

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

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

### **Daily Crop Weather Information as on 25 July 2019**

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

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

- The monsoon trough at mean sea level now passes through Ganganagar, Hissar, Gurugram, Agra, Sultanpur, Patna, Purnea and the south east wards to Northwest Bay of Bengal. It is very likely to deepen gradually from today onwards. In this scenario, the rainfall activity is very likely to increase over central India, adjoining northern parts of peninsular India and also along the northern plains during 2-3 days. Fairly widespread to widespread rainfall with isolated heavy falls are likely over Madhya Pradesh, Chhattisgarh, West Bengal, Odisha, Uttar Pradesh, Haryana, Chandigarh & Delhi, Punjab, Rajasthan, Maharashtra & Goa during this period.
- With the likely southward shift of the monsoon trough and probable formation of a low pressure area over coastal areas of West Bengal around 26th July, the intensity of rainfall over Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim has reduced significantly.
- South Rajasthan and adjoining Northern Parts of Gujarat are likely to receive enhanced rainfall on 28th & 29th July.
- The images showing the latest satellite picture in figure. 1.

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

- Rain/Thunder showers observed (from 0830 hrs IST to 1730 hours IST of yesterday): at most places over Konkan & Goa, Jharkhand and Kerala & Mahe; at many places over East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim and Coastal Karnataka; at few places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Bihar, Gangetic West Bengal, Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra, South Interior Karnataka and Lakshadweep and at isolated places over Himachal Pradesh, Punjab, Rajasthan, West Uttar Pradesh, Gujarat region, Odisha, North Interior Karnataka, Tamil Nadu, Puducherry & Karikal and Andaman & Nicobar Islands.
- Yesterday, Heavy rainfall observed at isolated places over Gangetic West Bengal and Konkan & Goa.

- Thunder storm observed (from 1730 hours IST of yesterday to 0530 hours IST of today):at many places over Gangetic West Bengal; at a few places over Jammu & Kashmir and Odisha and at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh& Delhi, Rajasthan, West Uttar Pradesh, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Jharkhand, Gujarat, Chhattisgarh, Marathawada and Coastal Andhra Pradesh & Yanam.
- Maximum temperature departures as on 24-07-2019: Maximum temperatures were markedly above normal (5.1°C or more) at many places over West Madhya Pradesh and Vidarbha; at a few places over Rajasthan and East Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at most places over Marathwada; at many places over Himachal Pradesh, Uttarakhand, Punjab and Gujarat region; at a few places over Jammu & Kashmir and Telangana; above normal (1.6°C to 3.0°C) at Many places over Coastal Andhra Pradesh & Yanam; at a few places over Gangetic West Bengal and Odisha and at isolated places over Saurashtra & Kutch and Tamil Nadu, Puducherry & Karaikal. They were appreciably below normal (-3.1°C to -5.0°C) at most places over East Uttar Pradesh and at a few places over Arunachal Pradesh and Sub-Himalayan West Bengal & Sikkim; below normal (-1.6°C to -3.0°C) at a few places over Assam& Meghalaya, Bihar and Coastal Karnataka and isolated places over Kerala & Mahe and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 42.3°C was recorded at Ganganagar( West Rajasthan).
- Minimum temperature departures as on 24-07-2019: Minimum temperatures were markedly above normal (5.1°C or more)at isolated places over Rajasthan and West Madhya Pradesh; appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu & Kashmir, Uttarakhand, East Madhya Pradesh, Vidarbha and at isolated places over Gujarat Region; above normal (1.6°C to 3.0°C) at most places over Haryana, Chandigarh & Delhi, Himachal Pradesh and Jharkhand; at many places over Punjab, Telangana, Gangetic West Bengal and Andaman &Nicobar Islands; at a few places over Saurashtra &Kutch, Chhattisgarh and Lakshadweep and at isolated places over Madhya Maharashtra, Odisha, Coastal Andhra Pradesh, Tamil Nadu, Puducherry &Karaikal, Sub-Himalayan West Bengal & Sikkim and West Uttar Pradesh; They were below normal (-1.6°C to -3.0°C) at a few places over East Uttar Pradesh and near normal over rest parts of the country.

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

- 25 July (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh; Heavy to very heavy rainfall at isolated places over Konkan & Goa, West Madhya Pradesh, Himachal Pradesh, Uttarakhand, East Rajasthan and Gangetic West Bengal and heavy rainfall at isolated places over Lakshadweep, Coastal & South Interior Karnataka, Telangana, Madhya Maharashtra, East Madhya Pradesh,

Chhattisgarh, Jammu & Kashmir, East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Odisha, Jharkhand, Bihar, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Thunder storm accompanied with lightning very likely at isolated places over West Bengal & Sikkim, Odisha and Jharkhand. Strong winds, speed reaching 40-50 kmph, are likely to prevail over southwest & west central Arabian Sea. Rough to very Rough sea conditions are very likely to prevail along & off South Tamil Nadu Coast. Fishermen are advised not to venture into these areas.

- 26 July (Day 2): Heavy to very heavy rainfall very likely at isolated places over Konkan & Goa, West Madhya Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, East Rajasthan, Gangetic West Bengal and Odisha and heavy rainfall at isolated places over Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Madhya Maharashtra, East Madhya Pradesh, Chhattisgarh, Uttar Pradesh and Jharkhand. Strong winds, speed reaching 40-50 kmph, are likely to prevail over west central & adjoining southwest Arabian Sea and North Arabian sea. Rough to very Rough sea conditions are very likely to prevail along & off Gujarat Coast. Fishermen are advised not to venture into these areas.
- 27 July (Day 3): Heavy rainfall at a few places with very heavy rainfall at isolated places likely over Konkan & Goa; Heavy to very heavy rainfall at isolated places over Madhya Maharashtra, Madhya Pradesh, Odisha and East Rajasthan and heavy rainfall at isolated places over Coastal Karnataka, Telangana, South Gujarat Region, Vidarbha, Chhattisgarh, East Uttar Pradesh, West Rajasthan, Gangetic West Bengal, Jharkhand and Assam & Meghalaya. Strong winds, speed reaching 40-50 kmph, are likely to prevail over west central & adjoining southwest Arabian Sea and North Arabian sea and North Bay of Bengal. Rough to very Rough sea conditions are very likely to prevail along & off Gujarat, West Bengal-Odisha Coasts. Fishermen are advised not to venture into these areas.
- 28 July (Day 4): Heavy rainfall at a few places with very heavy rainfall at isolated places likely over Konkan & Goa; Heavy to very heavy at isolated places over Madhya Maharashtra, Gujarat State, Rajasthan and Assam & Meghalaya and heavy rainfall at isolated places over Coastal Karnataka, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim. Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura. Strong winds, speed reaching 40-50 kmph, are likely to prevail over west central & adjoining southwest Arabian Sea and North Arabian sea and North Bay of Bengal. Rough to very Rough sea conditions are very likely to prevail along & off Gujarat, West Bengal-Odisha Coasts. Fishermen are advised not to venture into these areas.
- 29 July (Day 5): Heavy rainfall at a few places with very heavy rainfall at isolated places likely over Konkan & Goa and north Gujarat and heavy rainfall at isolated places likely over south Rajasthan, Coastal Karnataka, West Madhya Pradesh,

Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim. Strong winds, speed reaching 40-50 kmph, are likely to prevail over west central & adjoining southwest Arabian Sea and North Arabian sea and North Bay of Bengal. Rough to very Rough sea conditions are very likely to prevail along & off Gujarat, West Bengal-Odisha Coasts. Fishermen are advised not to venture into these areas

The weather outlook for the period of seven days *i.e.*, 25 July to 2 August 2019 forecasted (*Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>*) rain/thunder shower may occur over Sub-Himalayan West Bengal & Sikkim, Bihar, Madhya Pradesh, Odisha, Konkan & Goa, Vidarbha, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka, Coastal & South Interior Karnataka, Kerala, Tamil Nadu & Puducherry, Lakshadweep, Andaman & Nicobar Islands and North Eastern States. (Fig. 2).

## Agricultural activities (AICRPAM-CRIDA)

### Chattisgarh

#### Weather condition:

Very light to moderate rainfall received in isolated places in Chattisgarh state during past few days. The maximum temperature was ranged between 32-38°C and minimum temperature was ranged between 25-28°C

#### Contingency measure:

- Rice: To select healthy seeds for rice crop, seeds should be kept in salt solution of 17%. After the bold seed have settled down, these should be taken out of water. The seeds should be washed with clean water, dried in shade and should be sown after seed treatment. Seed treatment of rice seeds can be done by Azotobacter 5 gm. PSB 5 gm. and Carbendazim (Bavistn) @ 1.5 gram per Kg, of seed. 3-4 weeks aged rice nursery should be transplanted after treatment with Carbofuran G. treatment @ 20 Kg./ acre of nursery and this application should be done 3-4 days before nursery uprooting. After that nursery uprooting should be done and transplanting should be completed. The germination efficiency can be increased even in the rainless situation by line sowing method. For control of narrow leaved and broad leaved weeds in rice crop under transplanted condition, Butachlor 3 litres + 500 litres of water should be sprayed within 7 days of transplanting. In line sowing direct seeded rice, Pre-emergence herbicide like Pendimethalin should be sprayed @ 3 litres per ha. mixed in 500 litres of water. Proper bunding should be done of the rice fields. In rainless situation, seed rate should be increased by 25 percent. In the upland areas where rainfall has been less, rice crop early varieties like Tulsi, Aditya, Kalinga-3, Samleshwari, Vanprabha, Indira R-1 (Rajeshwari), Indira Barani Dhan-1 should be

selected and sown in lines. The seeds of these varieties are available in Krishi Vigyan Kendras and research centre of IGKV. The areas where sowing has not been possible due to rainless situation, farmers are advised to go for sowing of moong (variety Pusa Vishal and HUM-1) and Urad crop (TU 94-2, TAU-2, KU 96-3, Indira Urad-1) etc., Apply nitrogenous fertilizer 7 days after transplanting. Farmers are advised for transplanting of rice crop wherever irrigation facilities are available.

- Fruits & Vegetables: Looking to the present weather condition farmers are advised for planting of vegetable crops. Prepare seedlings for kharif vegetables. Seeds of pumpkin, bitter gourd and bottle guard should be sown by vegetable growers in the fields. Weed management should be done in Brinjal, Tomato, Lady finger and cauliflower.
- Animal husbandry: If cattle are not fed with wormicide medicine then cattle should be given (Panacur /albomore Nilzan/zenil @ 3 grams bolls and small cattle either should be fed 1.5 gram on empty stomach. New born calves should be given Piprazine salt/Helmicide medicine @ 30ml/ months up to 3 months. Dairy animal should not be allowed to suffer from rain drenching. Cattle shed should be kept dry as far as possible to prevent from foot rot disease. 4. In case of gastric problem, cattle and buffaloes should be given Blotocil/ Blotinofen @100 ml. For control of flies, cattle sheds floors should be cleared with phenyl water.

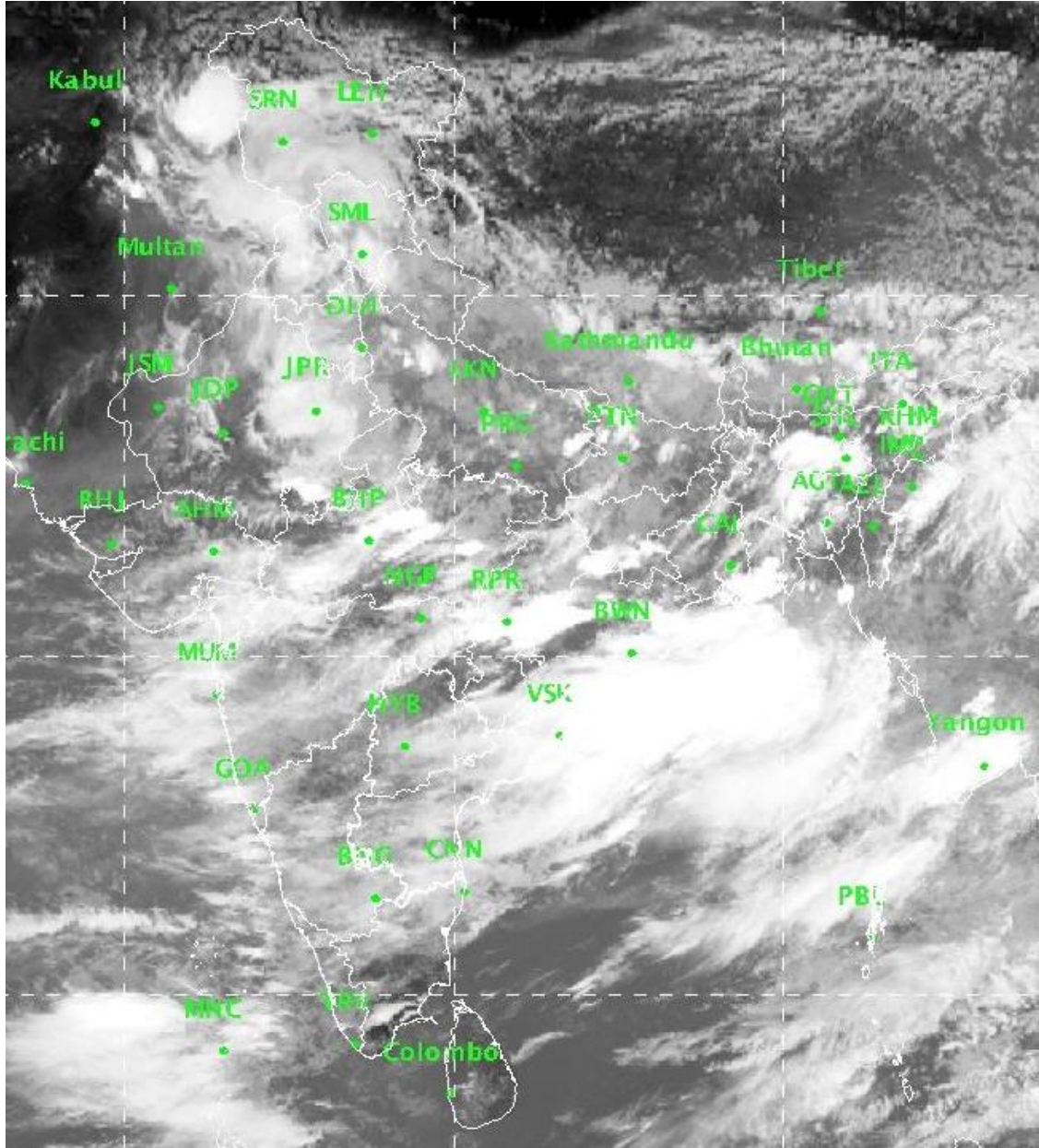


Figure: 1. Latest available satellite picture as on 25 July 2019 at 13:00 Hrs (IST).

(Source: IMD).

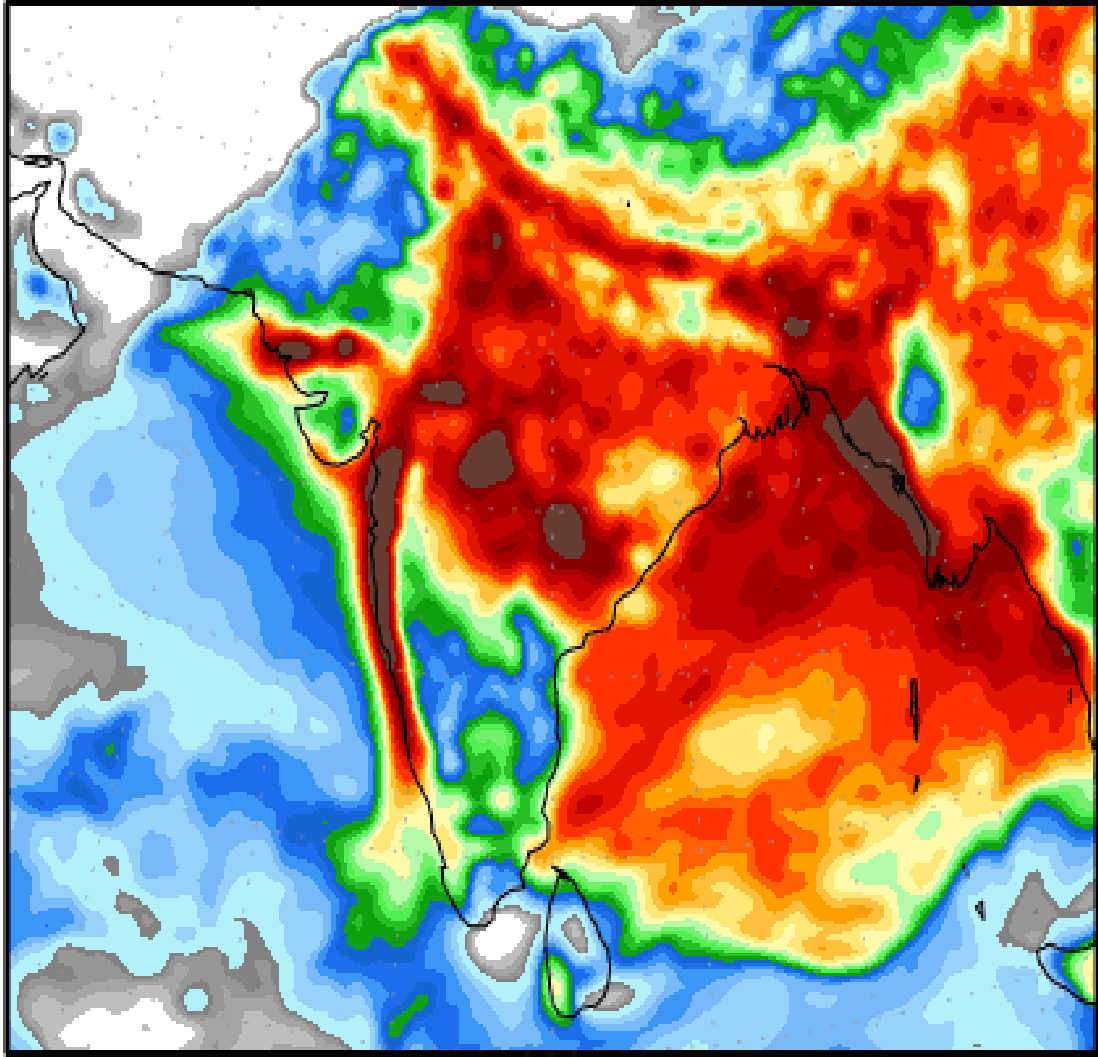


Figure: 2. Precipitation forecast for 25 July to 2 August 2019 (Source: NOAA NCEP).