



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

Validity: 20th September to 3rd October 2019

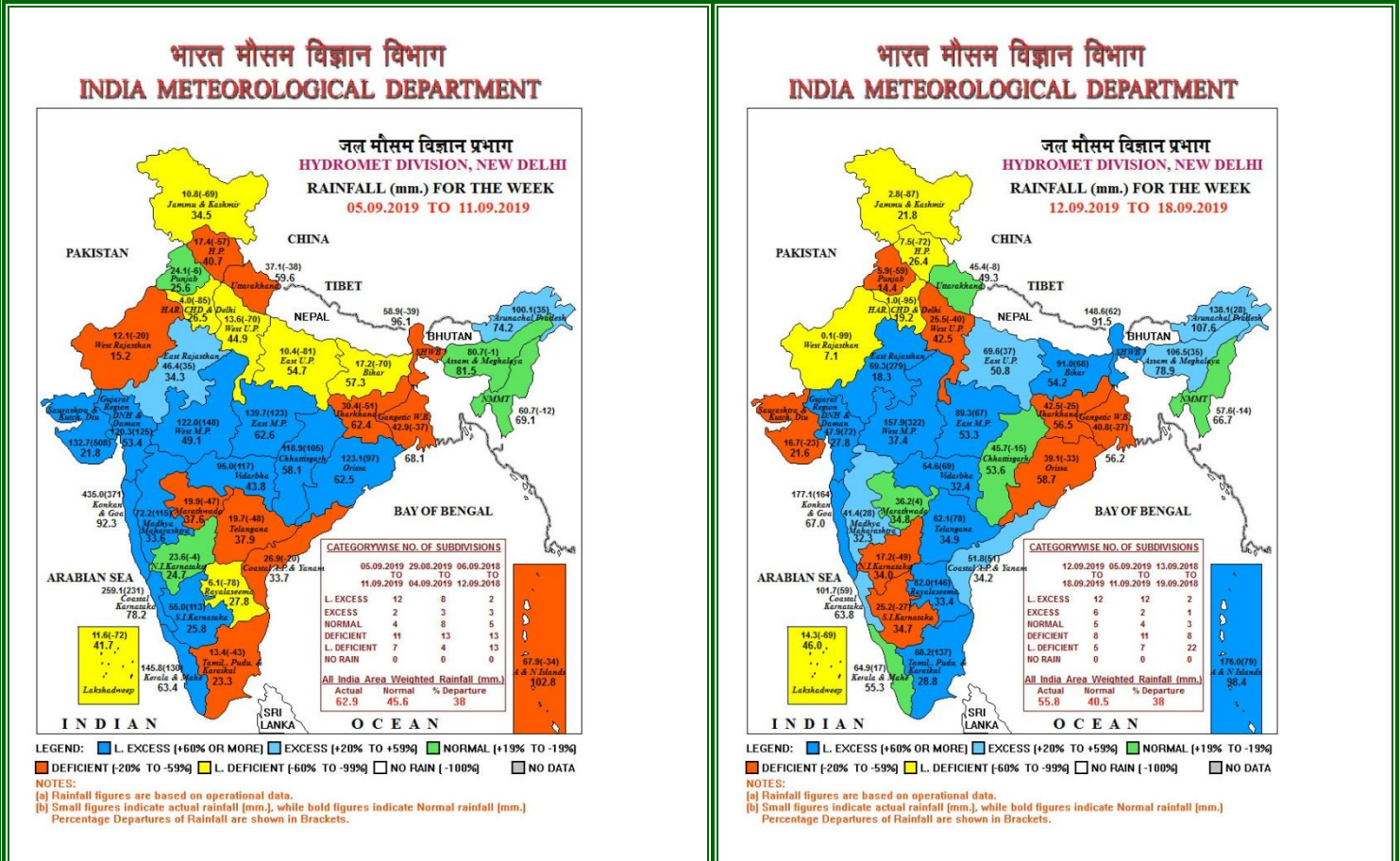
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&
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India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(5th to 18th September, 2019)



- Normal or above normal rainfall occurred in both the weeks in East Rajasthan, East Madhya Pradesh, West Madhya Pradesh, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura (NMMT), Gujarat Region, Konkan & Goa, Madhya Maharashtra, Vidarbha, Coastal Karnataka, and Kerala & Mahe.
- Normal or above normal rainfall occurred in either of the two weeks in Uttarakhand, East Uttar Pradesh, Punjab, Saurashtra & Kutch, Marathwada, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Rayalaseema, North Interior Karnataka, South Interior Karnataka, Telangana, Coastal Andhra Pradesh & Yanam, Andaman & Nicobar Islands and Tamil Nadu Puducherry & Karaikal.
- Below normal rainfall occurred in both the weeks in Jammu & Kashmir, Himachal Pradesh, Haryana, Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, Jharkhand, Gangetic West Bengal and Lakshadweep.

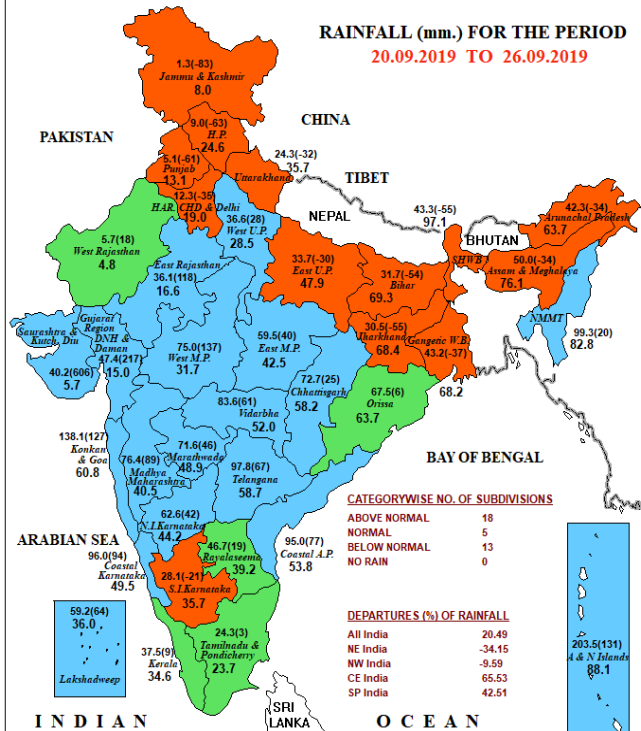
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 18 September)

(20th September to 3rd October 2019)

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Rainfall Forecast Map - Normal RF Based Categories

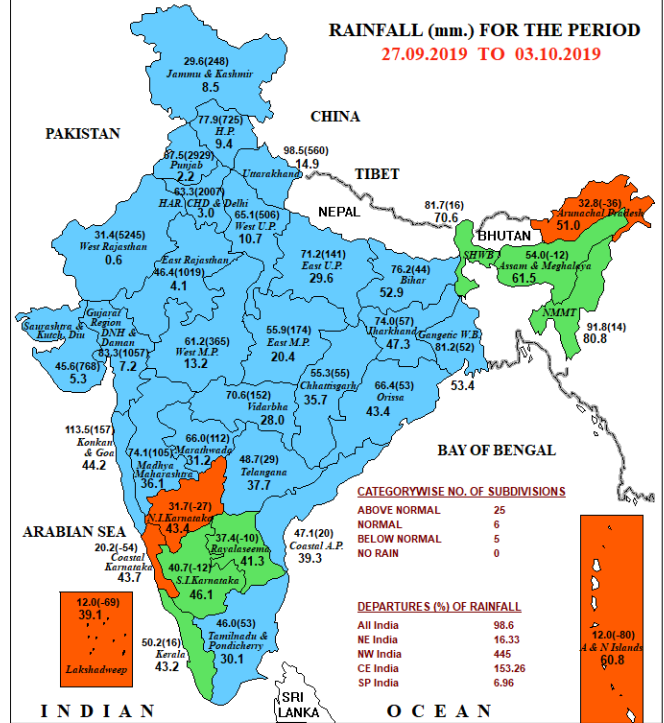


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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.

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Rainfall Forecast Map - Normal RF Based Categories



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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 (20.09.2019 to 26.09.2019):** Above normal rainfall over central parts of India and south-peninsular India, whereas northeast and northwest India will have below normal rainfall.
- **Week 2 (27.09.2019 to 03.10.2019):** Mostly above normal rainfall over most parts of India.

Strategic Agricultural Planning based on rainfall during next two weeks till 3rd October 2019

Agromet Advisories

Kerala

Amount of rainfall received over Kerala during the period from 01st June to 20th September 2019 is 2195.1 mm (13% normal). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 03rd October 2019) is normal for week-1 and week-2.

- Under the prevailing rainy weather conditions, there is a chance of Bacterial Leaf blight in rice crop, to control the spread of Bacterial Leaf blight in paddy, Mix 20 g of cow dung in one litre of water and spray the cow dung slurry by mixing with 20g of pseudomonas in one litre of water.
- There is a chance of bud rot in rainy season in coconut. Keep three numbers each of perforated Mancozeb sachets (5 g per packet) around spindle leaves as a prophylactic measure against bud rot.
- Due to monsoon showers, there is a chance of Sigatoka disease in banana. It is advised to spray pseudomonas 20g/litre and spray 2 ml Hexaconazole or 1 ml Propiconazole per one litre of water by mixing it with a sticker and spray on both sides of the leaf.
- During rainy season, there is a chance of Fruit rot and leaf fall in Nutmeg. It is advised to apply trichoderma mixture. Add 2 kg trichoderma to a mixture of 90 kg FYM and 10 kg Neemcake and kept for two weeks with sufficient moisture. Basal application of 2.5 kg of this mixture followed by foliar spray with pseudomonas (20g/litre) or 1% Bordeaux mixture.

Karnataka

Amount of rainfall received over north interior Karnataka during the period from 01st June to 20th September 2019 is 511.8 mm (20% excess). Amount of rainfall received over south interior during the period from 01st June to 20th September 2019 is 734.1 mm (20% excess). Coastal Karnataka is 2885.6 mm (25 % excess) The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) over north interior is above normal for week-1 and below normal for week-2, south interior Karnataka is below normal for week-1 and normal for week-2.

South Interior Karnataka

- It is advised in rainfall conditions to top dress in Maize crop@25kg N/ha. To control stem borer in Maize Spray Quinolphos-25 EC @ 2ml/liter of water or Chlorophyrifhos -20 EC @ 2ml/liter of water.
- If Wilt diseases is noticed in red gram field then it is advised to apply Carbendazim 50 WP 2 g/litre of water. and remove and burn the wilt infected plant in field.
- It is advised to remove malformed inflorescence to prevent further spread in coming season.

North Interior Karnataka

- The farmers are advised to take up plant protection measures carefully in horticultural crops like Tomato for fruit rot and leaf curl, Pomegranate for bacterial blight and Lime for leaf minor.
- In field crops like Cotton, Pigeon pea and Groundnut plant protection measures for sucking pests should be taken up.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 316.1mm (10 % normal) during the period of 01st June to 20th September 2019. The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) is normal for week-1 and above normal for week-2.

- Anticipated weather condition is favourable for sucking pest-Thrips and Green peach aphid in chilli. To control Thrips and Green peach aphid, apply Carbofuran 3% G @ 33 kg/ha or Phorate 10%G@10 kg/ha or Spray any one of the following insecticide.
- For protecting banana from high wind speed, farmers are advised to do propping for Banana
- Preventive medicine for FM disease may be given to the cow, goat and sheep by utilizing the facility from nearby veterinary hospital for tolerating heat stress.

Maharashtra

Rainfall received over Madhya Maharashtra is 1055.2 mm (55% excess), over Marathwada is 495.0 mm (-18% deficit), Vidarbha is 957.2 mm (7% normal) and Konkan region 4228.9 mm (54% excess) during 01 June to 20 September 2019. The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) over Madhya Maharashtra, Konkan, Vidharbha and Marathwada is above normal for both week-1 and week-2.

Marathwada

- Due to expected rainfall during next five days, spray Tebuconazole 10 % WP + Sulphur 65 % WG @ 10 gm per 10 liter of water during clear weather condition for management of Anthracnose in soybean.
- To control leaf eating caterpillar in turmeric crop, take a spray of 20 % Chlorpyriphos @ 20 ml per 10 liter of water during clear weather condition. Remove excess amount of water from the field.
- Due to rainy season, helminthic parasites and coccidia protozoa infection is increasing in goat. Therefore it is recommended to administer Anthelmintic and Anticoccidial medication.

Vidarbha

- Due to rainfall and cloudy weather conditions, harvest matured black gram and ensure safe storage of harvested produce and undertake preparatory tillage in harvested greengram/blackgram fields with minimum tillage to avoid excess moisture loss from field for early rainfed rabi sowing.
- Under the prevailing cloudy and rainfall weather conditons there is a chance of pink boll worm larvae within flowers in cotton fields. Collect and destroy rosette flowers-buds before application of insecticides. To manage the initial incidence, undertake spray of 5% NSKE or Azadirachtin 1500 ppm @ 25 ml per 10 litres of water. Upon 5% infested flowers-buds undertake spray of quinolphos 25% AF @ 25 ml or Chlorpyriphos 20% EC @ 25 ml per 10 liters of water.
- In Maize crop at silking to kernel blister stage for mild incidence of maize army worm use of insecticides may not be feasible instead undertake mechanical picking of egg larvae masses & destroy regularly.

Konkan

- Due to intermittent rainfall and cloudy weather condition, there is a possibility of incidence of blue

beetle and caseworm on low land rice. Hence observe crop regularly for infestation of pest. If incidence of blue beetle is noticed in rice crop, spray Quinalphos 25% EC @ 40 ml or Triazophos 40%EC@ 12.5 ml or Lambda Cyhalothrin 5%EC @ 5 ml per 10 liter of water. If incidence of rice case worm is noticed on rice crop, then flood the field with water followed by dragging the rope to dislodge the cases and drain out water from field after 1-2 hrs.

- Due to increase in temperature which is congenial for vegetative flush in mango, spray Lambda cyhalothrin 5%EC@ 6ml or Quinalphos 25% EC @25 ml + Bavistin 20 g per 10 liter of water for protection.
- There is possibility of incidence of bud rot disease due to heavy rain. If incidence is noticed, spray coconut plant with 1% Bordo mixture.

Madhya Maharashtra

- To avoid the water loss from crop canopy, spray 1% potassium nitrate or 6-8% kaolin and do hoeing.
- To control the leaf eating caterpillars on kharif sunflower, greengram, blackgram, pigeonpea etc., spray chloropyriphos or Quinalphos @ 15-20 ml + 10 lit of water + 5 ml sticker.

Rajasthan

Rainfall received during 01st June to 20th September 2019 over East Rajasthan was 865.4 mm (48% excess). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) over east Rajasthan is above normal for week-1 and week-2.

- Where the crops are failed due to heavy rain farmers are advised to plan for rabi crops (mustard & gram) under conserved moisture.
- Harvest the green cob and use crop as fodder, where the crop has failed due to water lodging condition.

West Bengal

Rainfall received during 01st June to 20th September 2019 over West Bengal was 772.8 mm (-28% deficit). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) is below normal for week-1 and above normal for week-2.

- Due to heavy rainfall, there is a chance of attack of Brown plant hopper in the prevailing weather condition. Spray 0.75 ml Nuvan or Vapona per liter of water or dust Quinalphos 1.5% Carbaryl 4% at lower portion of the stem for the control of BPH.
- Under present hot and humid situation, attack of white fly has been reported from many areas leading to the spread of yellow mosaic virus in Okra. Spray Diafenthiuron @ 0.75g per litre of water to prevent the further spread of the disease.
- Under high humidity and cloudy condition, combined attack of Downy mildew and Mosaic may be seen in bitter gourd and pointed gourd. Apply Ridomil Gold MZ (@2 g per lt. to control the attack.

Chhattisgarh

Rainfall received during 01st June to 20th September 2019 in Chhattisgarh 1132.6 mm (4% normal). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) is above normal for both the week-1 and week-2.

- In those areas where rainfall has been deficit and rice cropping has not been possible, farmers are advised to go for sowing of the Kulthi (Horsegram), moong, urad, toria, maize, sunflower, vegetables and forage crops.

- The soil moisture content is going down slowly in the vegetable crops. Therefore intercultural operation is recommended for moisture conservation.
- Cattle shed and poultry beds should be kept under running fan condition so that saturated and suffocated air should go out of the poultry sheds. This will facilitate clean and fresh air in the poultry sheds.

Bihar

Rainfall received during 01st June to 20th September 2019 in Bihar 774.5 mm (-18% normal). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) is below normal for the week-1 and above normal week-2.

- Farmers are advised to postpone spraying of pesticides during next 12-24 hours in view of rainfall. Farmers are advised to apply 30 kg nitrogen/hectare in paddy crop. Monitoring of gundhi bug is advised in early transplanted paddy crop, which is in milk stage. It causes appreciable damage during this stage.
- Intercultural operation is advised in vegetables crops and provide irrigation if required. Monitoring of sucking insect-pests such as white fly, leaf hopper and aphid is advised in vegetables nursery of chilli, brinjal and tomato. For prevention, spraying of Imidacloprid 17.8 %SL @ 0.3ml/liter of water is advised.
- Application of 30 kg nitrogenous fertilizer is advised in *kharif* maize. Protect the crop against attack of insect-pest and diseases.

Jharkhand

Rainfall received during 01st June to 20 September 2019 in Jharkhand was 687.9 mm (-30% deficit). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) is below normal for the week-1 and above normal week-2.

- To conserve soil moisture in the field, go for inter-culture operation is needed. Timely sown green and black gram are at maturity stage. Harvest them during clear weather and in shade.
- It is advised to cultivate early potato and to proceed for seeding only on ridge. Recommended variety of potato is Kufri Ashoka and Kufri Pukhraj.
- Under assured irrigation, it is advised to sowing of pea with recommended varieties Arkel, Kashi Nandani, P.E. – 6, Birsa Matar.

Haryana

Rainfall received during 01st June to 20th September 2019 in Haryana 248.7mm (-40% deficit). The extended range weather forecast for next two weeks (20th September 26th to to 27th September to 3rd October 2019) is below normal for the week-1 and above normal week-2.

- Due to dry weather conditions, it is advised to irrigate crop paddy crop and avoid water stress at panicle emergence stage to minimize neck blast incidence.
- Under prevailing dry weather conditions, apply irrigation in fodder crops and continue cutting for green fodder.

- Because of dry weather, apply light irrigation and regularly monitor insect-pest in vegetable and fruits crops.
- Due to humid weather conditions farmers are advised to keep animals under well ventilated place and provide plenty of clean drinking water and green forage as per requirement. Adopt recommended vaccination schedule.

Punjab

Rainfall received during 01st June to 20th September 2019 in Punjab 405.4 mm (-8% normal). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) is below normal for the week-1 and above normal week-2.

- Prevailing weather is favourable for the onset of false smut in rice. Farmers are advised to protect their crop by spraying 500 ml Kocide in 200 litres of water per acre at boot stage.
- Due to insufficient rain maintain adequate water supply in maize crop particularly at tasseling and silking stages. Stress at these stages causes considerable losses in yield.
- Prevailing weather is favourable for the development and spread of fruit rot in chilli. Farmers are advised to give 3-4 sprays of Folicur @ 250 ml of Indofil M-45 or blitox 50 WP @ 750 g/acre at 10 days interval during clear weather.

Himachal Pradesh

Rainfall received during 01st June to 20th September 2019 in Himachal Pradesh 626.2 mm (-14% normal). The extended range weather forecast for next two weeks (20th September 26th September to 27th September to 3rd October 2019) is below normal for the week-1 and above normal week-2.

- Monitoring paddy crop against attack of blast and brown spot, spray Carbendazim @ 2 gram per litre of water if symptoms appears.
- It is advised to prepare the fields for the sowing of carrot, radish & china sarson.
- If cabbage nursery is ready and has attained sufficient height and growth, transplant this nursery in the already well prepared fields with recommended spacing.
- Continue picking in green tea at 8-10 days interval to maintain the quality and productivity. Lopping of shade tress advised in order to ensure better penetration of light in tea gardens.

Jammu

Rainfall received during 01st June to 20th September 2019 in Jammu 422.0 mm (-21% deficit). The extended range weather forecast for next two weeks (20th to 26th September to 27th September to 3rd October 2019) is below normal for the week-1 and above normal week-2.

- Brown plant hopper is observed under prevailing weather situation in rice. Install pheromone traps @ 1/kanal or sprays Imidacloprid 200SL @ 6.25 ml/Kanal.
- Due to prevailing dry weather, spray carbofuran/Cartap@ 1kg/kanal or soil application of chloropyriphos 5% dust to control termite under rainfed condition.
- It is advised to sow direct sown vegetables like methi, spinach Beet, coriander, radish, carrot, beet.

Root and spinach where moisture is adequate in the field. Keep the basin area clean. Remove the water suckers.

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