

**GOVERNMENT OF GOA
DIRECTORATE OF FIRE & EMERGENCY SERVICES**



**NATIONAL DISASTER MANAGEMENT
AUTHORITY**

**FIRST REGIONAL CONCLAVE, CHENNAI
08TH & 09TH MARCH 2022**



NITIN V. RAIKER, CMGM
Bsc, LLB, MA(Socio.), A.D.F.E. (NFSC),
GOLD MEDALIST, F.I. Fire E (U.K.), TOT, USAR & MFR (UK)
DIRECTOR
FIRE & EMERGENCY SERVICES
GOVERNMENT OF GOA
PANAJI GOA, INDIA.
www.dfes.goa.gov.in Email : dir-fire.goa@nic.in

DISASTER MANAGEMENT SCENARIO - GOA

DISASTER MANAGEMENT ACT 2005

Published in the Gazette of India, Part-II, Section – I, dated; 26.12.2005.

- Chapter I – Preliminary
- Chapter II – The National Disaster Management Authority
- Chapter III – State Disaster Management Authorities.
- Chapter IV – District Disaster Management Authority.
- Chapter V – Measures by the Government for Disaster Management.
- Chapter VI – Local Authorities
- Chapter VII – National Institute of Disaster Management
- Chapter VIII – National Disaster Response Force
- Chapter IX – Finance, Accounts and Audit
- Chapter X – Offences and Penalties
- Chapter XI – Miscellaneous

GOA STATE DISASTER MANAGEMENT RULES 2007

**Published in the Official Gazette, Series I No.43,
dated; 24.01.2008.**

- **Rule 3 – Composition of the State Disaster Management Authority.**
- **Rule 8 – Composition of the State Executive Committee.**
- **Rule 9 – Powers and functions of the Chairperson of the State Executive Committee.**
- **Rule 18 – Composition of District Disaster Management Authority.**
- **Rule 20 – Constitution of Fund.**

GOA STATE DISASTER MANAGEMENT AUTHORITY

1.	Chief Minister	Chairman Ex-Officio
2.	Revenue Minister	Vice Chairman Ex.Officio
3.	Chief Secretary	Member
4.	Collector (North)	Member
5.	Collector (South)	Member
6.	Director of Fire & Emergency Services	Member
7.	Director General of Police	Member
8.	Principal Chief Engineer (PWD)	Member
9.	Chief Engineer (Electricity)	Member
10.	Chief Engineer(Water Resources)	Member
11.	Secretary (Revenue)	Member Secretary

GOA STATE EXECUTIVE COMMITTEE

1.	Chief Secretary Government	to	Chairperson Ex-Officio
2.	Secretary (P.W.D.)		Member Ex.Officio
3.	Secretary (Transport)		Member Ex.Officio
4.	Secretary (Finance)		Member Ex.Officio
5.	Secretary (Revenue)		Member Secretary Ex.Officio

NORTH GOA DISTRICT DISASTER MANAGEMENT AUTHORITY

1. Collector of North Goa District Chairman Ex-Officio
2. Mayor of the Corporation of City of Panaji Co-Chairman Ex.Officio
3. Chairman of North Goa District, Zilla Panchayat, North Goa Co-Chairman Ex.Officio
4. Superintendent of Police, North Goa Member Ex.Officio
5. Director of Health Services, Directorate of Health Services Member Ex.Officio
6. Director of Panchayats Member Ex.Officio
7. Director of Municipal Administration Member Ex.Officio
8. Divisional Fire Officer/Assistant Divisional Fire Officer Member Ex.Officio
9. Additional Collector, North Goa District Chief Executive Officer

SOUTH GOA DISTRICT DISASTER MANAGEMENT AUTHORITY

1.	Collector of South Goa District	Chairman Ex-Officio
2.	President of Margao Municipal Council	Co-Chairman Ex.Officio
3.	Chairman of South Goa District, Zilla Panchayat.	Co-Chairman Ex.Officio
4.	Superintendent of Police, South Goa	Member Ex.Officio
5.	Medical Superintendent, Hospicio Hospital, Margao	Member Ex.Officio
6.	Deputy Director of Panchayats	Member Ex.Officio
7.	Deputy Director of Municipal Administration	Member Ex.Officio
8.	Divisional Fire Officer/Assistant Divisional Fire Officer (South)	Member Ex.Officio
9.	Additional Collector, South Goa District	Chief Executive Officer

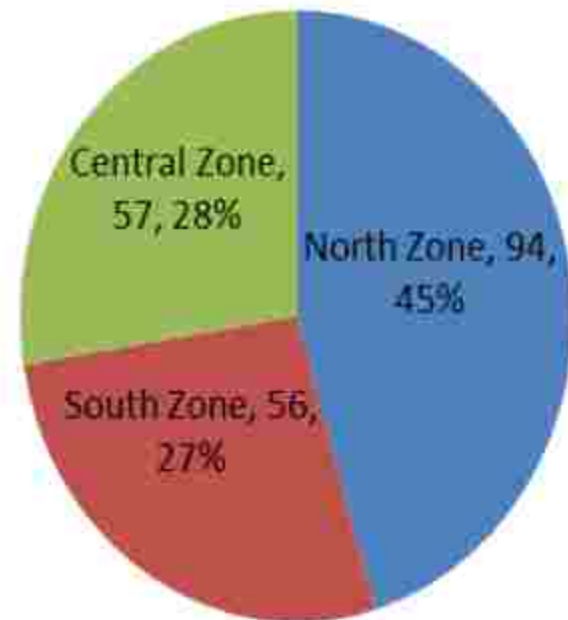


EMERGENCY INCIDENTS ATTENDED DURING THE NISARGA CYCLONE

Due to **Nisarga Cyclone** this Directorate, during the period from **01.06.2020 to 05.06.2020**, had received **207** Emergency Calls. The Cyclonic wind which hit Goa at a speed of 80 to 100 kmph caused havoc across Goa causing at least 94 trees falling on electrical line, houses etc. on Major district roads, Highways, Residential Houses, Electrical Transformers, Electrical poles/lines etc.

The damage of this destruction is estimated to Rs. 8.23 Lacs. The Fire Fighter across the State worked tirelessly to ensure that the Citizens get the required help in such eventuality.

Zone wise Incident calls





EMERGENCY INCIDENTS ATTENDED DURING THE CYCLONE TAUKTAE

Due to Cyclone Tauktae this Directorate, during the period from 15.05.21 to 31.05.21, had received **1443** Emergency Calls pertaining to uprooting of various trees such as Mango, Banyan, Nilgiri, Casurina, Gulmohar, Tamrind, Jackfruit etc. on Major district roads, Highways, Residential Houses, Electrical Transformers, Electrical poles/lines etc.



The Mapusa Fire Station attended the most number of emergency calls of 217, followed by Fire Force Headquarters at 180 and Vasco Fire Station at 148.

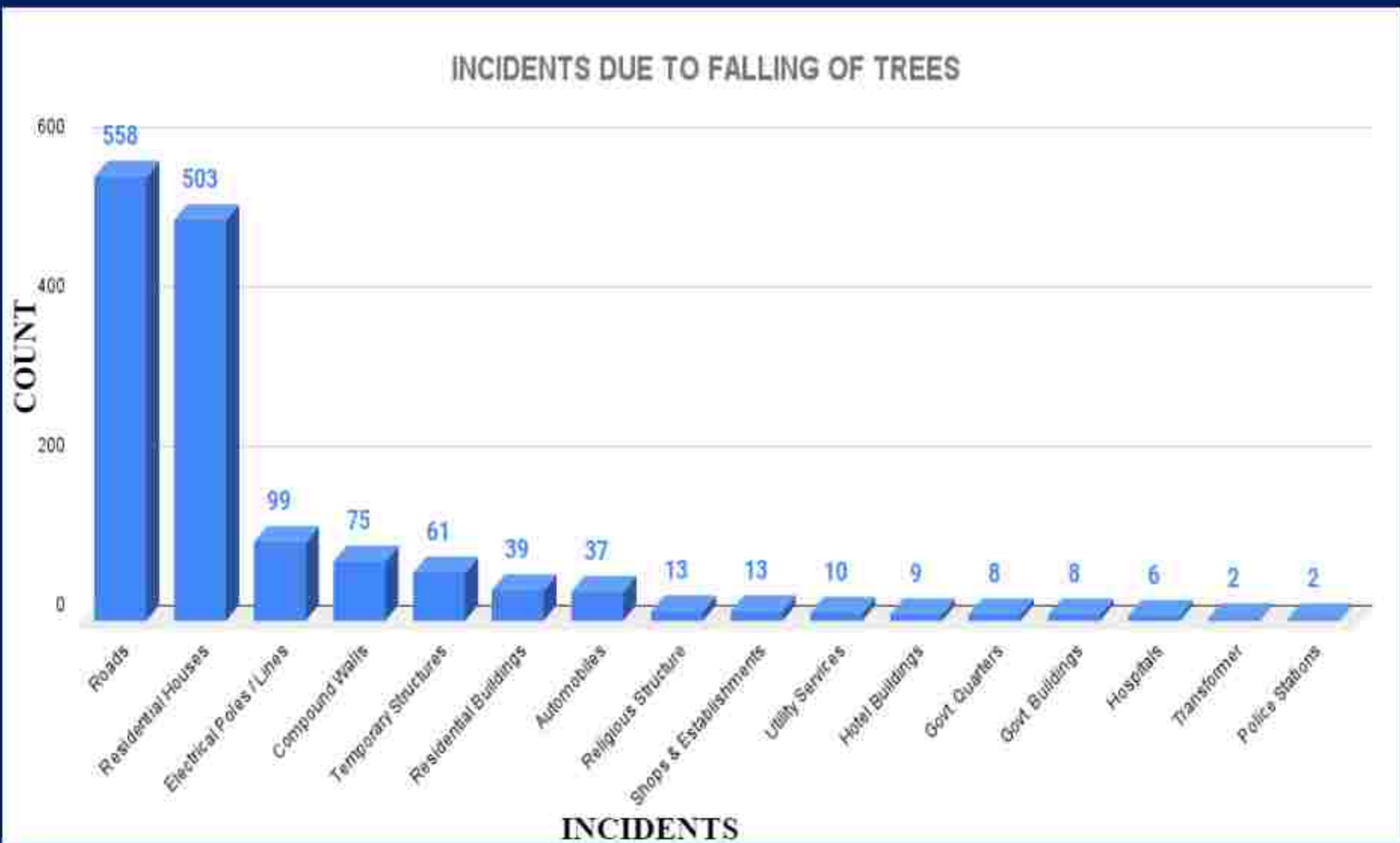


INCIDENT DETAILS –CYCLONE TAUKTAE

Fire Station	Radius Served (km)	Villages	Incidents Attended	Property Lost (Lakhs)	Property Saved(Lakhs)
Mapusa Fire Station	10	30	217	30	62
Vasco Fire Station	14	12	148	17	60
Pernem Fire Station	15	27	90	26	42
HQ Fire Station	10	18	180	3	1.6
Panaji Fire Station	10	18	90	3.4	15
Pilerne Fire Station	8	13	66	95	21
Ponda Fire Station	36	34	112	3	5
Old Goa Fire Station	10	21	97	6	14
Bicholim Fire Station	18	31	52	5	14
Kundaim Fire Station	10	14	50	13	8
Valpoi Fire Station	15	82	25	1.5	5
Margao Fire Station	15	43	129	8	43
Verna Fire Station	7	9	66	8	26
Curchorem Fire Station	25	79	63	4.6	13
Canacona Fire Station	25	9	58	3.5	6.6
TOTAL			1443	2.27 Cr	3.36 Cr



INCIDENTS DUE TO FALLING OF TREES





INCIDENTS DUE TO FALLING OF TREES

Tree fallen on Residential Government Quarters at Bambolim





INCIDENTS DUE TO FALLING OF TREES

Tree fallen on Transformer near TB Hospital in Bhatlem, Panaji.





INCIDENTS DUE TO FALLING OF TREES

Tree fallen on Primary Health Centre at Colvale.





INCIDENTS DUE TO FALLING OF TREES

Tree fallen on Electrical Lines at Canca Bardez Goa.





INCIDENTS DUE TO FALLING OF TREES

**Mango tree fallen on Electrical line & road at Sakhar Bhat
Aldona Bardez Goa.**





INCIDENTS DUE TO FALLING OF TREES

Tree fallen on Electrical line & road at Parra near Ganesh Temple, Bardez, Goa





INCIDENTS DUE TO FALLING OF TREES

North Zone

Pilerne Fire Station

8.3%

Panaji Fire Station

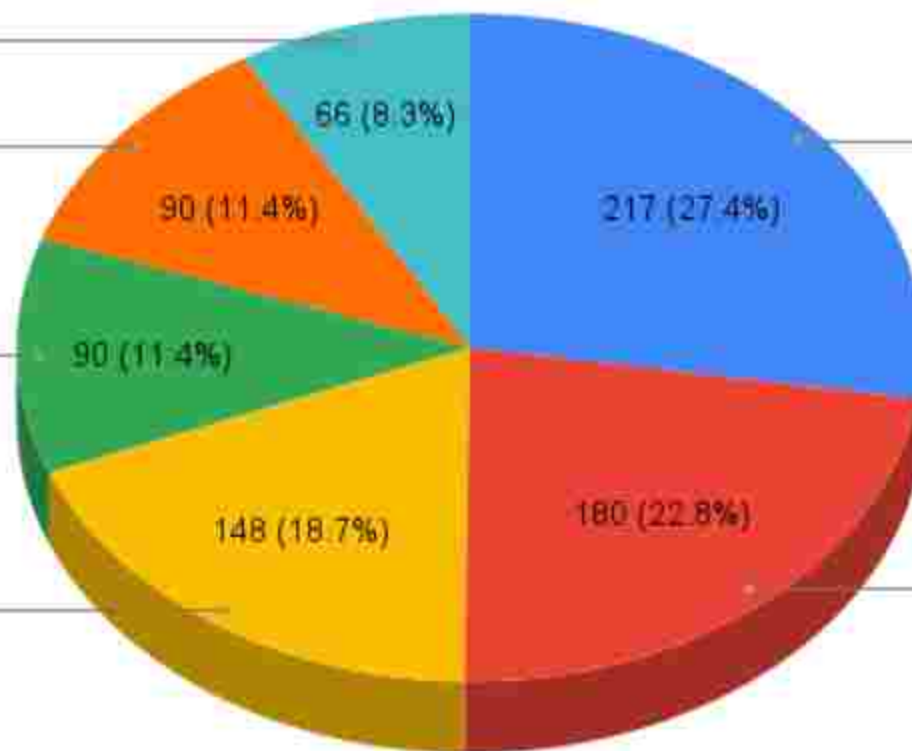
11.4%

Pernem Fire Station

11.4%

Vasco Fire Station

18.7%



Mapusa Fire Station

27.4%

Headquarters Fire Station

22.8%



INCIDENTS DUE TO FALLING OF TREES

Tree fallen on Road at Bethora, Ponda





INCIDENTS DUE TO FALLING OF TREES

Central Zone

Valpol Fire Station

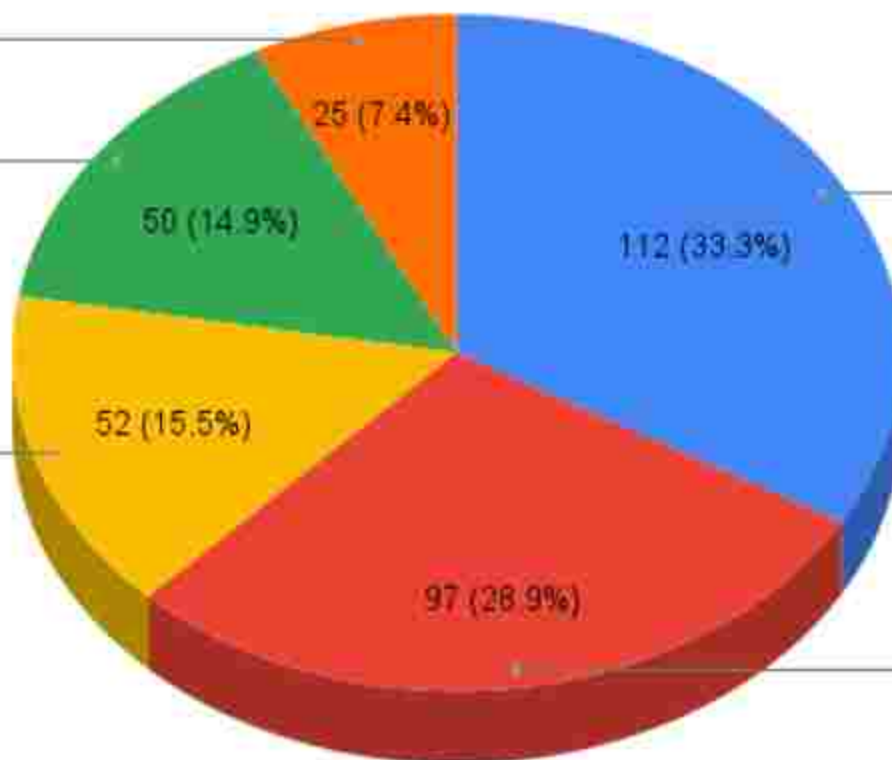
7.4%

Kundaim Fire Station

14.9%

Bicholim Fire Station

15.5%



Ponda Fire Station

33.3%

Old Goa Fire Station

28.9%



INCIDENTS DUE TO FALLING OF TREES

Coconut Tree fallen on Electrical Pole and House at Copel Waddo, Serna Batim, Salcette





INCIDENTS DUE TO FALLING OF TREES

Coconut Tree fallen on House behind Meat Complex, Gandhi Market, Margao





INCIDENTS DUE TO FALLING OF TREES

Tree fallen on Electrical Line at Bivsa, Cuncolim





INCIDENTS DUE TO FALLING OF TREES

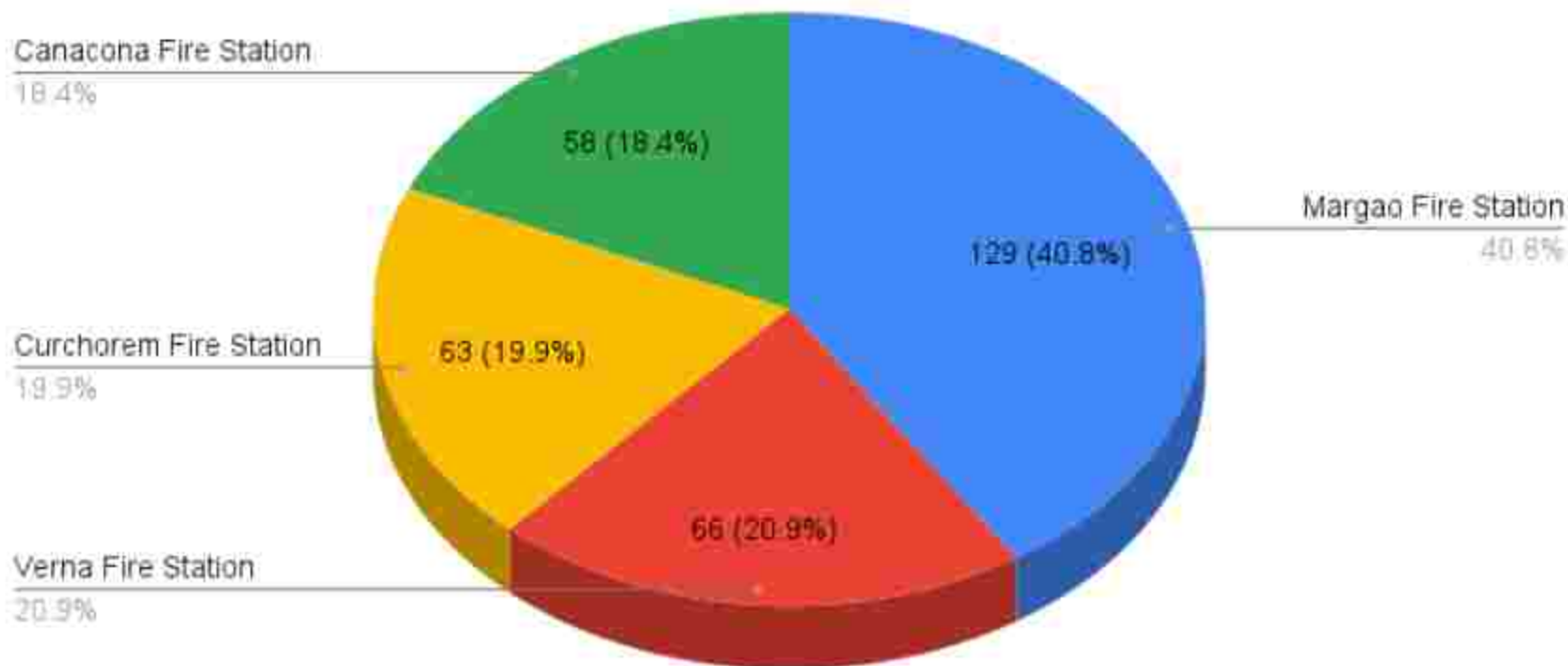
Tree fallen on Electrical Line and Road at Balli, Quepem





INCIDENTS DUE TO FALLING OF TREES

South Zone

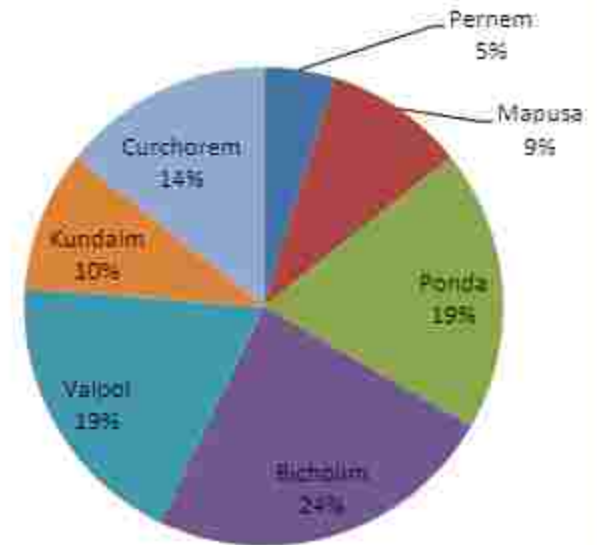




FLOODING DUE TO INCESSANT RAINS IN VARIOUS AREAS IN GOA ON 23rd & 24th July 2021

- Flooding due to incessant rain occurred in Harvalem, Pirol, Querim, Massordem, Honda, Dhabal, Nanus, Padeli, Chorla, Ganja, Tekan, Keran, Vagurme. Sattari and Bicholim in North and Dharbandora in South are reeling under a flood like situation where many number of houses got inundated as the water level of some rivers rose due to the incessant rainfall overnight.
- The Swift Water Flood Rescue Teams from Bicholim, Valpoi, Ponda, Kundaim & Curchorem Fire Stations with assistance of Life Guards from Dhrishti Life Saving Services carried out rescue operations in shifting people from flooded areas to higher grounds as a safety precaution.
- The Fire Personnel from Mapusa & Pernem Fire Station kept vigil on the rising waters in Revora & Dhargal, however no untoward incidents were reported.
- Total of 158 people in distress were rescued and shifted to safer area.

Hydrological Incident across the State of Goa



Taluka	BICHOLIM
Village	HARVALEM
Fire Station in attendance	BICHOLIM
Description	30 people shifted from flooded area to safer area.



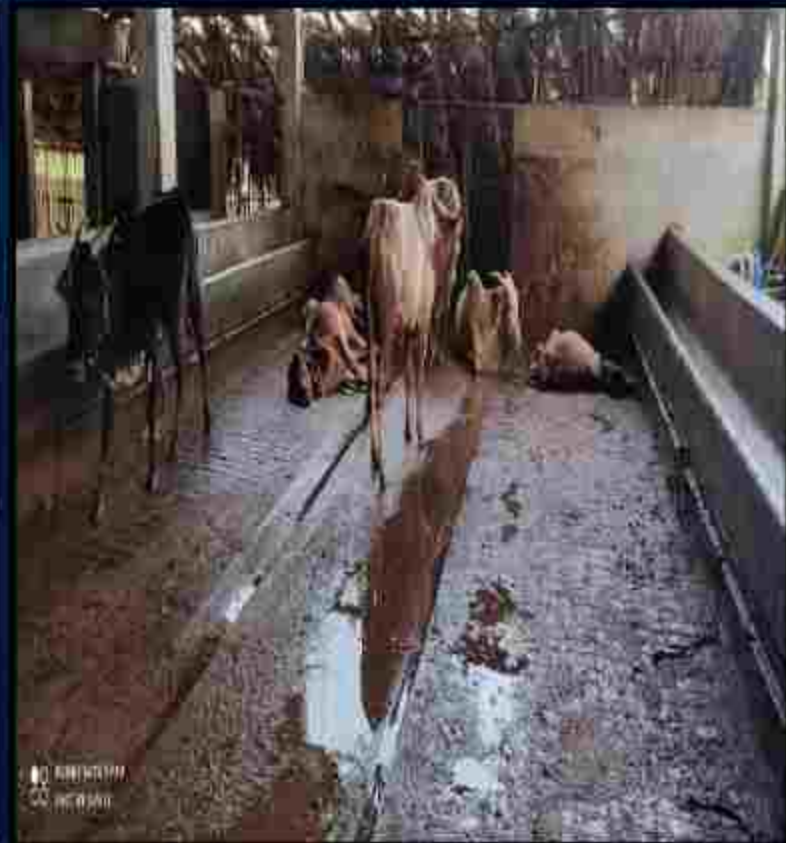
Taluka	SATTARI
Village	MASSORDEM
Fire Station in attendance	VALPOI
Description	25 people shifted from flooded area of Bus stand area at Valpoi & Masordem village to safer area and two houses collapsed however no casualties were reported.



Taluka	SATTARI
Village	HONDA
Fire Station in attendance	VALPOI
Description	34 people shifted from flooded area at Postar, Honda & Paddi to safer area.



Taluka	SATTARI
Village	NANUS
Fire Station in attendance	VALPOI
Description	Nanus Goshala major portion under water 30-40 Cows missing.



Taluka	SATTARI
Village	PADELI
Fire Station in attendance	VALPOI
Description	24 people shifted to safe place from Padeli Village.



Taluka	SATTARI
Village	CHORLA
Fire Station in attendance	VALPOI
Description	Landslide occurred at Chorla Ghat.



Taluka	PONDA
Village	PRIOL
Fire Station in attendance	KUNDAIM
Description	11 People being shifted from Vagurme, Priol.



Taluka	PONDA
Village	PRIOL
Fire Station in attendance	KUNDAIM
Description	People being shifted from Vagurme, Priol.



Taluka	PONDA
Village	QUERIM
Fire Station in attendance	PONDA
Description	10 People being shifted Querim, Usgao.



Taluka	PONDA
Village	GANJA, TAKAN, KERAN,
Fire Station in attendance	PONDA
Description	Swift water rescue team recued 20 people.



Taluka	DARBANDORA
Village	DHABAL
Fire Station in attendance	CURCHOREM
Description	4 nos. of people from Dhabal shifted to safer area.



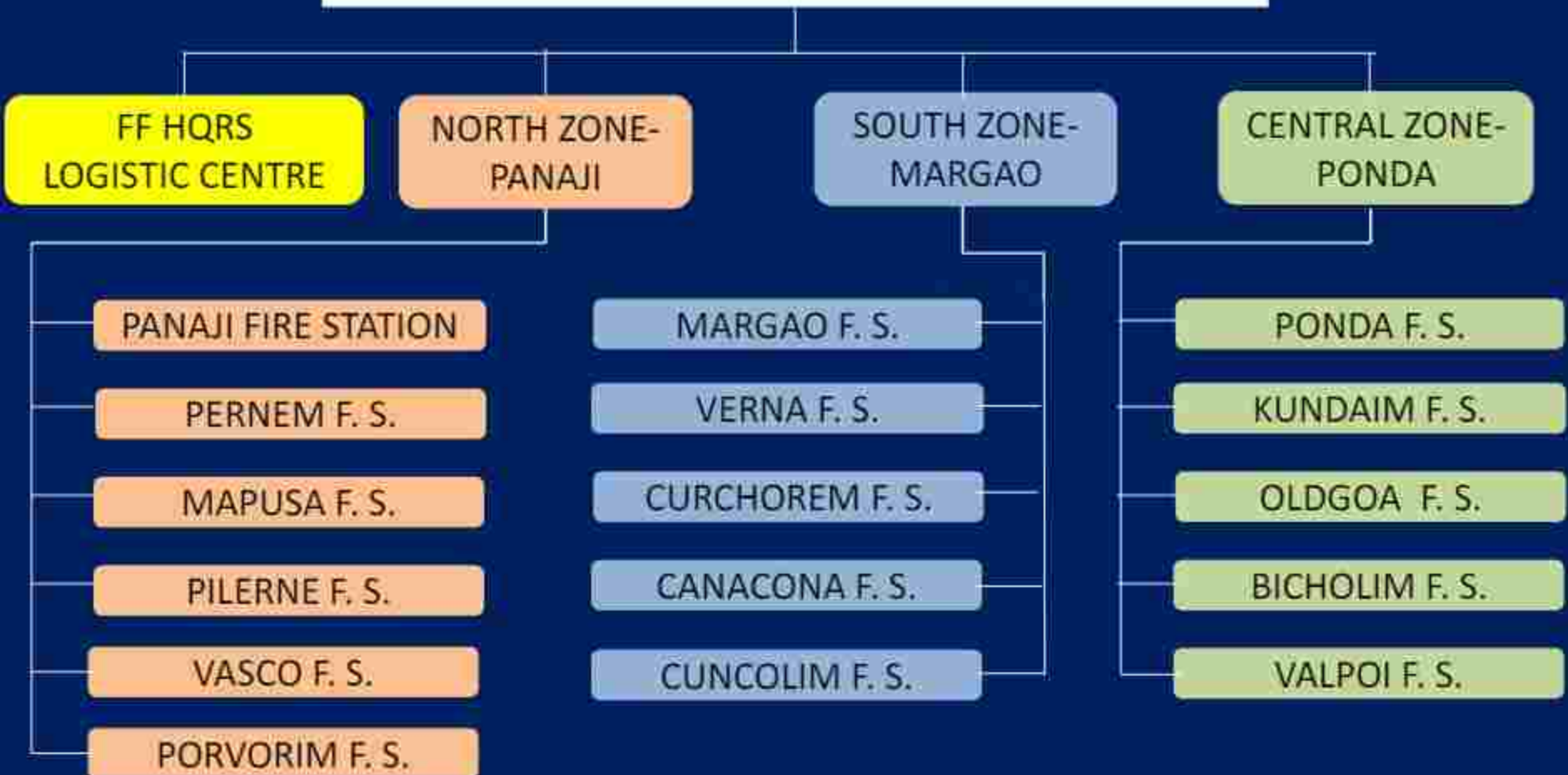
Taluka	PONDA
Village	OPA
Fire Station in attendance	PONDA
Description	236 nos. of people who had gone for work provided assistance to go home after both bridges were closed in Usgao due to flooding





ORGANIZATION AND CONTROL

DIRECTORATE OF FIRE & EMERGENCY SERVICES





STATE DISASTER RESPONSE FORCE

The State Disaster Management Authority has been constituted under the Disaster Management Act 2005. The Fire and Emergency Services constitute a component of 50 Fire personnel and are provided training in the following:

- **Swift Water Flood Rescue Training**
- **Medical First Responder (MFR)**
- **Urban Search And Rescue Training (USAR)**
- **Chemical, Biological, Radiological and Nuclear Training at National Disaster Response Force Centre (CBRN).**



SWIFT WATER FLOOD RESCUE TRAINING

The Special Rescue Training Academy(SRTA), a training organization of the Drishti Special Response Services Private Limited imparted flood rescue training to the officers and Fire Personnel of Goa State Fire & Emergency Services.

The six day training programme was conducted on the banks of river Kundalika at Kolad, Maharashtra where river offers a very appropriate flowing water body in form of flood by opening the dam gates for an hour.

Total 50 Officers & Personnel of Directorate of Fire & Emergency Services have undergone Swift Water Flood Rescue Training.



SWIFT WATER/FLOOD RESCUE PERSONNEL PROTECTION TEAM EQUIPMENTS

Sr.No.	Description Equipments	Quantity
1	Rapid Deployment Craft with OBM	05 Nos.
2	High Density Poly Ethylene Boat	04 Nos.
3	Personnel Floating Device	23 Nos.
4	Lifebouy	55 Nos.
5	Life Jacket	33 Nos.
6	Head Protection Helmet	21 nos.
7	EV03 Boot	21 pairs
8	Personal Flotation Device (PFD) with release able harness	21 nos.
9	Rescue Knife	06 nos
10	Kevlar Neoprene Gloves	21 pairs
11	Rescue Throw Bag	21 nos.
12	Reach Rescue System	07 nos.
13	Karabiner	20 nos.
14	Peli Heads Up lite 2620 Recoil LED 2620 led/Petzi Tikka 3 LED	21 nos.
15	Rescue Wet Suit(Half)	21 nos.



SWIFT WATER/FLOOD RESCUE PERSONNEL PROTECTION TEAM EQUIPMENTS

Sr. No.	Description Equipments	Quantity
16	Fire man Hose with end Fittings 25 Mtrs long	03 no.
17	Flat Webbing	03no.
18	Accessory Cord	04 nos.
19	Rescue Rope	04 nos.
20	Spine Board	06 nos.
21	Descender	09 nos.
22	Light Sticks	23 nos.
23	Single Rescue Pulley	10 nos.
24	Rigging Plate	09 nos.
25	Victim – Personal Flotation Device	13 nos.
26	Wading Poles	10 nos.
27	Remote area Lighting System	03 no.
28	Emergency Torch Light	07 nos.
29	Carrying Bag	10 Nos.



EQUIPMENTS UTILIZED FOR EMERGENCY OPERATION DURING DISASTER

Sr. No.	Description Equipments	Quantity
1	Floto Pump	13 Nos.
2	Submersible Pump	04 Nos.
3	Victim Location Camera Unit	04 Nos.
4	Demolition Hammer	04 Nos.
5	Chipping Hammer	05 Nos.
6	Rotary Rescue Saw	05 Nos.
7	Hydraulic Cutting & Breaking Rescue tools	12 Nos.
8	Lifting Bags	15 Nos.
9	Portable Generator	21 Nos.
10	Portable Ring Cutter (Circular Saw) with blade	04 Nos.
11	Handheld Forcible Entry Tool	02 Nos.
12	Combi Tool	18 Nos.
13	Concrete Cutter	08 Nos.
14	Stretcher(Scoop/Spine/Floating)	22 Nos.
15	Electric Chain Saw	70 Nos.
16	Petrol Chain Saw	23 Nos.



LIGHTING EQUIPMENTS

Sr. No.	Description Equipments	Quantity
1	ASKA light	23 Nos.
2	Remote Area Lighting System	07 Nos.
3	Potable torch	34 Nos.
4	Spot light	34 Nos.
5	Light Mast	04 Nos.



RESPONSE ACTION

The Local Fire Station in the respective Zone will be the First Responder in the event of any Emergency incident. The communication workflow will be as follows;

The Fire Station Watch Room of the Local Fire Station should record the Name of the Caller, Tel. No., Incident location, Time of Call & any other necessary information, communicate the information to the Station Fire Officer/Officer-In-Charge of the Fire Station and dispatch the Emergency Rescue Tender. The Watch Room will simultaneously inform the Zonal Control Room via WhatsApp, Telephone, Wireless, e-mail.

The Zonal Control Room will inform via telephone the incident information to the Director (DFES), Zonal Group Head and Headquarters Control Room.

The Officer-In-Charge of the First Responder Team will provide information to the Local Fire Station Watch Room and Zonal Control Room on continuous basis to the extent possible by communication facilities available with them i.e Whats App, Mobile Phone or VHF Wireless etc. he will also apprise the Zonal Officer-In-Charge of the progress of the operation. The Zonal Officer-In-Charge in turn will seek appropriate additional mobilization and also personally inform telephonically to the Director, Directorate of Fire and Emergency Services of the situation at site as it evolves.



RESPONSE ACTION

The Officer-in-Charge of the First Responder Team will seek appropriate assistance from Zonal Control Room as well as Headquarters Fire Control Room depending upon the extent and complexity of the incident. In the event if the incident cannot be controlled and requires assistance from neighboring Fire Stations or Mutual Aid Agencies the response Level should be escalated.

In case of State Level Disaster, the Response Actions stipulated in the Disaster Management Response Plan will be adhered with. The HQ Fire Control Room shall act as a Nodal Point to coordinate and communicate relating to Search & Rescue and Response Action.

The HQ Fire Control Room shall provide information to the superior officers of the Directorate of Fire & Emergency Services based on-scene information available through the First Responder Team on real time basis. The HQ Fire Control Room shall alert District Disaster Management Authority North Goa Control Room No. 1077/2225383/2225083/2427690 and District Disaster Management Authority South Goa Control Room No. 1077/2794410/2794400 depending upon the gravity of the situation.

The District Disaster Management Authority will alert State Disaster Management Authority and cause the State Emergency Operation Centre to be activated wherever necessary.





**WORKING
TOGETHER
WORKS**

Remember : Readiness is your only Protection



Thankyou