All India Coordinated Research Project on Agrometeorology CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 17 November 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A cyclonic circulation lies over Maldives area & neighbourhood and a trough in easterlies runs from this circulation to Southeast Arabian Sea in lower levels.
- The above trough is likely to move westwards and under its influence, a Low Pressure Area is likely to form over Southeast Arabian Sea around 19th November, 2020. It is very likely to move west-northwestwards and concentrate into a Depression over Southeast & adjoining Eastcentral Arabian sea during subsequent 48 hours. Under these conditions: Fairly widespread to widespread rainfall accompanied with thunderstorm & lightning and isolated heavy rainfall over Kerala and Lakshadweep on 17th & 18th November, 2020 and over Tamil Nadu, Puducherry & Karaikal during next 24 hours and reduce thereafter. Isolated to scattered light rainfall activity accompanied with thunderstorm & lightning is very likely over Rayalaseema on 17th and over Coastal & South Interior Karnataka on 17th & 18th; Scattered to fairly widespread moderate rainfall accompanied with thunderstorm & lightning is very likely over Kerala & Mahe and Lakshadweep on 19th & 20th November, 2020;
- Under the influence of a fresh Western Disturbance, light isolated to scattered rain/snow is very likely over Western Himalayan region from 18th to 20th November 2020.
- Minimum temperatures are very likely to fall gradually by 2-4°C over northwest India and north Madhya Pradesh during next 4-5 days.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/snow observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Himachal Pradesh.
- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe; at many places over Himachal Pradesh, Rayalaseema, Coastal & South Interior Karnataka and Lakshadweep; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Uttarakhand and at isolated places over Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Bihar, Madhya Maharashtra, Telangana, North Interior Karnataka and Coastal Andhra Pradesh & Yanam.
- Thunderstorm (from 0830 hrs IST of yesterday to 0830 hours IST of today) observed at isolated place over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe.
- Heavy to very heavy rainfall observed at isolated places over Tamil Nadu, Puducherry & Karaikal and heavy rainfall at isolated places over Coastal Andhra Pradesh.
- Maximum Temperature Departures as on 16-11-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Jharkhand, Chhattisgarh and Vidarbha; a few places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Odisha; above normal (1.6°C to 3.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura and Gangetic West Bengal; at many places over Marathwada, Telangana and Coastal Karnataka; at a few places over Madhya Maharashtra and Madhya Pradesh and at isolated places over Andaman & Nicobar Islands and Kerala & Mahe. They were Markedly below normal (- 5.1°C and less) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at many place over Himachal Pradesh and West Rajasthan; at a few places over Haryana, Chandigarh & Delhi and Uttarkhand; appreciably below normal (-3.1°C to - 5.0°C) at most places over Punjab; at many places over East Uttar Pradesh; at a few places over West Uttar Pradesh; below normal (-1.6°C to - 3.0°C) at many places over Rayalaseema; at a few places over East Rajasthan, Coastal Andhra Pradesh and Tamil Nadu, Puducherry & Karaikal and at isolated places over Bihar and Saurashtra & Kutch and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.4°C was reported at Ratnagiri (Konkan & Goa).

Minimum Temperature Departures as on 17-11-2020: Minimum temperatures are Markedly above normal (5.1 to more) at a few places over West Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over Konkan & Goa and Madhya Maharshtra and at a few places over East Rajasthan, Jharkhand and Chhattisgarh; above normal (1.6°C to 3.0°C) at most places over East Madhya Pradesh, Vidarbha, Coastal Karnataka, Marathawada, Rayalaseema and North Interior Karnataka; at many places over Odisha and Andaman & Nicobar Islands; at a few places over Punjab, Haryana, Chandigarh & Delhi, Telangana, South Interior Karnataka and Gujarat region; at isolated places over West Rajasthan, Uttar Pradesh, Assam & Meghalaya, Bihar, West Bengal & Sikkim, Coastal Andhra Pradesh, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1.6°C to - 3.0°C) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Himachal Pradesh and at isolated places over Uttarakhand and Saurashtra & Kutch and near normal over rest parts of the country. Today, the lowest minimum temperature of 10.7°C reported at Churk (East Uttar Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 17 November (Day 1): Heavy rainfall very likely at isolated places over Kerala and Tamil Nadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm with lightning & hail very likely at isolated places over Arunachal Pradesh, northeast Assam, Nagaland and with lightning at isolated places over Coastal & South Interior Karnataka, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed reaching 40-50 kmph gusting to 60 kmph) very likely to prevail over Comorin area & Equatorial Indian Ocean, Maldives area, Southeast Arabian Sea, Kerala coast and Lakshadweep area.
- 18 November (Day 2): Heavy rainfall very likely at isolated places over Kerala & Mahe and Lakshadweep. Thunderstorm with lightning very likely at isolated places over Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed reaching 45-55 kmph gusting to 65 kmph) very likely to prevail over Maldives area, Southeast Arabian Sea, Kerala coast and Lakshadweep area.
- 19 November (Day 3): Thunderstorm with lightning very likely at isolated places over Coastal Karnataka, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed reaching 45-55

kmph gusting to 65 kmph) very likely to prevail over Southeast & adjoining Eastcentral Arabian Sea and Lakshadweep area.

- 20 November (Day 4): Thunderstorm with lightning likely at isolated places over Kerala & Mahe and Lakshadweep.
- 21 November (Day 5): No Warning.
- The weather outlook for seven days i.e., 17 to 25 November 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)

Assam

Weather condition:

Weather during the week was partially clear. The daily average maximum temperature was 29.0°c which is 1.9 degree above normal and the average daily minimum temperature was 16.8°c which is 0.4 degree below normal for the week. Total BSSH was 35.3 hrs only with an average of 5.9 hrs. The daily average evaporation and wind speed was 1.6 mm and 5.9 km/hr respectively. The daily average RH during morning and afternoon was 97.1% and 64.7% respectively.

Contingency measure:

- Sali rice (Dough stage to maturity):- To control the attack of gundhi bug at dough stage, farmers are advised to go for dusting of Malathion 5% dust @ 2.6kg per bigha land if 1-2 bugs per sq. meter area were noticed. Again, Neem Seed Kernel Extract (NSKE) @ 1.5gm per lit. of water may also be applied to control this pest. Additionally, infestation of field rats (rodents) is a major problem at the time of maturity of the crop. To control the rat rodents, apply 2-3 tablets of Celphos/ Phostoxin per burrow and sealed with mud.
- Kharif pulses (green and black gram):- The crop is in flowering stage. Due to favorable weather during the past week, infestation of aphid was observed in the green gram crop. To control the pest, apply Malathion 50EC @ 130 ml in 65 lit of water to spray in one bigha land. The same pesticide is also found beneficial in controlling leaf folder infestation in green gram and black gram crop. During pod setting period, attack of pod borer may be observed in the green gram and black gram crop. As no rainfall is predicted, farmers are advised to go for application of Emmamectin Benzoate 5% SG @ 5 g/ 10 lit. water to control the pest infestation.
- Potato (land preparation):- Select well drained sandy loam and loam soils rich in organic matter for potato cultivation. Field should be ploughed thoroughly to obtain a good tilth with furrows at 50cm interval. Collect tubers of the recommended early varieties viz., Kufri Chandramukhi, Kufri Sindhuri, Kufri Megha etc. Apply 3-4 cart loads of well decomposed FYM in per bigha land in the furrows before planting of potato tuber. For proper fertility management, apply 19kg Urea, 45kg SSP and 12kg MOP in furrows as basal application and covered with a thin layer of soils so that tuber do not come into direct contact with the fertilizers.
- Toria (Land preparation):- Continue land preparation for toria cultivation. The optimum sowing period is mid- October to mid-November. However, early sowing escape aphid attack in toria. Select recommended cultivars like- M-27, TS-36, TS-38, TS-46 etc. for toria cultivation. During the land preparation apply 300-400kg FYM

- per bigha land and mix thoroughly in the soil. Under rainfed condition apply 12kg Urea, 30kg SSP and 25kg MOP per bigha land during final land preparation. A seed rate of 1.3kg per bigha is found optimum for toria cultivation.
- Tomato (Nursery bed preparation):- Select sunny area with well drained light to rich in organic matter for nursery raising bed. Bring the soil to fine tilth and prepare the bed 1m width and of convenient length and raise it to 10-15cm above ground level. Before sowing drenching of soil 0.1% solution of Carboxin and after drying thoroughly mix Malathion 5% dust @ 20g per 10 square meter area to protect the seedlings from soil borne insects. Collect seeds of recommended vaieties viz., Punjab Chuhara, S-12, Punjab Keshri, Sioux, Arka Alok, arka Abha etc.
- Banana (Fruit setting):- During the period of fruit setting fruit and leaf scaring beetle is a major problem in banana crop. To reduce the effect, go for bagging of banana bunches with muslin cloth or blue polyethylene bags before fruit set and remove the bag after 60 days of fruit setting.
- Livestock (various):- Farmers who have not yet vaccinated their domestic livestock against BQ, HS, FMD and Anthrax diseases, are advised to go for vaccination as early as possible. For further information consult with veterinary expert.



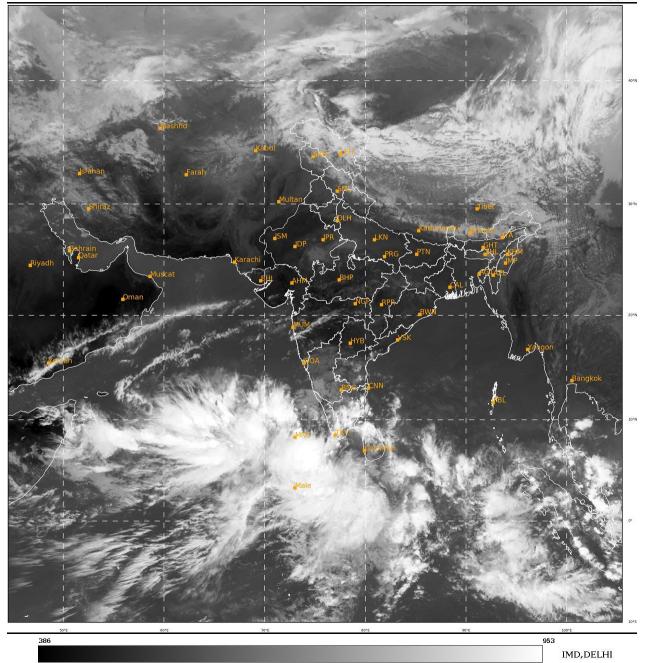


Figure: 1. Latest available satellite picture as on 17 November 2020 at 1357 Hrs (IST). (Source: IMD).

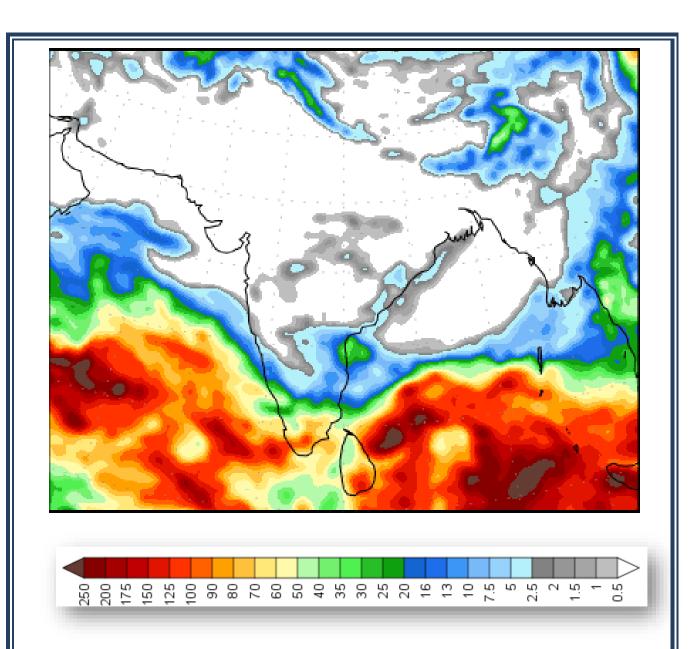


Figure: 2. Precipitation forecast for 17 to 25 November 2020 (Source: NOAA NCEP).

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