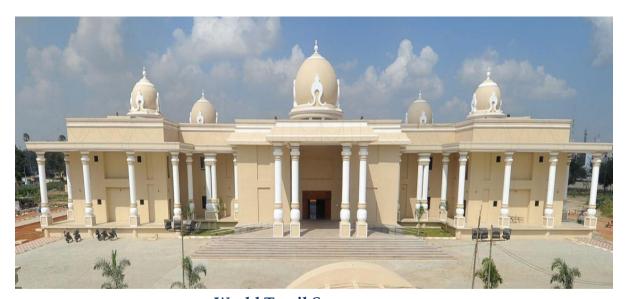
#### **Introduction:** (About Madurai)

Madurai District is situated in the South of Tamil Nadu State. It is bounded on the North by the districts of Dindigul, Thiruchirapalli and on the East by Sivagangai and on the West by Theni and South by Virudhunagar.

Madurai city as such is the second largest city by area and third largest city by population in Tamil Nadu. Madurai has been a major settlement for two millennia and is one of the oldest continuously inhabited cities in the world. Madurai is closely associated with the Tamil language, and the third Tamil Sangam, a major congregation of Tamil scholars, is said to have been held in the city.

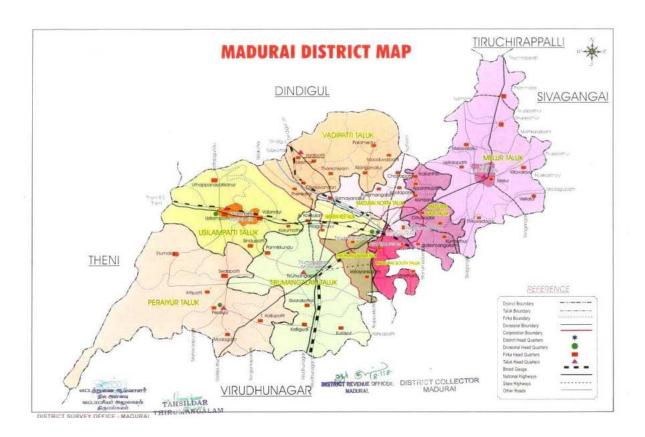


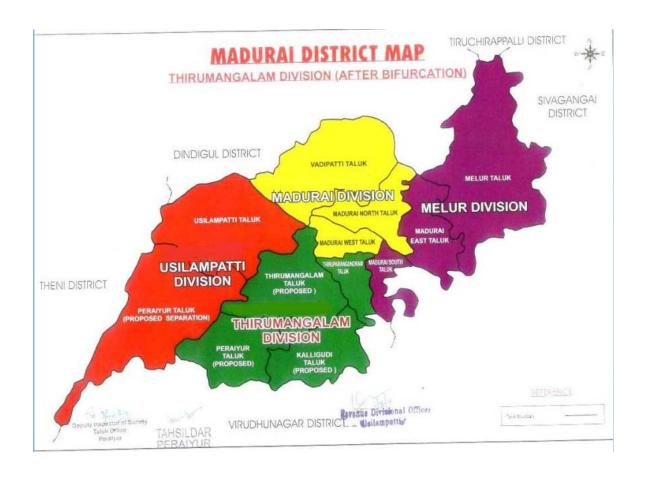
**World Tamil Sangam** 

#### **Geological history of Madurai:**

Madurai is located at 9.93°N 78.12°E. It has an average elevation of 101 metres. The city of Madurai lies on the flat and fertile plain of the river Vaigai, which runs in the northwest-southeast direction through the city, dividing it into two 40 almost equal halves. The Sirumalai and Nagamalai hills lie to the north and west of Madurai.

The land in and around Madurai is utilised largely for agricultural activity, which is fostered by the Periyar Dam. Temperatures during summer generally reach a maximum of 40 °C and a minimum of 26.3 °C. Winter temperatures range between 29.6 °C and 18 °C.





CHAPTER -3	<b>District Profile</b>	<u>e</u>		
Location		9.93°N 78.12°E		
Total Area		3,710		
Administrative Division		4		
Taluks		11		
Revenue Village		625		
Corporation		1		
Corporation Zones		5		
Municipalities		3		
Town Panchayats		9		
Village panchayats		13		
Major river		Vaigai river	c	
Other		Gundar, Sa	arguniyar, Vaippar	
No of Tanks maintained by P	WD/WRO	1314		
No .of MI Tanks tanks maint	ained by	950		
Panchayat Union	,	930		
Maximum Temperature		40 °C		
	Rainfall	2023		
Normal	Actual		Deficit / Shortfall	
874.86	962.77		+ 87.91	
Rainfall 2024 (August-24)				
Normal	Actual	Deficit / Shortfall		
874.86	468.96	- 405.90		
(1) Winter Season-2024		(January t	o February)	
Normal		35.40 mm		
Actual		24.33 mm		
(2) Summer Season-2024		(March to May)		
Normal		144.20 mm		
Actual		152.31 mm		
(3) South west Monsoon-202	4	(June to September)		
Normal		288.36 mm		
Actual		292.32 mm	292.32 mm (August-24)	
(4) North East Monsoon-2024	1	(October t	to December)	
Normal				
Actual				
Rain gauge stations		22		
Total population		3,038,252		
Male		1,526,475		
Female		1,511,777		
Sex ratio		990		
Age group population		313,978		
Population density sq km		819		
Average Literacy		83.45		
Natural Disaster			rth quake, Lightning and	
M. I.D.		Thunder	1 , 1 , 1 ,	
Man-made Disaster			val stampede, epidemics s like dengue, swin flu	

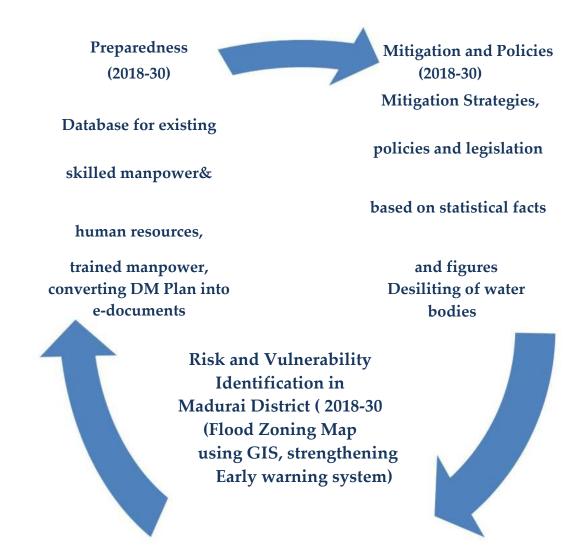
# DISTRICT DISASTER MANAGEMENT PERSPECTIVE PLAN & DISASTER MANAGEMENT GOALS (2018-30)

#### Sendai Framework - 2018-30

Sendai Framework (2018-30) has already spelled out its expected outcome, targets, goals and priority areas for Disaster Management. Major disasters in India were Tamil Nadu Kaja Cyclone-2018, Okhi Cyclone-2017, Kashmir Flood- 2014, Uttarakhand Flash Flood 2013, The Indian Ocean Tsunami 2004, Gujarat Earthquake 2004, Orissa Supercyclone-1999, Lattur earthquake-1993, the Great famine 1876-77 etc. In this event, a millions of people were suffered by uncoordinated and inefficient activities at various levels. It is being a major challenge to restore normal life within stimulated time. Important lessons learnt are many services which are under prepared for disasters. Systems neither intelligently integrated nor intelligently functional can cause delay in restoration process.

Thus Disaster Management sector needs several changes. It is due to constraints within their core of IT systems, poor integration, limited information, insufficient skills, passive resistant from community and lack of time etc. Innovation and Technology is the central core for disaster management in the present scenario.

IT will play vital role as a catalyze for disaster preparedness, response and mitigation, will provide platform to access information to various stakeholders. It helps to enable GIS based decision making support system, it will enable designing of Early Warning System and facilitate communication for timely relief and response, it build knowledge warehouse for planning and policy making.



## Goal of the District Disaster Management Plan

To prevent new and existing disaster risk through 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.

#### Scope and Purpose of District Disaster Management Plan:

The present plan-2024 will apply to risk of (a).small-scale and large scale (b) Frequent and infrequent (c). sudden, slow and on set disasters caused by man-made or natural hazards as well as related to environmental, technological and biological hazards. It aims to guide the multi-hazard management disaster risk in development at all levels as well as within and across all sectors

DDMP discussed in detailed about types of disasters prone to the district. Natural disasters related to weather like flood, lightning and thunder, drought and Heat wave. It also discussed about man-made disasters like fire accident, road accident, etc. This will be discussed detailed in Hazard, Risk and vulnerability assessment chapter.

District Disaster Management Plan discussed about management of any type of disasters, occurrence of any one disaster always brought us two or many secondary disasters, say flood may cause epidemic outbreak, earthquake may result in fire accidents, dam failure, bridge collapse etc. Thus DDMP focus on multi-hazard management disaster risk in development at all levels as well as within and across all sectors.

#### **Expected Outcome:**

Expected outcome of District Disaster Management Plan -2024 is substantial reduction in disaster risk and losses in lives, livelihoods and health in the economic, physical, social, cultural and environmental assets of persons, business & communities.

#### Aims and Objective:

The aims and objectives of the Plan is to minimize the loss of lives and social, private and community assets because of natural and manmade disasters –

- 1. To assess the risks and vulnerabilities associated with various disasters.
- 2. To develop appropriate disaster prevention and mitigation strategies.
- 3. To provide clarity on roles and responsibilities for all stakeholders concerned with disaster management so that disasters can be managed more effectively.

- 4. To develop & maintain arrangements for accessing resources, equipment, supplies and funding in preparation for disasters that might occur.
- 5. To ensure that arrangements are in place to mobilize the resources and capability for relief, rehabilitation, reconstruction and recovery from disasters.
- 6. To create awareness and preparedness and provide advice and training to the agencies involved in disaster management and to the community.
- 7. To strengthen the capacities of the community and establish to maintain effective systems for responding to disasters.
- 8. To carry out restoration and rehabilitation measures soon after the disaster strike

#### **Priority for Action**

Priority	Need for focused action at national, state and district level
One	Understanding disaster risk
Two	Strengthening disaster risk governance to manage disaster risk
Three	Investing in disaster risk reduction for resilience

#### **CHAPTER-5**

## HAZARD RISK AND VULNERABILITY ANALYSIS WITH SAMPLE MAPS & LINK TO VULNERABLE MAPS

Understanding disaster risk involves types of disaster prone to Madurai district. Hazard risk and vulnerability assessment study of the Madurai District will enable to understand disaster risk. Past disaster data will support and facilitate this action. Understanding Disaster Risk of Madurai district involves

- 1. Hazard Profile of the district (Study of Past disasters occurrence)
- 2. Types of disasters Prone to Madurai district
- 3. Vulnerable areas of Madurai districts (Villages/Taluk prone to various types of disasters) and preparation of vulnerable map
- 4. Preparation of Hazard Risk and Vulnerability Maps based on GIS application.

## Hazard profile of the Madurai District

Madurai District has identified and assessed the various hazards and risks to public health & safety that could give rise to disasters and has identified the facilities and other elements of the infrastructure that are at risk of being affected by disasters. They can be grouped into three categories:

S. No	Classification	Types of disasters
1.	Natural	
	Weather related	Flood –Urban flooding, Riverine flooding Thunder & Lightning Heavy winds Drought
2.	Geological	Earthquake
3.	Biological	Epidemics Pest attack Food poisoning / Hooch accidents
4.	Accidental	Fire accidents- Fire works/Short Circuits/LGP Explosion Stampedes Structural Collapse Air Craft/Rail./Road Accidents
5.	Infrastructure Disruption	Power failure, Water supply failure Sewage failure Accumulation of solid waste Critical resource shortage

## Occurrence of major disasters and damages in Madurai District

Floods have also occurred in areas, which were earlier not considered flood prone. Major part of the precipitation takes place in the monsoon months from October to December. The rivers bring heavy sediment load from catchments. These, coupled with inadequate carrying capacity of rivers are responsible for causing floods, drainage congestion and erosion of river-banks.

## Details of Loss of Human, Cattle and Hut Damaged -2023 & 2024

Category	2023	2024 (31.08.2023)
Human Loss	9 Persons	3 Persons
	(Male - 6; Female –3)	(Male – 3)
Hut Damages	314 Huts	53 Huts
	(Partly – 293; Fully – 7) (Partly – 50; Fully –	
	Pucca -14)	Pucca -1)
Cattle Loss	9 Cattles	5 Cattles

## **Human Loss Details – 2024 (31.08.2024)**

S. No	TALUK	VILLAGE	NAME OF THE DECEASED PERSON	DATE OF DEATH	SEX	CAUSE OF DEATH
1	Madurai North	North madruai	Balasubramani (Age-50)	16.05.2024	Male	Due to Wall Collapsed
2.	Melur	Chennakaram patti	Mahenderan (Age-47)	05.06.2024	Male	Due to thunder
3.	Madurai East	Andar kottaram	Shankar (Age-33)	07.06.2024	Male	Due to thunder

## Hut Damages - 01.01.2024 to 31.08.2024

#### **Abstract**

Month	Partly damage	Fully damage	Cattle Shed	Total	Relief Given	Declined	Balance
(1)	(2)	(3)	(4)	(5) (2+3+4)	(6)	(7)	(8) (5-(6+7))
Jan'24	12	1	-	13	13	-	-
Feb'24	-	-	-	-	-	-	-
Mar'24	-	-	-	-	-	-	-
Apr'24	-	-	-	-	-	-	-
May'24	19	1	1	20	20	-	-
June'24	-	1	1	1	-	-	-
July'24	6	1	1	6	6	-	-
Aug'24	14	1	1	14	14		
Total	51 Huts (Partly-50; Pucca-1)	2	-	53	53		

## <u>Cattle Loss details -2024</u> (31.08.2024)

Category	Relief Given	Declined	Balance
5		3	
(2- Goats; 1- Calf;	2 -Cow	(Not Postmorterm)	
2-Cow)		2- Goats; 1- Calf	

## RAINFALL - SEASON WISE COMPARISION 2023 & 2024

			2023		<b>2024</b> (31.08.2024)		
S. No	Season/ Monsoon	Normal	Actual	Shortfall	Normal	Actual	Shortfall
1	Winter (Jan – Feb)	35.40	13.72	-21.68	35.40	24.33	-11.07
2	Summer (Mar – May)	144.20	187.13	42.93	144.20	152.31	8.11
3	South West (June – Sep)	288.36	287.95	-0.41	288.36	292.32	3.96
4	North East (Oct - Dec)	406.90	473.97	67.07	406.90	0.00	-406.90
	Total	874.86	962.77	87.91	874.86	468.96	-405.90

## RAINFALL COMPARISION -- 2023 & 2024

S.	3.5 .4	2023			<b>2024</b> (31.08.2024)		
No	Month	Normal	Actual	Shortfall	Normal	Actual	Shortfall
1	January	22.40	0.84	-21.56	22.40	24.30	1.90
2	February	13.00	12.88	-0.12	13.00	0.03	-12.97
3	March	20.60	34.17	13.57	20.60	1.65	-18.95
4	April	59.80	54.52	-5.28	59.80	15.71	-44.09
5	May	63.80	98.44	34.64	63.80	134.95	71.15
6	June	39.80	28.83	-10.97	39.80	81.15	41.35
7	July	44.10	40.49	-3.61	44.10	26.15	-17.95
8	August	96.16	131.78	35.62	96.16	185.02	88.86
9	September	108.30	86.85	-21.45	108.30	0.00	-108.30
10	October	200.70	153.91	-46.79	200.70	0.00	-200.70
11	November	147.60	247.41	99.81	147.60	0.00	-147.60
12	December	58.60	72.65	14.05	58.60	0.00	-58.60
	Total	874.86	962.77	87.91	874.86	468.96	-405.90

## RAINFALL – 2024

874.86 mm Normal Annual Rainfall – 2024

468.96 <u>mm</u> (31.08.2024) Actual Rainfall – 2024

S1.	Month	2024				
No		Normal	Actual	Deficit / Shortfall		
1	January	22.40	24.30	1.90		
2	February	13.00	0.03	-12.97		
3	March	20.60	1.65	-18.95		
4	April	59.80	15.71	-44.09		
5	May	63.80	134.95	71.15		
6	June	39.80	81.15	41.35		
7	July	44.10	26.15	-17.95		
8	August	96.16	185.02	88.86		
9	September	108.30	0.00	-108.30		
10	October	200.70	0.00	-200.70		
11	November	147.60	0.00	-147.60		
12	December	58.60	0.00	-58.60		
	Total	874.86	468.96	-405.90		

## **Details of Rain Gauge Stations:**

S. No	Name of the Taluk	No. of Stations	Name of the raingauge staion in taluk office	Name of the raingauge station in other location
1	Madurai North	3	1. North Taluk office - Madurai North (IMD)	1.Tallakulam (PWD) 2. Periyapatti(PWD)
2	Madurai South	1	-	1.Viraganur (PWD)
3	Madurai East	3	-	1.Chittampatti (PWD) 2.Kallandiri (PWD) 3.Idayapatti (PWD)
4	Madurai West	0	-	-
5	Melur	3	-	1.Thaniyamangalam (PWD) 2.Melur (PWD) 3.Pulipatti (PWD)
6	Vadipatti	5	1.Vadipatti - Taluk Office (Revenue)	1.Sholavandhan (Revenue) 2.Sathaiyar dam (PWD) 3.Mettupatti (PWD) 4.Andipatti (PWD)
7	Usilampatti	2	1. Usilampatti - RDOoffice campus (Near Taluk office) (Revenue)	1.Kuppanampatti (PWD)

S. No	Name of the Taluk	No. of Stations	Name of the raingauge staion in taluk office	Name of the raingauge station in other location
8	Thirupparankundram	1	-	1.Airport Madurai (IMD)
9	Tirumangalam	1	1. Tirumangalam - Taluk office (Revenue)	-
10	Peraiyur	2	1. Peraiyur – Taluk office (Revenue)	1.Elumalai (PWD)
11	Kalligudi	1	1.Kalligudi - Taluk office Near (Revenue)	-
	Total	22	6	16

## **AUTOMATIC RAINGAUGE STATIONS & AUTOMATIC WEATHER STATIONS:**

#### **AUTOMATIC RAINGAUGE STATION DETIALS**

Sl. No	Station Code	Building Name	Taluk	Block	Firka name	Village	Ownership
1	ARG440	VAO Office	Mdurai North	Corporaction	Sathaman galam	Sathaman galam	Revenue Department
2	ARG441	RI Office, Kallandiri	Madurai East	Madurai East	Kallandhiri	Kallandiri I Bit	Revenue Department
3	ARG442	RI Office, Kunnathur	Madurai East	Madurai.East	Kunnathur	Varichiyur	Revenue Department
4	ARG443	Revenue Inspector office	Madurai West	Thirupuram kundram	Nagamalai pudukottai	Vilacheri	Revenue Department
5	ARG444	RI office	Vadipatti	Allanganallur	Palamedu	Palamedu	Revenue Department
6	ARG445	VAO Office	Vadipatti	Vadipatti	pannaikudi	Pannaikudi	Revenue Department
7	ARG446	RI office	Vadipatti	Allanganallur	Thanichiyam	Thanichiyam	Revenue Department
8	ARG447	RI office	Vadipatti	Vadipatti	Thenkarai	Thenkarai	Revenue Department
9	ARG448	Panchayat Union office	Vadipatti	Vadipatti	Neerethan	Katchaikatti	Revenue Department
10	ARG449	VAO Office Campus	Melur	Melur	Melur	Melur	Revenue Department
11	ARG450	Kirama Sevai Building	Melur	Melur	Vellalur	Vellalur	Rural Developme nt
12	ARG451	Vao Office Campus	Melur	Melur	Thiruvathavur	Thiruvatha vur	Revenue Department
13	ARG452	Panchayat office	Melur	Kottampatti	Kottampatti	Kottampatti	Revenue Department

14	ARG453	Vao Office near	Melur	Kottampatti	Karungala kudi	Karungala kudi	Revenue Department
15	ARG454	Near Panchayat office	Melur	Kottampatti	Melavalavu	Melavalavu	Rural Development
16	ARG455	Taluk office	Usilampatti	Usilampatti	Uthappa nayakkanur	Seemanuthu	Revenue Department
17	ARG456	Old Sub Registar office (Near)	Usilampatti	Chellampatti	Sindhupatti	Sindhupatti	Rural Development
18	ARG457	RI office	Tiruman galam	Tiruman galam	Pannikundu	Pannikundu	Revenue Department
19	ARG458	RI office	Usilampatti	Usilampatti	Utthappa naiyakkanur	Uthappa nayakkanur	Revenue Department
20	ARG459	VAO Office	Thiruparan kundram	Thiruparan kundram	Thiruparanku ndram	Nilaiyur bit 1	Revenue Department
21	ARG460	RI office	Thiruparan kundram	Thiruparan kundram	Valayankulam	Valayan kulam	Revenue Department
22	ARG461	VAO Office	Tiruman galam	Tiruman galam	A.Kokkulam	Kinniman galam	Revenue Department
23	ARG462	RI office	Tiruman galam	Tiruman galam	Thiruman galam	Thiruman galam	Revenue Department
24	ARG463	RI office	Peraiyur	T.Kallupatti	Peraiyur	Peraiyur	Revenue Department
25	ARG464	RI office	Peraiyur	Mothagam	Mothagam	Mothagam	Rural Development
26	ARG465	VAO Office	Peraiyur	Sedapatti	Athippatti	saptur	Revenue Department
27	ARG466	LIBRARY	Peraiyur	T.Kallupatti	T.Kallupatti	T.Kallupatti	Revenue Department
28	ARG467	Government primary health centre	Kalligudi	Kalligudi	Kalligudi	Kalligudi	Revenue Department
29	ARG468	RI office	Kalligudi	Kalligudi	Sivarakottai	Sivarakottai	Revenue Department
30	ARG469	Panchayat office	Kalligudi	Kalligudi	Kurayur	Kurayur	Rural Development
31	ARG470	Municipal Fertilizer Godown	Peraiyur	Sedapatti	Elumalai	Elumalai	Revenue Department
32	ARG471	RDO Office	Usilampatti	Usilampatti	Usilampatti	Usilampatti	Revenue Department
33	ARG472	Taluk office	Vadipatti	Vadipatti	Neerathan	Thathampat ti	Revenue Department
34	ARG473	RI office	Peraiyur	Elumalai	Sedapatti	Sedapatti	Revenue Department
35	ARG474	Panchayat office	Kalligudi	Kalligudi	Sivarakottai	Koodakovil	Rural Development

#### **AUTOMATIC WATHER STATION DETIALS**

S1. No	Station Code	Building Name	Taluk	Block	Village
1	AWS36	Taluk Office, Vadipatti	Vadipatti	Vadipatti	Thathampatti
2	AWS37	Union Office, Alanganallur	Vadipatti	Alanganallur	Alanganallur
3	AWS38	Taluk Office, Thirupparan kundram	Thirupparan kundram	Thirupparan kundram	Thirupparan kundram

#### Vulnerability assessment

To understand risks, it is important to assess vulnerable areas. The ACS/CRA has given guidelines to identify a location as Very High Vulnerability, High Vulnerability, Moderate Vulnerability, Low Vulnerability, as per the following norms:-

	a) Inundation of water and water level was more than 5 feet		
	due to heavy rains or discharge from waterbodies		
*** *** 1	b) Rescue operations carried out with the help of Central		
Very High	Forces/SDRF		
Vulnerability	c) Areas which are cut off and became inaccessible for		
	undertaking rescue and relief operations		
	d) Loss of lives or large scale evacuation carried out		
	a) Inundation of water and water level was 3-5 feet		
High Vulnerability	b) Rescue operations carried out only by Local police		
	or Fire services and local community		
Medium	Inundation of water and water level was 2-3 feet		
Vulnerability			
Low Vulnerability	Stagnation of water was below 2 feet		

#### Flood

To understand risks, it is important to assess vulnerable areas. ACS/CRA has given guidelines to identify a location as Very High Vulnerability, High Vulnerability, Moderate Vulnerability, Low Vulnerability, as per the following norms:-

Very High Vulnerability	<ol> <li>Inundation of water and water level was more than 5 feet due to heavy rains or discharge from waterbodies</li> <li>Rescue operations carried out with the help of Central Forces/SDRF</li> <li>Areas which are cut off and became inaccessible for undertaking rescue and relief operations</li> <li>Loss of lives or large scale evacuation carried out</li> </ol>		
High Vulnerability	<ul><li>a) Inundation of water and water level was 3-5 feet</li><li>b) Rescue operations carried out only by Local police</li><li>or Fire services and local community</li></ul>		
Medium Vulnerability	Inundation of water and water level was 2-3 feet		
Low Vulnerability	Stagnation of water was below 2 feet		

In Madurai District 27 vulnerable locations are identified which is frequently hit by flood. Among nine Taluks, type of risk are identified as below.

Sl. No	Taluk	Very High vulnerablity	High vulnerablity	Medium vulnerablity	Low vulnerablity	Total
1.	Madurai North	0	0	0	11	11
2.	Madurai East	0	0	0	1	1
3.	Madurai South	0	0	2	3	3
4.	Madurai West	0	0	0	4	4
5.	Thirumangalam	0	0	0	2	2
6.	Kallikudi	0	0	0	1	1
7.	Vadipatti	0	0	0	2	2
8.	Usilampatti	0	0	0	2	2
9.	Thirupparamkundram	0	0	0	1	1
	Total	0	0	0	27	27

#### Madurai North TALUK

Sl. No	Name of the location	Name &Type of local body Village Panchayat/Town Panchayat/Municipality and corporation	Reasons for Vulnerability
I.	Very High Vulnerablity	Nil	
II.	High Vulnerablity	Nil	
III.	MEDIUM Vulnerability	Nil	
IV.	Low Vulnerability	T.M Nagar, Mattuthavani Bus Stand(Opp) Koodal Pudur, Panangadi	Low lying area. Periyar Main Melur, Periyar Vaigai Basin Division is located here.

## Madurai South TALUK

S1.	Name of the location	Name & Type of local body	Reasons for
No		( Village Panchayat/Town	Vulnerability
		Panchayat/Municipality and	
		corporation	
I.	Very High Vulnerablity	Nil	
II.	High Vulnerablity	Nil	
III.	MEDIUM Vulnerability	Nil	
IV.	Low Vulnerability	N.M.R. Puram,	Heavy rain

## Madurai Thirumanaglam TALUK

Sl. No	Name of the location	Name &Type of local body (Village Panchayat/Town Panchayat/Municipality and corporation	Reasons for Vulnerability
I.	Very High Vulnerablity	Nil	
II.	High Vulnerablity	Nil	
III.	MEDIUM Vulnerability	Nil	
IV.	Low Vulnerability	1). Pullamuthur Tank H/o. Sathankudi 2). Vellankulam Kanmoi H/o. Vellankulam	Pullamuthur tank, Vellankulam Kanmoi
		<ol> <li>Ammapatti periyakulam</li> <li>H/o. Ammapatti Panchayat</li> <li>Naduvakottai Kanmoi</li> <li>H/o. Naduvakottai</li> </ol>	Ammapatti Periyakulam, Naduvakottai Kanmor

## Madurai Usilampatti TALUK

Sl. No	Name of the location	Name & Type of local body Village Panchayat/Town Panchayat/Municipality and corporation	Reasons for Vulnerability
I.	Very High Vulnerablity	Nil	
II.	High Vulnerablity	Nil	
III.	MEDIUM Vulnerability	Nil	
IV.	Low Vulnerability	Vadukapatti,	Aswama Nathi, Matharai
		Thottappanaikanur	Tank is situate in the area.
		Matharai	

#### Madurai Thirupparamkundram TALUK

Sl. No	Name of the location	Name & Type of local body Village Panchayat/Town Paanchayat/Municipality and corporation	Reasons for Vulnerability
I.	Very High Vulnerablity	Nil	
II.	High Vulnerablity	Nil	
III.	MEDIUM Vulnerability	Nil	
IV.	Low Vulnerability	Sholavandan	Thenkarai Tank is situated in the area.
		Melakkal and Vaigai River	Melakkal tank is situated in the area.

## **Vulnerability Assessment of the Madurai Corporation area:**

Vulnerability factors and damage to the physical structures are more when compare to rural areas, the important vulnerable areas of the Madurai district are identified based on the on the past disaster events.

S. No	Taluk	Name of the Vulnerable Location	Name of the Tanks / channel Located in vulnerable Location	Vulnerability types (Low/Medium / High)
1.	Madurai West	Vaigai - Kochadai	Vaigai - Kochadai - 67.30 Km	LOW
2.	Madurai West	Vaigai - Melakkal	Vaigai - Melakkal - 54.25 Km	LOW
3.	Madurai West	Petchiamman Padithurai, Taikkal Street, Yanaikal, Sungam Pallivasal	Vaigai River	LOW
4.	Madurai West	Kochadai	Vaigai River	LOW
5.	Madurai West	Thuvariman	Vaigai River	LOW
6.	Thiruparankundaram	Madakkulam	Madakulam Supply Channel - 10.80 km	LOW
7.	Madurai South	Anna Thoppu	Vaigai River	LOW
8.	Madurai South	Munichalai Area & Ismailpuram	Vaigai River	LOW
9.	Madurai South	N.M.R. Puram, Iravathanallur Village	Vaigai River	LOW
10.	Madurai South	Silaiman Virahanur Puliyankulam	Vaigai River	LOW
11.	Madurai East	Deputy Collector Colony, Sathamangalam, Aringar Anna Nagar.	Vaigai River	LOW

12.	Madurai North	Bibikulam, Chokkikulam Vaigai River		LOW
13.	Madurai North	Tallakulam	Vaigai River	LOW
14.	Madurai North	Thenur, Samayanallur upto Fatima College	Vaigai River	LOW
15.	Madurai North	Vaigai - Vilangudi	Vaigai - Vilangudi - 68.20 Km	LOW
16.	Madurai North	Sellur	Sellur Tank	LOW
17.	Madurai North	Thathaneri, Tiruvappudaiyar Koil Area, Vadakarai, Alwarpuram, Asari Thoppu, Gandhi Nagar Area, Vandiyur	Vaigai River	LOW

#### SYSTEMS APPROACH OF SUSTAINABLE DISASTER RISK MANAGEMENT

Madurai district is historically a drought prone district, due to its geographical location and erratic rainfall patterns. The District does not have any perennial river source. Vaigai rivers and other nonperennial rivers are seasonal. Therefore, the district is prone to drought and drinking water shortage.

The annual average rainfall of Madurai district is 874.86 mm. There is a need for the conservation of water as a drought proof measure. Various water conservation measures have been undertaken by the District Administration to handle the drought scenario.

#### Goals:

1) As Madurai is a drought prone district due to its geographic disadvantage and terrain, the main disaster management goal over the next three years is to ensure that every single household in each habitation gets safe and adequate drinking water supply and no single protest should be seen on the road by public with empty pots. Now in Madurai district, the water table is around thousand feet. We aim to improve the ground water table level to 200 or 300 feet by implementing various water conservation measures.

- 2) We aim to enhance the resilience of the farmers in the district to face the vagaries of monsoon, climate change and ensure that the extent of suffering and damage is minimized by various measures to combat drought / floods.
- 3) Madurai district has recorded the more number of road accident mortalities in the entire state. The district is criss crossed by several state and national highways. The district is home to a major pilgrimage center, Madurai Meenakshiamman temple, Alagarkovil temple which attracts pilgrims from across the country. Therefore, goal has been assigned to reduce the mortalities in road accidents in the short term through Road Safety plans, Identification of Black spots and carrying out necessary road engineering works in liason with RTO, Police and Highways department and aim towards achievement of Zero Fatality in the long term.

#### **DISASTER RISK MANAGEMENT STRATEGIES**

#### ❖ Prevention, Mitigation and Preparedness Strategies:

Mitigation, preparedness, and prevention actions are to be taken before a disaster to reduce the likelihood of a disaster (risk reduction) or the level of damage (vulnerability reduction) expected from apossible disaster. Vulnerability reduction is given priority overarisk reduction. The district can availit self offour mechanisms (singularly or together) to reduce risk and vulnerability.

- Long term planning for mitigation, preparedness and prevention investments in the district,
- Enforcement of regulations, particularly building –safety codes and land use plans,
- Review and evaluation of development plans and activities to identify ways to reduce risks and vulnerability.
- Capacity building, including warning, the provision of relief and recovery assistance and community
- Level identification of risk and vulnerability.

#### **Based**

On the inter imassessment of risk and vulnerabilities, the District will focus on the following areas for mitigation, preparedness and prevention;

- Resilience of life line systems (water, power and communications)
- Reduction in disaster impact on health care facilities, schools and roads
- Vulnerability reduction in flood-proneareas
- Vulnerability reduction to Accidents
- Improvement of Off-site Preparedness near Industrial sites.

#### <u>Institutionalisation of Disaster Management</u>

Strengthening Disaster Risk Governance to manage disaster risk involves formation of Disaster Management Committee. It is apex body which gives directions to all stakeholders for disaster management for Pre and post disasters activities Organogram for disaster risk governance.

#### Objectives of District Disaster Management committee

The District Disaster Management Committee provides with an effective vehicle for developing and maintaining a comprehensive disaster management program, as defined under the National Disaster Management Act, 2005, and to manage emergency response activities, which will ensure:

- Mitigation, preparedness, response & recovery
- → Support of emergency operations at the site(s)
- → Overall strategic management of the emergency
- ★ Risk identification, critical infrastructure protection
- → Mobilization of all municipal, voluntary, and other agencies required
- → Prevention of further injury, loss of life, property damage
- Establishment of information centres for the public and news media
- → Procurement of essential resources
- ✦ Restoration of utilities and other essential services
- Rehabilitation.

## The following officers constitute the District Disaster Management committee

1.	District Collector, Madurai District.	Chairman
2.	District Revenue Officer, Madurai	Vice Chairman
3.	Commissioner, Madurai Corporation, Madurai	Members
4.	Project Director, D.R.D.A. Madurai	Member
5.	Superintendent of Police, Madurai	Member
6.	Superintending Engineer (PWD) Buildings, Madurai	Member
7.	Superintending Engineer, TNEB, Madurai (Metro / Rural)	Member
8.	Superintending Engineer, TWAD, Madurai	Member
9.	Executive Engineer, (PWD – WRO), Madurai	Member
10.	Divisional Engineer, ( H & R.W ) Madurai	Member
11.	Divisional Engineer, ( Rural Roads) Madurai	Member
12.	Senior Regional Manager, TNCSC, Madurai	Member
13.	Joint Registrar (Cooperatives) Madurai	Member
14.	Revenue Divisional Officers, Madurai District	Member
15.	Municipality Commissioner- Melur, Tirumangalam & Usilampatti	Member
16.	Joint Director of Health Services, Madurai	Member
17.	Regional Transport Officer, Madurai	Member
18.	Public Relations Officer Madurai	Member
19.	Deputy Director of Health Services, Madurai	Member
20.	Assistant Director of Panchayats, Madurai	Member
21.	Assistant Director of Audit, Madurai	Member
22.	Deputy Superintendent of Police, Home Guards, Madurai	Member
23.	Executive Engineer (Building Constructions and Maintenance Division), Madurai.	Member
24.	Joint Director of Agriculture Madurai	Member
25.	Commanding Officer, (NCC) Madurai	Member
26.	Joint Director of Animal Husbandry, Madurai	Member
27.	All Personal Assistants to Collector, Madurai	Member
28.	District Supply Officer, Madurai	Member
29.	Divisional Fire Officer, Madurai	Member
30.	Area Commander (Home Guard) Madurai	Member
31.	Chief Educational Officer , Madurai	Member
32.	Special Deputy Collector (SSS), Madurai	Member

Various other committees chaired by the District Collector

- → Blind Rehabilitation Committee
- → District Screening Committee for Scheduled Tribals
- → District Health Society Committee
- → District Family Planning Committee
- → Task Force Committee on AVN INFULENZA

- → SPCA Committee
- → District Soldiers, Sailor & Airman board Committee
- → Administrative Committee
- → Jawans Bhavans Committee
- ★ Ex-Service man Committee
- → District Road Safety Committee
- → District Disaster Management Committee
- → Child Labour Rehabilitation and Welfare Society
- → Monitoring Committee (SSS)
- → District Level Monitoring and Review Committee
- → Patient Welfare Society
- → District Level Empowered Committee
- → Local Level Committee
- **♦** Consumer Protection Committee
- → Muslim Women's Aid Society
- → TABCEDCO Screening Committee (Irrigation Loan)
- → Vigilance Committee (DADWO)
- → PCR Committee

#### **Institutional Mechanism**

#### **District Emergency Operation Center**

EOC is established in the administrative block of district collectorate with all facilities i.e Toll Free No.1077 and VHF sets. Further, the Base Station, Mobile Station, and Walkie-Talkies are working in good condition. There are 4 numbers of repeated stations. Viz., Periayur BSNl site, Usilampatti BSNL site, EB Tower Pasumalai & Melur BSNl site.

#### **EMERGENCY OPERATION CENTER CONTACT DETAILS**

TOLL Free	1077
E-mail ID	<u>dteoc.mdu@gmail.com</u>
Landline No.	0452-2546160
DM Tahsildar No.	9443829511

VHF DETAILS				
No. of Repeater stations	04			
No. of Base stations	20			
No. of Mobile stations	27			
No. of Walki Talki	30			

#### **CHAPTER-8**

## **Preparedness**

#### **Investing in DRR – Structural Measures**

Undertaking necessary structural measures is one of the major thematic areas for action for disaster risk reduction and enhancing resilience. These consist of various physical infrastructure and facilities required to help communities cope with disasters. The implementation of these measures is essential to enhance disaster preparedness, a component of Priority-4 of the Sendai Framework. It is also an important component of investing in disaster risk reduction for resilience, which is Priority-3 of Sendai Framework.

#### **Investing in DRR – Non-Structural Measures**

Sets of appropriate laws, mechanisms, and techno-legal regimes are crucial components in strengthening the disaster risk governance to manage disaster risk, which is Priority-2 of the Sendai Framework. These non-structural measures comprising of laws, norms, rules, guidelines, and techno-legal regime (e.g., building codes) framework and empowers the authorities to mainstream disaster risk reduction and disaster resilience into development activities. The central and state governments will have to set up necessary institutional support for enforcement, monitoring, and compliance.

#### **Capacity Development**

Capacity development is a theme in all the thematic areas for action. The Sendai Priority-2 (Strengthening DRR governance to manage DR) and Priority-3 (Investing in DRR for resilience) are National Disaster Management Plan central to capacity development. The capacity development includes training programs, curriculum development, large-scale awareness creation efforts, and carrying out regular mock drills and disaster response exercises. The capability to implement, enforces, and monitors various disaster mitigation measures has to be improved at all levels from the local to the higher levels of governance. It is also strengthening the DRR governance.

#### 1. District Disaster Management Plan (DDMP)

District Disaster Management Plan for the year 2023 was updated.

#### 2. Taluk Level Disaster Management Plan

Taluk Level Disaster Management Plans were updated. The concerned Revenue Divisional Officers have certified them to be as per norms constituted by NDMA.

#### 3. Preparation of handbook on Disaster Management

The handbook on Disaster Management updated with the contact numbers of the district level officials and uploaded in the district website.

#### 4. Mock drills in vulnerable areas

In coordination with the District Administration, Fire & Rescue department is conducting mockdrill related to Disaster Preparedness. The details of the Mockdrills conducted in 2024 are given below:-

Month	Total No. of	Name of the Institution				No. of	
& Year	Mock Drills Conducted	Schools	Colleges	Public Places	Govt. Offices	Others	No. of viewers
Jan 2024	3	1			2		467
Feb 2024	10	1	1	1	5	2	822
Mar 2024	20	1	3	1	7	8	2467
April 2024	10		1		4	5	1145
May 2024	14				13	1	689
June 2024	8	1	1		5	1	805
July 2024	3	1			2		467
August 2024	4	1			3		162
Total	72	3	6	2	41	17	7024

## 5. Strengthening of the District Emergency Operation Centre(DEOC) & Toll Free No.1077

District Emergency Operation Centre has been set up at Collectorate and being manned by Special staff (Desk Personnel & office staff) round the clock. Toll free Number 1077 is in good working condition. The 1077 toll free number has been widely publicized through scrolls in local cable TV channels and newspapers. A mass sensitization campaign has been launched across the district in the form of rallies, human chains and painting speech & competitions on October'13th, ie, the International Day for Disaster Risk Reduction.

#### 6. Working condition of Rain gauges.

Rainfall and other data are being regularly entered in the web portal daily before 8 AM sharply. There are 22 raingauge stations, & all are in good working condition. The Revenue Divisional Officers and Tahsildars were directed to inspect all the rainguage stations in the district periodically and report back on repairs if any. Separate Whats App group is created with the contact numbers of all the district officials to share any information on disaster and to ensure free transmission of communication among the line departments.

#### 7. Identification of vulnerable areas.

District Administration has identified 27 vulnerable spots (prone to flood) based on the past disaster events. All the 27 vulnerable areas are of Low vulnerability. Inter department Zonal Teams have been constituted in each of the above locations and they have inspected all the vulnerable spots and submitted their reports.

#### 8. Preparation of maps of vulnerable areas

Vulnerable maps have been prepared Talukwise and submitted to the ACS/CRA through E-mail for approval.

### 9. Appointment of nodal officer at the Taluk level, Block level and vulnerable area level

Nodal officers at the taluk and block level & vulnerable point level have been appointed by the District Collector.

## 10. A) Formation of Zonal o Teams including local community at vulnerable locations.

The Zonal teams comprising of inter- departmental officials along with Local community members inspected all the vulnerable places.

#### B) Visiting of areas by Zonal Teams

The zonal teams have inspected all vulnerable areas in the district and submitted report for the corrective action to be taken to reduce the degree of vulnerability.

#### 11. Formation of Teams:

- I. Inter departmental Nodal Officers team
- II. Early Warning teams
- III. Relief and Rescue teams
- IV. Restroation teams
- V. Shelter and Food teams

#### **Additional 2 Teams:**

- VI. Traffic Management Committee
- VII. Rescue and Evacuation Committee

## 12. Inspection of Tanks/Water bodies/Supply Channels/Canals/river courses by PWD officials.

As per the instructions of the Additional Cheif Secretary/Commissioner of Revenue Administration, the Executive Engineer(PWD-WRD) Periyar-Vaigai Division- Madurai, Periyar Main Canal Division- Melur, Gundar Basin Division- Madurai have inspected the irrigation sources for desilting the tanks/supply channels and to evict all the encroachments in the water courses in their jurisdiction before the onset of North East Monsoon. The PWD officials have inspected the water course porambokes for desiltation and for removal of encroachments.

## 13. Preparation of deployment plan for rescue teams based on vulnerability mapping.

The Commissinor of Police, Madurai city and Superintendent of Police, Madurai rural has prepared deployment plan by forming sectors for all the 27 vulnerable places, each Sector having under the head of one DSP, inventories, SDRF trained personnel in rescue operations etc.,

## 14. Whether Private Institutions/Hospitals/ Educational Institutions/ Oil companies etc., sensitized about their preparedness

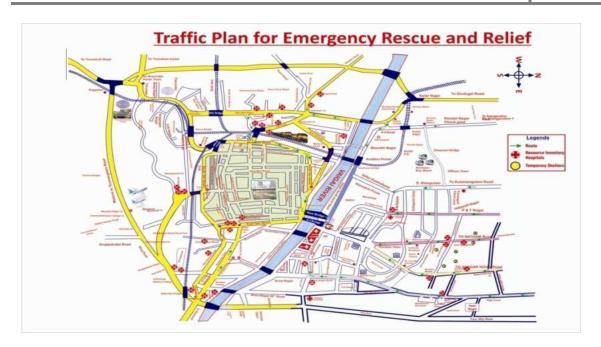
The Revenue Divisional Officers instructed to conduct meetings with the owners of Private Institutions/Oil companies/ Hospitals/ Hostels/ Commercial Malls and sensitized them with necessary emergency plans to meet any eventuality and copy of minutes have been sent. Further, a copy of the template available in the NDMA website was given for preparing their own disaster management plans.

## 15. Preparation of list of inventories machineries required for the vulnerable area Linkages with IDRN

India Disaster Resource Network (IDRN) is a portal providing nation-wide inventory of DM-related resources covering almost all the basic needs. It is a web based platform, for managing the inventory of equipment, skilled human resources and critical supplies for emergency response. Primary focus of IDRN portal is to enable the decision makers to find answers on availability of equipment and human resources required to combat any emergency situation. District administration is updating the web-portal based on the input received from the other departments. (as detailed in Annexure)

## 16. Preparation of traffic plan by police to establish green corridor to highly vulnerable areas.

In Madurai district, No area has been identified as very high vulnerability.



#### 17. Identification of advance storage points/location.

Civil Supply Dept.officials have been directed to identify advance storage points and locations to stock PDS food items in the eventuality of locations which may be marooned or cut off in the event of heavy rainfall and flooding.

#### 18. Identification and Training of First Responders (Volunteers)

First Responders and Volunteers of Red Cross Society, Nehru Yuva Kendra, NSS/NCC, Home Guards etc have been identified in each of the vulnerable locations A training programme was conducted for First Responders and Volunteers with Inter departmental zonal team officials by Revenue Divisional officers concerned. Corrective action to be taken in each vulnerable point was discussed and follow up action has been taken by the Line Dept. officials.

Identity cards have been issued to First responders and action is being taken to provide T.shirts with Reflection Jackets to them for easy identification during rescue and relief operations. The name and mobile numbers of trained swimmers, snake catchers have also been updated in the District plan and website.

#### **CHAPTER-9**

#### PREVENTION AND MITIGATION

#### **→ MAJOR DISASTER:**

Drought is the major disaster in Madurai district, as it is historically a drought prone district due to its location and erratic rainfall patterns. The District does not have any perennial river source. Most of the rivers except river Vaigai are seasonal. Therefore, the district is prone to drought which is a Major Disaster and drinking water shortages are being addressed by a detailed district disaster management plan.

During North East Monsoon period there is absolute possibility of heavy rains resulting in inundation, floods etc. The depressions in the Bay of Bengal may intensify into Cyclonic Storms. The three months period (i.e.October –December) categorized as 'PERIOD OF ALERT'. The last two weeks of November and the first week of December will be the 'CRUCIAL PERIOD OF ALERT'.

The rains may cause heavy inflow of water in the rivers and jungle streams, odais etc. These water courses then become too narrow to carry large volume of water which flows. Therefore the water overflows thereby breaching embankments, causes enormous damages to houses, huts, agricultural lands, roads, telephone lines, railway tracks, electricity lines and other public properties. It is not feasible to completely prevent nature's fury at one stroke. However, to minimize the damage caused by nature's onslaught and to ensure speedy relief thereby mitigating the sufferings of the people, the District Administration have to devise a plan and prepared a comprehensive "DISASTER MANAGEMENT PLAN". The plan can be set in motion when the need arises with the active co ordination of inter departmental officials.

#### **♦ ROLES & RESPONSIBILITIES OF VARIOUS LINE DEPARTMENTS**

The State Executive Committee will need to ensure that all line departments that are either likely to be affected in any disaster or will need to be involved in tackling a disaster are fully prepared with up-to-date contingency plans that will not be restricted to this but shall include the following:

- Each Department shall have their own Departmental Disaster Management plan
- Micro-Hazard zonation for each hazard will be taken up.
- Display of warning boards for general public in sensitive areas.

- ➤ Inventory of human and material resources available within the department at the local, district and state level is kept up-to-date and as broad based as possible.
- > Training, Capacity Building of the key members of the department
- Medical Preparedness nominate/designate hospitals, doctors and paramedics and emergency health management systems
- > State, District, Block and local level mock drills and rehearsals.
- Public Awareness generation and community training.
- ➤ Inventory of Lifeline buildings such as schools, hospitals, administration buildings to assess their safety and initiate measures for improving safety.
- Knowledge management of Disaster management skills
- Budgetary allocations for various mitigation, planning and preparedness activities.
- Yearly updating of the state plan. In case of a disaster, the plan will need to be reviewed immediately thereafter.
- ➤ Documentation of success stories, lessons learnt overall and review of the outputs of the plan.

#### **→ REVENUE DEPARTMENT**

- ➤ To coordinate the preparedness functions of all the departments; It is also overall in charge of formulating and implementing the disaster management policies of the state.
- Ensure adequate resources are allocated for preparedness work for all departments.
- Main support department for District Disaster Management Authority.
- Quick mobilization of resources for relief and rehabilitation to the Disaster spot.
- Ensure basic facilities for personnel who work on disaster response.
- Prepare a list of potential shelters while clearly specifying their capacity and check upon their suitability for accommodating people.

- ➤ Prepare a detailed contingency plan for disposal of dead bodies and carcasses that will include adequate documentation.
- Constitute Village-level Preparedness Teams with the help of local bodies, local NGOs and revenue officials.
- Coordinate Village/Habitation level mock drills with the assistance of the Rural Development department and Police.
- ➤ Prepare and update inventory of manpower and resources database every quarter inclusive of Earthmoving equipment, Tipper Lorries, Power saws, Cranes, Boats and any other lifesaving equipment.
- Annually facilitate the DDMA to update the District Disaster Management Plan.
- Maintain, activate and monitor the District level Emergency Operations Centre (DEOC).
- ➤ Establish communications with State Emergency Operations Centre (SEOC) and all stakeholders at all levels for the purpose of receiving and sending warning and information exchange through district control room.
- ➤ Ensure collation of expense accounts for sanctions and audits and to ensure full accountability for funds utilized through the department.

#### **♦** Transport Department

- > Develop a plan for mobilization of vehicles at short notice and to dovetail it into the disaster management plan for the department.
- Carry out survey and report condition of all highway systems at state and district level;
- Prepare an inventory of vehicles, tracks, buses, jeeps, tipper lorries and tractors of government and private agencies district wise and provide the list to the SEOC and DEOC;
- ➤ Issue standing instructions to the State transport department for providing buses for evacuation and relief;
- ➤ It is the primary agency for dealing with road accidents and in bringing in policies in this area.

#### + Police Department

- Prepare an operational Plan for responding to any type of disaster.
- ➤ Impart training to the members of the Police Force in first aid, evacuation, rescue and relief operations.
- ➤ To conduct Search and Rescue training to local volunteers and motivate youth and college students to participate; with the trained group, to constitute district wise 'Search & Rescue' Teams.
- Prepare an inventory of all manpower and equipment available to be utilized in managing a disaster.
- ➤ Identify the 'Risk" areas for different disasters and instruct the existing police installations located in those areas for keeping themselves in high alert for undertaking emergency rescue, evacuation and relief operations.
- Hold quarterly mock drills on disaster preparedness and response and involve local community and volunteers.
- ➤ Keeping police vehicles and other transport in readiness for deployment.
- Review maintenance of equipment and machinery that will be utilized during a disaster.
- ➤ Ensure the availability of adequate warning mechanism for evacuation.
- Installation of radio communication at the DEOC and at the affected site, during disaster.
- Identify alternative routes for possible hot spots.

#### **→** Fire and Rescue Services

The Fire Services in the States will be strengthened and made multihazard response outfit. The Fire and Rescue Service will perform the following functions:

- Organize public fire education programmes.
- Create and sustain awareness of the hazards of fire and other emergencies
- ➤ Heighten the role of the individual in the prevention of fire and other disasters.

- > rovide technical advice for building plans in respect of machinery and structural layouts to facilitate ascape from fire, rescue operations and fire management.
- ➤ Inspect and offer technical advice on fire extinguishers.
- ➤ Co-ordinate and advice on the training of personnel in firefighting to the departments / institutions in the State.
- ➤ Offer rescue and evacuation services to those trapped by fire or in other emergency situations and
- > Train and organize Emergency volunteer squads at community level

#### Public Works Department (PWD)

It is primary agency for maintenance of public infrastructure ranging from Buildings, Major irrigation Tanks, Dams and has the expertise to take up Flood prevention works.

- ➤ Department of Public Works takes precautionary steps for the protection of government property against possible loss and damage during a disaster.
- Formulates guidelines for safe construction of public buildings.
- ➤ Prepare source lists with specifications and position of heavy construction equipment in the state.
- ➤ Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies.
- ➤ Establish communication with state Emergency Operations Center (SEOC),

  DEOC and Departmental HQ within the division and state.
- ➤ Create an inventory of Earth moving machinery available with each division and with private contractors; Boats that could be used in times of floods and major inundation.
- Create linkage and communication with power project authorities and identity resources available with them.
- > Officers at SDO level should be familiar with pre-disaster precautions and during/post-disaster procedures for road clearing and have a clear idea of

- alternative safe evacuation routes; Routes strategic for evacuation and relief should be identified and marked in close coordination with police and DEOC.
- Undertake rapid visual inspection of critical buildings and structures of the state government (including hospital buildings) by a specialized team and identify structures which are endangered requiring retrofitting or demolition.
- Emergency tool kits to be organized for each division.

#### **Agriculture / Horticulture Department**

- This department will need to prepare a composite Disaster Management Plan for drought related disasters.
- ➤ The department is the Primary agency for assessment of crop damages.
- Organize the distribution of seeds, seedlings, fertilizer and implements to affected farmers;
- ➤ Arrange for keeping stock of certified seeds, fertilizers and pesticides.
- Establish communication with TNSDMA, DDMA, and Disaster Control Room and Agriculture Universities.
- Check available stock of equipment and materials which are likely to be most needed during disasters like floods and drought. Suggest a variety of seeds and cropping pattern, which can reduce losses and risks to farmers.
- Determine the type of damage, pests or disease affected crops.
- Setting up extension teams for crop protection and accordingly ensure that extra supplies and materials be obtained.

#### **→** Fisheries Department

- To keep the list of simmers in respect of the District and Taluk level
- ➤ To keep ready a good number of private boats / catamarans with crew and good swimmers, equipped with nylon rope etc. The catamarans and boats are to be transported to the marooned places by Lorries which can be arranged with the help of Regional Transport Officer for rescue services.

#### Animal Husbandry Department

- ➤ It is the primary agency for animal epidemics; fodder assessment disposal of dead animals and will advise the DDMA on these matters.
- The department will identify areas likely to be affected in the event of a disaster and incorporate it into the Disaster Plan of the department. Identify disaster prone areas, livestock population at risk, requirement of medicine, vaccines, equipment, disinfectants and other materials will feature in this.
- ➤ Prepare inventory of human recourses along with their contact number (Veterinary Doctors, Para Vets, and helpers).
- ➤ Identify shelters for animals.
- ➤ Prepare a list of water borne diseases that are preventable by vaccination. Publicize the information about common diseases afflicting livestock and the precautions that need to be taken.
- Stock emergency medical equipment which may be required during and post disaster.
- Capacity building of all veterinary hospital staff in dealing with likely damages and effects in the aftermath of disaster.
- Prepare kits for veterinary diseases, which could be provided to veterinary doctors at the block level and extension officers at the village level. The kits may also be provided to village level veterinary volunteers.

#### → Rural Development Department

- ➤ It is the primary agency to implement vulnerability reduction projects to alleviate poverty and improve people's livelihoods.
- ➤ Capacity building of rural population for managing disasters and incorporating Disaster management measures in rural development schemes where the bulk of the funding is towards improving the quality of life of the rural poor.
- ➤ Work on mock drills at the community level particularly in populations that are vulnerable.

- Develop a state level disaster management plan for the department and update it annually.
- Encourage disaster resistant technological practices in buildings and infrastructure.
- Analyze the training needs of the department's personnel, which will include its officials and elected representatives.
- Conduct Village Panchayat level mock drills as part of preparedness.
- ➤ Assist in establishing village disaster management teams.

#### → Department of Environment & Forests

- Primary Agency responsible for forest fires and disasters related to forest areas.
- Primary agency for research and development on Climate Change impact and adaptation activities for the state.
- Prepare a department disaster management plan.
- Forest Fire prone areas should be identified and extra vigilance be ensured in such cases.
- Organize community awareness programs and create task forces for forest fire fighting.

#### → Municipal Administration & Water Supply Department

- ➤ Develop a disaster management plan for the department, including the identification of location of camps for different type of disasters, existing locations that can be used as shelters, inventories of agencies that can be used for establishment of tents.
- > To conduct regular training for staff on minimum standards for shelter, relief camps and tent structures.
- ➤ The department should facilitate all corporations and Municipalities to develop city Disaster Management Plan and to ensure regular updation of the plan.

#### Department of Civil Supplies and Consumer Protection

- ➤ Develop a plan that will ensure timely distribution of food to the affected population. Plan for food storage locations and maintain a stock of food relief items for any emergency.
- ➤ Act as a Nodal agency for collection, Storage and distribution of food and other relief materials during emergencies.
- ➤ The Department may closely monitor supply of Diesel / Petrol to bunks during the disaster.
- Fair price outlets for vegetable need to be quickly setup in the affected area.
- ➤ Identify and delineate vulnerable areas Prepare departmental contingency plan.
- Make an inventory of storages &godowns and assess and ensure the safety of storage places.
- Constitute district wise/vulnerable zone wise response teams and delineate roles and responsibilities.
- Estimate the quantity and nature of the supplies required district / vulnerable zone wise.
- Ensure that all ration shops in vulnerable areas are fully stocked.
- Fair Price Shops located in low lying areas vulnerable to flood due to monsoon and cyclone will be identified and steps will be taken to shift them to higher locations.
- ➤ Essential Commodities especially rice and wheat will be safely stored with water proof gunny bags stored in full storage capacity of Fair Price Shops to meet any emergency during flood.
- Liftment and movement of PDS commodities will be watched daily and it will be ensured that no godown or FPS shall go without stock.
- ➤ New ration cards will be issued to those people who have lost their reation cards and necessary arrangements will be made to enable the cardholders to get essential commodities through fair price shops.

- In the Tamil Nadu Civil Supplies Corporation godowns, three months stock of rice and wheat will be kept as buffer stock especially in the 14 coastal districts during monsoon season.
- Also sufficient number of gunny bags will be stored in the godowns of Tamil Nadu Civil Supplies Corporation for emergency utilization.

## **→** Information and Public Relations Department

- Disseminate Disaster Management information and warnings to the public such as would enable taken and panic lessened.
- Media coordination; Ensure that proper and adequate information is provided to the media.
- Develop a disaster management plan for the department on its roles and strategy for dealing with responsibilities; Prepare guidelines / policy for necessary action by mass media on reporting disasters.
- Conduct education and awareness for local communities.
- ➤ Popularize the techniques for preparedness and survival during a pre-disaster, disaster and post-disaster period through television, radio and other publicity media.
- Setup a media center to dissipate information to Press and Media during disasters of higher magnitude.

## Tamil Nadu Generation and Distribution Corporation (TANGEDCO)

- Develop a disaster management plan for the department.
- Cary out survey of condition of all power supply lines at state and district level.
- Review and update precautionary measures and procedure and review with staff the precautions that have been taken to protect equipment.
- ➤ Ensure that alternate power supply arrangements for emergency supply are available for critical facilities.
- Stock spare parts for usage during crisis.
- Protect Power Stations from disaster.

- > Take a call on disconnection of electricity supply to prevent electrocution incidences.
- Make deployment teams which can be quickly moved to area where disaster has struck.

## **→** Labour Welfare Department

- ➤ Issue disaster management guidelines to all the industries and ensure on-site and off-site plans for all industries.
- Prepare and disseminate guidelines for labour security and safety.
- Prepare and disseminate public awareness material related to chemical accidents.
- ➤ Revise, update and implement rules and regulation for industrial safety and hazardous waste management.
- ➤ Ensure that Local Crisis Groups are formed and are functional in places were Major Accident Hazard Industries are located.

## **→** Education Department

- > Develop a state disaster management plan for the department.
- Preparing curriculum related to disaster management and to introduce at varied levels in the subjects taught.
- As students can get hurt easily with falling objects, the institutions should need to do their own safety audit.
- ➤ Coordinate with local authority and carry out mock drills once in a year to ensure safety for the children who are studying.
- ➤ Awareness campaigns amongst students and teachers.
- Arrange for training of teachers and students of disaster prone areas about the steps to be taken at different stages of disaster and organise them, in coordination with volunteers and inspire them for rescue, evacuation and relief works.

- ➤ To encourage all schools to prepare school Disaster Management plan in compliance with NDMA guidelines.
- Involve Scout and Guides and NCC units in the school in disaster related training and awareness.

## → Tamil Nadu Water Supply and Drainage Board (TWAD)

- ➤ Identify flood prone areas and activate flood monitoring mechanism.
- Often in a flooded area, there will be a shortage of good drinking water. This need has to be made good.
- Collect all the information on weather forecast and the water levels of all water storage area.
- Draw a schedule for chlorination and other required bacteriological analysis for ensuring safe public water supply.
- Keep in readiness essential tool kits and protection material at critical places for emergency deployment.
- Materials likely to be damaged by rains, such as cement bags, electric motors, office records etc. should be covered with plastic even though stored inside.
- A standby water supply plan should be available in the event of damage or pollution of the regular supply sources in disaster prone areas.
- Make an inventory provision to acquire tankers, Containers and storage tanks and establish other temporary means of distributing water on an emergency basis.
- Prepare plans for water distribution to all transit and relief camps, affected villages and cattle camps and ensure proper execution of these plans.

## **→** Health Department :

Communication establishment with District and Taluk control rooms and departmental offices within the division

- ➤ Stockpiling of live saving, anti-diarrhea drugs, de-toxicants, anesthesia, and adequate disinfectant for safe drinking water.
- Order for Arrangement of ambulance/generators
- ➤ Order to prepare In-house emergency medical teams to ensure that adequate staff available at all times to handle emergency causalities.
- Listing of private health facilities
- ➤ Identification of sites in probable disaster areas for site operation areas. Order for proper storing of immunization vaccines at Block level
- ➤ Awareness generation
- ➤ All staff informed about the disasters, likely damages and effects.

The Joint Director of Medical Services and the Deputy Directors of Public Health have been instructed to form emergency teams consisting of following staff under the leadership of Joint Director of Medical Services.

They should monitor the Teams, render services along with the assistance of all health staff employed at Panchayat Unions and Town Panchayats and also bear the following responsibilities and discharge duties in the affected areas in consultation with the District Collector and the Emergency Relief Organisations. In case of Cyclone/Flood situation, a medical team should move immediately and do the needful to the affected victims along with the services of social organisations and relief personnel.

## The following basic responsibilities should be planned for.

- I. Maintenance or restoration of safe water supply and temporary measures of rendering water safe form drinking and other essential uses.
- II. Disposal of corpses in the eventuality of a major disaster
- III. Adequate food inspection, especially inspection of emergency kitchen and canteens.
- IV. Tightening of existing sanitation regulations and devising measures for preventing spread of diseases among milch cattle.
- V. Maintenance or restoration of sanitation standards in the disposal of sewage and solid waste despite loss or dimunitation of water-supply.
- VI. Regulation of sanitation in shelters and emergency camps.

- VII. Control of rodents and insects which carry diseases, destroy, food or become serious nuisances.
- VIII. Prevention of epidemics by mass inoculation or vaccination.
  - IX. Requirements for health relief.
    - a. Disinfectants such as bleaching powder, chlorine liquid, water purifying tablets, phenyl cresol, barracksloxes and chlorscapes for ensuring Quantity for free chlorine and supplying safe potable and supplying safe potable and protected water.
    - b. Mobile water tankers, canvas water tanks, drums and jerry cans for transporting drinking water.
    - c. Vaccine Anticholera vaccine, T.D.B. Vaccine, Tetanus toxide and jet vaccination machines
    - d. Insecticides such as D.D.T. Pyrethurm and Bygon Belt
    - e. Wood plat forms (10X4') with holes (10X12') with lids for construction of deep trench latrine in the evacuee camps as per scale of 10 seats per 100 persons. Materials are locally available such as bamboo, mats, birkimats, palmyrah leave may be utilised for construction of side wall partitions.

In the event of hazard, another medical treatment team should rush up to affected area readily keeping with them sufficient medicines and life saving drugs apart from availability of medicines, drugs etc. at all Government Hospitals and all Primary Centres to meet any emergency. All the medical staff should be instructed suitably to carry out emergency health services in dedicated manner at all centres and hospitals, wherever their services are required. All the ambulances and other vehicles should be got repaired and put up to service in good condition during the period of calamity without any difficulty.

The emergency medical teams have to be formed consisting of the following category of staff:

Team-I	Team-II
Medical Officers – 3	Medical Officers – 3
Nurses -2	Nurses – 2
Pharmacist- 1	Pharmacist- 1
Nursing Assistant – 2	Nursing Assistant – 2
Hospital Worker – 2	Hospital Worker – 2
Driver with vehicle – 1	Driver with vehicle - 1

The special departments in the District Headquarters Hospital such as X-ray, Scan, Blood bank and lab have been instructed to equip with sufficient stock of X-ray films, Chemicals ingredient to manage the emergency situation

In North East Monsoon period, epidemic will occur due water Borne and Vector Borne diseases. The Public Health Care system is equipped to control any epidemic disease in this district. For the control of epidemic Rapid Response Team at the PHC and the district was formed and instructed to take immediate steps at the time of epidemic.

#### **→ WATERBORNE DISEASES:**

Diseases like, ADD, Typhoid and Viral Hepatitis are water borne disaseses. For safe drinking water supply, provision of chlorinated water supply must be ensured. For chlorinating water sources necessary Bleaching Powder, Chlorine Tablet, have been supplied to all PHCs and the available residual chlorine is being monitored by Health Inspectors. The Health Inspectors are checking five over-head tanks every month to monitor the Chlorine level in the drinking water provided by the local bodies to the public.

## **→ VECTOR BORNE DISEASE:**

For the control of Dengue, Chikungunya and Malaria cases, following precautionary measures have been taken to tackle the situation.

#### **→ SOURCE REDUCTION AND ANTI-LARVAL WORK:**

Each Blocks allotted 10 DBCs and plan prepared to cover Hot spot villages for source reduction work and Larvicidal application and Fogging Operation. For Adult Mosquito Control, every block has been provided with Pulse fog Fogging machine, Insecticide (Temophos & Pyrethram). For the supervision of above activities, Health Inspectors have been fixed responsibilities for rural areas.

#### **+ ZOONATIC DISEASES**

To control the Zoonatic disease like Leptospirosis, health education was given to all the public of the municipal and rural areas.

#### + I.E.C ACTIVITIES

IEC activities for Vectorborne, Water borne disease and Zoonatic Diseases are carried out in the school Health Camps and Village Health camps covering other Govt. Departmental, Local Bodies, Self Help Group members, Volunteers, School Children etc.

#### DISEASE SURVEILLANCE AND REPORTING SYSTEM

All Field Health staff are involved into Disease Surveillance. All the Private Nursing Homes are also kept under surveillance by Health Inspectors. All Govt. Hospitals also are kept under surveillance of Health Inspectors. Further Surveillance system is geared up to report any abnormal occurrences to the Office of the Deputy Director of Health Services and they are fully in charge of supervising the disease surveillance in the district.

## PHC level Rapid Response Team has been constituted

- 1. Block Medical Officer and concern PHC Medical Officer 2
- 2. Health Inspectors 2
- 3. Village Health Nurse 1

They should rush up to the affected area in case of emergency, take control measures and submit the report to higher authorities, well in advance.

## Role and Responsibility of Rapid Response Teams

- → Surveillance-Active search of cases with standard case definition
- ★ Line listing of Fever Cases
- Standard case management.
- → Mapping of Fever Cases in the spot Map.
- → Confirmation of Outbreak
- → FIR Sent to IDSP/DPHPM.
- ★ Collection of serum samples and transportations
- ★ Entomological Surveillance

- → Source Identification-Source reduction, Temphos application Thermal fogging
- → IEC activities
- ★ Final report submitting to DPHPM

#### **MEDICINES**:

Now all the required medicines have been kept in all Primary Health Centres

## **INSECTICIDES/ LARVICIDES:**

All the PHCs have kept with necessary insecticides/larvicides like, Temphos, pyrethrum etc., Sufficient Insecticide/Larvicides stock is kept in the office of the Deputy Director of Health Services

#### DISINFECTANTS:

Bleaching Powder, Chlorine Tablets and Phenyl have been procured and supplied to all the PHCs and kept in the DDHS Office also.

#### **CHAPTER-10**

## Response Plan

## **Incident Response System**

The Guidelines on the Incident Response System (IRS) are issued by the National Disaster Management Authority (NDMA) under Section 6 of the DM Act, 2005 for effective, efficient and comprehensive management of disasters in India. The vision is to minimize loss of life and property by strengthening and standardising the disaster response mechanism in the country.

Though India has been successfully managing disasters in the past, there are still a number of shortcomings which need to be addressed. The response today has to be far more comprehensive, effective, swift and well planned based on a well conceived response mechanism.

Realisation of certain shortcomings in our response system and a desire to address the critical gaps led the Government of India (GoI) to look at the world's

best practices. The GoI found that the system evolved for firefighting in California is very comprehensive and thus decided to adopt Incident Command System (ICS).

In view of the provisions of the DM Act, 2005, NDMA felt that authoritative Guidelines on the subject, with necessary modifications to suit the Indian administrative setup, were essential. To meet this need, a core group of experts was constituted and four regional consultation workshops were conducted. It was ensured that representatives of the State Governments and MHA participate and their views given due consideration. Training Institutes like the LBSNAA, NIDM and various RTIs / ATIs along with National core trainers also participated. The adaptation of ICS by other countries was also examined. The draft prepared was again sent to all States, UTs and their final comments were obtained and incorporated. A comprehensive set of Guidelines has thus been prepared and is called the Incident Response System (IRS).

## **Definition and Context**

The Incident Response System (IRS) is an effective mechanism for reducing the scope for ad-hoc measures in response. It incorporates all the tasks that may be performed during DM irrespective of their level of complexity. It envisages a composite team with various Sections to attend to all the possible response requirements. The IRS identifies and designates officers to perform various duties and get them trained in their respective roles. If IRS is put in place and stakeholders trained and made aware of their roles, it will greatly help in reducing chaos and confusion during the response phase. Every one will know what needs to be done, who will do it and who is in command, etc. IRS is a flexible system and all the Sections, Branches and Unitsneed not be activated at the same time. Various Sections, Branches and Units need to be activated only as and when they are required.

The main purpose of these Guidelines is to lay down the roles and responsibilities of different functionaries and stakeholders, at State and District levels and how coordination with the multi-tiered institutional mechanisms at the National, State and District level will be done. It also emphasises the need for proper documentation of various activities for better planning, accountability and analysis. It will also help new responders to immediately get a comprehensive picture of the situation and go in for immediate action.

## **IRS Organisation**

The IRS organisation functions through Incident Response Teams (IRTs) in the field. In line with our administrative structure and DM Act 2005, Responsible Officers (ROs) have been designated at the State and District level as overall in charge of the incident response management. The RO may however delegate responsibilities to the Incident Commander (IC), who in turn will manage the incident through IRTs. The IRTs will be pre-designated at all levels; State, District, Sub-Division and Tehsil/Block. On receipt of Early Warning, the RO will activate them. In case a disaster occurs without any warning, the local IRT will respond and contact RO for further support, if required. A Nodal Officer (NO) has to be designated for proper coordination between the District, State and National level in activating air support for response. Apart from the RO and Nodal Officer (NO), the IRS has two main components; a) Command Staff and b) General Staff as shown in this Fig.

## **Command Staff**

The Command Staff consists of Incident Commander (IC), Information & Media Officer (IMO), Safety Officer (SO) and Liaison Officer (LO). They report directly to the IC and may have assistants. The Command Staff may or may not have supporting organisations under them. The main function of the Command Staff is to assist the IC in the discharge of his functions.

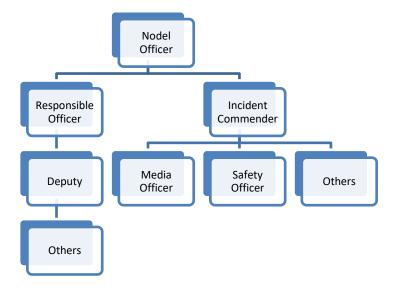
## **General Staff**

The General Staff has three components which are as follows; Operations Section

The OS is responsible for directing the required tactical actions to meet incident objectives. Management of disaster may not immediately require activation of Branch, Division and Group. Expansion of the OS depends on the enormity of the situation and number of different types and kinds of functional Groups required in the response management.'

## **Planning Section (PS)**

The PS is responsible for collection, evaluation and display of incident information, maintaining and tracking resources, preparing the Incident Action Plan (IAP) and other necessary incident related documentation. They will assess the requirement of additional resources, propose from where it can be mobilised and keep IC informed. This Section also prepares the demobilisation plan.



## **Logistics & Finance Section (L&FS)**

The L&FS is responsible for providing facilities, services, materials, equipment and other resources in support of the incident response. The Section Chief participates in development and implementation of the IAP, activates and supervises Branches and Units of his section. In order to ensure prompt and smooth procurement and supply of resources as per financial rules, the Finance Branch has been included in the LS.

## 1. REVENUE DEPARTMENT:

The Tahsildar should gather the details of all the damages etc., and send very quick communication to the Collector's office with copy to the Divisional Officers in the proforma together with any other valuable and useful information to be passed on to the Principal Secretary and Commissioner of Revenue Administration and to the Government. in assessing the damages to houses and crops and other properties special care should be taken to ensure that the work is carried out properly and promptly. The local, leading people should also be associated in assessing the damages.

Try to open control rooms, in taluks and Revenue Divisional Officer's offices and District Headquarters. As already instructed, the officers of this Department will be visiting the irrigation sources, Dam sites and ascertain their position regarding inflow and outflow of water, storage levels etc., and see to the arrangements of strengthening the bunds etc., whenever necessary, in consultation with the technical departments. The villagers should be informed of the real situation with the least possible delay. Rumors can be avoided by giving correct and timely information. The local M.Ps and M.L.As may also be informed of the position. The Village Administrative Officers and Firka Revenue Inspectors will be held responsible for communication of messages from the village level to the Taluk Office.

Such information may also be passed on through wireless sets kept in the nearby Police Station, Panchayat Union Offices. Similarly in case of communication of Floods, Cyclones received, the Tahsildars should immediately depute the Deputy Tahsildars and other staff to check up the vulnerable points and to Commence flood relief operations. The arrangements so made should be informed to the higher officials and to the other Departmental Officers concerned without any delay. In the case of possible disaster, the people living in the area and who may be affected should be evacuated to a safer place immediately even by forcible persuasion.

The services of the local Police and other organization may be utilised for this purpose. For accommodating such people, the buildings of the Panchayat Union School, Government School, Private School etc., where there are facilities like

lighting, drinking water, etc., should be utilised. Such a list of available places should be prepared now and will be kept in the Taluk Office and Panchayat Union Offices. The concerned School Management or Headmasters also should be advised of this and their concurrence taken even now to move into their premises when the need arises. A list of generators available in the area should be kept in the Taluk Office and Panchayat Union Offices and they should be utilised for lighting in the places accommodated. The owners of the generators should be approached and their consent to use the same obtained even now.

The Tahsildar should keep enough petromax and hurricane lights in the camps as stand by arrangements while rescuing, priority should be as follows:

- 1. Human beings
- 2. Cattle
- 3. Properties

All the people affected by the Floods/cyclone should be saved at all costs. For this, the Tahsildar should take all affective steps. He must keep a list of Boats and Catamarams available in his area and press all these into service immediately.

The need for Helicopters should be assessed in time ie., atleast 48 hours in advance and the same should be intimated to the Collector with a view to get them from the Naval authorities for rescuing marooned people.

The Divisional Officers may requisition motor vehicles, if necessary. During movement of relief teams, medical teams etc., the vehicle taking them should also carry the minimum requirements of food stuff and other articles that may be required urgently. The entire quantity of fuel should be utilised only for rescuing operations. Immediately after rescue, feeding arrangements should be started. To start with, Maida Bread may be supplied.

For arranging Bread, the District Supply Officer, Taluk Supply Officer must prepare and keep ready a list of Bakeries available in the Taluk and also their optimum production capacity during the times of emergency, they should be told to use all the available Wheat Flour and other items only for preparation of Bread, cutting drastically other items like Biscuits etc., For cooking, the list of places where

there are facilities should be kept in the Taluk Offices and Panchayat Union Offices and the work should start immediately.

The places where rice and other edible commodities are stored should be known and details should be kept in the Taluk Office and Panchayat Union Offices. Semi-dry food like Lemon rice or Chappathi or Sambar rice may be supplied.

The Feeding arrangements should be properly and closely supervised by a responsible officer of the Revenue Department and will take the assistance of the prominent men of the local area. He should see that no complaint is received from any quarters. The second stage is assessment of the damages. A responsible person in the cadre of Deputy Tahsildar will take up this work. If the area is large, the Tahsildar will utilise the services of all Deputy Tahsildars in the Taluk. If more personnel are needed, the Divisional Officers will arrange for it.

The damages and loss to Human life, cattle, crops etc., should be assessed with the assistance of the officers of the respective departments, As the Co-ordinator in Taluk level, the Tahsildar should gather the details of the damages etc., and send very quick communication to the Collector's office with copy to the Divisional Officers in the proforma together with any other valuable and useful information to be passed on to the Special Commissioner and Commissioner of Revenue Administration and to the Government.

In assessing the damages to houses and crops and other properties special care should be taken to ensure that the work is carried out properly and promptly without giving room for any future complaints. At the same time, too much of interpretation of rules should be avoided. Benefit of doubt may be given to the flood affected victims.

The local, leading people should also be associated in assessing the damages. For this purpose an all Party Committee should be formed on the spot Cash and other relief should be distributed only in their presence. Many service oriented organisations may come forward in a big way to help the flood affected people.

A list of such organisations should be kept ready in the Taluk Office and Panchayat Union Offices. These organisations should be guided in a proper manner so that all the affected people can be given relief in a systematic way. They may be provided transport, if needed. Care should also be taken for proper distribution of cloths to the victims.

Full information should be passed on immediately to the superior officers by the available means of communication. In such flood situations consumption of petrol and diesel by the vehicles drafted for flood relief operations will be heavy. The Divisional Officers and Tahsildars should instruct the local Bunk owners suitably in the matter and ensure that no fuel is used for non-relief work.

- They must have adequate stock at all times for the use of the Government vehicles. In the relief camps special attention should be given to children, old people and pregnant mothers, supply of good milk to small children should be arranged speedly. Daily figures on the number of houses affected, number of persons removed to safer places, number missing or dead number of cattle lost, the amount of cash relief paid number of clothing distributed and the quantum of feeding arrangements made and by breaches in river banks noticed and the nature of flood, whether subsiding, rising and whether there is any inflow of water into irrigation sources should be reported through wireless without any delay. Incorrect figures should not be reported.
- The Tahsildar should arrange for reporting the rainfall particulars to the Flood Control Room exactly by 8.00 A.M. every day. This job should be given more care and the Tahsildar should see that rainfall particulars are properly gathered and furnished to the Collector without fail.

## 2. POLICE DEPARTMENT

- To be alert to meet with any emergencies.
- To undertake rescue operation along with Fire Department.
- To keep ready the Wireless sets in all the Police Stations for passing the messages about the damages and relief operations to the officersconcerned.
- To maintain Law and Order.

- The Superintendent of Police has already been instructed to provide Wireless sets in the Headquarters of Revenue Divisions, Taluk and Panchayat Union Offices, so as to keep in touch with the officers concerned and to maintain the situation under control.
- A responsible staff of Revenue Department will be posted in each of these offices to receive the communication and transmit them by turn system.
- Necessary arrangement will be made in the Control Room for quick transmission of messages and issue of orders for bandobust arrangements in the Vulnerable areas.
- To strengthen the bandobust arrangements, the Superintendent of Police may utilise the services of the N.C.C. and Homeguards in Co-ordination with the Commanding Officer, NCC, Anna Nagar, Dindigul, and the respective Area Commanders of Home Guards.
- The Superintendent of Police, will arrange to provide necessary bandobust in the River sides and during removal operation of hut dwellers on River Banks etc., whenever a requisition is received from the Revenue or Public Works Department Officials, Police vans fitted with mike sets will be utilised to announce warnings to the people concerned.
- The Police department should be alert to meet any emergencies and undertake rescue and relief operation in close co ordination with Fire Department.
- This Department having sophisticated communication equipments such as VHF/
   HF.
- Should keep in touch with Control Room for quick transmission of messages and issue of orders for bandobust arrangements in the vulnerable areas.

# 3. FIRE AND RESCUE SERVICES DEPARTMENT

- The Fire Service Department is always alert and ready to rush rescue operations wherever necessary.
- The Revenue and Panchayat Union staff will be in constant touch with the officials of this Department.

- The Fire Service Department will co-ordinate with the Tamil Nadu Water and Drainage Board in cleaning the Drinking water wells wherever such a need arises.
- To keep many number of life jackets ropes etc and with modern equipments like combination tools.

## WARNING PEOPLE

Warning about heavy downpour will be done by the Assistant Divisional Fire Officers Fire prevention wing, to the concerned people at appropriate time.

#### **RESCUE OPERATIONS**

The Fire Service Department should always be alert and ready to rush up for rescue operation wherever necessary. The Revenue and Block staff will be in constant touch with the officials of this Department. The Fire Service Department will coordinate with the Tamil Nadu Water and Drainage Board in cleaning the drinking water wells wherever such a need arises, well trained swimmers, Life buoy, Life Jacket, Ropes and the required life saving equipments will be kept ready for rescue operation.

## 4. DEVELOPMENT DEPARTMENT

The Panchayat Union Commissioners will arrange for inspection of Minor Irrigation Tanks and other irrigation sources in their respective jurisdiction. Precautionary measures should be taken for strengthening of bunds of Minor Irrigation Sources. They should work in close co-ordination with the Revenue staff in their respective jurisdiction.

## 5. CIVIL SUPPLIES

The District Supply Officer is instructed to make suitable arrangements to keep sufficient stock of food grains, Kerosene, Sugar, etc., in various Godowns of the Tamil Nadu Civil Supplies Corporation Limited, Lead societies and the District wholesale Co-operative Stores. All the Godowns must be checked and should be water proof. To ensure that all the Fair Price shops are kept open on all the days with stock, the District Supply Officer should act in close Co-ordination with the joint Registrar of Co-operative Societies.

The District Supply Officer will also ascertain the stock position of Dhothies and Sarees etc. with the Co-optex. Quite a large number of vehicles will be pressed into service in the event of cyclone, the Revenue Divisional Officers and District Supply Officer will ensure that at least 25% of the capacity of tankers is kept as reserve throughout the period of emergency.

The District Supply Officer in the District Level and the Taluk Supply Officers in the Taluk level will be in charge of the arrangements for storage and movement of Rice, Kerosene etc., and for distribution of commodities to the officers in charge of the distribution points.

The District Supply Officer is expected to make suitable arrangements to keep sufficient stock of food grains, Kerosene, Sugar, etc., in the various Godowns of the Tamil Nadu Civil Supplies Corporation Limited, Lead societies and the District wholesale Co-operative Stores.(at least one month minimum stock should be kept) To ensure that all the Fair Price shops are kept open on all the days without stock out in Coordination with the joint Registrar of Cooperative Societies.

A list of such places with details of the available stock should be conveyed to the Divisional Officers and the Tahsildars at once with the details furnished to the Collectors.

The District Supply Officer will also ascertain the stock position of Dhothies and Sarees etc. with the Co-optex outlets and report the storage points to facilitate communication of these details to the officer, concerned. He will be in charge of such stocks in Coordination with the Divisional Officers.

The District Supply Officer will also get a list of leading Bakeries and ascertain their production capacity and he will also direct them that they should supply Breads and Buns, whenever demanded by the officers concerned. This list should be given to the Divisional Officers and Tahsildars immediately.

## 6. PUBLIC WORKS DEPARTMENT

The PWD Engineers have to keep close watch over the dams, rivers, Anaicut by deploying patrolling team and disseminate immediate information if excess inflow of water in river and channel is noticed.

They have to strengthen the weak portions and vulnerable points as ascertained from past experiences in the water courses. They should keep sufficient number of sand bags, along with transport facility for instant mobilization to the

vulnerable places.

The North-East monsoon may settle early and the tanks in delta areas and

non-delta areas may get filled up. Vigilant patrolling of the banks should be done to

so as to detect any breach in canal when water flow is abnormal. Even a minor

breech would cause incalculable damage by draining entire volume of water to

nearby agricultural lands, houses. The need for the Flood patrolling duty has been

emphasised more than once and the rules have been formed and communicated

already to the officers of Public Works Department. It is therefore considered

necessary to arrange for allocation of Flood duty in respect of the circle, so that there

can be effective supervision and quick action whenever flood damages occur.

The following instructions are issued in respect of Flood duty among officers

of this Circle.

(A) ZONE 1: PERIYAR VAIGAI

**ZONE 2: NON PERIYAR AREAS** 

**COMMON INSTRUCTIONS** 

> The regular Assistant Engineers will be attending to flood duty in their

respective jurisdiction.

The executive Engineers P.W.D., T.R.S Division are requested to be ready to

carry out the instructions of Superintending Engineer at any time during

flood.

The Executive Engineers are requested to instruct their subordinate officers

suitably to ensure proper patrolling of the tanks within their jurisdiction to

take effective steps to repair damages. The flood stock materials may be kept

ready and any bottle neck may be brought to the notice of the Superintending

Engineer, P.W.D., and Madurai Circle and to the Collector, Madurai.

56

- ➤ The Sathaiyar Dam receives flood flows during the North East monsoon period since the capacity of the dam is small the flood situation is to be anticipated at any time during the period from 1st October 31st December and the controlling Officer should keep alert during this period.
- The controlling officer should arrange to note the reading of the dam Level as often as is necessary during the North East Monsoon period to estimate the approaching flood.
- ➤ The Revenue officials will give wide publicity among the villages regarding the flood and take all precautionary measures.
- ➤ Before the flood period i.e. in the month of September itself the names of the persons in charge of the patrol and flood duty should be finalise.
- ➤ The spillway gates shall be opened uniformly. The height of opening should be regulated according to the intensity of the approaching floods.
- > The regulation of the dam during floods will be at closer intervals and such special regulation should be recorded in the daily water reports sent to all concerned. The readings are to be taken by a responsible person at every one hour or less if warranted.
- ➤ During the period when the Vaigai Dam in Theni District (since Drinking water and irrigation purpose water are received from Vaigai Dam to Madurai District) and Sathaiyar Dam in Madurai District is above normal level and there is a tendency for the level to rise, patrolling should be organised in three shifts of eight hours each (i.e) from 6.00AM to 2.00 P.M from 2.00 P.M to 10.00PM and from 10.00 PM. to 6.00AM.
- ➤ Each shift has to be manned by a responsible person who is capable of operating the sluice shutters and spillway gates, with four casual labourers for hand operation in case of failure of electricity.
- For patrolling the earth dam, there will be three shifts and the patrol gang in each shift will be incharge of a Technical Assistant and consist of one Lascar and one trained casual labour.

- ➤ The patrol Gang will walk along the toe of the Embankment carefully inspecting the rear scope of the bund. They should note the readings in the "V" notches to see whether there is any abnormal increase in seepage.
- ➤ They should bring it to the notice of the Section Officer immediately if any increase in seepage or slip, erosion or piping is noticed, in the bund, near the to eor in the vicinity.
- The patrol gang should also walk on the bund inspecting the Front slope of the bund and checking the safety of the revetment on the water face.
- The Section Officer should walk along the embankment daily. The Sub Divisional Officer and the Executive Engineer should also inspect the embankment (bothfront and rear) as often as is possible depending on the flood situation. They should watch both the front and rear slopes of the embankments carefully If any extra ordinary seepage or slip is noticed they are to swing into action immediately depending on the situation.
- ➤ The patrol party should be frequently checked by the section officer, Sub Divisional Officer and the Executive Engineer and the orders and instructions issued should always be in writing.
- The Diesel Generator should be checked before the Monsoon and kept in good running condition.
- The above rules are for general guidance. The Executive Engineer and the Sub Divisional Officer shall have powers to vary the procedure as and when necessary in the interest of the safely of the dam without relaxing the spirit of the rules. Such deviations shall be placed on record, together with the details of the circumstances necessitating such deviations they have full discretion to take all measures for the safety of the dam as and when considered necessary and shall in all circumstances be responsible for its safety.
- ➤ The Controlling Officer in charge of the reservoir shall then organise extra labour required in addition to the duty personal who would be needed for attending to the safety of the structure so that no over topping of the shutters or dam takes places. If a siren is provided in the dam site 3 long blasts shall

be sounded on this and all the Departmental staff available in the Camp area shall than immediately proceed to the dam site and report services for attending to the safety of the dam and regulators.

## **PATROLLING RULES**

- 1) Whenever there are high floods between 6.00PM and 6.00AM of the succeeding morning the Controlling Officer or a responsible person nominated by him shall be at the dam site incharge of the flood regulation and he shall not be less than an hour as long as the flood is rising.
- 2) The Controlling Officer shall also watch if the standing wave in the stilling basin is formed before the baffle block if this is not done, the discharge over the spillway may be reduced to maintain the standing wave within the stilling basin.
- 3) A look out shall be made by the flood control party to see that the debris floating down the river does not damage the river or spillway shutters Necessary flood stores may be provided so that these floating logs and other debris may pulled to one side and anchored so that they can be removed after the flood recedes.
- 4) Throughout the period of floods, the dam maistry and gate operator or fitter operating the spillway shutters will be at the utility tower to control and regulate the flows. Whenever they are relieved they shall make necessary entries in the register.
  - 1) Date
  - 2) Time
  - 3) Reservoir level
  - 4) Hourly reservoir level for the previous four hours
  - 5) Purpose of his leaving the utility tower
  - 6) Time he is expected back
  - 7) Name of the reliever and designation
  - 8) Remarks
  - 9) Signature of the dam mainstry
  - 10) Signature of Operator or fitter operating spillway gates.

## PATROLLING DUTY FOR OFFICERS

When a high flood is on, the Section Officer in charge of the dam shall walk along the toe of the embankment carefully to see if any unusual seepage of slips are noticed and take necessary action immediately to bring it to the notice of the Sub Divisional Officer and obtain instructions for rectification. Similarly the Sub Divisional Officer shall walk along the toe atleast on alternate days and take suitable action. The Executive Engineer will visit the dam and the toe of the embankment as often as possible especially during floods. The Section Officer in charge of masonary dam shall check the seepage through the drainage gallery to see if there is undue increase in the seepage. Any areas where piping or extra seepage is noticed it should be brought to the notice of the Controlling Officer and also to the Executive Engineer incharge of the dam.

## SPECIAL INSTRUCTIONS FOR PATROLLING THE EARTHDAM

If any place in the earth dam, piping of water is noticed, immediate attention must be drawn to this and effective supervision should be done round the clock and note the following:

- i. Whether it is increasing or decreasing
- ii. Whether it is bringing soil from the earth dam.
- iii. Whether it is clear water or muddy

Immediate action may be taken to bring down the water level in the Reservoir, if the piping action is considerably increased and also if soil is coming out, Higher officials should be informed through Phone or it not by a special messenger with available vehicle at site.

FLOOD OPERATIVE PERSONNEL		
1. Dam Superintendent or Work Inspector	2	
2. Electrician	1	
3. Fitter	1	
4. Pump Operator	2	
5. Watchman (Day and night-3 hours/day)	3	

## 7. HIGHWAYS AND RURAL WORKS

The Highway Department people have maintained the roads roadworthy and locate the sensitive points and should take effective measures to strengthen them.

There are possibility of trees felling on road thereby causing danger to the lives and disruption of road traffic. They will keep ready the rescue teams with the tree cutting materials, sufficient man power preferably power saws for removing the wind fallen trees.

## **EMERGENCY WORK DURING FLOODS**

Information of any emergency request received from the public or by any one are given immediate attention. Men and material are mobilized through the nearest Sub Division Head Quarters to the specific area within fraction of hours so that any delay could deteriorate the situation. Local participation are also encouraged in the relief works. Details of all water logging areas are collected and drainage works were immediately put to force to drain out the logged water so as to make roads free from obstructions and to provide uninterrupted traffic to migrate affected people. All wind fallen trees are immediately removed through Power saws and with required equipments. Temporary arrangements were made to make roads motorable conditions which were washed away during floods.

- Sand filled bags are to be kept ready at safe accessible places.
- Vulnerable points which were affected in previous floods are to be identified and listed.
- Power saws and necessary equipments are to be kept ready for removing all wind fallen trees.
- Sliding Trees and Plantation on road sides are identified and removed.
- All Culverts and Bridges are cleared from vegetations and debris to avoid stagnation of water and making water passage free.
- Department Vehicles with crews are kept ready to attend emergency work during flood time.

- Functional worthy machineries like Bull dozers, Lorries, JCB, Tippers & Tractors, Generators Diesel engine etc., are to be identified and listed with phone numbers.
- Weak bridges & Culverts vulnerable flood damage are to be identified.
- ❖ Adequate numbers of RCC hume pipes & Gunny bags, Casuarinas poles & Red flog with post are to be procured.
- Places for emergency landing of Helicopter are to be identified.
- ❖ A Control Room is to be set up at the Division Office connecting all control rooms at the Sub Division level. Staff will perform duties round the clock in all the Control Rooms. These Control Rooms acts as nerve centre for Disaster Management. It has three main components called the three C's − Command, Control and Communication for effective response in emergency. Its function is to monitor co-ordinate and implement action.

## **CHAPTER-11**

# Recovery and Reconstruction (Build Back Better)

Disaster recovery has three distinct but interrelated meanings.

- ♣ First, it is a goal that involves the restoration of normal community activities that were disrupted by disaster impacts – in most people's minds, exactly as they were before the disaster struck.
- → Second, it is a phase in the emergency management cycle that beginswith stabilization of the disaster conditions (the end of the emergency response phase) and ends when the community has returned to its normal routines.
- → Third, it is a process by which the community achieves the goal of returning to normal routines. The recovery process involves both activities that were planned before disaster impact and those that were improvised after disaster impact.

These are the physical and social disturbances that a hazard agent inflicts when it strikes a community.

- → Physical impacts comprise casualties (deaths, injuries, and illnesses) and damage to agriculture, structures, infrastructure, and the natural environment.
- → Social impacts comprise psychological impacts, demographic impacts, economic impacts, and political impacts. Incident stabilization. This is the point in time at which the immediate threats to human safety and property resultingfrom the physical impacts of the hazard agents have been resolved and the community as a whole can focus ondisaster recovery.

#### **Post Disaster**

- → After the calamity, it becomes necessary to assess the Damage and each department will need to follow the guidelines given to it
- → A committee may be formed to identify missing person, dead and injured and assess the damage of properties, loss or injured of livestock, loss of crops, agricultural lands, etc for providing suitable relief.
- → Removal of debris; Clearing the fallen trees; Restoring power lines; Restoration of basic infrastructure – All of this requires a massive effort and will need special mobilization of extra manpower.
- → Teams for Disposal of Dead Bodies and Disposal of carcasses will need to be organised on war – footing where the casualties have been high.
- → Spoilt foodstuffs that are dumped on the road will need to be disposed.
- → Air dropping of food and essential commodities in the inaccessible areas of cyclone and rain affected may need to be considered by the District Administration.
- → Food arrangement where accessible will need to be arranged. Cooked or dry food will need to be provided at the shelters.
- → Sufficient clothing and blankets will need to be provided to the affected people to ensure their dignity, safety and well – being.
- → Warm and inner clothes and additional clothes will need to be provided to Children, sick, elders, women and widows.
- → Immediate restoration on roads to motor able condition.
- ★ Keeping ready the Earth moving machineries like JCB, Tractors etc.,

- → The Tahsildar may also engage the vehicles of other Departments in carrying out rescue and relief operations.
- The Revenue Divisional officer is empowered to give requisition for the vehicles of other departments for being put into service on the occurrence of any calamity.
- The vehicles in central Government offices may also be pressed into service in emergency in consultation with the concerned officers. The vehicle owning officers shall send the vehicles to the Revenue Divisional Officers as and when called for by them during the flood and cyclone period. In this connection, the vehicle owning officers in the district are requested to ensure that their vehicles are kept in good working condition and if not, to get the vehicles road worthy before the onset of North East Monsoon

1. PWD/HD	They will take steps for clearance of fallen trees and Departmental buildings from the roads for free movement of vehicles etc. Immediate repair of roads and bridges be taken up.
2. BSNL	Immediate restoration of Telephone services.
3. Veterinary Dept.	Removal and disposal of carcasses, vaccination, cattle treatment, supply of fodder, etc
4. Health services	Disinfections of water sources & treatment etc.
5. Agriculture/ Horticulture Dept	Supply of seeds in area where crop has been damaged. Assessment of crop damages.
6. Town /Village Panchayats	Repair of damaged tube wells/installations of new tube wells. Repair of damaged houses
7. TNEB	Immediate restoration of power lines.

## **Recovery of Electricty:**

An initial assessment of damages caused to the electrical infrastructure due to the disaster is given by the nodal officer/team. Based on this restoration of electrical power in the possible affected area is planned, coordinated and execution works are started and restoration of supply made available one by one.

Reconstruction and recovery plan will be developed with the following priority according to the extent of damage:

Supply will be restored in the order as

- 1. in all EHT lines
- 2. in all Substations
- 3. in all HT lines
- 4. in all DTs

Finally supply will be restored to all consumers.

## **Recovery of Telecommunication:**

In coordination withe BSNL and electricity board, all the disrupted lines have to be cleared and poles have to changes and low lying lines have to be replaced and bring back the towers by locality one afte the other.

## Recovery of Traffic: (clearing logs on roads)

With the coordination of TNSTC, RTO, PWD, Local bodies and local community people, mobile JCBs, Saws and other equipments to clear the logs and fallen trees from the roads in cooperation with REvenue and Police and clear the traffic.

# Mooting the medical services to prevent communicable & other diseases:

- → Reduction of source of infection and identification of infected areas, houses and persons.
- → Investigation of water borne diseases
- → Immediate isolation and treatment
- ★ Checking the disinfection and chlorination
- ✦ Health Education
- ★ Strengthening of surveillance system
- → District level team will keep close touch with Commissioners of Panchayat Unions, Municipalities, Executive Officers of Town Panchayats for additional requirement of drugs and disinfectants for flood relief works.
- → District level team will be provided with one vehicle and equipped with enough drugs, disinfectants vaccines and other equipments.
- → One cholera combat team at the office of the DDHS will be deputed to the places wherever outbreak of epidemic is reported.
- → Water quality testing and treatment

- → Psychosocial Care and support
- ★ Action against vector borne diseases
- → Hygiene promotion in camps as well as behaviours change communication for hygiene and sanitation
- → Inclusive Sanitation solutions such as Portable Bio toilets.
- ★ Regulation of antibiotic usage in camps
- → Drug supply Including critical-For skin ailments, ORS, Zinc, TB, ART, Ointment for Foot sores/ alcers
- → MISP kits distribution to pregnant women

## Preventing the spread of diseases for animals:

Removal and disposal of carcasses, vaccination, cattle treatment, supply of fodder etc.,

# Assessment of Damages to crop and recommend for relief measures:

Proper reporting and requesting fund for the affected crop area.

# Food security and livelihoods

- → To identify and support the poorest and the most vulnerable
- → Families with supply of dry rations that will cover their food security requirements for at least three months from now. This will enable them cope up and return to normalcy gradually
- ★ For the poor households living on the river banks in Chennai, support for purchase of cooking vessels, stove and gas would help them tide over this situation. However, such families need to be first identified and extended this support. Direct cash transfers to these families can be tested.
- \* "Cash for work" programs can be initiated in the rural areas that are severely affected by the floods. Restoration of community infrastructure such as strengthening of bunds in irrigation tanks, ponds and drainage canals are some of the works that can be initiated.
- → Support these families for rescheduling of their loans from their SHGs and other MFIs that are operational in their areas.

#### ❖ Wash & Sanitation

→ Provision of individual household water purifications.

- → Providing the chlorine powder solution and aqua tabs for Water purification.
- → Provision of containers for drinking water storage and disinfection.
- → Temporary/Mobile toilets, Immediate cleaning of septic tanks
- → Immediate draining of water
- ★ Eradication of mosquito larvae using neem oil or other larvicides
- → Immediate cleaning of solid waste Mapping of Solid Waste management related issues.
- → Portable Drinking water stations/chlorination/flushing of hand pumps/ spot chlorination/boiling water
- → Sensitization program on Hand Washing with soap.

#### Shelter

- Need for supplementing the compensation offered by the Government, especially for those who lost their houses fully or partially.
- → Cash transfers for identified families from the most marginalized communities, particularly those from the Dalit communities will support them rebuild their houses.
- → This could be further combined with support of building materials supply and linkages where required.
- → Support for construction of toilets will help women and children for improving their health standards and well-being.
- → Inclusive toilets and temporary shelters for PWD
- → Linkages for credit for housing can be further more supportive to these
  communities.

#### Education

- → Schools need to allocate resources, time and space to provide psycho social care for children in their premises. This has to be integrated in regular school hours for a reasonable time period
- → Distribution of school books, text books, uniform and stationaries in Urban as well as rural areas.

- → Schools need to allocate resources, time and space to provide psycho social care for children in their premises. This has to be integrated in regular school hours for a reasonable time period
- → Training personnel for multi-hazard disaster resistant school planning, design, monitoring, maintenance, inspection and approval at communityand all levels of government
- → Resume the functioning of Anganwadi centre or makeshift centres in order to meet the nutritional needs of pregnant and lactating mothers and children below 2 years
- → Set up child Friendly to provide psycho social support for children
- → Prioritize the needs of children with vulnerabilities while providing

## **CHAPTER-12**

## RURAL DEVELOPMENT & PANCHAYATRAJ DEPARTMENT

## 1. ANAITHU GRAMA ANNA MARUMALARCHI THITTAM (AGAMT)

- ➤ In order to provide basic in infrastructural facilities in all the village panchayats in Tamil Nadu, The Annaithu Grama Anna Marumalarchi Thittam (Project) was initiated in 2006 by former Chief Minister Dr.Kalaignar. In order to revive the scheme, the Government of Tamil Naduhas implemented a scheme called Annaithu Grama Anna Marumalarchi Thittam- II scheme to be implemented in all villages from 2021-22 to 2025-26.
- A total of 340 village panchayats have been selected at the rate of 85village panchayats each for the three financial years 2021-22, 2022-23, 2023-2024 and 2024-25 in Madurai district. Rs.3755.33 lakhs for the financial year2021-22 and Rs.3257.38 lakhs for the financial year 2022-23. A total fund of Rs.3296.83 lakhs has been made for the financial year 2023-

- 2024 and Rs.3309.37 lakhs for the financial year 2024-25 A total sum of Fund allocation for the Four financial years is Rs.13636.02 lakhs.
- ➤ For the financial year2021-22,636 works were taken up at an estimated cost of Rs.3755.33 lakhs have been given administrative approval and all the works is in progress. All works completed.
- For the financial year 2022-23,577 works were taken up at an estimated cost of Rs.3257.38 lakh have been given administrative approval and all the works is in progress. All works completed
- For the financial year 2023-24, 586 works were taken up at an estimated cost of Rs.3296.83 lakhs have been given administrative approval and all the works is in progress. Out of which 539 works have been completed. Rest of the work is in progress.
- For the financial year 2024-25,533 works were taken up at an estimated cost of Rs.3309.37 lakh have been given administrative approval and all the works is in progress. Out of which 262 works have been completed. Rest of the work is in progress.

## 2. SAMATHUVAPURAM

- ➤ In Madurai District, Periyar Ninaivu Samathuvapuram, 2021-2022 only
  7 Samathuvapurams arrear marked for repair and reconstruction work.
  Out of this, 289 lakhs works have been carried out for the Minor repair of 578 houses.
- ➤ Reconstruction for 105 houses was completed at a cost of 221.98 lakhs as allocation.
- ➤ 164 infrastructural maintenance works at a cost of 240.58 lakhs repair and reconstruction works have been completed.
- ➤ At present Periyar Ninaivu Samathuvapuram in the second phase only 4 Samathuvapurams have been allotted for repair and reconstruction work

- for the year 2022-2023. Out of this, 2.28 lakh works are being carried our for the repair of 355houses.
- ➤ 392.00lakhs for the reconstruction work of 7houses.
- ➤ 38 infrastructural maintenance works at a cost of 13.03 lakhs are under repair and reconstruction. In the year 2022-2023.

#### 3. SRI LANKAN TAMIL REFUGEES CAMP

➤ 7 Group houses and 2 Single houses for the year 2022-2023 in Sri Lankan Tamil Refugees Camps Rs.1.51Crore has been allocated, administrative permission has been given for all the works, 2 Single houses have been completed and 7 Group houses have also been completed.

#### 4. SCHOOL INFRASTRUCTURE DEVELOPMENT SCHEME:

- In SIDS 2021-22, Madurai District has been allotted Rs.446.03 Lakhs. Administrative Sanction has been accorded for 331 works in which all 331 works have been completed by utilizing Rs.443.90 Lakhs.
- In SIDS 2022-23, Madurai District has been allotted Rs.594.36 Lakhs. Administrative Sanction has been accorded for 325 works in which all 325 works have been completed by utilizing Rs.587.16 Lakhs.
- ➤ In Madurai District under SIDS 2024-25, proposal has been received for 204 Works in 107 schools at an estimate cost of Rs.538.72 Lakhs.

# 5. <u>CHILD FRIENDLY SCHOOL INFRASTRUCTURE DEVELOPMENT SCHEME</u>:

- ➤ In CFSIDS 2022-23, Madurai District has been allotted Rs.1806.00 Lakhs. Administrative Sanction has been accorded for 56 works in which 53 works have been completed by utilizing Rs.1725.32 Lakhs and the remaining 3 works are in Physically Completed stage.
- ➤ In CFSIDS 2023-24, Madurai District has been allotted Rs.656.00 Lakhs. Administrative Sanction has been accorded for 20 works in which 1 work have been completed by utilizing Rs.32.80 Lakhs and the remaining 19 works are under progress.

➤ In Madurai District under CFSIDS 2024-25, proposal has been received for 56 Works in 25 schools at an estimate cost of Rs.978.00 Lakhs and also an additional proposal also received for 67 Works in 30 schools at an estimate cost of Rs.1185.00 Lakhs.

## 6. NAMAKU NAMME THITTAM:

- In NNT 2021-22, Madurai District has been allotted Government Contribution amount Rs.322.68 Lakhs. Administrative Sanction has been accorded for 81 works amounting to Rs.465.01 Lakhs in which all 81 works have been completed by utilizing Rs.464.16 Lakhs.
- In NNT 2022-23, Madurai District has been allotted Government Contribution amount Rs.463.06 Lakhs. Administrative Sanction has been accorded for 140 works amounting to Rs.626.77 Lakhs in which 132 works have been completed by utilizing Rs.576.08 Lakhs.
- In NNT 2023-24, Madurai District has been allotted Government Contribution amount Rs.237.70 Lakhs. Administrative Sanction has been accorded for 91 works amounting to Rs.583.05 Lakhs in which 69 works have been completed by utilizing Rs.315.27 Lakhs.

## 7. AD HABITATION SCHEME:

- ➤ In AD Habitation 2021-22, Madurai District has been allotted Rs.273.00 Lakhs. Administrative Sanction has been accorded for 69 works of which 69 works have been completed by utilizing Rs.272 Lakhs.
- In AD Habitation 2022-23, Madurai District has been allotted Rs.273.00Lakhs. Administrative Sanction has been accorded for 67 works of which 67 works have been completed by utilizing Rs.272 Lakhs.

## 8. PRADHAN MANTRI ADARSH GRAMYO JANA (PMAGY) :

➤ In PMAGY 2021-22, Madurai District has been allotted Rs.260.00 Lakhs.

Administrative Sanction has been accorded for 62 works of which 61

- works have been completed and 1 work is under progress.
- In PMAGY 2022-23, Madurai District has been allotted Rs.260.00 Lakhs.

  Administrative Sanction has been accorded for 46 works of which 38 works have been completed and 8 works are under progress.

# 9. MAHATMA GANDHI NATIONAL RURAL EMPLOMENT GURANTEE SCHEME

- Mahatma Gandhi National Rural Employment Guarantee Scheme A total Number of 2,93,086 families were registered in the current year and 2,91,367 job card have been issued out of which 3,01,230 active workers have benefited.
- ➤ Under this Scheme, 16.72 lakhs man days have been created and 1.54 lakhs workers have been employed. Rs. 4574.86 lakhs have been paid during the year.
- ➤ Under this Scheme 1613 natural resource management works taken up and 544 works are completed at a cost of Rs.2087.62 lakhs, in the during year Similarly, total expenditure on agriculture and allied works Rs.3620.55 lakhs.
- In 9388 Earthan Bunding works are made in the individual lands, under the cost of Rs.17011.50 lakhs
- During the year of 2024-2025, 60 works like construction of working shed for self help groups, construction of Panchayat Office Building, Anganwadi Building, Food Grain Godwon, Kitchen Shed, MPCS, Village Panchayat Secretariat Building were going on in the value of Rs.976.81 lakshs.

# 10. PRADHAN MANTRI AWAAS YOJANA(GRAMIN) SCHEME:

In PMAY(G)2021-22, Madurai District has been allotted Rs.5179.2 Lakhs. Administrative Sanction has been accorded for 1850 works in which 1740 works have been completed by utilizing Rs.2125.99Lakhs.

## 11. <u>ROADS</u>

- Under TNRRIS 2021-22, 36nos of works taken up at an estimate costof1858lakhs.36nosofworkscompletedatanestimatecostof1827.00lakhs.
- ➤ Under the scheme of PMGSY(III) 2021-22, 2nos of works taken up at an estimate cost of 341.70 lakhs. 2 nos of works completed at an estimate cost of 339.46 lakhs.
- ➤ Under the Scheme of NABARD XXVII 2021 -22, The construction of two bridges of 180 meters length completed at an estimated cost of 649.29 lakhs in Union SP Natham Panchayatat Kallikudi Block.
- ➤ Under the Scheme of NABARD XXVII 2023-24, 7 nos of works taken up at the cost of 6.00 crore of 10.77km in 4 blocks of Madurai district. All 7 works Completed.
- ➤ Under the Scheme of NABARD XXVII 2023-24, The construction of 4 bridges of 130 meters length at an estimated cost of 790.30. All works are in progress.

# 12. MUTHALVARIN GRAMA SALAIKAL MEMPATTU THITTAM (MGSMT)

- ➤ Under the scheme of MGSMT 2022-23, 283 nos of works taken up at the cost of 139.71 crore of 288.525 km in 13 blocks of Madurai district. 280 works Completed. Remaining 3 works is in progress.
- ➤ Under the scheme of MGSMT 2024-25, 73 nos of works taken up at the cost of 35.00 crore of 75.270 km in 13 blocks of Madurai district. All works are in progress.

# 13. JAL JEEVAN MISSION:

➤ In Madurai District 4,49,808 households in rural areas. Out of these households 4,00,928 household tap connections are provided under the scheme of Jal Jeevan Mission and Consolidated fund. Totally AS given to 3,197 works with the estimate of Rs.345.09/- Crore. Out of these works, 2,889 works are completed and 4,13,160 tap connections are given with expenditure of Rs.283.45/- Crores.

## 14. SWATCH BHARATH MISSION(GRAMIN):

In SBM(G) 2021-22, Madurai District has been allotted Rs.346.50 Lakhs.

- Administrative Sanction has been accorded for 66 works in which 66 works have been completed by utilizing Rs.346.50 Lakhs.
- ➤ In PWMU 2021-22, Madurai District has been allotted Rs.25.35 Lakhs. Administrative Sanction has been accorded for 3 works in which 3 works have been completed by utilizing Rs.25.35Lakhs.
- ➤ In ODF Plus Model Panchayat 2021-22, Madurai District has been allotted Rs.73.33Lakhs. Administrative Sanction has been accorded for 220 works in which 220 works have been completed by utilizing Rs.7.33Lakhs.
- ➤ In SBM(G) 2022-23, Madurai District has been allotted Rs.193.20 Lakhs. Administrative Sanction has been accorded for 1610 works in which 1553 works have been completed by utilizing Rs.186.36Lakhs.
- ➤ In CSC 2022-23, Madurai District has been allotted Rs.204.75 Lakhs. Administrative Sanction has been accorded for 39 works in which 33 works have been completed by utilizing Rs.173.25Lakhs.
- ➤ In Mini-CSC 2022-23, Madurai District has been allotted Rs.43.56 Lakhs. Administrative Sanction has been accorded for 24 works in which 19 works have been completed by utilising Rs.34.48Lakhs.
- ➤ In PWMU 2022-23, Madurai District has been allotted Rs.76.05 Lakhs. Administrative Sanction has been accorded for 9 works 8 works completed 67.6 lakhs.
- ➤ In 2023-24 IHHL , Madurai District has been allotted Rs.215.52 lakhs. Administrative Sanction has been accorded for 1796 works in which 880 works have been completed by utilizing Rs.105.60Lakhs.
- ➤ In SBM(G) 2023-24 CSC, Madurai District has been allotted Rs.164.85 Lakhs. Administrative Sanction has been accorded for 21 works in which 8 works have been completed by utilizing Rs.62.8 Lakhs.
- ➤ In SBM(G) 2023-24 Mini CSC, Madurai District has been allotted Rs.444.5 Lakhs. Administrative Sanction has been accorded for 127 works in which 53 works have been completed by utilizing Rs.185.5 Lakhs.
- ➤ In SBM(G) 2023-24 E-Cart, Madurai District has been allotted Rs.1383.2

Lakhs. Administrative Sanction has been accorded for 464 works.

# 15. <u>MEMBER OF PARLIAMENT LOCAL AREA DEVELOPMENT SCHEME</u> (MPLADS)

- ➤ Under the Scheme of MPLADS, Rs. 5.00 Crore Fund is allotted to each MPs for every Financial Year. This is executed from the financial year 2011-12.
- ➤ Under the Scheme of MPLADS, for the year 2021-2022, 22 works are taken by the Estimate of 196.01 Lakhs and 19 works are completed with the Expenditure of 163.32 Lakhs. Remaining 3 works are ongoing.
- ➤ Under the Scheme of MPLADS, for the year 2022-2023, 74 works are taken by the Estimate of 468.52 Lakhs and 66 works are completed with the Expenditure of 386.31Lakhs. Remaining 8works are ongoing.
- ➤ Under the Scheme of MPLADS, for the year 2023-2024, 80 works are taken by the Estimate of 485.00 Lakhs and 72 works are completed with the Expenditure of 395.78 Lakhs. Remaining 8 works are ongoing.

# MEMBER OF LEGISLATIVE ASSEMBLY Constitutional DEVELOPMENT SCHEME (MLACDS)

- ➤ In MLACDS Scheme, every year Rs.2.50 Crore Fund was allotted to each Constituency is up graded to Rs. 3.00 Crore from the year 2018-2019. Under the Scheme of MLACDS, for the year2021-2022, 411 works are taken by the Estimate of 2999.20 Lakhs and 408 works are completed with the Expenditure of 2908.89 Lakhs. Remaining 3 works are ongoing.
- ➤ Under the Scheme of MLACDS, for the year 2022-2023, 338 works are taken by the Estimate of 2921.61 Lakhs and 321 works are completed with the Expenditure of 2725.91 Lakhs. Remaining 17 works are ongoing.
- ➤ Under the Scheme of MLACDS, for the year 2023-2024, 341 works are taken by the Estimate of 2793.81 Lakhs and 218 works are completed with the Expenditure of 1623.72 Lakhs. Remaining 123 works are ongoing.

## 16. SCHEME COMPONENT OF POOLED ASSIGNED REVENUE (SCPAR)

Scheme Component of Pooled Assigned Revenue Scheme 2021-2022

Construction of Gasifier Crematorium in Madurai West Block, Chettikulam Panchayat, Oomatchikulam Village in Madurai District Rs. 2.00 Crores, the work is Physically Completed stage by utilizing Rs. 1.53 Crores.

➤ Construction of Thirupparankundram and Melur block Union Office Building works are Physically Completed stage by utilizing Rs.6.40 Crores. and which Estimate Cost of Rs.7.85 Crores have been given administrative approval for the year 2021-22.

# 17. NATIONALURBANMISSION-(PHASE-II)

- Village Panchayats in Madurai West Panchayat Union Surrounding Madurai city is selected for implementation of the scheme urban funded at 60% by Government of India and 40% by Tamil Nadu Government.
- Name of the Village Panchayats Selected 1) Chettikulam 2) Siruvalai 3) Ariyur 4) Ambalathadi 5) Vayalur 6) Kulamangalam 7) Kodimangalam 8) Veerapandi 9) Thodaneri 10) Petchikulam 11) Vagaikulam 12) Podhumbu 13) Adalai 14) Kovilpappakudi 15) Boothakudi 16) Samayanallur(CT)
- The Objective of the urban is to stimulate local Economic development enhance livelihood and to well planned urban Cluster and to nurture the essence of rural community life with focus one quantity and inclusiveness without compromising with the facilities perceived to the essentially urban in nature.
- Already in the existing Government schemes various works/skill Training to the tune of Rs.70 Crores Convergence works and a sum of Rs.30 Crores is allotted under CGF urban Scheme for Skill Training, Economic Activities Agriculture, Agri Engineering and Horticulture, Create basic Amenities such as Water supply & Drainage with Soak pit by Rural Development Department, Smart Class rooms for School / Anganwadies Establishing Rural Market / Production unit with employment to women

- and a smart Aavin parlour and Critical Trauma care centre at Samayanallur.
- ➤ Urban Scheme in Kovilpappakudi Cluster is beings implemented by District Rural Development Agency, Madurai under the Chairmanship of the Collector Madurai.

(Rs.in.Crores)

Details	Total No.of works	No.of.works Completed	Allotment	Expenditure
CGF	148	148	30.00	29.70
Convergence	147	147	70.00	70.00

All the Assets under urban have been handed over to the respective implementing Departments for Operation and Maintenance.

# ADB - Climate Change Adaptation Scheme

# ADB Pledge:

The Asian Development Bank (ADB) has pledged, under the NWP to further engage in adaptation to climate change and has focussed its pledge on those activities which strengthen adaptation planning by increasing the capacities of line Ministries, Finance Ministries and Economic Planning Ministries to understand and prioritize adaptation measures as part of the development process. Some of the results sought through its work include:

Result 1	Increased engagement of central Ministries in climate change adaptation
Result 2	Increased capacity for adaptation planning in countries and further the efforts underway in integrate climate change into development; and,
Result 3	A number of knowledge products will be developed and disseminated which will contribute to the body of work on development and adaptation planning

# ADB progress towards achieving ADB pledge

We need to explore the value of using community risk assessments (CRAs) for climate change adaptation. CRA refers to participatory methods to assess hazards, vulnerabilities and capacities in support of community-based disaster risk reduction, used by many NGOs, community-based organizations, and the Red Cross/Red Crescent. We review the evolution of climate change adaptation and community-based disaster risk reduction, and highlight the challenges of integrating global climate change into a bottom-up and place-based approach. Our analysis of CRAs carried out by various national Red Cross societies show that CRAs can help address those challenges by fostering community engagement in climate risk reduction, particularly given that many strategies to deal with current climate risks also help to reduce vulnerability to climate change.

Climate change can also be explicitly incorporated in CRAs by making better use of CRA tools to assess trends, and by addressing the notion of changing risks. However, a key challenge is to keep CRAs simple enough for wide application. This demands special attention in the modification of CRA tools; in the background materials and trainings for CRA facilitators; and in the guidance for interpretation of CRA outcomes. A second challenge is the application of a limited set of CRA results to guide risk reduction in other communities and to inform national and international adaptation policy. This requires specific attention for sampling and care in scaling up qualitative findings. Finally, stronger linkages are needed between organizations facilitating CRAs and suppliers of climate information, particularly addressing the translation of climate information to the community level.

#### **→** Preventive Measure (for all disasters)

The principle of prevention and mitigation is to reduce both exposure and vulnerability. Environmental management, site selection, urban planning and sound construction are critical to the safety of communities, where associoeconomic measures can be used to increase resilience, spread risk and responsibility, create redundancy, and minimize impact.

# **→** MitigationMeasure (for all disasters)

Mitigate measures can be structural or non-structural. Structural measures use technological solutions, like flood levels. Non-structural measures include

legislation, land-use planning and insurance. Mitigation is the most costefficient method for reducing the impact of hazards. Mitigation includes providing regulations regarding evacuation, sanctions against those who refuse to obey the regulations (such as mandatory evacuations), and communication of potential risks to the public.

# **→** Preparedness Strategies (for all disasters)

Preparedness is a continuous cycle of planning, organizing, training, equipping, exercising, evaluation and improvement activities to ensure effective co-ordination and the enhancement of capabilities to prevent, protect against, respond to, recover from, and mitigate against natural disasters, acts of terrorism, and other man-made disasters.

In the preparedness phase, emergency managers develop plans of action to manage and counter their risks and take action to build the necessary capabilities needed to implement such plans. Common preparedness measures include:

- ★ Communication plans with easily understandable terminology and methods.
- → Proper maintenance and training of emergency services, including mass human resources such ascommunityemergencyresponseteams.
- → Development and exercise of emergency population warning methods combined with emergency shelters and evacuation plans.
- → Stock piling, inventory, and maintain disaster supplies and equipment
- → Develop organization soft rained volunteers among civilian populations. Trained; organized, responsible volunteers are extremely valuable.

Another aspect of preparedness is casualty prediction, the study of how many deaths or injuries to expect for a given kind of event. This gives planners an idea of what resources need to be in place to respond to aparticular kind of event.

Emergency Managers in the planning phases hould be flexible, and allen compassing-carefully recognizing the risks and exposures of their respective regions

and employing un conventional an datypical means of support. Non-governmental organizations that offer desired resources, i.e., transportation of displaced home owners to be conducted by locals chool district buses, evacuation of flood victims to be performed by mutual aideagreements between fire departments and rescuesquads, should beidentifiedearlyinplanningstages, and practiced with regularity.

# **★** Response Planning (Frame work)

In India, the role of emergency management falls to National Disaster Management Authority of India, a government agency subordinate to the Ministry of Home Affairs. Inrecent years there has been as hiftinemphasis, from response and recovery to strategic risk management and reduction, and from a government-centered approach to decentralized community participation. The District Disaster Management Committee, headed by District Collector is responsible for developing the DDMP before an yhazard season based on the vulnerability of the district. They are also responsible for up-dation of the DDMP before all possible hazard season. DDM plan has to be approved by the DDMC and district development committee.

#### **→** DISTRICT DISASTER MANAGEMENT AUTHORITY

While developing the district disaster management plan the District Collector is responsible to calla meeting of suggestive members on the above and form the District Disaster Management Authority (DDMA) under his/her chairman ship. The district Disaster Management team has to be formed with all possible line dept. officers to carry out various activities during normal time, pre disaster, during and post disaster. The possible suggestive District Disaster Management teams which may be formed in a district based on the need: Information management team, rescue and evacuation team, emergency health management team, Food [relief, feed, fodder, civil supply] team, transportationmemt team, infrastructure management team etc.

# **→** TALUK DISASTER MANAGEMENT COMMITTEE:

Taluk Disaster Management Committee will act at taluk level under the Tahsildar and BDO with the guidance of Sub Divisional Officers and all Taluk level Departmental Head so feach Line Departments.

# **❖** Tamil Nadu System for Multi-hazard Impact Assessment, Alert and Emergency Response Planning and Tracking (TNSMART)

- 1) Tamil Nadu System for Multi-hazard Impact Assessment, Alert and Emergency Response Planning and Tracking (TNSMART) is a decision support system developed with 11 modules encompassing all the components of disaster management cycle that is preparedness, response, relief, recovery and mitigation measures.
- 2) The salient features of TNSMART are forecasting disaster risk, communication risk via Mobile Application, registering and tracking distress calls and evaluating risk reduction measures.
- 3) TNSMART assess the potential flood risk based on rainfall forecast issued by India Meteorological Department for the identified vulnerable locations in districts, in combination with previous rainfall quantity received during the season and status of water level in the reservoirs and tanks.
- 4) Further, the assessed risk is communicated via mobile application to alert the field level functionaries and the community to prepare for minimizing the impacts of potential flood risk through timely evacuation of people in low lying areas to safe shelters.
- 5) This mobile application has an unique alarm system that can send an alarm, even if the mobiles are in silent mode and the alarm stops only after the alert is viewed by the user to ensure timely dissemination of early warning information to minimize loss of lives during life threatening disasters like Tsunami.
- 6) All officials involved in disaster related activities should install the app and popularise among the public to download and utilise it.

#### **CHAPTER-13**

# Community and other Stakeholders Participants

The Concept of Community Based Disaster Management Plan

One of the main objectives of Disaster Risk Reduction Programme is involving community in preparing Disaster Management Plan. Increasing frequency and intensity of disasters in India, including some major disasters experienced in the recent past in Orissa and Gujarat, has made people at the highest policy level to realize the gravity of the problem and prompted a change in approach with more emphasis placed on pre-disaster preparedness and mitigation This entails a corresponding shift in focus away from conventional fire-fighting approach to disaster management towards the local-level initiatives involving a range of stakeholders

Though the responsibility of Disaster Management is vested with the Central and State governments, it is difficult for them to deal effectively all the aspects of the disaster area and population is large, the reach of the government machinery is not adequate and considerable loss of life and property occurs due to lack of timely response. It has been the experience during recent, major disasters that where local communities as well as the local governments took initiative, the process of rescue, relief and rehabilitation was smooth and effective, where as in other areas the Government and Non-government Agencies had to face enormous problems.

The High Powered Committee on Disaster Management has, in its draft policy, stated the importance of the community Based Disaster Management and the involvement of the local governments.

## INVOLVEMENT OF THE COMMUNITY

In the present day every individual is vulnerable and is threatened by the natural and man-made disasters, which are growing in number and variety In other words, every individual is required to be aware and also have minimum capacity to counter such crisis. This implies that entire population of a settlement or a village forms a community and has to be involved in its safeguard in the event of a crisis which has potential to affect all or majority of them.

While it is not possible to reach every individual to develop his/her capacity to counter the disasters, it is possible to approach the groups, formal or informal, to

achieve the task of creating awareness and developing minimum capacity to cope up with the disaster In other words, the community based disaster management has to start at community level through the groups of people to reach out to each family level The first response to the natural hazards comes from immediate neighborhood and spreads into many settlements in the community; while the government and other organization take some time to reach them.

#### COMMUNITY BASED DISASTER PREPAREDNESS – SCOPE AND ACTIVITIES

The community based disaster preparedness (CBDP) is a process to capacitate communities to prevent, mitigate and cope with disasters effectively. The process is designed, managed and owned by the communities. Other agencies like Government agencies, public and private corporate bodies, NGOs, International agencies / donors etc play the role of facilitators.

The Disaster Preparedness process embraces measures that enable governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes the formulation of viable emergency plans effective warning systems, maintenance of inventories and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be at 'risk' from a recurring disaster.

#### Initiatives taken by DDMC

- → District Disaster Management Committee has directed Taluks, Blocks, village Panchayats to prepare Community Based Disaster Management Plan.
- → It is also instructed to form disaster management teams by including community members like early warning teams, search and rescue team, evacuation team, medical team, carcass disposal team, water and sanitation team etc.
- ♦ Periodical training will be scheduled to give to the members of the teams.

#### FIRST RESPONDERS:-

Community is the first responders in case of any disasters in the area. Adequate training and periodical updation is essentials in any disasters. Therefore training has been imparted to the follow listed volunteers in the district.

# **Non-Governmental Organizations**

Non- Governmental Organisations are playing vital role in disaster management. Their capacity has to be improved periodically. Their involvement in disaster management plan preparation. Imparting training programmes, conducting mock drills etc,

# LIST OF NGO's

S. No.	Name of the NGO	Name & Address	Phone No.
1	Indian Red Cross	Collector's Office Campus, Madurai -625 020.	
2	Nehru Yuva Kendra	Thiru. Senthil kumar, Deputy Director, D.M. Nagar, Mattuthavani main road, Madurai.	9976478181
3	FEDCROT	Thiru. Subburaman The Secretary, 16 ESI Quarters, Mehaboobpalayam, Madurai 625 016.	9600212010
4	Masters Trust	Thiru.A.Rajkumar 7/143, Veeramani Complex SOR Nagar, batlagundu Main Road Usilampatti, Madurai – 625 532.	9842519371
5	DHAN Foundation	Thiru. Vasimalai, Executive Director 1 <sup>st</sup> Vaithiyanathapuram East, Madurai. Kennoth Cross Road, Madurai -625 016	0452-2530500 9791525231
6	Surabhi	Thiru. C.M. Sethu Muthuraj, Secretary, 194- Arasinar Colony, Baikara, Madurai-4.	9500660394
7.	Mother Teresa Educational Trust	Thiru. P. Ramar, Mother Teresa Educational Trust, Gandhipuram.	9443083095
8.	MAYILI TRUST	V.Rajkumar, Secretary, Jeeva Nagar, Madurai.	9943750321
9.	Rojavanam	Thiru. S.Raman, Manager, Uthangudi, Madurai.	9360288519

S. No.	Name of the NGO	Name & Address	Phone No.
10.	TNCCPC	Thiru. Karnan Pricident Tamil Nadu Citizen Consumer Protection Center, 21, Bharathidasan Road, T.P Road, Madurai 16.	9442703492
11.	CRED	Thiru.Alagesan The Secretary, 3-1-309, Main Road, Opp., to Police Sation, T.Vadipatti, Madurai-625 218.	9344108979
12.	ICCW	Thiru.Pramil kumar The Project Co-ordinater Matharai, Nakkalapatti (Post), Usilampatti, Madurai.	9842169945

# Linkages and Coordination with other agencies for Disaster Management

National Capacity building is national agenda for Disaster Management Plan. All agencies both government and Private institutions have to be linked in disaster risk reductions.

- 1. Health professional training programme
- 2. Engineers, Planners and Architects
- 3. Agriculture universities
- 4. All Government functionaries
  - a. All India Services
  - b. Central Services
  - c. State Administrative Services
  - d. District Cadres
  - e. Local Self-representatives and staff.
- 1. Youth Organisation/Schools/Colleges/NSS/NCC/Home guard

These agencies are to be linked to pool human resources at the time of emergencies.

# Linkages Budget and other financial outlay

The financial aspects of Disaster Risk Management entail various factors ranging from development planning to immediate relief post disaster, followed by investments made for reconstruction. As per the prevailing practice, the funds for preparedness, Mitigation and reconstruction are allocated by the Government as a part of budgetary allocations. The following funds are made available for Disaster Management.

- 1. National Disaster Response Fund
- 2. State Disaster Response Fund
- 3. National Disaster Mitigation Fund
- 4. 14TH Finance Commissions recommendations
  - a. Allocations by Ministries and Departments
  - b. Provisions in the Act of Disaster Management
  - c. Plan Schemes
  - d. Flex fund as a part of Centrally Sponsored Schemes.

With the change of paradigm shift in DM from the relief-centric to proactive approach of prevention, mitigation, capacity building, preparedness, response, evacuation, rescue, relief, rehabilitation and reconstruction, effort would be made to mainstream and integrate disaster risk reduction and emergency response in development process, plans and programmes of the Government at all levels. This would be done by involving all the stakeholders - Government organisations, research and academic institutions, private sector, industries, civil society organization and community. DDMA will ensure mainstreaming of disaster risk reduction in the developmental agenda of all existing and new developmental programmes and projects which shall incorporate disaster resilient specifications in design and construction. Due weight age will be given to these factors while allocating resources. Project which help in reducing the existing vulnerability of the area would be given preference over projects which are likely to enhance it.

# Monitoring teams

In order to report on the preventive action taken & preparedness status by various departments to avoid any damages to life/ property in case of any eventuality in the vulnerable areas identified, Inter-Departmental Zonal Team for each Taluk was constituted.

The Additional Chief Secretary/Commissioner of Revenue Administration, Chennai has also instructed to form Early Warning Team for North East Monsoon.

Accordingly, the line department officials are hereby nominated for the Early Warning Team.

# **CHAPTER-17**

# Indian Oil Corporation Bulk Stroage Unit Kappalur

#### Introduction:-

MADURAI OIL TERMINAL of INDIAN OIL CORPORATION LTD. is situated at Kappalur near Madurai in Tamilnadu. The Terminal was commissioned in the year 2005. It plays a crucial role in the distribution of petroleum oils to Madurai & others districts. It occupies an important place in the Indian Oil distribution network. The products handled by the Terminal are MS, HSD & SKO. The Terminals activities are confined for receiving, storing and dispatching of refined petroleum products to the consumption centers and there is no refining/processing involved.

#### **LOCATION AND SALIENT FEATURES OF THE SITE:**

The Terminal is located at SIDCO Industrial Estate, Kappalur near Madurai in Tamil Nadu.

#### STTF FFATURE

SITETERIORE			
Parameters	Details		
Latitude & Longitude	latitude 09°55'N Longitude 78°07'N		
Mean Elevation of the site	133m above Mean sea level		

Climatic condition	semi-arid
Land acquired for the plant	65 acres
Land use	Industrial use
Major crops in the District	Dry crops
Predominant wind direction	From South – West to North - East From North – East to South – West
Nearest Town	Thirumangalam
Nearest railway station	kappalur (3Km)
Nearest airport	Madurai (18Km)
Water Bodies	Irrigation tanks
Reserved forest	Nil
Historical Place	Tiruparakundram Temple (5Km)
National Park	Nil
Socio-economic	The site is within SIDCO industrial estate no settlement within 2 Km of the terminals

# 2.1 Meteorological Information

Temperature: Maximum 40°C

Minimum 19°C

Humidity: Maximum 75%

Minimum 37%

: Maximum in 24 Hrs – 188mm Rainfall

Minimum in 24 Hrs – 99.6mm

#### **ON-SITE EMERGENCY PREPAREDNESS PLAN:**

A major emergency in Madurai Terminal is one which has a potential to cause serious injury or loss of life. It may cause extensive damage to the property and serious disruption in the functioning of the Terminal. Although the emergency may be caused by number of different factors, it normally manifests in three basic forms namely.

- (a) Fire, (b) Explosion, (c) Toxic release. The major function of an emergency plan is to formulate a procedure for:
  - → Delegating specific assignments and avoid over lapping of activities.
  - ★ Controlling the emergency situation with minimum damage to men, materials and machine.
  - ★ Rescuing victims and treating them suitably.

- → Safeguarding others (evacuating them to safe places)
- → Identifying the persons affected/ dead.
- ★ Informing relatives of the causalities.
- → Providing authoritative information.
- → Preserving relevant records and equipments needed as evidence in any subsequent enquiry.
- ★ Rehabilitating the affected areas.

#### THE SUBJECT PLAN MEETS:

- → The statutory reguirements of Sec. 41(B) of factories Act. 1948,
- → Statutory requirements as per Rule 13.14,15 & 17 of Manufacture Storage and Import of Hazardous Chemicals Rules 1989 (Notified under EP Act 1986).
- → Rules on 'Emergency Planning. Preparedness and response for Chemical accidents as per notification 01. 1.8.96 from ministry of Environment and forests.
- → The recommendations of OISD Guidelines on Emergency preparedness Plan for Marketing locations of Oil Industry.
- → 1OCL Safety policy.

#### **EMERGENCY:**

A major emergency is one which has the potential to cause serious injury / loss of life, It may cause extensive damage to property and serious disruption both inside and outside the plant.

# Most of the major hazardous accidents come under two main categories namely:

- Events involving flammable materials
- Events involving toxic materials

#### **ON - SITE EMERGENCY:**

An event that may cause serious injuries / loss of life / extensive damage to property / serious disruption of work within the plant is called On - Site Emergency .

# **OFF - SITE EMERGENCY:**

Off - Site emergencies arise due to accidents which could affect the people and the environment outside the plant . In this case , it will be necessary to involve outside agencies.

#### **DISASTER:**

This is a major catastrophic affecting the life of the community and the environment. The Genesis may be either On - site or Off - site emergencies. " Emergency " usually refers to an unforeseen combination of circumstances or the resulting state that calls for immediate action . " Disaster " is defined as a sudden calamitous event bringing great damage , loss or disruption . Therefore not all emergencies are disasters. The degree and effectiveness of preparedness often spell the difference between emergency and disaster.

# **EMERGENCY / DISASTER MANAGEMENT PLAN:**

The Plan is the preparedness to respond to Emergencies / disasters. The plan tells the materials / resources. Agencies man power available for combating and specify the roles of each individual / agency in order to achieve appropriate and co-ordinate response with minimum loss of time and to achieve the highest effectiveness.

#### **CONCEPT OF EMERGENCY OPERATION:**

The four elements of a comprehensive approach for managing emergencies are:

- → Prevention incorporates all those activities which eliminate or reduce the probability of a disaster occurring on - site.
- → Preparedness includes all activities necessary to ensure a high degree of readiness so that response to an incident would be swift and effective.
- ★ Response activities are all those measures taken during an incident which minimize damage to the plant and surrounding areas and prevent the loss of life.
- ★ Recovery contains those short and long time activities which return all systems to normal operations.

#### THE OBJECTIVES OF EMERGENCY PLAN:

- a. To minimize the effect on people and property
- b. To localize the emergency and control it at the earliest
- c . To minimize the adverse impact on the environment
- d . To ensure effective rescue operations and treatment of casualties
- e. To identify the personnel affected or dead and also inform the relatives
- f. To train the people to act swiftly and effectively with confidence
- g. To preserve relevant records and exhibits for future investigations into the cause and circumstances leading to the emergency.
  - h. To restore the plant to normality at the earliest

# **OVERALL OBJECTIVES OF THE PLAN:-**

- ❖ To localise the emergency and if possible eliminate it.
- ❖ To minimise the effect of accident on people and propane.

These are to be achieved by operating staff and emergency staff by using fire fighting equipments . Emergency shut off valves and water sprays . Minimising the effects will include rescue, first aid, evacuation, rehabilitation etc.

#### **DURING EMERGENCIES**

- ❖ To provide basic guidance to the personnel for effectively combating such situations to minimize loss of life, damage to progeny and loss of property
- ❖ To localize the emergency and if possible eliminate it
- ❖ To minimize the consequences of an emergency
- ❖ To prevent spreading of the damage in the other areas.
- ❖ To give necessary warning to Terminal personnel and neighbourhoods.
- ❖ To maximize the resource utilization and combined efforts towards the emergency operations.
- To mobilize the internal resources and utilize them in the most effective way.

#### **ELEMENTS OF ONSITE EMERGENCY PLAN:**

- → Important elements considered in this plan are :
- ★ Emergency Organization
- → Emergency Facilities
- → Emergency Procedures
- ★ Communication during emergency
- ★ Rescue transport and rehabilitation
- ★ Role and responsibilities of key personnel and essential employees
- → Mutual Aid

## **PROJECT DATA**

Terminal	Madural Terminal at kappalur
Address	Indian Oil Corporation Limited Marketing Division (SR) Madurai Terminal , SIDCO Industriale Kappatur (PO), Madurai - 625008 TamilNadu
Products Stored	Motor Spirit ( MS ) Superior Kerosene Oil ( SKO ) High Speed Diesel ( HSD ) Packed Lubricants

Operations	Recipt, Storage And Distribution
Terminal Data	Total Licensed Tankage 79800 KL (proposed)

Tank No	Size	Storage Capacity ( KL )	Product	Type of Tank
TF 1A	28DIA X 15HT	8600	MS	FRVT
TF 1B	28DIA X 15HT	8600	MS	FRVT
TF 1C	28DIA X 15HT	8600	MS	FRVT
TF 2A	20DIA X 13HT	4000	SKO	CRVT
TF 2B	20DIA X 13HT	4000	SKO	CRVT
TF 2C	20DIA X 13HT	4000	SKO	CRVT
TF 3A	36DIA X 14HT	14000	HSD	CRVT
TF 3B	36DIA X 14HT	14000	HSD	CRVT
TF 3C	36DIA X 14HT	14000	HSD	CRVT

## **HAZARDOUS CHEMICAL STORE AND HANDLED:**

Motor Spirit	Liquid	Flammable
Superior Kerosene Oil	Liquid	Flammable
High Speed Diesel	Liquid	Flammable
Furfural	Liquid	Flammable / Toxic

# **EMERGENCY FACILITIES EMERGENCY CONTROL CENTRE:-**

The administrative building (17) is designated as ECC. In case this area is affected, the Terminal Control Room (29) is designated as alternative ECC.

# **FACILITIES AT ECC**

The following information and facilities be maintained at the ECC in Terminal Control Room:-

- ❖ Latest copy of Onsite emergency plan and offsite emergency plan ( as provided by District Emergency Authority ) to be approved .
- Inter Com . Telephone
- ❖ P & T Telephone
- ❖ Telephone directories (Internal, P & T)
- Terminal Layout , Site plan

- Layouts of piping , electrical connections plan indicating locations of hazardous inventories , sources of safety equipment , hydrant layout , location of pump house , road plan , assembly points , vulnerable zones , escape routes.
- Hazard chart
- Emergency shutdown procedures for Terminal unloading and loading operations including Pipeline.
- ❖ Nominal roll of employees
- List and addresses of key personnel and essential employees
- List and addresses of emergency co coordinators
- List and addresses of first aiders
- List and addresses of qualified alders
- MSDS Sheets

# The following emergency equipment is provided

- Fire Proximity Suit 1
- Stretcher -1
- Self contained breathing apparatus -1
- Safety Belt 1

The responsibility of maintaining the above emergency equipment lies with the Sr Operations Officer of the Terminal.

## **FIRE PROTECTION FACILITIES:-**

The fire protection facilities provided as per guideline norms given in OISD 177. (Detail in Annexure)

## **I.** Fire Hydrant system on auto drawing attached

Above ground static water tank	2 Nos (16 mt.dia x 13 mt . height) - 5200KL		
Fire Pumps	3 x 616M / Hr (2 operating + 1 stand by)		
Jockey Pump	2 x 20 M3/ H		
Pipe Dia	400mm		
Pipe Length	1000mts		
Water Monitor	33 Nos		
Double Hydrant Point	24 Nos		

# II. Sprinkler System provided for MS (3) & HSD (3) tanks

Is designed as single centralized foam generation system & connected to foam pouring systems installed on the MS / SKO / HSD storage tanks by main header pipeline and subsequently by separate pipe lines to the tanks . The basic technical parameters like quantity of AFFF, flow rate etc. for the

system are considered as per OISD regulations. 32 No. MCP point has been available. Monitoring facility available at control room.

#### **SYSTEM OPERATION:-**

The AFFF concentrate is stored in 10 KI SS Tank . The 3 % AFFF solution is generated with the help of water driven pump of 616M / Hr capacity . The solution is conveyed through 200mm diamond headers on each for each tank dyke . The main header in the dyke branch off as 100mm diamond riser pipelines leading to individual foam maker on the product storage tanks each of these pipeline has been provided with control gate walls before the dyke entry . Foam pourers with foam nozzles are provided on the tanks in line with OISD recommendations opening any of the gate valve will result in pressure drop and activate the system which results in operation of the pump.

- 1. Control room fire protection system
- 2. Control room, PLC room & store room is provided with automatic smoke / fire Detection system
- 3. Manually operated foam pourers on all the tanks

#### **LOCATION OF FIRST AID BOXES:-**

- → Terminal Managers Office
- → Terminal Control Room
- → TLF Gantry Supervisors room
- ★ Security gate
- → Control Room
- → Pump Station

## **EMERGENCY SIREN:-**

Located above TLF Gate Security Room. Operated on regular supply / emergency supply.

# **WIND SOCK:-**

Wind socks are installed at the top of the administrative building , at HPC & CTMPL exchange pits.

#### **EMERGENCY IDENTIFICATION:-**

# The likely emergencies of this Terminal are:

1. Tank Farm Area:

Tank containment failure

Pool fires in Dyke Vapor cloud explosion (a) Tank, (b) Dyke

Floating roof stuck

2. Tank Truck Loading Gantry

Containment failure - spill

Pool fire

Vapor cloud explosion

3. Furfural Storage and Injection System

Spillage / escape of vapors of furfural

Pool fires of furfural

4. Fires in the remaining areas

Near captive power DG sets

Near Fire pumps

Pump house

Sump

Slope tank

Electrical fires

Others:

Asphyxiation of persons

Structural collapse

Road accidents

#### PRIORITY OF PROTECTION

Life and safety of personnel

Reclamation of material

Preservation of property

Restoration of normalcy

#### **CHAPTER-18**

# Indian Oil Corporation Aviation Fuel Stroage Unit - Airport Madurai

#### Introduction:-

Incorporated as Indian Oil Corporation Ltd. On 1st September,1964 Indian Oli corporation and its subsidiaries account for nearly half India's petroleum product markets share,32%national refining capacity and 71% downstream sector pipelines capacity in India. it is India's flagship national oil company and downstream petroleum major thus being India's largest commercial enterprise.

# **Details of Area surrounding AFS:**

**North:** Towards this direction, located is the AAI housing colony, approach road to AFs and nearest village Perungudi at 2kms from our location, this village is having a population of approximately 5000, the is the Avaniyapuram road connecting to city railway station.

**South:** Adjacent to our compound wall in this direction is the run way for aircraft movement. Beyond this run way, highway connecting to Tirunelveli and down of Tamil Nadu is located

**East:**\_Located in this direction is highway NH38 ring road connecting to Trichy road. Beyond this, located is village Chinnavudapu (0.2km) and pokkuvarathu nagar(0.5km)

**West:** AAI Fire Station, Airport admin building, departure and arrivals terminal are close to our boundaries.

# **DETAILS OF THE OCCUPIER / MANAGER**

Occupier : Mr.S.Vijaya Kumar

Station Manager

Address Office: MADURAI AFS

**AVIATION FUEL STATION** 

INDIAN OIL CORPORATIONLIMITED MADURAI AIRPORT, PERUNGUDI

MADURAI - 625 022.

## **Contact Details:**

Telephone : 0452-2690397,0452 2690347

Mobile No : +91 9443389147 Email id : svk@indianoil.in Fax No : 0452 2690347

# **Description of facilities and Process:**

Madurai AFS is commissioned in 1986 situated in Madurai Airport premises. It has capability to store 1000 Kl of jet-A1 in 2nos above ground Vertical storage tanks of 500 KL capacity each.

# **Receipt:**

IOCL Madurai AFS receives ATF(Jet A-1) from sankari Terminal through Tank trucks.

### **Storag**e:

ATF (Jet A-1) is stored as bulk in 2 above ground vertical tanks.

# **Delivery**:

Jet A-1 is delivered to domestic and international Aircrafts operating at Madurai airport. Also, refuelling is carried out to DGS&D customer i.e. IAF, Indian Army, Coast Guard & Aviation Research Centre aircrafts. for carrying out the above into plane service, JetA-1 is filled into refuellers and delivered.

JetA-1 falls under category of class B petroleum product. as the Pertroleum Products are flammable and can catch fire if exposed to ignition, facilities and operations of the AFS are designed and maintained to prevent any incidence of fire. All internal electrical facilities in the AFS which are in Zone 0 &Zone 1 are designed to prevent generation of spark.

Tank Trucks are allowed to enter the AFS with spark arrestors only so that sparks do not come out with exhaust from the trucks. Earthing system is provided to dissipate static electrical charges to eliminated the chances of spark during product handling. Precautions are taken during execution of maintenance and project works involving welding, cutting, ginding or any other action that can generate spark.

Then refuellers are fitted with spark arrestors and routed to front so that sparks do not come out with exhaust from the Refuellers. The Refueller hoses are provided with cam lock coupling for providing leak free connections. Deadman control is provided to ensure availability or personnel during entire refuelling operation. Break interlock with the hoses of the refuellers is provided to avoid refuelled from moving while the hoses are connected.

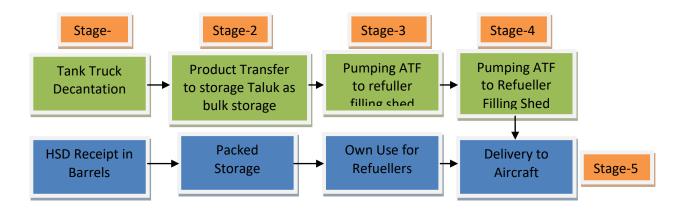
The AFS takes adequate and precautions in its Operations, however in an unlikely event of fire the AFS is equipped with fire fighting facilities. 10Kg dry chemical powder extinguishers, 25kg dry chemical powder extinguishers and 75kg dry chemical powder extinguishers are positioned as per statutory requirements. Foam required to fight Petroleum fires is kept ready in the AFS for instant use in case of emergency. Mock Fire Drills are conducted on regular training for the same is imparted to them.

# Averaged delivered quantity per day of JET A-1 is 3KL

- 1.5 Various POL Activities at Madurai AFS
  - a. TT Decantation-ATF
  - b. Refueller Topping up- ATF
  - c. Barrel Loading -ATF
  - d. Aircraft Refuelling
  - e. Cleaning of Strainers, filters
  - f. Storaged Tank Cleaning

# g. Refueller tank cleaning

# Flow chart of AFS operations:



# Storage tank details, quantity& storing method:

Tank. No	Product	Flammability class	Size (m)	Capacity (KL)	Safe Filling Capacity (KL)	Туре
	ATF	В	9.0m0X8.0mHT	500	475	AG
MUR-2	ATF	В	9.0m0X8.0mHT	500	475	AG

# **Pump facilities:**

SL NO	MAKE	KW	HP	VOLTS	AMPS	RPM	MAKE	HEAD	RATEDFLOW (LPM)
1	CROMPTON GREAVES LTD	7.5	10	400/400	15	1450	FLOWMORE	17	1500
2	CROMPTON GREAVES LTD	7.5	10	415+10%	15	1450	BEACON	17	1500

# Fire fighting Facilities & Infrastructure:

#### **FIRE EXTINGUISHERS**

1. 75 KG Dry Chemical Powder = 03 NOS.

2. 25 KG Dry Chemical Powder = 07 NOS.

3. 9/10 KG Fry Chemical Powder = 24NOS.

4. 4.5 KG CO2 F.E = 6NOS.

5. 2.0 KG CO2 F.E = 3NOS.

6. 1.0 KG CO2 F.E **=** 4NOS.

- 7. Sand Drum With Scoops = 8NOS.
- 8. Dry Chemical Powder
  - A) 10 Kg DCP 250Kg
  - B) CO2 Cartridges 200GM -10KGDCP 26 NOS.

#### **NOZZLES**

- a) Jet = 3nos
- b) Fog = 2nos
- c) Universal = 4nos
- d) Foam Branching Pipe = 2nos
- e) Water Curtain-= 2nos
- f) Portable Foam Monitors = 2nos.

#### **FOAM**

a) AFFF 0.600K.L

# **LIFE SAVING EQUIPMENTS**

- 1) Safety Helments = 11 nos.
- 2) Stretcher 2 nos
- 3) Explosive Meter 1 nos.
- 4) Rubber Hand Gloves 2 Pairs
- 5) Electrical Tester 1 no.
- 6) Flame Proof Search Light = 1 no.
- 7) First Aid Box With Anti
  - Snake Venom = 1 no.
- 8) First Aid Bix Inrefuellers = 3nos.
- 9) Fire Hoses = 6 nos.
- 10) Fire Proximity Suit = 1 no

#### **SIREN**

- 1. Electricsiren 3km Range 01 nos.
- 2. Hand Operated Siren 02 nos.

# **MISC**

1. Green Flag	1 no
2. Ref Flag	1 no
3. Resuscitators	1 no
4. Wind Sock	2 no

# **Fire water System**

Not applicable as per OISD-STD 235 as location is having aggregate storage capacity not more than 1000kl in above ground Tank. However in case of emergencies assistance is sought from Mutual Aid Partner AAI Fire team, Madurai Airport.

#### **ESD**

Emergency shut Down is provided at three places in the location

- Admin office entrance i)
- Pump house ii)
- iii) Topping up shed

## **Manpower Details**

Total manpower deployed at locations is Officers: 2 & Employees:4 No of security guards:4 & House keeping workers: 4

# CHAPTER -19

#### FOREST FIRE AND ITS MANAGEMENT

#### INTRODUCTION

Forest fire causes imbalances in nature and endangers biodiversity by reducing faunal and floral wealth. Traditional methods of fire prevention are not proving effective and it is now essential to raise public awareness on the matter, particularly among those people who live close to or in forested areas.

In Madurai District the reserved forest are located in Melur taluk 1. Perumal Malai forest 2. Vaguthu Malai forest, Vadipatti taluk the Sirumalai forests both borders with Dindigul District and in Peraiyur taluk Elumalai and Sathuragiri forest range borders with Virudhunagar District.

#### **CAUSES OF FOREST FIRE**



Forests have been affected by fires. The menace has been aggravated with rising human and cattle population and the consequent increase in demand for forest products by individuals and communities. Causes of forest fires can be divided into

two broad categories: environmental (which are beyond control) and human related (which are controllable).

- **1.** Environmental causes are largely related to climatic conditions such as temperature, wind speed and direction, level of moisture in soil and atmosphere and duration of dry spells. Other natural causes are the friction of bamboos swaying due to high wind velocity and rolling stones that result in sparks setting off fires in highly inflammable leaf litter on the forest floor.
- **2. Human related causes** result from human activity as well as methods of forest management. These can be intentional or unintentional, for example
  - graziers and gatherers of various forest products starting small fires to obtain good grazing grass as well as to facilitate gathering of minor forest produce like flowers of Madhuca indica and leaves of Diospyros melanoxylon
  - → the centuries old practice of shifting cultivation (especially in the North-Eastern region of India and inparts of the States of Orissa and Andhra Pradesh).
  - the use of fires by villagers to ward off wild animals
  - → fires lit intentionally by people living around forests for recreation
  - fires started accidentally by careless visitors to forests who discard cigarette butts.

The causes of forest fire have been increasing rapidly. The problem has been accentuated by the growing human and cattle population. People enter forests ever more frequently to graze cattle, collect firewood, timber and other minor forest produce. It has been estimated that 90% of forest fires in India are man-made.

#### **EFFECT OF FOREST FIRE**

Fires are a major cause of forest degradation and have wide ranging adverse ecological, economic and social impacts, including:

- 1. Loss of valuable timber resources,
- 2. Degradation of catchment areas,
- 3. Loss of biodiversity and extinction of plants and animals,
- 4. Loss of wildlife habitat and depletion of wildlife,
- 5. Loss of natural regeneration and reduction in forest cover,
- 6. Global warming,
- 7. Loss of carbon sink resource and increase in percentage of CO2 in atmosphere,
- 8. Change in the microclimate of the area with unhealthy living conditions,
- 9. Soil erosion affecting productivity of soils and production,
- 10. Ozone layer depletion,
- 11. Health problems leading to diseases,
- 12. Loss of livelihood for tribal people

13. The rural poor, as approximately 300 million people are directly dependent upon collection of non-timber forest products from forest areas for their livelihood.

#### THE NEEDS OF THE FIRE MANAGEMENT

The incidence of forest fires is on the increase and more area is burned each year. The major cause of this failure is the piecemeal approach to the problem. Both the focus and the technical resources required for sustaining a systematic forest fire management programme. Important forest fire management elements like strategic fire centres, coordination among departments, funding, human resource development, fire research, fire management, and extension programmes is needed.

Taking into consideration the serious nature of the problem, it is necessary to make some major improvements in the forest fire management strategy for the country. The Ministry of Environment and Forests, Government of India, has prepared a National Master Plan for Forest Fire Control. This plan proposes to introduce a well-coordinated and integrated fire-management programme that includes the following components:

- 1. Prevention of human-caused fires through education and environmental modification. It will include silvicultural activities, engineering works, people participation, and education and enforcement. It is proposed that more emphasis be given to people participation through Joint Forest Fire Management for fire prevention.
- 2. Prompt detection of fires through a well coordinated network of observation points, efficient ground patrolling, and communication networks. Remote sensing technology is to be given due importance in fire detection. For successful fire management and administration, a National Fire Danger Rating System (NFDRS) and Fire Forecasting System are to be developed in the country.
- 3. Fast initial attack measures.
- 4. Vigorous follow up action.
- 5. Introducing a forest fuel modification system at strategic points.
- 6. Fire fighting resources.

Each of the above components plays an important role in the success of the entire system of fire management. Special emphasis is to be given to research, training, and development.

#### INTEGRATED FOREST PROTECTION PROGRAMME

1. The main objective of this scheme to control forest fires and strengthen the forest protection. The works like fire line clearing, assistance to Joint Forest Management committees, creating water bodies, purchase of vehicles and communication equipments, purchase of fire fighting tools, etc., are being undertaken.

- Fire-patrol parties comprising forester, guard, watchers and firewatchers have been formed in all ranges. They are equipped with walkie-talkies to communicate with the base station, if they required more manpower and logistics. The teams were working under the supervision of the respective rangers.
- 3. Services of the regular range office staff and that of anti-poaching teams are also being used to prevent accidental fires and in certain cases, intentional fires caused by poachers. Vigil would be maintained from the first week of Februarytill the end of the summer season in May.

Sl.No	Name of the officer & Range	Contact No
1.	District Forest Office	0452-2536279
2.	Dr. Guruswamy Dabbala, I.F.S., District Forest Officer	9885782760
3.	Selvi. Sarumathi, Madurai Range	9566607640
4.	Selvi. Saurmathi, (A/c) Wildlife Range	9566607640
5.	Thiru.Annakkodi, Usilampatti Range	6374600284
6.	Thiru. Venkateswaran, Sholavanthan Range	9750842308
7.	Thiru. Aurumugam, Social Forestry Range	9259399456
8.	Thiru. Aurumugam, Tirumangalam Social Range (A/c)	9159399456
9.	Thiru. Giritharan, Forest Extension Centre	9750842308

#### Disaster and its Kinds Do's and Don'ts

## **FLOODS**

Flooding is one of the natural disasters that threaten the lives and economic well being of Indians. A flood is caused when water inundates land, which is normally dry. While the pattern of flooding varies, there are few areas of the country where the community is not at risk. Flood warning is one way of reducing the damaging impact of floods. Following a flood warning for your area, typical

actions you should take as a volunteer include giving instructions and increasing awareness about the dangers and preparedness measures, such as:

- ♣ All members of a community should know the safe route to nearest shelter/ raised pucca house.
- ₩ Move valuable/personal items to a safe place above expected flood level.
- Open doors of refrigerators and other heavy airtight items that could float, tip over and be damaged
- Switch off electricity and gas at supply points to the building.
- Protect/relocate stock and equipment in commercial/industrial premises.
- Have an emergency kits on hand which includes:
- A portable radio, torch and spare batteries.
- ♣ Stocks of fresh water, dry food (chura, mudi, gur, biscuits), kerosene, candle and matchboxes.
- ♣ Waterproof or polythene bags for clothing and valuables, an umbrella and bamboo stick (to protect from snakes), salt and sugar. A first aid kit, manual and strong ropes for tying things.

The earlier you act and increase awareness about the preparedness measures, the better you will be prepared. Both during and after a flood keep tuned to your radio. Where possible, you will be kept up to date with the likely duration and level of flooding and when it is over you will receive advice from local authorities on where to obtain medical care, assistance with food, clothing, shelter and how best to help yourself and your community recover.

# **DURING FLOODS**

- Encourage drinking of boiled water.
- ♣ Make sure that all the food is kept covered, don't take heavy meals.
- ♣ Use raw tea, rice-water, tender coconut-water, etc. during diarrhoea; contact your ANM/AWW for ORS and treatment. Do not let children remain on empty stomach.
- ♣ Give instructions to use bleaching powder and lime to disinfect the surrounding.

♣ As a volunteer, help the officials distribute relief materials.



## AFTER THE FLOOD - VITAL POINTS

Floodwater can be extremely polluted and as a volunteer it is essential to spread awareness of the following in the affected areas, so as to follow these rules to reduce risk of injury, sickness or infection:

- ♣ Do not eat food, which has been in contact with floodwater.
- Boil all water until supplies have been declared safe.
- Do not handle wet electrical equipment.
- ♣ Avoid wading even in shallow water as it may be contaminated if you must enter shallow floodwater, wear solid boots or shoes for protection.
- ♣ Beware of snakes and spiders, which may move to drier areas in your house.
- Check with police for safe routes before driving anywhere.

#### Water Depth and Current

The great majority of the deaths from flooding result from people attempting to drive, walks, or swim through floodwaters. Floodwater depth and current are easily misjudged and are capable of sweeping away and submerging even large vehicles. Also in small streams the water level can change suddenly. Some deaths have even resulted from people camping in, or near, normally dry riverbeds. People have also died when flash floods occur in storm water drains and irrigation channels.

# **Hidden Dangers**

Many of those thought to have drowned in floods, especially flash floods, may actually have been killed by the violence of the water, or as a result of having been struck by, or having struck, objects in the water or the river bed. Thus, simply being a good swimmer may not be enough to survive. THEREFORE DO NOT ENTER OR DRIVE INTO FLOOD WATERS, especially where an obvious current exists. If your vehicle becomes stranded in floodwater, leave it and move to higher ground before the water level rises further. BE AWARE of other potential injuries or adverse effects from floodwaters such as:

- Possibility of exposure (hypothermia) after becoming soaked;
- Risk of illness after drinking from water supplies polluted by sewage and other hazardous wastes in urban and recreation areas;
- ♣ Injuries from vehicle accidents caused by road washouts, soft edges and damaged bridges; and
- ♣ Electrocution by overhead or fallen power lines. If in a boat on floodwater, be aware of power lines. They may be dangerously close to an aerial, mast, cabin, etc, or may even be in the water.

# **INITIAL STEPS**

It may take months, rather than weeks, to get a house back into its original condition. However it is important to start work just as soon as the rain stops and the water has receded. As a volunteer, your duties include giving instructions and increasing awareness about the dangers and preparedness measures that need to be done as quickly as possible:

- Clear up, drain and start drying out the house as soon as floodwaters recede.
- ♣ Take out everything that is wet and that can be moved floor coverings, furniture, bedding and clothing.
- On dry days, keep all doors and windows open. On wet days, leave windows slightly open.
- ♣ Drain away water under the house, and try to increase the airflow there to assist drying.

Check for trapped water and mud in wall cavities, as well as areas such as shower trays, baths, benches and bottom shelves.

#### **WARNING**

The hints given assume there is no structural building damage such as leaning walls or foundation damage. If there are any signs that the house has moved on its foundations - buckled floors, new cracks in the walls, out-of-shape doorframes, consult a qualified structural engineer or building consultant.

#### **CLOUD BURSTS**

- → It is a sudden occurrence and severe heavy rain and of very high intensity in a limited place. It creates a sudden flood in both plain and hilly areas, causes big landslides, brings down boulders, and uproots trees. Due to this, torrential rain occurs in a limited area.
- ◆ Cloudbursts cause heavy damages in the flood prone plain areas. Due to sudden rain or water flow, breaching of banks and over flowing of dams could happen. It causes landslide, traffic obstruction and damages to houses. Periodically, in the cloud burst areas, people have to construct houses in higher elevation than in flood prone places. This has to be enforced very strictly for saving the people.
- → People should avoid rivers and drainage channels during cloud burst as sudden flooding may endanger their lives.
- → Cloudbursts bring a lot of debris and boulders, and silt larger areas and make it uncultivable.
- → The most vulnerable areas could be the plains adjoining the hills.

#### **THUNDER & LIGHTNING**

Thunder is the sound that follows a flash of lightening and is caused by sudden expansion of the air in the path of the electrical discharge.

# **DURING THUNDERSTORMS**

Lightning claims quite a few lives and injures many every year. Quite a large number of injuries from the electric shock received while using fixed telephones during thunderstorms.

#### **TAKE ACTION NOW**

Consult an electrician for advice on lightning conductors required for your house.

#### IF CAUGHT OUTDOORS

If you hear thunder 10 seconds after a lightning flash, it is only about three kilometres away. The shorter the time, the closer the lightning, so find shelter urgently.

As a volunteer you must make sure you give instructions and increase awareness about the dangers associated with thunderstorms and lightening and preparedness measures, such as:

- 🖊 Seek shelter in a hardtop (metal-bodied) vehicle or solid building but avoid small open structures or fabric tents.
- Never take shelter under a small group of (or single) tree(s).
- 4 If far from any shelter, crouch (low, feet together), preferably in a hollow. Remove metal objects from head / body. Do not lie down flat but avoid being the highest object.
- 🖊 If your hair stands on end or you hear `buzzing' from nearby rocks, fences, etc, move immediately. At night, a blue glow may show if an object is about to be struck.
- Do not fly kites during thunderstorms.
- 🖊 Do not handle fishing rods, umbrellas or metal rods, etc.
- 🖊 Stay away from metal poles, fences, clotheslines etc.
- Do not ride bicycles or travel on open vehicles.
- 4 If driving, slow down or park away from trees, power lines, stay inside metal-bodied (hard top) vehicles or in a pucca building but do not touch any metal sections.
- If in water, leave the water immediately.
- ul>If on a boat, go ashore to a shelter as soon as possible.
- Be sure the mast and stays of the boat are adequately secured.

# IF YOU ARE INDOOR'S

Before the storm arrives, disconnect external aerial and power leads to radios and television sets. Disconnect computer modems and power leads.

- ♣ Draw all curtains and keep clear of windows, electrical appliances, pipes and other metal fixtures (e.g. do not use the bath, shower, hand basin or other electric equipments)
- ♣ Avoid the use of fixed telephones. In emergencies, make calls brief, (do not touch any metal, brick or concrete) and do not stand bare foot on concrete or tiled floors.

#### **FIRST AID**

Apply immediate heart massage and mouth-to-mouth resuscitation to lightning victims until medical help arrives. (You won't receive a shock from the victim).

#### LIGHTNING FACTS AND MYTHS

- When struck, people do not glow or fry to a crisp but the heart and breathing are often affected.
- ♣ Only about 30% of people struck actually die, and the incidence of long-term disability is low, particularly when appropriate first aid is applied promptly.
- ♣ If your clothes are wet, you are less likely to be seriously injured if struck, as most of the charge will be conducted through the wet clothes rather than your body.
- Lightning can, and often does, strike more than once in the same place.

## **HEAT WAVES**

Heat Wave conditions can result in physiological strain, which could even result in death. Orissa experienced severe heat wave conditions during April to mid June in 1998, and nearly 2,000 people died of heat stroke. To minimise the impact during the heat wave and to prevent serious ailment or death because of heat stroke, you can as a volunteer give instructions and increase awareness about the dangers and preparedness measures, such as the following measures:

- $\clubsuit$  Avoid going out in the sun, especially between 12.00 noon and 3.00 p.m.
- ♣ Drink sufficient water and as often as possible, even if not thirsty
- ♣ Wear light weight, light-coloured, loose, and porous cotton clothes. Use protective goggles, umbrella/hat, shoes or chappals while going out in sun.
- ♣ Avoid strenuous activities when the outside temperature is high. Avoid working outside between 12 noon and 3 p.m. While travelling, carry water with you.

- ♣ Avoid alcohol, tea, coffee and carbonated soft drinks, which dehydrates the body.
- Avoid high-protein food.
- If you work outside, use a hat or an umbrella and also use a damp cloth on your head, neck, face and limbs
- 辈 Do not leave children or pets in parked vehicles
- ♣ If you feel faint or ill, see a doctor immediately.
- ♣ Use ORS, homemade drinks like lassi, torani (rice water), lemon water, buttermilk, etc. which helps to re-hydrate the body.
- ♣ Keep animals in shade and give them plenty of water to drink.
- ♣ Keep your home cool, use curtains, shutters or sunshade and open windows at night.
- ♣ Use fans, damp clothing and take bath in cold water frequently.

#### TIPS FOR TREATMENT OF A PERSON AFFECTED BY SUNSTROKE:

- Lay the person in a cool place, under a shade. Wipe her/him with a wet cloth/wash the body frequently. Pour normal temperature water on the head. The main thing is to bring down the body temperature.
- ♣ Give the person ORS to drink or lemon sarbat/torani or whatever is useful to re-hydrate the body.
- ♣ Take the person immediately to the nearest health centre. The patient needs immediate hospitalisation, as heat strokes could be fatal.

#### **ACCLIMATISATION**

People at risk are those who have come from a cooler climate to a hot climate. You may have such a person(s) visiting your family during the heat wave season. They should not move about in open field for a period of one week till the body is acclimatized to heat and should drink plenty of water. Acclimatization is achieved by gradual exposure to the hot environment during heat wave.

#### **DROUGHTS**

Droughts are slow creeping disasters. Of all disasters, droughts have the greatest potential economic impact and can affect the largest number of people.

Droughts affect large geographical areas – often covering whole countries or parts of continents – they may last for months and in some cases several years. They invariably have a direct and significant impact on food production and the overall economy. A drought is a slow onset natural hazard and it offers time and opportunity to mitigate its impact. Drought connotes

situation of scarcity and distress usually caused by prolonged failure of rains, affecting agricultural activities adversely, leading to loss of production and employment, drinking water shortages, deficiency in fodder supply, etc.



Consequential effects are migration of people in search of an alternative employment or livelihood.

## Typical adverse effects of droughts are:

- Reduced income for farmers
- Negative impact on agricultural economy
- ♣ Negative impact on nutritional status
- Increased stress and morbidity if migration occurs
- Loss of water quality and quantity
- Negative social impact



As far as action points for the district administration are concerned, it would be useful to distinguish between widespread and prolonged droughts calling National or State level policies, and, the more frequently occurring local level scarcities. The two major reasons for onset of drought are the failure of monsoons, and inadequate water conservation efforts.

### POSSIBLE RISK REDUCING MEASURES

To reduce the risk of transitory food insecurity due to drought, it is necessary to protect people's access to food through:

- Ensuring the availability of food in the affected areas, and
- Protecting the entitlements of all groups within the affected population.
- ♣ Some of the principal measures for maintaining food security during droughts are:
- Price Stabilization
- Food subsidies
- Employment creation programs

- General food distributions
- Supplementary feeding programs
- Special programs for livestock and pastorals populations
- Complementary water programs
- Complementary health programs

#### POST DROUGHT ASSISTANCE

The affected population must be assisted to replace assets lost during the period of temporary food insecurity and where this is realistic to re-establish their livelihoods. The severity of this food insecurity episode will determine the nature and scale of the rehabilitation requirements. Thus, if migration to camps and significantly increased mortality has occurred, then a comprehensive rehabilitation program will be required. This may involve:

- Health care counseling
- Assisting the migrants back to their homes
- ♣ Material support to re-establish their homes and productive activities. Such provisions may include seeds, tools, cooking utensils, blankets, and support until households are capable of supporting themselves.

If the impact of the temporary food insecurity episode has not been severe and most households have not been obliged to sell productive assets (e.g. consume seed stocks and breeding livestock) then a rehabilitation program may not be required. Rehabilitation needs should therefore be carefully assessed and intervention tailored to the particular situation.

#### **GEOLOGICALLY RELATED**

#### **DISASTERS EARTHQUAKES**

Earthquakes are a shaking or trembling of the earth that is volcanic or tectonic in origin. Earthquakes usually give no warning at all.Prepare your family before the earthquake. It is better to be prepared before hand. So now is the time to formulate a safety plan for you and your family. If you wait until the earth starts to shake, it may be too late. As a volunteer, give instructions and increase awareness about the dangers and preparedness measures, such as the following safety measures:

EARTHQUAKE

- ♣ Always keep the following in a designated place: bottled drinking water, nonperishable food (chura, gur, etc), first-aid kit, torchlight Keep battery-operated radio with extra batteries.
- Teach family members how to turn off electricity, gas, etc.
- Identify places in the house that can provide cover during an earthquake.
- It may be easier to make long distance calls during an earthquake. Identify an out-of-town relative or friend as your family's emergency contact. If the family members get separated after the earthquake and are not able to contact each other, they should contact the designated relative/friend. The address and phone number of the contact person/relative should be with all the family members.

### SAFEGUARD YOUR HOUSE

- ♣ Consider retrofitting your house with earthquake-safety measures. Reinforcing the foundation and frame could make your house quake resistant. You may consult a reputable contractor and follow building codes.
- Kutchha buildings can also be retrofitted and strengthened.

### **DURING QUAKE**

Earthquakes give no warning at all. Sometimes, a loud rumbling sound might signal its arrival a few seconds ahead of time. Those few seconds could give you a chance to move to a safer location. Here are some tips for keeping safe during a quake.

- ♣ Take cover. Go under a table or other sturdy furniture; kneel, sit, or stay close to the floor. Hold on to furniture legs for balance. Be prepared to move if your cover moves.
- ♣ If no sturdy cover is nearby, kneel or sit close to the floor next to a structurally sound interior wall. Place your hands on the floor for balance.

- ♣ Do not stand in doorways. Violent motion could cause doors to slam and cause serious injuries. You may also be hit be flying objects.
- Move away from windows, mirrors, bookcases and other unsecured heavy objects.
- ♣ If you are in bed, stay there and cover yourself with pillows and blankets
- Do not run outside if you are inside. Never use the lift.
- ♣ If you are living in a kutcha house, the best thing to do is to move to an open area where there are no trees, electricity or telephone wires.

#### **IF OUTDOORS:**

- Move into the open, away from buildings, streetlights, and utility wires. Once in the open, stay there until the shaking stops.
- ♣ If your home is badly damaged, you will have to leave. Collect water, food, medicine, other essential items and important documents before leaving.
- ♣ Avoid places where there are loose electrical wires and do not touch metal objects that are in touch with the loose wires.
- ♣ Do not re-enter damaged buildings and stay away from badly damaged structures.

#### IF IN A MOVING VEHICLE:

Move to a clear area away from buildings, trees, overpasses, or utility wires, stop, and stay in the vehicle. Once the shaking has stopped, proceed with caution. Avoid bridges or ramps that might have been damaged by the quake.

## AFTER THE QUAKE

Here are a few things to keep in mind after an earthquake. The caution you display in the aftermath can be essential for your personal safety.

- ₩ Wear shoes/chappals to protect your feet from debris
- After the first tremor, be prepared for aftershocks. Though less intense, aftershocks cause additional damages and may bring down weakened structures. Aftershocks can occur in the first hours, days, weeks, or even months after the quake.
- Check for fire hazards and use torchlights instead of candles or lanterns.

- ♣ If the building you live in is in a good shape after the earthquake, stay inside and listen for radio advises. If you are not certain about the damage to your building, evacuate carefully. Do not touch downed power line.
- ♣ Help injured or trapped persons. Give first aid where appropriate. Do not move seriously injured persons unless they are in immediate danger of further injury. In such cases call for help.
- ♣ Remember to help your neighbours who may require special assistance-infants, the elderly, and people with disabilities.
- lacktriangle Listen to a battery-operated radio for the latest emergency information.
- Stay out of damaged buildings.
- ♣ Return home only when authorities say it is safe. Clean up spilled medicines, bleaches or gasoline or other flammable liquids immediately. Leave the area if you smell gas or fumes from other chemicals. Open closet and cupboard doors cautiously.
- ♣ If you smell gas or hear hissing noise, open windows and quickly leave the building. Turn off the switch on the top of the gas cylinder.
- Look for electrical system damages if you see sparks, broken wires, or if you smell burning of amber, turn off electricity at the main fuse box. If you have to step in water to get to the fuse box, call an electrician first for advice.
- Let Check for sewage and water lines damage. If you suspect sewage lines are damaged, avoid using the toilets. If water pipes are damaged, avoid using water from the tap.
- lacktriangle Use the telephone only for emergency calls.
- In case family members are separated from one another during an earthquake (a real possibility during the day when adults are at work and children are at school), develop a plan for reuniting after the disaster. Ask an out of state / district relative or friend to serve as the "family contact". Make sure everyone in the family knows the name, address, and phone number(s) of the contact person (s).

## **LAND SLIDES**

A landslide is the downward and outward movement of slope forming material, composed of natural rocks, soils, artificial fills or combination of these materials. Landslides, in a strict sense, do not include creep phenomena or subsidence but usually these are considered along with landslides because of their relation to instability of slope. Factor causing landslides

Geological

Hydrological

Seismic

#### Land use

- Unscientific land use and land management practices
- Improper drainage system
- Cultivation on steep slopes and indiscriminate Construction activities on steep slopes
- Steep road cuts
- Deforestation etc.
- Effect Slope failure resulting in frequent road blocks
- Affect power generation units
- Loss of lives and properties
- Siltation in lakes and reservoirs
- Affect trade and tourism
- Affect other developmental, cultural and economic activities Precautionary measures Adopted Cultivated lands
- 🖊 Land capability based land use and land management practices
- 🔱 Diversion of water from unprotected areas
- Development and management of steep slopes
- 🖊 Graded bunding and trenching
- Bench terracing (inward sloping)
- Vegetative or bio-engineering measures
- 🖊 Puertorican type of terrace with Guatemala, Napier grass
- Vegetative hedges across slope
- Well planned lateral and vertical drains, toe drains, drop pits for safe disposal of runoff water.

## Tea plantation

- Staggered contour trenching
- Radial and vertical drains
- Mulching
- 🦊 Vegetative barriers
- Inter cropping of cover crops like beans
- No need of demolishing benches for tea

## Residential development/construction activities

- Proper town planning
- Landslide zonation
- Avoid encroachments on steep slope
- Slope stabilization measures

## Watch out for:

- New springs, seepage or saturated ground in areas
- Unusual bulge or cracks on the ground
- ♣ Movement of soil away from foundation
- Tilting or crack on concrete floor and foundation
- Leaning telephone poles, trees, retaining wall or fences
- Sunken road beds
- Rapid increase in creek water levels accompanied by increased
- turbidity Sticking doors and windows and visible open spaces indicating jambs and frames out of plumb

#### Areas vulnerable to landslides

## On existing landslides

- On or at base of hill slopes
- ♣ At the base or top of an old fill slope
- ♣ At the base or top of a steep slope
- 🖊 Become familiar with the land around you

## What to do during a landslide

- Quickly move out of the path of the landslide ordebris flow. Moving away from the path of the flow to a stable area will reduce your risk.
- ♣ If escape is not possible, curl into a tight ball and protect your head. A tight ball will provide the best protection for your body.

#### What to do after a landslide?

- Stay away from the slide area. There may be danger ofadditional slides.
- Check for injured and trapped persons near the slide, without entering the direct slide area. Direct rescuers to their locations.
- 🖊 Help a neighbour who may require special assistance
- 💺 infants, elderly people, and people with disabilities.
- Liderly people and people with disabilities may require additional assistance.
- ♣ Who have large families may need additional assistance in emergency situations.
- Listen to local radio or television stations for the latest emergency information.
- Watch for flooding, which may occur after a landslide or debris flow. Floods sometimes follow landslides and debris flows because they may both be started by the same event.
- Look for and report broken utility lines to appropriate authorities.
- Reporting potential hazards will get the utilities as quickly as possible, preventing further hazard and injury.
- Check the building foundation, chimney, and surrounding land for damage.
- ♣ Damage to foundations, chimneys, or surrounding land may help you assess the safety of the area.
- ♣ Replant damaged ground as soon as possible since erosion caused by loss of ground cover can lead to flash flooding.
- Seek the advice of a technical expert for evaluating landslide hazards or designing corrective techniques to reduce landslide risk.

## **ACCIDENT RELATED DISASTERS**

#### **URBAN & RURAL FIRES**

Urban fires are manmade disasters, and lives and properties worth millions of rupees are lost. The phases in the development of an urban fire are outbreak, development, spread, and extinction. Besides cataclysmic natural events, urban fires are caused by electrical faults (in an estimated 35-40 percent of cases), human carelessness or malevolence, the lack of supervision of a naked flame, or the uncontrolled product of a chemical or physical reaction. Once the flame is ignited it would either go out by itself or spread in its initial surroundings at a variable speed. The materials encountered are likely to vary in terms of their abundance, flammability and calorific potential. As it develops, the fire would produce heat and hot gases, which are potentially toxic or chemically aggressive.

The spread of fire in urban areas depends on the structure and materials of buildings, their volumes and partitions or spacing. Doors, windows, facades, ducts and holes may provide shafts that act as vectors for the spread of the fire. The risk to people, rather than property, depends on their location and concentration, their perception of the hazard, and the potential for rapid evacuation via safe routes. Particular problems are likely to result from the rapid destruction early in the fire of "nerve centers" such as communications headquarters and the nodes of warning systems.

The risk can be reduced greatly by structural and non-structural measures. Extinguishers, sprinklers, hoses, evacuation routes, and fire sensors are all well known structural approaches. Evacuation drills designed for cases of fire hazard can be combined with those created for natural hazards such as earthquakes. Firehazards can be investigated in terms of all phases, producing information on whereand when fires are likely to break out, how they are likely to develop and spread andwith what degree of rapidity this is likely to occur. Fire-fighting plans must be based on this sort of knowledge and prediction.

Fire leads to:

- High intensity of heat
- High concentration of smoke
- Generation of toxic and noxious fumes
- Explosion
- Building collapses/structural damage Disruption of essential
- services like water/Food/Medicine/Communication/Transport/Power supply.

#### FIRE PROTECTION/RESCUE

- Identification of high risk areas
- Installations of hydrants
- Provision of static water tanks
- Provision of passive and active fire protection system
- Provision of adequate means of escape with exit signs
- Establishment of fire station with proper adequate appliance and equipment/manpower
- Co-ordination with other essential services by local administration (water supply, electricity, PWD, etc.)
- Proper communication network.

#### **ELECTRICAL DISASTERS**

Electricity is a necessity in our lives – just think of all the ways we benefit from electrical power on a daily basis. Electricity is readily accessible and safe when used properly, it is still important to follow necessary safety precautions.

#### **USE ELECTRICITY SAFELY**

If an appliance emits smoke or has an unusual smell, unplug it immediately and have it repaired. Replace any electrical cord that is cracked or frayed. Do not overload extension cords or run them under rugs.

- ♣ Do not tamper with fuses. This is a potential fire hazard.
- ♣ Do not overload circuits. Overload may cause the wires to heat and may ignite insulation or other combustibles.
- Replace or repair electrical appliances that over heat, spark, smoke, or have cracked or frayed cords.
- ♣ Wiring installations should always be made by a licensed electrician or other qualified person.

- ♣ Use light bulbs of the wattage recommended for your lamp and ceiling fixtures.
- Never break off the third prong of a plug.
- ♣ Do not use extension cords for permanent wiring. They may not be able to carry the load.
- Ensure lamps are free from contact with inflammable material.

#### SOME DO'S and DONT'S

Remember, electricity always tries to reach the ground. It travels over "conductors" or anything that allows electricity to flow. People, water, trees, damp ground, and metal are excellent (bad for people) conductors. An insulator is the opposite of a conductor. As a volunteer, your job includes giving instructions and increasing awareness about the dangers, such as:

- ♣ Touching a faulty appliance, plug, or bare wire can make you part of the electric circuit and put you at risk of electric shock.
- Frayed wires are dangerous anywhere. They should be repaired at once, or better yet, replaced.
- Replace inflexible electric cords.
- Repair any appliance that sparks, emits smoke, or shocks you.
- Don't use any appliance while you're touching metal pipes and faucets or anything wet.
- Outlets near water sources (bathrooms, kitchen sinks, garages, outdoors) should be product.
  - ♣ Never touch an electric cord or appliance while your hands are wet.

  - Don't yank the cord when unplugging appliances.
  - ♣ Keep work areas clean. Oily rags, newspapers, and sawdust can catch fire from electric sparks.
- Never overload a circuit with high-voltage appliances. Check the voltage on your appliance labels and be sure the combined voltage of all the appliances you want to plug into the same circuit does not exceed the circuit rating.
- ♣ Never use electric power tools or appliances in the rain or while standing in water.

- For outdoor locations, use only lights, cords, and fixtures intended for outdoor use.
- ♣ NEVER USE WATER on an electrical fire! Water can carry the electricity back to you and you could receive a deadly shock.
- Finally, having a working smoke alarm dramatically increases your chances of surviving a fire. And remember to practice an escape plan frequently.

#### **INDOORS SAFETY TIPS**

To be safe, it is recommended that wiring be installed and/or inspected by a licensed electrician. Your house or apartment may be inadequately wired if:

- Lights dim and motor's slow down when an appliance goes on.
- Fuses blow or circuit breakers trip frequently.
- ♣ Toasters or irons fail to heat properly.
- The television picture shrinks.
- Turn main power off before replacing a fuse or adjusting circuit breakers.
- Never pull a plug out by the cord.
- Regularly check wires, extension cords and appliances for signs of wear.
- Use appliances and power tools with three pronged plugs.
- ♣ Never touch appliances, wires or electrical switches with wet hands or feet.
- Turn television set and other appliances off during a lightning storm.
- ♣ If there are small children in your house, use plastic safety caps in unused outlets.
- ♣ Never insert a metal object into an appliance without disconnecting the appliance.
- Fire fighting in case of electrical fire, fire-fighting medium should be non-conductive and non-magnetic.
- Never build a shed or other structure under the power line leading to your house.

### **ROAD ACCIDENTS**

Road accidents are a major killer and take place without any warning. Accidents may involve passenger vehicles, goods vehicles, vehicles carrying hazardous and toxic materials. The damage therefore may involve injuries and deaths, chemical spills, fires or release of toxic gases.

Data on road accidents reportedly indicate that 70% of road accidents arise from driver's failure. Apart from this factor, the generic reasons are

- Poor road conditions
- Mixed traffic
- Poor vehicle maintenance
- Carelessness in driving
- Lack of safety belts and helmets
- Poor emergency services
- Absence of pedestrian amenities.

## **ACCIDENT SITE**

In the event of an accident involving passenger vehicles, those at the accident site should follow the following priorities:

- Look for and rescue the injured or those trapped in the vehicles
- ♣ Arrange for transport of the injured to the nearest medical care centre.
- Place the dead bodies on one side to avoid obstructions.
- Organise locally, traffic control using the available manpower to avoid traffic jams.
- Discourage people from crowding near the accident spot.
- Discourage people from looting the goods from the accident vehicle.
- ♣ Arrange to inform the nearest traffic police station/post through passing vehicles on either side.

## MEASURES THAT NEED TO BE TAKEN

- ♣ All two-wheeler drivers, including pillion riders must always wear the right kind of protective headgear.
- ♣ Drunken driving/liquor availability and sales all along the highway are the cause for accidents. This should be restricted.
- ♣ Awareness to be created among pedestrians regarding cross the roads, etc.
- ♣ Burning the vehicle involved in the accident and beating the driver/crew by the local people to be checked.

#### **CHAPTER-21**

## **Risk Communication Strategies**

## **District Emergency Operation Centre**

The Control Room of EOC is functioning in Collectorate with all facilities with Toll Free No.1077 and VHF sets. Further, the Base Station, Mobile Station, and Walkie-Talkies are working in good condition. There are 4 numbers of repeated

stations. Viz., Periayur BSNl site, Usilampatti BSNL site, EB Tower Pasumalai & Melur BSNl site.

EMERGENCY OPERATION CENTER CONTACT DETAILS		
TOLL Free 1077		
E-mail ID	dteoc.mdu@gmail.com	
Landline No.	0452-2546160	

VHF DETAILS		
No. of Repeater Stations	4	
No. of Base stations	20	
No. of Mobile Stations	27	
No. of Walki Talki	30	

## REPEATER STATIONS

1.	Periayur BSNL site	
2.	Usilampatti BSNL site	
3.	EB Tower Pasumalai	
4.	Melur BSNL Site	

## **BASE STATION**

S1.	Name of the office	S1.	Name of the office
No	Name of the office	No	Name of the office
1	Collector Room	11	Madurai South Taluk
2	Collector Camp Office	12	Madurai North Taluk
3	DRO Chamber	13	Madurai East Taluk
4	DRO Camp Office	14	Madurai West Taluk
5	PA(G) Office	15	Thirumangalam Taluk
6	RDO Madurai	16	Vadipatti Taluk
7	RDO Usilampatti	17	RDO Melur
8	District Supply Office	18	RDO Tirumangalam
9	Huzur Sarishtadar, Magistrial	19	Thirupparankundram Taluk
10	EOC Control Room	20	Kalligudi Taluk

## MOBILE STATIONS

Sl. No	Designation	Sl. No	Designation
1	Collector Vehicle	15	Thasildar, Tirumangalam
2	DRO Vehicle	16	Thasildar, Peraiyur
3	SSS Deputy Collector, Madurai.	17	Thasildar SSS, Madurai North
4	D.S.O Madurai	18	Thasildar SSS, Madurai South.
5	RDO Madurai	19	Thasildar SSS, Melur
6	RDO Usilampatti	20	Thasildar SSS, Vadipatti.
7	Tahsildar, Madurai North	21	Thasildar SSS, Usilampatti.

8	Tahsildar, Madurai South	22	Thasildar SSS, Tirumangalam.
9	Thasildar, Madurai East	23	Thasildar SSS, Peraiyur.
10	Thasildar, Madurai West	24	RDO Melur
11	Thasildar, Thiruppankundram	25	Thasildar SSS, . Thiruppankundram
12	Thasildar, Melur	26	RDO Tirumangalam
13	Thasildar, Vadipatti	27	Thasildar, Kalligudi
14	Thasildar, Usilampatti		

## **WALIKE TALKIE**

<b>S1.</b>	Designation of the officer	S1.	Designation of the officer
No	Designation of the officer	No	Designation of the officer
01	Collector	16	Zonel D.T, Thirumangalam
02	DRO	17	Tahsildar, Vadipatty
03	PA(G)	18	Zonel D.T, Vadipatty
04	RDO ,Usilampatty	19	Tahsildar, Thirupparankundram
05	RDO, Madurai	20	HQDT, Thirupparankundram
06	Tahsildar, Reception	21	Zonel D.T, Thirupparankundram
07	Tahsildar, Madurai North	22	Tahsildar, Melur
08	Zonel D.T, Madurai North	23	HQDY, Melur
09	Tahsildar, Madurai South	24	Zonel D.T, Melur
10	Zonel D.T, Madurai South	25	Tahsildar, Usilampatty
11	Tahsildar, Madurai West	26	HQDT, Usilampatty
12	Zonel D.T, Madurai West	27	Zonel D.T, Usilampatty
13	Tahsildar, Madurai East	28	Tahsildar, Peraiyur
14	Zonel D.T, Madurai East	29	HQDT, Peraiyur
15	Tahsildar, Thirumangalam	30	Zonel D.T, Peraiyur

#### CHAPTER - 22

## Specific issues of various vulnerable groups have been addressed

Children are more vulnerable population in any disasters. Children, the worst affected in most disasters due to their physical, psychological & social vulnerabilities. Among lives lost in disasters at least one out of three is a child below 18 years & one out of four happens to be a women. Psychological stress, depression anxiety besides physical & mental health hazards affecting children. Children are denied of special care, protection & social support. Existing Government schemes and programmes for child protection.

- A Programme for Juvenile Justice
- Scheme for Working Children in need of care and protection
- Integrated Programme for Street Children
- Shishu Greha Scheme
- CHILDLINE -24 hour help line for children in distress
- Rajiv Gandhi national creche scheme for the children of working mothers
- Pilot Project to Combat the Trafficking of Women and Children for Commercial Sexual Exploitation in Destination Areas
- General Grant in aid Scheme to support Pilot Projects, which are not covered by regular Schemes
- No special reference / allocation to children affected by disasters or scheme available in the government for relief & rehabilitation.

#### CHAPTER - 23

## **Date of Approval**

The District Disaster Management Plan 2024-25 has prepared as per the directions of the Office of Additional Chief Secretary / Commissioner for Revenue Administration, Chennai. It is based on Sendai Framework on Disaster Risk Reduction 2018-30. The plan is updated by collecting informations from various department/agencies. It is approved by the District Disaster Management Authority chaired by District Collector, Madurai.

Chairman,
District Disaster Management
Authority and District Collector,
Madurai.

#### **ANNEXURE - I**

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
1.	Madurai South	Name (TvI) & Designation
	1. Munichalai Area & Ismailpuram.	Jeyanthi     Revenue Divisional Officer, Melur.     Cell: 96777 41861
	2. N.M.R. Puram, Iravathanallur Village	2. Saravanan, Tahsildar, Madurai South Taluk, Cell:9445000587
	3. Silaiman Virahanur, Puliyankulam	Jeyakandhan     Zonal Deputy Tahsildar, Madurai South Taluk,
	Police Station	Cell:9786632532
	Tmt. Flowershila,     Inspector,	4. Anissathar, Tahsildar (Civil supply), Madurai East Zone. Cell:9445000340
	E-3, Anna Nagar station, Cell No: 8300011100	5. M.S.K. Sundaramoorthy, A.E., Periyar Vaigai Basin Division, PWD/WRO, Madurai. Cell:98423 90116
	2. Tr.Vasanthakumar Inspector, B-3 Police Station,	6. Chokkalingam, A.E., Agricultural Engineering Department, Cell: 9486226346
	Theppakulam, Cell No: 9444855511	7. G.Kathirvel, AEE/Airport, TANGEDCO (Rural)
	3. Tr.Kottaisamy Inspector, B-4 Police Station, Keerathurai, Cell No:9498179248	Cell:9445852979 & Er.R.Selvaraj, AEE/ Teppam TANGEDCO / Metro Cell: 9445852939
	4. Tr.Balamurgan, Inspector,	8. Iswarya, A.E, Gundar Basin Division, Madurai. Cell: 7598681218
	Silaiman Police Station, Cell No: 9498184777	9. N.Shajakan, Assistant Commissioner Madurai Corporation – Zone –IV Cell No-9498749004
		10. S.Kanthasamy, Station Officer, Anupanadi Fire Station Cell No-94450 86210.
		11. A.Rani, PA to Collector - Agriculture, Madurai East & West, Cell: 9976146270
		12. M.GokilaSakthi, Assistant Director of Horticulture, Thirupprankundram, Cell: 9489378845
		13. Dr. Ameena, Vetenery Assistant Surgeon JD Office, Animal 9791061891
		14. Charles, A.E., Highways Department, (C&M) Madurai. Cell No. 9003408583.

SI.	
No.	

Name of the village/location

Inter-Departmental Nodal Officers posted

2.	Madurai North	Name (Tvl) Designation
	Bibikulam, Chokkikulam, Tallakulam, Thenur, Samayanallur upto Fatima College,	Tmt. R.D.Shalini,     Revenue Divisional Officer, Madurai. Cell: 9445000449.
	Vaigai – Vilangudi, Sellur, Thathaneri, Tiruvappudaiyar Koil Area, Vadakarai, Alwarpuram, Asari Thoppu,	2. Masthankani Tahsildar Madurai North Taluk. Cell:9445000586
	Gandhi Nagar Area.	3. Sundaravel Zonal Deputy Tahsildar, Sathamangalam Cell: 7373997105
		4. Navaneethakrishnan Tahsildar (Civil supply), Madurai North Zone. Cell:944500337
	Police Station	5. Er. Prabaharan, PWD/AE, Periyar Vaigai Basin Division, Madurai. Cell: 90809 23545
	1. Tr. JohnBrito, Inspector, D-1, Tallkulam station, Cell No: 8300064001.	6. Jeyalakshmi, Executive Officer Town Panchayat - Paravai Cell: 7824058216
	(Bibikulam, Chokkikulam, Tallakulam)	7. Chokkalingam, A.E. Agricultural Engineering Department, Cell: 9486226346
	2. Tr. Sivakaumar, Inspector, D-2, Sellur station, Cell No: 9943313356.	8. Hariharasudhan, A.E. Periyar Main Canal Section, Madurai Cell:91591 54090
	(Sellur, Thathaneri)  3. Tr. Mohammed Idiris, Inspector,	9. G.Gopu, Assistant Commissioner Madurai Corporation – Zone –II Cell No- 9498749002
	E-2, Mathiciyam station, Cell No: 9498161868 (Vadakarai, Alwarpuram, Asari Thoppu, Gandhi	10. R.Ashok Kumar, Station Fire Officer, Tallakulam Fire Station Cell No-9445086215
	Nagar Area) 4. Tmt.Flowershila,	11. R.Ashok Kumar, AEE/Samayanallur/TANGEDCO (Rural) Cell No. 9445852902
	Inspector, E-3, Anna Nagar station, Cell No: 8300011100	Er.R.Ramachandran, AEE/Tamukkam TANGEDCO/Metro Cell No. 9445852932
		12. A.Rani PA to Collector - Agriculture, Madurai East & West, Cell: 9976146270
		13. Jesima Banu Assistant Director of Horticulture (i/c) Madurai East, Cell: 9865705034
		14. Dr. Ganansubramanian, Vetenery Assistant Surgeon JD Office, Animal Husbandry, Cell: 9443917301.
		15. Guru Prasad, A.E, Highways Department, (C&M) Madurai. Cell No.9551627214

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
3.	Madurai North / East	Name (TvI) & Designation
	Deputy Collector Colony, Sathamangalam,	Jeyanthi     Revenue Divisional Officer, Melur.     Cell: 96777 41861
	Aringar Anna Nagar.	2. Masthankani Tahsildar , Madurai North Taluk. Cell:9445000586
	Police Station  1. Tmt.Flowershila, Inspector, E-3, Anna Nagar station,	3. Meenakshi Tahsildar, Madurai East Taluk. Cell: 97862 99447  4. Muthulakshmi, Zonal Deputy Tahsildar, Madurai East Taluk Cell:6385483926  5. Surenderan.
	Cell No: 8300011100	Tahsildar (Civil supply), Madurai North Taluk. Cell: 9445000336.  6. Uma Devi, A.E Agricultural Engineering Department, Cell: 8072324275
		7. Murugan AEE / K.K.Nagar, TANGEDCO (Metro) Cell:9445852851
		8. Shanmugasundarm, A.E. Periyar Main Canal Section, Mettupatti Cell:9443474181
		9. G.Gopu, Assistant Commissioner Madurai Corporation – Zone –II Cell No- 9498749002 & N.Shajakan Assistant Commissioner Madurai Corporation – Zone –IV Cell No-9498749004
		10. R.Ashok Kumar, Station Fire Officer, Tallakulam Fire Station, Cell No-9445086215
		11. P.Balamurugan Assistant Director of Agriculture, Madurai East & West, Cell: 9944503489
		12. Jesima Banu Assistant Director of Horticulture Madurai East, Cell: 9865705034.
		13. Dr. Vijayakumar, Vetenery Assistant Surgeon RJD - Animal Husbandry, Cell:9442046868
		14. Sakthivel, A.E., Assistant Engineer Highways, (C&M) Madurai West. Cell: 7092874432

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
4.	Madurai West	Name (TvI) & Designation
	1. Vaigai - Kochadai - 67.30 Km 2. Vaigai - Melakkal - 54.25 Km	Tmt. R.D.Shalini,     Revenue Divisional Officer, Madurai.     Cell: 9445000449.
	3. Petchiamman Padithurai, Taikkal Street, Yanaikal, Sungam Pallivasal.	2. Senthamarivalli Tahsildar, Madurai West Taluk. Cell: 80566 64070
	4. Kochadai	3. lyyammal Zonal Deputy Tahsildar, Madurai West Taluk. Cell:9965407968
	<ul><li>5. Thuvariman</li><li>6. Anna Thoppu</li></ul>	4. Vijayalakshmi, Tahsildar (Civil supply), Madurai West Zone. Cell:9445000339
	Police Station	5. Sekaran, A.E., PWD/WRO, Periyar Vaigai Basin Division, Madurai. Cell:9842158860
	1. Tr.Shankar Inspector, C-5, Karimedu station, Cell No: 9498182994	6. Uma Devi, A.E Agricultural Engineering Department, Cell: 8072324275
	Tr.Alagar,     Inspector,     C-4, Thilagar Thiddal station,	7. Er.M.Jeyaraman, AEE / Villapuram, TANGEDCO/Metro Cell:9445852971 & 8. A.Thangapandi, AEE / Vadipatti,
	Cell No: 9442904500	TANGEDCO(Rural) Cell:9445852903  9. G.Gopu, Assistant Commissioner
		Madurai Corporation – Zone –II Cell No- 9498749002  10. N.Suresh Kannan, Assistant District Officer, Madurai Fire Station,
		Cell No-9445086209
		Assistant Director of Agriculture Madurai East & West, Cell:: 9944503489
		12. M.GokilaSakthi, Assistant Director of Horticulture, Thirupprankundram, Cell: 9489378845
		13. Dr. Senthilselvakumar, Vetenery Assistant Surgeon RJD - Animal Husbandry, Cell:9566679616
		14. Sakthivel, A.E., Assistant Engineer Highways, (C&M) Madurai West. Cell: 7092874432

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
5.	Thiruparakundram	Name (TvI) & Designation
	Madakulam Supply Channel- 10.80 km	Shanthi     Revenue Divisional Officer, Thirumangalam     Cell:9442967302
		2. Kavitha, Tahsildar, Thiruparakundram Taluk. Cell: 95979 56990
		3. MaheniraBabu, Zonal Deputy Tahsildar, Thiruparakundram Taluk. Cell :9003418616
	Police Station  1. Tr. Kasi, Inspector,	4. Panjacharam, Tahsildar (Civil supply), Madurai Central Zone. Cell:9445000338
	C-3, S.S.Colony station, Cell No: 83000 19323	5. Sekaran, A.E., PWD/WRO, Periyar Vaigai Basin Division, Madurai. Cell:9842158860
		6. Kasinathan, Assistant Engineer, Agricultural Engineering Department, Cell: 8825520608
		7. Er.K.Shanmuganatha Boopathy, AEE / South /Arasaradi, TANGEDCO/Metro Cell:9445852957
		8. N.A.Selvarajan, AEE/Kappalur, TANGEDCO (R) Cell:9445852837
		9. R.Radha Assistant Commissioner Madurai Corporation – Zone –V Cell No- 9498749005
		10. J.Udayakumar, Station Officer, Thirupparankundram Fire Station Cell No-9940207672
		11. Meenakshisundram, Assistant Director of Agriculture, Thirupparankaundram, Cell:8667875730
		12. M.GokilaSakthi, Assistant Director of Horticulture, Thirupprankundram, Cell: 9489378845
		13. Dr. Veeramanikandan Vetenery Assistant Surgeon JD Office, Animal Husbandry, Cell:6380406798
		14. Charles, A.E., Highways Department, (C&M) Madurai. Cell:9003408583

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
6.	Vadipatti	Name (TvI) & Designation
	Sholavandan     Melakkal and Vaigai River	Tmt. R.D.Shalini,     Revenue Divisional Officer, Madurai.     Cell: 9445000449.      Ramachandran,     Tahsildar, Vadipatti Taluk
	Police Station  1. Tr. Chellapandi, Sholavanthan Police Station, Cell No: 83000 07058	Cell:9445000589  3. Tamilezhilan Zonal Deputy Tahsildar, Vadipatti Taluk Cell: 9080889386 &  4. Bibin Subash Zonal Deputy Tahsildar, Sholavandhan Cell: 8825444052  5. Rajkumar Taluk Supply Officer, Cell:9445000342
		6. Mookkaiyan PWD/WRO, Periyar Vaigai Basin Division, Usilpampatti. Cell:9443060031
		7. Paraman, Assistant Engineer, Agricultural Engineering Department, Cell: 9842675807
		8. A.Thangapandi, AEE / Vadipatti, TANGEDCO (Rural) Cell:9445852903 & 9. D.Senthilkumar, AE / Alanganallur, TANGEDCO (Rural)
		Cell:9445852907  10. P.Jeyalakshmi, Executive Officer Town Panchayat, Vadipatti. Cell: 8925809636
		11. K.Balanagaraj Station Officer, Vadipatti Fire Station. Cell No-9965068173
		12. R.Pandi, Assistant Director of Agriculture, Vadipatti, Cell:9486161498
		13. R.Thamaraiselvi Assistant Director of Horticulture, Vadipatti, Cell: 7639053454
		14. Dr. Thirunavukkarasu, Vetenery Assistant Surgeon Animal Husbandry, Vadipatti Cell: 8825967149
		15. Radha Muthukumari, A.D.E., Highways Department, (C&M) Madurai. Cell: 8838924821

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
7.	Melur	Name (TvI) & Designation
	Melavalavu     Karungalakudi	Jeyanthi     Revenue Divisional Officer, Melur.     Cell: 96777 41861
	3. Soorakundu	2. Senthamarai, Tashildar Melur Taluk, Cell:9445000588
		3. Dhamodharan & Shanthi Zonal Deputy Tahsildar, (Melur & Kottampatti) Cell:8838960358 & 9487417865
	Police Station	4. Nagarani Taluk Supply Officer, Cell: 6383044008
	Tmt. Vinodha,     Inspector.	5. Kannan, A.E & Rajan, A.E Agricultural Engineering Department, Cell: 9080904345 & 8072256103
	Police Station  4. N The Company of the station of	6. P.K.Arunkumar, AEE / South / Melur, TANGEDCO(R) Cell:9445852853
	2. Tr. Jothibasu,	T.Chandran, AEE / North / Melur, TANGEDCO(R), Cell:9445852854
	Station,	7. S.Malaiselvam, A.E., Peraiyar Main Canal Section, Thaniyamangalam Cell: 9159736687
		8. V.Muthukumar Municipal Engineer, Melur. Cell: 7397382173
		9. N. Sasikala, Executive Officer, Town Panchayat, A.Vellalapatti. Cell: 8925809638
		10. R.Manivannan, Station Officer, Melur Fire Station. Cell No: 9445086214
		11. P.Subramanian, Special Station Officer (T) Kottampatti Fire Station, Cell No: 9445086213
		12. J.Jeyanthi, Assistant Director of Agriculture, Melur, Cell: : 9489874206
		13. S.Bhuvaneshwari, Assistant Director of Horticulture, Melur, Cell: 9345144646.
		I.Rijwana Parveen, Assistant Director of Horticulture, Kottampatti, Cell: 9600328797
		14. Dr. Sankar, Vetenery Assistant Surgeon RJD - Animal Husbandry, Cell:9443217194
		15. Indira Priyadharshini, J.E, Highways Department, (C&M) Madurai. Cell:9361887454.

SI. No.	Name of the Village/location	Inter-Departmental Nodal Officers posted
8.	Usilampatti	Name (TvI) & Designation
	1. Vadukapatti, Thottappanaikanur	C.Ravichandran     Revenue Divisional Officer, Usilampatti.     Cell:9445000450
	2. Matharai	2. Balakrishnan, Tahsildar, Usilampatti Taluk, Cell:9445000590
		3. Paniarajan Zonal Deputy Tahsildar, Cell:7358657692
		4. Mugibalan Taluk Supply Officer, Cell:8778735996
	Police Station	5. Jegadeeson, & Saravanan, Assistant Engineer, Agricultural Engineering Department. Cell:9943166688 & 9047468701
	<ol> <li>Tr. Anand, Inspector, Usilampatti Police Station, Cell No:7598184281</li> </ol>	6. M.B.Ravichandran, AEE / Usilampattii TANGEDCO(Rural) Cell:9445852877
		7. Manokaran, & Pandian Assistant Engineer, Gundar Basin Division, Madurai. Cell: 7010873054 & 9171977085
		8. B.Patturajan, Muncipality Engineer, Usilampatti. Cell: 7397382172
		9. S. Neelamegam, Executive Officer, Town Panchayat, Elumalai. Cell: 8925809642
		10. Jeeva, Station Officer Transport. Usilampatti Fire Station, Cell No- 9445086217.
		11. M.P. Udhayakumar, Assistant Director of Agriculture, Usilampatti, Cell: 8248041337
		12. M.Saravana Priya, Assistant Director of Horticulture, Vadipatti, Cell: 9944582217
		P.T.Baby, Assistant Director of Horticulture, Chellampatti, Cell: 9566333887
		13. Dr. Manikandan, Vetenery Assistant Surgeon RJD - Animal Husbandry, Cell: 8111015961
		14. Balaji, A.E., Highways Department, (C&M) Madurai. Cell: 9629374434

SI. No	Name of the village / location	Inter-Departmental Nodal Officers posted
9.	Thirumangalam	Name (TvI) & Designation
	Kakkan Colony, Anna Nagar     Pullamuthur Tank     H/o. Sathankudi     Ammapatti periyakulam     H/o. Ammapatti Panchayat	Shanthi     Revenue Divisional Officer, Thirumangalam     Cell:9442967302      Maneshkumar,     Tahsildar Thirumangalam Taluk,     Cell:9445000591.      Gopalakrishnan
	b) Naduvakottai Kanmoi H/o. Naduvakottai	Zonal Deputy Tahsildar, Cell:9159784508  4. Tmt. Rajeswari Taluk Supply Officer,
	Police Station  1. Tmt. Lakshmi latha,	Cell :9445000344  5. Govindaraj, A.E., PWD/WRO, Periyar Vaigai Basin Division, Madurai. Cell:9842423500.
	Inspector Thirumanagalam Police Station, (Town) Cell No: 8300007812	<ul> <li>6. Rajapandi,     Assistant Engineer, Agricultural     Engineering Department,     Cell: 9677992055</li> <li>7. P.Ramasubbu, AEE / Thirumangalam,     TANGEDCO(Rural)</li> </ul>
	2. Tr.Vijaya Kandeepan, Inspector Thirumanagalam Police Station, (Taluk) Cell No: 9498105791	Cell:9445852830.  8. Sathya & Vinith Menon Assistant Engineer, Gundar Basin Division, Madurai. Cell: 9500215767 & 9994709467  9. M.Rathinavel,
		Muncipality Engineer, Thirumangalam, Cell No: 7397382175  10. S.K.Sankar, Station Officer, Thirumangalam Fire Station, Cell No- 94450 86216
		11. M.Mayil, Assistant Director of Agriculture, Thirumangalam Cell: 8608687143
		12. R.Tamilselvi, Assistant Director of Horticulture, Thirumangalam, Cell: 7598648493
		13. Dr. NoorMohamadhu, Vetenery Assistant Surgeon Animal Husbandry Cell:9486087831.
		14. Ashok Pandian, A.E., Highways Department, (C&M) Madurai. Cell: 9750945450

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
10.	Peraiyur	Name (TvI) & Designation
	Govinda nadhi     Nondiaru (M.Kallupatti)	C.Ravichandran     Revenue Divisional Officer, Usilampatti.     Cell:9445000450
		2. Chellapandi Tahsildar Peraiyur Taluk, Cell :9445000592
		3. Premkishore Zonal Deputy Tahsildar, T.Kallupatti Cell :9965855745 &
	Police Station	Tmt. Bala Zonal Deputy Tahsildar, Sedapatti Cell:7871539096
	Tmt. Mathana kala, Inspector     Peraiyur Police Station,	4. Thangapandian, Taluk Supply Officer, Cell: 9445000345
	Cell No:9444507007.	5. Selvendran, & Nagendran Assistant Engineer, Agricultural Engineering Department, Cell: 9865544247 & 9965225873
		6. R.Nandakumar AEE / T.Kallupatti, TANGEDCO(R) Cell:9445852842
		7. Eanasto, Assisstant Engineer. Gundar Basin Division, Madurai. Cell: 7708313483
		8. N.Jeyathara Town Panchayat, Peraiyur. Cell: 8925809641
		9. R.Gurusamy, Station Officer, T.Kallupatti Fire station Cell No- 9445086528
		10. Vimala Assistant Director of Agriculture, T.Kallupatti Cell: 8973750925
		11. N.Rajasekaran, Assistant Director of Horticulture, T.Kallupatti. Cell: 9486467312
		4 12. L. Pratheeba, Assistant Director of Horticulture, Sedapatti Cell: 9786179469
		13. Dr.Veerapathiran, Vetenery Assistant Surgeon Animal Husbandry, Cell:9159841291
		14. Sundara Rajan,J.E., Highways Department, (C&M) Madurai. Cell: 9894829713

SI. No.	Name of the village/location	Inter-Departmental Nodal Officers posted
11.	Kalligudi	Name (TvI) & Designation
	Vellankulam Kanmoi     H/o.Vellankulam	Shanthi     Revenue Divisional Officer, Thirumangalam     Cell:9442967302
		2. Sivkaumar Tahsildar Kalligudi Taluk, Cell :9365870201
		3. Aravind Zonal Deputy Tahsildar, Cell: 8682016775
	Police Station	4. Malathi Deputy Tahsildar, Cell: 9942460362
	<ol> <li>Tmt. Lakshmi latha, Inspector (i/c –TMM)</li> </ol>	5. Shanthi Taluk Supply Officer, Kalligudi Cell: 8973818776
	Kalligudi PoliceStation, Cell No: 8300007812	6. Siva Ganesh, Assistant Engineer, Gundar Basin Division, Cell: 9626396694
		7. Rama Vivekanandhan Assistant Engineer, Agricultural Engineering Department, Cell: 9443148364.
		8. P.Ramasubbu, AEE / Thirumangalam, TANGEDCO(R) Cell:9445852830
		9. G.Kannan, Executive Officer, Town Panchayat, T.Kallupatti. Cell: 8925809640
		10. J.Chandrakala, Assistant Director of Agriculture, Kalligudi Cell: 9488080516
		11. R.Prisca flavia, Assistant Director of Horticulture, Cell: 9962666469
		12. K.Sakthivel, Special Station Officer, Kalikudi Fire station Cell No- 9445086212
		13. Dr. Rooparani Vetenery Assistant Surgeon Animal Husbandry Cell:8148484599
		14. Ashok Pandian, A.E., Highways Department, (C&M) Madurai. Cell: 9750945450

# EARLY WARNING TEAM (Monitoring) - 2024

Madurai Corporation				
Zone No	Team	Name (TVL)	Designation	Cell No
		Thiru. F.Arockia Xavier	Asst. Executive Engineer	9498748901
Zone-1	1	Mr. Selvakumar	Sanitary Inspector	9498748617
	·	Mr.Alagusubramaniyan	Bill Collector	9498748803
		Mr.V. Rajkumar	Bill Collector	9498748804
		Mr. N.Loganathan	Assistant Revenue Officer	9498749101
Zone-1	2	Mrs.M.Suganya	Bill Collector	9498748805
20116-1	۷	Mr.S.Mahaboobjan	Bill Collector	9498748806
		Mrs.D.Devi	Bill Collector	9498748807
		Mr.G. Gopu	Assistant Commissioner	9498749002
Zone-2	3	Mr.Muthupandi	Bill Collector	9498748801
		Mr.R.Saravanan	Bill Collector	9498748802
		Bhavani	Bill Collector	9498748815
	4	Mr.Rajaram	Assistant Revenue Officer	9498749102
Zone-2		D. Kannan	Bill Collector	9498748820
		R. Kannan	Bill Collector	9498748821
		Mr.Murugan	Sanitary Inspector	9498748609
		Mr. Sundarraj	Executive Engineer	9498748906
Zone-3	5	Mr.Muthumanickam	Bill Collector	9498748850
		Mr.Felixraja	Bill Collector	9498748851
		Mr.T. Manickam	Bill Collector	9498748852
		Mr. V.SenthilKumaran	Assistant Revenue Officer	9498749103
Zone-3	6	Mr. S.Aravindh	Bill Collector	9498748854
		K. Kannan	Bill Collector	9385233655
		Mr. Omsakthi	Sanitary Inspector	9498748620

Madurai Corporation					
Zone No	Team	Name (TVL)	Designation	Cell No	
		Mr.N.Shajakan	Assistant Commissioner	9498749004	
Zone-4	7	Mr.S.Ramachandran	Bill Collector	9498748829	
		Mr.M.Oorkavalan	Bill Collector	9498748830	
		Mrs.Valli	Bill Collector	9498748841	
		Mrs. Chitra	Assistant Revenue Officer	9498749104	
Zone-4	8	Mukilan	Bill Collector	9498748842	
		Mr.Eddy GnanaPrakash	Bill Collector	9498748843	
		Mr. Marimuthu	Sanitary Inspector	9498748106	
		Mrs.R.Radha	Assistant Commissioner	9498749005	
Zone-5	9	R. Selvi	Bill Collector	9498748871	
		M. Saravanan	Bill Collector	9498748872	
		J.Merlinjoys	Bill Collector	9498748873	
		Mr.Seenimuthu	Bill Collector	9498748874	
Zone-5	10	Mr.Kulanthairaj	Bill Collector	9498748878	
		Mr. Manoharan	Sanitary Inspector	9498748618	
		Mr.Kalidoss	Bill Collector	9498749083	

## **EARLY WARNING TEAM (Monitoring)**

Municipality				
Municipality	Team	Name (Tvl.)	Designation	Cell No
		S.Ulaganathan	Oversear	8838689204
Melur	11	V.Subbaiah	Sanitary Inspector	8754950844
Wiciai	''	M.Kathiresan	Fitter	9894812616
		K.Balasubbramanian	Sanitary Supervisor	9894697958
	12	P.Raja	Overseer	7845162391
		P.Shantha	Town Planning Inspector	8940393556
Thirumangalam		P. Raju	Meter Reader	9790295832
		N. Mathan Raj	Helper	9952444714
		M.Pandi	Fitter	9976641778
		B. Balamurugan	Overseer	9994173769
		M.Mohammed Raseedh	Revenue Inspector	8608203090
Usilampatti	13	K.Thanikodi	Sanitary Supervisor	9843268867
		R.Ganesan	Sanitary Supervisor	9790593019
		M.Syed Abthaheer	Sanitary Inspector	9443074837

## **EARLY WARNING TEAM (Monitoring)**

	Town Panchayat					
Town Panchayat	Team	Name (Tvl.)	Designation	Cell No		
		N. Jeelan banu	Executive Officer	8925809634		
	14	R. Arumugam	Junior Assistant	8248314044		
		S.Venkatesh	Bill Collector	9566505901		
Paravai		V. Muthalagu	Sanitary Supervisor	9940888449		
		Gengai Eswaran	Tractor Driver	9976352526		
		V. Senthil Murugan	OHT Watchman	7639788993		
		A. Manimala	OHT Watchman	9025371009		

Town Panchayat	Team	Name (Tvl.)	Designation	Cell No
		K. Raja	Junior Assistant	9787522698
		R. Abitha	Junior Assistant	9159070821
Alanganallur	15	M. Balachandran	Bill Collector	9787417917
, nariganana	10	K. Kandhavel	Bill Collector	9751876327
		V.Ganesan	OHT Operator	8012087798
		R.Rangasamy	Sanitary Supervisor	9842850419
		P. Jeyalakshmi	Executive Officer	8925809636
		J.Dhanalakshimi	Junior Assistant	9944977120
		M. Muthupandi	Junior Assistant	9843319501
		R.Malarvizhi	Bill Collector	6379675285
Vadipatti	16	S. Balaji Jawahar singh	Bill Collector	8754288008
		Thangapandi	Sanitary Worker	9025358283
		M.Murugan	Sanitary Worker	9659462450
		Saravanakumar	Water Supply staff	9865403750
		M.Alagar	Sanitary Worker	7094686673
		S.Selvakumar	Executive Officer	8925809637
		R. Kannammal	Junior Assistant	8838347176
		M. Kalyanasundaram	Junior Assistant	9842595559
		K. Kannadasan	Bill Collector	9655237663
Sholavandan	17	S. Selvaraj	OHT Watchman	7373202095
		G.Ramu	Sanitary Supervisor	9894133016
		V.Poovalingam	Sanitary Worker	9788314124
		P.Arun	Sanitary Worker	9171715666
		K.Sathishwaran	Sanitary Worker	9943870070

Town Panchayat	Team	Name (Tvl.)	Designation	Cell No
A.	18	S.Dhanalakshmi	Junior Assistant	9786308099
		M.Lakshmanan	Sanitary worker	8098730669
Vellalapatti	10	K.MallaKottai	Sanitary worker	9994277698
		C.Boopathi	Sanitary worker	9600818470
	19	N. Sasikala	Executive Officer	8925809639
Palamedu		S.Kirankumar	Junior Assistant	8122168019
		R. Dilipan Chakkaravarthi	Sanitary Supervisor	9626824545
		K.Paulraj	Sanitary worker	9677937763
	20	P. Anandhakumar	Executive Officer	8925809640
		C. Angayarkanni	Junior Assistant	7904794733
T. kallupatti		S.Dhanalakshmi	Bill Collector	8056977449
		P. Kanagaraj	Sanitary Supervisor	9677937763
		M.Thavamani	OHT Watchman	8144483331
		M. Manikandan	Executive Officer	8925809641
		A. Ammavasi	Bill Collector	9843560098
Peraiyur	21	R. Karthigai Selvi	Bill Collector	8807982205
		M. Ansardeen	Sanitary Supervisor	9943576831
		S.Sundaram	Sanitary Worker	9943481271
	22	M.Sundaram	Bill Collector	9943986327
		M. Selvamani	Bill Collector	9944160557
Elumala:		A.Palanisamy	Sanitary Worker	9626103349
Elumalai		S,Venkatachalam	Sanitary Worker	7200721008
		S. Nagaraj	Sanitary Worker	7819025808
		V.Ravikumar	Sanitary Worker	9655108669

# **EARLY WARNING TEAM (Monitoring)**

Block Development Offices							
Block	Team	Name (Tvl.)	Designation	Cell No			
Madurai East		S.Kathiravan	BDO(B.P)	7402607938			
	23	R.Jothiraj	BDO(V.P)	7402607951			
		S.Kannan	Dy.BDO (Pts)	7402907039			
		M.Manokaran	Zonal Dy.BDO	7402907042			
		C.Kannan	Zonal Dy.BDO	7402907043			
		S.Muthukrishnan	Zonal Dy.BDO	7402907045			
Madurai	24	A.Alagupandi	BDO(B.P)	7402607939			
		S.Sonabai	BDOV.P)	7402607952			
		C.indira	Dy.BDO (Pts)	7402907048			
West		V.Sangeetha	Zonal Dy.BDO	7402907051			
		R.Sankari	Zonal Dy.BDO	7402907052			
		M. MeenakshiSundaram	Zonal Dy.BDO	7402907053			
	25	S. Senthilmani	BDO(B.P)	7402607940			
		V.PreatchiPrema	BDO(V.P)	7402607953			
Thirupparan		M.Rajalakshmi	Dy.BDO (Pts)	7402907057			
kundram		S.Saravanamuthukrishn	Zonal Dy.BDO	7402907060			
		A.NeelaDevi	Zonal Dy.BDO	7402907062			
		M.Kalaiselvan	Zonal Dy.BDO	7402907063			
	26	P.Rathinakalavathi	BDO (B.P)	7402607941			
		K.Sundharasamy	BDO (V.P)	7402607954			
Melur		V.Rajamarthandan	Dy.BDO (Pts)	7402907067			
		M. Karthikeyan	Zonal Dy.BDO	7402907070			
		R.Meena	Zonal Dy.BDO	7402907071			
			Vacant				
Kottampatti	27	S.Jeyapalan	BDO (B.P)	7402607942			
		B.Ulaganathan	BDO (V.P)	7402607955			
		S.Sumathi	Dy.BDO (Pts)	7402907076			
		L.Rajaboopathi	Zonal Dy.BDO	7402907079			
		R.Muthukumar	Zonal Dy.BDO	7402907080			
		N.Muthaiah	Zonal Dy.BDO	7402907082			

		S.Kalaiselvi	BDO(B.P)	7402607943
		P.Valli	BDO(V.P)	7402607956
Alanganallur	28	P.Mohanram	Dy.BDO (Pts)	7402907093
7 lianganaliai	20	P.Sunderarajan	Zonal Dy.BDO	7402907096
		M.S.Jeyaprakash	Zonal Dy.BDO	7402907097
		V.Chinnaiah	Zonal Dy.BDO	7402907099
	29	J.Lakshmikantham	BDO(B.P)	7402607944
		R.Porselvi	BDO(V.P)	7402607957
Vadipatti		R.Sathishkumar	Dy.BDO (Pts)	7402907085
Vadipatti		T.Kalaiyarasi	Zonal Dy.BDO	7402907090
		P.Kaniselvi	Zonal Dy.BDO	7402907088
		Vacant		
	30	C.Geetha	BDO(B.P)	7402607946
		V.Thangapandi	BDO(V.P)	7402607959
Chellampatti		T.Solaikurumban	Dy.BDO (Pts)	7402907110
		N.Saroja	Zonal Dy.BDO	7402907114
		S.Maveeraprabakar	Zonal Dy.BDO	7402907115
	31	R.Anbarasu	BDO(B.P)	7402607945
		A.Raja	BDO(V.P)	7402607958
Usilampatti		C.Muthupandiyaraj	Dy.BDO (Pts)	7402907102
		S.Muhamad Ali	Zonal Dy.BDO	7402907105
		G.P. Pandi	Zonal Dy.BDO	7402907107
		K.Kannan	BDO(B.P)	7402607947
		M.Asik	BDO(V.P)  Dy.BDO (Pts)  Zonal Dy.BDO  Vacant  BDO(B.P)  BDO(V.P)  Dy.BDO (Pts)  Zonal Dy.BDO  kar Zonal Dy.BDO  BDO(B.P)  BDO(V.P)  Zonal Dy.BDO  BDO(V.P)  Zonal Dy.BDO  BDO(V.P)  Zonal Dy.BDO  Zonal Dy.BDO  Zonal Dy.BDO  Zonal Dy.BDO  BDO(B.P)  BDO(V.P)  Dy.BDO(Pts)  an Zonal Dy.BDO  Zonal Dy.BDO  BDO(V.P)  Dy.BDO(Pts)  BDO(V.P)  Dy.BDO(Pts)  BDO(V.P)  Dy.BDO(Pts)	7402607960
Sedapatti	32	A. Balamurugan	Dy.BDO(Pts)	7402907119
		K.C.N.Rajasekaran	Zonal Dy.BDO	7402907124
		K.Mathanbabu	Zonal Dy.BDO	7402907125
	33	K.Pandian	BDO(B.P)	7402607948
		P.Chandrakala	BDO(V.P)	7402607961
Thiruman galam		V.G.Rajeswari	Dy.BDO(Pts)	7402907128
3		R.Thiruppathi	Zonal Dy.BDO	7402907131
		S.Maheswaran	Zonal Dy.BDO	7402907132

		K.Saraswathi	BDO(B.P)	7402607949
		M.Dharmarajan	BDO(V.P)	7402607962
T. Kallupatti	34	B.Hemasudha	Dy.BDO(Pts)	7402907138
		S.S.Raja	Zonal Dy.BDO	7402907142 7402907143 7402607950
		K.Ramalingam	Zonal Dy.BDO	7402907143
		V.Krishnaveni	BDO(B.P)	7402607950
		M.Thanagavelu	BDOV.P)	7402607963
Kallikudi	35	N.Gomathi	Dy.BDO(Pts)	7402907148
		M.Mathiyarasu	Zonal Dy.BDO	7402907151
		D.Sivasakthi	Zonal Dy.BDO	7402907152
		T.Muthuselvi	Zonal Dy.BDO	7402907154

## **RELIEF AND RESCUE TEAMS – 2024**

MADURAI CORPORATION						
Zone No	Team	Name (Tvl)	Designation	Cell No		
		Muthuramalingam	Assistant Engineer	9498748923		
		Senthamarivalli (Entire Taluk Area)	Tahsildar, West Taluk	80566 64070		
Zone-1	1	Palani Kumar	Vehicle Supervisor	7639896313		
		Balamurugan	Sanitary Inspector	8668166022		
		Alagu	Fitter	9626942443		
		P. Solaimalai	Junior Engineer	9498748922		
- ·	•	Siva subramani	Sanitary Officer	9498748602		
Zone-1	2	Ramsubramani	Sanitary Inspector	8144945467		
		Sakthivel	Fitter	9942162742		
		Mrs. Ponmani	Assistant Engineer	9498748929		
		Masthankani (Entire Taluk Area)	Tahsildar, North Taluk	9445000586		
Zone-2	3	Selva kumar	Vehicle Supervisor	99528 02274		
		Murugaiah	Sanitary Inspector	9042342400		
		Magudeesh waran	Fitter	9159509953		
		K.Kannan	Junior Engineer	9952133406		
Zone-2	4	Lavanya	Sanitary Inspector	8489222214		
		Saravanan	Fitter	9942109435		
		Ramesh Babu	Assistant Engineer	9842507669		
		Meenakshi (Entire Taluk Area)	Tahsildar, East Taluk	97862 99447		
Zone-3	5	Sathish kumar	Vehicle Supervisor	99440 52102		
		S.Ramesh	Sanitary Inspector	9498748611		
		Sugumar	Fitter	9788847354		
		P. Ragunathan	Junior Engineer	8778421305		
Zone-3	6	Kavitha	Sanitary Inspector	9498748608		
		Harinagarajan	Fitter	9790127403		

Madurai Corporation					
Zone No	Team	Name (TvI)	Designation	Cell No	
		Santhanam	Assistant Engineer	9498748944	
		Saravanan, (Entire Taluk Area)	Tahsildar, Madurai South Taluk	9445000587	
Zone-4	7	Ramanathan	Sanitary Inspector	9498748616	
		N.R Vishvanathan	Fitter	9344444115	
		S.Sharbudeen	Junior Engineer	9498748921	
		Nagaraj	Sanitary Inspector	9498748614	
Zone-4	8	A.Thangamani	Fitter	9843179556	
		Ramasubramanian	Junior Engineer	9498748716	
		M.Muthu	Assistant Exe.Engineer	9498748905	
Zone-5	0	Kavitha, (Entire Taluk Area)	Tahsildar, Thirupparankundram Taluk	95979 56990	
Zone-5	9	Subburaj	Sanitary Inspector	9498748615	
		N.R Vishvanathan	Fitter	9344444115	
		Solomon	Junior Engineer	9498748916	
		Chandrasekhar	Sanitary Inspector	9894146814	
		Vanaja	Sanitary Inspector	9498748619	
Zone-5	10	A.Thangamani	Fitter	9843179556	
		R.Murugan	Assistant Engineer	9498748943	

## Relief and Rescue Teams - 2024

	Municipality				
Municipality	Team	Name (Tvl.)	Designation	Cell No	
		S.Ulaganathan	Oversear	8838689204	
		Senthamarai	Tahsildar, Melur	9445000588	
		V.Subbaiah	Sanitary Inspector	8754950844	
Melur	11	M.Kathiresan	Fitter	9894812616	
		P.Sathiya	Sanitary Supervisor	9655889115	
		P. Mayilvaghanan	Sanitary Supervisor	9787266625	
		Saravana Prabhu	Sanitary Inspector	8072525559	
	12	S.Sikkandar	Sanitary Inspector	9944326667	
		Sathish	Sanitary Supervisor	7708356516	
Thirumangala m		S.Kaleeswaran	Revenue Assistant	8903550079	
		S.Muthupandi	Revenue Assistant	9894413254	
		Rajeshwari	Sanitary Supervisor	9047082258	
		B. Balamurugan	Overseer	9994173769	
		M.Mohammed Raseedh	Revenue Inspector	8608203090	
Usilampatti	13	V.Surulichamy	Revenue Assistant	9965999300	
		K.Thanikodi	Sanitary Supervisor	9843268867	
		A.Athan	Sanitary Supervisor	9942145965	

## Relief and Rescue Teams - 2024

Town Panachayat				
Town Panachayat	Team	Name (Tvl.)	Designation	Cell No
		N.Jeelan banu	Executive Officer	8925809634
		R. Neelavathi	Junior Engineer	9942180611
		R. Arumugam	Junior Assistant	or Assistant 8248314044
	14	V. Muthalagu	Sanitary Supervisor	9940888449
		Gengai Eswaran	Tractor Driver	9976352526
Paravai		V. Senthil Murugan	OHT Watchman	7639788993
		A. Manimala	OHT Watchman	9025371009
		K. Silambarasan	Sanitary Worker 975100	9751000996
		K. Paraman	Sanitary Worker	9944058013
		K.Pandi	Sanitary Worker	9952132129
		A.PalaniMuthu	Sanitary Worker	9843700240

Town Panachayat	Team	Name (Tvl.)	Designation	Cell No
		P. Gurusamy	Junior Engineer	9442253459
		K. Raja	Junior Assistant	9787522698
Alanganallur	15	R. Abitha	Junior Assistant	9159070821
		V.Ganesan	OHT Operator	8012087798
		R.Rangasamy	Sanitary Worker	9842850419
		P. Jeyalakshmi	Executive Officer	8925809636
		P. Gurusamy	Junior Engineer	9442253459
		J.Dhanalakshimi	Junior Assistant	9944977120
Vadinatti	16	M. Muthupandi	Junior Assistant	9843319501
Vadipatti	16	Saravana Kumar	water Supply staff	9865403750
		Nagaraj	water Supply staff	7708785283
		M.Murugan	Sanitary Worker	9659462450
		M.Alagar	Sanitary Worker	7094686673
	17	S.Selvakumar	Executive Officer	8925809637
		R. Neelavathi	Junior Engineer	9942180611
Sholavandan		G.Ramu	Sanitary Supervisor	9894133016
		Poovalingam	Sanitary Worker	9788314124
		R. Arun	Sanitary Worker	9171715666
		K.Satheeswaran	Sanitary Worker	9943870070
		R. Neelavathi	Junior Engineer	9942180611
		S.Dhanalakshmi	Junior Assistant	9786308099
A. Vellalapatti	18	M.Lakshmanan	Sanitary worker	8098730669
		K.MallaKottai	Sanitary worker	9994277698
		C.Boopathi	Sanitary worker	9600818470
		N. Sasikala	Executive Officer	8925809639
		P. Gurusamy	Junior Engineer	9442253459
Palamedu	19	S.Kirankumar	Junior Assistant	8122168019
		R. Dilipan Chakkaravarthi	Sanitary Supervisor	9626824545
		K.Paulraj	Sanitary worker	9677937763

Town Panachayat	Team	Name (Tvl.)	Designation	Cell No
		P. Anandhakumar	Executive Officer	8925809640
		K. Senkathir Selvan	Junior Engineer	9787242959
		S.Dhanalakshmi	Bill Collector	9786308099
T. kallupatti	20	P. Kanagaraj	Sanitary Supervisor	9677937763
		V.Poongavanam	Sanitary worker	9791449374
		M.Sundaram	Sanitary Worker	9786892055
	21	M. Manikandan	Executive Officer	8925809641
		K. Senkathir Selvan	Junior Engineer	9787242959
Peraiyur		M.Ansardeen	Sanitary Supervisor	9943576831
		G. Alaguraja	Sanitary Worker	9655883601
		N.Kalaiselvan	Sanitary Worker	9585181617
		K. Senkathir Selvan	Junior Engineer	9787242959
		M.Selvamani	Bill Collector	9944160557
Elumalai	22	T.Chellapandi	Tractor Driver	9626103330
		V.Ravikumar	Sanitary Worker	9655108669
		A.Palanisamy	Sanitary Worker	9626103349
		S.Venkatachalam	Sanitary Worker	7200721008

## Relief and Rescue Teams - 2024

Block Development Offices					
Block	Team	Name (Tvl.)	Designation	Cell No	
		S.Kathiravan R.Jothiraj R.Solaimalai	BDO(B.P) BDO(V.P) Engineer	7402607938 7402607951 9791481090	
Madurai East	23	M.Sureshkumar	Engineer	8056896560	
Madurai East	23	S.Kannan	Dy.BDO (Pts)	7402907039	
		M.Manokaran	Zonal Dy.BDO	7402907042	
		C.Kannan	Zonal Dy.BDO	7402907043	
		S.Muthukrishnan	Zonal Dy.BDO	7402907045	

## Relief and Rescue Teams - 2024

Block Development Offices					
Block	Team	Name (Tvl.)	Designation	Cell No	
		A.Alagupandi	BDO (B.P)	7402607939	
		S.Sonabai	BDO (V.P)	7402607952	
		S.Radha	Engineer	9443052642	
		M.Duraikannan	Engineer	9500449595	
Madurai West	24	C.indira	Dy.BDO (Pts)	7402907048	
		V.Sangeetha	Zonal Dy.BDO	7402907051	
		R.Sankari	Zonal Dy.BDO	7402907052	
		M. Meenakshi Sundaram	Zonal Dy.BDO	7402907053	
		S. Senthilmani	BDO(B.P)	7402607940	
	25	V.PreatchiPrema	BDO(V.P)	7402607953	
		A.Leo Stephan Raj	Engineer	8870262224	
		M.Suganya	Engineer	9962752834	
Thirupparan kundram		K.Chandrasekaran	Engineer	9994595275	
Kullulalli		M.Rajalakshmi	Dy.BDO (Pts)	7402907057	
		S.Saravanamuthu krishnan	Zonal Dy.BDO	7402907060	
		A.NeelaDevi	Zonal Dy.BDO	7402907062	
		M.Kalaiselvan	Zonal Dy.BDO	7402907063	
		P.Rathinakalavathi	BDO (B.P)	7402607941	
		K.Sundharasamy	BDO (V.P)	7402607954	
		V.Nehru	Engineer	9952538133	
Melur	26	R.Nedunchelizian	Engineer	9488743666	
		V.Rajamarthandan	Dy.BDO (Pts)	7402907067	
		M. Karthikeyan	Zonal Dy.BDO	7402907070	
		R.Meena	Zonal Dy.BDO	7402907071	
			Vacant		

		Block Developmer	nt Offices	
Block	Team	Name (Tvl.)	Designation	Cell No
		S.Jeyapalan	BDO (B.P)	7402607942
		B.Ulaganathan	BDO (V.P)	7402607955
		S.P.Saravanan	Engineer	9486888654
14 . 11	07	P.Ganesan	Engineer	9443279652
Kottampatti	27	S.Sumathi	Dy.BDO (Pts)	7402907076
		L.Rajaboopathi	Zonal Dy.BDO	7402907079
		R.Muthukumar	Zonal Dy.BDO	7402907080
		N.Muthaiah	Zonal Dy.BDO	7402907082
		S.Kalaiselvi	BDO(B.P)	7402607943
		P.Valli	BDO(V.P)	7402607956
Alanganallur	28	A.Vignesh Kanniyappan	Engineer	9486365398
<b>3</b>		P.Mohanram	Dy.BDO (Pts)	7402907093
		P.Sunderarajan	Zonal Dy.BDO	7402907096
		M.S.Jeyaprakash	Zonal Dy.BDO	7402907097
		V.Chinnaiah	Zonal Dy.BDO	7402907099
		J.Lakshmikantham	BDO(B.P)	7402607944
		R.Porselvi	BDO(V.P)	7402607957
		T.Malathi	Engineer	9080612192
Vadipatti	29	P. Marutham	Engineer	9003533116
		R.Sathishkumar	Dy.BDO (Pts)	7402907085
		T.Kalaiyarasi	Zonal Dy.BDO	7402907090
		P.Kaniselvi	Zonal Dy.BDO	7402907088
			Vacant	
		C.Geetha	BDO(B.P)	7402607946
		V.Thangapandi	BDO(V.P)	7402607959
Challam - att:	20	T.Ramesh	Engineer	9585955425
Chellampatti	30	V.Poompandi	Engineer	9443572656
		T.Solaikurumban	Dy.BDO (Pts)	7402907110
		N.Saroja	Zonal Dy.BDO	7402907114
		S.Maveeraprabakaran	Zonal Dy.BDO	7402907115

	Block Development Offices				
Block	Team	Name (Tvl.)	Designation	Cell No	
		R.Anbarasu	BDO(B.P)	7402607945	
		A.Raja	BDO(V.P)	7402607958	
		A.Vinoth	Engineer	9789725109	
Usilampatti	31	S.Amstrong	Engineer	9543087920	
		C.Muthupandiyaraj	Dy.BDO (Pts)	7402907102	
		S.Muhamad Ali	Zonal Dy.BDO	7402907105	
		G.P. Pandi	Zonal Dy.BDO	7402907107	
		K.Kannan	BDO(B.P)	7402607947	
		M.Asik	BDO(V.P)	7402607960	
		R.Palanivel	Engineer	9486029056	
Sedapatti	32	S.Kannan	Engineer	9865718664	
		A. Balamurugan	Dy.BDO(Pts)	7402907119	
		K.C.N.Rajasekaran	Zonal Dy.BDO	7402907124	
		K.Mathanbabu	Zonal Dy.BDO	7402907125	
		K.Pandian	BDO(B.P)	7402607948	
		P.Chandrakala	BDO(V.P)	7402607961	
		P.Mayan	Engineer	8637668837	
Thirumangala	00	S.Vasanthi	Engineer	9597518481	
m	33	C.Thirumalaisamy	Engineer	9943665677	
		V.G.Rajeswari	Dy.BDO(Pts)	7402907128	
		R.Thiruppathi	Zonal Dy.BDO	7402907131	
		S.Maheswaran	Zonal Dy.BDO	7402907132	
		K.Saraswathi	BDO(B.P)	7402607949	
		M.Dharmarajan	BDO(V.P)	7402607962	
		I.Banumathi	Engineer	9487702231	
T. Kallupatti	34	T.Ganesamurugan	Engineer	9842109929	
		B.Hemasudha	Dy.BDO(Pts)	7402907138	
		S.S.Raja	Zonal Dy.BDO	7402907142	
		K.Ramalingam	Zonal Dy.BDO	7402907143	

Block Development Offices				
Block	Team	Name (Tvl.)	Designation	Cell No
		V.Krishnaveni	BDO(B.P)	7402607950
		M.Thanagavelu	BDO(V.P)	7402607963
		M.Amutha	Engineer	9994164829
		S.Kamali	Engineer	7299258485
Kallikudi	35	S.Selvi	Engineer	9943335940
		N.Gomathi	Dy.BDO(Pts)	7402907148
		M.Mathiyarasu	Zonal Dy.BDO	7402907151
		D.Sivasakthi	Zonal Dy.BDO	7402907152
		T.Muthuselvi	Zonal Dy.BDO	7402907154

## **RESTORATION TEAM – 2024**

	Madurai Corporation						
Zone No	Team	Name (Tvl.)	Designation	Cell No			
		Masthankani (Entire Taluk Area)	Tahsildar, Madurai North Taluk	9445000586			
		Thirupathi	Junior Engineer	9443279646			
		Amardeep		9498748715			
		A.Murugan	Junior Engineer	9498748932			
Zone-1	1	Ravichandran	Fitter	9994164954			
		Hariharasudhan	Assistant Engineer, Periyar Main Canal Section, Madurai	9159154090			
		Guru Prasad	Assistant Engineer, Highways Department, (C&M) Madurai.	9551627214			
		Chokkalingam	Assistant Engineer, Agricultural Engineering Department,	9486226346			
		Meenakshi (Entire Taluk Area)	Tahsildar, Madurai East Taluk	9786299447			
		A. Amardeep	Assistant Engineer	9498748715			
		S.Thirupathi	Junior Engineer	9443279646			
		China samy	Fitter	8870244678			
Zone-1	2	Muthu Samy	Fitter	7810882357			
		Shanmugasundarm, A.E.	Periyar Main Canal Section, Mettupatti	9443474181			
		Sakthivel	Assistant Engineer, Divisional Highways, (C&M) Madurai West.	7092874432			
		Uma Devi,	Assistant Engineer, Agricultural Engineering Department,	8072324275			

	Madurai Corporation					
Zone No	Team	Name (Tvl.)	Designation	Cell No		
		Masthankani (Entire Taluk Area)	Tahsildar, Madurai North Taluk	9445000586		
		M.Kamaraj	Assistant Executive Engineer	9498748902		
		Malliga	Assistant Engineer	9498748937		
		Sakthivel	Assistant Engineer	9498748954		
Zone-2	3	MahalinBatsha	Fitter	8883203070		
		Hariharasudhan	Assistant Engineer, Periyar Main Canal Section, Madurai	9159154090		
		Guru Prasad	Assistant Engineer, Highways Department, (C&M) Madurai.	Engineer, s Department, 9551627214		
		Chokkalingam	Assistant Engineer, Agricultural Engineering Department,	9486226346		
		Senthamarivalli (Entire Taluk Area)	Tahsildar, Madurai West Taluk	80566 64070		
		Karuppaiya	Assistant Engineer	9894688398		
		N.Sakthivel	Assistant Engineer	9498748954		
		Ganeshan	Fitter	7871980757		
Zone-2	4	Velankanni	Fitter	9345102670		
		Sekaran	Assistant Engineer, Periyar Vaigai Basin Division, Madurai.	9842158860		
		Sakthivel	Assistant Engineer Highways, (C&M)	7092874432		
		Uma Devi	Assistant Engineer, Agricultural Engineering Department,	8072324275		

	Madurai Corporation						
Zone No	Team	Name (Tvl.)	Designation	Cell No			
		Senthamarivalli (Entire Taluk Area)	Tahsildar, Madurai West Taluk	80566 64070			
		R.Jeya	Assistant Engineer	7200008118 6381912513			
		Veerabaranidoss	Junior Engineer	7200008118			
		Baskaran	Fitter	6381912513 9514367968			
Zone-3	5	ChellaPandi	Fitter	9514367968 r, sin 9842158860			
		Sekaran	Assistant Engineer, Periyar Vaigai Basin Division, Madurai.				
		Sakthivel	Assistant Engineer Highways, (C&M)	7092874432			
		Uma Devi	Assistant Engineer, Agricultural Engineering Department,	8072324275			
		Senthamarivalli (Entire Taluk Area)	Tahsildar, Madurai West Taluk	8056664070			
		P. Mani	Junior Engineer	9790297785			
Zone-3	6	Shyam Sundar	Junior Engineer	9443796544			
		PalaniAppan	Fitter	97914 81070			
		Vishvanathan	Fitter	9344444115			
		Selvarani	Sanitary Inspector	9789038057			

	Madurai Corporation						
Zone No	Team	Name (Tvl.)	Designation	Cell No			
		Masthankani (Entire Taluk Area)	Tahsildar, Madurai North Taluk	9445000586			
		Mailerinathan	Assistant Executive Engineer	9498748904			
		Sharbudeen	Assistant Engineer	9498748921			
		Karuppasamy	Fitter	9790519685			
Zone-4	7	Premkumar	Fitter	9003853075			
		Hariharasudhan	Assistant Engineer, Periyar Main Canal Section, Madurai	9159154090			
	Guru Prasad Chokkalingam	Guru Prasad	Assistant Engineer, Highways Department, (C&M) Madurai.	9551627214			
			Chokkalingam	Assistant Engineer, Agricultural Engineering Department,	9486226346		
	8	Saravanan, (Entire Taluk Area)	Tahsildar, Madurai South Taluk	9445000587			
		Soosai Arockkiya Sami	Junior Engineer	9498748690			
		Sangilirajan	Assistant Engineer	9498748928			
		Muniasamy	Fitter	9944283559			
Zone-4		Muthumari	Fitter	8973887016			
		M.S.K. Sundaramoorthy	Assistant Engineer, Periyar Vaigai Basin Division, Madurai.	9842390116			
		Charles	Assistant Engineer, Highways Department, (C&M) Madurai.	9003408583			
		Chokkalingam	Assistant Engineer, Agricultural Engineering Department.	9486226346			

	Madurai Corporation						
Zone No	Tea m	Name (Tvl.)	Designation	Cell No			
		Kavitha, (Entire Taluk Area)	Tahsildar, Thirupparankundram Taluk	9597956990			
		Mr. M Muthu	Assistant Executive Engineer	9498748905			
		Mr. Solomon Jeyaprabhu	Assistant Engineer	9498748916			
		Mr. Karuppasamy	Fitter	9790519685			
Zone-5	9	Mr. Premkumar	Fitter	9003853075			
		Sekaran	Assistant Engineer, Periyar Vaigai Basin Division, Madurai.	9842158860			
		Charles	Assistant Engineer, Highways Department, (C&M) Madurai.	9003408583			
		Kasinathan,	Assistant Engineer, Agricultural Engineering Department.	8825520608			
		Saravanan, (Entire Taluk Area)	Tahsildar, Madurai South Taluk	9445000587			
		Mr. Selvavinayagam	Junior Engineer	9843266450			
		Mr. Ilangovan	Junior Engineer	9894358183			
		Mr. Muniasamy	Fitter	99442 83559			
Zone-5	10	Mr. Muthumari	Fitter	89738 87016			
		M.S.K. Sundaramoorthy	Assistant Engineer, Periyar Vaigai Basin Division, Madurai.	9842390116			
		Charles	Assistant Engineer, Highways Department, (C&M) Madurai.	9003408583			
		Chokkalingam	Assistant Engineer, Agricultural Engineering Department.	9486226346			

### **RESTORATION TEAM - 2024**

	Municipality					
Municipality	Team	Name (Tvl.)	Designation	Cell No		
		S.Ulaganathan	Overseer	8838689204		
		Senthamarai	Tahsildar, Melur	9445000588		
		V.Subbaiah	Sanitary Inspector 875495084 Fitter 989481261	8754950844		
Melur	11	M.Kathiresan	Fitter	9894812616		
		Balasubbramanian	Sanitary Supervisor	9894697958		
		V.Saravanan	Assistant Engineer	9843450020		
		S.G. Anand	Assistant Engineer	94431 32249		
		M.Ramkumar	Revenue Inspector	6385559298		
	12	Yamuna devi	Sanitary Supervisor	8681804734		
		Kesavan	Sanitary Supervisor	9843082512		
Thirumangalam		Pabithakani	Revenue Assistant	9042440284		
		C.Sivasakthivel	Revenue Assistant	9944864352		
		Alagumalai	Sanitary Supervisor	9944337530		
		M.Ramkumar	Revenue Inspector	6385559298		
		B. Balamurugan	Overseer	9994173769		
		K. Suguna	Tap Inspector	8122064210		
Usilampatti	13	G.Nellai Rajan	Fitter	9865229990		
		R.Ganesan	Sanitary Supervisor	9790593019		
		M.Syed Abthaheer	Sanitary Inspector	9443074837		

### **RESTORATION TEAM - 2024**

	TOWN PANCHAYAT					
Town Panachayat	Team	Name (Tvl.)	Designation	Cell No		
		R. Neelavathi	Junior Engineer	9942180611		
		R. Arumugam	Junior Assistant	8248314044		
		P.Gopalakrishnan	Bill Collector	9442750122		
Paravai	14	G.Ramu	Sanitary Supervisor	7358385836		
		Gengai Eswaran	Tractor Driver	9976352526		
		JothiBasu	Assistant Engineer, Highways (C & M)	9786906048		
		Karuppiah	Junior Engineer	6380400799		
		K. Raja	Junior Assistant	9787522698		
		R. Abitha	Junior Assistant	9159070821		
		V.Ganesan	OHT Operator	8012087798		
Alanganallur	15	R.Rangasamy	Sanitary Supervisor	9842850419		
		VenkateshBabu	Junior Engineer, Highways (C & M)	75986 19898		
		Mookkaiyan	Assistant Engineer (PWD) Periyar Vaigai Basin Division	9443060031		
		Moorthy	Tahsildar, Vadipatti	9445000589		
		S.Karuppiah	Junior Engineer	6380400799		
		J.Dhanalakshimi	Junior Assistant	9944977120		
		R.Arumugam	Junior Assistant	8248314044		
Vadipatti	16	Saravanakumar	water Supply staff	9865403750		
		VenkateshBabu	Junior Engineer, Highways (C & M)	75986 19898		
		Mookkaiyan	Assistant Engineer (PWD) Periyar Vaigai Basin Division	9443060031		
		R. Kannammal	Junior Assistant	8838347176		
		M. Kalyanasundaram	Junior Assistant	9842595559		
		V.Sundaraj	Sanitary Supervisor	99427 05531		
		R.Arun	Sanitary Worker	9171715666		
Sholavandan	17	R. Kannammal	Junior Assistant	8838347176		
		VenkateshBabu	Junior Engineer, Highways (C & M)	75986 19898		
		Mookkaiyan	Assistant Engineer (PWD) PeriyarVaigai Basin Division	9443060031		

TOWN PANCHAYAT				
Town Panachayat	Team	Name (Tvl.)	Designation	Cell No
		R. Neelavathi	Junior Engineer	9942180611
		S.Dhanalakshmi	Junior Assistant	9786308099
		M.Lakshmanan	Sanitary worker	8098730669
A Vallalanat		K.MallaKottai	Sanitary worker	9994277698
A.Vallalapat ti	18	C.Boopathi	Sanitary worker	9600818470
		M.Prabhakaran,	Assistant Engineer, (PWD) Periyar Main Canal Division, Melur	9080923545
		Indira Priyadharshini	Junior Engineer Highways Department,	9361887454
	19	S.Karuppiah	Junior Engineer	6380400799
		V. Muthalagu	Sanitary Supervisor	9940888449
Palamedu		K.Paulraj	Sanitary worker	9677937763
		VenkateshBabu	Junior Engineer, Highways Department,	75986 19898
		Mookkaiyan	Assistant Engineer (PWD) PeriyarVaigai Basin Division	9443060031
		A.Muthu Prakash	Record Clerk	8270216931
		R.Murugan	Sanitary Worker	9047896631
T.Kallupatti	20	V.Velmurugan	Sanitary Worker	9047344087
		Sundaravadivel	Junior Engineer, Highways	9585949211
		Venkatachalam	Sanitary Worker	7200721008
		V.Ravikumar	Sanitary Worker	9655108669
Peraiyur	21	SivaGanesh	Assistant Engineer, (PWD) Gundar Basin Division, Madurai.	9626396694
		Muktheeswari,	Assistant Director Highways (C & M)	9443362500

TOWN PANCHAYAT					
Town Panachayat	Team	Name (Tvl.)	Designation	Cell No	
		T. Chellapandi	Tractor Driver	9626103330	
		A.Palanisamy	Sanitary Worker	9626103349	
Elumalai	22	SivaGanesh	Assistant Engineer, (PWD) Gundar Basin Division, Madurai.	9626396694	
		Muktheeswari,	Assistant Director Highways (C & M)	9443362500	

## **RESTORATION TEAM - 2024**

	Block Development office					
Block Development office	Team	Name (Tvl.)	Designation	Cell No		
		S.Kathiravan	BDO(B.P)	7402607938		
		R.Jothiraj	BDO(V.P)	7402607951		
		R.Solaimalai	Engineer	7402607938 7402607951 9791481090 8056896560 s) 7402907039 Ingineer, In Canal 9443474181 ettupatti Ingineer ighways, Jurai. 7402607939 7402607952 9443052642 9500449595 s) 7402907048 Ingineer, Ingin		
		M.Sureshkumar	Engineer	8056896560		
Madurai East	23	S.Kannan	Dy.BDO (Pts)	7402907039		
		Shanmugasundarm, Periyar Main Can	Assistant Engineer, Periyar Main Canal Section, Mettupatti	9443474181		
		Sakthivel	Assistant Engineer Divisional Highways, (C&M) Madurai.	7092874432		
		A.Alagupandi	BDO(B.P)	7402607939		
		S.Sonabai	BDOV.P)	7402607952		
		S.Radha	Engineer	9443052642		
		M.Duraikannan	Engineer	9500449595		
Madurai West	24	C.indira	Dy.BDO (Pts)	7402907048		
		Sekaran	Assistant Engineer, PeriyarVaigai Basin Division, Madurai	9842158860		
		Sakthivel	Assistant Engineer, Highways (C & M)	7092874432		

		Block Developn	nent office	
Block Development office	Team	Name (Tvl.)	Designation	Cell No
		S. Senthilmani	BDO(B.P)	7402607940
		V.PreatchiPrema	BDO(V.P)	7402607953
		A.Leo Stephan Raj	Engineer	8870262224
		M.Suganya	Engineer	9962752834
Thiruparanku ndaram	25	K.Chandrasekaran	Engineer	9994595275
		Sekaran	Assistant Engineer, Periyar Vaigai Basin Division, Madurai.	9842158860
		Charles	Assistant Engineer, Highways (C & M)	9003408583
		P.Rathinakalavathi	BDO (B.P)	7402607941
	26	K.Sundharasamy	BDO (V.P)	7402607954
		V.Nehru	Engineer	9952538133
		R.Nedunchelizian	Engineer	9488743666
Melur		V.Rajamarthandan	Dy.BDO (Pts)	7402907067
weiui		S.Malaiselvam	Assistant Engineer, Peraiyar Main Canal Section, Thaniyamangalam	9159736687
		Indira Priyadharshini	Junior Engineer Highways (C & M)	9361887454
		S.Jeyapalan	BDO (B.P)	7402607942
		B.Ulaganathan	BDO (V.P)	7402607955
		S.P.Saravanan	Engineer	9486888654
		P.Ganesan	Engineer	9443279652
Kottampatti	27	S.Sumathi	Dy.BDO (Pts)	7402907076
Kottampatti	27	S.Malaiselvam	Assistant Engineer, Peraiyar Main Canal Section, Thaniyamangalam	9159736687
		Indira Priyadharshini	Junior Engineer Highways (C & M)	9361887454

Block Development office				
Block Development office	Team	Name (Tvl.)	Designation	Cell No
		J.Lakshmikantham	BDO(B.P)	7402607944
		R.Porselvi	BDO(V.P)	7402607957
		T.Malathi	Engineer	9080612192
		P. Marutham	Engineer	9003533116
Vadipatti	28	R.Sathishkumar	Dy.BDO (Pts)	7402907085
vadipatti		Mookkaiyan	Assistant Engineer, PeriyarVaigai Basin Division, Madurai	9443060031
		Radha Muthukumari,	Assistant Divisional Engineer, Highways (C & M)	8838924821
		S.Kalaiselvi	BDO(B.P)	7402607943
	29	P.Valli	BDO(V.P)	7402607956
		A.VigneshKanniyappan	Engineer	9486365398
		P.Mohanram	Dy.BDO (Pts)	7402907093
		P.Sunderarajan	Zonal Dy.BDO	7402907096
Alanganallur		M.S.Jeyaprakash	Zonal Dy.BDO	7402907097
		Mookkaiyan	Assistant Engineer, Periyar Vaigai Basin Division, Madurai	9443060031
		Radha Muthukumari,	Assistant Divisional Engineer, Highways (C & M)	8838924821
		C.Geetha	BDO(B.P)	7402607946
		V.Thangapandi	BDO(V.P)	7402607959
		T.Ramesh	Engineer	9585955425
		V.Poompandi	Engineer	9443572656
Chellampatti	30	T.Solaikurumban	Dy.BDO (Pts)	7402907110
- <b>F</b>		N.Saroja	Zonal Dy.BDO	7402907114
		Manokaran,	Assistant Engineer, Gundar Basin Division, Madurai.	7010873054
		Balaji	Assistant Engineer, Highways (C & M)	9629374434

Block Development office				
Block Development office	Team	Name (Tvl.)	Designation	Cell No
		R.Anbarasu	BDO(B.P)	7402607945
		A.Raja	BDO(V.P)	7402607958
		A.Vinoth	Engineer	9789725109
		S.Amstrong	Engineer	9543087920
Hailaman atti	0.4	C.Muthupandiyaraj	Dy.BDO (Pts)	7402907102
Usilampatti	31	S.Muhamad Ali	Zonal Dy.BDO	7402907105
		A.Pandian,	Assistant Engineer, (PWD) Gundar Basin Division,	9171977085
		Balaji	Assistant Engineer, Highways (C & M)	9629374434
	32	K.Kannan	BDO(B.P)	7402607947
		M.Asik	BDO(V.P)	7402607960
		R.Palanivel	Engineer	9486029056
		S.Kannan	Engineer	9865718664
Sedapatti		A. Balamurugan	Dy.BDO(Pts)	7402907119
		K.C.N.Rajasekaran	Zonal Dy.BDO	7402907124
		A.Pandian,	Assistant Engineer, (PWD) Gundar Basin Division,	9171977085
		Balaji	Assistant Engineer, Highways (C & M)	9629374434
		K.Pandian	BDO(B.P)	7402607948
		P.Chandrakala	BDO(V.P)	7402607961
		P.Mayan	Engineer	8637668837
		S.Vasanthi	Engineer	9597518481
		C.Thirumalaisamy	Engineer	9943665677
Thriumangalam	33	V.G.Rajeswari	Dy.BDO(Pts)	7402907128
		Sathya	Assistant Engineer, Gundar Basin Division, Madurai.	9500215767
		Ashok Pandian,	Assistant Engineer, Highways (C & M)	9750945450

		Block Develo	pment office	
Block Development Team office		Name (Tvl.)	Designation	Cell No
		K.Saraswathi	BDO(B.P)	7402607949
		M.Dharmarajan	BDO(V.P)	7402607962
		I.Banumathi	Engineer	9487702231
		T.Ganesamurug	Engineer	9842109929
T. Kallupatti	34	B.Hemasudha	Dy.BDO(Pts)	7402907138
		K.Saraswathi	BDO(B.P)	7402607949
		Eanasto	Assistant Engineer, Gundar Basin Division,	7708313483
		Sundara Rajan	Junior Engineer, Highways (C & M)	9894829713
		V.Krishnaveni	BDO(B.P)	7402607950
		M.Thanagavelu	BDO(V.P)	7402607963
		M.Amutha	Engineer	9994164829
		S.Kamali	Engineer	7299258485
Kallikudi	35	S.Selvi	Engineer	9943335940
	00	N.Gomathi	Dy.BDO(Pts)	7402907148
		Vinith Menon	Assistant Engineer, Gundar Basin Division,	9994709467
		Ashok Pandian,	Assistant Engineer, Highways (C & M)	9750945450

Madurai Corporation					
Zone	Te am	Name (Tvl.)	Designation	Cell No	
		V.S. Manian	Assistant Engineer	9498748933	
		Kathiresan	Sanitary Supervisor	9385233508	
Zone-1	1	Basheer	Sanitary Supervisor	9385233536	
		Rakkappan	Fitter	94436 09829	
		P.Solamalai	Junior Engineer	9498748922	
		Pandiselvam	Sanitary Supervisor	9385233506	
		Ayyappan	Sanitary Supervisor	9385233514	
Zone-1	2	Muthumani	Sanitary Supervisor	9385233512	
		Palpandi	Fitter	97862 59187	
		Muthuramalingam	Junior Engineer	9498748923	
		Premshankar	Junior Engineer	9994227363	
		Murugesan	Sanitary Supervisor	9385233521	
Zone-2	3	Thivaan	Sanitary Supervisor	9385233528	
		ChinnaPandi	Fitter	8489137065	
		K.G.Kannan	Junior Engineer	9842218766	
		Karumaripandiyan	Sanitary Supervisor	9385233520	
		Jaffer	Sanitary Supervisor	9385233525	
Zone-2	4	Velmurugan	Sanitary Supervisor	9385233566	
		Chinasamy	Fitter	8870244678	
		Malliga	Assistant Engineer	9498748937	
		Ramesh Babu	Junior Engineer	9842507669	
		Perumal	Sanitary Supervisor	9385233569	
Zone-3	5	Lakshmanan	Sanitary Supervisor	9385233067	
		Jegadeesan	Fitter	9786011527	
		R.Jaya	Assistant Engineer	9498748938	
		Sangupandi	Sanitary Supervisor	9385233559	
		Thirupathi	Sanitary Supervisor	9385233552	
Zone-3	6	Chandramogan	Sanitary Supervisor	9385233557	
		Balraj	Fitter	9487951041	
		P.Mani	Junior Engineer	9790297785	

	Madurai Corporation					
Zone	Team	Name (Tvl.)	Designation	Cell No		
		Pandidurai	Sanitary Supervisor	9385233590		
Zone-4	7	Neduncheziyan	Sanitary Supervisor	9385233586		
		K.Chinnakaalai	Fitter	9994339705		
		Ramasubramanian	Junior Engineer	9498748716		
		Jeyabalan	Sanitary Supervisor	9385233547		
		Petchiyammal	Sanitary Supervisor	9385233544		
		Nandakumar	Sanitary Supervisor	9385233529		
Zone-4	8	Perumal	Fitter	9790274703		
		K.S.Kanthappa	Assistant Engineer	9498748940		
		Vinothkumar	Sanitary Supervisor	9385233045		
		Rajendra kumar	Sanitary Supervisor	9385233100		
		Mahamuni	Sanitary Supervisor	9385233595		
Zone-5	9	K.Chinnakaalai	Fitter	9994339705		
		T.Thiyagarajan	Junior Engineer	9498748955		
		Krishnan	Sanitary Supervisor	9385233583		
		Shanmugavel	Sanitary Supervisor	9385233580		
		Chitradevi	Sanitary Supervisor	9385233571		
Zone-5	10	Perumal	Fitter	9790274703		
		Arul Sakaya Xavier	Junior Engineer	9865612418		
		Sundarrajan	Sanitary Supervisor	9385233584		

### Taluk Offices

Taluk Office	Team	Name (Tvl.)	Designation	Mobile No.
		Saravanan	Tahsildar, Madurai South	9445000587
		Anissathar	Tahsildar, (CS) East Zone	9445000340
Madurai	11	A.Alagupandi	Block Development Officer	7402607939
South	•••	D.Moses Benjamin	Block Educational Officer	9750982569 & 9943576504
		Dr. Narendiran	Chief Medical Officer, TPK	9442362524
		Masthankani	Tahsildar, Madurai North	9445000586
		Navaneethakrishnan	Tahsildar, (CS) North Zone	9445000337
Madurai	40	S.Kathiravan	Block Development Officer	7402607938
North	12	Pandian	Block Educational Officer	9750982571 & 9790449666
		Dr .Padmavathi.R	Block Medical Officer, Samayanallur	9842414878
	13	Meenakshi	Tahsildar, Madurai East	9786299447
		Surenderan	Tahsildar, (CS) Madurai North Taluk.	944500336
Madurai		R.Jothiraj	Block Development Officer	7402607951
East		K.Jansi	Block Educational Officer	9750982565 & 9842077332
		Dr. S.Najimarani	Block Medical Officer, Kallandri	9443000647
		Senthamarivalli	Tahsildar, Madurai West	8056664070
		Vijayalakshmi,	Tahsildar, (CS) West Zone	9445000339
Madurai West	14	S. Senthilmani	Block Development Officer Thiruparnkundram.	7402607940
		Josephine ruby	Block Educational Officer	9750982568 & 8056603124
		Dr .Padmavathi.R	Block Medical Officer, Samayanallur	9842414878

Taluk Office	Team	Name (Tvl.)	Designation	Mobile No.
		Kavitha	Tahsildar, Thirupparankundram	9597956990
		Panjacharam	Tahsildar, (CS) Central Zone	9445000338
Thirupparan kundaram	15	V.PreatchiPrema	Block Development Officer	7402607953
Kullualalii		V.Arul Murugan	Block Educational Officer	9750982572 & 8610099235
		Dr.Dhanasekar	Block Medical Officer, Tiruparankundram	9597950013
		Senthamarai	Tahsildar, Melur	9445000588
		Nagarani	Taluk Supply Officer	6383044008
Melur	16	P.Rathinakalavathi	Block Development Officer	7402607941
		E.AlaguMeena	Block Education Officer	9750982577 & 9500788353
		Dr.Ambalam Sivanesh	Block Medical Officer, Melur	9843586733
	17	Ramachandran	Tahsildar, Vadipatti	9445000589
		Rajkumar	Taluk Supply Officer	9445000342
		J.Lakshmikantham	Block Development Officer	7402607944
Vadipatti		D.AgilathuElavarasi	Block Educational Officer	9750982575 & 9994503780
		Dr. P.Valarmathi	Block Medical Officer, Primary Health Centre, Alanganallur.	9500444096
		Maneshkumar	Tahsildar, Thirumangalam	9445000591
		Rajeswari	Taluk Supply Officer	9445000344
Tirumana		K.Pandian	Block Development Officer	7402607948
Tirumana galam	18	A.Chinna Vellaichamy	Block Educational Officer	9750982591 & 8248791007
		Dr. Uma Maheswari	Block Medical Officer, Primary Health Centre. Checkanoorani	9944831316

Taluk Office	Team	Name (Tvl.)	Designation	Mobile No.
		Balakrishnan	Tahsildar, Usilampatti.	9445000590
		Mugibalan	Taluk Supply Officer	8778735996
		R.Anbarasu	Block Development Officer.	7402607945
Usilampatti	19	M.Thilagavathy	Block Educational Officer	9750982583 & 9994718669
		Dr.Dheivakkani .M	Block Medical Officer, Usilampatti	9443548451
		Chellapandi	Tahsildar, Peraiyur	9445000592
		Thangapandian	Taluk Supply Officer	9445000345
Porojvur	20	K.Kannan	Block Development Officer, Sedapatti	7402607947
Peraiyur		M.Subramanian	Block Educational Officer (T.Kallupatti Block)	9750982589 & 9486498135
		Dr. Thangaramu	Block Medical Officer, Primary Health Centre, T.Kallupatti.	9965545591
		Sivkaumar	Tahsildar, Kalligudi	9365870201
		Shanthi	Taluk Supply Officer	8973818776
Kalligudi	21	V.Krishnaveni	Block Development Officer, Kalligudi	7402607950
		K.Govindammal	Block Educational Officer	9750982587 & 9894915255
		Dr. K.Rajasekar	Block Medical Officer, Primary Health Centre, Kallikudi	9443951740

#### ANNEXURE - II

# IMPORTANT CONTACT NUMBER

	Distr	ict Level Officers	
SI. No	Name	Designation	Mobile No.
1.	Tmt. M.S.Sangeetha, I.A.S.,	District Collector	94441 71000
2.	Dr. Monika Rana, I.A.S.,	Additional Collector - Project Director, DRDA	73737 04222
3.	Thiru. C.Dinesh Kumar, I.A.S.,	Commissioner, Madurai Corporation	94874 47000
4.	Thiru. J.Loganathan, I.P.S.,	Commissioner of Police, Madurai City.	98844 47581
5.	Thiru. B.K.Arvind, I.P.S.,	Superintendent of Police, Madurai District.	94982 34567
6.	Thiru. T.Tharun Kumar, I.F.S.,	District Forest Officer, Madurai.	99499 92222
7.	Thiru. R.Sakthivel	District Revenue Officer,	94450 00916
8.	Thiru. R.Chandrasekar,	Personnel Assistant (General) to the Collector	94450 08142
9.	Tmt. R.D.Shalini	Revenue Divisional Officer, Madurai	94450 00449
10.	Tmt. Jeyanthi	Revenue Divisional Officer, Melur	96777 41861
11.	Thiru. C.Ravichandran	Revenue Divisional Officer, Usilampatti	94450 00450
12.	Tmt. Shanthi	Revenue Divisional Officer, Thirumangalam.	9442967302
13.	Tmt. UmmaulJamiah	Personnel Assistant (Dev) to the Collector	74026 07921
14.	Thiru. Aravind	Assistant Director (Panchayat)	74026 07923
15.	Thiru. Manikandan	Assistant Director (Town Panchayat)	8925809229

	DEPUTY COLLECTORS				
SI. No.	Name	Designation	Mobile No.		
1.	Tmt. Vidhya	Additional Personal Assistant (Land) to the Collector, Madurai.	80562 62884		
2.	Tmt. Sangeetha	Special Deputy Collector (SSS) Madurai.	9445461741		
3.	Tmt. H.CeliniKalaiSelvi	District AdiDravidar and Tribal Welfare Officer, Madurai.	73388 01263		
4.	Thiru.D.MuthuKrishnan	District Backward Classes and Minorities Welfare Officer, Madurai.	94454 77840		
5.	Tmt. R.Ravikumar	District Supply Officer, Madurai.	94450 00335		
6.	Thiru. S.SathiyaBalaGangatharan	Assistant Commissioner (Excise), Madurai.	9443797855		
7.	Thiru. T.Panchapakesan	District Inspection Cell Officer, Madurai.	90039 90146		
8.	Thiru.MuthuMurugesa Pandian	Special Deputy Collector (Stamps), Madurai.	9600535464		
9.	Tmt.M.Murugaselvi	Assistant Commissioner (ULT), Madurai.	9443631634		
10.	Thiru. S.Muthuramalingam	Special Deputy Collector (Revenue Court), Madurai.	94884 24669		

	POLICE DEPARTMENT					
SI. No	Name	Designation	Mobile No.			
1.	Thiru. J.Loganathan, I.P.S.,	Inspector General & Commissioner Of Police, Madurai City.	98844 47581			
2.	Thiru. B.K.Arvind, I.P.S.,	Superintendent Of Police, Madurai District	94982 34567			
3.	Thiru. Garad Karun Uddav Rao, I.P.S.,	Deputy Commissioner Of Police, Madurai South	96656 43322			
4.	Tmt. Madhukumari, I.P.S.,	Deputy Commissioner Of Police, Madurai North	94981 11004			
5.	Thiru. D.Kumar	Deputy Commissioner – Traffic, Madurai City	99411 82117			

	TALUK TAHSILDARS					
S. No	Designation	Contact No	Mobile No.			
1.	Tahsildar, Madurai South Taluk		94450 00587			
2.	Tahsildar, Madurai North Taluk		94450 00586			
3.	Tahsildar, Madurai East Taluk		97862 99447			
4.	Tahsildar, Madurai West Taluk		80566 64070			
5.	Tahsildar, Thiruparakundram Taluk		95979 56990			
6.	Tahsildar, VadipattiTaluk		94450 00589			
7.	Tashildar, MelurTaluk		94450 00588			
8.	Tahsildar, UsilampattiTaluk		94450 00590			
9.	Tahsildar, ThirumangalamTaluk		94450 00591			
10.	Tahsildar, PeraiyurTaluk		94450 00592			
11.	Tahsildar, KalligudiTaluk		93658 70201			

	FIRE & RESCUE DEPARTMENT				
S. No	Designation	Contact No	Mobile No.		
1.	District Fire Officer, Madurai	0452- 2533958	94450 86206		
2.	Madurai Fire Station	0452-2335399	94450 86209		
3.	Tallakulam Fire Station	0452-2531620	94450 86215		
4.	Anupanadi Fire Station	0452-2697999	94450 86210		
5.	Thirupparankundram Fire Station	0452-2584101	99402 07672		
6.	Tirumangalam Fire Station	04549-280626	94450 86216		
7.	Vadipatti Fire Station	04543-254101	99650 68173		
8.	Sholavandhan Fire Station	04543-258289	94450 86211		
9.	Melur Fire Station	0452-2415582	94450 86214		
10.	Usilampatti Fire Station	04552-252001	94450 86217		
11.	Kottampatti Fire Station	04544-230422	94450 86213		
12.	Kalligudi Fire Station	04549-278501	94450 86212		
13.	T.Kallupatti, Fire Station	04549-270626	94450 86528		
14.	Alanganallur, Fire Station	04543-245301	94450 86529		
15.	Chennai High Court Branch, Madurai	0452-2433077	70107 13635		
16.	Meenakshi Amman Temple, Madurai.	0452-2350112	94450 86208		

	WATER RESOURCE DEPARTMENT (WRD)			
S. No	Designation	Contact No.	Mobile No.	
1.	Executive Engineer, Periyar Vaigai Basin Division	0452-2530027	9443310743	
2.	Executive Engineer, Periyar Main Canal Division	0452-2415902	94869 26592	
3.	Executive Engineer, Gundar Basin Division	0452-2531391	98944 55989	

PUBLIC WORKS DEPARTMENT (PWD)			
S. No	Designation	Contact No.	Mobile No.
1.	Executive Engineer, Buildings		88709 80950
2.	Assistant Engineer, Buildings		99438 20212

	AGRICULTURAL & HORTICULTURAL DEPARTMENT				
S. No	Designation	Contact No.	Mobile No.		
1.	Joint Director, Agricultural (i/c)	0452-2537153	94865 01681		
2.	Personnel Assistant (Agricultural) to the Collector	0452-2531136	99761 46270		
3.	Deputy Director, Horticulture (i/c)	0452-2532351	94893 78845		

	AGRI ENGINEERING DEPARTMENT			
S. No	Designation	Contact No.	Mobile No.	
1.	Executive Engineer	0452 - 2678639	94439 27722	
2.	Assistant Engineer	0452 - 2678639	94436 77046	
3.	Assistant Engineer	0452 - 2678639	99944 60295	

	HEALTH (MEDICAL) DEPARTMENT			
S. No	Designation	Contact No.	Mobile No.	
1.	The Dean (GH)	0452- 2532535	94431 16535	
2.	Deputy Director, Health	0452- 2640778	73581 22486	
3.	Joint Director, Health (Usilampatti)	04552-253334	94449 82671	
4.	City Health Officer	0452- 2530801	98403 70096	

	HIGHWAYS DEPARTMENT				
S. No	Designa	ition	Contact No.	Mobile No.	
1.	Divisional Engineer, Highways,	National	0452- 2532761	9443208645	
2.	Divisional Engineer, Highways (C&M)	State	0452- 2537578	9443571200	
3.	Divisional Engineer, (Nabard)	Rural Roads		8072669975	
4.	Divisional Engineer, (Projects) Madurai			9443148668	

	TWAD			
S. No	Designation	Contact No.	Mobile No.	
1.	Executive Engineer (RWS)	0452- 2585117	80729 65697	
2.	Executive Engineer, (Project Maintenance)	0452- 2585117	98429 09090	
3.	Executive Engineer, (Maintenance)	0452- 2585117	98429 09090	

	TNEB				
S. No	Designation	Contact No.	Mobile No.		
1.	Superintendent Engineer, Metro		94430 53767		
2.	Superintendent Engineer, Rural		94430 37754		
3.	PRO, Metro		94458 52919		
4.	PRO, Rural		94458 52821		

	MUNICIPALITY				
S. No	Designation	Contact No.	Mobile No.		
1.	Regional Director of Municipal Administration	0452-2389821	73973 82189		
2.	Commissioner, Thirumangalam Municipality	04549-280722	73973 82176		
3.	Commissioner, Melur Municipality	0452-2415239	73973 82174		
4.	Commissioner, Usilampatti Municipality	04552-250217	73973 82171		

	MADURAI CORPORATION			
S. No	Name of the Office	Contact No.	Mobile No.	
1.	Commissioner, Madurai Corporation	0452-2540333	94874 47000	
2.	Deputy Commissioner	0452-2540333	94987 48700	
3.	Chief Engineer,	0452-2540333	94987 48719	
4.	Assistant Commissioner, Zone 1	0452- 2310011	94987 49001	
5.	Assistant Commissioner, Zone 2	0452- 2310022	94987 49002	
6.	Assistant Commissioner, Zone 3	0452- 2310033	94987 49003	
7.	Assistant Commissioner, Zone 3	0452- 2310044	94987 49004	
8.	Assistant Commissioner, Zone 5	0452- 2310055	9498749005	

	BLOCK DEVELOPMENT OFFICERS			
SI. No.	Name of the Office	Block Panchyat Mobile no	Village Panchyat Mobile no	
1.	Madurai East	74026 07938	74026 07951	
2.	Madurai West	74026 07939	74026 07952	
3.	Thiruparankundaram	74026 07940	74026 07953	
4.	Melur	74026 07941	74026 07954	
5.	Kottampatti	74026 07942	74026 07955	
6.	Alanganallur	74026 07943	74026 07956	
7.	Vadipatti	74026 07944	74026 07949	
8.	Usilampatti	74026 07945	74026 07958	
9.	Chellampatti	74026 07946	74026 07959	
10.	Sedapatti	74026 07947	74026 07960	
11.	Thirumangalam	74026 07948	74026 07961	
12.	T.Kallupatti	74026 07949	74026 07962	
13.	Kallikudi	74026 07950	74026 07963	

	TNSTC				
SI. No	Designation	Contact No.	Mobile No.		
1.	General Manager	0452 - 2380112	94875 99021		
2.	Deputy Manager (Commercial)	0452 - 2380112	94875 99022		

	TOWN PANCHAYAT OFFICERS			
SI. No	Name of the Office	Contact No.	Mobile No.	
1.	A.Vallalapatti	0452-2425068	89258 09638	
2.	Alanganallur	04543-245725	89258 09635	
3.	Elumalai	04552-246333	89258 09642	
4.	Palamedu	04543-246399	89258 09639	
5.	Paravai	0452-2463449	89258 09634	
6.	Peraiyur	04549-275831	89258 09641	
7.	Sholavandan	04543-258238	89258 09637	
8.	T.kallupatti	04549-270192	89258 09640	
9.	Vadipatti	04543-254363	89258 09636	

FOREST DEPARTMENT			
SI. No	Name of the officer& Range	Contact No	
1.	District Forest Officer	99499 92222	
2.	Forest Range Officer, Madurai	99524 53375	
3.	Wildlife Range	73393 85949	
4.	Usilampatti Range	63746 00284	
5.	Sholavanthan Range	89735 03658	
6.	Social Forestry Range	95666 07640	
7.	Tirumangalam Social Forestry Range	94871 59909	
8.	Forest Extension Centre	91718 15427	

	FISHERIES DEPARTMENT				
SI. No	SI. No Designation Contact No. Mobile No.				
1.	Assistant Director (Fisheries)	0452 - 2347200	93848 24275		

ANIMAL HUSBANDRY DEPARTMENT				
SI. No	SI. No Designation Contact No. Mobile No.			
1.	Joint Director (Animal Husbandry),	0452 - 2530801	94450 01127	

DISTRICT INDUSTRIES CENTER				
SI. No	SI. No Designation Contact No. Mobile No.			
1.	General Manager, DIC, Madurai	0452 - 2537621	98426 72125	

### **Blood Bank List**

S. No	Name & Address	Contact No.
1.	Shai Theyagarajar Salai, Raja Muthiah Mandram	0452 2522245
2.	Thai Mugambegai, Gandhi nagar, Madurai-20	0452 2535685, 9362683732
3.	Vignesh, Sivagangai Road, Gandhi Nagar	0452 2582562
4.	Sivana Aringar Anna nagar, Madurai-20	0452 2536562 0452 2537562
5.	Vadamalaiyan Hospital, Chinna Chokkikulam	9942141553
6.	Saththayam Blood Bank, 21, palayakuyavar palayam road	0452-2330327
7.	Vcare, 14E, keelaveli street	0452-4379505

### MOBILE MEDICAL TEAMS

S. No	Name of the Taluk	Mobile Medical Units Available	Name of the Doctors	Contact Number
1.	Madurai East	Government Primary Health Centre, Kallandiri.		0452-2470281
2.	Madurai North	Government Primary Health Centre, Samayanallur		0452-2463883
3.	Vadipatti	Government Primary Health Centre, Alanganallur	Vimal. N	9786684599 04543-245144
		Government Primary Health Centre, Katchakatti	Selvi	9677779887 04543-254098
4.	Tirumangalam	Government Primary Health Centre, Chekkanoorani	Sonapriya.P.	9442206963 04549-287521
5.	Kallikudi	Government Primary Health Centre, Kallikudi	Madhusuthanan. C	9894448652 04549-278518
6.	Usilampatti	Government Primary Health Centre, Chellampatti	Anantha Jothi.R.S	9444718441 04552-243281
		Government Primary Health Centre, Thottappanayakkanur	Krishnananth.P	9894187265 94430 92915

7.	Peraiyur	Government Primary	Muthudurai	9443432352
		Health Centre,	Kannan.P.S	04549- 270733
		T.Kallupatti		
		Government Primary	Susee Pradeep .S	9790194039
		Health Centre,		954552246319
		Elumalai		
8.	Tiruparankundram	Government Primary	Thangavalli.R	9609610999
		Health Centre,		0452-2485046
		Tiruparankundram		
9.	Melur	Government Primary	Pandiaraj.K.R	9843667880
		Health Centre,		0452-2427545
		Vellalur		
		Government Primary	Nagadeepa.P	9940968712
		Health Centre,		04544-250301
		Karunkalakudi		

### DETAILS OF VETERINARY HOSPITALS, VETERINARY DISPENSARY AND SUB-CENTRES IN MADURAI DISTRICT.

S. No	Name of the Taluk	Name of the Veterinary	Sub – Centres
1.	Madurai Corporation	Poly Clinic	Poly Cinic, Madurai.
2.	Madurai South	Madurai City	South Gate, Munichalai, Ponnagaram, Chinthamani, Avaniyapuram, Silaiman, Iravadhanallur.
3.	Tirupparankundram	Tirupparankundram	Madakulam, Palanganatham, Koothiayarkundu, Thenpalanji, Valayankulam,
4.	Madurai West	Tirupparankundram	Vilacherri, Achampattu, Kodimangalam,
5.	Madurai North	Samayanallur	Vandiyur, Sellur, Paravai, Vilankudi, Podumbu,
		Oomatchikulam	Tirupalai, K.Pudur, Kulamangalam
		Chathrapatti	Manjampatti, Siruvalai, Chinnapatti
6.	Madurai East	Varichiyur	Kalimangalai, Andarkottaram
		Othakadai	Chittampatti, Puduthamaraipatti
7.	Melur	Mangulam	Appanthiruppathi
		Keelavalavu	Kottakudi, A.Vallalapatti, Therkutheru, Thiruvadhavur, Pudhusukkampatti, Kidaripatti, Vellaloor, Thaniyamangalam, Keelaaiyur, Muthsamypatti.

	Melur	Karungalakudi	Pathimootu Sakkampatti, Kodukkampatti, Boothamangalam, Kambur,
		Kottampatti	Pullapatti, Kottapatti, Sekkipatti, M.Vellalapatti, Chockampatti.
8.	Tirumangalam	Checkanurani	Kappalur, Ammapatti, Sathangudi, Vidathakulam, Melaurappanur, Karaikudi
9.	Kallikudi	Kallikudi	Melakottai, Sivarakottai, Kurayur, Veeraperumalpuram, Koodakoil, Avalsooranpatti, Villur
10.	Usilampatti	Usilampatti	Thottappanaickanur, Jothilnaickanur, Pottampatti, Uthappanaickanur, Vadugapatti, Allikundam
		Valandur	Vagaikulam, Papppatti, Karumathur, Sindhupatti, Ayyanarkulam, Thidiyan,
11.	Vadipatti	Sholavandan	Thiruvedagam, Melakkal, Thenkarai, Mannadimangalam, Ayyankottai, Thathampatti,
		Alanganallur	Vavidamaruthur, Kondayampatti, Thandalai,
		Palamedu	Erampatti, Chatravellalapatti, Mathur, Kodangipatti.
12.	Peraiyur	Peraiyur	S.Melapatti, Periyapoolampatti, Saptur
		T.Kallupatti	T.Pudupatti, Vannivelampatti, Silarpatti, T.Kunnathur, Vaiyur
		Sedapatti	Alapatcheri, Kilavaneri, Poosalapuram, Athipatti, Chinnakattalai
		Elumalai	Seelnaickenpatti, E.Kottaipatti, T.Ramanathapuram, M.Kallupatti

#### **ANNEXURE - IV**

### **Abbreviations**

- 1. CAPF-Central Armed Police Force
- 2. DDMA-District Disaster Management Authority
- 3. DDMP- District Disaster Management Plan
- 4. DDMC- District Disaster Management Committee
- 5. EOC-Emergency Operation Centre
- 6. EWS-Early Warning System
- 7. SDMP-State Disaster Management Plan
- 8. IRS-Incident Response System
- 9. IRT-Incident Response Team
- 10. IDRN-Indian Disaster Resourse Nerwork
- 11. NDRF-National Disaster Response Force
- 12. UNISDR-United Nations International Strategy for Disaster Reduction
- 13. VHF-Very High Frequency
- 14. CBCDMP Community Based Disaster Management Plan

