

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

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

### **Daily Crop Weather Information as on 19 February 2022**

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

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

- Weather Systems and associated forecast & warnings:
- Under the influence of a fresh Western Disturbance and its induced cyclonic circulation; scattered to fairly widespread light/moderate rainfall/snowfall very likely over Western Himalayan Region on 22nd & 23rd and isolated light rainfall likely over Punjab on 22nd & over Haryana-Chandigarh-Delhi and north Rajasthan on 22nd & 23rd February, 2022.
- Strong surface winds (25-35 kmph) likely to prevail over Haryana-Chandigarh-Delhi & Uttar Pradesh on 19th, 20th & 22nd and over north Rajasthan on 22nd February 2022.
- Scattered to fairly widespread light/moderate rainfall likely over Arunachal Pradesh and isolated to scattered light/moderate rainfall over Assam-Meghalaya & Nagaland-Manipur-Mizoram-Tripura during 19th to 21st February. Isolated Heavy rainfall also likely over Arunachal Pradesh on 20th February 2022. Isolated hailstorm activity also likely over east Arunachal Pradesh and northeast Assam on 20th February 2022.
- Under the influence of cyclonic circulation over Southeast Bay of Bengal & adjoining north Andaman Sea at lower tropospheric levels; Fairly widespread rainfall with isolated thunderstorm/lightning very likely over Andaman & Nicobar Islands during next 24 hours and significant reduction thereafter.
- Isolated light/moderate rainfall very likely over Sub-Himalayan West Bengal-Sikkim during 19th-22nd; over Odisha on 19th & 20th and over Gangetic West Bengal during 20th -22nd February, 2022.
- No significant change in minimum temperatures very likely over most parts of the country during next 5 days.
- The images showing the latest satellite picture in the figure. 1.

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

- Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Andaman & Nicobar Islands and at isolated places over

Jammu-Kashmir-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Haryana-Chandigarh-Delhi, Madhya Pradesh, East Rajasthan, Sub-Himalayan West Bengal-Sikkim, Arunachal Pradesh and Tamil Nadu-Puducherry-Karaikal.

- Minimum Temperature Departures (as on 19-02-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at few places over Madhya Pradesh and at isolated places over Gujarat state and West Rajasthan; above normal (1.6°C to 3.0°C) at many places over East Rajasthan, Chhattisgarh and Madhya Maharashtra; at a few places over Vidarbha and Coastal Karnataka and at isolated places over East Uttar Pradesh, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. They are appreciably below normal (-3.1°C to -5.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura and at a few places over Gangetic West Bengal; below normal (-1.6°C to -3.0°C) at many places over South Interior Karnataka and Jharkhand; at a few places over Haryana and at isolated places over Odisha and Assam & Meghalaya and near normal over rest parts of the country. Today, the lowest minimum temperature of 7.2°C is reported at Alwar (East Rajasthan) and Karnal (Haryana) over the plains of the country.
- Maximum Temperature Departures (as on 18-02-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Himachal Pradesh and Saurashtra & Kutch and at isolated places over Haryana, Chandigarh & Delhi, West Rajasthan and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at a few places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, East Rajasthan, West Madhya Pradesh, Gujarat Region and Coastal Karnataka and at isolated places over Punjab, Uttar Pradesh and Kerala & Mahe. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Andaman & Nicobar Islands and at isolated places over East Madhya Pradesh and Vidarbha; below normal (-1.6°C to -3.0°C) at a few places over Telangana and West Bengal & Sikkim and at isolated places over East Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, South Interior Karnataka, Odisha and Tamil Nadu-Puducherry-Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.0°C was reported at Kottayam(Kerala & Mahe) over the country.

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

- 19 February (Day 1): Thunderstorm accompanied with lightning at isolated places very likely over Andaman & Nicobar Islands.
- 20 February (Day 2): Thunderstorm accompanied with lightning & hail at isolated places very likely over east Arunachal Pradesh and northeast Assam and with lightning at isolated places over West Bengal & Sikkim and Nagaland, Manipur,

Mizoram & Tripura. Heavy Rainfall at isolated places very likely over Arunachal Pradesh.

- 21 February (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 22 February (Day 4): Thunderstorm accompanied with lightning at isolated places likely over Jammu- Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh.
- 23 February (Day 5): Thunderstorm accompanied with lightning at isolated places likely over Himachal Pradesh and Uttarakhand.
- The weather outlook for seven days i.e., 19 Feb to 27 Feb 2022 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 region**

#### **Weather condition:**

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 9.0 to 10.7 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 30.0 to 33.8 and 10.3 to 16.0 oC respectively. Wind velocity ranged from 3.2 to 4.8 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

- General advisory: Follow harvesting of matured pulse crop during morning hours
- SMS advisory: Due to forecast for decrease in humidity, to minimize the premature fruit drop of mango, as per availability of water, apply 100 liter /tree at weekly or 150 to 200 liter/ tree at 15 days interval from pea to arecanut fruit size
- Pulse crop: Due to forecast for gradual rise in temperature, provide irrigation to lablab bean, cowpea crop where crop is in flowering to pod filling stage. There is possibility of incidence of pod borer on lablab bean crop which initially feed on buds and then on tender pods. If incidence is noticed, collect and destroy all infected pods and spray 5% neem seed kernel extract or Dimethoate 30% EC@12 ml per 10 liter of water. Avoid spraying in field where green pods harvesting is carried out.

- Green gram:For sowing of summer moong, Sow seed at a spacing of 30 X 10 cm on flat bed. use seed rate @ 150-200 gms/guntha. apply 540 gms urea, 3 kg single Super Phosphate and 1 kg murate of potash per guntha before sowing.Treat the seed with Trichoderma 5 gms/kg and with rhizobium and PSB biofertilizers @ 25 gms per kg of seed before sowing.
- Mango:Due to forecast for gradual rise in temperature and decrease in humidity, possibility for pre-mature fruit drop in mango, to minimize fruit drop, as per availability of water, apply 100 liter /tree at weekly or 150 to 200 liter/ tree at 15 days interval from pea to arecanut fruit size also use straw mulch.To minimize the pre-mature fruit drop and increasing the production and quality improvement of mango fruits, spray 1 % Potassium nitrate at pea marble and arecanut size stage of mango fruits.The pre-harvest bagging with newspaper bag of size 25 X 20 cm at marble to egg stage as per recommendation of D.B.S.K.K.V. helps to protect the fruits from rain water, fruit fly incidence, sun scorching and improves quality and spot less fruit in mango. Care should be taken that avoid injury to fruit stalk while bagging fruits with paper bag.There is possibility for incidence of fruit fly on mango fruits of egg size. Collect and destroy all fallen fruits and install ?Rakshak fruit fly trap? developed by University @ 2 traps per acre.Observed mango Inflorescence and fruits regularly for hoppers, thrips insect and powdery mildew disease, if incidence is noticed, then undertake spraying.For protection against powdery mildew disease, spray Hexaconazole 5% SC @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter of water. Avoid use of same fungicide for spraying.There is possibility incidence of thrips on mango, if incidence is noticed, spray Spinosad 45%SC @ 2.5 ml per 10liter of water. If incidence is severe, then take second spray of Thiomethoxam 25%WG @ 2 gm per 10 liter of water.There is possibility incidence of hoppers, midge fly on mango inflorescence. For management of pest, spray of Imidacloprid 17.8% SL @ 6 ml or Buprofezin 25%SC@ 20 ml per 10 liter of water.To protect the mustard size fruits of mango from hoppers as per blossom protection schedule for mango crop, take a fourth spray of Thiomethoxam 25%WG @ 1 gm per 10 liter of water and fifth spray (15 days after 4th spray) of Dimethoate 30%EC@ 10 ml or Lambda cyhalothrin 5%EC@ 6 ml per 10 liter of water.Due to forecast for gradual rise in temperature and decrease in humidity, 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 incidence of tea mosquito bug and thrips on inflorescence and nut of cashewnut. If incidence is noticed spray Profenophos

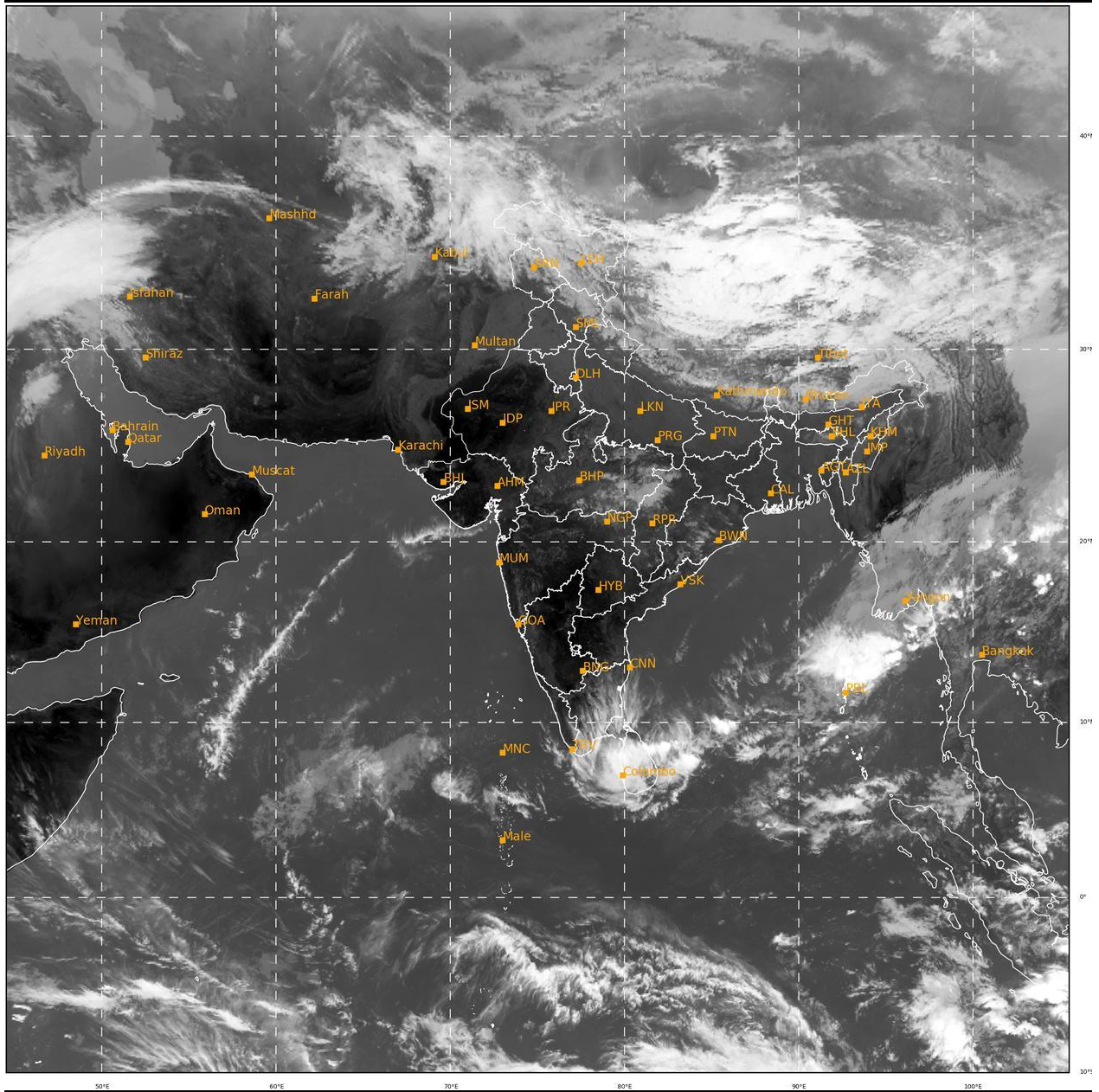
50%EC @ 10 ml or Lambda cyhalothrin 5% EC @6 ml or Acetamiprid 5 gms per 10 liter of water at nut stage. (The insecticide is not under label claim). There is possibility for incidence of cashew apple and nut borer, if incidence is noticed spray Profenophos 50%EC @ 15 ml per 10 liter of water. Due to forecast for gradual rise in temperature and decrease in humidity, provide irrigation to newly planted cashewnut orchard @ 15 liters of water at 15 days intervals. New growth below graft union should be removed regularly.

- **Mango and Cashewnut:** There is possibility of incidence of Stem Borer in Mango and Cashewnut tree. Grubs tunnels in the sapwood on the trunk and branches and results into wilting of branches or entire tree. Observe the orchard regularly for pest infestation. If the incidence is noticed, remove the grubs from the holes and apply Chloropyriphos 20% EC @ 50 ml per 10 liter of water on the stem (swabbing) or inject solution of Chloropyriphos 20% EC @ 10 ml + kerosene 50 ml into stem hole.
- **Coconut:** Due to clear sky and decrease in humidity, provide irrigation to first four years old coconut orchard at 4 to 5 days interval and for above four years old orchard provide irrigation at 6 to 7 days interval. Apply 40 liter of water per day to fully grown coconut tree by drip irrigation. also use straw mulch to reduce evaporation losses. Provide shed to newly planted coconut orchard. 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 three time in a year (Oct-Nov, Jan-Feb, Apr-May). 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 during clear weather (no rainfall). (The insecticide is not under label claim). Collect and destroy all infected inflorescence and nuts before spraying.
- **Arecanut:** Due to clear sky and decrease in humidity, provide irrigation to arecanut orchard at 4-5 days interval.
- **Water melon:** Provide irrigation to water melon crops at 3-4 days interval regularly and on alternate day in drip irrigation. Cover the water melon fruits with paddy straw or grasses to protect fruits from sunlight.



SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
L1C Mercator

19-02-2022/(0800 to 0826) GMT  
19-02-2022/(1330 to 1356) IST

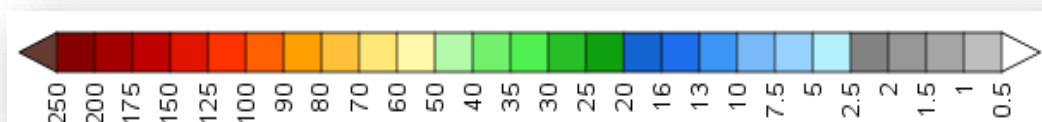
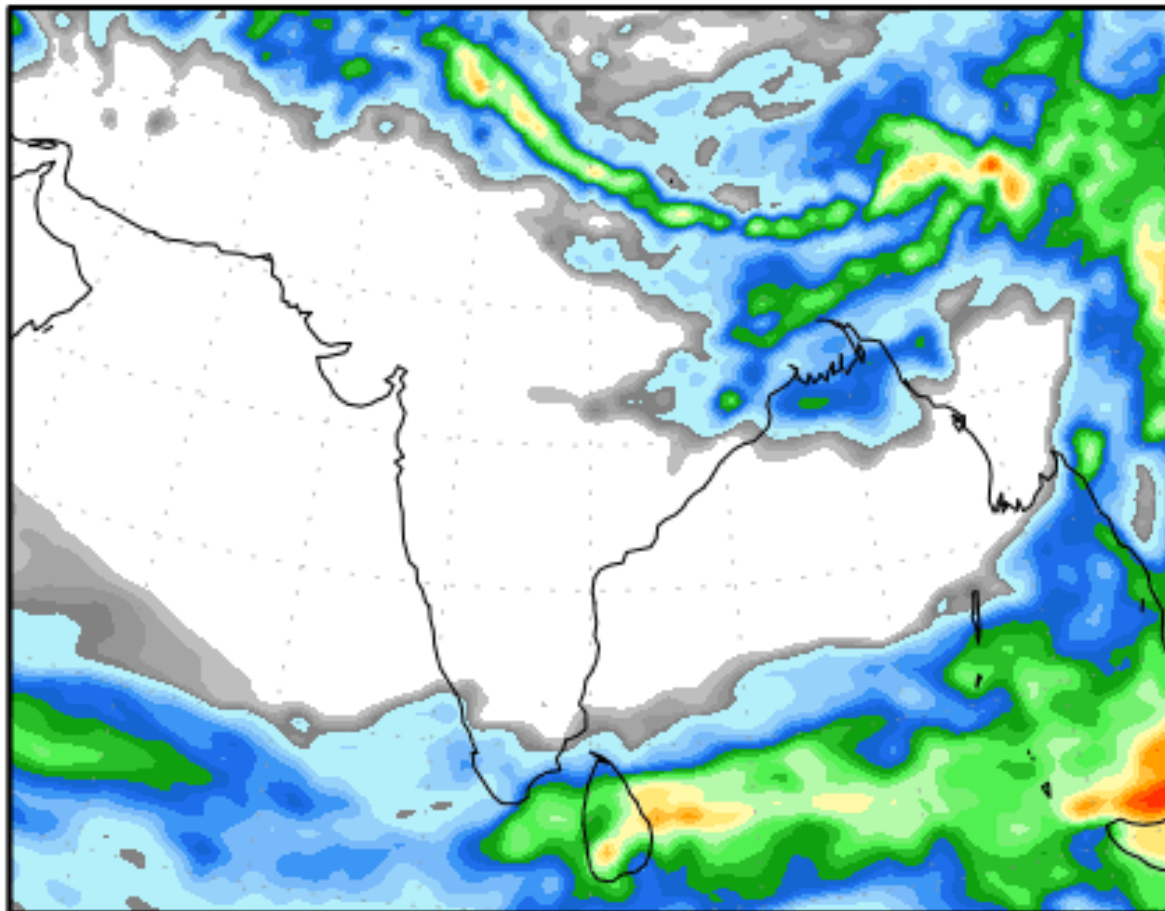


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IMD, DELHI

Figure: 1. Latest available satellite picture as on 19 Feb 2022 at 1356 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 19 Feb to 27 Feb 2022 (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.*