

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

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

### **Daily Crop Weather Information as on 23 March 2022**

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

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

- Forecast & Warnings for other parts of the country:
- Under the influence of a fresh Western Disturbance, isolated/scattered rainfall/snowfall with thunderstorm/lightning very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh on 23rd & 24th and isolated rainfall/snowfall with thunderstorm/lightning & hail over Uttarakhand on 24th March, 2022.
- Light isolated/scattered rainfall very likely over Kerala & Mahe, Tamilnadu, Puducherry & Karaikal and Karnataka during next 5 days and over Coastal Andhra Pradesh & Rayalaseema during next 3 days. Isolated thunderstorm/lightning activity also very likely over Kerala & Mahe during next 5 days, over Coastal & South Interior Karnataka during next 3 days and over Tamilnadu, Puducherry-Karaikal, Coastal Andhra Pradesh & Rayalaseema during next 24 hours.
- Light to moderate scattered/fairly widespread rainfall very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Sub-Himalayan West Bengal & Sikkim during next 5 days with isolated thunderstorm/lightning over the region during 23rd-26th March, 2022. Well Marked Low Pressure Area over Myanmar: The Depression over Myanmar continued to move nearly north-northeastwards and further weakened into into a Well Marked Low Pressure Area at 0830 hours IST of today, the 23rd March, over the same region. It would continue to move nearly north-northeastwards and weaken further.
- Heat wave warning:
- Heat Wave conditions in isolated pockets very likely over Saurashtra-Kutch during 25th-27th March and over Gujarat Region on 26th & 27th March, 2022
- The images showing the latest satellite picture in the figure. 1.

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

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Sub-Himalayan West Bengal Sikkim and at isolated places over Arunachal Pradesh, Assam & Meghalaya, Andaman-Nicobar Islands, Madhya Maharashtra, Coastal Andhra Pradesh, Telangana, Rayalaseema, Interior Karnataka, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hours IST of yesterday - 0830 hours IST of today): North Interior Karnataka.
- Heat Wave conditions are observed at isolated pockets over West Madhya Pradesh.
- Maximum Temperature Departures (as on 22-03-2022): Maximum temperatures were markedly above normal ( $5.1^{\circ}\text{C}$  or more) at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Himachal Pradesh; at many places over Uttarakhand and Assam-Meghalaya and at isolated places over East Rajasthan and Madhya Pradesh; appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at most places over Punjab and Jharkhand; at many places over Haryana-Chandigarh-Delhi; at a few places over Saurashtra & Kutch, Madhya Pradesh and at isolated places over East Uttar Pradesh, Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal; above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at most places over Chhattisgarh, Vidarbha and West Uttar Pradesh; at many places over Nagaland-Manipur-Mizoram-Tripura, Odisha and Marathwada; at a few places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar, Coastal Andhra Pradesh-Yanam Telangana, Gujarat Region and Kerala & Mahe. They were below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at isolated places over South Interior and near normal over rest parts of the country. Yesterday, the highest maximum temperature of  $42.0^{\circ}\text{C}$  was reported at Chadrapur (Vidarbha) over the country.
- Minimum Temperature Departures (as on 23-03-2022): Minimum temperatures are markedly above normal ( $5.1^{\circ}\text{C}$  or more) at many places over Bihar; at a few places over East Rajasthan; appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at most places over Sub-Himalayan West Bengal-Sikkim, Punjab and Gujarat Region; at a few places over Arunachal Pradesh, Himachal Pradesh, West Uttar Pradesh, Vidarbha and Saurashtra & Kutch; at isolated places over Gangetic West Bengal, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra and Tamil Nadu, Puducherry-Karaikal; above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Jharkhand; at many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttarakhand,

Haryana, Chandigarh & Delhi, Marathwada, Telangana, Coastal Andhra Pradesh & Yanam, Kerala & Mahe; at a few places over East Uttar Pradesh, East Madhya Pradesh, Rayalaseema, Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 15.4°C reported at Karnal (Haryana) over the plains of the country.

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

- 23 March (Day 1): Thunderstorm accompanied with lightning at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Goa, south Madhya Maharashtra, Sub-Himalayan West Bengal-Sikkim, Assam-Meghalaya, Coastal Andhra Pradesh, Rayalaseema, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry-Karaikal and Kerala-Mahe. Heat wave conditions very likely in isolated pockets over Himachal Pradesh.
- 24 March (Day 2): Thunderstorm accompanied with lightning & hail at isolated places very likely over Uttarakhand and with lightning at isolated places over Himachal Pradesh, Goa, Sub-Himalayan West Bengal & Sikkim, Coastal & South Interior Karnataka, Kerala & Mahe, Arunachal Pradesh, Assam-Meghalaya and Nagaland-Manipur-Mizoram-Tripura.
- 25 March (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Kerala & Mahe, Arunachal Pradesh, Assam-Meghalaya and Nagaland-Manipur-Mizoram-Tripura. Heat wave conditions in isolated pockets very likely over Saurashtra & Kutch.
- 26 March (Day 4): Thunderstorm accompanied with lightning at isolated places likely over Arunachal Pradesh, Assam-Meghalaya, Nagaland and Kerala & Mahe. Heat wave conditions in isolated pockets likely over Gujarat state.
- 27 March (Day 5): Thunderstorm accompanied with lightning at isolated places likely over Kerala & Mahe. Heat wave conditions in isolated pockets likely over Gujarat state.
- The weather outlook for seven days i.e., 23 Mar to 31 Mar 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 6.8 to 9.5 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 36.5 to 39.0 and 13.4 to 18.2 oC respectively. Wind velocity ranged from 2.5 to 5.0 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

- General advisory: Due to forecast of Thunderstorms accompanied with lightning, keep farm animals at safe place and away from open water, pond or river
- SMS advisory: There is forecast of light rainfall at isolated places from 8th to 9th March 2022, keep harvested turmeric, black pepper, cashewnut, pulses at protective and safe place for drying
- Lablab bean, cowpea: Due to forecast of light rainfall at isolated places from 8th to 12th March 2022, harvest matured lablab bean, cowpea crop and keep for drying at safe and protective place
- Mango: Due to forecast of light rainfall at isolated places from 8th to 12th March 2022, hence to protect the mango fruits from rain water and fruit fly, 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. Care should be taken that avoid injury to fruit stalk while bagging fruits with paper bag. Due to forecast for light rainfall from 8th to 12th March 2022, harvest the mature mango fruits by observing rainfall situation before 10 am in the morning and after 4 pm in the evening with the help on mango harvester at 80 to 85% maturity. Keep the harvested fruits in shade to prevent spongy tissue disease and from heat. Do not spray any insecticides/fungicides 15 days before harvesting of mango fruits. To prevent incidence of post-harvest diseases on fruits, place the fruits in hot water of 52oC for 10 minutes and then keep for ripening. Use C.F.B. (corrugated fiber box) for packing. Transport of harvested fruits should be done preferably during night hours. Due to forecast for gradual rise in temperature and decrease in humidity, possibility for pre-mature fruit drop in mango and sun scorching, 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 also use straw mulch. 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. There is forecast for partly cloudy weather and light rainfall from 8th to 12th March 2022, there is possibility of incidence of anthracnose disease on fruits of mango, if rainfall received then undertake the protective spraying for anthracnose disease, spray Carbendazim 12% + Mancozeb 63% @ 10 g per 10 liter of water. There is possibility for incidence of powdery mildew disease, if incidence is noticed spray wettable Sulphur 80% @ 20 gm per 10 liter of water. Due to forecast for cloudy weather, there is possibility incidence of thrips on mango, if incidence is noticed, spray Spinosad 45%SC @ 2.5 ml per 10 liter of water. If incidence is severe, then take second spray of Thiomethoxam 25%WG @ 2 gm per 10 liter of water. Due to forecast for cloudy weather, there is possibility incidence of hoppers 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.

- Cashewnut: There is possibility of incidence of tea mosquito bugs and aphids on the fruits of cashewnut, to protect the cashew during fruit bearing stage, spray Lambda cyhalothrin 5% EC @ 6 ml or Acetamiprid 20%SP @ 5 gms per 10 liter of water during clear weather. (insecticide is not under label claim). Due to forecast for rain, keep harvested nuts for drying at safe and protective place.
- Arecanut: Due to forecast light rainfall at isolate places on 8th to 13th March, 2022, keep the harvested nuts for drying at safe place.
- Water melon: Due to cloudy weather, possibility for incidence of blight disease on water melon, if incidence is noticed, remove and destroy infected leaves and spray Mancozeb 75% WP @ 25 gm 10 liters of water.
- Animal husbandry: There is possibility of increase in temperature hence Provide clean, hygienic and plenty amount of drinking water to farm animals. To reduce the stress of heat in farm animals, provide roughages by mixing with solution of 1% gaggery and 0.5% salt separately. To protect animals from heat, sprinkle cold water on animals during the afternoon, it will help to maintain the body temperature.
- Poultry: There is possibility for increases in temperature during day hence protect poultry birds from heat. In poultry shed, increase the water pot and provide adequate and clean water for drinking.



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

23-03-2022/(0530 to 0557) GMT  
23-03-2022/(1100 to 1127) IST

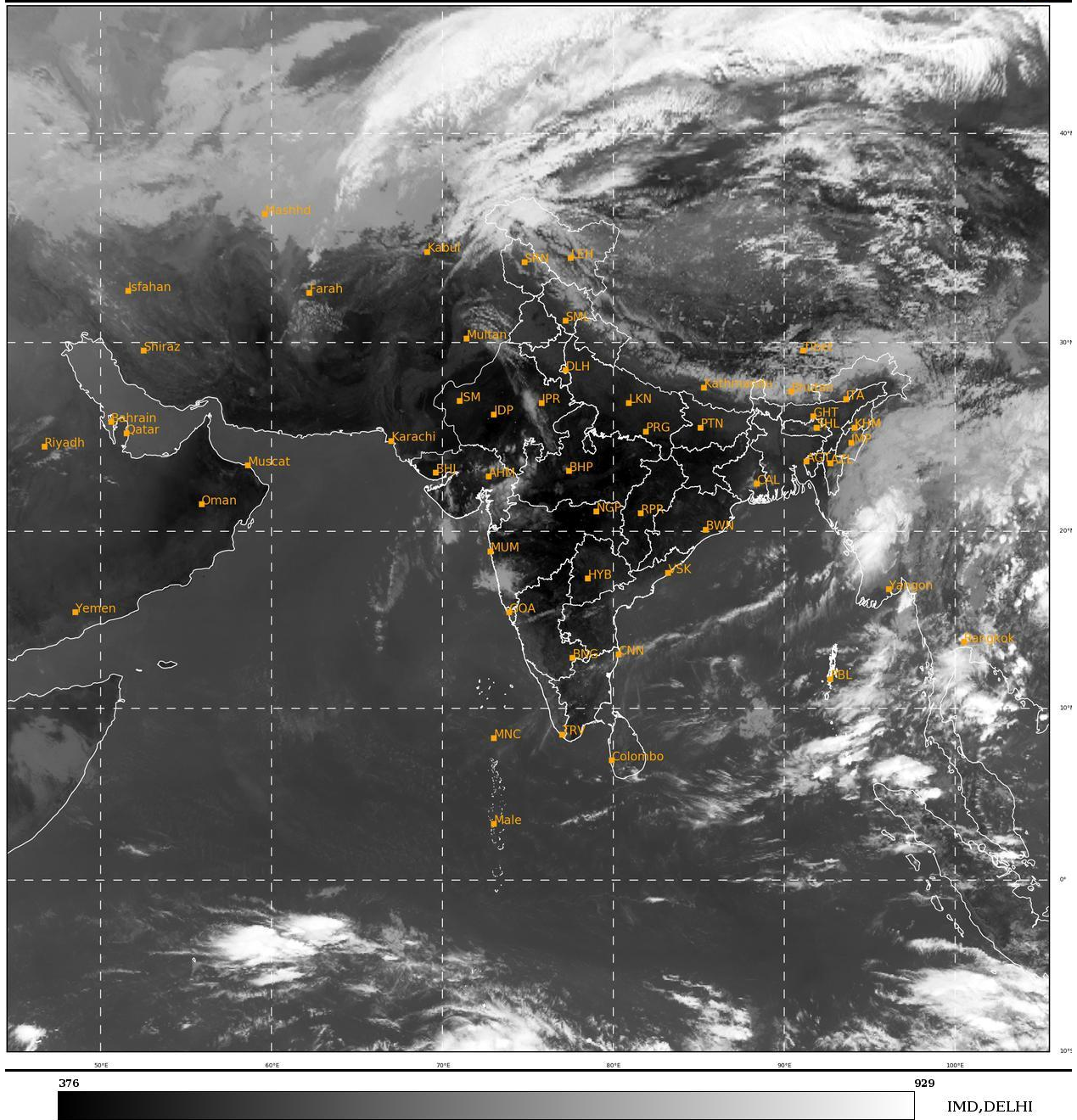
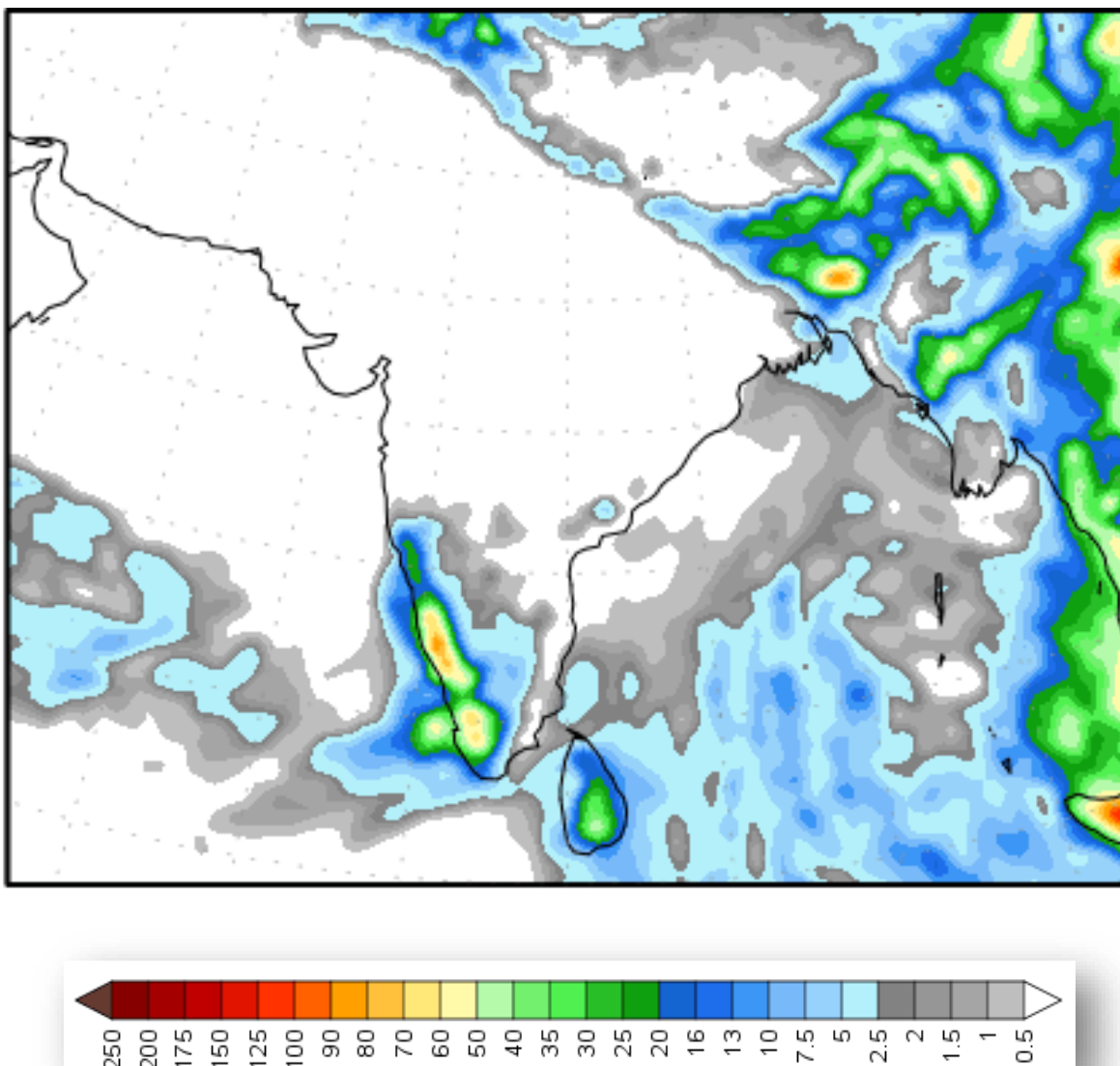


Figure: 1. Latest available satellite picture as on 23 Mar 2022 at 1127 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 23 Mar to 31 Mar 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.*