



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

Validity: 28 September to 11 October 2018

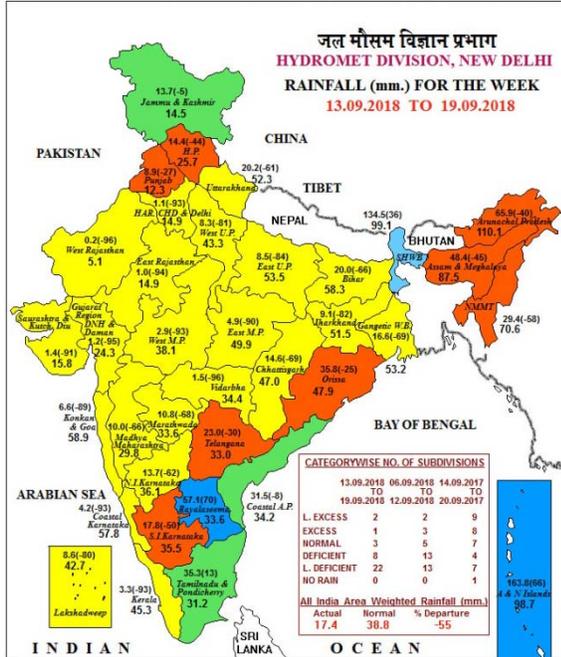
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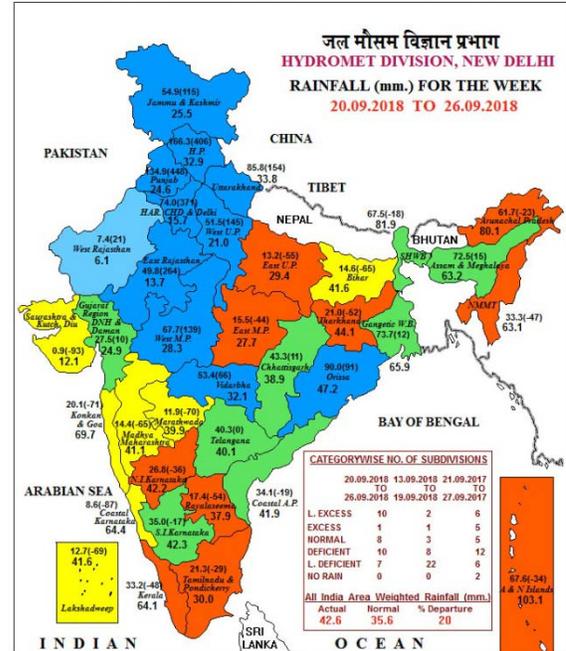
Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall (13th to 26th September 2018)

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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

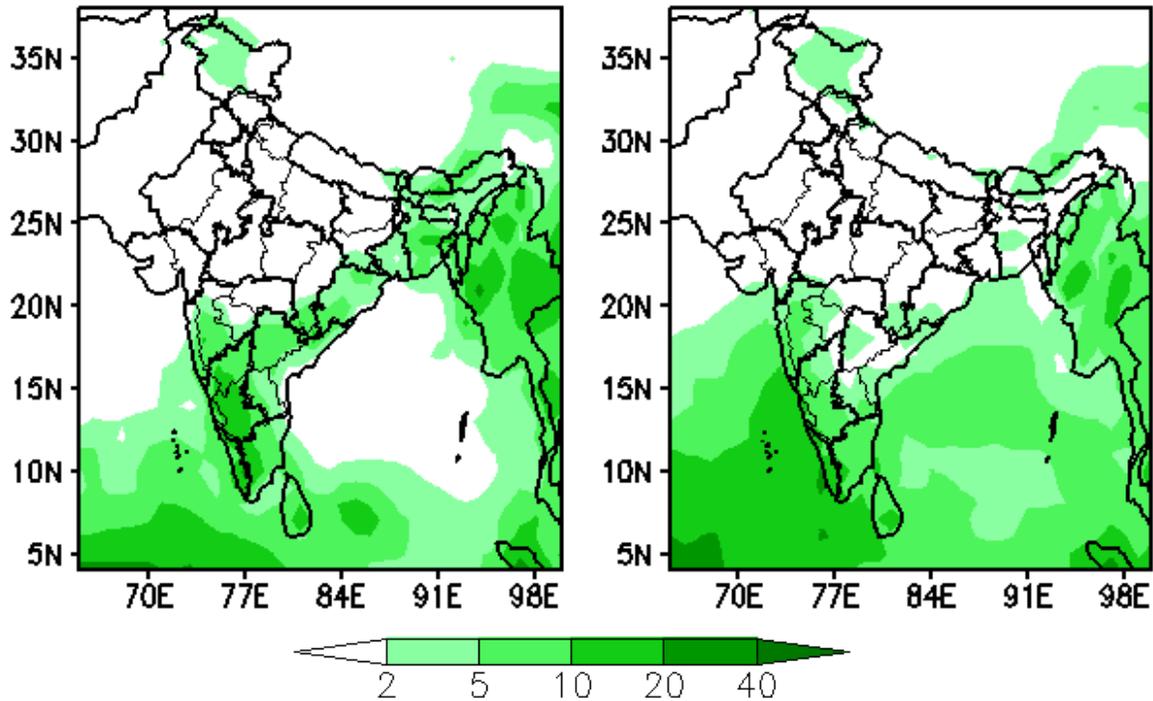
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 26 September)
(28th September to 11th October 2018)

Actual Rainfall (mm/day)

(Week1: 28Sep–04Oct)

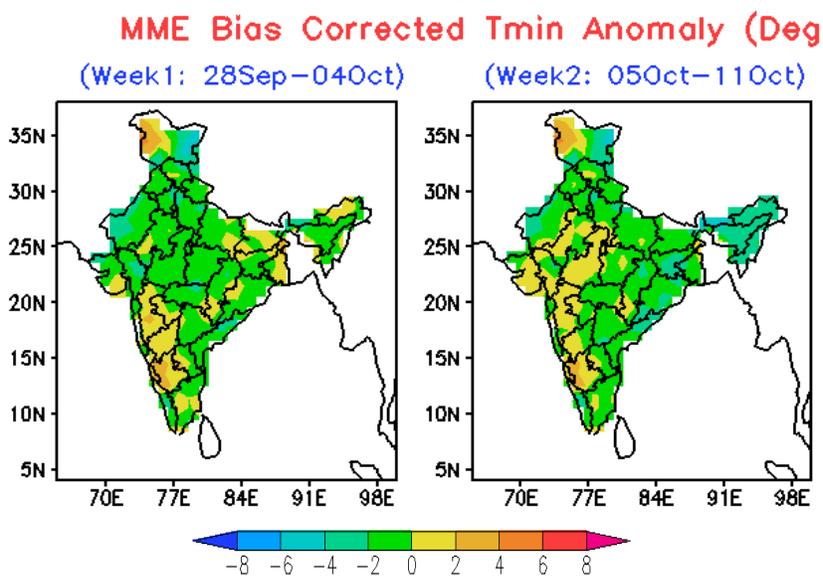
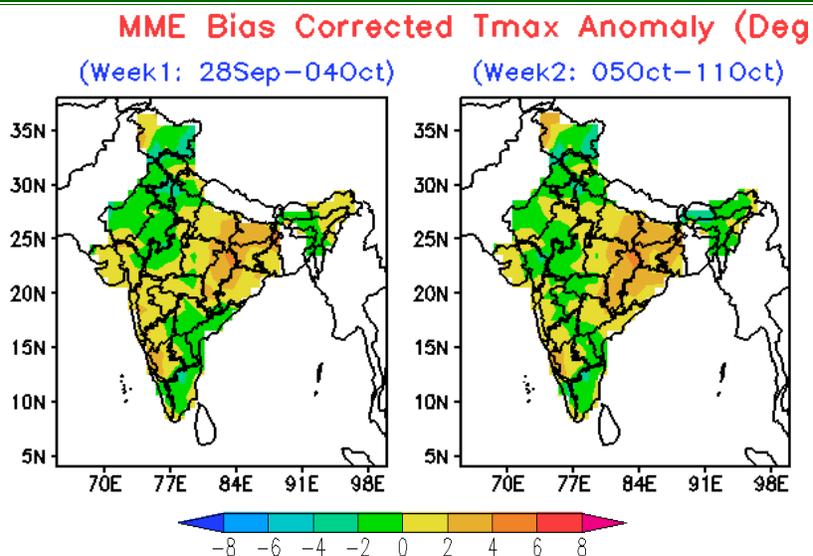
(Week2: 05Oct–11Oct)



Extended Range Rainfall Forecast

- **Week 1 (28.09.2018 to 04.10.2018):** Except south peninsula (where it will be above normal), below normal rainfall likely over the remaining region.
- **Week 2 (05.10.2018 to 11.10.2018):** South peninsula, western coastal region and adjoining Arabian Sea & Bay of Bengal will remain active.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 26 September)
(28th September to 11th October 2018)**



Maximum Temperature (Tmax)

- **Week 1 (28.09.2018 to 04.10.2018) and Week 2 (05.10.2018 to 11.10.2018):** Mostly above normal Tmax over eastern region (Uttar Pradesh, Bihar, Odisha, West Bengal, Chhattisgarh, east Madhya Pradesh).

Minimum Temperature (Tmin)

- **Week 1 (28.09.2018 to 04.10.2018) and Week 2 (05.10.2018 to 11.10.2018):** Mostly normal to below normal Tmin during the period.

Strategic Agricultural Planning based on rainfall during next two weeks till 11th October 2018

Agromet Advisories

Kerala

Rainfall received during the period from 01 June to 27 September 2018 over Kerala is 2471.0 mm, which is 24% excess than normal.

- Apply 2CC trichogramma cards per acre to control leaf folder and stem borer in paddy. If the attack is severe, spray 3ml chlorantraniliprole per 10 litre of water.
- To control white fly in coconut, spray the mixture of 2% neem oil emulsion with 20g of biocontrol agent (*Lecanicillium*) on lower sides of leaves.
- There is a chance of foot rot in pepper. To control the infestation, add 2 kg Trichoderma to a mixture of 90 kg FYM and 10 kg Neemcake.
- Shoot and fruit borer affected parts in cowpea can be removed. Apply 5% Neem Kernel Suspension to control shoot and fruit borer in the initial stage. Spray Flubendiamide 2ml/10 litre of water if the attack is severe.

Karnataka

Rainfall received during the period from 01 June to 27 September 2018 over different meteorological subdivisions of Karnataka viz, North Interior Karnataka is 335.0 mm (30% deficit), South Interior Karnataka is 644.5 mm (1% excess) and Coastal Karnataka is 3018.4 mm (1% deficit).

North Interior Karnataka

- Plough the land across the slope which is to be spared for sowing of Rabi crops so as to facilitate better conservation of soil and soil moisture.
- Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic Septicaemia*.
- Vaccinate (ET vaccine) sheep and goats against Enterotoxemia.

South Interior Karnataka

- To control stem borer in maize, spray Quinolphos-25 EC @ 2ml/litre of water or Chlorophyriphos -20 EC @ 2ml/litre of water.

Tamil Nadu

Rainfall received during the period of 01 June to 27 September 2018 over Tamil Nadu is 261.5 mm, which is 12% deficit as compared to the normal.

- There is a possibility of fruit dropping in chilli. Spray growth regulators NAA 10 mg/litre on 60th and 90th days after planting.
- Prevailing weather condition is favorable for Citrus canker disease incidence. To control, spray Copper Oxchloride 0.2% at fortnight intervals.

Maharashtra

Rainfall received during 01 June to 27 September 2018 over different meteorological sub divisions of the state viz., Konkan: 2851.7 mm (1% deficit), Madhya Maharashtra: 652.4 mm (8% deficit), Vidarbha: 875.2 mm (7% deficit) and Marathwada: 532.9 mm (20% deficit).

Marathwada

- Remove excess amount of water from soybean fields after rainfall.
- For management of sucking pest in cotton crop, apply a spray of Buprofezin 25 % @ 400 ml or Clothianidin 50 % @ 20 gm or Pyriproxyfen 5 % + Fenprothrin 15 % @ 200 ml per acre. Protective irrigation should be applied as per availability and requirement of water in cotton crop.

Konkan

- For control of blast disease in rice, spray Tricyclazole 75 % WP @ 6 g or Carbendazim 50 % @ WP 10 g per 10 litre of water.
- To control the attack of ear head bug on finger millet at milky stage, take a spray with Cypermethrin 25% EC @ 0.5 ml/litre of water.
- Maintain 5 to 10 cm level of water in rice field where mid- late rice varieties in grain filling stage and late rice varieties is in flowering stage. Drain out water from the field where early rice varieties is in maturity stage.

Vidarbha

- For control of above ETL level infestation of thrips and leaf hopper in cotton, undertake spray of Fipronil 5% SC @ 35 ml or Buprofezin 25% SC 20 ml per 10 litres water after current spell of rains or undertake spray of biopesticide *Verticillium lecanii* (2X108 CFUs/g)@ 50 g per 10 litres of water.
- Undertake harvesting of short duration soybean (JS 95-60, JS 20-34, JS 93-05) and ensure safe storage of harvested produce from sudden rain showers.
- In pigeon pea, undertake drenching with copper oxychloride @ 25 g / 10 litre of water to avoid incidence of wilt and root rot, as soon as possible after symptoms.

Madhya Maharashtra

- To control white grub in sugarcane, apply drenching of 50EC Chloropyrifos @1 litre + 400 litre of water near sugarcane roots with the help of sprayer without nozzle or apply granular insecticides 10% phorate / 0.3 % fipronil / 0.4 % chlorantraniloprole @ 25 kg/ ha well mixed into soil of ridges/ furrow
- In dry land areas, sowing of chick pea should be done after 25th September. Under sufficient soil moisture condition, use the recommended varieties of gram i.e. Vijay & Digvijay.
- Sowing of Rabi sorghum should be done between 15th September to 15th October under sufficient soil moisture condition at 5 cm depth.
- Sowing of safflower crop should be done between 2nd fortnight of September to 1st week of October.

Andhra Pradesh

Amount of rainfall received over Coastal Andhra Pradesh region is 568.6 mm (2% excess) and Rayalaseema is 242.3 mm (36% deficit) during 01 June to 27 September 2018.

- Farmers of Rayalaseema and Prakasam districts are advised to go for top dressing of urea for castor, maize,

bajra and Jowar crops.

- Incidence of army worm is observed in maize crop in Ananthapuramu, Chittoor, Kurnool, Srikakulam, East Godavari districts. Farmers are advised to take up spraying of Emamectin Benzoate @ 0.5 g/litre or Lamda cyhalothrin@ 1ml/ litre of water for control of army worm.
- Incidence of sucking pests and leaf and boll rot observed in cotton crop in Krishna, Guntur, Prakasam, Ananthapuramu, Kurnool districts. Farmers are advised to spray Imidacloprid @ 0.4 ml/litre or acetamiprid @ 0.2g/litre or acephate@ 1.5g/litre or monochrotophos@ 1.6 ml/l for control of sucking pests.

Chhattisgarh

Rainfall received over Chhattisgarh during 01 June to 27 September 2018 is 1100.0 mm, which is 3% deficit than normal.

- Blast disease in rice is observed in many rice fields (boat like spots/ lesions), to control farmers are advised to spray Tricyclazole fungicide @ 0.6 g / litre water.
- Sowing of appropriate varieties of vegetables like turnip and carrot should be done for preparation of nursery.
- Cucurbitaceous vegetables particularly pointed gourd is vulnerable to fruit rotting and drying. Fields should be kept clean and Metalaxyl+ Mancozeb @2.5 g per litre or copper oxychloride COC @ 4 gram per litre should be sprayed to avoid the infestation.
- For avoiding the fruit shedding in papaya crop, Nephthalene Acetic Acid (NAA) should be sprayed @ 20 ppm.
- The soil moisture content is going down slowly in the vegetable crops, therefore intercultural operation is recommended in these crops for moisture conservation.

Bihar

Rainfall received over Bihar during 01 June to 27 September 2018 is 770.4 mm, which is 23% deficit.

- In view of dry weather condition, farmers are advised to give life saving irrigation in paddy crop, which is in reproductive stage. Moisture stress at this stage would negatively impact the production.
- 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/litre of water is advised.

West Bengal

Rainfall received over Gangetic West Bengal during 01 June to 27 September 2018 is 932.5 mm, which is 18% deficit.

- Attack of Brown spot & Blast may be found in Aman rice. Apply Carbendazim + Mancozeb 2.5g/litre of water at 10-12 days interval. At the same time, attack of stem borer and rice hispa may also found. Apply Chlorapyriphos 2.5ml / Triazophos 2ml per litre of water to control the attack.
- Start seed sowing of early variety of cabbage (e.g. Pride of India, Pusa early, Kranti etc.) & cauliflower (e.g. Jawharmoti, Bharat Jyoti, Early banaras etc.) @ 4gm / katha.

- There is possibility of attack of thrips and mites leading to the leaf curling in chilli. As a control measure, spray Difenthiuron @ 0.75g per litre of water at 7-10 days interval.

Jharkhand

Rainfall received over Jharkhand during 01 June to 27 September 2018 is 784.1 mm, which is 26% deficit.

- Mung & Urd : Crops sown during first week of July, are approaching the maturity stage. Harvest the crops when the siliqua turns into golden colour.
- Rice crops are attacked either by stem borer or leaf eating insects. Broadcast granular insecticides like Kataf Hydrochloride (Kaldan or Goldon) at the rate of 10 kg per acre to control them.
- In some areas, maize crops are affected by the insects and fruit borer. Spray neem based insecticide @ 2-3 ml per litre of water on upper part of the plant to control these insects.
- Spray Bio insecticide Delfin @ 2 g per litre of water to control white fly in cauliflower and cabbage and stem & fruit borer in brinjal.

Odisha

Rainfall received over Odisha during 01 June to 27 September 2018 is 1283.5 mm, which is 14% excess.

- The upland early sown short duration paddy is at milking to maturity stage. Farmers are advised to drain out water seven days before harvesting. Go for harvesting at 85% maturity of the panicles.
- High humidity, low temperature and cloudy weather favours the infestation of blast in paddy. Spray 1 g Beam and 1.5 g Hinosan twice at 15 days interval to control the infestation.

Rajasthan

Amount of rainfall received over East Rajasthan region is 635.3 mm (4% excess) and West Rajasthan is 201.1 mm (23% deficit) during 01 June to 27 September 2018.

- Farmers are to harvest maize, sorghum, green gram and bajra wherever it had attained physiological maturity stage and vacant the field for sowing of rabi crops.
- Field preparation should be started for rabi crops. Ploughing and planking should be done properly to conserve the moisture in the soil. Sowing of rainfed mustard should be done in conserved moisture.
- Use fully decomposed FYM or compost before sowing of crops and vegetables.

Gujarat

Amount of rainfall received over Gujarat region is 695.8 mm (23% deficit) and Saurashtra & Kutch is 316.0 mm (33% deficit) during 01 June to 27 September 2018.

- Soil cracks should be closed by inter-cultural operation to avoid the evaporation losses of soil moisture from crop fields.
- As per the availability of irrigation water, life-saving irrigation should be given to the crop in alternative

furrow.

- In current hot and humid weather, food should be provided to cattle before 10AM and after 5PM. Sufficient drinking water should be given to animals to avoid water stress.

Assam

Rainfall received over Assam is 1296.7 mm (26% deficit) during 01 June to 27 September 2018.

- There may be attack of rice hispa in some pockets of rice field. The farmers are advised to spray Quinolphos 25EC @2000 ml/ha as soon as 2 adults per hill is observed.
- Farmers may go for spraying of 0.2%-0.3% Borax @ 220-320 g/100litre/bigha against browning disease in early cauliflower field on clear weather.
- Farmers involved in the pond fish farming can go for supplementary feeding of Rice bran and mustard oil cake mixed at the ratio of 1:1. The feed mixture should be supplied on feeding tray or in bags at different depth of water. To increase the dissolved Oxygen in water maintain a weed free condition.

Punjab

Rainfall received over Punjab is 526.0 mm rainfall (8% excess) during 01 June to 27 September 2018.

- Survey the rice crop regularly for plant hoppers infestation. If the population is above ETL (5 or more hoppers per hill), spray 800 ml Ekalux/ Quinguard/ Quinalmass 25 EC in 100 litres of water per acre.
- If the incidence of whitefly in cotton is above ETL (6 adults/leaf before 10 am), spray either 80g Ulala 50 WG or 200g Polo/Craze/Ruby/Ludo/ Shoku 50 WP in 150 litres of water per acre.
- To prevent lodging of sugarcane crop, prop up the crop by using trash twist method.
- It is right time for sowing of cauliflower nursery of mid season varieties.
- For management of canker in citrus, spray Streptocycline @ 50 g + Copper Sulphate @ 25 g in 500 litres of water per acre or spray of Bordeaux mixture (2:2:250) can also be done to control affect.

Haryana

Haryana has received 423.1 mm of rainfall during 01 June to 27 September 2018, which is 8% deficit.

- Farmers are advised to monitor the infestation of paddy blast, if infestation/symptom observed than spray 120 gram tricyclazole 75 WP mixed with 200 litres water per acre when weather remain clear.
- Due to rain, the infestation of Boll rot disease may occur in cotton field, spray 2 gram copper oxychloride or 2 gram Bavistin mixed with per litre water. For better leaf adhesive use 10 gram selvat or 50 ml triton in 100 litres solution in cotton crop.
- Farmers are advised to do intercultural operation to conserve soil moisture in vegetables and fruit crops.

Jammu

Rainfall received during 01 June to 27 September 2018 over Jammu is 591.2 mm, which is 12% excess.

- Harvest the early sown maize crop as and when the cobs dry, turns brown and grain hardens.
- Harvest the early maturing varieties of rice when 80 per cent grains in panicle are golden colour.
- In moong picking of mature pods is recommended to avoid shattering loss.
- Sowing of winter vegetables like potato (var. K Badshah, K.Sinduri, K.Chipsona & K.Sona), radish (var. P.Reshmi), carrot (var.Pusa Kesar, P.Yamdagani), Turnip (var. PTWG), garlic (var.local, yamuna safed agri found parvati), Methi (var. pusa early bunching and kasuri methi) and spinach (var.all green) is recommended

***Disclaimer:** The predictability of weather depends on many factors which are dynamic in nature. The success of agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.*