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

Daily Crop Weather Information as on 02 December 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Cyclonic Storm 'Burevi' over Southwest Bay of Bengal moved westnorthwestwards with a speed of 18 kmph during past six hours and lay centered at 0830 hours IST of today, the 02nd December, 2020 over Southwest Bay of Bengal near Lat. 8.6°N and Long. 83.0°E, about 200 km east of Trincomalee (Sri Lanka), 420 km east-southeast of Pamban (India) and 600 km nearly eastnortheast of Kanniyakumari (India).It is very likely to intensify further during next 12 hours.It is very likely to move west-northwestwards and cross Sri Lanka coast around Latitude 9.0°N, to north of Trincomalee during evening/night of 02nd December as a Cyclonic Storm with a wind speed of 80-90 kmph gusting to 100 kmph. It is very likely to move nearly west-northwestwards thereafter, emerge into Gulf of Mannar & adjoining Comorin area on 03rd December morning. The cyclonic Storm with wind speed 70-80 kmph gusting to 90 kmph would be centred very close to Pamban around noon of 3rd December. It would then move nearly west-southwestwards very close to coast slowly and cross south Tamil Nadu coast between Kanniyakumari and Pamban during 3rd December night and 4th December early morning as a Cyclonic Storm with wind speed of 70-80 kmph gusting to 90 kmph. Thus its impact on south Tamilnadu coastal districts is very likely to commenced from 3rd December forenoon initially over Ramnathpuram district and gradually towards Kanniyakumari district. ♦ Under the influence of the above system:
- Storm surge of about 1.0 m height above astronomical tide is very likely to inundate low lying areas of south coastal Tamil Nadu (Ramanathapuram, Thoothukudi, Tirunelveli and Kanniyakumari districts) during the time of landfall. i) Heavy to very heavy rainfall at a few places with isolated Extremely heavy falls very likely over south Tamil Nadu (Ramanathapuram, Thoothukudi, Tirunelveli, Kanniyakumari, Tenkasi and Sivagangai districts) on 2nd & 3rd December, 2020; over south Kerala (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah) on 3rd December and isolated heavy to very heavy rainfall likely over south Tamil Nadu on 4th December 2020 and south

- Kerala on 2nd & 4th December, 2020. ii) Heavy to very heavy rainfall at isolated places very likely over north Tamil Nadu, Puducherry, Mahe & Karaikal and north Kerala on 3rd December, isolated heavy rainfall on 2nd & 4th December.
- Fishermen are advised not to venture into southwest Bay of Bengal and along & off east Sri Lanka coast from 2nd to 3rd December; Comorin Area, Gulf of Mannar and south Tamil Nadu-Kerala and west Sri Lanka coasts from 2nd to 4th December, over Lakshadweep-Maldives area & adjoining southeast Arabian Sea from 3rd to 5th December. Total suspension of fishing operation during 2nd to 5th December over the areas.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): at a few places over Andaman & Nicobar Islands and Tamil Nadu, Puducherry & Karaikal.
- Moderate to dense fog observed observed (from 1730 hrs IST of yesterday to 0830 hours IST of today): in isolated pockets over Himachal Pradesh, Punjab, Haryana, Uttar Pradesh and Nagaland, Manipur, Mizoram & Tripura.
- Maximum Temperature Departures as on 01-12-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Saurashtra & Kutch, Chhattisgarh and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Himachal Pradesh, Gujarat Region, West Madhya Pradesh, Konkan & Goa, Vidarbha, Kerala & Mahe and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at a few places over Marathwada and Sub-Himalayan West Bengal & Sikkim and at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal, Odisha, Gangetic West Bengal and Arunachal Pradesh. They were below normal (-1.6°C to -3.0°C) at isolated places over Rayalaseema and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, The highest maximum temperature of 35.9°C was reported at Cannur(Kerala & Mahe).
- Minimum Temperature Departures as on 02-12-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan, Saurashtra & Kutch, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands and at isolated places over Himachal Pradesh, Gujarat Region, Konkan & Goa, Madhya Maharashtra and Bihar; above normal (1.6°C to 3.0°C) at

many places over Assam & Meghalaya; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Madhya Pradesh, East Rajasthan, Vidarbha, Marathwada, Lakshadweep, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and at isolated places over Punjab, Uttar Pradesh, East Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1.6°C to -3.0°C) at a few places over North Interior Karnataka and at isolated places over Odisha and near normal over rest parts of the country. The lowest minimum temperature of 6.5°C reported at Sikar(East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 02 December (Day 1): Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Tamil Nadu, Puducherry & Karaikal; heavy to very heavy rainfall at isolated places over Kerala & Mahe. Thunderstorm with lightning likely at isolated places over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Gale Winds (speed reaching 75-85 kmph gusting to 95 kmph) very likely over Southwest Bay of Bengal along & off Sri Lanka coast and (speed reaching 45- 55 kmph gusting to 65 kmph) over Comorin Area, Gulf of Mannar and south Tamil Nadu coast (Kanniyakumari, Tirunelveli, Thoothukudi and Ramanathapuram districts) and south Kerala coast (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah district). It will gradually increase becoming 55-65 kmph gusting to 75 kmph from evening. Sea condition is very rough to high over Southwest Bay of Bengal and along & off east Sri Lanka coast and rough to very rough over Comorin Area, Gulf of Mannar & along & off south Tamil Nadu-Kerala and west Sri Lanka coasts. Fishermen are advised not to venture into these areas.
- 03 December (Day 2): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Tamil Nadu and Kerala & Mahe; heavy to very heavy rainfall at isolated places over Lakshadweep and heavy rainfall at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam and Rayalseema. Thunderstorm with lightning likely at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema, Andaman & Nicobar Islands, Lakshadweep, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Squally Winds (speed reaching 45-55 kmph gusting to 65 kmph) over Lakshadweep-Maldives areas and adjoining Southeast Arabian Sea from 3rd December morning for next 48 hours and (speed reaching 70-80 kmph gusting to 90 kmph) over Comorin Area, Gulf of Mannar, along & off south Tamil Nadu coast

(Kanniyakumari, Tirunelveli, Thoothukudi and Ramanathapuram districts) and south Kerala coast (Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzah district) from 3rd December for subsequent 24 hours and decrease thereafter. Sea condition is very rough to high over Southwest Bay of Bengal and along & off east Sri Lanka coast and rough to high over Comorin Area, Gulf of Mannar & along & off south Tamil Nadu-Kerala coasts and rough to very rough over Lakshadweep-Maldives areas & adjoining Southeast Arabian Sea. Fishermen are advised not to venture into these areas.

- 04 December (Day 3): Heavy to very heavy rainfall at isolated places over Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep and heavy rainfall at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam and Rayalseema. Thunderstorm with lightning likely at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema, Andaman & Nicobar Islands, Lakshadweep, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Dense fog likely at isolated places over Tripura, Mizoram and south Assam & Meghalaya. Squally Weather (speed reaching 40-50 kmph gusting to 60 kmph) likely over Southeast Bay of Bengal and south Andaman Sea. Sea condition is very rough to high over Comorin Area, Gulf of Mannar & along & off south Tamil Nadu-Kerala coasts and rough to very rough over and Lakshadweep-Maldives areas & adjoining Southeast Arabian Sea. Fishermen are advised not to venture into these areas.
- 05 December (Day 4): Heavy rainfall at isolated places over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Thunderstorm with lightning likely at isolated places over Coastal Andhra Pradesh & Yanam, Rayalaseema, Lakshadweep, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Dense fog likely at isolated places over Tripura, Mizoram and south Assam & Meghalaya. Squally Weather (speed reaching 40-50 kmph gusting to 60 kmph) likely over Southeast Bay of Bengal and south Andaman Sea. Sea condition rough to very rough over Lakshadweep-Maldives areas & adjoining Southeast Arabian Sea. Fishermen are advised not to venture into these areas.
- 06 December (Day 5): Thunderstorm with lightning likely at isolated places over Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Dense fog likely at isolated places over Tripura, Mizoram and south Assam & Meghalaya. Squally Weather (speed reaching 40-50 kmph gusting to 60 kmph) likely over Southeast Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 02 December to 10 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)

Assam

Weather condition:

Weather during the week was partially clear. The daily average maximum temperature was 25.5°C which is 1.8 degree below normal and the average daily minimum temperature was 14.1°C which is 0.3 degree below normal for the week. Total BSSH was 32.1 hrs only with an average of 5.4 hrs. The daily average evaporation and wind speed was 1.2 mm and 1.2 km/hr respectively. The daily average RH during morning and afternoon was 98.6% and 63.0% respectively.

Contingency measure:

- Sali rice (Dough stage to maturity):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): 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. Farmers may go for harvesting of pods when 75% of the pods turn darkish in colour brittle on slight pressure.
- Potato (land preparation): Farmers are advised to go for seed treatment before sowing of potato seeds. In case of cut seeds, the pieces are to be dipped in Mancozeb @ 5 g/litre solution for about 10 minutes. After treatment, the seeds are to be spread thinly and dried under shade for 48 hours or should be covered with moist gunny bags for 2-3 days for suberization.
- Rapeseed-mustard (vegetative stage): Need based weeding may be advocated at 15-20 days after sowing to keep the field free from weeds. Farmers are also advised to go for selection of suitable bee colonies for enhancing yield through increased pollination in rapeseed-mustard. As per recommendation 5 honey bee colonies/ha is recommended in rapeseed-mustard.
- Rabi Maize (seedling stage): Under the seedling stage of rabi Maize, cut worm infestation is a major problem. To control the infestation, apply Malathion @ 3.3kg/ bigha as a foliar treatment on seedlings. Since no rainfall was recorded during the past week irrigation may be provided during the grand growth period (35-40 DAS)

of maize in case of short duration crop. However excess irrigation should be avoided as maize cannot withstand water logging.

- Banana (fruit setting stage): 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.

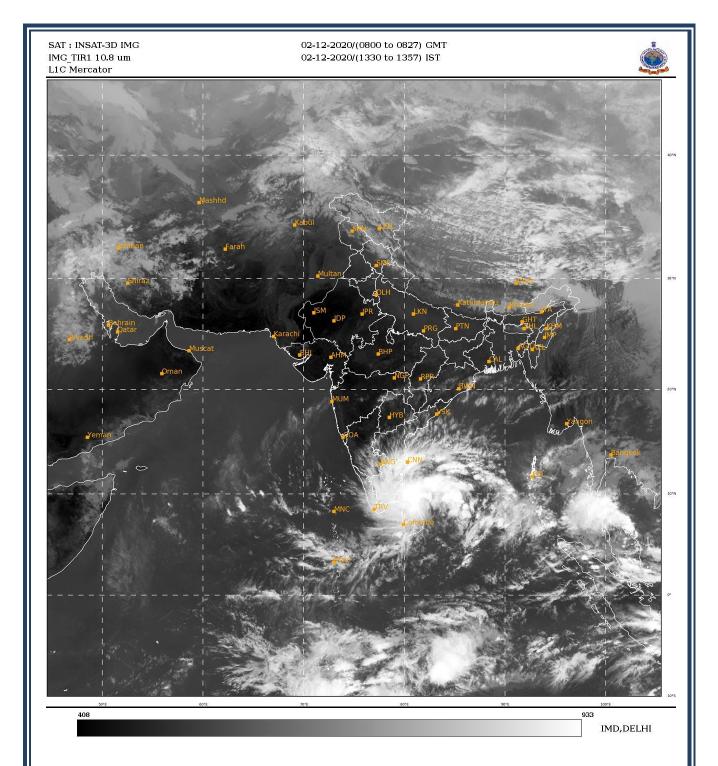


Figure: 1. Latest available satellite picture as on 02 December 2020 at 1357 Hrs (IST). (Source: IMD).

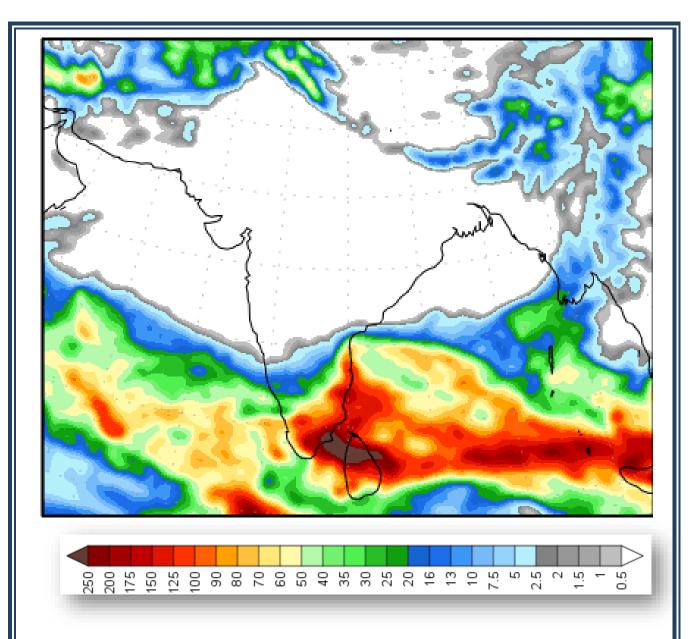


Figure: 2. Precipitation forecast for 02 to 10 December 2020 (Source: NOAA NCEP).

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