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

Daily Crop Weather Information as on 29 September 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Well Marked Low Pressure Area lies over north Madhya Maharashtra and adjoining Gujarat region & southwest Madhya Pradesh and the associated cyclonic circulation extends upto mid-tropospheric levels. It is likely to move west-northwestwards and likely to emerge into northeast Arabian Sea & adjoining Gujarat coast around 30th September and there is likelihood for the system to further intensity into a Depression over northeast Arabian Sea during subsequent 24 hours.
- The Well Marked Low Pressure Area lies over central parts of Gangetic West Bengal and the associated cyclonic circulation extends upto mid-tropospheric levels.
- The east-west trough continues to run from north Konkan to north Coastal Andhra Pradesh across the embedded cyclonic circulation associated with Well Marked Low Pressure Area area over north Madhya Maharashtra and adjoining Gujarat region & southwest Madhya Pradesh between 1.5 km & 5.8 km above mean sea level. Under the influence of the above systems:
 - i) 29th Sept.: Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Gujarat state Heavy to very heavy rainfall at isolated places over Gangetic West Bengal, Odisha, Jharkhand, north Madhya Maharashtra & north Konkan; Heavy rainfall at isolated places over Marathwada.
 - ii) 30th Sept.: Heavy to very heavy rainfall very likely at isolated places over Saurashtra & Kutch; Heavy rainfall at isolated places over Odisha, Gangetic West Bengal and Gujarat Region.
 - iii) Squally weather (wind speed 45-55 kmph to gusting 65 kmph) very likely over Northeast Arabian Sea along & off Gujarat coast next 4-5 days and along & off north Maharashtra coasts during next 3 days. Fishermen are advised not to venture into these areas.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (0830 hrs IST to 1730 hrs IST of Yesterday) at most places over West Bengal & Sikkim, Marathwada, Konkan & Goa, Coastal Karnataka and Kerala & Mahe; at many places over Himachal Pradesh, Vidarbha and Lakshadweep; at a few places over Bihar and Odisha; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Uttarakhand, Rajasthan, Gujarat State, Uttar Pradesh, Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Madhya Pradesh, Andaman & Nicobar Islands, Interior Karnataka and Tamilnadu, Puducherry & Karaikal.
- Heavy Rainfall recorded (0830 hrs IST to 1730 hrs IST of Yesterday): Heavy Rainfall at isolated places over Konkan & Goa and Madhya Maharashtra.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Himachal Pradesh, Odisha, West Rajasthan, Gujarat State, East Uttar Pradesh, East Madhya Pradesh, Jharkhand, Uttrakhand, Punjab, Bihar, Marathwada, Chhattisgarh, West Bengal & Sikkim, Assam & Meghalaya, Tripura, Rayalaseema and Coastal Andhra Pradesh.
- Minimum Temperature Departures as on 28-09-2021: Minimum temperatures were markedly above normal (5.0°C or more) at most places over Punjab; at many places over Himachal Pradesh and at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, d; appreciably above normal (3.1°C to 5.0°C) at most places over Uttarakhand; at many places over Haryana, Chandigarh & Delhi; at a few places over Madhya Pradesh and at isolated places over Rajasthan and West Uttar Pradesh; above normal (1.6°C to 3.0°C) at most places over East Uttar Pradesh at a few places over Coastal Andhra Pradesh & Yanam; at isolated places over Tamil Nadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at most places over East Uttar Pradesh; at a many places over Sub-Himalayan West Bengal & Sikkim, Jharkhand; at a few places over Bihar and South Interior Karnataka and at isolated places over Odisha, Tamil Nadu, Puducherry & Karaikal and Vidarbha and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 19.0°C was reported at Bulsar (Gujarat Region) over the plains of the country.
- Maximum Temperature Departures as on 28-09-2021: Maximum temperatures were markedly above normal (5.0°C or more) at isolated places over Arunachal Pradesh and Assam & Meghalaya; appreciably above normal (3.1°C to 5.0°C) at a few places over Uttrakhand and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; above normal (1.6°C to 3.0°C) at many places over Sub-Himalayan west Bengal & Sikkim and Tamil Nadu, Puducherry &

Karaikal; at a few places over West Uttar Pradesh and at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi and East Madhya Pradesh. They were markedly below normal (-5.1 or less) at many places over Vidarbha, Marathwada and Madhya Maharashtra; appreciably below normal (-3.1°C to -5.0°C) at a few places over Gangetic West Bengal and North interior Karnataka; at isolated places over West Madhya Pradesh, Gujarat State, Telangana, Coastal Andhra Pradesh & Yanam and Kerala & Mahe and below normal (-1.6°C to -3.0°C) at many places over Rajasthan; at a few places over Odisha and at isolated places over Andaman & Nicobar islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.4°C reported at Barmer (West Rajasthan).

Weather Warning during the next 5 days (IMD)

- 29 September (Day 1): Heavy to very heavy rainfall with extremely heavy falls very likely at isolated places over Gujarat state; Heavy to very heavy rainfall likely at isolated places over Jharkhand, Gangetic West Bengal, Odisha, Madhya Maharashtra and Konkan & Goa; Heavy rainfall at isolated places over Uttarakhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathwada. Thunderstorm accompanied with lightning very likely at isolated places over Uttarkhand, Uttar Pradesh, East Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Squally wind (speed reaching 45-55 kmph gusting to 65 kmph) very likely over North Bay of Bengal and along & off West BengalOdisha coasts; (speed reaching 40-50 kmph gusting to 60 kmph) over Northeast Arabian Sea along & off Gujarat-Maharashtra-Goa coasts; Southeast Bay of Bengal and Andaman Sea. Fishermen are advised not to venture into these areas.
- 30 September (Day 2): Heavy to very heavy rainfall very likely at isolated places over Saurashtra & Kutch and Heavy rainfall at isolated places over Uttarakhand, Gangetic West Bengal, Jharkhand, Odisha, Gujarat Region and Tamilnadu, Puducherry and Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Uttarkhand, East Uttar Pradesh, East Rajasthan, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 45-55 kmph to gusting 65 kmph) likely over Northeast Arabian Sea along & off Gujarat and adjoining north Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 01 October (Day 3): Heavy rainfall likely at isolated places over Uttarakhand, Bihar, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra

- & Kutch, Kerala & Mahe and Tamilnadu, Puducherry and Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Uttarkhand, East Uttar Pradesh, East Rajasthan, Bihar, SubHimalayan West Bengal & Sikkim and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 45-55 kmph to gusting 65 kmph) likely over Northeast Arabian Sea along & off Gujarat and adjoining north Maharashtra coasts. Fishermen are advised not to venture into these areas.
- 02 October (Day 4): Heavy to Very Heavy Rainfall likely at isolated places over Tamilnadu, Puducherry & Karaikal and Heavy Rainfall at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, East Uttar Pradesh, East Rajasthan, Bihar, SubHimalayan West Bengal & Sikkim and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) likely over Northeast Arabian Sea along & off Gujarat coast. Fishermen are advised not to venture into these areas.
- 03 October (Day 5): Heavy Rainfall likely at isolated places over West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Bihar, Jharkhand, Gangetic West Bengal, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Squally weather (wind speed 40-50 kmph to gusting 60 kmph) likely over Northeast Arabian Sea along & off Gujarat coast. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 29 Sep to 07 Oct 2021 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)

Chattisgarh

Weather condition:

A total of 16.2 mm of rainfall was recorded during the week as against the normal of 31.9 mm at Agromet observatory of IGKV, Raipur. District wise average rainfall as on 23 September, 2021 received from IMD is as follows Balod 889.5 (985.3, -10% Normal), Baloda Bazar 924.7 (920.9, 0% Normal), Balrampur 1032.2 (1132.5, -9% Normal), Bastar 1042.8 (1139.3, -8% Normal), Bemetara 1123.6 (978.9, +15% Normal), Bijapur 1160.7 (1293.0, -10% Normal), Bilaspur 1196.6 (1069.2, +12% Normal), Dantewada 1109.8

(1257.4, -12% Normal), Dhamtari 914.4 (1011.1, -10% Normal), Durg 971.8 (959.5, +1 % Normal), Gariyaband 1027.3 (1053.4, -2% Normal), Janjgir 1120.3 (1143.4, -2% Normal), Jashpur 1071.1(1357.2, -21% Deficit), Kabirdham 937.3 (831.0, +13% Normal), Kanker 987.7 (1259.6,-22% Deficit), Kondagaon 1041.7 (1142.9, -9% Normal), Korba 1348.0 (1285.1, +5% Normal), Koriya 1029.1 (1103.1, -7% Normal), Mahasamund 896.6 (1027.8, -13% Normal), Mungeli 1043.0 (942.3, +11% Normal), Narayanpur 1215.2 (1177.2, +3% Normal), Raigarh 919.9 (1166.3, -21% Deficit), Raipur 859.1 (1017.9, -16% Normal), Rajnandgaon 958.1 (953.0, +1% Normal), Sukma 1499.4 (1087.9, +38% Excess), Surajpur 1252.7 (1091.7, +15% Normal), Surguja 908.6 (1192.2, -24% Deficit), Chhattisgarh State 1067.4 (1112.8, -4% Normal) *Figures outside the parenthesis indicates average districtwise rainfall revived during current year as on reporting date and figures within the parenthesis indicates normal rainfall, its percentage and rainfall situation in respective districts.

Contingency measure:

 Rice: Flowering stage Short duration rice is in flowering stage. If 50% of flowering may occur then farmers are advised for application of third dose of nitrogenous fertilizer. Farmers are advised to go for 25% potash top dressing to increase rice grain quantity and quality. Insect pest (yellow stem borer) If the adult insects of yellow stem borer are there in the rice crop, then egg groups of YSB should be destroyed. Dead hearts (dried leaves) should be taken out of plants. Insecticide spray phipronil 5% S.C@ 1 liter per ha. should be made Hoppers insects In some pockets, hoppers insects are being observed. Crops should be properly monitored and if insects are being observed more than @ 10-15 per plant then Buprofenzic @ 800 ml should be sprayed. In case insects keep multiplying after 15 days then Dinetofuron @ 200 gram/ hectare mixed in 500 litre water should be sprayed preferably in evening time in the lower parts of plant. Avoid the use of Synthetic pyrethroids i.e. Cypermethrin and Deltamethrin as it causes resurgence. Panicle mite In some pockets, panicle mite is being observed. It is being observed as per dissolved grains or chaffy grain and brownish patches can be observed on stem. For its control Propiconazole 2ml + Profenophos @ 2ml per litre can be sprayed per hectare mixed in 500 litres of water. Blast In the rice crop at the initial stages, light violet color spots and lesions are being observed and these increase in their size and look like eye/ boat type structures. They are wide in centre and are narrow in the corners. These spots are light brown coloured in the centre. Tabuconzole 750 ml. per ha. 500 litter water/ha. should be applied. Bacterial Leaf Blight (BLB) Water-soaked to yellowish stripes on leaf blades or starting at leaf tips with a wavy margin leaves with undulated yellowish white or golden yellow marginal necrosis, drying of leaves back from tip and curling, leaving mid rib intact are the major symptoms of this disease. In rice fields disease can be controlled by draining off water from rice fields. After 3-4 days, 25 Kg. Potash per hectare can be broadcast for control. Streptomycin sulphate + Tetracycline combination 300 g + Copper oxychloride 1.25kg/ha. should be dissolved in 500 liter of water for spray. If needed, this spray can be repeated after 12-15 days. Sheath Blight Symptoms of sheath blight in rice crop are dusty spots on rice stems and spots surrounded by violet colored patches. Farmers should spray Hexaconazole fungicide @ 1ml/ litre of water on the affected parts. If necessary, spray should be repeated after 12-15 days.

- Pulses and oilseed crop: Flowering to pod stage Continuous monitoring of the economically harmful insects in black gram and green gram crops should be done. First picking of matured pod should be done in black gram and green gram.
- Soybean: Leaf caterpillar and girdle beetles If leaf caterpillar and girdle beetle is observed in soybean crop, apply Profenophos 50 EC @ 1.25 lit/ha or Flubendiamide 39.35% SC 150 ml per ha. 500 liter water per ha. should be spray
- Vegetables: Winter vegetables like cauliflower, cabbage and kholkhol early varieties should be selected and nursery sowing can be done. Preparation for nursery sowing of tomato, brinjal, chillies and capsicum can be done.
- Fruits/ Flowers: Farmers should go for earthing up in the banana plantations. In Aonla Inderbela attack is generally observed in the month of September-October. For its control, Gud slurry solution and some insecticide @ 1 gram should be kept in small pitcher and kept hanging on the branches. It is right time for plantations of Chrysanthemum and Gladiolus plantations flowers plants, weed control management operation should be taken up in Rajnigandha.
- Animal husbandry: In September months goats & sheep should be given Entoroctosimia Vaccine. This vaccine should also be given to lambs aged 6-10 weeks against this disease. Weed management and cleaniliness of weeds around cattle sheds, poultry sheds and ponds should be done so that flies, mosquitoes breeding is not there. Smoking should be done by cowdung cakes in cattle sheds. If milch animals are taken to open pastures for grazing then their parts should be treated with Himex ointment so that flies don't sit there. For protection from damping, poultry beds should be mixed with 2-3 kg.lime/ 100 sq.ft.

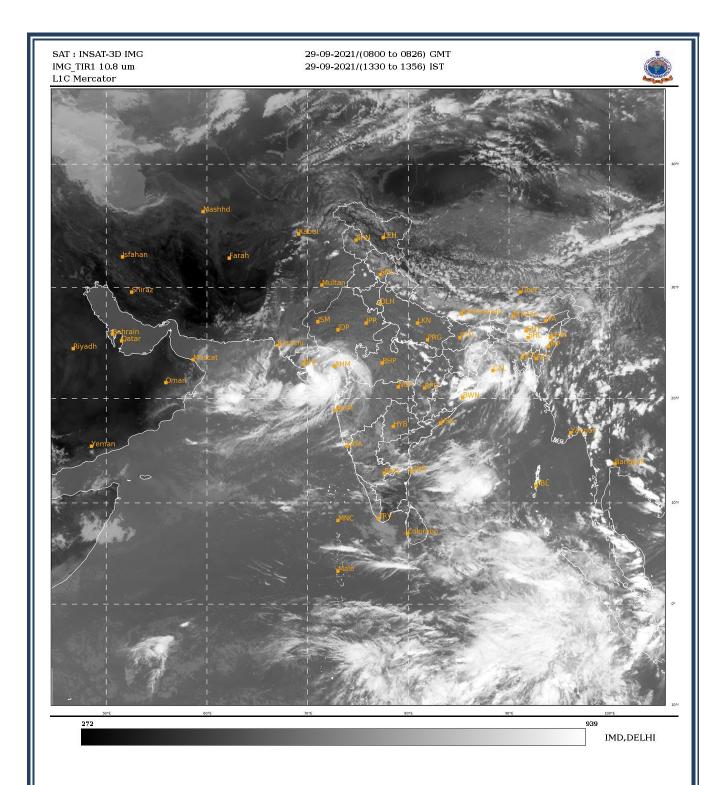


Figure: 1. Latest available satellite picture as on 29 Sep 2021 at 1356 Hrs (IST). (Source: IMD).

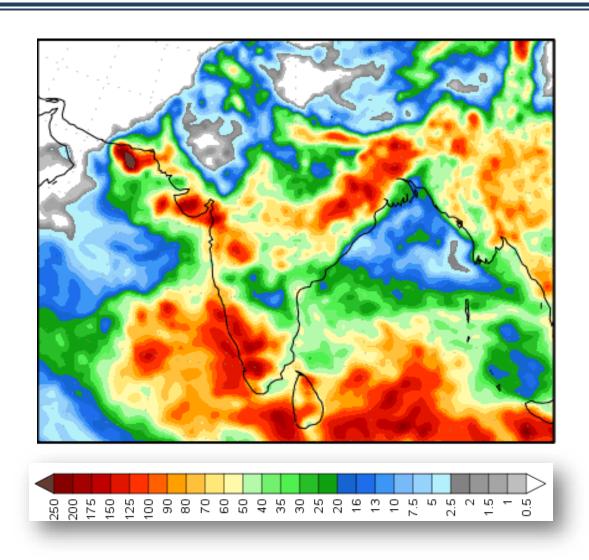


Figure: 2. Precipitation forecast for 29Sep to 07 Oct 2021 (Source: NOAA NCEP).

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