



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

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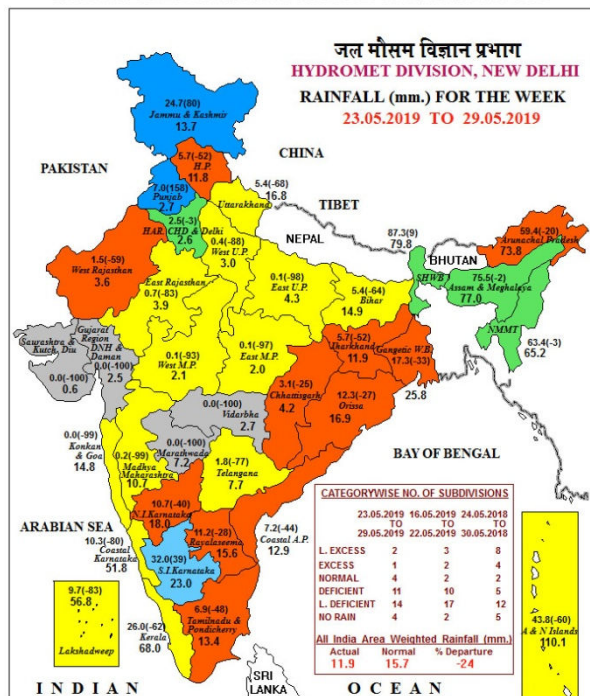
Issued by
Indian Council of Agricultural Research (ICAR)
All India Coordinated Research Project on Agricultural Meteorology (AICRPAM),
Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.
&
Earth System Science Organization
India Meteorological Department

(Rainfall and Temperatures)

Realized Rainfall

(23rd May to 5th June, 2019)

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

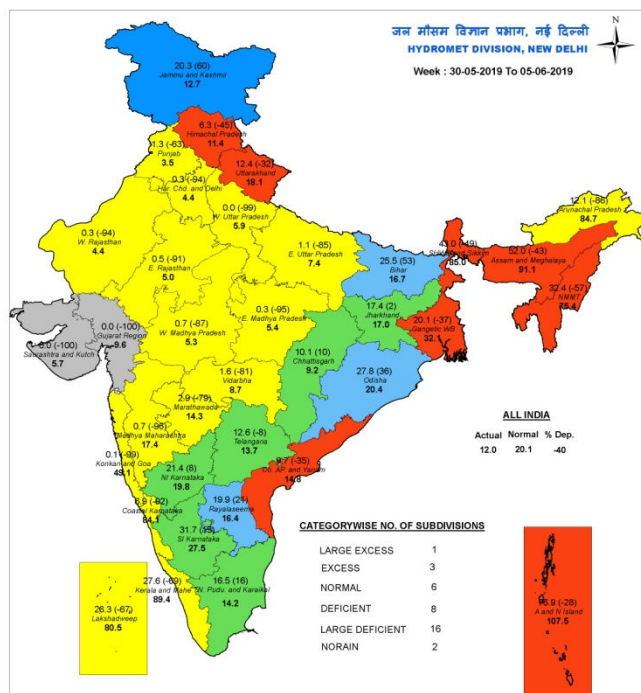


LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+1% TO -19%)
■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN [-100%] ■ NO DATA

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



SUBDIVISION RAINFALL MAP



Legend: ■ Large Excess [+60% or more] ■ Excess [+20% to 59%] ■ Normal [+1% to 19%] ■ Deficient [-5% to -20%] ■ Large Deficient [-49% to -80%] ■ No Rain [-100%] ■ NO DATA

NOTES:
 (a) Rainfall figures are based on operation data.
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 (c) Percentage Departures of rainfall are shown in brackets.

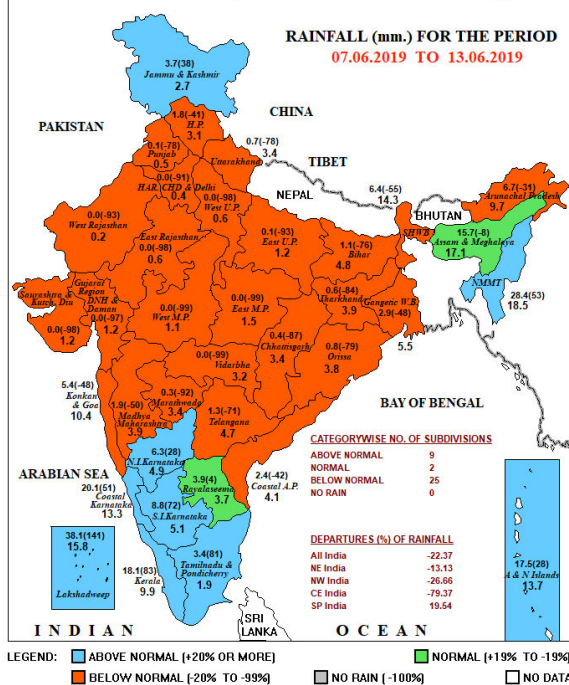
- Normal or above normal rainfall occurred in both the weeks in Jammu & Kashmir and South Interior Karnataka.
- Normal or above normal rainfall occurred in either of the two weeks in Punjab, Haryana, Chandigarh & Delhi, Bihar, Jharkhand, Odisha, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura (NMMT), Chhattisgarh, North Interior Karnataka, Rayalaseema, Telangana and Tamil Nadu.
- Below normal rainfall / no rain occurred over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 05 June) (7th to 20th June 2019)

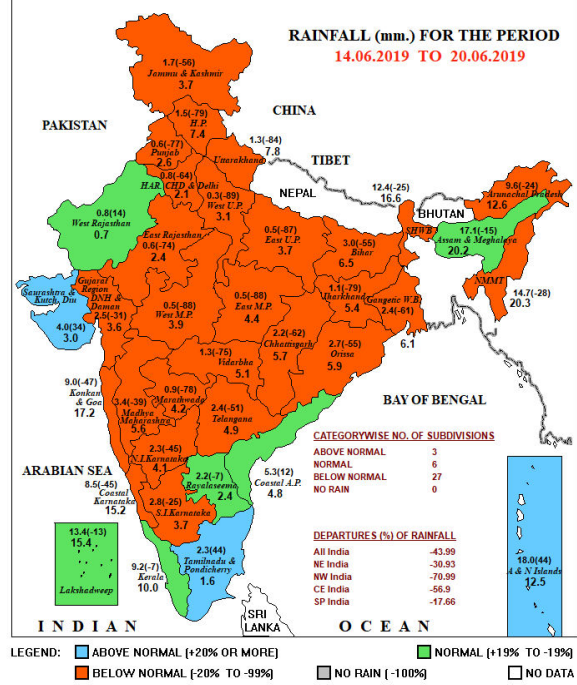
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Rainfall Forecast Map - Normal RF Based Categories



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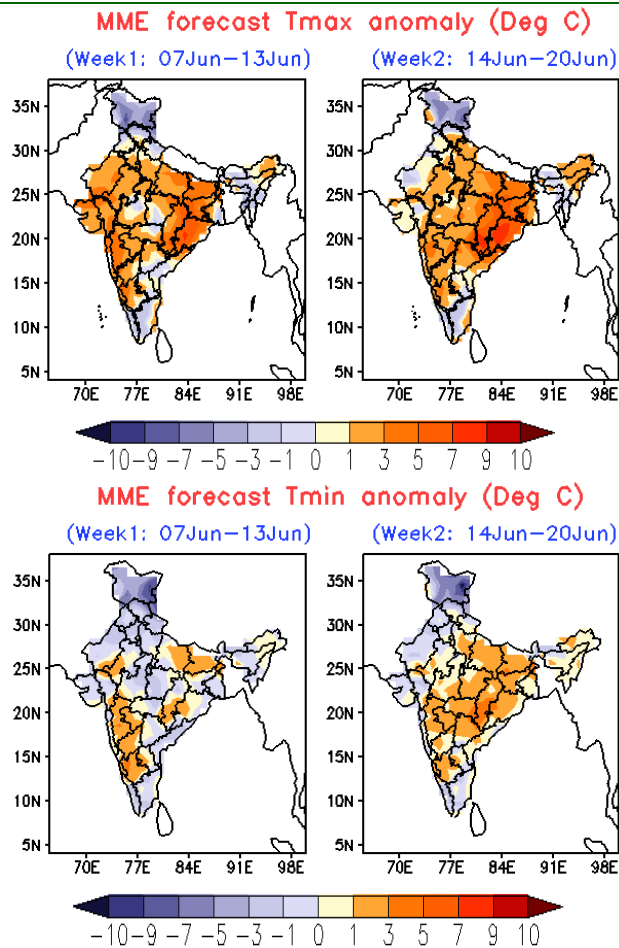
Rainfall Forecast Map - Normal RF Based Categories



- Week 1 (07.06.2019 to 13.06.2019):** (i) Above normal rainfall mainly over Kerala, Karnataka, Tamil Nadu and parts of Coastal Andhra Pradesh. Also rainfall likely over parts of Northeast India. Overall the rainfall over country as a whole will be below normal. The three homogeneous regions (Northwest India, Central India and Northeast India) will have below normal rainfall during the week.
- Week 2 (14.06.2019 to 20.06.2019):** Monsoon rainfall will be mainly below normal over most of India except some parts of south peninsula.

Thus, as indicated earlier monsoon will progress slowly to the central and Northwest India and the cumulative rainfall for the country as a whole is expected to be weaker than normal till 3rd week of June, 2019

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 05 June)
(7th to 20th June 2019)**



Maximum Temperature (Tmax)

- **Week 1 (07.06.2019 to 13.06.2019) and Week 2 (14.06.2019 to 20.06.2019):** Tmax will be mostly above normal over most parts of India with anomaly between 4 to 7 degree C over parts of Odisha, Chhattisgarh and adjoining regions.

Minimum Temperature (Tmin)

- **Week 1 (07.06.2019 to 13.06.2019) and Week 2 (14.06.2019 to 20.06.2019):**
 - (i) Mostly below normal Tmin in week 1 over Northwest India, parts of central India and Southeast India. Above normal over isolated region of central India during the week.
 - (ii) above normal Tmin over central and eastern parts of India during week 2.

Strategic Agricultural Planning based on rainfall during next two weeks till 20th June 2019

Agromet Advisories

Kerala

Amount of rainfall received during the period from 01 June to 06 June 2019 over Kerala is 19.9 mm (70% deficit). The extended range weather forecast for next two weeks (07 to 13 and 14 to 20 June) is above normal for week-1 and normal for week-2.

- Since humid conditions prevailed in the state and the onset of monsoon was forecasted on 06 June 2019, there is a chance of bud rot in coconut plantations. Hence keep three numbers of perforated Mancozeb sachets (5 g) per palm around spindle leaves as a prophylactic measure against bud rot.
- Propping can be followed to reduce the damage due to high wind speed. There is a chance of sigatoka disease in banana. As a precaution, spray 20 g *Pseudomonas* per litre of water.
- As South west monsoon was forecasted on 6th June 2019, the farmers were advised to go for land preparation. Soak seeds for 30 minutes in a solution of *Pseudomonas* culture @10g/litre per kg of seeds. The above seed treatment can also be used to control sheath blight, sheath rot, leaf spot disease etc. Transplant seedlings at 4-5 leaf stage.
- Since there is a chance for prolonged rainfall, Mahali disease may occur in Arecanut. Prophylactic spraying of Bordeaux mixture(1%) or Copper Oxychloride 50WP (2g/litre) with sticker is recommended.

Karnataka

Amount of rainfall received over North Interior Karnataka is 21.4 mm (40% excess), South Interior Karnataka is 26.3 mm (29% excess) and Coastal Karnataka is 6.9 mm (89 % deficit) during 01 to 06 June 2019. The extended range weather forecast for next two weeks (07 to 13 and 14 to 20 June) over North Interior Karnataka, South Interior Karnataka and Coastal Karnataka is above normal for week-1 and below normal for week-2.

South Interior Karnataka

- TMV-2, JL-24, KCG-6 are recommended varieties of groundnut.

Tamil Nadu

Amount of rainfall received during the period of 01 to 06 June 2019 over Tamil Nadu is 11.0 mm (6 % excess). The extended range weather forecast for next two weeks (07 to 13 and 14 to 20 June) is above normal for both the weeks.

- In the prevailing weather condition, shoot fly occurrence is expected in sorghum. Spray Dimethoate 30 EC @ 500 ml/ha or 5% Neem Seed Kernel extract.
- Anticipated weather condition is favourable for fruit rot / die back in chilli. Disease may be control by by three sprayings of Wettable Sulphur or Copperoxy Chloride 0.25%.
- Prevailing weather condition is favorable for citrus canker / scab disease incidence. To control, spray Copperoxy Chloride 0.2% at fortnight intervals.

Maharashtra

Amount of rainfall received over Madhya Maharashtra is 0.7 mm (95% deficit), over Marathwada is 2.9 mm (77% deficit), Vidarbha is 1.6 mm (80% deficit) and Konkan region 0.1 mm (99% deficit) during 01 to 06 June 2019. The extended range weather forecast for next two weeks (07 to 13 and 14 to 20 June) over all the sub divisions of Maharashtra is below normal for both the weeks.

Marathwada

- Varieties like Bunny, MRC-7301, Kanak, Ajeet, Super Bunny Bt., SP-503 Bt., MRC-4347, RCH-578 and Ankur-651 must be selected for cultivation of rainfed cotton and Mallika, Brahma, Dianya, Vikram-5, RCH-2, Kanak, Bhaskar for cultivation of irrigated cotton.
- Select SB-11, LGN-2, TAG-24, TG-26, TLG-45, LGN-1, LGN-123 varieties for cultivation of Kharif groundnut.
- Plantation of banana crop should not be done until sufficient amount of rainfall is received. Intercultural operation should be done in banana orchard.
- Intercultural operation should also be done in grape orchard.

Madhya Maharashtra

- Give alternate furrow irrigation to sugarcane.
- Use certified seeds of recommended varieties of various crops for *kharif* sowing.
- To control white grub attack after pre monsoon rains, collect white grub adults from neem, babul trees and put it in kerosene mixed water.
- For control of fruit flies in the cucurbit vegetables, install clue-luer traps @ 2 per acre and spray Azadirachtin @ 10 ml + 10 litre of water.

Konkan

- As there is forecast for light rainfall on 5th, 6th and 8th June, it is advised to sow the rice nursery if irrigation facility is available.
- For sowing of fodder, cowpea and maize, plough the field area, add FYM or Compost @ 5-10 tonnes per hectare and bring the soil to fine tilth.
- As there is a forecast for light rainfall on 5th, 6th and 8th June, harvest the mature mango fruits before 10 AM and after 4PM.
- There is a possibility of incidence of bud rot fungal disease on young coconut palm during rainy season. To prevent the incidence of bud rot disease, spray 1% bordo mixture on to the crown region of palm.

Odisha

Amount of rainfall received over Odisha during 01 to 06 June 2019 is 25.9 mm (55 % excess). The extended range weather forecast for next two weeks (07 - 13 and 14 - 20 June) is below normal for both the weeks.

- Fruit and shoot borer is observed in brinjal. To control, install pheromone trap, and spray 4 g Sevin WP or 2 ml Malathion in 1 litre of water alternatively.
- Withheld top dressing in jute till rain stops.
- To control root rot of pointed gourd, spray 10 g of Plantomycin along with 20 g Blitox 50 in 10 litre

water.

- Go for early sowing of *kharif* vegetables like okra and cucurbits.

Jharkhand

Amount of rainfall received over Jharkhand during 01 to 06 June 2019 is 15.4 mm (12 % excess). The extended range weather forecast for next two weeks (07 - 13 and 14 - 20 June) is below normal for both the weeks.

- Prepare land for sowing/transplanting of rainy season vegetables and for transplanting, raise the seedlings of different vegetables.
- Dig the pit for plantation of seedlings and keep the distance between the pit according to fruit tree. Plantation is only way to utilize the waste and degraded land.
- Most of the summer rice crops are at maturity stage. However, do not harvest the crop during next few days.

Chhattisgarh

Amount of rainfall received over Chhattisgarh during 01 to 06 June 2019 is 4.4 mm (45 % deficit). The extended range weather forecast for next two weeks (07 - 13 and 14 - 20 June) is below normal for both the weeks.

- Need based irrigation and intercultural operation should be done in tomato, brinjal, chilli, okra and other vegetable crops. Increase frequency of irrigation as per temperature condition.
- If maize stem borer attack is being observed, then apply Carbofuran @2-3 grain per plant.
- Regular monitoring of the summer vegetable crops should be done and irrigate the crop as per need.
- Mulching should be done in ginger and turmeric crops and drainage facilities should be well managed before rainy season.

Assam

Rainfall received over Assam is 37.5 mm (42% deficit) during 01 to 06 June 2019. The extended range weather forecast for next two weeks (07 - 13 and 14 - 20 June) is normal for both the weeks.

- Collect the seeds of high yielding varieties of sali rice namely Ranjit, Bahadur, Satyaranjan, Basundhara, Kushal, Mahsuri, Bhogali, Rangilee, Ketekijoha etc.
- During this period, farmers may observe circular spot as well as water soaked sunken lesions with black margin on chilli. To control, spray Captan @5 g/2.5 litres of water.
- Collect local cultivars of citrus viz. Assam lemon for planting in the orchard or homestead garden. Select high land with uniform soil texture for planting. Prepare pits of 0.5m×0.5m size with a spacing of 3m×3m and refilled with soil-manure mixture (1:1) and then allow to settle.
- **Fishery:** As sufficient water has accumulated in the ponds, the ponds should be stocked with fingerlings or carried over seeds of 15 cm size @ 5000 per hectare of water surface area.

West Bengal

Rainfall received over Gangetic West Bengal is 17.7 mm (30% deficit) during 01 to 06 June 2019. The extended range weather forecast for next two weeks (07 - 13 and 14 - 20 June) is below normal for both the weeks.

- Sow 7 to 8 kg seeds of aman rice in the seed bed for transplanting of one bigha of land. Use suitable and improved varieties like IET-4786, Khitish, Swarna, IR-36, etc.
- Complete the intercultural operations in jute. Under prevalent weather situation, there is a chance of attack of weevil. To control, apply 2ml Endosulphan per litre of water. At present attack of jute semilooper, bihar hairy caterpillar and stem weevil is becoming severe. To control, apply Dichlorvos @ 3 ml per 4 litre of water or Endosulphan @ 2 ml per litre of water.
- In pumpkin, ridge-gourd, pointed gourd and cucumber, there is a chance of attack of Red-Pumpkin Beetle. To control, apply Dimecron or Rogor (1ml per litre of water).

Punjab

Rainfall received over Punjab is 1.3 mm rainfall (49% deficit) during 01 to 06 June 2019. The extended range weather forecast for next two weeks (07 - 13 and 14 - 20 June) is below normal for both the weeks.

- Sowing of sponge gourd and summer radish varieties can be done.
- Chilli fruits may drop due to the high temperature during May and June, Two foliar sprays of naphthalene acetic acid (NAA) at 10 day interval @4g after 45 and 55 days of transplanting can be done to increase fruit yield of chilli.
- Fruit borer attack in tomato crop can be checked by spraying 30 ml of Fame 480 SL or Coragen 18.5 SC in 100 litres of water per acre.
- Fruit and shoot borer of brinjal can be controlled by spraying 80 ml Coragen 18.5 SC or 80 g Proclaim 5 SG in 100-125 litres of water per acre.
- To control powdery mildew in cucurbits, spray Karathane 50-80 ml/acre at the appearance of powdery patches on the leaves. Avoid sprays of sulphur or copper based fungicide on cucurbits.

Jammu

Rainfall received during 01 - 06 June 2019 over Jammu is 20.3 mm, which is 119% excess. The extended range weather forecast for next two weeks (07 - 13 and 14 - 20 June) is above normal for week-1 and below normal for week-2.

- Due to high infestation of fruit and shoot borer at present situation, clip off shoots/fruits infected with borer and bury them inside the soil. Spray mixture of Profenofos and Cypermethrin (4:40) @ 1ml/litre.
- Due to rise in temperature, farmers are advised to protect young fruit plants from heat by providing thatches/cover but ensure proper ventilation. Spray Dimethoate @ 1ml/litre during clear weather to control Citrus psylla, leaf miner, if observed.

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