

About Workshop

In continuation of the convergent efforts made by the TSDPS in preparation of action plan to face adverse seasonal conditions and to take precautionary measures by organising the periodic workshop for this year-2019 in collaboration with Indian Meteorological Society (IMS), UNICEF, IMD Hyderabad and State Disaster Management Department on "Extreme Weather Events with Reference to Heat Wave over Telangana State" by involving all Stakeholders, officials from line departments to discuss related issues to improve the quality of dissemination of various weather advisories/warnings through multi channels, preparation and dissemination of Districts/mandal level advisories on Extreme Weather Events such as heat waves, thunder and hailstorms for the benefit of public and agricultural operations, and for development of field level feedback mechanism.

Participants

The workshop is expected to be participated by about 250 participants with expertise in diverse fields from various Government Departments, Scientific and academic institutions and NGO's viz., Indian Meteorological Department (IMD), INCOIS, CRIDA, NRSC, UNICEF, PITSAU and Academicians from University of Hyderabad, JNTU, GITAM, VBIT, domain experts, Research Scientists, IMS Members and Media etc.,

Telangana Climatic Conditions

Telangana State is a semi-arid zone and has predominantly hot and dry climate. The area covered by the Deccan Plateau is characterized by hot summers with relatively mild winters. It is prone to various disasters such as heat waves, thunder storms, hailstorms, drought, heavy rainfall and strong winds. Climate change and its variability are also considered to be the greatest challenge to the state.

Relief Operations

To reduce the casualties from the heat waves and other extreme events, the line departments viz., Revenue, Medical & Health, Panchayath Raj, Animal Husbandry, Municipal Administration are implementing necessary relief measures and the services of NGOs also utilized in establishing drinking water distribution centers, Medical aid etc.,

Heavy Rains/Flash Floods

Heavy rains caused due to thunder/hailstorms in pre-monsoon season adversely affect the districts/cities of Telangana and cause local floods and inundation of colonies in cities.

Heat Wave

Heat wave is defined as a climatologically extreme event involving 'spells of abnormally high temperatures that occur during the months of April - June. Heat wave is considered only after the maximum temperature of a station reaches at least 40°C for plains, 30°C for hilly regions. When the actual maximum temperature of 45°C or more reached in a station is considered as Heat wave and more than 47°C is considered as Severe Heat wave.


In Telangana State the erstwhile Districts of Karimnagar, Khammam, Adilabad and Nalgonda districts are most prone for heat waves during the months of April and May. In the last 3 years there is considerable decrease in the number of casualties due to timely early warnings and precautionary measures taken by the Government. It is also observed that due to improvement in weather forecast, dissemination of the weather alerts to the officials/public, public awareness programs through media, conducting of workshops have played a significant role in improving the mitigation of Heat wave affects. **TSDPS will take up the exercise in fixing the region specific threshold values for declaration of heat waves based on Mortality / Morbidity rates.**

LED Weather Display Boards

For Transmission of Real time Weather updates and alerts for Public and Official use the LED boards were installed in all the District Collector Offices and other prominent places in Hyderabad. The following colour code will be displayed as per the intensity of the weather conditions. The Colour Code is applicable for Temperature and Rainfall

Maximum Temperature	
>=45°C Warning	41-45°C Alert
35-40°C Watch	<35°C No Warning

Rainfall	
>204.5mm Warning	115.6-204.4mm Alert
64.5-115.5mm Watch	64.5mm No Warning



Thunderstorms

Thunderstorms occur frequently during the pre-monsoon season of March to May due to vertical development of Cumulonimbus clouds when atmosphere is unstable and sufficient humidity is available around. They are characterized by tall clouds, lightning and thunder. Heavy rains, gale winds as strong as 150 kmph uproot trees and cause damages to property and loss of life.

Hailstorms

Hailstorms also have similar characteristics of thunderstorms except that the Cumulonimbus clouds are taller and violent than thunderstorm clouds and give solid or mixed precipitation. The heavy balls of ice cause severe damage to properties and agriculture/horticulture crops every year during the months March - June.

Urban Flooding

Flash floods in urban areas occur due to extremely intense rain spells (>50 mm/hour) in short periods due to localised weather phenomena like thunderstorms, cloudburst etc. Integrated Urban Flooding study is initiated by TSDPS in collaboration with IIT,Mumbai, IISc,Bangalore, GHMC, NIT Warangal, IMD Hyderabad and NRSC.

IMD Activities:

India Meteorological Department that established in 1875, is the national meteorological service of the country in all the matters relating to meteorology. Takes meteorological observations and provides forecast such as nowcast(0-3 hours) for cities and districts, short-range (0-3 days), medium range(3-10 days) and extended range (10 days to months) to weather sensitive activities like agriculture/shipping, aviation, offshore oil explorations etc. Early warnings are issued against severe weather phenomena like thunderstorms, hailstorms, lightning, heavy rainfall, floods, heatwaves and cold waves which cause destruction to life and property. Provides meteorological statistics to concerned activities. IMD also works in coordination with other agencies like TSDPS in weather related activities..