



National Agromet Advisory Service Bulletin
Based on
Extended Range Weather Forecast (ERFS)

Validity: (10th January to 23rd January 2020)

Date of issue: 10th January 2020

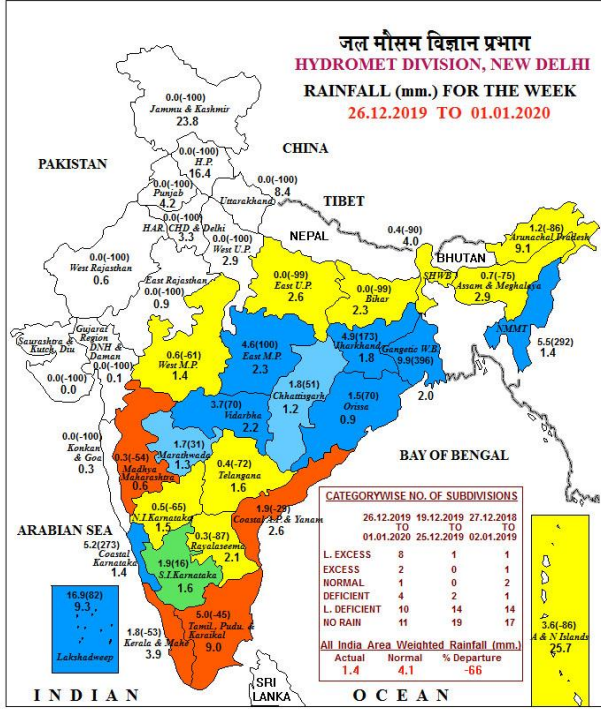
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Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.
&
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

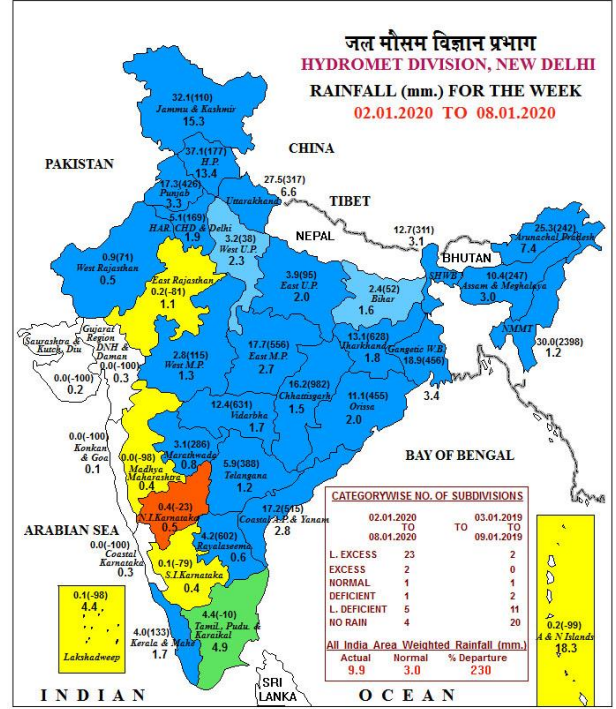
Realized Rainfall

(26th December 2019 to 8th January, 2020)

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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- Above normal rainfall occurred in both the weeks in Nagaland, Manipur, Mizoram & Tripura (NMMT), Jharkhand, Gangetic West Bengal, Odisha, East Madhya Pradesh, Chhattisgarh, Marathwada and Vidarbha,
- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, West Madhya Pradesh, Telangana, Andhra Pradesh, Coastal Karnataka, South Interior Karnataka, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- Below normal rainfall/no rain occurred over rest of the country.

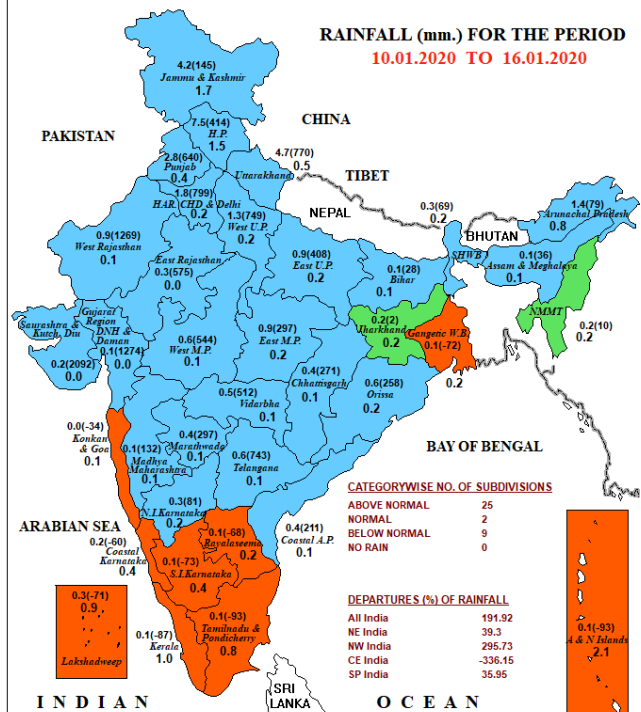
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 08 January)

(10th to 23rd Jan. 2020)

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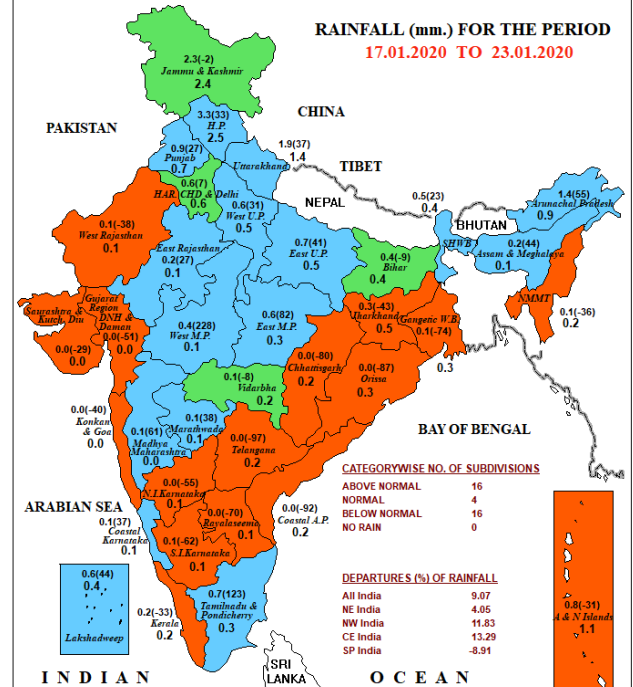
Rainfall Forecast Map - Normal RF Based Categories



NOTES:
 [a] Rainfall figures are based on MME Forecast data.
 [b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.

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Rainfall Forecast Map - Normal RF Based Categories

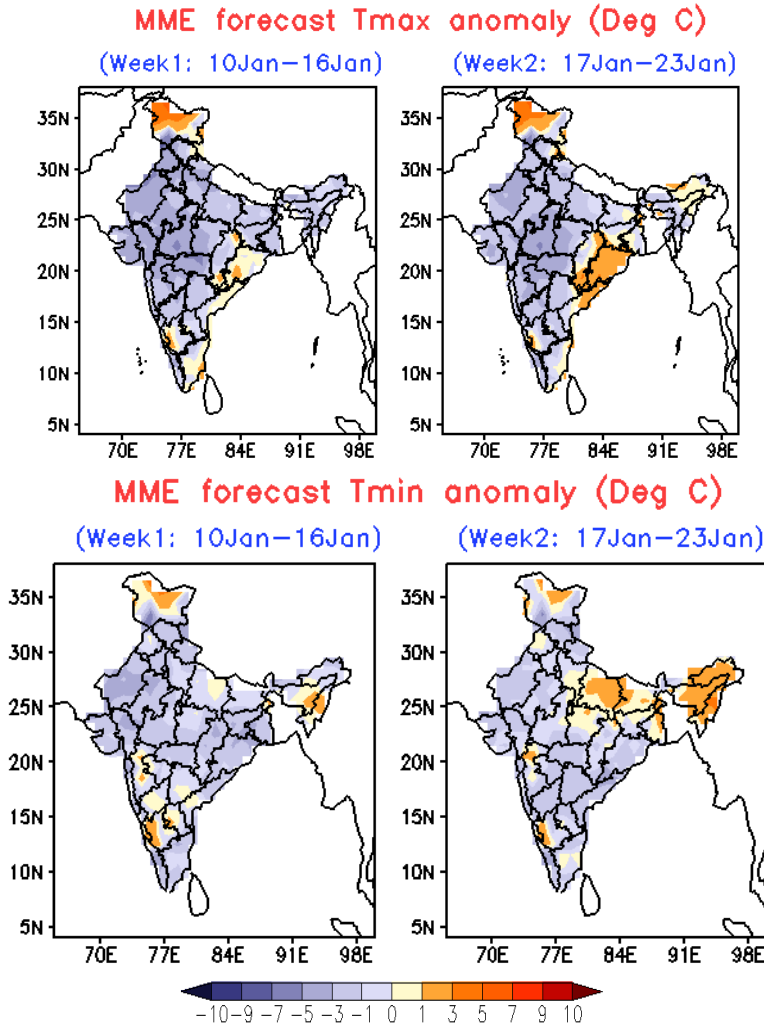


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN [-100%] □ NO DATA

NOTES:
 [a] Rainfall figures are based on MME Forecast data.
 [b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.

- **Week 1 (10.01.2020 to 16.01.2020):** North Indian states and parts of northwest India will get rainfall under the influence of Western Disturbance.
- **Week 2 (17.01.2020 to 23.01.2020):** Mainly normal weather condition with slight rainfall over parts of Indo-Gangetic regions and some parts of southern India.

**Maximum and Minimum temperature anomaly (°C) forecast
for next 2 weeks (IC – 08 January)
(10th to 23rd Jan. 2020)**



Maximum Temperature (Tmax)

- **Week 1 (10.01.2020 to 16.01.2020) and Week 2 (17.01.2020 to 23.01.2020):** Tmax anomaly is mostly negative over most parts of India except extreme north India and some parts of eastern coastal regions.

Minimum Temperature (Tmin)

- **Week 1 (10.01.2020 to 16.01.2020):** Below normal Tmin likely over most parts of India during the week. Over some parts of south peninsula and Northeast India Tmin will be above normal.
- **Week 2 (17.01.2020 to 23.01.2020):** Below normal Tmin likely over most of northern, northwestern India and western India.

Strategic Agricultural Planning based on rainfall during next two weeks till 23rd January 2020

Agromet Advisories

Kerala

Amount of rainfall received over Kerala is 629.0 mm (27% excess) during the period of 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) is below normal for week-1 and for week-2.

- There is a chance of fusarium wilt in cowpea. Drench the soil rhizosphere with 2 g of Bavistin or 2 ml of Contaf /litre of water alternatively within 15 days interval.
- Mulching is advised for conserving moisture and reducing soil temperature in coconut gardens. Mulch the coconut basins with dry/green leaves at the end of Northeast monsoon.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 459.0 mm (1% normal) during the period of 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) is below normal for week-1 and above normal for week-2.

- Prevailing weather condition is favorable for tobacco caterpillar in sunflower. It is advised to spray any one of the insecticides Dichlorvos 76 EC 500 ml/ha or Phosalone 35 EC 1000 ml/ha.
- Prevailing weather conditions are favorable for leaf hopper and aphid incidence in cotton. Spray Dimethoate 30 EC 500ml/ha for the control of leaf hopper and Methyl demeton 25 EC 500ml/ha for the control of aphid.
- Farmers are advised to monitor fall army worm incidence in maize. If symptoms are noticed, spray any one of the following insecticide to control. (Azardirachtin 1 EC @ 2 ml/litre (or) Thiodicarb 75 WP @ 2 g/l (or) Emamectin benzoate 5 SG @ 0.4 g/litre (or) Spinetoram 12 SP @ 0.5 ml/litre).

Maharashtra

Rainfall received over Madhya Maharashtra is 228.6 mm (120% large excess), over Marathwada is 260.4 mm (157% large excess), Vidharbha is 86.4 mm (3% normal) and Konkan region 281.5 mm (101% large excess) during 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) over Madhya Maharashtra, Marathwada and Vidharbha are above normal and is below normal in Konkan for week-1 and over Madhya Maharashtra, Marathwada are above normal and Vidharbha is normal and Konkan below normal for week-2.

Madhya Maharashtra

- Spray of 1% KNO₃ is advised during flowering stages of chickpea crop.
- Weather is congenial to aphid infestation in safflower crop. For control, spray Dimethoate 20 EC @ 15 ml/10 litre of water.

Konkan

- Due to forecast for increase in temperature, there is possibility of incidence of sucking pest in snake gourd. Spray of Dimethoate 30%EC @ 10 ml per 10 liter of water also place yellow sticky cards in field is advised.
- Weather is congenial for the incidence of aphids in lablab. To control, spray Dimethoate 30% EC @ 12 ml per 10 litre of water.

Vidharbha

- Low temperature regime is congenial for incidence of sap sucking aphids in irrigated / late sown safflower crop. It is advised to spray Dimethoate 30% EC @ 10 ml/10 litres of water on a clear day.
- For control of initial infestation of pod borer (*Helicoverpa*) in pigeonpea, spray of 5% neem seed kernel extract is advised. Above ETL levels spray of Emamectin benzoate 5% SG @ 3 g in 10 liters of water.

Rajasthan

Rainfall received during 01 Oct. 2019 - 09 Jan. 2020 over East Rajasthan is 38.0 mm (40% excess). The extended range weather forecast for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) over East Rajasthan is above normal for week-1 and for week-2.

- In present weather condition constant monitoring of aphid is advised in mustard crop. If insect population above ETL then spraying of Rogar or Quinalphos @ 2.0 ml/ litre water is recommended.
- For monitoring of the pod borer in the gram crop, installation of Pheromone trap @ 3-4 traps/acre is advised. "T" shaped bird perches in and around crop field to be installed for controlling insect population.
- Spraying of 2 % urea is advised for proper growth of pods in the pea crop.

Jammu

Rainfall received during 01 Oct. 2019 - 09 Jan. 2020 in Jammu is 281.8 mm (85% large excess). The extended range weather forecast for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) is above normal for week-1 and normal for week-2.

- Due to congenial weather for collar rot and root rot in gram, rogue out affected plants and drench the affected patches of the field with Thiram or Captan @ 2 g/litre of water.
- Due to presence of sufficient moisture in soil, farmers are advised to apply nitrogenous fertilizer as top dress in gobi sarson as well as in mustard crop.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 170.6 mm (56% excess) during 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast provided for next two weeks (10 - 16 Jan. and 17 - 23

Jan. 2020) on rainfall over Himachal Pradesh is above normal for week-1 and for week-2.

- It is advised to cover horticulture saplings with grass to avoid frost injury.
- Farmers are advised to make proper arrangement to collect and store the rain water in their fields for the future use.
- Dingri mushroom can be sown in closed room, with temperature at 25-28°C and relative humidity of 80-85 % for good crop.

Hisar

Amount of rainfall received over Hisar is 37.4 mm (55% excess) during 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast provided for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) on rainfall over Hisar is above normal for week-1 and normal for week-2.

- Farmers are advised to keep vigilance insect/pests in sugarcane crop. Apply need based irrigation to the crop.
- Apply requirement based irrigation and recommended doses of fertilizers in existing vegetable crops and monitor for insect-pests and diseases. Go for effective weed management measures.
- Due to fall in night temperature and cloudy weather, keep the animals under shed. Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep them healthy.

Jharkhand

Amount of rainfall received over Jharkhand is 161.0 mm (74% large excess) during 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast provided for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) on rainfall over Jharkhand is normal for week-1 and below normal for week-2.

- Due to cold weather condition, it is advised to frequently irrigate the potato crop field to minimize the effect of frost.
- There is chances of powdery mildew disease in table pea crop. Hence, spray Karathen @ 1 ml/litre of water or Sulfex @ 3 g/litre of water to control the disease.

Gujarat

Amount of rainfall received over Gujarat is 83.8 mm (178% large excess) during 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast provided for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) on rainfall over Gujarat is above normal for week-1 and below normal for week-2.

- It is advised to spray Acetamiprid 5 g/10 litre water to control thrips and aphids of cumin. And stop excess irrigation to prevent further infection in standing crop.
- For control of thrips in garlic, spray of Neem seed extract 5% and make alternative sprays of Profenofos 20 ml and lambda-cyhalothrin 14 ml in 10 litre water at 10 days interval is advised.
- For the management of mango hopper, spray Deltamethrin 2.8 EC, 3 ml or Cypermethrin 25 EC, 2 ml in 10 litre water, in case of severe incidence spray Imidacloprid 17.8 SL, 3ml or Fenobucarb 50 EC, 20 ml or Buprofezin 25EC, 10ml in 10 litre water.

Karnataka

Rainfall received during 01 Oct. 2019 - 09 Jan. 2020 over South Interior Karnataka is 307.8 mm (50% excess) and North Interior Karnataka is 245.5 mm (77% large excess). The extended range weather forecast for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) over South Interior Karnataka is below normal for week-1 and week-2 and for North Interior Karnataka above normal for week-1 and below normal for week-2.

South Interior Karnataka

- It is the right time for harvesting, and storage of ragi crop.
- It is advised to align the long axis of poultry shed in east-west direction. This will prevent the direct sunshine over the birds.
- Manage the humidity in the silk worm rearing house by providing good cross-ventilation. Dust dry slaked lime powder when silkworms settle for moult.

Odisha

Amount of rainfall received over Odisha is 200.5 mm (49% excess) during 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast provided for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) on rainfall over Odisha is above normal for week-1 and below normal for week-2.

- Due to rain, the color of cauliflower heads may be discolored. To avoid rotting, spray 1.5 g Streptocycline in 10 litre water.
- Due to cloudy sky and light rainfall there is a chances of aphid in mustard crop. To control, spraying of Dimethoate 20 ml/10 litre or Imidachlopid 3.5 ml/10 litre of water is advised.

Uttar Pradesh

Uttar Pradesh Rainfall received during 01 Oct. 2019 - 09 Jan. 2020 over East Uttar Pradesh is 54.4 mm (8% normal) and West Uttar Pradesh is 62.3 mm (73% large excess). The extended range weather forecast for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) over East Uttar Pradesh is above normal for week-1 and week-2.

- Because of prevailing cloudy and humid weather, farmers are advised to skip irrigation for rabi crops.
- Farmers are advised to follow a regular vaccination programme for cattle, buffalo, goat, sheep and poultry to prevent the infectious diseases.

Bihar

Amount of rainfall received over Bihar is 47.6 mm (-37% deficit) during 01 Oct. 2019 - 09 Jan. 2020. The extended range weather forecast provided for next two weeks (10 - 16 Jan. and 17 - 23 Jan. 2020) on rainfall over Bihar is above normal for week-1 and normal for week-2.

- Monitoring is advised for infestation of fruit borers in brinjal, tomato, chilli. If infestation occurs, installation of pheromone traps @ 3-4 traps per acre is advised.

- Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spray Cartap hydrochloride @ 1.5ml/litre of water.
- Farmers are advised to give 50 gram salt and 50-100 g mineral mixture supplicated with feeds prepared from grains, and green & dry hay.

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