

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 24 November 2020**

**Attention: Rajiv Maheshwari, OSD, ICAR**

#### **Significant Weather Features (IMD)**

- The Cyclonic Storm “NIVAR” over southwest Bay of Bengal remained practically stationary during past 03 hours, and lay centred at 0830 hrs IST of 24th November, 2020 over southwest Bay of Bengal near latitude 10.0°N and longitude 83.0°E, about 410 km eastsoutheast of Puducherry and 450 km southeast of Chennai. It is very likely to intensify further into a severe cyclonic storm during next 24 hours. It is very likely to move west-northwestwards for next 12 hours and then northwestwards. It is very likely to cross Tamil Nadu and Puducherry coasts between Karaikal and Mamallapuram around Puducherry during 25th November 2020 evening as a severe cyclonic storm with a wind speed of 100-110 kmph gusting to 120 kmph.
- Under its influence, fairly widespread to widespread rainfall/thunderstorm activity very likely over coastal and north interior Tamil Nadu, Puducherry & Karaikal during 24th to 26th November and over south coastal Andhra Pradesh, Rayalaseema during 25th to 26th and southeast Telangana during 26th November, 2020. Isolated extremely heavy rainfall activity also very likely over coastal & north interior Tamil Nadu & Puducherry (Pudukottai, Thanjavur, Tiruvarur, Karaikal, Nagapattinam, Cuddalore, Ariyalur & Perabalu districts during 24th and Kadalur, Kallakurchi, Puducherry, Villupuram, Tiruvannamalai, Chengalpattu to Ariyalur, Perambalur and Karaikal districts during 25th) and over Nellore and Chittoor districts of Andhra Pradesh on 25th and over Rayalseema & southeast Telangana on 26th November, 2020.
- Fishermen are advised not to venture into southwest and adjoining westcentral & southeast Bay of Bengal, Gulf of Mannar and along & off Tamil Nadu, Puducherry and south Andhra Pradesh coasts during 24th to 25th November. Also the fishermen out at the Sea are advised to return to the coast and avoid the above sea areas.
- The Depression lies over Gulf of Aden and adjoining Somalia near Latitude 11.6°N and Longitude 46.8°E. It is very likely to move nearly west-southwestwards and weaken into a well marked low pressure area during next 12

hours. Fishermen are advised not to venture into Gulf of Aden and along & off north Somalia coast during next 12 hours.

- Under the influence of Western Disturbances over Afghanistan & neighbourhood, fairly widespread to widespread rainfall activity very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad and Himachal Pradesh on 24th & 25th with isolated heavy rain/snow on 25th November. Isolated to scattered rain/snow also likely over Uttarakhand during same period.
- The images showing the latest satellite picture in the figure. 1.

### **Main Weather Observations (IMD)**

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Himachal Pradesh, Uttarakhand, Odisha, Tamil Nadu, Puducherry & Karaikal, Rayalaseema and Andaman & Nicobar Islands.
- Thunderstorm with lightning observed (0830 hrs IST of yesterday to 0830 hrs IST Today): Tamil Nadu, Puducherry & Karaikal.
- Moderate to Dense fog observed (during 1730 hours IST of yesterday to 0830 hours IST of today) (Visibility in meters;) in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Uttar Pradesh, Assam & Meghalaya, Punjab, Haryana, Chandigarh & Delhi and Himachal Pradesh. Visibility: Batote, Gulmarg and Kalpa-200; Kokarnag, Ludhiana, Karnal, New Delhi (Safdarjung), Lucknow, Fursatganj, Varanasi, Guwahati, Sultanpur and Haflong-500.
- Maximum Temperature Departures as on 23-11-2020: Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe and at isolated places over Telangana, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal. They were markedly below normal (-5.1 or less) at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at a few places over Himachal Pradesh; appreciably below normal (-3.1°C to - 5.0°C) at many places over Haryana, Chandigarh & Delhi; at a few places over Bihar and at isolated places over Punjab and Uttar Pradesh and below normal (-1.6°C to -3.0°C) at a few places over West Bengal & Sikkim and Assam & Meghalaya and at isolated places over Rajasthan, Saurashtra & Kutch and Madhya Pradesh and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 35.9°C was reported at Karwar (Coastal Karnataka).

- Minimum Temperature Departures as on 24-11-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at most places over Madhya Maharashtra; at isolated places over Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands; above normal (1.6°C to 3.0°C) at most places over Punjab; at many places over Rayalaseema; at a few places over Himachal Pradesh and West Rajasthan; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and West Madhya Pradesh. They are appreciably below normal (-3.1°C to - 5.0°C) at many places over Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar, Jharkhand and Saurashtra & Kutch; at a few places over East Madhya Pradesh, Gangetic West Bengal and Chhattisgarh; at isolated places over East Rajasthan, Vidarbha and Assam & Meghalaya and below normal (-1.6°C to -3.0°C) at many places over Odisha; at a few places over Sub-Himalayan west Bengal & Sikkim and Gujarat region and near normal over rest parts of the country. The lowest minimum temperature of 5.5°C reported at Churk (East Uttar Pradesh) over the plains of the country.

### **Weather Warning during the next 5 days (IMD)**

- 24 November (Day 1): Heavy to very rainfall with extremely heavy falls very likely at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over Coastal Andhra Pradesh & Yanam and Rayalaseema. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalseema and Tamil Nadu, Puducherry & Karaikal. Cold day conditions very likely at isolated places over Haryana, Chandigarh & Delhi and West Uttar Pradesh and Cold Wave conditions very likely at isolated places over Bihar. Gale wind (speed reaching 70-80 kmph gusting to 90 kmph) very likely to prevail over Southwest Bay of Bengal and squally wind (speed reaching 30-40 kmph gusting to 50 kmph) along & off Tamil Nadu & Puducherry and adjoining south Andhra Pradesh coasts. Sea conditions is likely to be high over Southwest Bay of Bengal and rough to very rough along & off Tamil Nadu, Puducherry, south Andhra Pradesh coasts and Gulf of Mannar. The Sea conditions very likely to become very high over Southwest Bay of Bengal from night of today. Fishermen are advised not to venture into these areas.
- 25 November (Day 2): Heavy to very rainfall at a few places with extremely heavy falls very likely at isolated places over Tamil Nadu, Puducherry & Karaikal; Heavy to very rainfall with extremely heavy falls at isolated places over Coastal

Andhra Pradesh & Yanam and Rayalaseema; heavy rain/snow at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh and heavy rainfall at isolated places over South Interior Karnataka. Thunderstorm/hailstorm with lightning very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand and Himachal Pradesh and thunderstorm with lightning at isolated places over Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Cold day conditions very likely at isolated places over Haryana, Chandigarh & Delhi and Punjab. Gale wind (speed reaching 100-110 kmph gusting to 120 kmph) very likely to prevail over Southwest Bay of Bengal and along & off coastal districts of Tamil Nadu and Puducherry(Nagapattinam, Karaikal, Myladuthurai, Cuddalore, Puducherry, Villupuram and Chengalpattu) and (wind speed reaching 80-90 kmph gusting to 100 kmph) very likely along & off coastal districts of Tiruvarur, Kanchipuram, Chennai, Tiruvallur. Gale wind (speed reaching 65-75 kmph gusting to 85 kmph) over adjoining Westcentral Bay of Bengal and along & off coastal districts of south south Andhra Pradesh (Nellore and Chittoor), Gulf of Mannar and along & off coastal districts of south Tamil Nadu. Sea conditions is likely to be Very High over Southwest & adjoining Westcentral Bay of Bengal and along & off north Tamil Nadu-Puducherry coasts and High along & off south Tamil Nadu & south Andhra Pradesh coasts and Gulf of Mannar. Fishermen are advised not to venture into these areas.

- 26 November (Day 3): Heavy to very rainfall at a few places with extremely heavy falls at isolated places very likely over Rayalaseema; heavy to very rainfall with extremely heavy falls at isolated places over Coastal Andhra Pradesh & Yanam and Telangana and heavy rainfall at isolated places over South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- 27 November (Day 4): Thunderstorm with lightning likely at isolated places over Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Telangana and Interior Karnataka. Cold Wave conditions at isolated places likely over north Rajasthan, Haryana, Chandigarh & Delhi and West Uttar Pradesh.
- 28 November (Day 5): Heavy rainfall likely at isolated places over Andaman & Nicobar Islands. Cold Wave conditions at isolated places likely over north Rajasthan, Haryana, Chandigarh & Delhi and West Uttar Pradesh.

- The weather outlook for seven days i.e., 24 November to 02 December 2020 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thundershower may occur over Some parts of Extreme northern parts of India. (Fig. 2).

## **Agricultural activities (AICRPAM-CRIDA)**

### **Konkan**

#### **Weather condition:**

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 10.2 to 10.8 Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 31.5 to 34.8 and 11.2 to 21.6°C respectively. Wind velocity ranged from 1.2 to 3.6 km and wind was blowing from south westerly Direction.

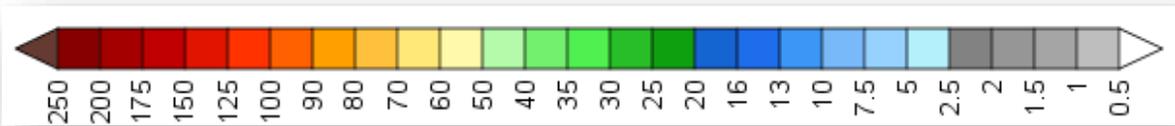
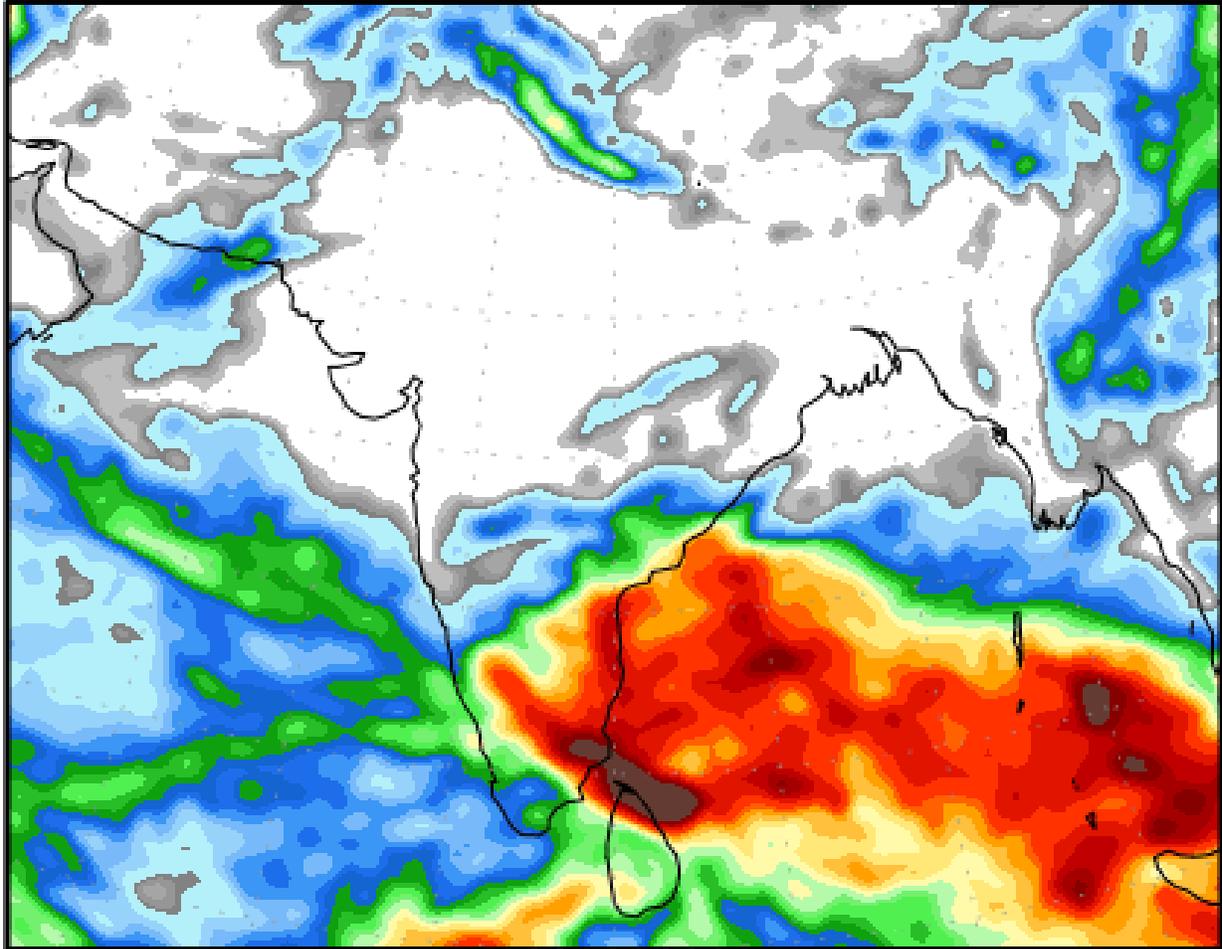
#### **Contingency measure:**

- Groundnut: For cultivation of groundnut, carryout ploughing operation and incorporate 2 tonnes/acre FYM or compost at the time of ploughing. Carryout sowing on flat bed by dibbling the seed at 30 X 15 cm spacing (for erect type) and at 45 X 15 cm spacing (for semi-spreading and spreading type). Use 40-50 kg seed rate/acre. Apply fertilizer dose of 22 kg urea, 125 kg boronated super phosphate and 20 kg of MOP per acre at the time of sowing. Before sowing treat the seeds with Rhizobium @ 20 gms and Phosphate solubilizing bacteria biofertilizer @50 gms per kg of seed. For control of weeds in groundnut apply Butachlor @ 50 ml per 10 liter of water after sowing on wet flat bed.
- Cowpea: Plough the field for cultivation of cowpea and incorporate FYM or compost @ 2 tonnes/acre at the time of last ploughing. prepare check basin of 4 X 3 m size leaving furrow of 30 cm for irrigation between alternate two beds. Sow seed at a spacing of 30 X 15 cm. Apply 65 gms urea, 450 gms single Super Phosphate and 80 gms of muriate of potash per check basin before sowing. Treat the seed with Thiram fungicide @3 gm/kg or Trichoderma 5 gms/kg and with Rhizobium and PSB biofertilizers @ 25 gms per kg of seed before sowing.
- Lablab bean: Complete the sowing operation of lablab bean.
- Mango: There is possibility incidence of hoppers and powdery mildew disease on flower bud stage in mango. To protect the inflorescence from pest and powdery mildew diseases, spray Lambda cyhalothrin 5%EC @ 6 ml + hexaconazole @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water and for protection of vegetative flush from hoppers and diseases, spray deltamethrin 2.8%EC @ 10 ml + fungicide

combination (carbendazim 12% + mancozeb 63%) @ 10 gm per 10 liter in water. Due to cloudy weather for protection against anthracnose disease, spray carbendazim 12% + mancozeb 63% combination fungicide @ 10 gm per 10 liter in water.

- Mango new plantation: Due to forecast for increase in temperature may leads to accelerate evaporation, provide irrigation to newly planted mango orchard @ 30 liters of water at 7 days interval (1 years old), 15 days interval (2 years old) and one-month interval to 3 years old tree. New growth below graft union should be removed regularly.
- Cashewnut: There is possibility of tea mosquito bug and thrips incidence on inflorescence of cashewnut, to protect the cashew inflorescence from tea mosquito bug and thrips incidence, spray Profenophos 50% EC @10 ml per 10 liter of water. Also for protection of vegetative flush from tea mosquito bug incidence, spray spray Monocrotophos 36%SL @ 15 ml or Lambda cyhalothrin 5% EC @ 6 ml per 10 liter of water. (The insecticide is not under label claim).
- Cashewnut new plantation: Due to forecast for increase in temperature may leads to accelerate evaporation, hence provide irrigation to newly planted cashewnut orchard @ 15 liters of water at 15 days intervals. New growth below graft union should be removed regularly.
- Coconut: Due forecast for increase in temperature accelerate evaporation, provide irrigation to coconut orchard at 8-10 days interval. For control of eriophyid mite on coconut, neem-based insecticide neemazal 5% @ 7.5 ml be mixed in equal quantity of water apply through root feeding during month of October-November. Harvesting is avoided at least 45 days after treatment. In addition to this spray neem-based insecticide (neemazal) 1% @4 ml per liter of water on bunch of nuts. Collect and destroy all infected inflorescence and nuts before spraying
- Arecanut: Due to forecast for increase in temperature accelerate evaporation, provide irrigation to arecanut orchard at 6-8 days interval.
- Cabbage: If seedlings of cabbage crops are ready for transplanting, transplant the seedlings on ridges and furrow with spacing of 45 X 45 cm or 60 X 60 cm. Apply fertilizer dose of 8 tonne of FYM/Compost, 35 kg urea, 150 kg SSP and 40 kg of MOP per acre at the time of transplanting. Provide irrigation immediately after transplanting.
- Vegetable crop: Follow weeding in vegetable crop field. provide irrigation as per requirement.





**Figure:2. Precipitation forecast for 24 Nov to 02 Dec 2020 (Source: NOAA NCEP).**

*Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.*