY OPERATION CENTRE, KANCHEEPURAM COLLECTORATE CAMPUS, KANCHEEPURAM -631501	1. 044-27237107 2. 044-27237207 3. 1077(TOLL FREE)

- This centre will serve as a nodal point and will function as a **Drought Monitoring Cell** during drought or water scarcity seasons, addressing water supply complaints. Based on necessity, additional control rooms will be temporarily established at the site of occurrence.

- Additionally, this centre will act as a **COVID War Room / Unified Command Centre (UCC)** for managing COVID-related activities and handling public complaints. It will also serve as a counselling centre for individuals in home quarantine.

Monitoring Officer and District Collector inspection at DEOC

District Revenue Officer inspection at DEOC

Kancheepuram District

District Emergency Operation Centre

Control Room

Inside View

ROLE OF EMERGENCY OPERATION CENTRE IN NORMAL TIME

The District Collector is in charge of the EOC, with the Personal Assistant (General) responsible for its effective functioning. The responsibilities of the EOC in charge during normal times include:

- ✓ Ensuring that all equipment in the EOC is operational.
- ✓ Collecting data routinely from line departments for disaster management.
- ✓ Developing status reports on preparedness and mitigation activities in the district.
- ✓ Ensuring the appropriate implementation of the District Disaster Management Plan.
- ✓ Maintaining a data bank with regular updates.
- ✓ Activating the trigger mechanism upon receiving disaster warnings or when a disaster occurs.

ROLE OF EMERGENCY OPERATION CENTRE DURING DISASTER TIME

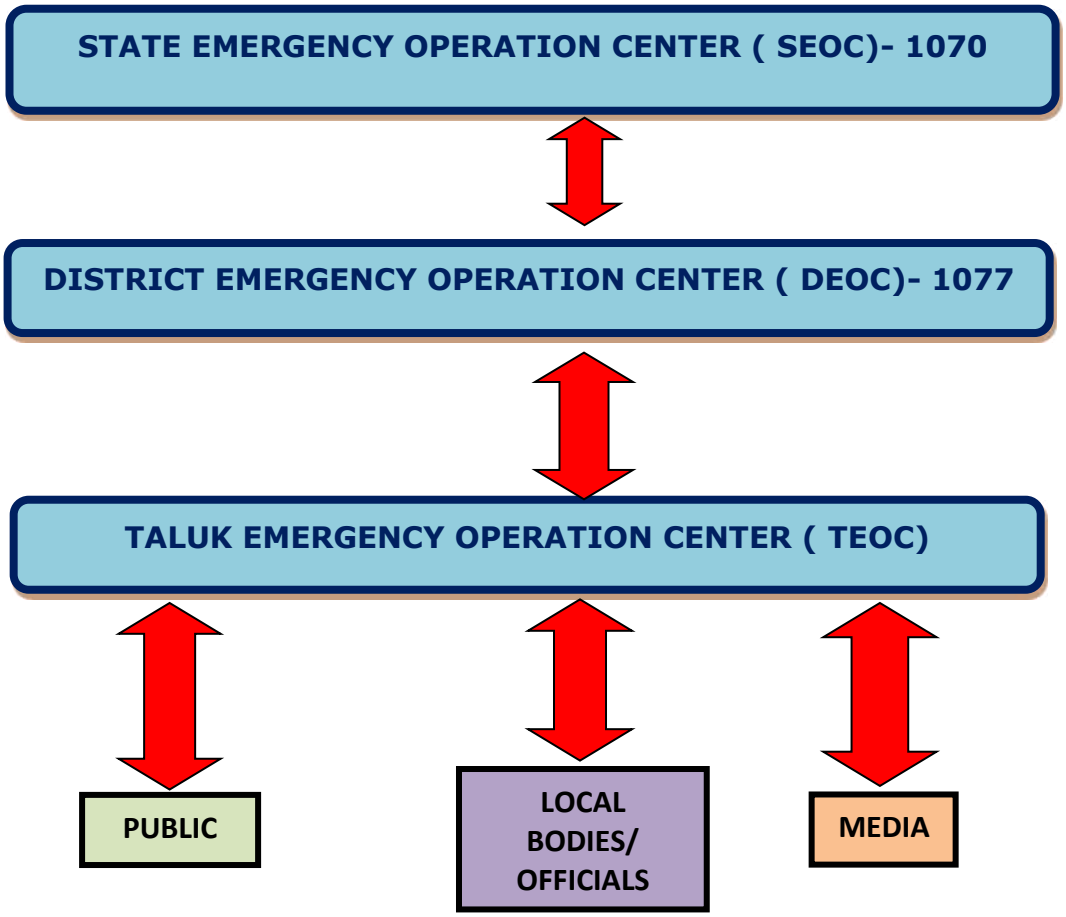
Based on messages received from forecasting agencies, the EOC is responsible for issuing warnings to the general public and to departments that play vital roles during emergencies. Issuing correct and timely warnings is one of the primary responsibilities of the EOC.

For effective dissemination of warnings, the EOC must have a well-planned communication line. The District Collector (DC) is the competent authority to disseminate disaster warnings. Warnings regarding the occurrence of a disaster will also be communicated to:

- ✓ All the concerned departments
- ✓ Hospitals in the disaster area
- ✓ Emergency Operation Centres in the neighboring districts
- ✓ State Emergency Operation Centre
- ✓ People’s representatives from the district

In addition, onsite EOCs will be established with support from the district EOC. Constant communication will be maintained between the State EOC, District EOC, and onsite EOCs.

COMMUNCATION LINK:



Other Control Rooms:

Divisional office Control Rooms	2
Taluk office Control Rooms	5
Police Mini Flood Control Room	1
Fire Control Room	1
Rural Development Control Room	1
EB Control Room	1

RAINFALL MONITORING MECHANISM

In Kancheepuram District, rainfall and weather forecasts are closely monitored based on warnings issued by the IMD, Chennai, and the State Emergency Operation Centre. During the Northeast Monsoon, rainfall is recorded every two hours from all rain gauges to facilitate immediate action in priority areas.

I. Existing Raingauges:

1. Automatic Raingauge Station

Raingauge Station:	Chembarampakkam Tank
Mode:	Automatic
Maintained by :	IMD
Latitude and Longitude:	**"13.008653 80.084337"**

2. Manual Raingauge Station:

S.No	Raingauge Station	Maintained by	Latitude & Longitude
1	Kancheepuram	Revenue	**"12.83348658, 79.70208779"**
2	Walajabad	Revenue	**"12.7939565, 79.8168114"**
3	Uthiramerur	Revenue	**"12.61535436, 79.7563333"**
4	Sriperumbudur	Revenue	**"12.96756571, 79.94351497"**
5	Kundrathur	Revenue	**"13.003025, 80.099077"**
6	Chembarampakkam	PWD	**"13.008943 80.085024"**

II. Locations identified for the Establishment of new Automatic Raingauges at Firka level:

Following the announcements made by the Hon'ble Minister for Revenue and Disaster Management on 31.08.2021 and the Hon'ble Minister for Finance on 18.03.2022, a total of 1,400 ARGs and 100 Automatic Weather Stations (AWS) will be installed across the state. Specifically, for Kancheepuram District, 18 locations have been identified, including 15 ARGs at the firka level and 3 ARGs at the grid level, along with 3 AWS locations. An implementation committee has been formed at the district level to monitor the supply, installation, testing, commissioning, and maintenance of the ARGs and AWSs.

ARG's at Firkha Level

ARG No	Taluk	Survey No	Lat	Long	Installation (Ground/ Building TOP)
Kancheepuram Taluk					
ARG 319	Sirukaveripakkam- RI Quaters	37/1	12.85954	79.67858	Ground
ARG 320	Paranthur- A Agriculture Extension Centre	957/1 A	12.94097	79.7363	Ground
ARG 321	Govindavadi – Kottavakkam VAO office	16	12.95313	79.72375	Ground
ARG 322	Sityampakkam -RI Quarters	199/3	12.87546	79.76893	Ground
ARG 335	Thiruppukuzhi- Panchayat Building Kilar	74	12.86654	79.57308	Ground
Walajabad Taluk					
ARG 323	Magaral - RI Quarters	776/12	12.71918	79.7541	**Roof**
ARG 324	Thenneri- RI Quarters	195/19	12.85038	79.85238	Ground
Uthiramerur Taluk					
ARG 325	Tirupulivanam surveyar Quarters	383/16	12.63315	79.76157	**Roof**
ARG 326	PWD Bungalow Vedapalayam	678	12.61153	79.73443	Ground
ARG 327	Arumbuliyur Thirumukkudal	176	12.74801	79.8629	Ground
ARG 328	Kunnavakkam Vadathavur VAO office	38/1A	12.65837	79.80894	Ground
ARG 336	Kaliyampoondi- Pennalur Community Hall	18	12.6007	79.71248	**Roof**
Sriperumbudur Taluk					
ARG329	Sriperumbudur-PWD Bungalow	1502/1	12.95542	79.93477	Ground
ARG330	Maduramangalam Govt School	483/1	12.95088	79.81682	Ground
ARG331	Thandalam Govt School Building	69/8	13.0137	80.00484	Ground
ARG334	Thandalam- Mannur ration shop	670/9	13.02306	79.95536	Ground
Kundrathur Taluk					
ARG332	Somangalam-Government Model School Building	309/21	12.95284	80.04445	Ground
ARG333	Kolapakkam Govt School	187/3	13.01035	80.14832	**Roof**

Automatic Weather Stations:

New	AWS28	Sriperumbuthur	**Survey No.66 Sivanthangal rice godown**
	AWS29	Walajabad	**Taluk Office building**
	AWS30	Uthiramerur	**Survey No.698/2 Vedapalayam TNCSC Godown**

CHAPTER 6

PREPAREDNESS MEASURES

Effective preparedness before Disasters will save lives and will minimize damage when a disaster occurs. Disaster prevention and preparedness measures should be developed and put in place long before a disaster strikes. Preparedness plans should be developed based on the identification of potential disasters and the related risks associated with those disasters. The plan should include training of health personnel, community members, and other potential first-responders, as well as establishing systems for communicating warnings to the community.

Preparedness strengthens efforts for preventing disasters enhances ability for rescue and evacuation, enables inclusive coverage of vulnerable sections during relief operations, provides scope for rapid response for restoration and rehabilitation as well as provides opportunities for building back better and above all ensures unification of the efforts of multiple agencies and integration of the community participation in Governmental efforts. A comprehensive disaster preparedness strategy would therefore include the following elements:

1	Hazard, vulnerability and risk assessments
2	End-to-end early warning systems
3	Information Management & Risk Communication
4	Community-Based disaster preparedness
5	Public education, training &rehearsals
6	Risk Reduction Strategies
7	Response mechanisms
8	Institutional Framework & Coordination
9	Resource mobilization

In Kancheepuram District, to face the Disasters the following (3 Tier) committees have been formed.

1	DISTRICT LEVEL COMMITTEES
2	DIVISIONAL LEVEL COMMITTEES
3	TALUK/BLOCK LEVEL COMMITTEES

1. DISTRICT LEVEL STEERING COMMITTEES

COMMITTEES	MEMBERS
Apex Committee	6
Early Warning Committee	2
Water Resources Monitoring Committee	6
Food Management Committee	15
Rescue & Relief Committee	8
Traffic & Logistics Management Committee	4
Health & Epidemic Management Committee	8
MediaManagement Committee	2
Volunteers Management Committee	5
Disaster Management Dissemination Committee	5
Relief Material Management Committee	9

Committees	Functions
Apex Committee	Overall Supervision
Early Warning Committee	Dissemination of Information through Various modes and ensuring awareness of Disasters
Water Resources Monitoring Committee	Monitoring of Water Level in Water Reservoirs and ensuring the prevention of Sluices, weir damages etc
Food Management Committee	Arranging Food from various sources and providing in the Relief Shelters
Rescue & Relief Committee	To warn and create awareness among the Public about the Disasters and Deployment of SDRF, Police and TNDRF personnels. Maintaining the Inventories
Traffic & Logistics Management Committee	Arrangement of vehicles for transportation of boats etc and for stranded public Route map for vehicles.
Health & Epidemic Management Committee	Deployment of Health and Mobile Teams Ensuring the Availability of Medicine Stock
Media Management Committee	Disseminating of information by getting inputs from Early Warning Committee. Providing information required by press
Volunteers Management Committee	Pooling volunteers, providing extra manpower in problematic areas for rescue operations and regulation of flood victims
Disaster Management Dissemination Committee	Sensitizing all institutions including industries, Schools / Colleges, Hospitals, High rise Buildings
Relief Material Management Committee	Pooling of Relief materials and despatch to respective camps

6.1 DISTRICT LEVEL STEERING COMMITTEES

1. Apex Committee

- District Collector
- District Revenue Officer
- Superintendent of Police, Kancheepuram
- Personal Assistant (General) to Collector

2. Early Warning Committee

- Personal Assistant (General) to Collector
- District Project Officer (CBDRM)
- Tahsildar (Disaster Management)

Role :

- Information / warnings reception through automated weather system in 5 Blocks apart from rain gauges and communication through WhatsApp group name Monsoon –KPM NEM 2023.
- Setting up control room and managing control room round the clock
- Assignment of duties to the district level officials and Deputy collectors/Tahsildars/BDO's
- Arrangement of vehicles and Soundsystem for information dissemination
- NGO co-ordination and assignment of duty
- Proper record keeping and transmission of information to all the levels
- Early warning to fishermen
- Holding of Natural Calamity meeting
- Ensure functioning of warning and communication systems
- Create awareness with the target and ensure mock drill

3. Water Resources Monitoring Committee

- Executive Engineer (WRO)
- Project Director (DRDA)
- Assistant Director (Town Panchayats), Kancheepuram
- Assistant Director (Panchayats), Kancheepuram

Role: Monitoring of water level in water bodies including rivers, ponds, tanks and channels.

4. Rescue & Relief Committee

- Additional Superintendent of Police, Kancheepuram

- Assistant Commissioner of Police
- District Fire Officer
- Deputy Director (Mines)
- Divisional Engineer (Highways)
- Executive Engineer (WRO)
- Executive Engineer (Agriculture Engineering)
- Project Director (DRDA)
- Assistant Director (Town Panchayats), Kancheepuram
- Assistant Director (Panchayats), Kancheepuram
- Joint Director, Agriculture
- Joint Director, Animal Husbandry
- Deputy Director, Horticulture
- District Supply Officer
- Chief Educational Officer
- Joint Registrar, Co-operatives
- Ad Fisheries

Role:

- Rescue if necessary with the help of NDRF / SDRF and immediate sheltering to provide food, Water and ensure sanitation.
- Deployment of Police/ Fire force for search and rescue
- Co-ordination with NCC/ NSS/ Civil Defence/ NDRF/ etc. for rescue operation
- Ensure availability of the rescue materials
- Prepare inventory of shelter places and map indicating the shelter centers
- Provide and arrange Rescue Kit at riskareas
- To warn people about the impending danger & to leave for safer places
- To co-ordinate with Civil Defence –NGOs/ Board/ Police for Support
- Arrangement of boats / vehicles etc.for evacuation
- Evacuate people of marooned areas and administer emergent relief
- Organize trained task force members
- Deployment of police for maintaining law & order and peace
- Mobilize people to go to identified/ safer shelters
- Deployment of Power boats/ Countryboats (Govt./ Private) for evacuation

5. Food Management Committee

- Additional Superintendent of Police, Kancheepuram
- Assistant Commissioner of Police
- District Supply Officer
- Joint Registrar, Co-operatives
- Personal Assistant to Collector (Noon meal)
- Assistant Director (Town Panchayats), Kancheepuram
- Assistant Director (Panchayats), Kancheepuram

Role :

- Arranging Food from various sources and distribution to various relief centres.
- Identification of shelters/ temporary shelters in high- elevated places and arrangement of tents etc.
- Arrangement of Food/ Drinking water/ Medicine in the shelter places
- Persons allocation for each shelter
- Arrangement of transportation
- Arrangement of safe shelter for animals
- Providing the lighting facilities for shelter places
- Deployment of Police personnel
- Temporary supply of safe drinking water
- Deployment of Vehicles
- Procurement and transportation of relief materials to affected pockets/ areas
- Arrangement of free kitchen in the shelter camps and affected areas
- Assigning responsibilities to officials for distribution of emergency relief / running of free kitchen

6. Traffic & Logistics Management Committee

- Additional Superintendent of Police, Kancheepuram
- Divisional Engineer, Highways
- Regional Transport Officers
- Assistant Director (Mines)

Role:

- Arrangement of vehicles for transportation of boats etc and for stranded public Route map for vehicles.

7. Health & Epidemic Management Committee

- Joint Director, Health Services
- Deputy Director, Health Services, Kancheepurm
- Assistant Director (Panchayats), Kancheepuram
- Executive Engineer , TWAD

Role :

- Precautionary measures to prevent outbreak of epidemics
- Deployment of Medical Staff
- Stock piling of Life saving drugs/ORS packets/ Halogen tablets
- Treatment of the injured persons and Transportation of the injured to Hospitals
- Awareness messages to stop the outbreak of epidemics
- Disease surveillances and transmission of reports to the higher authorities on a daily basis.
- Vaccination
- Constitute mobile teams and visit the worst affected areas.
- Dis-infection of drinking water sources
- Advance inoculation programme in the flood/ cyclone prone areas
- Arrangement of fodder/ medicines for the animals
- Vaccination, site operation camps, carcasses disposal
- List of the Medical staff members with contact address and telephone number
- Stock position of medicines at District/ Taluk/ PHC/CHC/ AWC and indent position of stock
- Trained voluntary staffs/ task forces/Anganwadi workers on use and providing min. Health services to the community
- Arrangement of mobile health unit for inaccessible pockets/ health awareness campaign
- Stock position for medicine of animals
- Disinfectant water system and ensuring supply of safe drinking water arrangement for supply of drinking water

- Arrangement of mobile team and assigning specific operational areas for supply of water
- Involvement of volunteers

8. Media Management Committee

- Public Relation Officer
- Tahsildar, TACTV

Role : Disseminating of information by getting inputs from Early Warning Committee. Providing information required by press

9. Volunteers Management Committee

- Project Officer, Mahalir Thittam
- Chief Educational Officer
- District Project Manager, Puthuvazhvu Thittam
- NSS Coordinator
- Red Cross

Role: Pooling volunteers, providing extra manpower in problematic areas for rescue operations and regulation of flood victims

10. Disaster Management Dissemination (to private organizations) Committee

- District Labour Officer
- Inspector of Factories
- The District Environmental Engineer, TNPCB

Role *:*

Sensitizing all institutions including industries, Schools / Colleges, Hospitals, High rise Buildings

11. Relief Material Management Committee

- Special DRO (LA SIPCOT), Sriperumbudur
- Special DRO (NH), Kancheepuram
- Superintendent Of Police, Kancheepuram
- PA to RDO, Kancheepuram, Sriperumbudur
- Residents Welfare Association / NGO's

Role :

- Pooling of Relief materials and despatch to respective camps

DISTRICT LEVEL CO-ORDINATION MEETINGS

இன்று (27.08.2024) காஞ்சிபுரம் மாவட்ட ஆட்சியர் அலுவலக வளாக மக்கள் நல்லுறவு மைய கூட்டரங்கில், வடகிழக்கு பருவமழை முன்னெச்சரிக்கை நடவடிக்கை குறித்து ஆலோசனை கூட்டம் மாண்புமிகு குறு, சிறு மற்றும் நடுத்தரத் தொழில் நிறுவனங்கள் துறை அமைச்சர் திரு.தா.மோ.அன்பரசன் அவர்கள் தலைமையில் நடைபெற்றது. உடன் மாவட்ட ஆட்சித்தலைவர் திருமதி. கலைச்செல்வி மோகன், இ.ஆ.ப., காஞ்சிபுரம் நாடாளுமன்ற உறுப்பினர் திரு.க.செல்வம், காஞ்சிபுரம் சட்டமன்ற உறுப்பினர் திரு.சி.வி.எம்.பி.எழிலரசன், காஞ்சிபுரம் மாநகராட்சி மேயர் திருமதி.எம்.மகாலட்சுமி யுவராஜ், மாவட்ட வருவாய் அலுவலர் திரு.செ.வெங்கடேஷ், மாவட்ட ஊரக வளர்ச்சி முகமை திட்ட இயக்குநர் திருமதி. க.ஆர்த்தி,காஞ்சிபுரம் ஒன்றிய குழுத்தலைவர் திருமதி.மலர்க்கொடி குமார், திருப்பெரும்புதூர் ஒன்றியக் குழுத் தலைவர் திரு.எஸ்.டி. கருணாநிதி ஆகியோர் உள்ளனர்.

இன்று (25.06.2024) காஞ்சிபுரம் மாவட்ட ஆட்சியர் அலுவலக வளாக மக்கள் நல்லுறவு மைய கூட்டரங்கில், தென்மேற்கு பருவமழை 2024 முன்னிட்டு, மேற்கொள்ள வேண்டிய முன்னேற்பாடு பணிகள் குறித்த ஆலோசனைக் கூட்டம் மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் தலைமையில் நடைபெற்றது. உடன் மாவட்ட ஆட்சியரின் நேர்முக உதவியாளர் (பொது) திருமதி.ஜெ.யோகஜோதி உள்ளார்.

6.2 REVENUE DIVISION LEVEL COORDINATION COMMITTEES

In Kancheepuram District, 21 teams have been established to execute rescue and relief operations, each led by an official of at least the Tahsildar rank. These teams consist of officials from various departments, including Revenue, TANGEDCO, FARS, Transport, Local Bodies, Police, Medical, PWD, WRD, TNSTC, Highways, and Fisheries.

Furthermore, the respective Sub-divisional Magistrates have been assigned the responsibility of coordinating the activities of these teams, focusing on dissemination, preparedness, monitoring, rescue, relief, and the restoration of execution efforts.

ZONAL TEAM MEETINGS

Inter Departmental Zonal Teams for vulnerable areas

21 inter-departmental Zonal Teams have been formed under the leadership of the District Collector. Each team comprises officials from 11 different departments, with a special focus on monitoring, evacuation, and recovery processes in vulnerable areas. The teams consist of officials from the following departments:

1. **Rural Development,**
2. **Town Panchayat,**
3. **Municipality,**
4. **Police,**
5. **Fire,**
6. **PWD,**
7. **Highways,**
8. **Electricity Department,**
10. **Medical,**
11. **Fisheries**

- In addition to the supervisory officers, each team will closely monitor vulnerable areas. These 21 inter-departmental zonal teams have been specifically formed to oversee the 72 vulnerable areas during the Northeast Monsoon.
- Administrative nodal officers and technical-level officers have been appointed to assess the situations in these vulnerable areas.

6.3 VILLAGE/WARD LEVEL DISASTER MANAGEMENT COMMITTEE

In Kancheepuram District, Village/Ward Level Disaster Management Committees have been formed under the Chairmanship of the District Collector to ensure greater community involvement in disaster management. It is recognized that effective disaster response requires total involvement and cooperation from village/ward-level citizens.

Unique Mitigation measures adopted in Kancheepuram District -Village level Response Team

In Kancheepuram District, after the Vardha Cyclone Scenerio and experience incurred from Gaja, Ockhi, Nivar and Burevi Cyclones, a separate Methodology and mitigation measures have been adopted in Village and Ward level.

Based on the experiences from the Vardha Cyclone and other cyclones like Gaja, Ockhi, Nivar, and Burevi, a separate methodology and mitigation measures have been adopted at the village and ward levels. During these cyclones, preparedness, rehabilitation, and recovery measures were enhanced by involving local community officials and volunteers. These individuals have been identified and appointed to the Village Level Response Team for emergency situations.

VAO is the Responsible Officer for their concern Village and following Village level officials are appointed as members

The Village level Response team includes other village-level officials such as cooks, Anganwadi workers, OHT operators, and ration shop workers. These individuals have been pre-identified to act as key response personnel in case of communication interruptions during severe cyclones. They serve as nodal points to provide basic amenities to evacuated residents in shelters.

Additionally, as part of the precautionary measures, nearby

- Ration shops,
- Hospitals,
- Medical Shops,

OHT's have been identified to ensure that essential needs can be met during emergency situations.

Village Level Team Members:-

1.Panchayat Secretary

2.Village Assistant

3.OHT Operator

4.Noon Meal Organiser

5.Noon Meal Cook

6.Anganwadi Workers

7.Village Health Nurse

8.Volunteers

Other Preparedness Teams formed:-

Health	❖ Rapid Response Teams ❖ Chlorination Teams ❖ Vector Control Teams ❖ Mobile Health Teams ❖ Ambulance Management Teams
Animal Husbandary	❖ Mobile Health Teams ❖ Animal Responders Teams
Police	❖ Mobile Teams ❖ Traffic Diversion Plan Evacuation Team
Fire	❖ Mobile Teams ❖ Search & Rescue Teams
EB	❖ EB Restoration Teams
Water Reservoir Monitoring	❖ PWD & RD Tank inspection Team
Inventories	❖ Inventories/Resources Team




6.3 COMMUNITY AWARENESS AND INVOLVEMENT

"Local Community will always be the first responder to Natural Disaster"

A) Community Preparedness and Public Co-operation.

- In order to minimize the impact of the disaster on the community, it is necessary that there should be psychological preparedness on the part of the public to absorb the initial shock caused by a disaster and to gear up the relief machinery for timely action.
- The primary mode of community preparedness is public education about the likely impact of various disasters on individuals and the community, as well as the proper responses to such disasters.
- During disaster-prone periods (the later part of the monsoon for floods and May-June and September-October for cyclones), people should be educated about the potential impacts of such disasters and the different ways to combat them through audio-visual aids like films and posters. It

would be beneficial to extend such programs to schools to educate the population from an early age. Films should be screened in vulnerable areas by the Field Publicity Organisation and could also be shown in cinema houses in vulnerable towns. Films on cyclones and floods should be created with the local context in mind. The first responders are trained to empower communities to proactively tackle disasters.

- Community participation at the grassroots level is encouraged through the enrollment of able-bodied volunteers with skills in swimming and climbing, serving as first responders (10 per vulnerable area).
- The first responders are trained by Fire Services, SDRF, and the Red Cross Society.
- Mobile teams of First Responders and Snake Catchers at Block, Taluk, Sub-Divisional, and District levels are formed for deployment based on need.
- The First Responders play a key role in:
    - Providing first aid, search and rescue, extrication from damaged buildings, road clearance, and firefighting.
    - Raising awareness about hazards, risks, and disaster response.
    - Conducting community drills (annual drills for disaster response).
    - Equipping the community with minimum resources (first aid kits, extrication equipment, life jackets, lifebuoys, ropes, etc.). rope etc.)

Interaction with First Responders & Imparting Training

Apdamithra Volunteers:-

Under the Apdamithra Scheme, training is imparted to community volunteers to enhance disaster preparedness and response capabilities. In Kancheepuram District, 500 community volunteers have been identified across 5 Taluks. In the 1st phase, 215 volunteers were trained, followed by 285 volunteers in the 2nd phase.

Ist Phase Trained Volunteers:-

Taluk	Institute	No.of Volunteers Trained
Kancheepuram	Pallavan Engg.College	55
Kundrathur	Madha Engg.College	37
Sriperumbudur	Sri.Venkateswara Engg.College	33
Uthiramerur	Meenakshiammal Teacher Training Institute	90
Walajabad		
Total		215

2nd Phase Trained Volunteers:-

Taluk	Institute	No.of Volunteers Trained
Kancheepuram	Sankara Arts & Science College	200
Uthiramerur		
Walajabad		
Kundrathur	Sri.Venkateswara Engg.College	85
Sriperumbudur		
Total		285

Volunteers Training

இன்று (22.08.2023) காஞ்சிபுரம் மாவட்ட ஆட்சியர் அலுவலகத்தில், ஆப்தமித்ரா திட்டத்தின் கீழ், 12 நாள் பேரிடர் காலப் பயிற்சி முடித்த தன்னார்வலர்களுக்கு 15 வகையான பேரிடர் காலத்தில் உதவும் மீட்பு உபகரணங்களை கொண்ட தொகுப்பினை மாவட்ட ஆட்சித்தலைவர் திருமதி. கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் வழங்கினார்கள்.

BEST PARTICIPATION OF APDAMITHRA VOLUNTEERS DURING MICHAUNG CYCLONE

- In Kancheepuram District, 23 Apdamithra Volunteers were actively involved in rescue operations at Kundrathur Taluk, covering areas like Iyyappanthangal, **Koluthuvancherry, Baraniputhur, Srinivasapuram, Kolapakkam, and Gerugampakkam.**
- Approximately **150 families were rescued** from inundated areas in coordination with NDRF, the Fire team, and the Police. The volunteers assisted in removing 5 fallen trees in Iyyappanthangal and Baraniputhur areas.
- They participated in distributing essential commodities in flooded areas, providing **5,000 food and bread packets, 3,000 milk packets, and drinking water delivered to the doorsteps of affected residents**. In coordination with SRMC Police Team, 20 stray dogs were rescued by the volunteers.
- **30 people were safely evacuated to relief centers at Iyyappanthangal and Srinivasapuram School.**
- The volunteers mobilized 500 sandbags to inundated areas and breached portions.
- Apdamithra Volunteers also aided in distributing flood relief materials received from other districts, including rice and dhal.


ACTIVITIES OF APDAMITHRA VOLUNTEERS- KANCHEEPURAM DISTRICT

Public Awareness:

Imparting disaster risk knowledge and fostering attitudinal and behavioral changes regarding early warning messages are crucial for risk reduction, particularly in minimizing loss of life.

Recognizing the importance of enhancing knowledge levels among various stakeholders to effectively address different disaster situations, the District Administration has prioritized building the capacities of the community and other stakeholders. To increase awareness, all available communication channels, including print, electronic, social, and traditional media, are being utilized by the District Administration.

Mock Drills:

Search and rescue teams at the district level conduct annual mock drills for various disaster situations. For floods and flash floods, these mock drills are carried out before the monsoon season. Similarly, drills for earthquakes, landslides, and other disasters are conducted periodically. At both district and taluk levels, mock exercises are held to assess and evaluate the preparedness of the state machinery and the community. In Kancheepuram District, number of mock drills conducted by the Fire and Rescue Department in vulnerable areas include:

Year	No. of Mock Drills Conducted
2015	**388**
2016	**257**
2017	**268**
2018	**273**
2019	**278**
2020	**30**
2021	**30**
2022	**71**
2023	**127**
2024	**122**

Capacity Building Activities:

The concept of capacity building for managing and reducing disaster risk is highlighted extensively in the Framework. It is for accelerated efforts to build community- and national-level capacities to manage and reduce risk, and links these efforts to all five priority areas of action:

Ensuring that disaster risk reduction is a national and local priority with a strong institutional basis for implementation requires building institutional capacity through the development of policy, legislative and institutional frameworks.

Identifying, assessing and monitoring disaster risks and enhancing early warning requires developing scientific, technological and technical capacities to observe, analyse and forecast disasters, and institutional capacities to integrate early warning systems into local- and national-level processes and systems.

Using knowledge, innovation and education to build a culture of safety and resilience at all levels requires supporting and building technical capacity to assess impact and vulnerability, improve monitoring and evaluation, and promote community-based education.

Reducing underlying risk factors requires integrating DRR planning and capacity building into multiple sectors including the health sector (e.g., so that health care remains functional during disasters), and housing and construction sectors (e.g., to ensure structures are resistant to disasters through new building codes, standards and practices).

Strengthening disaster preparedness for effective response at all levels requires equipping institutions, individuals and communities in

disaster-prone areas with the necessary knowledge, skills and capacities to manage and reduce disaster risk.

In Kancheepuram District, capacity-building activities have been carried out at the local community in coordination with Central and State Agencies like NDRF, SDRF, TNDRF, Police, and Fire for effective preparedness.

Important Mass-level Campaigns conducted in Kancheepuram District are tabulated below:

Year	Scenario's
2017	Tsunami Mock Drill
2018	NDRF Exercise
2019	Mega Disaster Awareness Campaign
2021	NDRF Mock Drill at Water Bodies
2022	ONGC Training "Benzene"
2022	State Level Mock Exercise on "Flood Scenario's"
2023	Radiological Exercise
2024	NDRF Familiarisation Exercise
2024	Fire and Rescue conducted 122 Mock Exercises from Jan to Aug 2024

Capacity Building Activities		Year	Date	Details	Participants
Awareness Campaigns	International Disaster Reduction day	2015	13.10.2015	Rally, Awareness Modules, Competition and Mock Drills	700
Mock Drill	Fire and Rescue Services conducted 388 Mock Drills at Vulnerable Areas		Jan to Dec	Training to Teams and Mock Drills of Do's and Dont's during Disasters	7000
Total					7700
Awareness Campaigns	International Disaster Reduction day	2016	13.10.2016	Rally, Awareness Modules, Competition and Mock Drills	250
Mock Drill	Fire and Rescue Services conducted 257 Mock Drills at Vulnerable Areas		Jan to Dec	Training to Teams and Mock Drills of Do's and Dont's during Disasters	6700
Total					6950
Awareness Campaigns	International Disaster Reduction day	2017	13.10.2017	Rally, Awareness Modules, Competition and Mock Drills	200
Mock Drill	Tsunami Mock Drill		24.11.2017	INCOIS Tsunami Mock Drill	500
Mock Drill	Radiological Emergency		17.11.2017	International Airport	100
Mock Drill	Offisite Emergency Exercise		02.08.17-10.08.17	Table Top Exercise @ DAE Centre Kalpakkam	250
Mock Drill	Fire and Rescue Services conducted 268 Mock Drills at Vulnerable Areas		Jan to Dec	Training to Teams and Mock Drills of Do's and Dont's during Disasters	5400
Total					6450
Mock Drill	NDRF 4th BATTALION FAMILARISATION EXERCISE	2018	11.02-18.02.18	NDRF Familiarization training, Mock drill and Community awareness & Participation	500
Mock Drill	Fire and Rescue Services conducted 273 Mock Drills at Vulnerable Areas		Jan to Dec	Training to Teams and Mock Drills of Do's and Dont's during Disasters	4500
Total					5000
Mock Drill	NDRF 4th BATTALION FAMILARISATION EXERCISE	2019	04.02- 15.02.19	NDRF 4th BATTALION FAMILARISATION EXERCISE	500
Awareness Campaigns	International Disaster Reduction day		13.10.2019	Rally, Awareness Modules, Competition and Mock Drills	550
Awareness Campaigns	Mega Disaster Awareness Campaign		08.11.2019	Mega level Mock drill at Vandalur Crescent College	2000
Mock Drill	Fire and Rescue Services conducted 278 Mock Drills at Vulnerable Areas		Jan to Dec	Training to Teams and Mock Drills of Do's and Dont's during Disasters	5500
Total					8550
Mock Drill	Monsoon Preparedness -Training to First Responders	2020	13.10.20	Training to Zonal Team and First Responders at Rajakulam Kancheepuram Taluk	100
Mock Drill	Fire and Rescue Services conducted 30 Mock Drills at Vulnerable Areas		Jan to Dec	Training to Teams and Mock Drills of Do's and Dont's during Disasters	300
Total					400
Mock Drill	Monsoon Preparedness -NDRF Mock Drill	2021	17.09.21	Training to Zonal Team and First Responders at Kundrathur	100
Awareness Campaigns	Mega Vaccination and Covid Awareness		12.09.21	Covid awareness module among Public	500
Awareness Campaigns	Mega Desilting Campaign		21.09.21	Mass Desilting Program for Upcoming NEM 2021	500
Mock Drill	Fire and Rescue Services conducted 30 Mock Drills at Vulnerable Areas		Jan to Dec	Training to Teams and Mock Drills of Do's and Dont's during Disasters	450
Total					1550
Mock Drill	Fire and Rescue Services conducted Mock Drills at Vulnerable Areas	2022	Jan to March	Training to Teams and Mock Drills of Do's and Dont's during Disasters	2500
Awareness Training	ONGC Training by OMPL Team Mangalore- 07.04.2021	2022	07.04.2022	Measures to address Tanker accidents carrying Benzene from ONGC Mangalore Petrochemicals Limited (OMPL)-Programme Module Presentation	50
Awareness Training	State Level Mock Exercise on Flood Scenario	2022	01.09.2022	Flood Scenario's	500
Total					3050
Awareness Training	Radiological Emergency Exercise	2023	2023	CBRN	150
Awareness Campaigns	International Disaster Reduction day	2023	13.10.2023	Rally, Awareness Modules, Competition and Mock Drills	200
Mock Drill	NDRF 4th BATTALION FAMILARISATION EXERCISE	2024	2024	Inspection and evaluation of Disaster Preparedness	100

Police Mock Drills

Fire & Rescue

NDRF Mock Drills

SDRF Mock Drills

State Level Mock Exercise on "Flood Scenario" in Co-ordination with NDMA & TNDRRA held on 01.09.2022

Search & Rescue Mechanism @ Vulnerable Area




Specialised Search & Rescue Mechanism at River




Specialised Search & Rescue Mechanism-Stranded Persons at Roof Top & Damaged Structure




Search & Rescue Mechanism @ Industrial Site



RALLIES AND MOCK DRILLS AT VULNERABLE AREAS

NDRF FAMILARIZATION EXERCISE

Mock drill awareness at Industrial Sites


Mock drill awareness at Schools


Mock drills for creating awareness among public


Mock drill awareness - Rescue Mechanism


6.4 HAZARD SPECIFIC CRISIS MANAGEMENT PLAN FOR THE DISTRICT:

Heavy Rainfall (64.4 to 124.4 mm)	**Be updated -** Actions to be taken and sustained till warning is withdrawn, in the villages/taluks/districts predicted to be affected by rainfall ❖ SEOC – All state level officers of the nodal departments informed ❖ DEOC – Emergency time functions activated ❖ District Control Rooms of Revenue & Police- 24hoursfunctioning ❖ All line departments and Revenue Officials to remain at Headquarters ❖ Public adviced to remain indoors and those in low lying areas/flood prone areas to move to safer locations. --
Very Heavy Rainfall (124.5mm to 244.4mm)	**Be prepared -** Actions to be taken and sustained till warning is withdrawn, in the districts predicted to be affected by rainfall ❖ DEOC – Emergency time functions activated ❖ District, taluk Control Rooms of Revenue and Police – 24 hrs functioning ❖ SDRF and Fire and Rescue Service – pre-positioned as per the direction of State Incident Commander ❖ Army, Navy, Air Force, Coast Guard and other central forces in the state – informed ❖ Hospitals and PHCs – ensure doctors and paramedical staff are available on call ❖ Tahsildar – take control of the identified relief shelters; Quarry blasting to be banned until atleast 24 hrs of rain free situation arises in the quarry locality based on evaluation by the village officers ❖ Tahsildar-Evacuate public within 250m from the coastline to the relief camp and other safe higher ground and start the relief camps ❖ Public adviced to remain indoors and those in low lying areas/flood prone areas to move

	to safer locations. -District –Taluk Control

Extremely Heavy Rainfall (>244.4mm)	**Most Vigil -** Actions to be taken and sustained till warning is withdrawn in the villages/taluks/districts predicted to be affected by rainfall ❖ SEOC & DEOC – Keep checking the bulletins from IMD. ❖ State-District –Taluk Control Rooms of Revenue & Police-24hours functioning ❖ NDRF, SDRF, Army and Fire and Rescue Service – pre-positioned as per the direction of State Incident Commander ❖ BSNL and Police – deploy emergency communication systems ❖ Hospitals and PHCs in the villages predicted to be affected by rainfall – function at full strength 24hrs ❖ Tahsildar – Start the relief camps; Quarry blasting to be banned until atleast 24 hrs of rain free situation arises in the quarry locality based on evaluation by the village officers ❖ Local Self Governments – relocate vulnerable population to the relief camps and other safe locations ❖ Transport department – take control of all cranes and earthmovers in the district for deployment in the event of major calamities ❖ TNEB & PWD – Emergency repair teams to be ready for deployment ❖ District Officers of TNEB, PWD, Health, Irrigation & Transport – to be available at the respective Head Quaters ❖ Police – Stop vehicular traffic other than that of emergency services via ghat roads prone to landslides and flash floods; ensure strict one-way system for vehicle movement ❖ Declare holiday for all educational institutions ❖ All mass gatherings and social events to be stopped ❖ Public advised to remain indoors and those in

	landslide/flood prone areas to move to safer locations

6.5 INCIDENT COMMAND SYSTEM IN KANCHEEPURAM DISTRICT

- The Incident Command System (ICS) is a recent innovation in the disaster administrative mechanism of the country.
- This tested institutional mechanism has a clear objective of coordinating all manpower and other resources effectively.
- In an administrative structure where numerous line departments with unique features exist, a mechanism like the Incident Command System proves to be highly beneficial.
- India has a well-defined administrative structure extending down to the village level.
- The Chief Secretary, as the head of the state administrative machinery, coordinates and supervises the functioning of all departments.
- At the district level, the Collector/District Magistrate serves as the administrative head, coordinating the activities of district-level departments.
- The district is divided into subdivisions, each under the administrative control of a Sub-divisional Officer.
- Subdivisions are further divided into Blocks and Taluks, managed by Block Development Officers/Tahsildars who oversee the functioning of various departments within their jurisdictions.
- The District Collector acts as the Incident Commander for Kancheepuram District, assisted by Divisional Officers. The Operations, Planning, and Logistics sections support the Incident Commander in implementing various measures during disasters.


Incident Command System
Dissemination of Flood alert to Public through Loudspeakers

- The Five Command Systems used in Incident Command Systems are as follows

1. OPERATION DESK:

- Police and Fire & Rescue

- Monitoring field level rescue and evacuation operations
- Monitoring salvage operations
- Requisition of accommodation, transport and other necessary equipment for relief groups
- Maintain law and order
- Regular updates to the EOC regarding relief operations

2. INFORMATION DESK:

- Revenue

- Communication of weather reports and warnings and subsequent updates
- Dissemination of information
- Keep contingency plans along with all necessary maps in ready to use condition
- Maintenance of important telephone numbers, database on available resources, list of key persons
- Send and receive messages and maintain records of the messages
- Maintain information of damage, materials sent and ongoing activities for immediate sharing with Emergency Operation Centre

3. LOGISTICS DESK:

- Transport

- Assess the need in terms of manpower and resources and ensure regular supply
- Ensure proper storage and transport facilities for relief materials
- Maintain adequate supply of necessary transport and equipment
- Coordinate with private transport associations and boat association for emergency requirement
- Organize transportation for rescue party, evacuated people medical terms and injured or sick people

4. HEALTH DESK:

- Health

- Organize treatment of injured and sick, disposal of carcasses
- Preventive Medicine and anti-epidemic measures are taken
- Maintain record of all activities
- Maintain adequate supply of medicines, equipment and personnel

5. RESOURCE & SERVICE DESK:

- All Departments Co-ordination

- Overall coordination of rescue and relief operations

- Assessing the relief, search and rescue and cash compensation requirements
- Organize and co-ordinate setting up of relief camps
- Ensure adequate supplies to the camps
- Coordinate identified NGO activities to ensure community participation
- Reporting the procurement and disbursement of relief material received from all sources
- Organize construction of temporary shelters, school buildings, medical facilities etc.

Inter Departmental Zonal Teams for Pre-Inspection and Monitoring

In Kancheepuram District, Inter Departmental Zonal Teams have been established as the first level for incident command. These teams are tasked with closely monitoring the situation in designated areas, particularly in vulnerable regions.

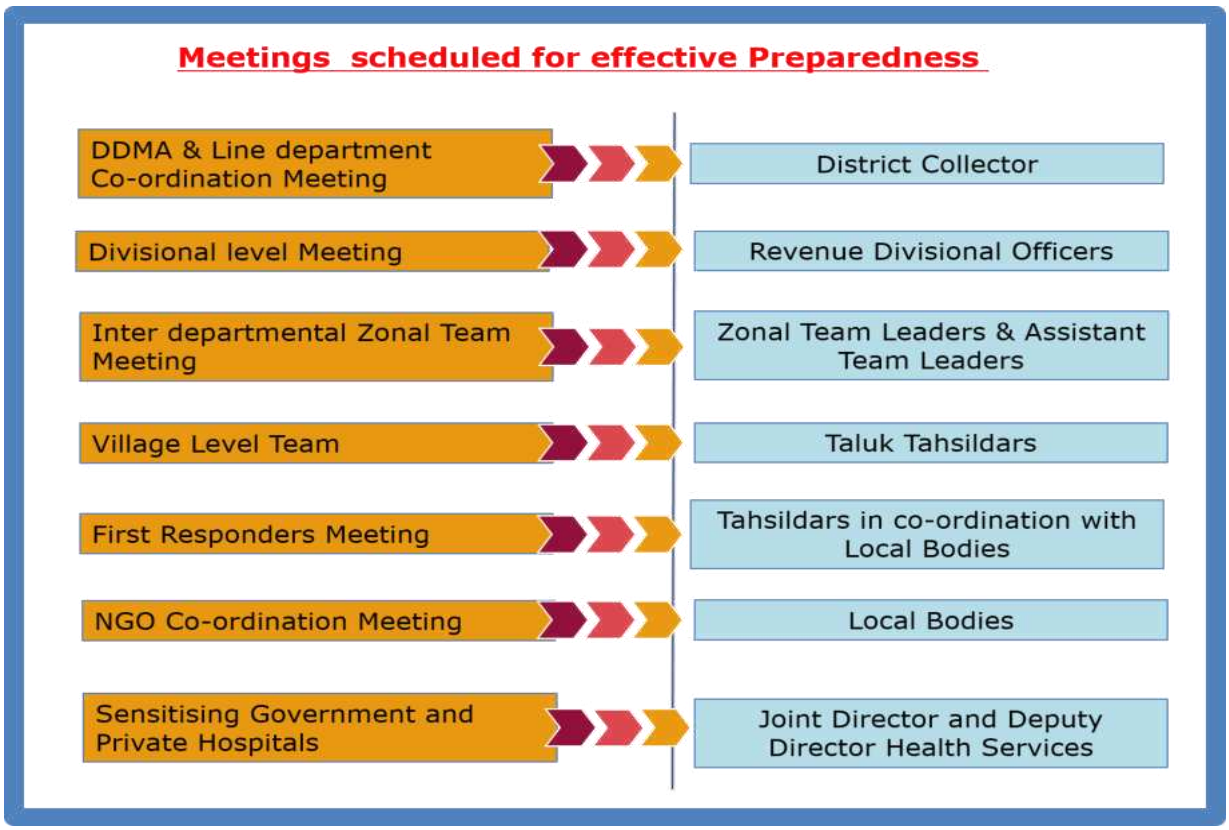
There are 21 Inter Departmental Zonal Teams, each led by Supervisory Officers (DRO Cadre) and supported by Nodal Officers (Administrative and Technical). Each team is comprised of one Team Leader and representatives from 11 different departments. Departments involved: Police, Fire services, Revenue, Animal Husbandry, Electricity Department, PWD, Highways, Forest department, Agriculture, Rural Development and Health Department. These teams have been deployed to ensure effective and immediate response and relief during disaster situations.

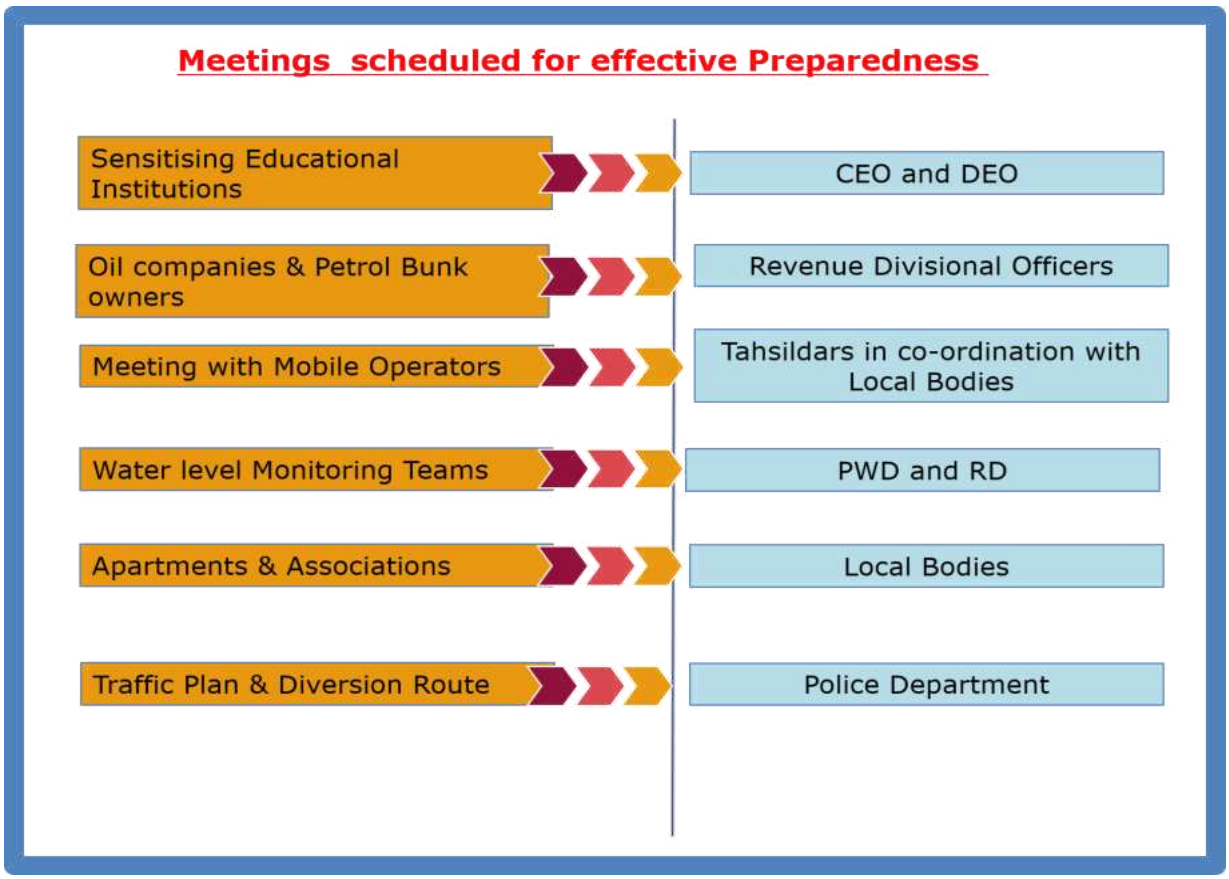
S. No	Taluk	Team Leaders	Flood Teams
1	Kancheepuram	4	4
2	Sriperumbudur	3	3
3	Uthiramerur	3	3
4	Walajabad	3	3
5	Kundrathur	8	8

Total	**21**	**21**

Hon'ble Chief Minister Inspection at Flood Prone Areas

Strengthening Institutional Mechanism & involving multiple stakeholders:





Nodal officers/Departments for Disaster Early Warning dissemination in Kancheepuram District

Function	NodalAgency /Team Leader	Participating functionaries
Coordination (Incident – Commander)	District Administration (District Collector)	SP, DFO, ADM, RDO, DMO, Tahsildars, Municipal Corporation, NCC and other related agencies. Municipal corporation, NCC and other related agencies.
Communication	Bharat Sanchar Nigam Limited	Existing wireless operators (Police, Fire) Telecom Dept., mobile operators, FM Radio, Signals Regiment –, VHF, satellite communication, Community Radio.
Law and Order	Police Dept.	SP, Civil Defence and Home guards, Coast Guard
Search and Rescue	Fire & Rescue Service (Divisional Fire Officer)	Department of Revenue, TN Police, Civil Defence, Directorate of Health Services, Quick Response Team, DDMT, Coast Guard.
Evacuation	Revenue Divisional Office	TN Police, Fire Service, Directorate of Health Service, Civil Defence, Air Force, DDMT, Coast Guard.
Relief (Food, Damage Assessment, Donation, Shelter……)	District Administration	Department of Food and Civil Supplies, NGO, DDMT, Other Organizations. Municipal Corporation, Electricity Board, TWAD, Health dept, Education dept, PWD, BSNL, Animal Husbandry, Agriculture. NCC, Blood Bank, Red Cross, NSS, Rotary Club, Lions Club
Emergency Medical Response	Department of Health (DMO)	Dispensaries, Mobile Dispensaries, Hospitals, Ambulance Service, Blood Bank,

		NSS, Rotary Club, Lions Club, IMA. Private medical association, Medicine Stockiest. Indian Red Cross, Civil Defence, Fire Service, DDMTs, NGOs.
Public Works Equipment support, debris and road Clearance.	**PWD**	**Municipal Corporations, Water Authority, TNEB, PWD, Builders Association, Railway, Fire force.**
Relief –Shelter	**Revenue Department**	**Tahsildars, Municipality, TWAD, Local Civil Suppliers. PWD, Developmental Authorities, NGO**
Cattle Resource Recovery and Care	**Animal Husbandry (District Animal Husbandry Officer)**	**Animal medicine stockiest, Poultry Corporation NGOs, and other organizations.**
Logistics (Electricity-Water)	**Electricity – TNEB Water - TWAD**	**DC Office, Electricity Board, Transport Department, TWAD, Corporation, Private Road Ways, PWD, National Highway, Fire Force Dept, Police services, DDMTs, NGOs**
Transport	**Motor Vehicle (RTO)**	**TNSTC, SETC Railway, PWD, Police, Municipality, Private Bus Owners, Scout, NCC etc.**
Public Information and Help lines – Warning Dissemination	**Public Relations Department**	**Media (print/audio-visual), NSS, Scouts & Guides, Education Dept., Department of Information and Publicity, BSNL, AIR**

Pre-Positioning of Men/Human Resources:

Before Emergency, the Following personnels will be prepositioned in their respective places

1. First Responders for Vulnerable areas
2. First Responders for Trees Cutting
3. Apdamithra Volunteers
4. Snake catchers
5. Swimmers/Boat Owners
6. EB Pole responders
7. Animal care responders
8. Redcross Volunteers
9. Sathyasai Volunteers

For Rescue and Evacuation Operations,

1. Fire and Resue Personnels
2. Trained Police Personnels
3. SDRF Personnel
4. Disaster Response Guards/TNDRF
5. NDRF

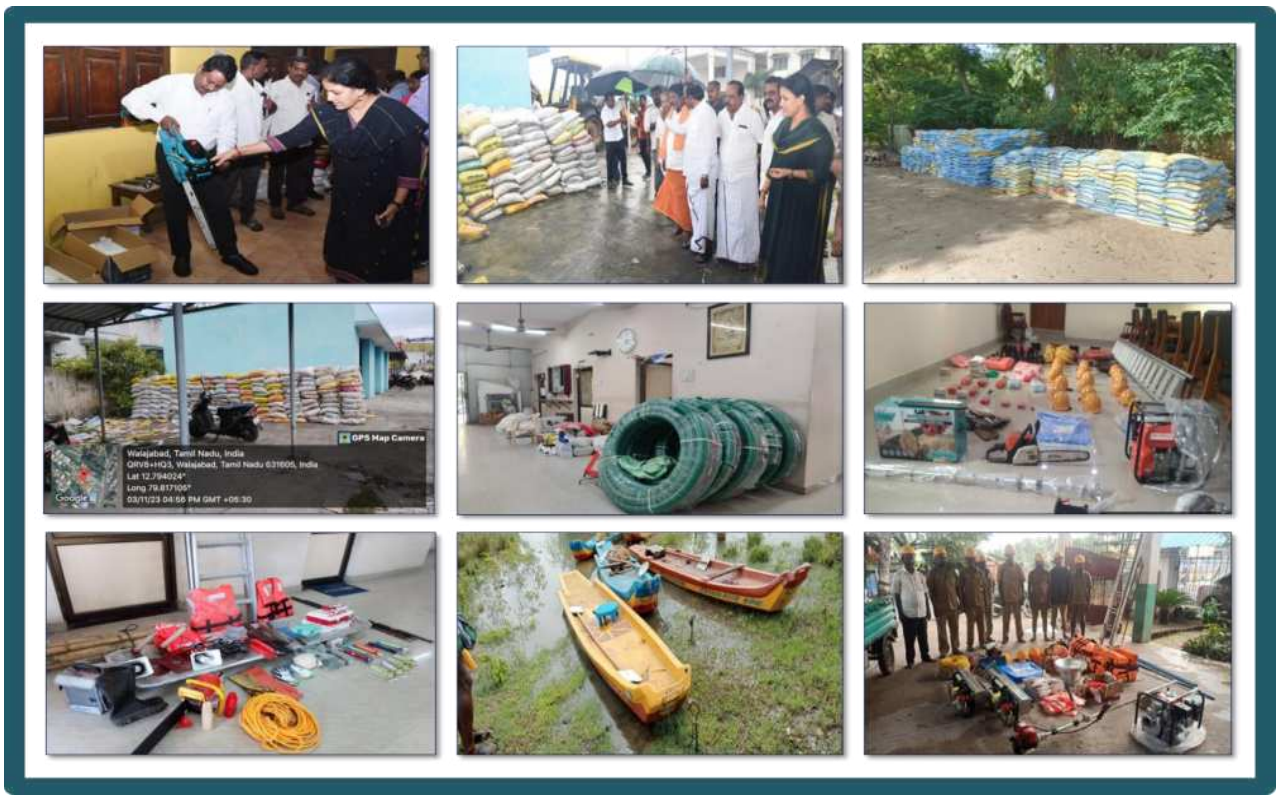
Meetings are held during pre-monsoon phase to ensure that there is perfect coordination with Police, Fire and Line Departments.

Pre-Positioning of Materials

In Kancheepuram District, a comprehensive deployment plan has been established for pre-positioning essential relief materials and first aid supplies in relief shelters.

Exclusive Inventory Teams and Mobile Teams have been formed to facilitate the mobilization of these inventories and ensure smooth communication during disaster events.

A detailed list of inventories and machinery, along with contact persons, availability, and locations for rescue operations, has been compiled and documented in a separate booklet. ***In Kancheepuram District, Relief shelters and vulnerable areas near ration shops and medical facilities have been identified to enhance preparedness. Transport vehicles, including motor boats, have been identified, along with the contact information of boat owners. These resources will be prioritized for deployment during emergencies. A traffic plan has been developed to establish green corridors in vulnerable areas, ensuring the rapid movement of rescue and relief materials when needed.***



Communication Mechanism:-

In Kancheepuram District, the District Emergency Operation Centre operates 24/7, staffed by six inter-departmental personnel responsible for:

- Handling public complaints,
- monitoring rainfall,
- Sending timely situation reports.

The following additional control rooms were established in response to specific disasters in the district:

Year	Disaster	Addl.Control Rooms
2015	Floods	Tambaram Municipal Office
2016	Vardha Cyclone	Mammallapuram Town Panchayat
2017	Incessant Rains	Tambaram Divisional office
2018 & 2019	NEM	Tambaram Divisional office
2020 to 2022	NEM	2 Control Rooms

Public Complaint Handling & Monitoring	**1. 044-27237107** **2. 044-27237207**

Equipments installed in DEOC

VSAT Phone	**81745**
Satelline Phone (ISAT)	**8991119505** **8991122582**
VHF SETS – **DEOC -1,COLLECTOR'S CAMP OFFICE -1, DRO CAMP OFFICE-1**	

Details and Nature of Complaints handling in DEOC

- Water Logging Complaints
- House Inundation Complaints
- Drainage related Complaints
- EB related Complaints
- Tree Fallen related Complaints
- Bund Breach Complaints
- Rescue related Complaints
- Losses related Complaints

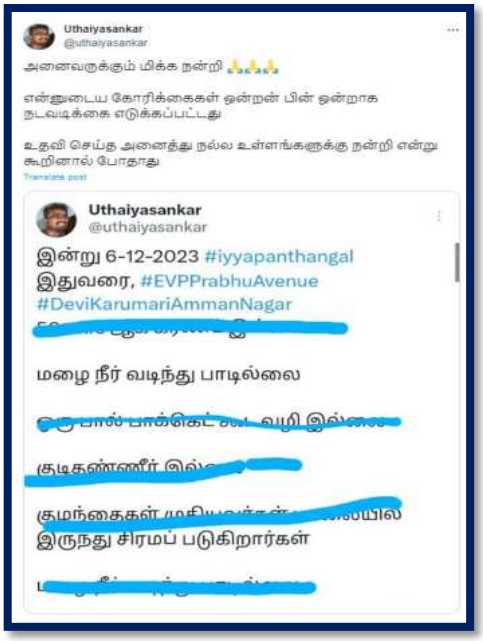
Mode of Complaints handling in DEOC

- Control room Helplines
- TNSMART APP
- 1070 & 1077 Hotlines
- Whatsapp Complaints
- TV Complaints
- Social Media Pages
- Collector Mail & Whatsapp
- Through Petitions

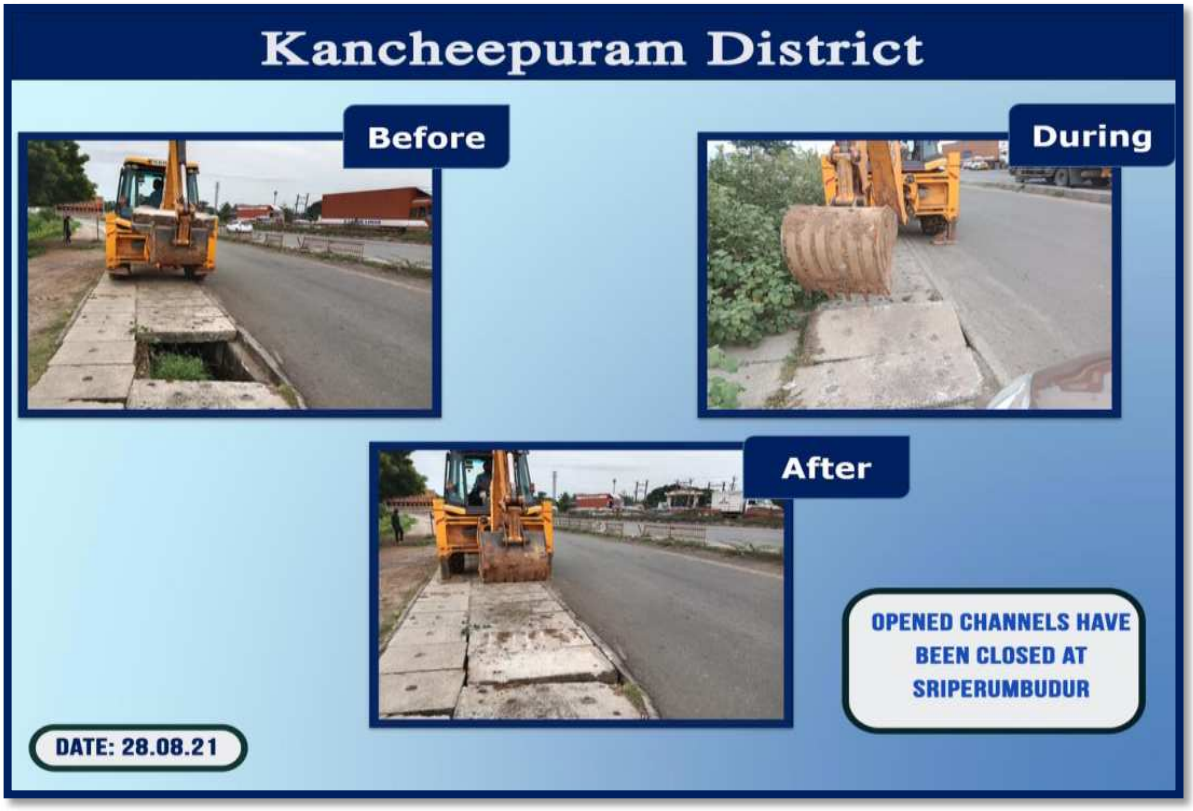
Public Complaints redressel:

Apart from Phone Complaints, Social Media pages like Facebook, Twitter and Instagram have been activated for easy handling of Public Complaints and go for immediate response towards it.

Instagram Complaint Subject:
To Rescue wounded cow



Feedback from the complainer



Facebook Complaint Subject: To Close the Opened Channel

Twitter Complaint Subject: To restore damaged Pipeline

Operation of Permanenent Relief Centres:

Identified structures suitable for organizing relief camps in villages, Panchayats, and Municipalities, including necessary contact information, in addition to regular cyclone centers and Multipurpose Evacuation Shelters.

Identified three to four collection points for the efficient collection and local distribution of relief materials. These facilities include kitchens, water storage, and toilets for men and women, thereby providing a safe and hygienic shelter. Conducted thorough checks for appropriate security arrangements in Relief Centres.

Additionally, generators have been prepared for relief operations and in relief camps, as it is advisable to switch off the power supply during extreme weather events. Ensured the provision of a sufficient supply of good-quality drinking water, and an adequate number of toilets are available in the Relief Centers.

Arrangements have been made for temporary toilets, and regular emptying of septic tanks/pits and safe disposal have been ensured. A list of vehicles available in Urban Local Bodies (ULB) or with private operators has been prepared.

To accommodate livestock, separate infrastructure has been established. These structures are designed as multipurpose utility buildings and can be utilized for activities such as classrooms, community function halls, meeting rooms for Self-Help Groups (SHGs), community meetings, vocational training, and other community activities regularly, making this infrastructure a vital component of community development.

Permanent Shelters	**62**
Animal Shelters	**45**

INSPECTION OF RELIEF SHELTERS

Animal Shelters

Temporary Shelters

In addition to permanent shelters, temporary shelters have been pre-identified for the immediate accommodation of evacuated individuals.

Temporary Shelters	**1573**

Veterinary Care:

The identification of hospitals, doctors, and para-medical teams, including mental health and psycho-social service providers at the sub-divisional and district levels, has been completed to facilitate the rapid deployment of medical teams when necessary.

Details such as names, addresses, telephone numbers, mobile numbers, and email addresses will be maintained at the District Emergency Operation Centres, with updates occurring biannually. The inventory of medicines, accessories, and equipment for each identified team at the district and sub-divisional levels will be predetermined based on needs and potential disasters.

Animal Responders	
Kancheepuram District	70

Training to the Animal Responders

Medical Preparedness

The identification of hospitals, doctors, and para-medical teams, including mental health and psycho-social service providers at the sub-divisional and district levels, has been completed to facilitate the rapid deployment of medical teams when necessary.

Details such as names, addresses, telephone numbers, mobile numbers, and email addresses will be maintained at the District Emergency Operation Centres, with updates occurring biannually. The inventory of medicines, accessories, and equipment for each identified team at the district and sub-divisional levels will be predetermined based on needs and potential disasters.

Emergency Health Preparedness

Disasters can lead to an unforeseen surge in deaths, injuries, or illnesses within affected communities, surpassing the capacity of local health services and necessitating external support. Such events may disrupt local healthcare infrastructures, including hospitals, rendering them unable to respond effectively to emergencies. Additionally, certain disasters can negatively impact the environment and population, increasing the risk of communicable diseases and environmental hazards, thereby escalating morbidity, mortality, and diminishing overall quality of life in the long term.

Special Attention to Vulnerable Groups:

When addressing the preparedness and relief needs of disaster victims, special emphasis is placed on the unique requirements of vulnerable populations, including children, women, the elderly, and differently-abled individuals. Socio-cultural considerations are integrated into disaster management planning.

The District Disaster Management Authority (DDMA) prioritize the following:

1. Ensuring appropriate arrangements for vulnerable groups, including differently-abled individuals, senior citizens, women, and children.
2. Providing warm clothing and additional garments for children, the sick, elderly individuals, women, and widows.
3. Supplying sanitary napkins for women and girls in disposable paper bags.
4. Ensuring necessary basic provisions for the safe delivery of pregnant women.
5. Coordinating with government and private hospitals to guarantee that essential medical assistance is readily available.
6. Providing milk powder and other nutritional support for lactating mothers.
7. Ensuring the availability of wheelchairs for elderly and differently-abled persons.

CHAPTER 7

PREVENTION & MITIGATION PLAN

Effective preparedness prior to disasters is crucial for saving lives and minimizing damage when such events occur. Disaster prevention and preparedness measures should be established well in advance of a disaster. These measures can be categorized into structural and non-structural approaches.

In Kancheepuram District, the District Disaster Management Authority (DDMA) has initiated projects that encompass both structural and non-structural measures aimed at risk reduction throughout the district.

STRUCTURAL MEASURES	NON STRUCTURAL MEASURES
Housing • Disaster Resistant Housing, • Multi-Purpose Evacuation Shelters	**Economic measures** • Diversification of Economic Activity • Subsides, • Credit Waiver
Water resources • RestorationofRiverdrainagesystems • RiverGrading/StreamTraining,Flood Routing • Clearing inflowchannels	**Risk Transfer** Insurance, Credit &Tax Policies
Infrastructures • Roads, • Bridges • Drinkingwater, • Power, • Communication, • Education, • Heritage, • Tourism	**Societal Measures** • Public InformationCampaigns, • Non formalEducation • CommunityInvolvement

Flood Mitigation Measures

"Droughts and flooding are two sides of the same coin"

Flood Mitigation Measures in Kancheepuram District:

Kancheepuram District, popularly known as "Erikal Mavattam" due to the presence of numerous irrigation tanks, is characterized by its two major river basins: the Palar Basin and the Chennai Basin. These basins encompass five sub-basins: Adyar, Vegavathi, Cheyyar, Kiliyar, and several minor and major streams and channels that cross the entire district, which typically receives 30% more rainfall than inland areas.

To mitigate flood damage, the Comprehensive Flood Management Plan for Kancheepuram District includes several initiatives, such as the construction of cut-and-cover systems, stormwater drains, bridges, box culverts, check dams, anicuts, new reservoirs, rehabilitation of existing reservoirs, riverine reservoirs, and regulators. These structures are prioritized in river basins known for recurrent flooding.

The 2015 floods and the incessant rains in 2017 had devastating effects, particularly in suburban areas. Following the 2017 events, various departments undertook rigorous efforts to improve flood management in the district. During the Northeast Monsoon of 2015, Kancheepuram District experienced abnormal rainfall exceeding 2100 mm over 27 days, compared to the annual average of 1004 mm. This unprecedented rainfall resulted in severe flooding, which the Government of India declared a "Calamity of Severe Nature." The impacts of this disaster left lasting scars on public infrastructure, including tanks, channels, rivers, bridges, buildings, and roads.

Informed by the flooding incidents and lessons learned from the 2015 floods, this final report encompasses all river basins and sub-

basins of Kancheepuram District. While routine permanent flood mitigation projects focus primarily on structural solutions through river training works, this master plan adopts a comprehensive approach to flood management in the district's highly urbanized areas.

The flood mitigation measures undertaken in Kancheepuram District are comprehensive and multifaceted, addressing both structural and non-structural strategies to effectively manage flood risks.

Here's a summary of key efforts:

1. Infrastructure Development

Reservoirs:

Construction of new reservoirs and rehabilitation of existing ones for flood storage and water supply augmentation.

Storm Water Drains and Culverts:

Building and upgrading stormwater drains, box culverts, and channels to efficiently manage water flow during heavy rains.

River Training:

Strengthening riverbanks to direct floodwaters and prevent overflow.

Check Dams and Anicuts:

Installation of structures to slow water flow and enhance groundwater recharge.

2. Long-Term Flood Mitigation Projects

Phase I (2018):

With an investment of ₹15 crore, the focus was on structural measures like building reservoirs and drainage systems. This phase was successfully completed, reducing flood vulnerability.

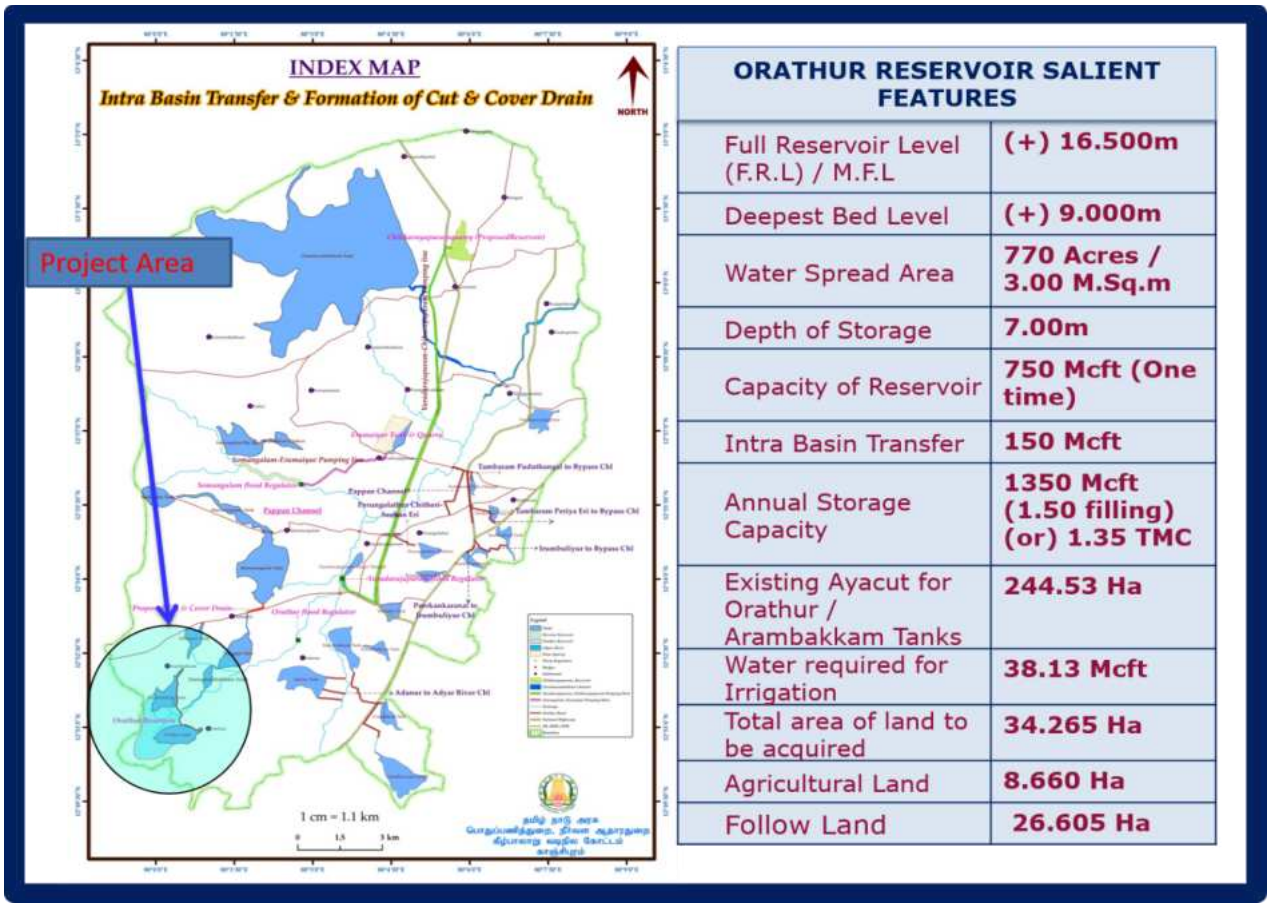
Phase II (2019):

The government allocated ₹71.64 crore for additional flood mitigation works, including the construction of the Orathur and Adyar riverine reservoirs.

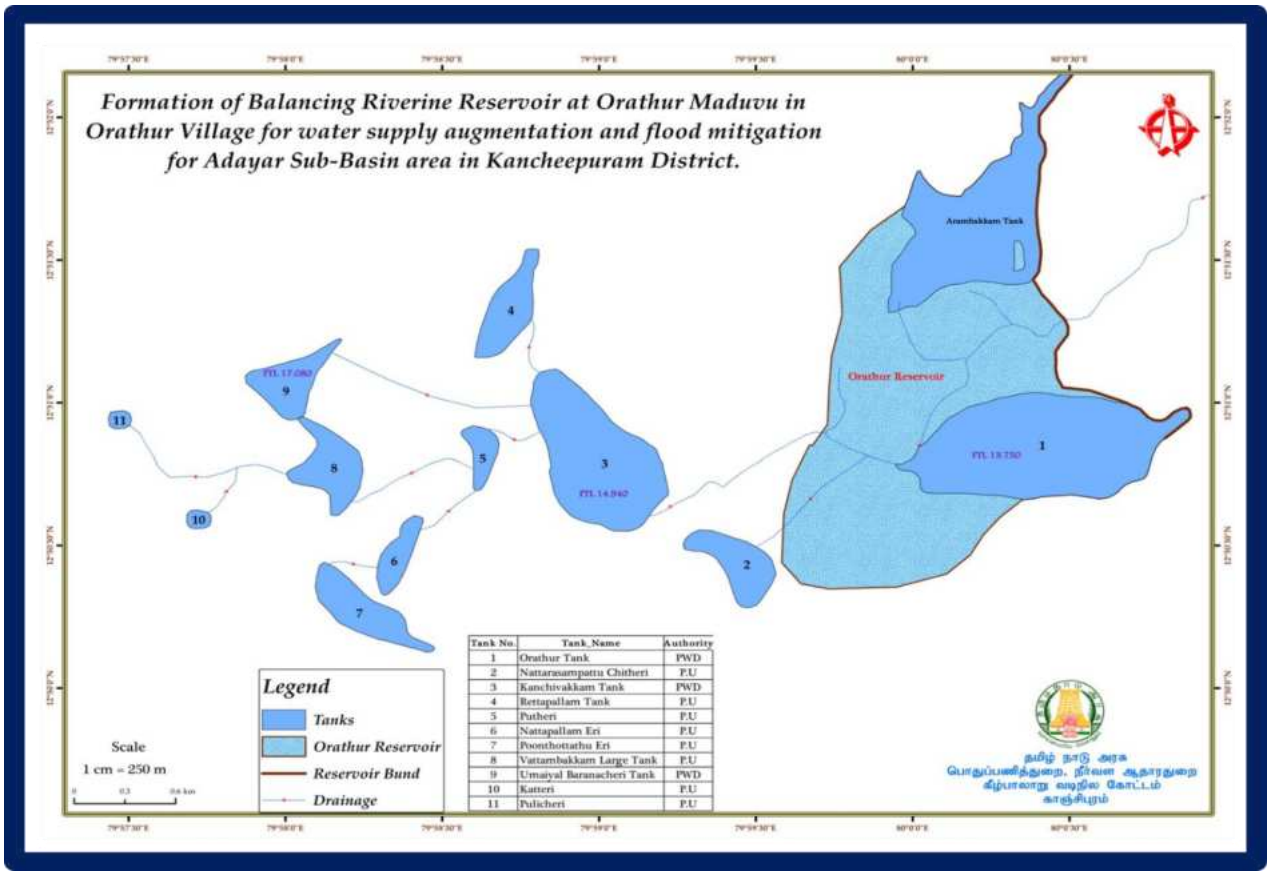
S. No	Name of Works	Est Amt in Lakhs	Remarks
1	Formation of Reservoir across Orathur Tributary of Adayar River with Intra Basin transfer canal for water supply augmentation and flood mitigation near Orathur Village in Sriperumbudur Taluk of Kancheepuram District.	5584.00	Work is in Progress 68% Physically completed. Formation of Reservoir bund pending due to Land exchange proposal.
2	Formation of Rivering Reservoir across Adayar River Sub Basin of Chennai Basin near Somangalam and Varatharajapuram Village in Sriperumbudur Taluk of Kancheepuram District.	1112.00	Work is inProgress 75% completed. The formation flood bank is pending due to removal encroachment

Orathur- Arambakkam Reservoir Bund

Spillway of Orathur – Arambakkam Reservoir



ORATHUR RESERVOIR SALIENT FEATURES	
Full Reservoir Level (F.R.L) / M.F.L	(+) 16.500m
Deepest Bed Level	(+) 9.000m
Water Spread Area	770 Acres / 3.00 M.Sq.m
Depth of Storage	7.00m
Capacity of Reservoir	750 Mcft (One time)
Intra Basin Transfer	150 Mcft
Annual Storage Capacity	1350 Mcft (1.50 filling) (or) 1.35 TMC
Existing Ayacut for Orathur / Arambakkam Tanks	244.53 Ha
Water required for Irrigation	38.13 Mcft
Total area of land to be acquired	34.265 Ha
Agricultural Land	8.660 Ha
Follow Land	26.605 Ha



Tank No.	Tank_Name	Authority
1	Orathur Tank	PWD
2	Nattarasampattu Chitheri	P.U
3	Kanchivakkam Tank	PWD
4	Rettapallam Tank	P.U
5	Putheri	P.U
6	Nattapallam Eri	P.U
7	Poonthottathu Eri	P.U
8	Vattambakkam Large Tank	P.U
9	Umaiyal Baranacheri Tank	PWD
10	Katteri	P.U
11	Pulicheri	P.U

3. Pre-Monsoon Preparatory Works

Vegetation Removal: Regular clearing of weeds, debris, and obstructions from rivers, tanks, and channels to ensure smooth water flow during monsoon seasons.

De-silting of Drains: Cleaning stormwater and macro drains before the monsoon to avoid blockages.

In 2024 the Government allotted Rs.9.00 Crore for Pre-monsoon works-2024 in Chennai, Chengalpattu & Kancheepuram Districts vide G.O.(D). No.29, Water Resources (I. Spl.2) Department, dated.06.02.2024 to avoid last minute rushing in the execution of removal of weeds in the water ways.

Usually, the Pre-monsoon preparedness works start in the mid of September and are completed in the first week of October. From the lesson learned during the Michaung cyclone, this Pre-monsoon preparedness works is commenced in the first week of July and planned to complete the works before September 2024.

S. No	Name of Works	Est Amt in Lakhs
1	Removal of weeds, vegetations, Floating materials and hycinth the Adayar river from downstream of Sriperumbudur road bridge to upstream of Kishkintha road birdge using machinery, conveying and dumping the removed materials outside the residential area by using poclain machinery Tippers & Labourers in Kundrathur taluk of Kancheepuram District and Tambaram Taluk of Chengalpattu district.	20.00
2	Removal of weeds, vegetations, Floating materials and hycinth in Orathur odai Surplus to Confluence point of Adayar river near ruby builder (Reach 1 Ls.0 m to L.S.3300m) using machinery,conveying and dumping the removed materials outside the residential area by using poclain machinery, Tippers & Labourers in Kundrathur Taluk of Kancheepuram district.	10.00
3	Removal of weeds, vegetations, Floating materials and hycinth in Orathur odai Surplus to Confluence point of Adayar river near ruby builder (Reach 2 L.S.3300 m to L.S.5400m) using machinery,conveying and dumping the removed materials outside the residential area by using poclain machinery, Tippers & Labourers in Kundrathur Taluk of Kancheepuram	10.00

	district.	
4	Removal of weeds, vegetations, Floating materials and hycinth in Adhanur tank supply channel using machinery,conveying and dumping the removed materials outside the residential area by using poclain machinery, Tippers & Labourers in Kundrathur Taluk of Kancheepuram district.	10.00
5	Removal of weeds, vegetations, Floating materials and hycinth in Manimangalam Neeli kalvoy from Gajalakshmi Nagar to Adayar River using machinery,conveying and dumping the removed materials outside the residential area by using poclain machinery, Tippers & Labourers in Kundrathur Taluk of Kancheepuram district.	10.00
6	Removal of weeds vegetation, Floating materials and hyacinth the Adayar river from downstream of Walajabad road bridge to Upstream of Sriperumbudur road Bridge (Ruby) using machinery, conveying and dumping the removed materials outside the redidential area by using poclain machinery, tippers & labourers in Kundrathur Taluk of Kancheepuram district and Tambaram Taluk of Chengalpattu district.	30.00
7	Removal of weeds, vegetations, Floating materials and hycinth in Manimangalam tank Surplus course from Weir No.4 &5 of karasangal village using machinery,conveying and dumping the removed materials outside the residential area by using poclain machinery, Tippers & Labourers in Kundrathur Taluk of Kancheepuram district.	10.00
8	Removal of weeeds, vegetations, Floating materials and hycinth in Somangalam tank Surplus course using machinery,conveying and dumping the removed materials outside the residential area by using poclain machinery, Tippers & Labourers in Kundrathur Taluk of Kancheepuram district.	10.00
9	Removal of Weeds, Vegetation, Floating Materials and hyacinth the Adayar river from downstream of Kishkinta road bridge to upstream of Thiruneermalai road Bridge using machinery conveying and dumping ther removed materials outside the residential area by by using poclain machinery, Tippers & Labourers in kundrathur Taluk of Kancheepuram district and Tambaram Taluk of Chengalpattu District.	10.00
10	Clearing the obstructions, floating materials, vegetations in Surplus course from Weir No.1, 2 & 3 of Sriperumbudur Tank in Sriperumbudur Taluk of Kancheepuram District.	15.00
11	Removal of Vegetations, Debris and clearing obstructions of Sriperumbudur Tank Weir No.4 & 5 Surplus Course of Sriperumbudur Taluk in Kancheepuram District.	10.00
12	Removal of Vegetations, Debris and clearing obstructions of Pillaipakkam Tank Surplus Course of Sriperumbudur Taluk in Kancheepuram District.	10.00
13	Removal of Vegetations, Debris and clearing obstructions of	10.00

	Ettikuttimedu Tank Supply Channel of Sriperumbudur Taluk in Kancheepuram District.	
14	Removal of Vegetations, Debris and clearing obstructions in Lala Kalvoy of Konnerikuppam Tank Supply Channel in Kancheepuram Taluk and District.	10.00
15	Removal of Vegetations, Debris and clearing obstructions in Vegavathy river from Mel kathirpur to Kilkathipur to Thiruparuthikundram in Kancheepuram Taluk of Kancheepuram District.	10.00
16	Removal of Vegetations, Debris and clearing obstructions in Vegavathy River from Kilkathipur to Thiruparuthikundram in Kancheepuram Taluk of Kancheepuram District.	10.00
17	Removal of Vegetations, Debris and Clearing Obstructions in Sevilimedu Tank Surplus Course and Vegavathy River from Thiruparuthikundram to Kamatchiamman Colony in Kancheepuram Municipal Limits in Kancheepuram District.	10.00
18	Removal of Vegetations, Debris and Clearing Obstructions in Vegavathy River from Kamatchiamman Colony to Sadavaram Road Bridge in Kancheepuram Municipal Limits in Kancheepuram District.	10.00
19	Removal of Vegetations, Debris and Clearing Obstructions in Vegavathy River from Sadavaram Road Bridge to Periyar Nagar in Kancheepuram Municipal Limits in Kancheepuram District.	10.00
20	Removal of Vegetations, Debris and clearing obstructions in Vegavathy River from Periyar Nagar to Villivalam in Kancheepuram Taluk of Kancheepuram District.	10.00
21	Removal of Vegetations, Debris and clearing obstructions in Vegavathy River from Villivalam to Thimmarajampettai in Walajabad Taluk of Kancheepuram District.	10.00
22	Removal of Vegetations, Debris and clearing obstructions in Supply Channel of Kavanthandalam Tank in Walajabad Taluk of Kancheepuram District.	10.00
23	Removal of Vegetations, Debris and clearing obstructions in Kambakkam Channel L.S. 0m to 4000m @ Thaipakkam Village in Kancheepuram Taluk and District.	10.00
24	Clearing the obstructions, floating materials, vegetations in Surplus Course from Weir No.2 of Uthiramerur Tank in Uthiramerur Taluk of Kancheepuram District.	10.00
25	Clearing the obstructions, floating materials, vegetations in Surplus Course from Weir No.3 of Uthiramerur Tank in Uthiramerur Taluk of Kancheepuram District.	10.00
26	Clearing the obstructions, floating materials, vegetations in Supply Channel of Kattiyampanthal Surplus course in Uthiramerur Taluk of Kancheepuram District.	10.00
	KANCHEEPURAM DISTRICT TOTAL	**295.00**

VEGAVATHY RIVER

Removal of Vegetations, Debris and Clearing Obstructions in Sevilimedu Tank Surplus Course and Vegavathy River from Thiruparuthikundram to Kamatchiamman Colony in Kancheepuram Municipal Limits

Estimate Amount (Rs.in Lakh)	Total Length (in m)	Length completed (in m)	Machine deployed	Present Stage	Remarks
10.00	2000	1550	1 Poclain	Work is in progress	Scheduled date of completion 31.12.2024

BEFORE EXECUTION
Sadavaram Bridge D/S

DURING EXECUTION
Sadavaram Bridge D/S

VEGAVATHY RIVER

Removal of Vegetations, Debris and Clearing Obstructions in Sevilimedu Tank Surplus Course and Vegavathy River from Thiruparuthikundram to Kamatchiamman Colony in Kancheepuram Municipal Limits

Estimate Amount (Rs.in Lakh)	Total Length (in m)	Length completed (in m)	Machine deployed	Present Stage	Remarks
10.00	1350	1300	1 Poclain	Work is in progress	Scheduled date of completion 31.12.2024

BEFORE EXECUTION
Kavalangate Bridge

DURING EXECUTION
Kavalangate Bridge

PILLAIPAKKAM TANK SURPLUS

Removal of Vegetations, Debris and clearing obstructions of Pillaipakkam Tank Surplus Course of Sriperumbudur Taluk in Kancheepuram District.

Estimate Amount (Rs.in Lakh)	Total Length (in m)	Length completed (in m)	Machine deployed	Present Stage	Remarks
10.00	1050	950	1 Poclain	Work is in progress	Scheduled date of completion 31.12.2024

BEFORE EXECUTION
Weir No.3 D/S

DURING EXECUTION
Weir No.3 D/S

4. Lessons Learnt from 2015 Floods

The catastrophic floods of 2015, which resulted in over 2100mm of rainfall within 27 days, prompted the district to reassess its flood management strategies. Following 2017, a Master Plan was developed that focuses on both structural and non-structural solutions, integrating urban flood management approaches. These efforts aim to establish a resilient flood management system that protects the district from recurrent floods while ensuring effective water conservation and management.

Infrastructure Development

TNIAMP : In Kancheepuram District, the Tamil Nadu Irrigated Agriculture Modernization Project (Phase-III) under the Vegavathi Sub-Basin is nearing completion, involving 17 tanks in the district. This rehabilitation work will prevent sudden breaches of water bodies and safeguard crops from damage during the monsoon period.

Sl. No.	Name of Tank	Estimate Amount (in lakhs)	Ayacut (In Ha.)
1	Damal Manthangal	32.63	25.91
2	Damal Chakkaravarthi Thangal	13.12	5.26
3	Damal Tank	228.78	933.63
4	Kilar Peria Eri (Kilar)	65.07	55.87
5	Musaravakkam Koduva Eri	55.43	475.30
6	Thirupukkuzhi Manthangal	32.53	194.33
7	Thirupukkuzhi Tank	61.36	164.78
8	Musaravakkam Tank	75.84	172.87
9	Vishar Periya Eri	70.11	93.12
10	Melottivakkam Tank	60.66	41.68
11	Keelambi Tank	67.28	124.29
12	Sirukaveripakkam Tank	74.22	151.42
13	Melkathirupur Tank	50.93	101.62
14	Thiruparuthikundram Tank	44.13	60.70
15	Sevilimedu Tank	102.85	277.33

16	Thenambakkam Tank	97.99	226.31
17	Villivalam Tank	51.95	130.36

Check Dam :

The construction of this check dam across the Puthali basin will prevent floodwaters from being wasted during the rainy season in Chayyar. Villages such as Irumaram, Athavapakkam, Puthali, and Kavambair will significantly benefit from this project, as it will serve as a source of drinking water for surrounding areas by enriching groundwater resources, with a storage capacity of approximately 0.26 Mcft. The

construction of this check dam began on 18.08.2022 and was completed on 14.05.2024.

Puthali Check Dam

Anicut :

An anicut is a structure built across a stream, odai, or river to divert and store floodwater for irrigation, drinking water, and other purposes. Under the State Government Fund, two anicuts have been proposed, and the execution of this project has commenced.

Anicut 1 :

The construction of an anicut across Thollazhi Maduvu near Ullavur Village in Walajabad Taluk of Kancheepuram District was undertaken at an estimated cost of Rs. 7.00 Crore, with the work completed on 15.09.2024. This anicut stabilizes an ayacut of 117.80 hectares

Thollazhi Anicut

இன்று (04.10.2024) சென்னை தலைமைச் செயலகத்தில் மாண்புமிகு தமிழ்நாடு முதலமைச்சர் அவர்கள் காணொளி காட்சி மூலம், காஞ்சிபுரம் மாவட்டம், வாலாஜாபாத் ஒன்றியம், தொள்ளாழி மடுவின் குறுக்கே ரூ.7 கோடி மதிப்பீட்டில் கட்டப்பட்டுள்ள அணைக்கட்டினை திறந்து வைத்ததைத் தொடர்ந்து, அணைக்கட்டினை மாவட்ட ஆட்சித்தலைவர் திருமதிகலைச்செல்வி மோகன், இ.ஆ.ப., காஞ்சிபுரம் நாடாளுமன்ற உறுப்பினர் திரு.க.செல்வம், உத்திரமேரூர் சட்டமன்ற உறுப்பினர் திரு.க.சுந்தர் ஆகியோர் பார்வையிட்டனர். உடன் வாலாஜாபாத் ஒன்றியக் குழுத்தலைவர் திரு.ஆர்.கே.தேவேந்திரன், வாலாஜாபாத் ஒன்றிய குழுத் துணைத்தலைவர் திரு.பி.சேகர், நீர்வளத்துறை செயற்பொறியாளர் திரு.செல்வகுமார், உதவி செயற்பொறியாளர் திரு.மார்க்கண்டேயன் ஆகியோர் உள்ளனர்.

Anicut 2 :

The construction of an anicut across the Cheyyar River near Silambakkam Village is underway to feed the Magaral Big Tank, Arasanipalai Tank, and Vayalathur River Channel in Uthiramerur Taluk of Kancheepuram District. The estimated cost for this project is Rs. 35.21 Crore, and it is currently in the nearing completion stage. This anicut will stabilize an ayacut of 614.12 hectares.

Silambakkam Anicut

WRD- Kosasthalaiyar Basin

Flood Mitigation Measures in Kancheepuram District:

1) The Adyar River originates from the surplus course of the Adhanur tank in Chengalpattu District, approximately 15 kilometers west of Tambaram in South Chennai. It stretches 42.38 kilometers before merging into the Bay of Bengal. The surplus course of

Chembarambakkam Tank converges with the Adyar River at LS 25.20 km near Thiruneermalai Village.

The river's bed width varies from 40 to 120 meters (131 to 394 ft) from the confluence point to the Anakaputhur bridge. It flows for 24 kilometers within the Chennai Metropolitan Area, with about 17 kilometers located in Chennai district, before draining into the sea. The river's discharge is seasonal, primarily occurring during the Northeast monsoon season from September to December.

Downstream of the Chembarambakkam confluence point, the river width reduces to 43.00 meters in some stretches. To maximize the discharge capacity of the Adyar River and prevent inundation in the upper reaches, it is essential to widen the river to 120 meters over a length of 1,400 meters.

This project was sanctioned by the Government of Tamil Nadu through G.O.MS No. (2D) No. 9/ WR (rp/g2) Dept. dated 19.04.2022, with a total budget of Rs. 70.00 Crore, of which the civil work cost is Rs. 31.27 Crore. For land acquisition, the Government of Tamil Nadu allocated Rs. 92.71 Crore via G.O.MS No. 77/WRD (1) dated 18.08.2022. The funds have been deposited into the account of the District Collector, Kancheepuram District, and work is progressing in the land acquisition area based on the enter upon permission.

The original carrying capacity of the Adyar River from Thiruneermalai to Anakaputhur Bridge is 26,000 cusecs. Upon project completion, this capacity will increase to 62,000 cusecs. The details of the work are as follows:

S.No	Name of Works	Est Amt in Lakhs	Remarks
1	Widening of Adayar River from Chembarambakkam Surplus Course Confluence Point to Anakaputhur Bridge in Kundrathur Taluk of Kancheepuram District.	7000	Work Completed.

BEFORE EXECUTION

AFTER EXECUTION

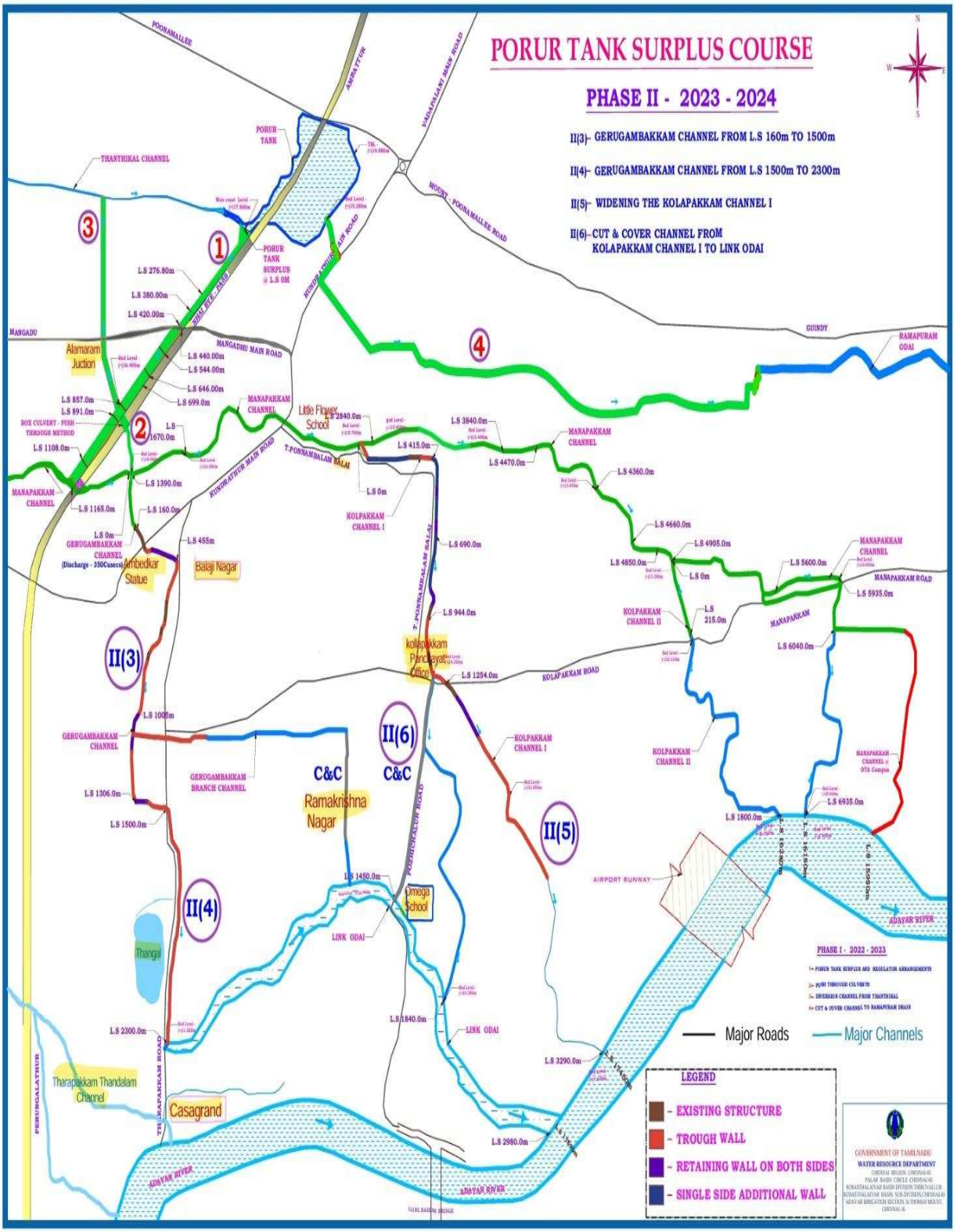
2) The Porur Tank, historically used for irrigation, has transitioned to serving as a drinking water source due to urbanization. It encompasses a water spread area of 252 acres, straddling both Chennai and Kancheepuram districts. The tank has a full storage capacity of approximately 67 Mcft and features a natural escape of 25 meters in length on its right flank. During the monsoon season, surplus floodwater is discharged through a weir, spreading into adjacent areas

and flowing into the Manapakkam Channel. The tank bund measures 3,092 meters in length.

The Government of Tamil Nadu has approved a master plan to mitigate floodwater by upgrading the existing stormwater drainage systems, addressing catastrophic flooding in and around Greater Chennai. Consequently, a scheme under JNNURM was developed for enhancements to the Porur Tank surplus drainage system, which includes weir reconstruction, canal widening and deepening, flood protection wall construction, and the widening of existing bridge waterways.

However, the execution of this work has been halted by the National Highways Authority of India (NHAI) due to various reasons, including the failure to obtain necessary permissions. NHAI has stated that improvement works should not proceed along the stretch of NHAI's jurisdiction (from the surplus weir to the Manapakkam Channel, approximately 1,165 meters).

The incomplete portions of the project have resulted in the Porur Tank and its surrounding catchment area being unable to discharge surplus water into the Manapakkam Channel, causing frequent inundation during monsoon seasons. In the monsoons of 2015, 2017, and 2021, the Public Works Department and local authorities faced significant challenges in managing the surplus floodwater from the Porur Tank, leading to flooding in areas such as Padur, Koluthuvancherry, Ayyappan Thangal, Srinivasapuram, and Mangadu, adversely affecting the normal lives of residents in these areas.



The Details of the work as below,

S. No	Name of Works	Est Amt in Lakhs	Remarks
2	Improvement to Porur Tank Surplus Course and Regulator Arrangements in Porur Tank in Kancheepuram District.	3400	**work Completed.**

DURING EXECUTION

AFTER EXECUTION

3) To prevent inundation and achieve permanent flood mitigation, additional box culverts are being constructed at the NHAI Bypass in Kundrathur Taluk, Kancheepuram District. This project is being executed using the push-through method, with a total estimated cost of Rs. 9.70 crores. The details of the work are as follows:

S. No	Name of Works	Est Amt in Lakhs	Remarks
3	Providing additional Box culverts at NHAI Bypass by Push through Method in Kundrathur Taluk Of Kancheepuram District	970	**work Completed**

DURING EXECUTION OF PUSH THROUGH WORK

4) To permanently prevent inundation and mitigate flooding, a new cut and cover channel is being constructed from the Thanthikal Channel to the Porur surplus course along Koluthuvancheri Road in Kundrathur Taluk, Kancheepuram District. The estimated cost for this project is Rs. 16.70 crores. The details of the work are as follows:

S. No	Name of Works	Est Amt in Lakhs	Remarks
4	Construction of new cut and cover channel from Thanthikal channel to Porur surplus course ,Koluthuvancheri road in Kundrathur Taluk of Kancheepuram District. Rs.16.70 Crores	1670	work Completed.

DURING EXECUTION

AFTER COMPLETION

5) To mitigate surplus flood water and prevent inundation in the aforementioned areas, a new sluice is being constructed in Porur Tank, along with the formation of a cut and cover channel from Porur Tank to Ramapuram Odai in Alandur Taluk, Chennai District. The estimated cost for this project is Rs. 39.60 crores. The details of the work are as follows:

S. No	Name of Works	Est Amt in Lakhs	Remarks
5	Construction of new sluice and cut and cover from Porur tank to Ramapuram tank in Alanthur Taluk of Chennai District.	3960	**work Completed.**

DURING & AFTER EXECUTION

DURING & AFTER EXECUTION

Flood Mitigation Work Porur Phase II

The Porur Tank, historically utilized for irrigation, has transitioned to serve primarily as a drinking water source due to urbanization. Spanning an area of 252 acres across both Chennai and Kanchipuram districts, the tank has a full storage capacity of approximately 67 Mcft and features a natural escape channel of 25 meters in length on the right flank. During the monsoon season, surplus floodwater discharged through the weir spreads into nearby areas, ultimately flowing into the Manapakkam Channel. The tank bund measures 3,092 meters in length.

To address flood inundation in Kancheepuram District, 14 interventions in the Porur area were originally proposed for the 2022-2023 period. Four works were sanctioned for a total of Rs. 100.00 crores, as per Government Order G.O. Ms (2D) No. 9 from the Water Resources (I. Spl.2) Department dated 19.04.2022. As a result, inundation in the upstream areas, including Dhanalakshmi Nagar, Kumaran Nagar, Sri Sai Nagar, Balaji Nagar, Mathuram Nagar, Jothi Nagar, Iyyappathangal, and Mowlivakkam villages, was significantly reduced, rendering these areas flood-free last year. However, downstream areas such as Ganesh Nagar, MGR Nagar, Rajalakshmi Nagar, Thiruvalluvar Salai, and Madha Nagar experienced inundation.

For the year 2023-2024, an additional amount of Rs. 69.45 crores were sanctioned through Government Order G.O. Ms (2D) No. 172 from the Water Resources (I. Spl.2) Department dated 03.08.2022, aimed at improving the Kolapakkam and Gerugambakkam Channels. These works are nearing completion.

1) To further mitigate inundation in the aforementioned areas, the construction of a new cut and cover channel from Kolapakkam Channel-I to Link Odai is proposed for the 2023-2024 period, with an estimated cost of Rs. 11.72 crores.

The details of the work are as follows:

S. No	Name of Works	Est Amt in Lakhs	Remarks
1	**Construction of new cut & cover channel from Kolapakkam channel - I to Link odai along Kolapakkam - Pozhichalur road in Kundrathur taluk of Kancheepuram District.**	1172.00	**work Completed.**

DURING EXECUTION

AFTER COMPLETION

2) To mitigate the inundation in the above-mentioned areas, improvements to Kolapakkam Channel I are proposed for the year 2023-2024, with an estimated budget of Rs. 23.28 crores. The details of the work are as follows:

S. No	Name of Works	Est Amt in Lakhs	Remarks
2	**Construction of Retaining Wall and Widening and desilting the Kolapakkam Channel - I in Kolpakkam Village in Kundrathur Taluk of Kancheepuram District.**	2328.00	**95% work Completed. Fencing Work is in Progress.**

DURING EXECUTION

AFTER COMPLETION

3) To mitigate the flooding in the aforementioned areas, improvements to the Gerugambakkam Channel from LS 160m to LS 1500m are proposed for the year 2023-2024, with an estimated budget of Rs. 19.16 crores. The details of the work are as follows:

S. No	Name of Works	Est Amt in Lakhs	Remarks
3	**Improvements to Gerugambakkam Channel from LS 160m to LS 1500m in Gerugambakkam Village in Kundrathur Taluk**	1916.00	**95% work Completed. Fencing Work is in Progress.**

DURING EXECUTION

AFTER COMPLETION

4) To mitigate the flooding in the aforementioned areas, improvements to the Gerugambakkam Channel from LS 1500m to LS 2300m are proposed for the year 2023-2024, with an estimated budget of Rs. 15.29 crores. The details of the work are as follows:

S. No	Name of Works	Est Amt in Lakhs	Remarks
4	**Improvements to Gerugambakkam Channel from LS 1500m to LS 2300m in Gerugambakkam Village in Kundrathur Taluk**	1529.00	**95% work Completed. Fencing Work is in Progress.**

DURING EXECUTION

AFTER COMPLETION

Premonsoon works for the year 2024-2025

- For the year 2024-2025, seven pre-monsoon works have been sanctioned in Kancheepuram District, with a total allocation of Rs. 1.10 crores as per Government Order (G.O.(Ms). No. 29, Water Resources (I. Spl-2) Department, dated 06.02.2024). The works include the removal of debris, weeds, vegetation, floating material, and other obstructions in the following channels: Thanthikal Channel, Kolapakkam Channel, Gerugambakkam Channel and Link Odai, Kovur Main Channel, Kundrathur Main Channel, Natham Main Channel, Thanthikal Main Channel, Manapakkam Main Channel and Palathandalam Channel. The work is currently in progress.

S. No	Name of Works	Est Amt in Lakhs	Remarks
1.	Removal Of Debris, Weeds, Vegetation, Floating Material and other Obstructions in Thanthikal Channel (Porur tank Supply Channel) in Koluthuvanchery Village in Kundrathur Taluk of Kancheepuram District.	15.00	**Work is in Progress.**
2.	Removal of Debris, Weeds, Vegetation, Floating Material and other Obstructions and free flow of water in Kolapakkam Channel in Kundrathur taluk of Kancheepuram District.	15.00	**Work is in Progress.**
3.	Removal of Debris, Weeds, Vegetation, Floating Material and other Obstructions and free flow of water in Gerugambakkam Channel and Link Odai in	20.00	**Work is in Progress**

	Kundrathur taluk of Kancheepuram District.		
4.	Removal of Debris, Weeds, Vegetation, Floating materials and other obstructions for free flow of water in Kovur main channel from L.S 0M to 8000M in Kundrathur Taluk of Kanceepuram District.	15.00	**Work is in Progress**
5.	Removal of Debris, Weeds, Vegetation, Floating materials and other obstructions for free flow of water in Kundrathur main channel from L.S.2000M to 7000M in Kundrathur Taluk of Kanceepuram District.	15.00	**Work is in Progress**
6.	Removal of Debris, Weeds, Vegetation, Floating materials and other obstructions for free flow of water in Natham main channel from L.S.0M to 3000M, Thanthikal Main channel from LS. 0M to 4500M, Manapakkam main channel from LS.0m to 6000m in Kundrathur Taluk of Kanceepuram District.	20.00	**Work is in Progress**
7.	Removal, debris. Weeds, vegetation, floating materials and other obstruction for free flow of water in Palathandalam channel from LS 0m to 8500m in Kundrathur Taluk of Kancheepuram District.	10.00	**Work is in Progress**

The Details of the work as below,

S. No	Name of Works	Est Amt in Lakhs	Remarks
1	Removal Of Debris, Weeds, Vegetation, Floating Material and other Obstructions in Thanthikal Channel (Porur tank Supply Channel) in Koluthuvanchery Village in Kundrathur Taluk of Kancheepuram District.	15.00	**Work is in Progress.**

BEFORE EXECUTION

AFTER COMPLETION

S. No	Name of Works	Est Amt in Lakhs	Remarks
2.	Removal of Debris, Weeds, Vegetation, Floating Material and other Obstructions and free flow of water in Kolapakkam Channel in Kundrathur taluk of Kancheepuram District.	15.00	**Work is in Progress.**

BEFORE EXECUTION

AFTER COMPLETION

S. No	Name of Works	Est Amt in Lakhs	Remarks
3	Removal of Debris, Weeds, Vegetation, Floating Material and other Obstructions and free flow of water in Gerugambakkam Channel and Link Odai in Kundrathur taluk of Kancheepuram District.	20.00	**Work is in Progress**

BEFORE EXECUTION

AFTER COMPLETION

S. No	Name of Works	Est Amt in Lakhs	Remarks
4	Removal of Debris, Weeds, Vegetation, Floating materials and other obstructions for free flow of water in Kovur main channel from L.S 0M to 8000M in Kundrathur Taluk of Kanceepuram District.	15.00	**Work is in Progress**

BEFORE EXECUTION

DURING COMPLETION

S. No	Name of Works	Est Amt in Lakhs	Remarks
5	Removal of Debris, Weeds, Vegetation, Floating materials and other obstructions for free flow of water in Kundrathur main channel from L.S.2000M to 7000M in Kundrathur Taluk of Kanceepuram District.	15.00	**Work is in Progress**

BEFORE EXECUTION

AFTER COMPLETION

S. No	Name of Works	Est Amt in Lakhs	Remarks
6	Removal of Debris, Weeds, Vegetation, Floating materials and other obstructions for free flow of water in Natham main channel from L.S.0M to 3000M, Thanthikal Main channel from LS. 0M to 4500M, Manapakkam main channel from LS.0m to 6000m in Kundrathur Taluk of Kanceepuram District.	20.00	**Work is in Progress**

BEFORE EXECUTION

AFTER COMPLETION

S. No	Name of Works	Est Amt in Lakhs	Remarks
7	Removal, debris. Weeds, vegetation, floating materials and other obstruction for free flow of water in Palathandalam channel from LS 0m to 8500m in Kundrathur Taluk of Kancheepuram District.	10.00	**Work is in Progress**

BEFORE EXECUTION

DURING COMPLETION

Highways Department

Flood Temporary Restoration 2023 – 2024
G.O. (Ms) No.13 Highways and Minor Ports (H.N.2) Department, Dated.01.02.2024

Sl. No	Name of Work	Amount Rs.in Lakhs	Present Stage of Work
1	Temporary Restoration of rain damaged eroded berms, riding surface and dip raising of bridge approach at Km 3/650 - 4/150 & 5/050-5/550 of Kanchipuram Wandawasi Road.	40.00	Work Completed
2	Temporary Restoration of rain damaged eroded berms and riding surface of Kanchipuram - Surappan Road at Km 66/8 - 72/2.	45.00	Work Completed
3	Temporary Restoration of rain damaged eroded berms and riding surface of Sadras - Chengalpattu - Kanchipuram - Arakkonam - Thiruttani Road at Km 50/4 - 52/4 & 66/0 - 66/940	40.00	Work Completed
4	Temporary Restoration of rain damaged eroded berms and riding surface of Kanchipuram Bye Pass (West) at Km 0/0 - 1/6	70.00	Work Completed
5	Temporary Restoration of rain damaged eroded berms and riding surface of Kanchipuram Bye Pass (West) at Km 1/600 - 4/8 including Bridge Portion at Km 3/0 - 3/2	141.00	Work Completed
6	Temporary Restoration of rain damaged eroded berms and riding surface of Kanchipuram Bye Pass (West) at Km 4/8 - 8/1	131.00	Work Completed

7	Temporary Restoration of rain damaged and riding surface of Chennai - Chittoor - Bangalore Road (Sunguvarchathiram Urban Limit) (Abandoned stretch of NH 4)(SU 142) at Km 48/800 - 50/0	105.00	Work Completed
8	Temporary Restoration of rain damaged eroded berms and riding surface of Kanchipuram Rajakulam Road at Km 5/5 - 9/180	30.00	Work Completed
9	Temporary Restoration of rain damaged eroded berms and riding surface of Ullavoor -Thollazhi Road at Km 1/0 - 5/2	55.00	Work Completed
10	Temporary Restoration of rain damaged eroded berms and riding surface of Magaral - Kavanthandalam Road at Km 0/0 - 1/0 & 4/0 - 5/0	25.00	Work Completed
11	Temporary Restoration of rain damaged riding surface of Mangadu pattu mugalivakkam road at Km 0/0 - 3/800	125.00	Work Completed
12	Temporary Restoration of rain damaged riding surface of Mevalurkuppam - Nayapakkam Road at Km 1/400 - 3/400	98.00	Work Completed

Km 3/650 - 4/150 & 5/050-5/550 of Kanchipuram Wandawasi Road.

Kanchipuram - Surappan Road at Km 66/8 - 72/2.

Sadras - Chengalpattu - Kanchipuram - Arakkonam - Thiruttani Road at Km 50/4 - 52/4 & 66/0 - 66/940

Kanchipuram Bye Pass (West) at Km 1/600 - 4/8 including Bridge Portion at Km 3/0 - 3/2

Kanchipuram Bye Pass (West) at Km 4/8 - 8/1

Chennai - Chittoor - Bangalore Road (Sunguvarchathiram Urban Limit) (Abandoned stretch of NH 4)(SU 142) at Km 48/800 - 50/0

Ullavoor -Thollazhi Road at Km 1/0 - 5/2

Mangadu pattu mugalivakkam road at Km 0/0 - 3/800

Mevalurkuppam - Nayapakkam Road at Km 1/400 - 3/400

Kanchipuram Bye Pass (West) at Km 0/0 - 1/6

Kanchipuram Rajakulam Road at Km 5/5 - 9/180

Flood Temporary Restoration 2023 – 2024
G.O. (Ms) No.19 Highways and Minor Ports (H.N.2) Department, Dated.07.02.2024

Sl. No	Name of Work	Amount Rs.in Lakhs	Present Stage of Work	
1	Temporary Restoration of rain damaged riding surface of Bukkathurai -Uthiramerur road at Km 10/2 - 10/6	10.00	Work Completed	

Highways Department-Permanent restoration works

G.O. (Ms) No.13 Highways and Minor Ports (H.N.2) Department, Dated.01.02.2024

Sl. No	Name of Work	Amount Rs.in Lakhs	Present Stage of Work
1	Permanent restoration at km 17/500-18/400 of Uthiramerur -Kammalampoondi -Acharapakkam road	100.00	Work Completed
2	Permanent restoration at km 0/0 - 1/0 of Kavanipakkam - Peranakavoor - Mambakkkam Road	76.00	Work Completed
3	Permanent restoration at km 15/0 -16/040 of Thirupulivanam - Salavakkam Road	63.00	Work Completed
4	Reconstruction of Box culverts at km 0/6 (i),0/6(ii) & 0/8 of Asur -Nelveli Road	90.00	Work Completed
5	Reconstruction of Box culvert at km 2/6 of Walajabad - Kolathur Road	45.00	Work Completed
6	Rebuilding of Kanchipuram Bye Pass (West) at Km 8/100 - 8/700	210.00	Work Completed
7	Construction of Storm water Drain at Km 24/4 - 25/0 of uthiramerur - Kanchipuram road	250.00	out of 690 m / 250 m drian length completed. 50 m work is in progress
8	Construction of storm water drain at km 40/300-41/400 of Chennai - Chittoor - Bangalore Road (Sriperumbudur Urban Limit) (Abandoned stretch of NH 4) (SU 3)	690.00	Out of 2200m 1100m Drain Work Completed. Balance work is in progress

9	Construction of retaining wall at km 2/850 - 3/600 of Tambaram Somangalam Nanthambakkam road	620.00	Out of 410 m, 75 m completed.15 m second lift work is in progress.
10	Construction of retaining wall at km 3/600-4/410 of Tambaram Somangalam Nanthambakkam road	680.00	Out of 670 m, /105 m completed. 25 m second lift work is in progress.
11	Construction of storm water drain at km 0/0-1/400 of Mangadupattu Moulivakkam road	680.00	Out of 1400m /600 m Completed. Balance work is in progress.
12	Construction of storm water drain at km 1/400-2/800 of Mangadupattu Moulivakkam road	680.00	Out of 1400m /430m Completed. Balance work is in progress.
13	Construction of storm water drain at km 2/800-3/800 of Mangadupattu Moulivakkam road	640.00	Out of 1000m /430 m Completed. Balance work is in progress.
14	Permanent restoration at km 0/0 - 3/4 of Marutham - Malaiyankulam Road	256.00	Work Completed
15	Reconstruction of box culvert at km 0/2,0/8,0/10,1/4, 1/8,2/6,3/2,3/4(i),(ii),3/8,3/10,4/2,4/4,4/8,4/ 10(i),(ii), 5/2,5/4, 5/6 of Thodur Kannanthangal road	320.00	Out of 20 Nos / 17nos of Culvert Completed 3 Nos culvert completed for half width. Balance work is in progress.
16	Reconstruction of box culvert at km 5/10 of Uthukkadu road	18.00	Work Completed
17	Reconstruction of box culvert at km 4/6, 4/8(i),(ii) of Edayarpakkam - Narasingapuram road	50.00	Work Completed
18	Reconstruction of box culvert at km 26/800, 26/10, 27/2 of Singaperumalkoil Sriperumbudur Thiruvallur Redhills road	50.00	Work Completed
19	Reconstruction of box culvert at km 0/800 of Valathancheri Perinjambakkam road	18.00	Work Completed
20	Reconstruction of box culvert at km 6/2 of Kolathur Kannanthangal road	15.00	Earth work is in progress.
21	Reconstruction of box culvert at km 3/4(i),(ii) of Km. 7/4 of - Walajabad -Keelacheri Road to Kovalavedu Road	34.00	Work Completed
22	Permanent restoration at km 0/0-4/6 of Thittalam - Kozhiyalam Road	320.00	Work Completed

23	Reconstruction of Box culvert at km 71/4 of Kanchipuram -Surappan Road	50.00	Work Completed
24	Reconstruction of Box culvert at km 60/8 of Sadras-Chengalpattu-Kanchipuram -Arakkonam -Thiruthani Road	50.00	7.5 m length of culvert completed .Balance 7.5 m length of Earthwork is in progress
25	Reconstruction of Box culverts at km 5/8 (i) ,(ii) of Purisai -Pullalore road	150.00	Work Completed
26	Construction of damaged storm water drain portion at km 0/024- 0/046 (Rs),0/247- 0/293 (Rs),0/445 - 0/453(Rs),0/559 - 0/573 (Both sides),0/660 - 724 (Ls),0/762- 0/772(Ls),0/772 - 0/914 (Ls),0/896 - 0/914(Rs),0/956 - 0/975(Ls), 1/014-1/027(Ls),1/070 - 1/078(Ls) ,1/238-1/246 (Ls),1/044-1/070(Rs) , 1/322- 1/328 (Ls),1/342-1/348(Ls) of Railway Road	145.00	Out of 442 m/ 420 m drain length completed 15 m wall concrete is in progress

Town Panchayat Department-Flood Mitigation Measures

Sl No	Name of the Town Panchayat	Name of the work	Length in KM	Present Status
1	Uthiramerur	Formation of BT Road at A) Muthu Krishna Avenue 1st cross Street, B) Muthu Krishna Avenue 2nd cross Street, C) Muthu Krishna Avenue 3rd cross Street, D) VatchalaStreet,E) Muthu Krishna Avenue Main Road,(Out of 3.000Km, (0.915km in Vulnerable area) (Est.Rs.56.42 out of Rs.185.00Lakh) in KNMT 21-22	0.915	Completed
2	Uthiramerur	Deepening of Channal at MGR Nagar and Chengalpattu Road-under TNUES-21-22 (Est.Rs.8.30Lakhks)	2.800	Completed
3	Uthiramerur	Providing Paver Block Road toM.G.R Nagar Cross Street, Muthu Krishna Avenue Cross st-(out of 1.210km-0.170km in vulnerable area-under knmt 21-22-ph-1-Est.Rs.12.59 out of Rs.89.60)	0.170	Completed
4	Walajabad	Construction of Storm water Drainage at Chinnasamynagar in Walajabad tp under GF 2021-22(Est.Rs.11.20Lakh)	0.359	Completed
5	Walajabad	Construction of Storm water Drainage at Bharathi Nagar in Walajabad tp under MLA scheme-2017-18 (Est.Rs.4.95Lakh)	0.106	Completed

Municipal Administration

Kancheepuram Corporation-

Flood Mitigation Measures

Sl. No.	Name of the work	Estimate cost (Rs.in lakh)	Scheme Proposed	Completed / Progress	
1	Construction of Storm Water Drain With Cover Slab at Manjal Neer Channel	4000.00	I & A 2022-23 Scheme	• Nathapettai End to STP Junction PCC Raft Rainforcement work, Retaining wall Shuttering and Dewatering Work is in Progress • Police booth to Pallavarmedu Retaining Wall Concrete Shuttering Work is in Progress • Min Nagar to Thirukalimedu Junction Dewatering Work and Earthwork Excavation Work is in Progress	  

Storm Water Drain			Channel			Culverts and Small Bridge		
Total length in (KM)	**Length of SWD desilted** (KM)	**Remaning Lengh of SWD** (KM)	**Total Length** (KM)	**Length of Channel desilted** (KM)	**Remaning Lengh of Channel** (KM)	**Total** (Nos)	**Restored** (Nos)	**Balance** (Nos)
55.10	15.60	39.50	14.60	0.00	14.60	262	57	205

FLOOD WORK 2024			
Sl. No.	**Name of the work**	**Estimate in lakh**	**Completed / Progress**
1	Construction of Storm Water Drain With Cover Slab at Manjal Neer Channel	4000.00	Work is in Progress
2	Engaging the Hire charges for JCB and Conveyance charges for Temporary Flood works at Zone - I	5.00	Work to be Started
3	Desilting and wall raising with precast cover slab for existing SED and culvert at PSK pumping station at Zone-I	3.00	Work to be Started
4	Engaging the Hire charges for Diesel Engine Pumpset for Temporary Flood works at Zone - II in Kancheepuram Corporation	3.00	Work to be Started
5	Engaging the Hire charges for JCB and Conveyance charges for Temporary Flood works at Zone - I in Kancheepuram Corporation	5.00	Work to be Started
6	Engaging the Hire charges for JCB and Conveyance charges for Temporary Flood works at Zone - III in Kancheepuram Corporation	5.00	Work to be Started
7	Engaging the Hire charges for Diesel Engine Pumpset for Temporary Flood works at Zone - III in Kancheepuram Corporation	5.00	Work to be Started
8	Engaging the Hire charges for Diesel Engine Pumpset for Temporary Flood works at Zone - IV in Kancheepuram Corporation	4.00	Work to be Started
9	Engaging the Hire charges for JCB and Conveyance charges for Temporary Flood works at Zone - III in Kancheepuram Corporation	4.00	Work to be Started
10	Providing Borewell with mini power pump in Ward No. 15 to joint road on Pallavar Medu	5.00	Work to be Started
11	Stangant of water for Low Level area use Sand Bag and Supply of Chainsaw Cutter, Rope, LED Torch Light, Digging hoe and crowbar for Temporary Flood work in Kancheepuram Corporation	2.00	Work to be Started
12	Desilting Channel at Vegavathy nullahs (Rangasamy Kulam to Thumbavanam Area)	2.00	Work to be Started
13	Engaging the Hire charges for Poclain and Conveyance charges for Temporary Flood works at Orikkai & Thenambakkam Drain Zone - III in Kancheepuram Corporation	6.00	Work to be Started
14	Desilting Work at Thiruparuthikundram Channel and Double Channel	7.00	Work to be Started
15	Engaging the Hire charges for Genset at Water Head works and UGD Pumping Station in Kancheepuram Corporation	2.00	Work to be Started
16	Supply of Food & Bedsheet with Pillow and Water Can for Flooded Area in Kancheepuram Corporation	5.00	Work to be Started
17	Removal of silt work in storm water drain at Ward No. 22,25,26 & 27	3.00	Work to be Started

Municipal Administration

Kundrathur Municipality-Long Term Measures

Permanent Measures for Flood Vulnerable Areas			
S.No.	**Name of the Area**	**Estimate Amount (Rs. in Lakhs)**	**Present Status**
1	Construction of cut and cover Storm water Drain to Sammanthan nagar, Aishwaryam Nagar and Sriram Salai	1570	Completed
2	Construction of cut and cover Storm Water Drain to Metha Nagar	1100	Completed
3	Construction of Storm Water Drain with Culvert to Kalvaikarai Street	8.90	Completed
4	Construction of Storm Water Drain and Laying of Paver Block to Thirupathi Nagar 1st Cross Street and 4th Cross Street	9.10	Completed
5	Construction of Storm Water Drain to Thirupathi Nagar 1st and 2nd Street	8.00	Completed
6	Construction of Storm Water Drain with Culvert to Thirupathi Nagar 3rd Street and 4th Street	8.40	Completed
7	Construction of Storm Water Drain with Culvert to Thirupathi Nagar 5th Cross Street	5.20	Completed
8	Construction of Storm Water Drain with Culvert to Vishal Nagar Gandhi Salai Main road	9.00	Completed
9	Construction of Storm Water Drain with Culvert to Manikandan Nagar Park	2.60	Completed

S.No.	Name of the Work	Estimate in lakhs)	Present Stage
2023-2024			
1	Construction of Cut and Cover Drain at Metha Nagar (West), Kutti Vinayagar Street	742.00	Completed
2	Construction of Cut and Cover Drain at Prithvi Nagar, Vishal Nagar Phase-I	382.00	Completed
3	Construction of Cut and Cover Drain at Metha Nagar Main Road in Ward No.18	218.00	Completed

Municipal Administration

Mangadu Municipality-Long Term Measures

S.No.	Name of the Work	Estimate in lakhs)	Present Stage
2022-2023			
1	Construction of Strom Water Drain with Cover Slab From Srinivasa Nagar to Omsakthi Nagar and Janani Nagar to Mariamman Koil Street via Mariamman Koil Street to Shanmuganantha samy koil street.	662.00	Completed

2023-2024			
S.No.	**Name of the Work**	**Estimate in lakhs)**	**Present Stage**
2	Construction of Storm water drain at Thriuvalluvar city phase 1 to Thirumurugan nagar main road.	366.00	Completed
3	Construction of Storm water drain at Indra nagar to chakra nagar main road	296.00	Completed
4	Construction of Storm water drain at Appavu nagar to Chakra nagar main road, Bhagavathi street to Police station road, SS Koil Street to Chakra Nagar Main Road and Chakra nagar cross street	490.00	Completed
5	Construction of Storm water drain at Guperan street, Narivanam salai to Thanthi channel and Addison Nagar Main road and Addison nagar cross steet.	492.00	Completed
6	Construction of Storm water drain at Kamatchi Nagar to Narivanam salai and RSR Garden, Indira Nagar to Manapathan channel	293.00	Completed
	TOTAL	**1937.00**	

Rural Development & Panchayat Raj Department

Flood Mitigation Measures

S. No	Name of the Block	Total No. of works	Completed	Under Progress	Est. Amnt (In Lakhs.)
1	Kancheepuram	25	21	3	162.72
2	Uthiramerur	10	-	10	290.13
3	Walajabad	5	2	3	100.00
4	Sriperumbudur	5	1	4	239.15
5	Kundrathur	112	84	28	1783.09
	Total	157	109	48	2575.09

Michaung Flood Restoration Works 2023-24								
Sl. No.	**Block Name**	**Village Name**	**Work ID**	**Work Type**	**Work Name**	**AS Value in lakhs**	**Amount Spent Sofar (Rs. in lakhs)**	**Current Stage**
1	Kancheepuram	Ariyaperumpakkam	11232067	CC Road	Providing of Cement Concrete Road Thulukkanthandalam New Village	10.000		1:2:4 Completed
2	Kancheepuram	Ariyaperumpakkam	11232071	CC Road	Providing of Cement Concrete Road Ariyaperumbakkam Perumal Koil street	9.000	8.997	Completed
3	Kancheepuram	Ariyaperumpakkam	11232072	CC Road	Providing of Cement Concrete Road Ariyaperumbakkam Pillaiyar Koil street	9.000		Physically Completed
4	Kancheepuram	Konerikuppam	11232059	CC Road	Providing of Cement Concrete Road Rajeshwari nagar Phase-3	7.500	7.489	Completed
5	Kancheepuram	Thimmasamudram	11232063	WMM + BC	Kariyangate to Pappankulam Road KM 0/0-0/800	19.220		BC Completed
6	Kancheepuram	Konerikuppam	11231187	CC Road	Providing of Cement Concrete Road at Anna Nagar	2.250	2.249	Completed
7	Kancheepuram	Konerikuppam	11231190	CC Road	Providing of Cement Concrete Road at Agathiyar Street	5.000	4.998	Completed
8	Kancheepuram	Konerikuppam	11231196	CC Road	Providing of Cement Concrete Road at Raja Raja Chozhan Street	5.000	4.945	Completed
9	Kancheepuram	Konerikuppam	11231202	CC Road	Providing of Cement Concrete Road at Ashok Nagar-Cross Street	4.250	4.238	Completed
10	Kancheepuram	Konerikuppam	11231207	CC Road	Providing of Cement Concrete Road at Indira Avenue- 2	4.000	3.988	Completed

11	Kancheepuram	Konerikuppam	11231209	CC Road	Providing of Cement Concrete Road at Rajeshwari Nagar Phase 2	4.800	4.795	Completed
12	Kancheepuram	Konerikuppam	11231212	CC Road	Providing of Cement Concrete Road at Rajeshwari Nagar Phase 1	6.000	5.993	Completed
13	Kancheepuram	Konerikuppam	11231217	CC Road	Providing of Cement Concrete Road at Kamatchi Nagar Cross Street	4.000	3.986	Completed
14	Kancheepuram	Konerikuppam	11231220	CC Road	Providing of Cement Concrete Road at Saraswathi Nagar	5.100	5.099	Completed
15	Kancheepuram	Konerikuppam	11231276	CC Road	Providing of Cement Concrete Road at Ganesh Nagar	5.000	4.988	Completed
16	Kancheepuram	Konerikuppam	11231297	CC Road	Providing of Cement Concrete Road at Thangavel Street	6.000	5.988	Completed
17	Kancheepuram	Muttavakkam	11231392	CC Road	Providing of Cement Concrete Road at Melbangaram Erikkarai Road	2.500	2.254	Completed
18	Kancheepuram	Sirukaveripakkam	11231412	CC Road	Providing of Cement Concrete Road at Saraswathy Nagar	4.400		Corewall Completed
19	Kancheepuram	Sirukaveripakkam	11231422	CC Road	Providing of Cement Concrete Road at M.D Arul Nagar	9.900		Physically Completed
20	Kancheepuram	Sirukaveripakkam	11231427	CC Road	Providing of Cement Concrete Road at J.J Nagar	10.500	10.486	Completed
21	Kancheepuram	Thimmasamudram	11231317	CC Road	Providing of Cement Concrete Road at Balaji Nagar - Housing Board Cross Street -1	2.400	2.399	Completed
22	Kancheepuram	Thimmasamudram	11231322	CC Road	Providing of Cement Concrete Road at Balaji Nagar - Housing Board Cross Street -2	2.500	2.477	Completed
23	Kancheepuram	Thimmasamudram	11231335	CC Road	Providing of Cement Concrete Road at Thirupathi estate OHT Street	9.000	8.861	Completed
24	Kancheepuram	Thimmasamudram	11231343	CC Road	Providing of Cement Concrete Road at Shetti Kuttai	9.900	9.841	Completed
25	Kancheepuram	Thiruppukuzhi	11231301	CC Road	Providing of Cement Concrete Road at Anna Nagar Cross Street	5.500		Physically Completed
26	Kundrathur	Ayyappanthangal	11232073	CC Road	Providing of Cement Concrete Road to Mangala Nagar 1st Main Road	8.800	8.798	Completed
27	Kundrathur	Ayyappanthangal	11232074	CC Road	Providing of Cement Concrete Road to I Main Road II Cross Street	7.750	7.748	Completed
28	Kundrathur	Ayyappanthangal	11232075	CC Road	Providing Cement Concrete Road to Subramani Nagar Cross Street	8.470		Base Course

29	Kundrathur	Gerugambakkam	11232077	CC Road	Providing of Cement Concrete Road to Perumal Koil Ist Street	5.980	5.980	Completed
30	Kundrathur	Gerugambakkam	11232346	CC Road	Providing of Cement Concrete Road to at Sakthy Nagar Main Road	19.320	19.304	Completed
31	Kundrathur	Gerugambakkam	11232456	CC Road	Providing of Cement Concrete Road to Balaji Nagar 5,6 7 Streets	10.010	9.994	Completed
32	Kundrathur	Gerugambakkam	11232457	CC Road	Providing of Cement Concrete Road to at Vigneswara Nagar I Street	10.350	10.337	Completed
33	Kundrathur	Gerugambakkam	11232458	CC Road	Providing of Cement Concrete Road to Balaji Nagar II Street	17.250	17.196	Completed
34	Kundrathur	Gerugambakkam	11232459	CC Road	Providing of Cement Concrete Road to at Vigneswara Nagar II Street, Sowdappa Nagar Link	11.040	11.027	Completed
35	Kundrathur	Gerugambakkam	11232460	CC Road	Providing of Cement Concrete Road to Balaji Nagar I Street	10.350	10.335	Completed
36	Kundrathur	Gerugambakkam	11232461	CC Road	Providing of Cement Concrete Road to at Sree Lakshmi Road	15.270	15.257	Completed
37	Kundrathur	Gerugambakkam	11232463	CC Road	Providing of Cement Concrete Road to at Sakthy Nagar I II Cross Street	20.700	20.677	Completed
38	Kundrathur	Gerugambakkam	11232076	WMMBMBC	Strengthening of B.T Nagar Main Road Km 0/0 - 0/650	35.820	35.811	Completed
39	Kundrathur	Irandankattalai	11232107	CC Road	Providing of Cement Concrete Road to Murasoli Maaran Street	11.000	10.988	Completed
40	Kundrathur	Irandankattalai	11232304	CC Road	Providing Cement Concrete Road to Samayapuram 8th Street	8.500	8.492	Completed
41	Kundrathur	Kolapakkam	11232110	CC Road	Providing of Cement Concrete Road to Devi Karumari Amman Nagar	12.170		Physically Completed
42	Kundrathur	Kolapakkam	11232374	CC Road	Providing of Cement Concrete Road to Mahalakshmi Nagar 4.50m	14.040		Physically Completed
43	Kundrathur	Kolapakkam	11232379	CC Road	Providing of Cement Concrete Road to Ramamoorthy Avenue II Street 4.50m	11.700		Physically Completed
44	Kundrathur	Kolapakkam	11232384	CC Road	Providing of Cement Concrete Road to RamaKrishna Nagar Main Road	10.140		Physically Completed
45	Kundrathur	Kovur	11232112	CC Road	Providing of Cement Concrete Road to Avvayar Street, Jeyachandran Street Gandhi Street	7.180		1:2:4 Completed

46	Kundrathur	Kovur	112321 14	CC Road	Providing of Cement Concrete Road to Bharathidasan Street	8.350		1:2:4 Completed
47	Kundrathur	Kovur	112321 20	CC Road	Providing Cement Concrete Road to Annamal Nagar I Street	6.760		Physically Completed
48	Kundrathur	Kovur	112321 27	CC Road	Providing Cement Concrete Road to KS Road to South Mada Street	4.240	4.214	Completed
49	Kundrathur	Malaiyambakkam	112321 30	CC Road	Providing Cement Concrete Road to Thiruveeka Street	10.400	10.397	Completed
50	Kundrathur	Malaiyambakkam	112321 33	CC Road	Providing Cement Concrete Road to Pappa City	5.120	5.114	Completed
51	Kundrathur	Malaiyambakkam	112321 36	CC Road	Providing Cement Concrete Road to S.R.D Royal City	11.280	11.271	Completed
52	Kundrathur	Malaiyambakkam	112321 59	CC Road	Providing Cement Concrete Road to Main Road North Malayambakkam	8.580	8.578	Completed
53	Kundrathur	Mowlivakkam	112321 85	CC Road	Providing Cement Concrete Road to Dhanalakshmi Nagar Main Road	13.550		1:2:4 Completed
54	Kundrathur	Paraniputhur	112322 05	CC Road	Providing of Cement Concrete Road to Jothy Nagar Kalaignar Street	6.680		Base Course
55	Kundrathur	Paraniputhur	112322 11	CC Road	Providing Of Cement Concrete Road to Eswaran Nagar Kalaignar Street	3.680		Base Course
56	Kundrathur	Paraniputhur	112322 21	CC Road	Providing Of Cement Concrete Road to VP Sinthan Street	3.690		Base Course
57	Kundrathur	Paraniputhur	112323 53	CC Road	Providing of Cement Concrete Road to Nova Nagar Annexxe	10.350		1:2:4 Completed
58	Kundrathur	Paraniputhur	112323 56	CC Road	Providing of Cement Concrete Road to ADL Nagar Ariyathamman Koil Street	11.110		Physically Completed
59	Kundrathur	Paraniputhur	112323 58	CC Road	Providing of Cement Concrete Road to Janakiraman Street	18.220		Base Course
60	Kundrathur	Paraniputhur	112323 61	CC Road	Providing of Cement Concrete Road to Annamalai Nagar Street	5.590		Base Course
61	Kundrathur	Paraniputhur	112323 63	CC Road	Providing of Cement Concrete Road to Indra Nagar 4th Street	5.240		Base Course
62	Kundrathur	Paraniputhur	112323 66	CC Road	Providing of Cement Concrete Road to gandhi Street	4.830	4.828	Completed
63	Kundrathur	Periyapanicheri	112322 25	CC Road	Providing of Cement Concrete Road to Golden Estate 5th Street	3.050	3.050	Completed

64	Kundrathur	Sikkarayapuram	11232233	CC Road	Providing Cement Concrete Road to Ragavendhira Nagar 3rd Street	3.640	3.639	Completed
65	Kundrathur	Sikkarayapuram	11232245	CC Road	Providing Cement Concrete Road to Jothi Park	4.680	4.679	Completed
66	Kundrathur	Sikkarayapuram	11232258	CC Road	Providing Cement Concrete Road to Ragavendhira Nagar Sun TV Office	3.540	3.540	Completed
67	Kundrathur	Sikkarayapuram	11232267	CC Road	Providing Cement Concrete Road to Ambal Nagar Main Road	11.660	11.614	Completed
68	Kundrathur	Sirukalathur	11232276	CC Road	Providing Cement Concrete Road to Kambar Street	6.500	6.498	Completed
69	Kundrathur	Sirukalathur	11232280	CC Road	Providing Cement Concrete Road to Periyar Street	10.990	10.858	Completed
70	Kundrathur	Sirukalathur	11232354	CC Road	Providing Cement Concrete Road to Velu Nayakkar Street	1.660	1.660	Completed
71	Kundrathur	Thandalam	11232283	CC Road	Providing of Cement Concrete Road to Oil Mill Street	2.910	2.908	Completed
72	Kundrathur	Thandalam	11232301	CC Road	Providing of Cement Concrete Road to Subham Avenue	3.740		Physically Completed
73	Kundrathur	Thandalam	11232302	CC Road	Providing of Cement Concrete Road to sree avvenue Street	7.400		1:2:4 Completed
74	Kundrathur	Tharapakkam	11232306	CC Road	Providing of Cement Concrete Road to SSS Garden main road	13.150	13.135	Completed
75	Kundrathur	Varadharajapuram	11232324	CC Road	Providing Cement Concrete Road to Kumaran Nagar Cross 1st Street Road	2.290		Base Course
76	Kundrathur	Varadharajapuram	11232328	CC Road	Providing Cement Concrete Road to Bharathwaj Nagar 5th Street	12.950		Physically Completed
77	Kundrathur	Varadharajapuram	11232334	CC Road	Providing Cement Concrete Road to Bharathwaj Nagar cross Street	1.870		Physically Completed
78	Kundrathur	Varadharajapuram	11232339	CC Road	Providing Cement Concrete Road to Vijay Nagar 5th Street	2.810	2.792	Completed
79	Kundrathur	Varadharajapuram	11232343	CC Road	Providing Cement Concrete Road to Vijay Nagar 1st and 2nd Joint Street Street	3.380	3.338	Completed
80	Kundrathur	Varadharajapuram	11232344	CC Road	Providing Cement Concrete Road to Vaithegi 2nd Street	3.220	3.219	Completed
81	Kundrathur	Varadharajapuram	11232347	CC Road	Providing Cement Concrete Road to Balaji Nagar Ist, 2nd, 3rd, 4th Cross Street	5.200	5.198	Completed

82	Kundrathur	Varadharajapuram	11232348	CC Road	Providing Cement Concrete Road to Balaji Nagar 2nd main Street at Varatharajapuram Panchayat	5.200	5.189	Completed
83	Kundrathur	Varadharajapuram	11232350	CC Road	Providing Of Cement Concrete Road To Sasthiri Nagar 2nd Street	6.020		Base Course
84	Kundrathur	Varadharajapuram	11232352	CC Road	Providing Cement Concrete Road To Sathish Nagar Cross Street	4.320		Base Course
85	Kundrathur	Kovur	11232330	CC Road	Providing Cement Concrete Road to Kulakarai Street	12.110		1:2:4 Completed
86	Kundrathur	Kovur	11232335	CC Road	Providing Cement Concrete Road to Arunachala Nagar	13.390		1:2:4 Completed
87	Kundrathur	Kovur	11232338	CC Road	Providing Cement Concrete Road to Thiruchendurpuram	17.530		Physically Completed
88	Kundrathur	Thandalam	11232325	CC Road	Providing Cement Concrete Road to Leelavathy Nagar VI Street	3.860	3.859	Completed
89	Kundrathur	Thandalam	11232327	CC Road	Providing Cement Concrete Road to Leelavathy Nagar V Street	4.280	4.277	Completed
90	Kundrathur	Ayyappanthangal	11232426	CC Road	Providing Cement Concrete Road to Ramachandra Nagar III Man Road Cross Street	13.800		Base Course
91	Kundrathur	Ayyappanthangal	11232428	CC Road	Providing Cement Concrete Road to Ramachandra Nagar II Man Road Cross Street	11.040		Base Course
92	Kundrathur	Ayyappanthangal	11232435	CC Road	Providing Cement Concrete Road to Adithanar Nagar II Street	9.660	9.659	Completed
93	Kundrathur	Ayyappanthangal	11232438	CC Road	Providing Cement Concrete Road to Kamatchi Nagar III Street	11.040		Base Course
94	Kundrathur	Kovur	11232442	CC Road	Providing of Cement Concrete Road to Agathiyar Street	2.650		1:2:4 Completed
95	Kundrathur	Kovur	11232445	CC Road	Providing Cement Concrete Road to VV Nagar Extension	12.420		Physically Completed
96	Kundrathur	Thandalam	11232441	CC Road	Providing Cement Concrete Road to Anugraha Avenue Main Road	26.570	26.558	Completed
97	Kundrathur	Thandalam	11232444	CC Road	Providing Cement Concrete Road to Church Street In Anugraha Avenue	9.390	9.384	Completed
98	Kundrathur	Thandalam	11232447	CC Road	Providing Cement Concrete Road to Leelavathy Nagar IV Street	4.860	4.493	Completed

99	Kundrathur	Thandalam	11232448	CC Road	Providing Cement Concrete Road to Chandra Avenue Street	3.800		1:2:4 Completed
100	Kundrathur	Thandalam	11232449	CC Road	Providing Cement Concrete Road to Chandra Avenue I Street	6.900		Physically Completed
101	Kundrathur	Thandalam	11232450	CC Road	Providing Cement Concrete Road to Leelavathy Nagar III Street	5.180	5.139	Completed
102	Kundrathur	Thandalam	11232451	CC Road	Providing Cement Concrete Road to Sree Padmavathy Street	5.660	5.647	Completed
103	Kundrathur	Thandalam	11232453	CC Road	Providing Cement Concrete Road to Brisil Gold III Street	7.940	7.937	Completed
104	Kundrathur	Thandalam	11232454	CC Road	Providing Cement Concrete Road to Brisil Gold II Main Road	10.630	9.821	Completed
105	Kundrathur	Varadharajapuram	11232421	CC Road	Providing Cement Concrete Road to Vijay Nagar 4th Street	2.130		Physically Completed
106	Kundrathur	Varadharajapuram	11232424	CC Road	Providing Cement Concrete Road to Balaji Nagar 3rd Cross Street	5.200	5.199	Completed
107	Kundrathur	Varadharajapuram	11232991	WMMBMBC	Strengthening of Balaji Nagar Road	49.000	48.991	Completed
108	Kundrathur	Padappai	11232386	CC Road	Providing of Anna Nagar Athanancheri Link Road	35.000		Physically Completed
109	Kundrathur	Padappai	11232395	CC Road	Providing of Cement Concrete Road to in Thiruvalluvar Nagar	9.500		Physically Completed
110	Kundrathur	Padappai	11232397	CC Road	Providing of Cement Concrete Road to Osuramman Koil Street	9.500		Physically Completed
111	Kundrathur	Padappai	11232402	CC Road	Providing of Cement Concrete Road to Pillaiyar Koil Street	9.500		Physically Completed
112	Kundrathur	Vattambakkam	11232407	CC Road	Providing of Cement Concrete Road to Katteri Anna Street	10.400		Physically Completed
113	Kundrathur	Vattambakkam	11232410	CC Road	Providing of Cement Concrete Road to Kanchivakkam Anna Street	10.400		Physically Completed
114	Kundrathur	Ayyappanthangal	11232425	CC Road	Providing of Cement Concrete Road to I Main Road	6.290		Physically Completed
115	Kundrathur	Ayyappanthangal	11232430	CC Road	Providing of Cement Concrete Road to I Main Road I Cross Street	4.210		1:2:4 Completed
116	Kundrathur	Ayyappanthangal	11232436	CC Road	Providing of Cement Concrete Road to Othaivaadai Street	7.020		Physically Completed

117	Kundrathur	Ayyappanthangal	11232440	CC Road	Providing of Cement Concrete Road to Subbaiah Nagar 2nd Cross Street	5.980		1:2:4 Completed
118	Kundrathur	Gerugambakkam	11232408	CC Road	Providing of Cement Concrete Road to Perumal Koil Street	15.600	15.584	Completed
119	Kundrathur	Irandankattalai	11232411	CC Road	Providing of Cement Concrete Road to Vasantham II Street	3.900	3.899	Completed
120	Kundrathur	Irandankattalai	11232419	WMMBMBC	Strengthening of Everest Gardern Main Road	28.600	28.585	Completed
121	Kundrathur	Kovur	11232341	CC Road	Providing Cement Concrete Road to Madura Avenue Main Road	21.720		Physically Completed
122	Kundrathur	Kovur	11232351	CC Road	Providing Cement Concrete Road to Sunderasan Nagar	19.320		1:2:4 Completed
123	Kundrathur	Kozhumanivakkam	11232373	CC Road	Providing Cement Concrete Road to Gengaiyamman Koil Street	3.690	3.674	Completed
124	Kundrathur	Kozhumanivakkam	11232378	CC Road	Providing Cement Concrete Road to Yadhavar Nagar	8.160	8.138	Completed
125	Kundrathur	Kozhumanivakkam	11232383	CC Road	Providing Cement Concrete Road to Ambedkar Street	5.720	5.718	Completed
126	Kundrathur	Kozhumanivakkam	11232389	CC Road	Providing Cement Concrete Road to Charles Nagar	3.150	3.148	Completed
127	Kundrathur	Kozhumanivakkam	11232391	CC Road	Providing Cement Concrete Road to Pillayar Koil Street	26.600	26.588	Completed
128	Kundrathur	Kozhumanivakkam	11232396	CC Road	Providing Cement Concrete Road to Thamaraikulam Road	7.700	7.694	Completed
129	Kundrathur	Paraniputhur	11232368	CC Road	Providing of Cement Concrete Road to Rajappa Nagar 2nd Cross Street	8.220		Base Course
130	Kundrathur	Periyapanicheri	11232359	CC Road	Providing of Cement Concrete Road to Golden Estate Main Road	8.000		Physically Completed
131	Kundrathur	Periyapanicheri	11232364	CC Road	Providing of Cement Concrete Road to City Babu Street	5.670		Physically Completed
132	Kundrathur	Sirukalathur	11232355	CC Road	Providing Cement Concrete Road to Raja Raja Solan Street	6.450	6.434	Completed
133	Kundrathur	Manimangalam	11225976	WMMBMBC	Manimangalam to Puducheri Road via Naduveerapet Road Km 0/0 - 3/500	104.990		BM Progress
134	Kundrathur	Nattarasanpattu	11225984	WMMBMBC	Vadamelpakkam to Kattupakkam road Km 0/0 -2/100	98.000		Physically Completed

135	Kundrathur	Padappai	11225994	WMMBMBC	MVW Road to Join TK Road Km 0/0 - 3/840	126.070		Physically Completed
136	Kundrathur	Sethupattu	11225988	WMMBMBC	Sethpatu to Somangalam Road Km 0/0-4/00	198.000		Physically Completed
137	Kundrathur	Vattambakkam	11225978	WMMBMBC	Vattambakkam panapakkam Road via Umayalpancheri Road Km 0/0 - 4/480	213.000		BM Completed
138	Sriperumbudur	Santhavelur	11233108	WMMBMBC	Podavur - Santhavellore Road Km 0/0 - 1/380	71.210		Physically Completed
139	Sriperumbudur	Katrampakkam	11226015	WMMBMBC	Puthuper medu road 0/0 - 0/880	46.000		BC Completed
140	Sriperumbudur	Kiloy	11225995	WMMBMBC	Kiloy Colony Road Km 0/0 - 0/780	58.150		WMM MC 50%
141	Sriperumbudur	Maduramangalam	11226018	GSBWMMBMBC	Madhuramangalam Thamarai Kulam Road Km 0/0 - 0/510	27.150		GSB Material Collection
142	Sriperumbudur	Pondur	11226013	WMMBMBC	Pondhur Malayalcheri Sipcot Road Km 0/0 - 1/000	36.640		BM Progress
143	Uthiramerur	Alisoor	11232317	WMM + BC	Alisoor Silambakkam Road Km 0/0 - 1/100	40.000		BC Completed
144	Uthiramerur	Kaliyapettai	11232323	WMM + BC	Kaliyapettai HC Road Km 0/0 - 0/990	39.000		WMM Spreading
145	Uthiramerur	Kattiyampandal	11232315	WMM + BC	Kattiyampandal-Nancheepuram Road Km 0/0 - 1/400	48.000		BC Completed
146	Uthiramerur	Kurumanjeri	11232309	Renewal BT	Kurumancheri colony BG Road Km 0/0 - 0/680	15.000		MC for Patches
147	Uthiramerur	Pinayur	11232312	Renewal BT	Pinayur to Colony Junction Road Km 0/0 - 1/02	25.000	9.238	MC for Patches
148	Uthiramerur	Rettamangalam	11232318	WMM + BC	Rettamangalam Road Km 0/0 - 1/009	40.130	16.756	WMM Completed
149	Uthiramerur	Kattankulam	11226022	WMMBMBC	Kattankulam AD Colony Road Km 0/0 - 0/650	24.000		WMM Spreading
150	Uthiramerur	Melpakkam	11226033	WMMBMBC	Melpakkam Vayalveli Road Km 0/0 - 0/700	22.000		BC Completed
151	Uthiramerur	Ozhaiyur	11226030	WMMBMBC	Sundupallam Road Km 0/0 - 0/630	15.000		WMM Spreading
152	Uthiramerur	Ozhugarai	11226028	WMMBMBC	Ozhugarai Vayalveli Salai Km 0/0 - 0/700	22.000		WMM Completed

153	Walajabad	Athivakkam	11231439	CC Road	Providing Cement Concrete Road to Chinnaiyanchatram Anganwadi Street	17.500		Physically Completed
154	Walajabad	Athivakkam	11231442	CC Road	Providing Cement Concrete Road to Athivakkam Thirumalpattu Colony Sudukadu Road	14.000		Physically Completed
155	Walajabad	Illuppapattu	11231433	CC Road	Providing Cement Concrete Road to Chittiyambakkam Periya street	17.500		Corewall Completed
156	Walajabad	Illuppapattu	11226037	WMMBMBC	MCB road to Sithiyambakkam (via) Rajakulam Km 0/0-0/700	30.800		WMM Spreading
157	Walajabad	Puthagaram	11226038	WMMBMBC	Puthagaram colony to Marutham Road Km 0/0-1/600	20.200		WMM Completed
					Total	**2575.0**	**698.15**	






Cluster wise Methodology

As per the instruction from the Commissioner of Revenue Administration, the vulnerable areas have been identified with reasons for flooding in those areas. Considering the past 2015 flooding and 2017 incessant rains flooding scenarios, the flood mitigation measures have been taken up in a cluster-wise methodology, which includes:

- Source and causes for Flooding
- Inundated areas
- Depth level and days of Flooding/Inundated
- Mitigation Measures/Solutions taken up by various departments in that Vulnerable location with comparison of stages of 2015, 2017 and present stage with recent photographs

PERMANENT FLOOD MITIGATION - KANCHEEPURAM DISTRICT

VARADARAJAPURAM AREAS

DURING 2015 FLOOD

DURING 2017 INCESSANT RAINS

REASONS FOR FLOODING:

1. Slender and Weak River banks of Adyar river near Mahalakshmi Nagar, Bhubaneswari Nagar, PTC Apartments and Baradwaj Nagar areas.
2. Diversion of Adyar canal due to encroachment near Mahalakshmi Nagar area.
3. Lack of proper cross draingage system in the residential area

Construction of 2 Nos. of RCC slab culvert of vent 2.00m at Shanthinagar at Varadharajapuram Panchayat

Construction of 2 Nos. of RCC slab culvert of vent 2.00m at Balajinagar at Varadharaja-puram Panchayat

Construction of Rain water Drain in Kumaran Nagar Main Street & Cross Streets in Varadarajapuram Panchayat. 400m Length

Construction of RCC slab culvert of vent 1.50m (3 Numbers) in Rayappa Nagar at Varadharajapuram Panchayat

Varadarajapuram Areas – Solutions and Action Taken

S.No	Suggestions	Department	Action Taken
1	Strengthening the banks of Adyar river and normalizing the curves.	PWD	Adyar banks have been strengthened for 2 KM 4 Shutter Inlet points Setting works have been completed with CSR fund.
2	Encroachments must be evicted and new canals should be provided	REVENUE / PWD	The Encroachments of 189 houses and 17 commercial buildings has been evicted. riverbank correction works have been completed.
3	Proper rain water drainage and Culvert works should be carried out.	RURAL DEVELOPMENT	11 drain and Culvert works have been completed with the cost of Rs 47.01 lakhs.

PRESENT 2019

YEAR	INUNDATION DAYS AND DETAILS
2015	7 Feet/7 days-5 streets fully inundated
2017	2 Feet/3 days-2 streets –inundated in Bhuvaneswari nagar and Astalakshmi nagar
2019	1 Feet / 1 day

Removal of Encroachments

Eviction along the river course/supply channels :

The removal of encroachments and the relocation of authorized structures play a crucial role in maintaining the integrity of waterways and minimizing the risks associated with floods. Following the unprecedented rains during 2015, a clear demarcation of the boundaries of rivers, the Adyar watercourse, and other water bodies was established, leading to the initiation of encroachment eviction processes.Subsequently, after the incessant rains in 2017, a large-scale eviction plan was developed. The details of the eviction efforts focus on flood-prone areas, especially along the courses of the Adyar River and the supply channels/surplus courses of major tanks, prioritizing these actions to mitigate future flood risks effectively.

Areas identified for Eviction in Water Bodies: - 760.57.23 Hec

Areas Evicted upto August Month: - 586.41.57 Hec

Eviction and Fencing of Government Lands

On 18.03.2022, during a session of the Tamil Nadu Legislative Assembly, the Hon'ble Minister for Finance and Human Resources stated, "The Government is taking every effort to retrieve and protect Government lands, including water bodies from encroachments."

7.1 MAJOR DISASTERS:

FLOOD:

In Kancheepuram District there are 5 Major River Basins namely Palar Basin, Adyar Basin, Cheyyar-Kiliyar, Vegavathy, Coovum Sub-Basins. Besides, there are numerous minor & major streams and channels criss-crossing the entire district, which normally receives 30% higher rainfall than Inland.

Before Disaster:

Structural:

- Clearance of waterways
- Removal of encroachments
- Cleaning of sewerage systems
- Repairing damaged roads
- Construct water harvesting system
- Construction of bunds, canals, and related infrastructure
- Maintenance and repair of sluice gates and spill way of reservoirs

Non-Structural:

- Public awareness campaigns
- Monitoring & updating flood related parameters
- Provision of Sand bags
- Deployment of dewatering pumps
- Update resource inventories
- Procurement of locally available boats
- Collection of details regarding earth movers, cutters, JCBs, and other related machinery
- Ensuring availability of generators
- Storage of essential medicine

  Mobilization of search and rescue equipment

During Disaster:

- Effective utilization of Machineries like Boats, Vehicles, and Helicopters to rescue maximum No. of People from the flood affected areas using Rescue equipment and Human resources to reduce the No. of Human losses.
- Installation of Mobile clinics adjacent to the temporary shelters to provide basic and immediate medical assistance to the people staying in

shelters and use Lifesaving equipment to minimize the loss of life

After Disaster:

- Providing Safe drinking water, food and shelter to the affected people.
- Offering financial aid to the victims.
- Restoring electricity and other basic infrastructure needs for the affected population.
- Providing medicines and other essential healthcare services to the victims.

EARTHQUAKE:

Kancheepuram district is situated at an elevation of 83.2 meters above sea level. The soil in Kancheepuram is described as inferior, consisting of a mixture of stone and gravel. This region is classified as seismic zone II, indicating a low damage risk zone. While no major earthquakes have occurred in Kancheepuram in recent times, the following preparations will be undertaken:

Before Disaster:

Structural:

- Construction of earthquake-resistant buildings.
- Strengthening of bridges.
- Analysis of historical seismic data and regional geology to guide architects, builders, and engineers in constructing safer structures.
- Implementation of earthquake-safe designs and building codes for public construction.
- Seismic strengthening and retrofitting of non-engineered structures.
- Identification and removal of unsafe buildings/structures.
- Development of seismic micro zonation maps.

Non-Structural:

- Dissemination of earthquake risk information to the general public residing in earthquake-prone zones.
- Campaigns promoting earthquake safety tips.
- Updating resource inventories.
- Collecting details of earth movers, cutters, JCBs, and other related machinery.
- Storage of medicine.

- Mobilization of search and rescue equipment.
- Planning logistics for response scenarios and evacuation routes.

During Disaster:

- Effective utilization of machinery, such as vehicles and helicopters, to rescue as many people as possible from affected areas, using rescue equipment and human resources to minimize human losses.
- Installation of mobile clinics adjacent to temporary shelters to provide basic and immediate medical assistance to those in shelters, employing lifesaving equipment to reduce loss of life.

After Disaster:

- Providing safe drinking water, food, and shelter to affected individuals.
- Offering financial aid to victims.
- Restoring electricity and other essential infrastructure for the affected population.
- Providing medicines and other basic healthcare services to victims.
- Implementing precautionary measures, such as vaccination and ensuring safe drinking water, to prevent epidemic outbreaks.

DROUGHT

The total annual rainfall received in Kancheepuram district during the year 2016 was approximately 979.45 mm, which is around 182 mm less than the annual average. Notably, the rainfall recorded up to November 2016 was about 687.13 mm, while an average of 468 mm is typically observed in October and November. However, in 2016, Kancheepuram District experienced a significantly low rainfall of only 55.53 mm during these months, resulting in a shortfall of 412.47 mm. Consequently, drought can be considered a major disaster in this district.

Before Disaster:

Structural:

- Renovation of existing ponds and open wells.
- Construction of check dams, along with cleaning and protection of existing water sources.
- Renovation of the existing lift irrigation system.
- Implementation of afforestation initiatives.
- Promotion of rainwater harvesting and soil conservation measures.
- Implementation of watershed management programs.

- Enactment and enforcement of laws regulating groundwater levels and the exploitation of natural resources.

Non-Structural:

- Public awareness campaigns regarding drought preparedness.
- Monitoring and updating of drought-related parameters.
- Updating resource inventories.
- Storage of medicines for emergencies.
- Ensuring water supply availability.
- Encouraging farmers to understand and adopt suitable crop patterns for their area.
- Disseminating drought risk information to the general public residing in drought-prone zones.
- Conducting campaigns for drought preparedness tips for agriculture and the general public.

During Disaster:

- Utilizing human resources effectively to address the drought situation, such as employing manpower under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) for desilting channels and strengthening bunds.
- Organizing mobile clinics or camps to treat human and cattle ailments.

After Disaster:

- Providing safe drinking water and food to affected individuals.
- Offering financial aid to victims of the drought.
- Providing medicines and other basic healthcare services to those affected.
- Implementing precautionary measures, such as vaccination and ensuring safe drinking water, to prevent epidemic outbreaks.

CHAPTER 8

RESPONSE PLAN

In Kancheepuram District, flooding during the monsoon season is a disaster that occurs almost every year. Hence, a comprehensive departmental-wise plan of action for the whole year is inevitable. By effectively planning and executing responsibilities and ensuring successful coordination, this disaster can be managed effectively. Therefore, an elaborate activity calendar is prepared as follows.

8.1ACTIVITY CALENDAR

DEPARTMENT	PRE-MONSOON	DURING MONSOON	POST MONSOON
HEALTH	• Training to all staff. • Awareness campaign and intersectoral co-ordination. • Identify outbreak prone areas from experience of previous year. • Identify high risk areas as per vector index. • Breeding container elimination campaign. • Clean public place campaign. • Clean water campaign. • Formation and rejuvenation of rapid response team. • Stock necessary drugs, insecticides, allied materials, test kits, disinfectants, larvicides, equipment etc. • Repair of fogging machines, sprayer • Advocacy and	• Intersectoral-Ordination Meetings. • Strengthen treatment facility. • Surveillance of diseases and outbreaks. • Dry day observation. • Intensive screening of immigrants for Malaria. • Release larvivores fishes in wells and other water sources. • Aedes surveillance work. • Super chlorination of water sources. • Indoor Residual Spray in Malaria reported areas. • Indoor space spray and	• Improve active and Passive blood collection for Malaria detection. • Conduct regular screening of migrant to detect Malaria and Filaria. • Detection and elimination of breeding sources of Aedes Mosquitoes. • Detection and elimination of breeding sources of Anopheles mosquitoes. • Identify water scarcity area and work to avail safe drinking water. • Conduct D&O trade Inspection regularly.

	sensitization meetings. • Plantation owner Meetings • Active Disaster Response Team for communication	thermal fogging at Dengue reported areas. • Supply of Doxycycline for the prevention of Leptospirosis to high-risk groups. • Public Health Act Implementation D&O Trade inspection. • Active DISASTER RESPONSE TEAM if may require	
REVENUE	• Maps and Survey sketches are provided to concerned departments so as to establish easy operation and administration procedure • Identifying low lying Areas • Inspection of cyclone prone Villages & Low-lying Areas • Forming a Team for Upcoming Monsoon Co-ordinating with Line Departments • Monitoring water Bodies & Reservoirs of the District • Inspection of Manpower & Resources in the District • Operating Emergency Operation Centre in 24*7 Pattern with Round clock manpower	• The Chairman of DDMA forms a Disaster team and TRIGGER Mechanism in order to avoid major damages • All Line Department officials, Army, Navy, SDRF, NDRF, Helicopter Teams and Revenue officials are in Co-ordination to rescue People. • Activating DEOC • people from Low-lying Areas are immediately rescued and transformed to Safer Places • Temporary Restoration • Shelter Homes are formed for affected Peoples	• Creating an activity calendar of the District with Reference of Past Disaster • Forming Disaster Response Team which includes all Line department Officials along with consider Revenue Officials • Enumeration and Inspection of Low- Lying Areas • Enumeration of flood Affected Villages and Cyclone prone Villages • Temporary and permanent Restoration • Damages in

	• Close contact with Line Departments and NGO's • Updating DDMP with updated contact numbers • Preparing Action Plans • Emergency Response teams • Emergency response methods • Monitoring IMD Warnings • Shelter, Evacuation Plans • Develop Trained Volunteers • Monitoring Early Warning Systems, Cyclone Shelters, Multipurpose Evacuation Shelters	• Evacuation Teams are in Charge for Evacuating Peoples from Risk • Medical Camps are formed for injured persons and for preventing from Diseases • Rapid response Teams are in action along with Local Bodies and NGO's and volunteers • Water Breaches and other damages in Tank or any other water Bodies is temporarily Restored in order to avoid losses • Road, Bridges Damages are temporarily restored by the Line Departments. • Food packets, Water Bottles and other needs will be immediately delivered to affected people • Hospitals and PHCs in the district functions at full strength 24hrs • Reporting Human Loss, Cattle Loss, Hut Damages &	crop, roads, Bridges and tank are permanently restored by the concern officials • Mapping and sketching of past Disaster affected areas • Desilting of channels • Availability of Resources & Inventories • Preparing Action Plans done in Past Disaster

		Crop Damages • Relief fund will be immediately given to the beneficiaries	
PWD	Clearing drain, chalked culvert etc. to avoid flooding during monsoon and to make road traffic worthy.	Road making pothole free which have been formed during monsoon and road making traffic worthy, cutting and removing branches of tree and fallen trees.	Resurfacing arranging to rectify the damaged road surface.
POLICE	• Equipment and vehicles would be inspected ensuring the working condition. Men and officers will be alerted and briefed.	• Police patrolling would be intensified. On emergencies, a Control Room become operational at District Police Office. • Activating Flood Control rooms in 24*7 Pattern • Rescue and Evacuation Teams • Reporting any Losses immediately	• Availability of Manpower • Ensure availability of Resources and inventories
FIRE	• Vehicles and equipment's are being kept ready to meet any eventuality.	• Attends emergency calls whenever required. • Rescue and Evacuation Teams • Availability of Manpower • Availability of Resources and inventories	• Forming Search and Rescue Teams in case of emergencies • Co-ordination with Volunteers and NGOs with contact no's • conducting Mock-Drills Periodically • Availability of Manpower • Ensure

			availability of Resources and inventories
AGRICULTURE	• Butter stock of paddy seeds will be made available by seed authority for resowing the flood damaged paddy areas. • Removal of silt and cleaning of water bodies with the assistance of Village Panchayaths (to avoid flood) • Construction of rain water harvesting structures popularizing. • Moisture conservation by mulching husk burial etc. • Improve drainage system- drainage channels are deepened before the onset of monsoon in all possible areas. • Propping of bananas/ Collar ringing method to avoid damage to bananas by wind.	• Provide proper drainage • clear canals near paddy fields. • Crop damages Relief	• Provide compensation for crop loss due to natural calamity.
ANIMAL HUSBANDRY	• Vaccination and deworming of animals & birds, • Conducting awareness	• Assessing & reporting of losses due to natural calamities • conducting Medical Teams for infected Cattles • Vaccination and deworming of animals & birds • Adequate	• Vaccination and deworming of animals & birds, • Conducting awareness

		Medicines in stock for emergency	
TNEB	• Removed all touching along HT and LT lines, tightened all jumper connections and re-shacked LT lines wherever necessary, cleared all transformer stations, replaced faulty lightning arrestors, breathers, earth connections • Filled good quality transformer oil in transformers wherever necessary. • Reconstituted D/M cell with one Convener, two joint Conveners and five Members.	• Staff engaged at all Sections for 24 hours with vehicle to attend any line breakdown and untoward incidents. Supply rectification being carried out on war foot basis. • Individual complaints are rectified by Section staff and major HT/LT breakdown cases are rectified by engaging contract workers.	• HT and LT lines to be cleared from creepers and touching. • All transformer stations to be cleared off vegetation. • Supply restored on temporary basis if any to be made pukka using standard accessories.
TWAD	• TWAD officials are given adequate alerts through circulars and conferences regarding maintaining all Treatment plants, Machineries in good working condition by overhauling. Also to ensure the water quality as per standards is also maintained. • Constituting a Blue Brigade team for pipe line work • Completing trenching works and other activities for pipe line	• All stand by arrangements is made ready and Level of treatment is carried out maintaining the desired level of residual chlorine to fight epidemics or waterborne diseases. • Water sample analysis is also carried out in District Quality control labs as well as in treatment plant.	• Any corrective measures to be taken are carried out and the regular water supply maintaining the required quality and quantity is ensured. • Constructing street fire hydrants at various locations for Providing tap facilities to Fire Engines.

	maintenance works • Procure bulk quantity of PVC pipes as ready stock for drawing or tapping water from nearest available source on emergency situations. • Address to TNEB officials to provide an uninterrupted power supply. • Constructing street fire hydrants at various locations for Providing tap facilities to Fire Engines and other agency	• Arrangements for super - chlorination wherever contaminations noticed in the water supply distribution systems. • Keep ready stock of sufficient quantity of bleaching powder for super chlorination where required. • Immediate action for carrying out repair works with the help of Blue Brigade team or alternate arrangement for water supply facility. • Immediate Refilling the pipe line trenches where rectification works carried out or where or where soil erosion occurred due to major pipe line bursts	
IRRIGATION	• Joint Inspection of Engineers from Mechanical Electrical and Civil Divisions to evaluate the preparedness for Monsoon. • Directions for the operation during	• Operator, workers and officers constantly watching the water level and controlled the water level to avoid any possibility of a	• Maintenance to the shutters, Motors and hoisting mechanism dam body and related structures.

	monsoon issued to the Engineer in Charge of the Dam. • Trial Run of the motors and hoisting Mechanism conducted to verify the operability during emergency. • Trees/ Branches of trees, or similar objects that may endanger the safety of Dams and buildings identified and actions taken to cut and remove them. • Alert message given to KSEB to provide un interrupted power supply for the shutter operation at all the time during monsoon. • Warning message given to the public regarding the shutter opening. • Generator arranged ready for hire to use in case of an emergency.	flood disaster. • Operators /workers arranged for night watching and duty log book maintained for recording the incidents and to bring to the notice of the Engineer in Charge immediately. • During heavy rains water level recorded in every hour. • Water storage level brought down to get enough time for opening all the shutters in case of an emergency. At the same time the required water level maintained for the pumping of Water Authority.	
IMD	• Carry over simulation and establish daily forecasting. • To increase numerical modelling, precision and accuracy. • To send daily report to DCR/ EOC of Collectorate and other departments.	• To monitor and compute met parameter for the district/ state. • Give the necessary response to SEOC, DCR/ EOC of respective Collectorates.	• To monitor the met parameter and give daily reports to concerned departments.

8.2 RESPONSIBILITY MATRIX

- The risks associated with hazards must be addressed through appropriate monitoring and targeted activities, highlighting the need for a vigilant forecasting system to manage the disastrous effects of a hazard.
- The structural framework begins with identifying, evaluating, and assigning well-defined roles and responsibilities to various authorities involved in disaster management. Previous disaster experiences have shown that authorities need to be sensitized both before and after an event occurs.
- Therefore, coordination among stakeholders is crucial for effective disaster management. To achieve this, pre-planning must take place before a disaster strikes, with specific tasks assigned to each department to facilitate targeted training in their respective areas.

RESPONSIBILITY MATRIX

Time	Task	Department/ Agency
D-72 Hr	Warning and analysing in the information.	IMD, SEOC, INCOIS.
D-48 Hr	Evacuation, Arrangement of temporary shelters.	Revenue, Police
D-24Hr	Mitigation Measures.	Revenue, Police, Fire& Rescue,Health, Guard, NGO's, PWD.
D-0Hr	Activate the Incident Command System.	DDMA, Police, fire, Health.
D+15 Min	Search and Rescue	Revenue, Police, fire& Rescue,Health, NGO's, PWD.

CHAPTER 9

RECOVERY & RECONSTRUCTION PLAN

- Disasters can devastate property, adversely affect livelihoods, reverse development initiatives, and damage public infrastructure and facilities. Affected individuals and communities often require both tangible and intangible support to regain normalcy and restart their lives. Each disaster presents an opportunity to reinforce community resilience and enhance infrastructure resistance, thereby minimizing the impact of future adversities.

- Recovery is defined as the assistance provided to individuals and communities affected by emergencies to achieve a proper and effective level of functioning. In the immediate aftermath of an emergency and over the longer term, recovery focuses on:

  - ✓ The physical aspects of restoring and reconstructing damaged community infrastructure and private housing.
  - ✓ The economic aspect of restoring productive activity and local employment.
  - ✓ The social, financial, and psychological aspects of personal, family, and community functioning.

- Recovery arrangements are designed to facilitate an enabling and supportive process that allows individuals, families, and communities to navigate the recovery journey. This is achieved through the provision of information, specialist services, and resources. The recovery process is thus a long-term endeavor in which all stakeholders—government entities, self-governance institutions, NGOs, and especially the affected individuals and communities—play a role.

- An emergency may have localized effects, such as a single house fire or a road/train accident, or it may result in widespread consequences, as seen in major cyclones or floods. Community support may be necessary regardless of whether the cause is natural or man-made. The capacity for individuals to recover from a disaster using their own resources varies based on the specific

circumstances of the disaster and the nature of their community. Repeated disasters can strengthen community coping mechanisms but can also entrap them in a vicious cycle of socio-economic vulnerability. Long-term disaster-proofing measures are essential to help communities break this cycle and reduce their vulnerability.

- Assistance provided will be tailored to meet the basic needs of affected individuals, with a focus on the most vulnerable groups. After disasters, special recovery measures are necessary for vulnerable populations, including people with disabilities, widows, orphans, children, and unaccompanied elders. Recovery plans will also be gender-sensitive and include cultural and biodiversity components. This requires sensitivity, extensive consultation with affected communities, and the inclusion of psychosocial expertise in the recovery teams. Assistance may include material aid, temporary accommodation, financial support, counseling, personal services, information, and community support, drawing from various sources.

- Experience shows that recovery is most effective when affected communities exercise a high degree of self-determination. Recovery should be viewed as a developmental process through which communities attain a proper level of functioning rather than merely returning to their previous state.

- Recovery encompasses more than simply replacing what was destroyed and rehabilitating individuals; it involves a complex social process that engages the entire community. This process is best achieved when affected communities exercise a high degree of self-determination, viewing recovery as a developmental journey rather than a remedial one.

- Agencies responsible for recovery management should incorporate the following principles into their plans:

  - ✓ Recovery from a disaster should be an enabling and supportive process that empowers individuals, families, and communities to achieve a proper level of functioning through information, specialist services, and resources.
  - ✓ The recovery process must be properly planned, clearly understood, and effectively executed by recovery agencies,

response agencies, and the community, necessitating requisite training for community members and implementing personnel.

- ✓ Recovery management is most effective when the complexities and dynamics of recovery processes are recognized and integrated with the changing needs of affected individuals, families, and groups. The evolution of recovery should involve community participation and leverage local resources and expertise for overall development.
- ✓ Recovery management is more effective when health, education, and social welfare agencies are actively involved in key decision-making at all levels.
- ✓ A holistic approach to recovery should integrate environmental, social, and psychological recovery processes with infrastructural and economic recovery.
- ✓ The recovery process is more effective when plans are comprehensive, executed promptly according to the planned schedule, and distribution is equitable.

Function	Nodal Agency	Participating functionaries / agencies
Coordination (Incident – Commander)	**District Administration (District Collector)**	SP, DFO, ADM, RDO, DMO, Tahsildars, Municipal corporation, NCC and other related agencies.
Communication	**Bharat Sanchar Nigam Limited**	Existing wireless operators (Police, Fire) Telecom Dept., mobile operators, FM Radio, Signals Regiment –, VHF, satellite communication, Community Radio.
Law and Order	**Police Dept.**	SP,Civil Defence and Home guards, Coast Guard
Search and Rescue	**Fire & Rescue Service (Divisional Fire Officer)**	Department of Revenue, TN Police, Civil Defence, Directorate of Health Services, Quick Response Team, DDMT, Coast Guard.

Evacuation	**Revenue Divisional Office**	TN Police, Fire Service, Directorate of Health Service, Civil Defence, Air Force, DDMT, Coast Guard.
Relief (Food, Damage Assessment, Donation, Shelter……)	**District Administration**	Department of Food and Civil Supplies, NGOs, DDMT, Other Organizations. Municipal Corporation, Electricity Board, TWAD, Health dept, Education dept, PWD, BSNL, Animal Husbandry, Agriculture. NCC, Blood Bank, Red Cross, NSS, Rotary Club, Lions Club
Emergency Medical Response	**Department of Health (DMO)**	Dispensaries, Mobile Dispensaries, Hospitals, Ambulance Service, Blood Bank, NSS, Rotary Club, Lions Club, IMA. Private medical association, Medicine Stockiest. Indian Red Cross, Civil Defence, Fire Service, DDMTs, NGOs.
Public Works Equipment support, debris and road Clearance.	**PWD**	Municipal Corporations, Water Authority, TNEB, PWD, Builders Association, Railway, Fire force.
Relief –Shelter	**Revenue**	Tahsildars, Municipality, TWAD, Local Civil Suppliers. PWD, Developmental Authorities, NGO representatives.
Cattle Resource Recovery and Care	**Animal Husbandry (District Animal Husbandry Officer)**	Animal medicine stockiest, Poultry Corporation NGOs and other organizations.
Logistics (Electricity-Water	**Electricity – TNEB Water - TWAD**	DC Office, Electricity Board, Transport Department, TWAD, Corporation, Private Road Ways, PWD, National Highway, Fire Force Dept, Police services, DDMTs, NGOs
Transport	**Motor Vehicle (RTO)**	TNSTC, Railway, PWD, Police, Municipality, Private Bus Owners, Scout, NCC etc.
Public Information and Help lines - Warning Dissemination	**Public Relations Department**	Media (print/audio-visual), NSS, Scouts & Guides, Education Dept., Department of Information and Publicity, BSNL, AIR etc

CHAPTER 10

MAINSTREAMING OF DISATER MANAGEMENT IN DEVELOPMENT PLANS

Mainstreaming Disaster Risk Reduction into Developmental Planning

Risks due to disasters are exacerbated by a lack of holistic approaches in developmental planning and project implementation. The multitude of schemes currently implemented in different sectors has not integrated disaster risk concerns arising from natural causes and anthropogenic interventions at both global and local levels. It is essential to mainstream risk concerns into developmental plans to establish a multi-pronged strategy that addresses risks from both natural and man-made causes.

The Legal Context

The Disaster Management (DM) Act mandates the District Disaster Management Authority (DDMA) to "lay down guidelines to be followed by the departments of the Government of the State for the integration of measures for the prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance." This includes reviewing the development plans of various departments to ensure that prevention and mitigation measures are integrated.

Under Section 38 (2) (e) of the Act, the State Government must ensure that measures for the prevention of disaster or mitigation are incorporated by government departments in their development plans and projects. The District Administration is also required to "review the development plans and projects of the different departments of the district and ensure that prevention and mitigation measures are integrated" in accordance with this Act.

Furthermore, the District Administration must ensure measures to reduce or mitigate the vulnerability of different areas of the district to various disasters within the District Development Plan.

Purpose of Mainstreaming

Mainstreaming disaster management into the development planning process has the following purposes:

1. To ensure that all government-originated or funded development programs and projects consider risk reduction.
2. To prevent government-funded development programs and projects from inadvertently increasing vulnerability to disasters across all sectors: social, physical, economic, and environmental.
3. To ensure that disaster relief and rehabilitation programs funded by the government contribute to development goals and reduce future disaster risk.
4. To prepare area-specific plans (prone to disasters) to facilitate the convergence of all future development programs and projects to mitigate risks.

"Do No Harm Approach"

The objectives of disaster prevention will be realized through the "Do No Harm Approach." Development plans will incorporate elements of impact assessment, risk reduction, and the 'Do No Harm' approach. Priority areas will include urban planning and zoning, updating and enforcing building codes, adopting disaster-resilient housing designs, flood-proofing, establishing early warning systems, generating community awareness, building technical competence, and promoting disaster-resistant technologies.

Mainstreaming Risk concerns a way of disaster management

'Mainstreaming Disaster Risk Reduction' means fully institutionalizing Disaster Risk Reduction (DRR) within the development and recovery agenda. This approach is a logical extension of the systems approach and entails fully integrating DRR within developmental planning and projects. The following

processes will facilitate the institutionalization of disaster risk reduction:

- Ongoing schemes and projects of the Ministries and Departments of the Government of India (GoI) and Government of Tamil Nadu (GoTN), as well as all government agencies and institutions, including Public Sector Undertakings, will be selectively audited by designated government agencies to ensure that they have addressed the disaster risk and vulnerability profiles of the local areas where such schemes and activities are being undertaken.
- At the conceptualization or funding stage, developmental schemes will be designed with consideration for any potentially hazardous impacts and incorporate measures for their mitigation.
- All developmental schemes will be pragmatic, incorporating awareness of local disaster risks and vulnerabilities, ensuring that the schemes have addressed these concerns and included specific provisions for mitigation.

Guiding Principles for Mainstreaming Resilient Communities

Mainstreaming efforts will focus on anticipating disasters and planning and executing disaster risk reduction strategies to promote community resilience by enhancing livelihood opportunities, health, culture and heritage protection, and socio-economic assets. As part of community involvement and promoting leadership among youth, approximately 974 able-bodied youngsters, including 319 women, have been enrolled as first responders. These first responders are trained in search, rescue, and evacuation operations involving governmental and non-governmental agencies. The systems approach will prioritize community involvement and capacity building in risk management while protecting ecosystem integrity to enhance

resilience.

Integrated Development of Vulnerable Areas

The focus on integrated development of vulnerable areas aims to reduce existing disaster risks and prevent emerging challenges. This includes mainstreaming disaster risk concerns into individual schemes and promoting the convergence of both structural and non-structural measures. All risk reduction strategies will prioritize social and financial inclusive growth, preventing and reducing hazard exposure and vulnerability, and ensuring the resilience of the district through robust preparedness, preventive, and mitigation strategies.

Major Areas identified for mainstreaming risk concerns into developmental plans.

The focus will be on major thrust areas for mainstreaming risk concerns into development plans, recognizing risk reduction as essential for sustainable and inclusive development. The identified major thrust areas are:

- Natural Resources Conservation
- Comprehensive River Basin development
- Restoration & Sustainable Management of Ecosystems
- Sustainable Agricultural Development
- Inclusive Development

The State Government has been implementing numerous projects and programs in these thrust areas, which were previously carried out with sectoral priorities and limited focus on disaster risk concerns during planning and implementation. To leverage the risk reduction potential of these programs, risk concerns will be mainstreamed into project components, with a focus on reducing disaster risks in vulnerable areas identified in the districts. These schemes will also integrate with special projects targeted at reducing risks in vulnerable areas.

Convergence and mainstreaming risk concerns within these major thrust areas will enhance the resilience of the community and the state in facing various disasters. The mainstreaming and convergence will also incorporate the principle of "Build Back Better" to significantly risk-proof the community against major disasters.

To enhance the resilience of the farming community against monsoon vagaries and climate change impacts, sustainable agricultural practices will be implemented with a special focus on rainfed agriculture. Mainstreaming of risk reduction strategies will be included in relevant schemes to promote groundwater aquifer recharge through integrated watershed management approaches and comprehensive rainwater harvesting at household, community, and institutional levels. Addressing the problems of seawater intrusion in vulnerable coastal areas will be a major focus through the establishment of tail-end regulators, construction of bed dams, and injection of freshwater in tail-end areas of drainage systems that drain into estuaries under MGNREGS, state schemes, and special risk reduction schemes, including private sector funding.

The mainstreaming will prioritize works in vulnerable areas under five major themes:

- Sustainable Agricultural Development
- Natural Resources Conservation
- Comprehensive Flood Protection
- Sustainable Management of Ecologically fragile area
- Inclusive Development

Natural Resources Conservation Schemes	
❖ MGNREGS ❖ Watershed Development ❖ Special Area Development Programmes ❖ Integrated Tribal Development ❖ Micro Irrigation ❖ Rain Water Harvesting ❖ Artificial Recharging of Ground Water ❖ New Irrigation Projects ❖ Prevention of Sea water Incursion	To Address ❖ Drought ❖ Floods ❖ Heat Waves ❖ Climate Impact
Comprehensive Management of River Basins Schemes	
❖ IAMWARM /TNIAMP ❖ Desilting of Tanks under G.O.50 ❖ Clearing & Widening Drainage Carriers to Original Standards ❖ Check Dams across River Courses with necessary scour vents for recharging the Downstreamstrectches ❖ Construction of Regulators and Barrages ❖ Riverine Reservoirs ❖ Instream Reservoirs ❖ Interlinking of Rivers	Flood protection and augumentation of aquifers during Incessant Rains & Cyclones through Structural interventions like ❖ Improving Storage Capacity of Water Bodies ❖ Moderate flood flows by constructing link canals and diversion canals ❖ River Training works ❖ Construction of new reservoirs / Dams / Anaicuts etc.

Sustainable Agricultural Development Schemes	
Mission for Sustainable Dry Land Agriculture, Rain fed Area Development for Horticulture Clusters	To Combat ❖ Drought and Climate mitigation
Sustainable Management of Ecologically fragile areas Schemes	
❖ Rain Water Harvesting ❖ Artificial recharging through check dams and recharge shafts ❖ Prevention of sea water intrusion ❖ Rejuvenation of failed Wells ❖ Eco restoration of marsh lands, estuaries and creeks ❖ Conservation & Restoration of Creeks Marsh lands and Wetlands ❖ River grading works	❖ Flood and ❖ Drought Mitigation ❖ Livelihood Support

Inclusive development Schemes	
Social Security Schemes Capacity building of the vulnerable sections Livelihood schemes	
❖ Social Security Schemes implemented by Revenue Department ❖ MGNREGS implemented by RD Department ❖ Tamil Nadu Rural Transformation Project (TNRTP) ❖ National Rural Livelihood Mission (NRLM) ❖ Tamil Nadu State Rural Livelihood Mission (TNSRLM) ❖ Tamil Nadu Urban Livelihood Mission (TNULM) ❖ Tamil Nadu Skill Development Mission Programmes ❖ Self Help Groups ❖ Fisheries Management for Sustainable Livelihoods (CDRRP) ❖ Economic Development of AdiDravidar and Tribal Welfare ❖ Social Security Schemes for differently abled persons ❖ Schemes implemented by various Welfare Boards.	❖ To enchance Community Resilience

MGNREGS Scheme

The objective of the scheme is to provide 100 days of guaranteed employment to every rural household whose adult members volunteer to do unskilled manual work. This scheme is a significant step towards establishing the right to work for rural people.

Apart from enhancing the livelihood of the rural poor, the scheme also aims to create assets that would enhance rural productivity, prevent the migration of rural people to urban areas, and establish social equality by empowering the rural poor.

In the Labour Budget of 2020-21, instructions have been given to include at least 60% of the expenditure under MGNREGS for Natural Resource Management (NRM) works in areas categorized as Over-Exploited and Critical Blocks.

Hence, the following works are given priority under the scheme:

1. Formation of new ponds, kuttai, ooranies etc.
2. Renovation of existing tanks, ponds & ooranies.
3. Desilting of supply and irrigation Channels.
4. Desilting of irrigation ponds and tanks and strengthening of bunds.
5. Formation of earthen roads.
6. Flood protection, water and soil conservation works.
7. Land development activities in SC/ ST, Small & Marginal farmers Lands.
8. Farm Ponds works.
9. Tree saplings and fruit saplings in convergence with the Agriculture Department, Horticulture Department, and Tamil Nadu Watershed Development Agency (TAWDEVA).
10. Afforestation activities in coastal panchayats.
11. Convergence with Sericulture Department - Mulberry cultivation, Green Mass Tree plantation and Mulberry sampling production.
12. Tamil Nadu Watershed Development Agency (TAWDEVA) – Prime Minister Krishi Sinchayi Yojana - Improvements in irrigation facilities in rural areas.
13. Convergence with Highways Department - Plantation along roads.
14. Convergence with Agricultural Engineering Department – Compartmental Bunding.

The District Administration has taken special initiatives to undertake a large number of check dams under MGNREGS as a measure to replenish groundwater potential.

AGAMT 23-24 Taken Up Details							
Sl. No	**Details**	**KPM**	**UTR**	**KNR**	**SPR**	**WAL**	**Total**
1	MI tank/Eri (weir/Sluice)	0	5	0	0	0	5
2	Ooranies / Kulams/kuttai	4	4	4	5	2	19
Total		**4**	**9**	**4**	**5**	**2**	**24**

AGAMT 24-25 Taken Up Details							
Sl. No	**Details**	**KPM**	**UTR**	**KNR**	**SPR**	**WAL**	**Total**
1	MI tank/Eri (weir/Sluice)	0	0	0	0	0	0
2	Ooranies / Kulams/kuttai	2	1	0	2	2	7
Total		**2**	**1**	**0**	**2**	**2**	**7**

இன்று (13.09.2024) காஞ்சிபுரம் மாவட்டம், உத்திரமேரூர் வட்டம், பெருநகர் ஊராட்சியில் மகாத்மா காந்தி தேசிய ஊரக வேலை உறுதி திட்டத்தின்கீழ் குளம் வெட்டும் பணியினை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள். உடன் மாவட்ட ஊரக வளர்ச்சி முகமை திட்ட இயக்குநர் திருமதி. க.ஆர்த்தி உள்ளார்.

CHAPTER 11

BUILD BACK BETTER APPROACH

APPROACH

Tamil Nadu is one of the few states that addresses the long-term concerns of the community by not only building resilient infrastructure but also improving access to services, imparting new skills, strengthening livelihood security, and expanding services through well-coordinated actions as part of the "Build Back Better" strategies. The process of "Building Back Better" begins with a commitment to deliver the best outcomes using available resources

while also accessing international funding to implement projects within specified time limits.

The "Build Back Better" strategies adopted by Tamil Nadu instill confidence in communities that have been psychologically traumatized and economically devastated by unprecedented disasters. The activities and measures initiated under these strategies focus on the prevention and mitigation of disaster risks. As part of the "Build Back Better" strategies and based on experiences gained during past disasters, the Government of Tamil Nadu conducted a needs assessment in a post-disaster scenario.

This assessment considered not only the damages to infrastructure and the losses incurred by the community but also the design interventions required through a detailed evaluation carried out by various agencies across sectors such as housing, industry, public infrastructure, health, agriculture and other sectors.

Based on the needs assessment, projects are undertaken with a special focus on risk-proofing housing infrastructure for vulnerable sections of the community and enhancing their livelihood opportunities and resilience. Additionally, the infrastructure across different sectors is reconstructed with a focus on improvement. The core philosophy of "Building Back Better" is deeply ingrained in all project designs and interventions, ensuring a comprehensive approach to recovery and resilience building.

CHAPTER 12

COORDINATION WITH OTHER AGENCIES FOR DISASTER MANAGEMENT

- Coordination with the following agencies will be established for pre-disaster warnings in the district:

AUTHORISED AGENCIES FOR PRE DISASTER WARNING

Disaster	Agency
Flood	Meteorological department
Earthquake	INCOIS, IMD
Tsunami	INCOIS, IMD
Cyclone	IMD,ACWC
Sea Erosion	Meteorological department
Adverse climate	Meteorological department
Biologically related	Health department
Land slides	Meteorological department
Accidents	Police Department
Fire	Fire
NGOs	Indian Red Cross Society, Sri Sathya Sai Seva Organisation

The following agencies have been conceptualized to carryout immediate response activities

AUTHORISED AGENCIES FOR IMMEDIATE RESPONSE ACTIVITIES

Activities	Agency
Communication	BSNL
Health & sanitation	District Medical Officer
Power	TNEB
Transport	TNSTC & RTO
Search & Rescue	Fire,Police,NDRF,SDRF Coast Guard
Relief supply	Tahsildar & D.S.O.
Water Supply	TWAD
Shelter	Revenue Department
Public works	P.W.D
Media	District Information Officer,PRO
Co-ordination	Addl.District Magistrate/ Deputy Collector(Gnl)
Collection of Valuables	Revenue Department

CHAPTER 13

MONITORING & EVALUATION

Systems equipped with monitoring and predictive capabilities offer timely assessments of the potential risks encountered by communities, economies, and the environment.

Hon'ble Chief Minister of Tamilnadu inspected Vulnerable spots in Kancheepuram District

Hon'ble Ministers Inspection at Vulnerable Points

Hon'ble Ministers Inspection at Vulnerable Points

Hon'ble Ministers Inspection at Vulnerable Points




Chief Secretary Inspection at Vulnerable Points




Monitoring Officer inspection at Vulnerable areas



District Collector inspection at Vulnerable areas







இன்று (22.08.2023) காஞ்சிபுரம் மாவட்டம், வாலாஜாபாத் ஒன்றியம், புத்தாகரம் ஊராட்சியில் உள்ள தூர்வாரப்பட்ட பில்லேரி குளத்தினை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள். உடன் ஊரக வளர்ச்சி முகமை திட்ட இயக்குநர் திரு.சா.செல்வகுமார் உள்ளார்.

இன்று (26.08.2023) காஞ்சிபுரம் மாவட்டம், மாங்காடு நகராட்சி பகுதிகளில் கட்டப்பட்டு வரும் மழைநீர் வடிகால் கால்வாய் அமைத்தல் பணியினை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள்.

இன்று (26.08.2023) காஞ்சிபுரம் மாவட்டம், கொளப்பாக்கம் ஊராட்சியில் மழைநீர் வடிகால் கால்வாயினை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள்.

இன்று (26.08.2023) காஞ்சிபுரம் மாவட்டம், மாங்காடு நகராட்சி பகுதிகளில் கட்டப்பட்டு வரும் மழைநீர் வடிகால் கால்வாய் அமைத்தல் பணியினை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள்.

இன்று (26.08.2023) காஞ்சிபுரம் மாவட்டம், மாங்காடு நகராட்சி பகுதிகளில் கட்டப்பட்டு வரும் மழைநீர் வடிகால் கால்வாய் அமைத்தல் பணியினை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள்.

இன்று (26.08.2023) காஞ்சிபுரம் மாவட்டம், மாங்காடு நகராட்சி பகுதிகளில் கட்டப்பட்டு வரும் மழைநீர் வடிகால் கால்வாய் அமைத்தல் பணியினை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள்.

இன்று (23.05.2024) காஞ்சிபுரம் மாவட்டம், குன்றத்தூர் ஊராட்சி ஒன்றியத்திற்குட்பட்ட பகுதிகளில் மழைநீர் வடிகால் கால்வாய் அமைக்கும் பணியினை மாவட்ட ஆட்சித் தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள். உடன் மாவட்ட வருவாய் அலுவலர் திரு.செ.வெங்கடேஷ், மாவட்ட ஊரக வளர்ச்சி முகமை திட்ட இயக்குநர் திரு.வை.ஜெயக்குமார், திருப்பெரும்புதூர் வருவாய் கோட்டாட்சியர் திரு.ஜ.சரவணக்கண்ணன் ஆகியோர் உள்ளனர்.

இன்று (23.05.2024) காஞ்சிபுரம் மாவட்டம், குன்றத்தூர் ஊராட்சி ஒன்றியத்திற்குட்பட்ட கொளப்பாக்கத்தில் நமக்கு நாமே திட்டம் கீழ் அமைக்கப்பட்டுள்ள மழைநீர் வடிகால் கால்வாய் பணிகளை மாவட்ட ஆட்சித்தலைவர் திருமதி.கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள். உடன் மாவட்ட வருவாய் அலுவலர் திரு.செ.வெங்கடேஷ், மாவட்ட ஊரக வளர்ச்சி முகமை திட்ட இயக்குநர் திரு.வை.ஜெயக்குமார், திருப்பெரும்புதூர் வருவாய் கோட்டாட்சியர் திரு.ஜ.சரவணக்கண்ணன் ஆகியோர் உள்ளனர்.

இன்று (30.08.2024) காஞ்சிபுரம் மாவட்டம், குன்றத்தூர் ஊராட்சி ஒன்றியம், கொளப்பாக்கம் ஊராட்சியில் மழைநீர் வடிகால்வாய் பணியினை மாவட்ட ஆட்சித்தலைவர் திருமதி கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள்.

இன்று (09.07.2024) காஞ்சிபுரம் மாவட்டம், வளாஜாபாத் ஒன்றியம், கூரம் ஊராட்சியில் ஏரிநீர் வெளியேறும் சாலையின் குறுக்கே கட்டப்படவேரும் மேம்பாலம் பணிகளை மாவட்ட ஆட்சித்தலைவர் திருமதி. கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள். உடன் மாவட்ட ஊரக வளர்ச்சி முகமை திட்ட இயக்குநர் திரு.வை. ஜெயக்குமார், வளாஜாபாத் ஒன்றியக் குழுத்தலைவர் திரு.ஆர்.கே.தேவேந்திரன் ஆகியோர் உள்ளனர்.

இன்று (25.06.2024) காஞ்சிபுரத்தில் நெடுஞ்சாலைத் துறையால் மேற்கொள்ளப்பட்டு வரும் உத்திரமேரூர் சாலையில் ஆசிரியர் காலனி அருகில் மழைநீர் வடிகால் அமைக்கும் பணியினை மாவட்ட ஆட்சித்தலைவர் திருமதி. கலைச்செல்வி மோகன், இ.ஆ.ப., அவர்கள் பார்வையிட்டு, ஆய்வு மேற்கொண்டார்கள்.

CHAPTER 14

RISK COMMUNICATION STRATERGIES

All stakeholder offices have established permanent landline numbers. Additionally, all officials involved in the disaster management process have been assigned mobile numbers. Furthermore, VHF sets have been provided to the following offices and officers:

15.1 Communication sets

Name of the Sets	Place of Installation
VHF Sets	1. Collector's Mobile (Car)
	2. Collector's Camp Office
	3.District Revenue Officer's Camp Office, Kancheepuram
	4.District Revenue Officer's Mobile (Car)
	5. Revenue Divisional Office,Kancheepuram
	6. Revenue Divisional Officer,Kancheepuram Mobile (Jeep)
	7. Revenue Divisional Office, Sriperumbudur
	8. Revenue Divisional Officer,Sriperumbudur Mobile (Jeep)
	9. Taluk Office, Kancheepuram
	10. Tahsildar, Kancheepuram (Mobile)
	11.Taluk Office, Uthiramerur
	12.Tahsildar, Uthiramerur(Mobile)
	13.Taluk Office, Sriperumbudur
	14.Tahsildar, Sriperumbudur(Mobile)
	15. Taluk Office, Walajabad
	16. Tahsildar, Walajabad (Mobile)
	17.Tahsildar, Kundrathur
	18. Tahsildar, Kundrathur (Mobile)
VSAT Phone	District Emergency Operation Centre (DEOC) – 81745
ISAT Phone	District Emergency Operation Centre (DEOC) - 8991119505 8991122582
IP Phone Details	Collector- 2170000 Elcot Room -1. 2170103, 2. 2170001

CHAPTER 15

IMPORTANT CONTACT NUMBERS

a) DISTRICT ADMINISTRATION

DESIGNATION	OFFICE	CELL NO
DISTRICT COLLECTOR	044-27238477 044-27238478	9444134000
DISTRICT REVENUE OFFICER	044-27238955	9445000903
SUPERINTENDENT OF POLICE	044-27237720 044-27238070	
PROJECT OFFICER DRDA	044-27237153	7373704201
PERSONAL ASST. (GENERAL) TO COLLECTOR	044-27237424	9445008138

S.NO	NAME (THIRU / TMT)	DESIGNATION	MOBILE
1	SATHYA	PERSONAL ASSISTANT (GENERAL)	9445008138
2	BAKIYALAKSHMI	SPECIAL DEPUTY COLLECTOR (SSS)	9442476862
3	JOTHISANKAR	ADDL.PERSONAL ASSISTANT (LAND)	9443098567
4	BALAJI	DISTRICT SUPPLY OFFICER	9445000168
5	SRINIVASAN	DISTRICT BACKWARD CLASSES OFFICER	9445477826
6	DHANALAKSHMI	DISTRICT ADI DRAVIDAR WELFARE OFFICER	7338801259
7	SRINIVASAN	AC (EXCISE)	9445477826
8	P.BHAVANI	HUZUR SARISHTADAR (GENERAL)	9566568681
9	KAMATCHI	HUZUR SARISHTADAR (MAGISTERIAL)	9787477948
10	E.MOHAN	SPECIAL TAHSILDAR (DM)	8056972640 9384056227

REVENUE DIVISIONAL OFFICERS

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE	MOBILE
1	P.I.ASHIK ALI	ASST COLLR, KANCHEEPURAM	27237081	9445000413
2	J.SARAVANAKANNAN	RDO, SRIPERUMBUDUR	27162230	9444964899

TAHSILDARS

S.NO	NAME (THIRU / TMT)	TALUK NAME	OFFICE	MOBILE
1	V.SATHYA	KANCHEEPURAM	27222776	9445000497
2	SATHISH	SRIPERUMBUDUR	27162231	9445000499
3	TNENMOZHI	UTHIRAMERUR	27272230	9445000498
4	G.KARUNAGARAN	WALAJABAD	27256090	9443990015
5	MALARVIZHI	KUNDRATHUR	24780449	9444279499

TALUK REVENUE INSPECTORS

KANCHEEPURAM TALUK			
S.NO	**NAME (THIRU / TMT)**	**FIRKHA NAME**	**MOBILE**
1	ARUMUGAM	GOVINDAVADI	9626322741
2	PRIYA	PARANTHUR	9655642326
3	SANKARI	THIRUPUKUZHI	7402467545
4	LOGANATHAN	KANCHEEPURAM	8838574418
5	SILAMBARASAN	SITTIYAMPAKKAM	9629540668
6	SINGIYAMMAL	SIRUKAVERIPAKKAM	9384094655

UTHIRAMERUR TALUK			
S.NO	**NAME (THIRU / TMT)**	**FIRKHA NAME**	**MOBILE**
1	SURYAKALA	SALAVAKKAM	9245351707
2	SARAVANAN	ARUMPULIYUR	9384094672
3	SHANKAR	KUNNAVAKKAM	9176987564
4	POONGUZHALI	KALIYAMPOONDI	9710230150
5	VINOTHKUMAR	THIRUPULIVANNAM	8838551639
6	DIVYA	UTHIRAMERUR	9943166541

WALAJABAD TALUK			
S.NO	**NAME (THIRU / TMT)**	**FIRKHA NAME**	**MOBILE**
1	YOGARAJ	WALAJABAD	8754232423
2	ABDUL HAMEED	THENNERI	7708740777
3	KARUNAMOORTHY	MAGARAL	9444658130

SRIPERUMBUDUR TALUK			
S.NO	**NAME (THIRU / TMT)**	**FIRKHA NAME**	**MOBILE**
1	HEMAPRIYA	SUNGUVARCHATRAM	8220628005
2	SATHYAMOORTHY	MADURAMANGALAM	9600494736
3	MURALI	VALLAM	9884849164
4	PRADEEPKUMAR	THANDALAM	7010830009
5	MAHALINGAM	SRIPERUMBUDUR	9042859353

KUNDRATHUR TALUK			
S.NO	**NAME (THIRU / TMT)**	**FIRKHA NAME**	**MOBILE**
1	KAMALI	MANGADU	9841778059
2	RAMYA	PADAPAI	8489669047
3	SARANYA	KOLLAPAKKAM	7200203236
4	SARAVANAN	KUNDRATHUR	8807063998
5	SIVAPRAKASH	SERAPANACHERI	9976735995

MUNICIPAL ADMINISTRATION

S.NO	NAME (THIRU / TMT)	DESIGNATION	MOBILE
1	NAVEENDIRAN	CORPORATION COMMISSIONER	7397372823
2	RANI (I/C)	COMMISSIONER, KUNDRATHUR	9841733993
3	RANI	COMMISSIONER, MANGADU	9962023814
4	GANESAN	CORPORATION ENGINEER,KPM	7397372824
5	USHARANI	MUNICIPAL ENGINEER, KUNDRATHUR	9445163378
6	SENTHILKUMARAN	MUNICIPAL ENGINEER, MANGADU	9443943403

TOWN PANCHAYAT

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE	MOBILE
1	N.LATHA	ASSISTANT DIRECTOR OF TOWN PANCHAYATS KANCHEEPURAM ZONE	27237710	8925809212
2	U.SARAVANAN (I/C)	ASSISTANT EXECUTIVE ENGINEER, KANCHEEPURAM ZONE	27237710	8925809238

TOWN PANCHAYAT - EXECUTIVE OFFICER

S.NO	NAME (THIRU / TMT)	TOWN PANCHAYAT NAME	OFFICE	MOBILE
1	MOHANARANGAN	SRIPERUMBUDUR	27162440	8925809268
2	PALANIKUMAR	UTHIRAMERUR	27272530	8925809269
3	MALA	WALAJABAD	27256034	8925809270

BLOCK DEVELOPMENT OFFICERS

S.NO	NAME (THIRU / TMT)	BLOCK NAME(BP)	OFFICE-044	CUG MOBILE
1	KOMALA	KANCHIPURAM	27277620, 27277621	7402606019
2	BANUMATHY	UTHIRAMERUR	27272233, 27272203	7402606028
3	BALAJI	SRIPERUMBUDUR	27162235, 27162757	7402606033
4	E.VARADHARAJAN	KUNDRATHUR	27174152,	7402606038
5	KANCHANA	WALAJABAD	27256031, 27257072	7402606022
S.NO	**NAME (THIRU / TMT)**	**BLOCK NAME(VP)**	**OFFICE-044**	**CUG MOBILE**
1	SURYA	KANCHIPURAM	27277620, 27277621	7402606020
2	LOGANATHAN	UTHIRAMERUR	27272233, 27272203	7402606029
3	M.BHAVANI	SRIPERUMBUDUR	27162235, 27162757	7402606034
4	SRIDEVI	KUNDRATHUR	27174152, 27174306	7402606039
5	KANNAN	WALAJABAD	27256031, 27257072	7402606023

HIGHWAYS

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	MURALIDARAN	DIVISIONAL ENGINEER (H) C&M CHENGALPATTU	044-22355003	9488840567/ 9500499222
2	ELANGOVAN	ASSISTANT DIVISIONAL ENGINEER,KPM	-	9841702398
3	ANANTHAKALYANARAMAN M	ASSISTANT DIVISIONAL ENGINEER (C&M),UTR	-	9952088588
4	KANIMOZHI M	ASSISTANT DIVISIONAL ENGINEER (C&M),SPR	-	8610794887

PUBLIC WORKS DEPARTMENT

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	S.SELVAKUMAR	EXECUTIVE ENGINEER, WRD,Lower Palar Basin Division	-	9952046172
2	SIVASHANMUGASUNDHARAM	EXECUTIVE ENGINEER, PWD BUILDINGS	-	9443541226
2	M.BASKARAN	ASSISTANT EXECUTIVE ENGINEER / TPA	-	8778022574

HEALTH DEPARTMENT

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	DR.GOPINATH MBBS.,	JOINT DIRECTOR HEALTH SERVICES, KANCHEEPURAM	27222091	7358151950
2	DR., SENTHIL M.B.B.S,	DDHS, KANCHEEPURAM	27222019	7358122438

TANGEDCO

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	K.KANNAN (I/C)	S.E. KANCHIPURAM CIRCLE	27222733	9445855444
2	ANBUSELVAM	S.E. Chennai South 1	24715121	9443343293
3	ARUNACHALAM	S.E. Chengalpattu	27423293	9445850111

AGRICULTURE & HORTICULTURE

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	TR.R. RAJKUMAR	JOINT DIRECTOR OF AGRICULTURE (JD) (I/C)	-	9865252270
2	MOHAN	D.D HORTICULTURE	27222545	9176691999

FIRE DEPARTMENT

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	ABDUL BARI	DFO	27224126	9445086136
2	BASKARAN	ADDL.DFO	27224126	9445086137

POLICE DEPARTMENT

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	TR.MARTIN ROBERTS	ADSP(HQ)	-	9498181360
2	TR.S.CHARLES SAM RAJADURAI	ADSP CWC	-	9498181269
3	TR.C.MURALI	DSP, KANCHEEPURAM	27233100	9952816693
4	TR.R.UTHAYAKUMAR, IPS.,	ASP, SRIPERUMBUDUR	27162202	9498100261

FISHERIES DEPARTMENT

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	JANARTHANAN	ASSISTANT DIRECTOR	24492719	9750327753

CO-OPERATIVES

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	TMT.JAYASHREE	JR (CO-OP)	-	7338720801

ANIMAL HUSBANDRY DEPARTMENT

S.NO	NAME (THIRU / TMT)	DESIGNATION	OFFICE-044	MOBILE
1	DR.P.JAYANTHI	REGIONAL JOINT DIRECTOR	27222689	9445001130

VOLUNTEERS / NGOs

S.NO	VOLUNTEERS / NGOs	MOBILE
1	RED CROSS SOCEITY CO-ORDINATOR	9842344411
2	CO-ORDINATOR, SRI SATHYA SAI SEVA ORGANISATION	9884859651
3	ASSISTANT GENERAL MANAGER, HAND IN HAND	9442230232

NDRF & SDRF & OTHERS

S.NO	DEPARTMENT	LANDLINES	CONTACT
1	NDRF CONTROL ROOM	04177246594	9442140269/9444143481
2	TNDRF CONTROL ROOM	044-26273400/26271133	9840302312
3	IMD CHENNAI	044-28271014	044-28230091/92
4	MARUTHAM CONTROL ROOM	044-24344618	-
5	SEOC	044-28410577	9445869843

CHAPTER 16

Do's and Dont's during Disaster

Flood:

DO's	DON'T's
• Raise furniture, electrical appliances on beds and tables • Put sandbags in the toilet bowl and cover all drain holes to prevent sewage back flow. • Use bleaching powder and lime to disinfect the surroundings • Eat freshly cooked or dry food. Always keep your food covered • Drink boiled water or use chlorine tablets to purify water before drinking as advised by Health Department • After the flood recedes, watch out for broken electric poles, damaged bridges, broken glass, sharp objects and debris • Use mosquito nets/ repellants to prevent malaria • Keep your mobile phones charged • Listen to radio or watch television for the latest weather bulletin and flood warnings • Keep strong ropes, a lantern, battery operated torches, extra batteries ready • Keep the First Aid Kit Ready with extra medication for snake bite and diarrhea • Keep umbrellas and bamboo sticks with you for protection from snakes • Stay in touch with local officials. Follow instructions when asked to evacuate • If you are being evacuated: pack some clothing, essential medication, valuables, important documents in water proof bags to be taken to the safe shelter; and turn off power and gas connection	• Don't enter flood waters. If you need to enter, then wear suitable footwear • Don't walk through moving water. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you • Don't get near the electric poles and fallen power-lines to avoid electrocution • Don't get near the sewage line, gutters, drains, culverts etc. • Don't let children remain on empty stomach • Don't leave the safe shelter until the local officials declare normalcy • Don't allow children to play in or near flood waters • Don't use any damaged electric goods, get it checked by an electrician before using it • Don't use the toilet or tap water if the water lines or sewage pipes are damaged • Don't eat food which has been in flood waters • Don't drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

before leaving the house • Keep cattle untied to ensure their safety	

HEAT WAVES

Heat wave conditions can lead to physiological strain, potentially resulting in serious health issues or even death. To minimize the impact during a heat wave and to prevent severe illness or death due to heat stroke, consider the following measures:

- Avoid going out in the sun, especially between 12:00 noon and 3:00 p.m.
- Drink sufficient water frequently, even if you do not feel thirsty.
- Wear lightweight, light-colored, loose, and porous cotton clothing. Use protective goggles, an umbrella or hat, and appropriate footwear when outside.
- Avoid strenuous activities during high temperatures, especially between 12:00 noon and 3:00 p.m.
- Carry water with you while traveling.
- Avoid alcohol, tea, coffee, and carbonated soft drinks, as they can dehydrate the body.
- Refrain from consuming high-protein foods and avoid stale food.
- If working outside, use a hat or umbrella, and apply a damp cloth to your head, neck, face, and limbs.
- Never leave children or pets in parked vehicles.
- Seek medical attention immediately if you feel faint or ill.
- Use oral rehydration solutions (ORS) or homemade drinks such as lassi, torani (rice water), lemon water, or buttermilk to help rehydrate.
- Keep animals in the shade and provide plenty of water.
- Maintain a cool home environment by using curtains, shutters, or sunshades, and open windows at night.
- Use fans, wear damp clothing, and take frequent cold-water baths.

TIPS FOR TREATMENT OF A PERSON AFFECTED BY SUNSTROKE:

- Lay the person in a cool, shaded area. Wipe their body with a wet cloth or wash them frequently, and pour water at normal temperature on their head to help reduce body temperature.

- Offer the person ORS, lemon sarbat, torani, or other rehydrating drinks.
- Take the person immediately to the nearest health center. Heat strokes can be fatal, so prompt hospitalization may be necessary.

Acclimatisation

Individuals who have moved from a cooler climate to a hot climate are at higher risk during heat waves. If you have guests from cooler areas during this season, they should avoid outdoor activities for about one week to allow their bodies to acclimatize to the heat. Acclimatization can be achieved through gradual exposure to the hot environment during heat waves.

Tsunami

- Determine if your home, school, workplace, or other frequently visited locations are in tsunami hazard areas along the coastline.
- Be aware of the height of your street above sea level and the distance from the coast or other high-risk waters. (Local authorities may place signboards).
- Establish evacuation routes from your home, school, workplace, or any other locations where tsunamis pose a risk.
- If your children's school is located in a designated inundation zone, inquire about the school's evacuation plan.
- Practice your evacuation routes.
- Utilize a Weather Radio or stay tuned to a local radio or television station to remain informed of local watches and warnings.
- Consult your insurance agent. Homeowners' policies may not cover flooding due to a tsunami. Ask the agent about the advantages of Multi-Hazard Insurance Schemes.
- Discuss tsunamis with your family. Everyone should understand what to do in a tsunami situation. Having these discussions in advance will help alleviate fear and save valuable time during an emergency. Review flood safety and preparedness measures with your family.

If you are in an area at risk from tsunamis

- Confirm whether your home, school, workplace, or other frequently visited locations are in tsunami hazard areas.

- Know the height of your street above sea level and the distance from the coast or other high-risk waters. (Local authorities may place signboards). Additionally, determine the height above sea level and the distance from the coast of outbuildings housing animals, pastures, or corrals.
- Create evacuation routes from your home, school, workplace, or any other places where tsunamis pose a risk. If possible, select areas (30 meters) above sea level or travel up to 3 kilometers inland, away from the coastline. If you cannot reach this height or distance, go as high or far as you can. Every meter inland or upward can make a difference. You should be able to reach your safe location on foot within 15 minutes. After a disaster, roads may become blocked or unusable. Be prepared to evacuate on foot if necessary. Footpaths typically lead uphill and inland, while many roads run parallel to coastlines. Follow posted tsunami evacuation routes, which will lead to safety. Local emergency management officials can advise you on the best route to safety and likely shelter locations.
- If your children's school is in an identified inundation zone, find out the school's evacuation plan. Determine whether the plan requires you to pick your children up from school or from another location. During a tsunami watch or warning, telephone lines may become overloaded, and routes to and from schools may be congested.
- Practice your evacuation routes. Familiarity may save your life. Be able to navigate your escape route at night and during inclement weather. Practicing your plan makes your response more instinctive, requiring less thought during an actual emergency situation.
- Use a Weather Radio or stay tuned to a local radio or television station to stay informed of local watches and warnings.
- Talk to your insurance agent. Homeowners' policies may not cover flooding due to a tsunami. Ask the agent about the benefits of Multi-Hazard Insurance Schemes.
- Discuss tsunamis with your family. Everyone should know what to do in a tsunami situation. Discussing tsunamis ahead of time will help reduce fear and save valuable time during an emergency. Review flood safety and preparedness measures with your family.

If you are visiting an area at risk from tsunamis

- Check with hotel or campground operators for tsunami evacuation information and find out the warning system in place for tsunamis. It is essential to know designated escape routes before a warning is issued.
- One early warning sign of a tsunami is the seawater receding several meters, exposing fish in shallow waters or on the beaches. If you notice the seawater receding, immediately leave the beach and head to higher ground, far from the shore.
- Protect Your Property
- Avoid building or residing within 200 meters of the high tide coastline.
- These areas are more likely to experience damage from tsunamis, strong winds, or coastal storms.
- Create a list of items to bring indoors in the event of a tsunami.
- A list will assist you in remembering items that can be swept away by tsunami water.
- Elevate coastal homes.
- Most tsunami waves are under 3 meters. Elevating your house can help minimize damage to your property from most tsunamis.
- Take precautions to prevent flooding.
- Have an engineer assess your home and recommend ways to enhance its resistance to tsunami water.
- There may be methods to divert waves away from your property. Improperly constructed walls could worsen your situation. Consult a professional for guidance.
- Ensure that outbuildings, pastures, or corrals are protected similarly to your home. When installing or modifying fence lines, consider positioning them to allow your animals to move to higher ground in the event of a tsunami.

What to Do if You Feel a Strong Coastal Earthquake

If you feel an earthquake lasting 20 seconds or longer while in a coastal area, you should:

- Drop, cover, and hold on. First, protect yourself from earthquake damage.

- When the shaking stops: Gather your household members and swiftly move to higher ground away from the coast. A tsunami may arrive within minutes.
- Avoid downed power lines and stay clear of damaged buildings and bridges, as heavy objects may fall during an aftershock.

If you are on land

- Be aware of tsunami facts. This knowledge could save your life! Share this information with relatives and friends; it could save their lives!

If you are in school and hear a tsunami warning:

- Follow the advice of teachers and other school staff.

If you are at home and hear a tsunami warning:

- Ensure your entire family is aware of the warning. Your family should evacuate your home if you reside in a tsunami evacuation zone. Move in an orderly, calm, and safe manner to the evacuation site or any safe location outside your evacuation zone. Follow the guidance of local emergency and law enforcement authorities.

If you are at the beach or near the ocean and feel the earth shake:

- Immediately move to higher ground; DO NOT wait for a tsunami warning to be announced. Stay away from rivers and streams that lead to the ocean, just as you would avoid the beach and ocean if there is a tsunami. A regional tsunami from a local earthquake could strike some areas before a tsunami warning is issued.
- Tsunamis generated from distant locations generally provide enough time for people to reach higher ground. However, locally-generated tsunamis, where you may feel the ground shake, may give you only a few minutes to move to higher ground.
- High, multi-storied, reinforced concrete hotels are found in many low-lying coastal areas. The upper floors of these hotels can serve as a safe refuge

in the event of a tsunami warning if you cannot move quickly inland to higher ground.

- Homes and small buildings in low-lying coastal areas are not designed to withstand tsunami impacts. Do not remain in these structures during a tsunami warning.
- Offshore reefs and shallow areas may help break the force of tsunami waves, but large and dangerous waves can still threaten coastal residents in these regions.
- Staying away from all low-lying areas is the safest course of action when a tsunami warning is in effect.

If you are on a boat:

- Since tsunami wave activity is imperceptible in the open ocean, do not return to port if you are at sea and a tsunami warning has been issued for your area. Tsunamis can cause rapid changes in water levels and unpredictable, dangerous currents in harbors and ports.

If there is time to move your boat or ship from port to deep water (after a tsunami warning has been issued), you should consider the following:

- Most large harbors and ports are managed by a harbor authority and/or a vessel traffic system. These authorities oversee operations during periods of increased readiness (should a tsunami be expected), including the forced movement of vessels if necessary. Stay in contact with the authorities should a forced vessel movement be directed.
- Smaller ports may not fall under the jurisdiction of a harbor authority. If you are aware of a tsunami warning and have time to move your vessel to deep water, you may choose to do so in an orderly fashion, considering other vessels.
- Owners of small boats may find it safest to leave their boat at the pier and physically move to higher ground, especially in the event of a locally-generated tsunami.
- Concurrent severe weather conditions (rough seas outside of safe harbor) could present a more hazardous situation for small boats, so physically moving to higher ground may be the only option.

- Damaging wave activity and unpredictable currents can affect harbors for a period following the initial tsunami impact on the coast. Contact the harbor authority before returning to port to verify that conditions in the harbor are safe for navigation and berthing.

What to do after a Tsunami

- You Continue to use a Weather Radio or stay tuned to a local radio or television station for updated emergency information, as the tsunami may have damaged roads, bridges, or other unsafe areas.
- Check yourself for injuries and seek first aid, if necessary, before assisting injured or trapped individuals.
- If someone requires rescue, call professionals equipped with the right tools to help.
- Assist those who need special support—infants, elderly individuals, those without transportation, large families who may require additional help in an emergency, people with disabilities, and their caregivers.
- Avoid disaster areas. Your presence might hinder rescue and emergency operations and expose you to further risks from residual effects of floods, such as contaminated water, crumbled roads, landslides, and mudflows.
- Use the telephone only for emergency calls. Telephone lines are often overwhelmed in disaster situations and need to remain clear for urgent communications.
- Stay out of buildings if water remains around them. Tsunami water, like floodwater, can undermine foundations, causing structures to sink, floors to crack, or walls to collapse.
- When re-entering buildings or homes, exercise extreme caution. Tsunami-driven floodwater may have damaged structures in unexpected ways, so carefully watch every step.
- Wear long pants, a long-sleeved shirt, and sturdy shoes. The most common injury following a disaster is cut feet.
- Use battery-powered lanterns or flashlights when examining buildings. Battery-powered lighting is the safest and easiest to use, as it does not pose a fire hazard for the user, occupants, or the building. DO NOT USE CANDLES.

- Inspect walls, floors, doors, staircases, and windows to ensure that the building is not at risk of collapsing. Check foundations for cracks or damage, as such issues can render a building uninhabitable.
- Look for fire hazards. Following an earthquake, there may be broken or leaking gas lines, and tsunami-flooded electrical circuits or submerged furnaces and appliances. Flammable or explosive materials may have been washed downstream. Fire is the most frequent hazard after floods.
- Check for gas leaks. If you smell gas or hear a hissing noise, open a window and quickly evacuate everyone outside. If possible, turn off the gas at the outside main valve and call the gas company from a neighbor's home. If you turn off the gas, it must be restored by a professional.
- Look for damage to electrical systems. If you notice sparks, broken or frayed wires, or smell burning insulation, turn off the electricity at the main fuse box or circuit breaker. If you must step in water to reach the fuse box or circuit breaker, call an electrician first for advice. Electrical equipment should be checked and dried before being returned to service.
- Inspect sewage and water lines for damage. If you suspect sewage lines are damaged, avoid using toilets and contact a plumber. If water pipes are damaged, notify the water company and refrain from using tap water. You can obtain safe drinking water from undamaged water heaters or by melting ice cubes made prior to the tsunami. Turn off the main water valve before draining water from these sources. Use tap water only if local health officials indicate it is safe.
- Be cautious of wild animals, especially poisonous snakes that may have entered buildings with the floodwater. Use a stick to probe through debris, as tsunami floodwater can flush animals out of their homes.
- Take pictures of the damage to both the building and its contents for insurance claims. Open windows and doors to help dry the building.
- Shovel mud before it solidifies.
- Check food supplies. Any food that has come into contact with floodwater may be contaminated and should be discarded.
- Expect aftershocks. If the initial earthquake is significant (magnitude 8 to 9+ on the Richter scale) and nearby, subsequent aftershocks could be as large as magnitude 7+ and capable of generating another tsunami. The

frequency of aftershocks will diminish over the coming days, weeks, or months, depending on the magnitude of the main shock.

CHAPTER 17

Linkages with IDRN

The IDRN (India Disaster Resource Network) is a nationwide electronic inventory of resources that catalogs equipment and human resources sourced from districts, states, and national-level line departments and agencies. This web-based platform is designed for managing the inventory of equipment, skilled personnel, and critical supplies necessary for emergency response. The primary focus of the IDRN portal is to empower decision-makers to quickly ascertain the availability of the resources required to address any emergency situation. Additionally, this database enables them to evaluate the level of preparedness for specific disasters.

In Kancheepuram District, the resources have been uploaded, and the status of the inventory is continually updated, as illustrated below:

IDRN PORTAL UPDATION DETAILS		
S.NO	**DEPARTMENT**	**NO. OF ITEMS UPDATED**
1	Emergency Operation Centre	24
2	Fisheries	4
3	Health Services	120
4	Highways Department	105
5	Town Panchayat	124
6	TNEB	64
7	Police	18
8	Fire and Rescue Services	141
9	School Education	974
10	Rural Development	85
11	Transsport	29
12	Corporation	68
13	NGO	7
14	Industries	1175
15	Medical & Rural Health Services	176

CHAPTER 18

TNSMART USAGE

- The Disaster Management Department/Tamil Nadu Disaster Risk Reduction Agency is implementing the Tamil Nadu – System for Multi-Hazard Potential Impact Assessment and Emergency Response Tracking (TN-SMART) project in collaboration with the Regional Integrated Multi-Hazard Early Warning System (RIMES) to enhance State Emergency Operations with essential technical capacities for effective disaster risk management in Tamil Nadu.
- TN-SMART is a dynamic web-based system equipped with advanced data analytics capabilities for archiving, analyzing, modeling, and communicating disaster risk information. The system serves as a data management platform for processing data related to weather, disaster risk, vulnerability profiles, disaster damage, and emergency response resources.
- TN-SMART will be utilized to assess the potential impacts of hazards based on weather forecast information, enabling the evaluation, generation, and designation of impact management options. Furthermore, potential risk and impact management options will be communicated to revenue officials at various administrative levels and first responders through a specialized mobile application, as well as via SMS, email, fax, and other means. The response tracking functionalities within the TN-SMART mobile application will facilitate two-way communication between the State Emergency Operations Center (SEOC) and information users.

Salient functionalities of the TN-SMART Mobile Application

- Provides weather forecasts
- Displays observed rainfall data
- Facilitates special communication of alerts
- Allows the public to send distress messages to concerned field officers
- Provides action taken reports from relevant officers to the public
- Issues salient alarm system alerts for disaster threats
- Identifies vulnerable locations based on previous disasters
- Displays vulnerable location maps
- Provides dos and don’ts during disasters

Usage of TNSMART by District Administration

PLANNING:

- TN-SMART includes an emergency response database with a response planning map (Firkha/Revenue circle and ward-wise) embedded with details on vulnerable locations, evacuation routes, relief shelters, response forces, first responders, response equipment, ambulance locations, MPES, and hospital locations. Utilizing this database allows the District Administration to finalize the disaster preparedness plan.

RISK COMMUNICATION:

- Disaster information is disseminated to field-level functionaries and the public through emails, app messages with alarms, social media, and websites.
- Risk factors are communicated to vulnerable populations via SMS, the Disaster Warning Announcement System (DWAS), etc.

EMERGENCY CALLS/MESSAGE REGISTRY:

- The general public seeks emergency support from the government during disasters. At such times, individuals send information accompanied by visuals (photographs) to help officers understand the nature and urgency of the problem and take appropriate action.
- An application has been developed to send distress messages with photos to the TN-SMART system. Similarly, emergency calls received through helpline numbers at the District Emergency Operations Center (DEOC) can be registered in this database.
- An icon is designed to flash red whenever emergency calls/messages are registered in TN-SMART.
- Once the issue has been forwarded to the concerned department, the flashing red icon turns blue.
- After actions are taken to resolve the issue, the emergency operation officer must enter relevant details into the system, causing the icon to turn green.

Identifying Vulnerable locations

- Flood-vulnerable locations in the districts can be viewed, along with details of previous flood thresholds and other relevant factors. This helps the public understand the flood status and vulnerability of their location.

Monitoring rainfall

- The TN-SMART app provides observed rainfall conditions across 400+ locations with one-day latency. Users can select stations through the map view. Choosing a station name allows users to view rainfall characteristics and prepare for any emergency situation.

Weather Forecast

- App users can access daily rainfall forecasts at various administrative levels, including state, district, taluk, and vulnerable locations.

Thailand Team inspection to study utility of TNSMART

CHAPTER 19

PREPAREDNESS ON CHEMICAL DISASTERS IN MAH UNITS

1.CHEMICAL DISASTERS IN MAH UNITS

The Directorate of Industrial Safety and Health enforces the Factories Act of 1948 and other allied labour laws in factories registered under this Act. Factories are registered under Section 2m(i) and 2m(ii) of the Factories Act:

Section 2m(i) – In a factory where 10 or more workers are working with the aid of power.

Section 2m(ii) - In a factory where 20 or more workers are working without the aid of power.

Factories involving the storage and handling of hazardous chemicals that may lead to a major accident (e.g., toxic emissions, fire, or explosion) are classified as Major Accident Hazard (MAH) factories. Specifically, these are factories where isolated storage and industrial activities involving hazardous chemicals equal to or exceed the threshold quantities specified in column 3 of schedules 2 and 3 of the Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989 (MSIHC Rules, 1989).

The manufacture, storage, and use of hazardous substances pose significant risks to industries, surrounding communities, and the environment. The accidental release of hazardous chemicals, which may be flammable, explosive, or toxic, can lead to emergencies. Depending on the nature of the substance and the magnitude of the release, an emergency may be confined within the industry (On-site Emergency) or may extend beyond the industry's boundaries, affecting the public (Off-site Emergency).

1.1 On –site Mitigation Measures: -

Actions to be taken in the event of an emergency during the handling or storage of hazardous chemicals with fire, explosion, or toxic gas release hazards.

1.2 Detection of Emergency: -

Emergencies can be detected through automatic systems such as smoke detectors for fire or gas sensors for toxic releases.

1.3 Responsibility of person noticing the Emergency.

The person noticing the emergency should immediately communicate it to superiors using available means (e.g., intercom, fire alarm, manual call points). They should clearly identify themselves and explain the nature of the emergency and its exact location.

1.4 Emergency Siren

Upon confirmation of the emergency, the concerned person will immediately operate the emergency siren.

1.5 Mobilization of the Action team (Emergency Task Force)

During the day, the Chief Executive will act as the "Site Controller." In their absence, the General Manager will take on this role. After general shift hours, the overall in-charge of shift operations will assume the responsibilities of the site controller. The site controller holds ultimate authority to provide directions regarding emergency response procedures and will operate from the Emergency Control Centre.

The Manager (Works), designated as the "Incident Controller," will arrive at the site and convey the situation's gravity to the Site Controller. The officer in charge of the fire crew/toxic gas release combat crew will reach the site with the necessary equipment and appliances for the emergency.

The Safety Officer/Chief Safety Officer will arrange for the necessary safety and personal protective equipment for personnel managing the situation.

The Site Controller will request assistance from the Tamil Nadu Fire Service, police, and neighbouring factories as needed. required.

1.6 Firefighting:

The following fire protection systems are utilized to combat fire:

- Fire hydrants and fixed fire monitors
- Fixed water sprinkler systems

- First – aid firefighting equipment

1.7 Arresting the toxic Gas release:

To arrest toxic gas release, the following precautions should be taken:

- Adequate protective clothing must be worn before entering an emergency zone, and other appropriate safety measures should be established.
- Repairs or investigations should only be performed by qualified personnel equipped with the correct tools.
- Approach from the windward side to ensure escaping gas is carried downwind to a lower level.

1.8 Statutory Authorities:

Government Departments' Participation in Mitigation of On-site Emergency. The following government departments participate in the mitigation of on-site emergencies:

- Fire service
- Police
- Health
- Transport
- Directorate of Industrial Safety and Health
- Tamil Nadu Pollution control Board

The Fire Service aids in firefighting, the Police Department maintains law and order, the Health Department provides medical assistance, and the Transport Department facilitates transport. The Pollution Control Board offers expert suggestions on safety and environmental matters.

1.9 Guidelines followed by the Director of Industrial Safety and Health while recording the on-site Emergency Plan.

Before recording the On-site Emergency Plan received from a Major Accident Hazard Factory, the following guidelines are followed:

- The On-site Emergency Plan is reviewed using a checklist for assessment preparedness, as provided in Annexure II.
- It is verified whether the On-site Emergency Plan includes the details specified in Schedule II of the Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989 (amended in 1994), outlined in Annexure III.

- A field-level officer, either the Joint Director of Industrial Safety and Health or the Deputy Director of Industrial Safety and Health, must conduct a personal inspection of the factory to verify the actual provision and maintenance of emergency facilities. During a mock drill conducted on the factory premises, the officer will observe the exercise and provide specific remarks in their report to the Director of Industrial Safety and Health regarding the merits and shortcomings of the On-site Emergency Plan.

2.1 Off-site Emergency Plan

An off-site emergency arising from chemical hazards has the potential to cause serious damage or loss of life beyond the plant boundary. Additionally, accidents during the transportation of hazardous chemicals by road, rail, or pipeline can also lead to off-site emergencies. Emergency services, including police, fire, and medical teams, must be prepared to handle such situations promptly and effectively. The escalation of a small incident into a major chemical disaster and its subsequent effects on life and property can be mitigated through a readily implementable emergency preparedness plan available to the concerned district authorities. To maintain preparedness for responding to accidents and minimizing their adverse impacts on the off-site population, Rule 14 of the Manufacture, Storage & Import of Hazardous Chemical (MSIHC) Rules, 1989, amended in 2000, under the Environment (Protection) Act (EPA) 1986, amended in 1991, mandates that the District Collector of the Industrial Area prepare an Off-site Emergency Plan as applicable.

2.2 Role of executives (at factory) and Government Department in Off-Site Emergency control Rescue and Mitigation Executives at Factory

- **Incident Controllers**

They will be present at the emergency site and will communicate the prevailing situation to the Site Controller.

- **Site Controllers**

They will inform the District Collector about the incident, detailing the magnitude of the emergency, the name of the chemical involved, the probable quantity, the possible damage events, the direction of the plume travel, and actions taken at the

factory for control. They should advise the District Collector on whether an Off-site Emergency should be declared. Additionally, they will report the incident to the Superintendent of Police, District Fire Officer, District Medical Officer, and others.

- **Government Departments' Participation:**

Government Departments Participation in mitigation of off-site Emergency:

- District Collector
- Revenue Department
- Police Department
- Medical Department
- Fire Services
- TNEB
- Pollution Control Board
- Town Panchayat
- Directorate of Industrial Safety and Health
- Transport Department

In Tamil Nadu, there are 166 factories classified under the Major Accident Hazardous Category, primarily located in five chemical belts: Manali-Ennore, Ranipet, Mettur, Cuddalore, and Tuticorin. A Major Accident Hazard Control Cell, established at headquarters, recommends suitable safety measures to these factories to prevent industrial disasters and develop mitigative measures to minimize pollution and environmental disturbances.

3. Emergency Scenarios: -

Major industrial hazards typically involve the potential for toxic chemical release, fire, or explosion. The scenarios include:

Events Involving Release of Toxic Materials:

- Slow or intermittent release of a toxic substance from a leaking valve.
- Rapid release for a limited duration due to pipe fracture, leading to a toxic cloud that may travel or dissipate.
- Massive release of a toxic substance due to the failure of a large storage or process vessel or uncontrolled chemical reaction.
- Loss of containment for a plant threatened by a fire.

- Events Involving Spillage of Flammable Liquids or Loss of Containment of Flammable Gases: Confined spill, Unconfined spill

Major fires without explosion risks, with hazards from high thermal radiation and smoke, such as:

- Pool fire
- Flash fire
- Jet fire

Explosion Events - Hazards from blast waves, flying debris, and high thermal radiation. Serious emergencies may include:

- Confined explosions
- Unconfined vapor cloud explosions
- Boiling Liquid Expanding Vapor Explosion (BLEVE)

Assessment of potential incidents must be conducted for each MAH installation, focusing on:

- The quantity of hazardous material that could be released.
- The rate of release.
- The effects of such a release.
- Thermal radiation from a fire at different distances.
- Blast over-pressures due to an explosion, based on distance from the incident site.
- Toxic effects impacting vulnerable zones (indicating concentrations).
- The number of people likely to be affected. affected

4. Control Measures:

Fire: -

- Automatic medium velocity sprinklers are installed.
- Foam pourers are provided.
- An emergency DG set is available for power supply to critical equipment.
- Firefighting equipment, such as hydrants, monitors, and portable foam tankers, is provided.
- Sensors and smoke detectors are installed.
- Personal Protective Equipment (PPE) is available.
- Leakages in the parking area for trucks are monitored using an explosimeter.
- Spark arrestors are fitted to all vehicles.

Explosion:

- Rupture discs and safety valves are provided.
- The storage tank area is isolated from the rest of the plant, and personnel entry is restricted.
- A gas monitoring system and explosimeter are installed.
- Remote-operated shut-off valves are provided.
- Gas detectors are positioned at strategic locations.
- A Work Permit System is followed.

Toxic Leakage:

- Sensors with alarms are installed.
- Scrubbing arrangements are in place to neutralize toxic gas releases.

5.Personal Protective equipment

- Safety equipment provided includes safety shoes, helmets, goggles, earplugs/muffs, safety belts, safety harnesses, fire proximity suits, self-contained breathing apparatus, and water gel blankets.

5.1 Emergency Control Centre

- A copy of the Onsite Emergency Plan is maintained.
- Topographical plans are available.
- Name, address, and telephone numbers of employees are documented.
- Emergency lights are installed.
- Standard Operating Procedures (SOPs) are available.
- Communication facilities are provided.
- Medical facilities are available.
- Ambulance facilities are included.
- Details of trained personnel are documented.
- Facilities at the first aid center are available.
- Antidotes and emergency medicines are stocked.
- A copy of mutual aid agreements made between organizations is maintained.
- Escape routes and evacuation zones are marked.
- An emergency shutdown system is in place.
- Firefighting and gas detection systems are operational.
- Self-contained breathing apparatus and fire proximity suits are available.

6. Medical Facilities

All hazardous factories are equipped and maintained with Occupational Health Centres, which include appropriate antidotes for the chemicals stored/handled. Additionally, an ambulance van is provided as stipulated in Rule 62-P of the Tamil Nadu Factories Rules, 1950.

6.1 Firefighting facilities

As per Rule 61(11)(e) of the Tamil Nadu Factories Rules, 1950, factories are equipped with fire water storage with a capacity of 450,000 litres, and the hydrant system is maintained at a minimum pressure of 7 kg/cm².

7. Onsite Emergency Plan

Each unit must prepare an Onsite Emergency Plan to assess emergency response measures. In Kancheepuram district, Onsite Emergency Plans for 26 Major Accident Hazard (MAH) Units have been submitted to the Directorate of Industrial Safety and Health. These plans are scrutinized periodically, and suitable safety and health measures are suggested to management for implementation and updating.

8. Off -Site Emergency Plan

The Ministry of Environment & Forests, New Delhi, has commissioned the preparation of an Off-Site Emergency Plan for Kancheepuram District. The project is currently underway by M/s Techno Safe Consultant Private Limited, New Delhi.

9.1 Safety Reports

As per Rule 10 of the MSIHC Rules, 1989, safety reports are submitted by management. In Kancheepuram district, out of 20 MAH units, 3 units are required to submit a safety report, and these 3 units have submitted their reports to the Directorate of Industrial Safety and Health.

9.2 Safety Audit Reports

In compliance with Rule 10(2) of the MSIHC Rules, 1989, Safety Audits are conducted by an External Auditor approved by DGFASLI and recognized by the

Directorate of Industrial Safety and Health. The reports are prepared according to IS 14489 of 1998. In Kancheepuram district, out of 19 MAH units, 3 units are required to conduct safety audits, and these 3 units have submitted their Safety Audit reports to the Directorate of Industrial Safety and Health.

9.3 Safe Operating Procedures

Safe Operating Procedures: Each MAH unit has prepared Standard Operating Procedures (SOPs) for their factory based on the hazardous substances handled. These SOPs are available in both Tamil and English for workers to follow during their work. A copy of the SOP is displayed near the work area in each factory.

10. Training

Each factory provides training to workers before employment. During their tenure, workers receive training from officials of the Directorate of Industrial Safety and Health through regular Safety Training Classes and Safety Awareness Programs. Additionally, workers are trained to handle emergencies in their factory through Mock Drills.

11. Rehearsing Emergency Procedures

Rehearsing Emergency Procedures: Once the Emergency Plan is finalized and documented, it must be communicated to all personnel concerned, ensuring that everyone knows their role during an emergency. Regular testing of the plan is essential to identify and rectify any defects.

According to Rule 13(4) of the Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989 (amended in 1994), the occupier must ensure that a full-scale mock drill of the Onsite Emergency Plan is conducted every six months in their factory.

The adequacy of emergency response measures and the preparedness level of key personnel are monitored by management through periodic Mock Drills, conducted every six months. Additionally, the National Disaster Management Authority conducts Mock Drills in Major Accident Hazardous Industries.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AMBULANCE

Standard Operating Procedures (SOP) for Chemical attack/ Emergency

Sr. No.	Task	Activity	Responsibility
1.	**Disaster Declaration and Plan Activation**	• Declare an off-site emergency in consultation with CRA and activate an off-site emergency plan • Establish immediate communication with DEOC, SEOC, TNSDMA and CRA	**Collector**
2.	**Mobilization & Deployment**	• Arrange an immediate deployment of various ERTs in affected sector(s). (Police, Fire, S&R, Medical, etc.) • Based on the emergency monitoring teams from off- site areas initiate counter measures (such as sheltering and medical help) • Arrange an evacuation of the affected/ likely to be affected workers and population to safer places • Activate systems of the State machinery to meet the necessary requirements of the public in the camp till the people are in a position to go back to their homes after the affected areas are cleared and	**Collector, Municipal Commissioner, DISH, Home Dept., Health Dept., Industry/ Industrial Association**
		• To ensure that necessary arrangements at evacuation/ relief centers is made with sufficient availability of: i) Food, ii) Water, iii) Blankets/Clothing iv) Medicines v) Lighting vi) Sanitation and Hygiene, etc. • To ensure necessary security arrangements for the personnel (Emergency responders/ relief teams) who are working at relief centers and involved in distribution of relief materials • To ensure that law and order is maintained at evacuation/relief centers and in the affected areas	**CRA, Civil Supply Dept., Collectors, Municipal Commissioner, DISH, Water Supply Dept., Health Dept., TNEB, Energy & Petrochemical Dept, TWADB & Local Authorities, Home Dept.**

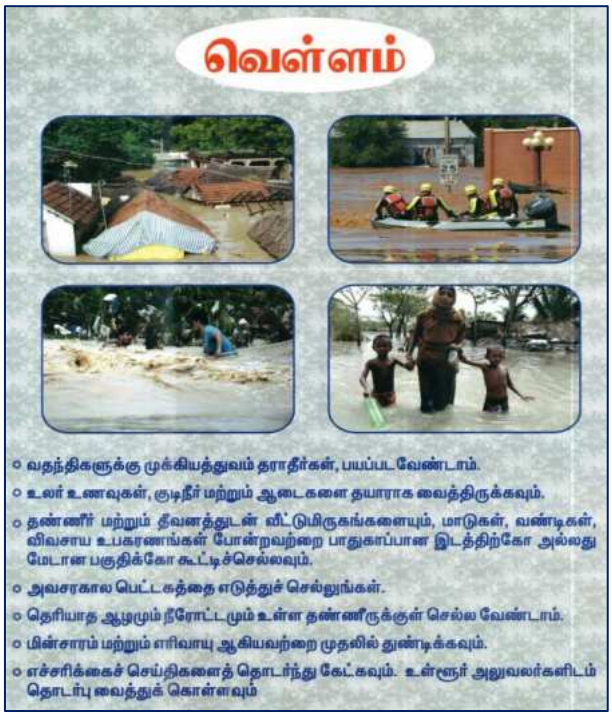
3.	**Addressing Health Related Issues**	• Ensure that the required medical assistance/ aid and medicines/ antidotes are provided to the affected people at site as well as at evacuation/ relief centers in the affected area and necessary records are maintained • Ensure that the hospitals are well prepared to deal with seriously injured persons • Keep adequate stock of essential medicines, antidotes, first-aid etc. at taluk/district hospitals. • If required, take the help of doctors/ paramedics f rom the list of doctors/ paramedics available at the taluk/district level for immediate medical assistance	**Health Dept.**
4.	**Information to public andmedia**	• Make an arrangement for providing useful, timely, correct, consistent, and appropriate information to the public and media in the event of a chemical	**Collector, Municipal Commissioner**
		• Ensure that the information to media/ general public about the coordinated response is released in an organized manner.	**DISH, CRA, Collector PRO**
5.	**Disposal of Dead bodies**	• Ensure following procedure is followed before disposal/handing over of dead bodies: a. Photographs of the dead bodies are taken, b. Identification of the dead bodies is done, c. Post Mortem wherever necessary and possible is carried out, d. Handing over dead bodies of persons known/identified to their relatives • Disposal of unclaimed and unidentified dead bodies	**Collector, Municipal Commissioner, Revenue Dept., Health Dept., Home Dept., Local Authorities, Industry,** **Industry/ Industrial Association**
		• Animal Husbandry Department to ensure medical aid to cattle that are injured. • Disposal of animal carcasses with the help of local bodies/health dept.	**Animal Husbandry Depts., Local Authorities, health dept.**

LIST OF MAJOR ACCIDENT HAZARD FACTORIES

S.No	Name And Address Of Mah Units	Harzadous Chemicals / Manufactured / Handled / Stored
1	Hyundai Motar India Limited, Plot No. H-1, SIPCOT Industrial Park, Irungattukottai	Propane, CNG Fuel, Paint, Furance Oil, HSDO, Solvents, Petrol, Diesel
2	Praxair India Limited, F-18, SIPCOT Industrial Park, Sriperumbudur.	Liquid Oxygen Liquid Nitrogen Hydrogen Silane
3	St.Globain Glass India Limited, Plot No.A1, SIPCOT Industrial Park, Sriperumbudur	LPG Liquid Oxygen
4	Clariant Chemicals (India) Limited, (Stahl India PVT Ltd) Singadivakkam Village, Attuputtur Post, Kancheepuram 631 561	Formaldehyde (33%) Oleum (120%) Sulphuric Acid (98%)
5	Hinduja Foundaries, K2, SIPCOT Industrial Centre, Arneri Village, Sriperumbudur.	Thinner, LPG ,HSD,Paint
6	Flamagas India Private Limited, 121/2c, Mambakkam (V&P), Kancheepuram	LPG
7	SHV Energy Private Limited, Irrangulam Village, Sriperumbudur, Kancheepuram	LPG
8	Daimler India Vehicles PVT Ltd, SIPCOT Industrial Growth Centre, Mathur Post, Sriperumbudur Taluk, Kancheepuram	Propane HSD
9	Capro Engineering India PVT Ltd., SIPCOT Industrial Park, Thirumangalam Village, Sunguvarchatram, Sriperumbdur 602 106.	LPG
10	Renault Nissan Automotive India PVT Ltd, Pinno 1, SIPCOT Industrial Part, Oragadam, Mathur, Sriperumbudur.	LPG HSD Acetyl Petrol
11	Samsung India Electronic PVT Ltd, Plot No. p-1, SIPCOT Industrial Park, Phase II, Sunguvarchathram, Sriperumbudur	HSD,LPG,Liquid O_2,MDI,Polyol,Cyclo Pentane
12	ETA Engineering PVT, Ltd., K-6, SIPCOT Industrial Park, Phase II, Mambakkam Sriperumbudur, Kancheepuram.	LPG
13	M/s. Johoku Manu Facturins Pvt Ltd., Plot No.7, SIPCOT Industrial Park, Vallam Vadagal, Echoor Post, Sriperumbudur	LPG
14	Ashok Leyland Ltd., (Foundary Division) Plot No.K2, SIPCOT Industrial Estate, Araneri Village, Sriperumbudur,	LPG,NSD
15	Royal Enfield Unit, Oradagam Plant, Plot No.A19/1, SIPCOT Industrial Growth Centre, Oragadam, Kancheepuram	LPG NSD

CHAPTER 20

PUBLIC AWARENESS -INFOGRAPHICS



IEC ACTIVITIES DO'S & DON'T'S – FOR PUBLIC AWARENESS

IEC ACTIVITIES DO'S & DON'T'S – FOR PUBLIC AWARENESS

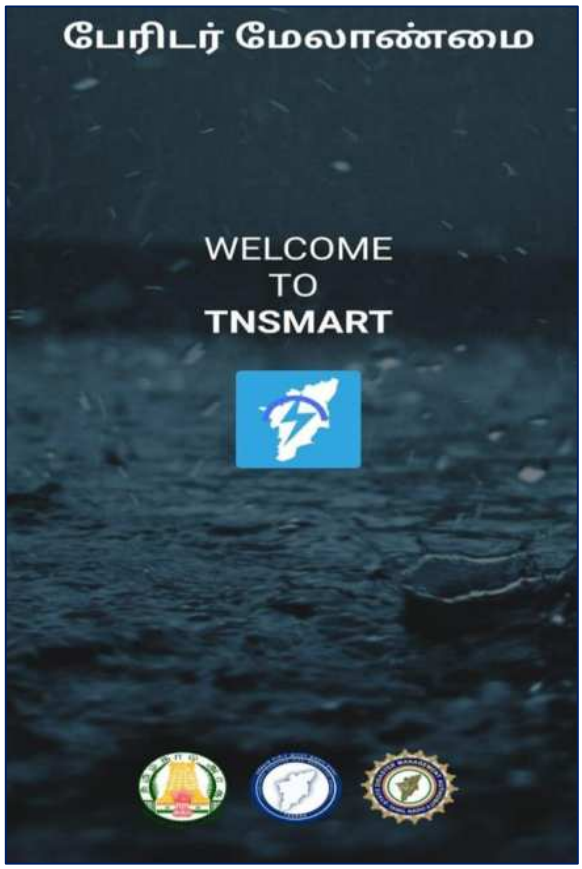
USUAGE OF MOBILE APPS

TNSMART- Tamil Nadu System for Multi Hazard Potential Impact Assessment, Alert, Emergency Response Planning & Tracking

TN-SMART assists in forecasting and analysis, risk mapping, and assessment, serving as a data management system for managing and processing weather forecasts, disaster risks, and emergency response resource data. This data is crucial during the various phases of disaster management.

TN-SMART's emergency response database includes a Response Planning Map (at the Firkha/Revenue circle and ward level) embedded with key details such as vulnerable locations, evacuation routes, relief shelters, response forces, first responders, response equipment, ambulance locations, Mobile Primary Emergency Services (MPES), and hospital locations. By utilizing this comprehensive database, the District Administration is able to finalize and implement its Disaster Preparedness Plan effectively.

- Provides Weather Forecast
- Observed Rainfall Data
- Special Communication of Alerts
- Send Distress Message from Public to Concern Field Officers
- Action Taken Report from concern Officers to the Public
- Salient Alarm System alerts on Disaster threatening
- Vulnerable Locations from previous Disaster
- Vulnerable Location Maps
- Do's and Donts during Disasters



Damini Mobile App:-

The Damini Lightning Alert application provides warnings to users about lightning based on their location. The app offers advance information on impending lightning activity, showing the exact location of current strikes and probable locations within a 40 sq. km radius. It also tracks the movement and direction of thunderstorms. In addition, Damini provides precautionary measures to be taken during lightning and general information about lightning safety.

TN-ALERT:-

TN alert TN-ALERT is an application developed to issue advisories and alerts for extreme events, including heavy rain, lightning, and flash alert situations.