

Cyclone Nisarga keeps Goa Fire Personnel on their Toes



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The India Meteorological Department (IMD) had issued a red alert for coastal Maharashtra and Gujarat for 4 June due to the cyclonic storm Nisarga in the Arabian Sea. The weather department stated that "low pressure" formed over the Arabian Sea was expected to move towards Maharashtra and Gujarat and which would cause rainfall over both the states.

The IMD had also issued an orange code warning for Kerala, coastal Karnataka, Goa and coastal Maharashtra for today. The same warning was issued for coastal Maharashtra and Goa for 2 June.

Cyclone Nisarga when made landfall in northern Maharashtra on 3rd Wednesday afternoon left a trail of destruction in faraway Goa after gusty winds and heavy rain damaged trees and homes across the state.

Some gauges across the state crossed the 100mm mark. The highest rainfall on 3rd Wednesday was recorded in Mormugao taluka South-West (15.3889° N, 73.8166°E), which measured 132mm, While Panaji North-East (15.4909° N, 73.8278° E) and Quepem, South-East (15.2282° N, 74.0647° E) recorded 127.9mm and 115mm respectively.

The Directorate of Fire & Emergency Services as a proactive measure briefed all the Fire Stations across the

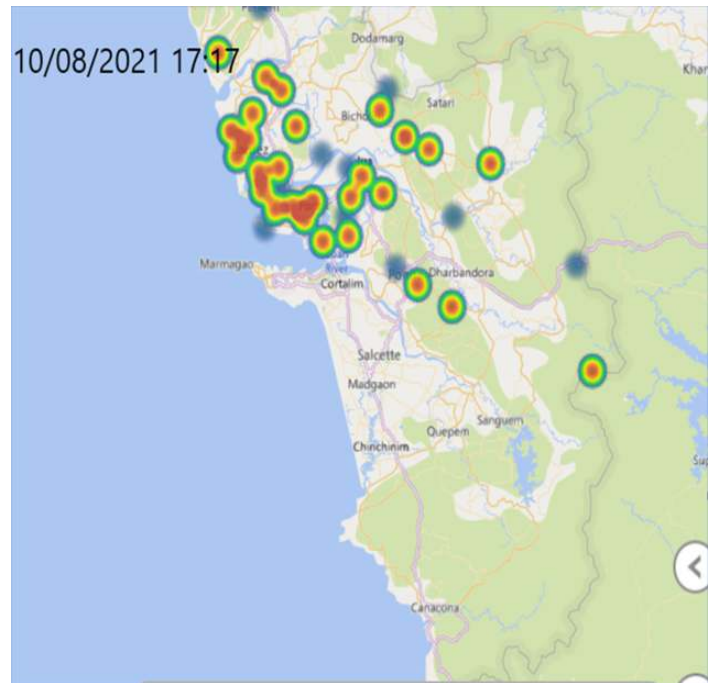
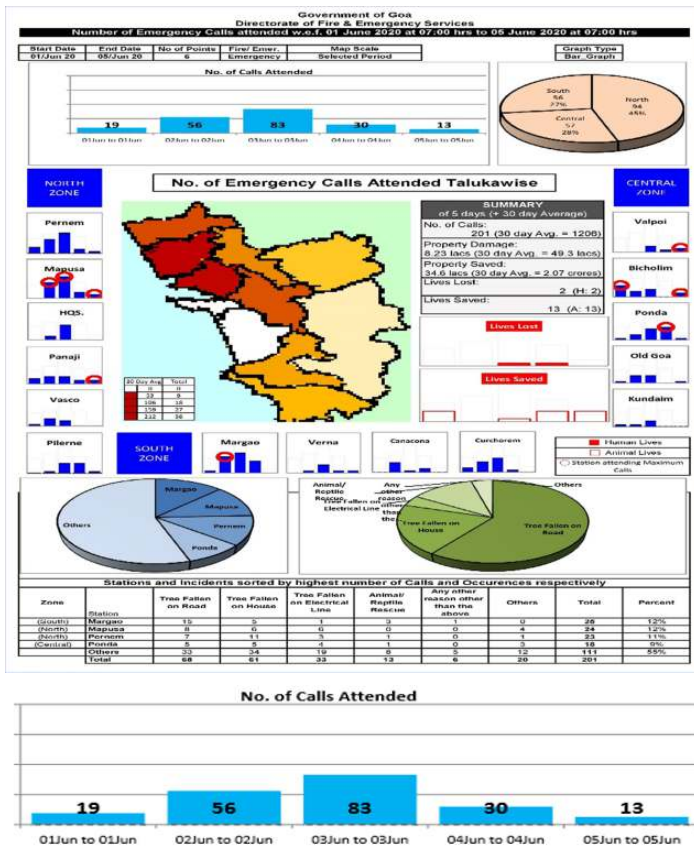
State to be in readiness for any eventuality of Search & Rescue, Tree falling etc. The Fire Station across Goa having all the required Emergency equipment tackled the aftermath of the Cyclonic wind effectively. The Cyclonic wind which hit Goa at a speed of 80 to 100 kmph caused havoc across Goa causing atleast 94 trees falling on electrical line, houses 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.



SUMMARY of 5 days (+ 30 day Average)	
No. of Calls:	201 (30 day Avg. = 1206)
Property Damage:	8.23 lacs (30 day Avg. = 49.3 lacs)
Property Saved:	34.6 lacs (30 day Avg. = 2.07 crores)
Lives Lost:	2 (H: 2)
Lives Saved:	13 (A: 13)

The Directorate of Fire and Emergency Services has been in the process of undertaking Technological research in various domains of IoT, Communication & Data Analysis.

In this time the Directorate of Fire and Emergency Services has created Automated Dynamic Statistical Dashboard, as a part of populating a Set of Reports of Fire and Emergency Calls attended, along with Summary, Trends and Thermal Mapping. This has helped the Department in understanding the requirement of resources depending on the season type of incidents arising in the locations. The analysis of data from the reports will have a profound impact in planning of



Disaster Management. The Department now intends to use Power Maps for data visualization technology that creates interactive charts, graphs, maps, and other visuals that bring the data to life and this will help the Department in collating data.

Salient Features and Major Technical Specifications of the Automated Dynamic Statistical Dashboard

with Talukwise Thermal Map, Stationwise Trends & Summary Report Directorate of Fire and Emergency Services, Panaji, Goa.

SUMMARY

The Automated Dynamic Statistical Dashboard, is a part of Consolidated Set of Reports of Fire and Emergency Calls attended, along with Summary, Trends and Thermal Mapping. Start Date and End Date have to be set at only

one location and is applicable to the entire set of reports. 30 day averages has been introduced in certain reports, for uniform comparisons. The analysis of data from the reports will have a profound impact in planning of Disaster Management.

01 SELECTION PANE	
Start & End Date	Will display the Selected Start Date and End Date.
No of Points	Number of Bars to be displayed in charts can be selected from 3 to 12.
Fire & Emergency	The Dashboard can be used for Fire and Emergency as per selection.
Map Scale	Default Colour Scale is to be used for Monthly Comparative Reports. Scale for Specific Period is to be used for General Analysis.
02 GRAPH FOR TOTAL CALLS ATTENDED	
Blue Scale	Number of Bars depend on the Value selected and depict the number of calls attended in the selected period.
Dotted Scale	Dates for individual bars are Auto Calculated based on the Start Date, End Date, Duration, and Number of Bars selected. If number of days in the selected period is not divisible by number of bars selected, then the first bar will be shown dotted. Example: 4 bars for 31 days = 7 days per bar for 3 bars + 10 days for the first bar.

	Max Comparison	To compare each station with the station with the highest call, an additional light grey scale has been introduced in the trend graph of each station.
	Uniform Scaling	All stations have been equally scaled for uniform comparison.
	Red Circle	The Station with highest number of Calls during each period is circled Red.
03	SUMMARY	
	Call Details Property Lost & Saved	Number of Calls Attended and Duration Selected in Days Property Lost and Saved is displayed after converting it to the nearest thousands, lacs or crores.
	Life Lost & Saved	Shows Total Lives Lost & Saved, with split up of Human & Animal Life
	30 Days average	Number of Calls, Property Lost and Property Saved are also scaled to 30 day period, for easier comparison.
04	STATION TRENDS	
	Blue Scale	Depict the Number of Calls attended during each period.
	Max Comparison	To compare each month with the station with the highest call, an additional light grey scale has been introduced in the trend graph of each station.
	Uniform Scaling	All stations have been equally scaled for uniform comparison.
	Red Circle	The Station with highest number of Calls during each period is circled Red.
05	MAP FOR TALUKAWISE CALLS ATTENDED	
	Legend Colour	The Colour Scale of Legend changes as per selection of Scale.
	Actual Value	Number of incidents in the Taluka with highest calls rounded and scaled. When a station attends call outside its home taluka, the same has to be entered in Data Entry. Otherwise Talukas are Auto detected.
	30 Day Average	The Number of Calls attended are also displayed as a 30 Day Average.
	Map Colour	The Map displays the sum of all Calls attended by all stations within each Taluka. When Stations attend calls outside their home taluka, then this data is used. Colour of Map is Dependent on whether Default Scale is Selected or the scale for Specific Period is Selected. Provision to adjust colour scale settings has been introduced for Fire, Emergency and Mid-point.
06	SORTED LIST OF STATIONS AND CALL TYPES	
	Top 4 Stations Sorted	4 stations with the highest number of calls are sorted with number number of calls, percentage of total and zone.
	Top 5 Faults Sorted	Top 5 Calls are Sorted along with Number of Calls and Total.
07	GRAPH	
	Stations & Faults	Pie Charts for Station and Faults, display the Number of Calls and Type of Calls Sorted respectively, sorted in Descending order.
	Zone wise Graphs	Zone wise calls with percentage are displayed.

08 LIVES - TREND GRAPH

Lives Lost & Saved	Trands of Lives Saved and Lost is dsplayed for the same periods.
Human & Animals	Human & Animal lives Lost & Saved are shown separately.

09 OTHER FEATURES

Report Generation	All standard reports can be generated by a procedure as simple as Select Dates > Refresh > Save > Save As PDF/ Print Data kept ready for Pivot Tables make generation of unique or specilised reports faster than ever before.
Macro Security	No Macros have been used for any aspect. Hence no Macro Viruses can enter.
Compatibility	The formulas are backwordcompatable and forward compatble from Excel Versions 2007 to 2016.
Data Entry	Data Entry has been kept in a independent and separate File
Data Export	All sheets in the Data Entry file have been organised in a way that data can be exported directly to any Sotware or application that the department may procure.
Ease of Data Entry	Dynamic Drop down lists have been created for several Data Entry Fileds, for Quick and Accurate entry of Data. 