



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

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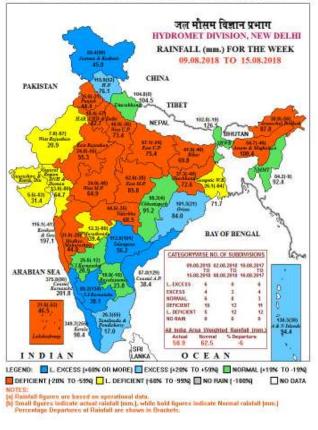
Earth System Science Organization India Meteorological Department

(Rainfall and Temperatures)

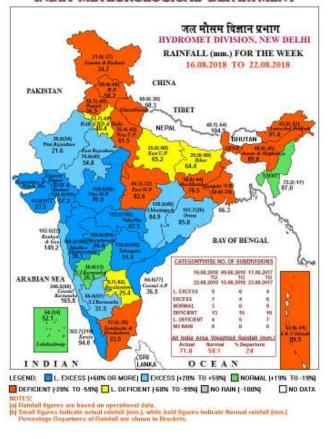
Realized Rainfall

(9th to 22nd August 2018)

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



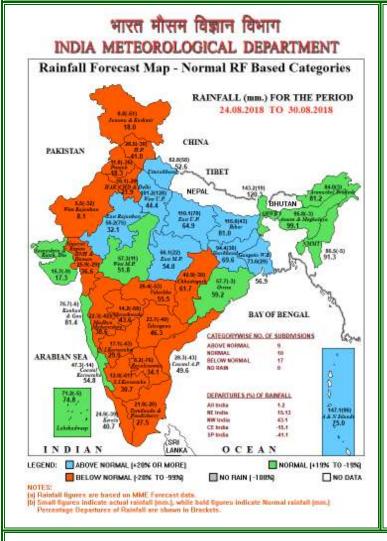
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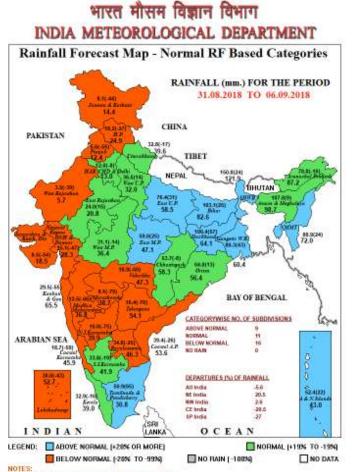


- Normal or above normal rainfall occurred during last two weeks in Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh, Odisha, Telangana, Coastal Andhra Pradesh, Karnataka and Kerala.
- Normal or above normal rainfall occurred in either of the last two weeks in Jammu & Kashmir, Uttarakhand, Himachal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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 22 August) (24th August to 6th September 2018)

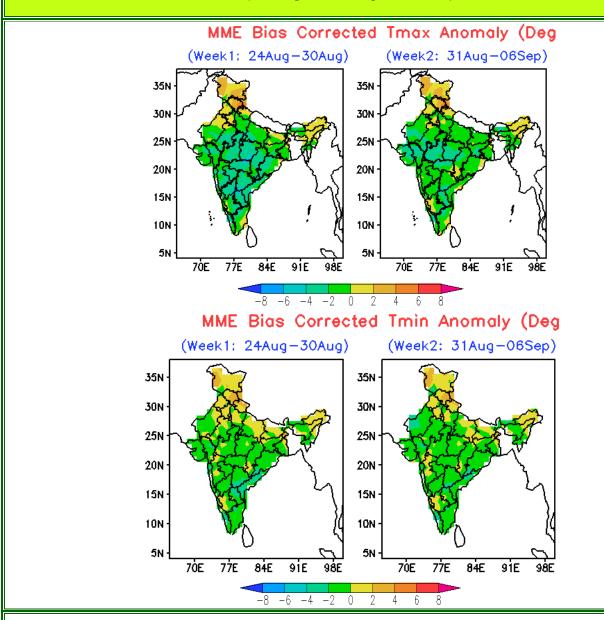




Extended Range Rainfall Forecast

- Week 1 (24.08.2018 to 30.08.2018): Above normal rainfall is expected over East Rajasthan, northern part of Madhya Pradesh, Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Gangetic West Bengal and adjoining north Odisha and parts of Northeast India. Country as a whole, it is expected to be normal. South peninsula and adjoining central parts of India will get below normal rainfall.
- Week 2 (31.08.2018 to 06.09.2018): Above normal rainfall to continue over East Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, north Odisha and parts of Northeast India. Tamil Nadu is also expected to get above normal rainfall. South peninsula and adjoining central parts of India will get below normal rainfall.

Maximum and Minimum temperature anomaly (^oC) forecast for next 2 weeks (IC – 22 August) (24th August to 6th September 2018)



Maximum Temperature (Tmax)

• Week 1 (24.08.2018 to 30.08.2018) and Week 2 (31.08.2018 to 06.09.2018): Mostly normal to below normal Tmax except parts of northern India where it is likely tobe above normal.

Minimum Temperature (Tmin)

• Week 1 (24.08.2018 to 30.08.2018) and Week 2 (31.08.2018 to 06.09.2018): Mostly normal to below normal Tmin except parts of northern India where it is likely tobe above normal.

Strategic Agricultural Planning based on rainfall during next two weeks till 06th September 2018 Agromet Advisories

Tamil Nadu

Rainfall received during the period of 01 June to 23 August 2018 over Tamil Nadu is 160.8 mm, which is 6% deficit as compared to the normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are below normal for week-1 and above normal for week-2.

- Prevailing weather condition is favourable for sucking pest incidence in chilli. For controlling, spray Imidacloprid 17.8 % SL @ 3 ml/10 litre of water or Dimethoate 30 % EC @1.0 ml/litre.
- Current weather condition is favorable for panama wilt disease incidence in Banana. For controlling this, drench banana with Carbendazim @ 2g/litre of water.

Kerala

Rainfall received during the period of 01 June to 23 August 2018 over Kerala is 2392.4 mm, which is 41% excess than normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are below normal for week-1 and normal for week-2.

- To control rice bug in paddy, spray 2 ml malathion per litre of water. (Pesticides application should be done either before 9 am or after 3 pm). Otherwise, the pesticide application will adversely affect the pollination.
- Due to continuous rain, there is a chance of bud rot disease in coconut palm. Small perforated sachets containing 2 g of mancozeb may be tied to the top crown portion and leaf axil.
- Due to monsoon showers, there is a chance of Sigatoka disease in banana. As a precaution, Spray Pseudomonas 20g/litre. In case of severe attack, spray 2 ml hexaconazole per one litre of water by mixing it with a sticker and spray on both the surface of the leaf.
- Due to continuous rain, there is a chance of foot rot in pepper. Add 2 kg Trichoderma to a mixture of 90 kg FYM and 10 kg Neemcake and keep for two weeks with sufficient moisture.

Karnataka

Rainfall received during the period of 01 June to 23 August 2018 over different meteorological sub-divisions of Karnataka *viz*, North Interior Karnataka is 260.3 mm (20 % deficit), South Interior Karnataka is 542.0 mm (12% excess) and Coastal Karnataka is 2816.3 mm (7% excess). The extended range weather forecast provided from 24 to 30 August and 31 August to 06 September for North Interior Karnataka is below normal for both the weeks, for South Interior Karnataka is below normal for week-1 and normal for week-2 and coastal Karnataka is normal for week-1 and below normal for week-2.

North Interior Karnataka

- As below normal rainfall is forecasted, therefore farmers are advised to supply essential irrigation to crops.
- Very light rain is forecasted for north interior Karnataka, it is not advisable for taking up sowing

operation.

• Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic septcaemia*.

South Interior Karnataka

- Vaccinate the cows against the Foot and Mouth Disease (FMD) & Black Quarter.
- Poultry shed is recommended to construct in East-West direction to avoid rainfall

Andhra Pradesh

Amount of rainfall received during the period of 01 June to 23 August 2018 over Coastal Andhra Pradesh is 459.8 mm (22% excess) and over Rayalaseema is 138.8 (41% deficit). The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are below normal for both the weeks.

- Farmers can continue sowing of maize, ragi, bajra, redgram, greengram, blackgram and planting of sugarcane in North Coastal Andhra Pradesh with the available soil moisture.
- Farmers who have sown groundnut crop during June-July months in Chittoor, Ananthapuramu, Kurnool districts are advised to apply gypsum @ 500 kg/ha utilizing the soil moisture.
- Incidence of army worm is observed in maize crop in Ananthapuramu, Chittoor, Kurnool, Srikakulam and East Godavari districts. Farmers are advised to take up spraying of Emamectin Benzoate @ 0.5 g/litre of water for control of army worm.
- Pinkboll worm incidence is observed in the early sown (May, June) cotton crop over the western part of Kurnool district. If noticed spraying of Quinalphos @ 2ml/litre or Chlorpyrifos@ 2.5 ml/ litre or Thiodicarb @1g/litre is recommended.

Maharashtra

Rainfall received during 01 June to 23 August 2018 over different meteorological sub divisions of the state *viz.*, Konkan: 2602.1 mm (9% excess), Madhya Maharashtra: 578.8 mm (9% excess), Vidarbha: 760.7 mm (7% excess) and Marathwada: 489.3 mm (6 % excess). The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are below normal over Madhya Maharashtra, Vidarbha and Marathwada for both the weeks and over Konkan region is normal for week-1 and below normal for week-2.

Marathwada

- Drain out the excess amount of water from *kharif* sorghum field.
- Remove excess amount of water from the cotton crop. To control para wilt in cotton crop prepare solution of Copper oxychloride 25 gm or Carbendazim 10 gm + 100 Urea + 300 gm Super phosphate in 10 litre of water and drenching should be done with the help of solution in absence of rainfall.

Madhya Maharashtra

- For control of thrips and blight of onion, spray Dimethoate 15 ml and Mancozeb 30gm or Tebuconazole 10 ml and sticker 5-10 ml per 10 litre of water.
- Due to cloudy weather and rainy climate, the incidence of leaf eating caterpillar on *kharif* crops, vegetables and fruit crops can be checked by spraying of chloropyriphos/ quinolphos/ trizophos @ 15-20 ml + 10 ml water + 5 ml sticker.

Konkan

- If the incidence of aphids, leaf hoppers, red pumpkin beetle, leaf eating caterpillars is observed on cucurbitaceous crops, spray malathion 20 ml or Dimethoate 15 ml per 10 litre of water at 10 to 15 days interval
- If incidence of stem borer is noticed in rice field, broadcast phorate 10 % granules @10 kg/ha or 5 % Quinalphos granules @ 15 kg/ha when there is sufficient moisture in the field. If the field is dry then spray Cartap hydrochloride 50 % 2 gm or triazophos 40 % 1.25 ml per litre of water.

Vidarbha

- In cotton crop, after current heavy spell of rains soil drenching with copper oxychloride 25 g + 100 g urea in 10 litres of water is advisable to avoid para wilt incidence in water logged areas.
- After current heavy spell of rains incidence of pest in soybean crop may be raise, for management of stem fly incidence remove and destroy damaged plant parts. Above ETL level (10% damaged plants) control, undertake spray of Ethion 50% EC @ 30 ml or Indoxacarb 15.8% EC @ 6.7 ml or chlorantraniliprole 18.5% @ 3 ml per 10 litre of water.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 841.0 mm during 01 June to 23 August 2018 which is 1% deficit as compared to normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are below normal for week-1 and normal for week-2.

- In the low rainfall area, there is possibility of infestation of cut worm in rice crop so farmers are advised to keep vigilant watch in that area. If cut warm is observed in the field, spray Dichlorvas @ 1 ml / litre of water and apply 200 litre water in acre area.
- If leaf caterpillar is observed in soybean crop, apply Trizofas @ 2 ml/ acre or Flubendiamide @ 0.5 ml/litre of water and apply 200 litre water in one acre area.
- In the places where water is lying stagnant in pigeon pea and other pulse crops, proper drainage management should be made.

Jharkhand

Rainfall received over Jharkhand is 553.5 mm during 01 June to 23 August 2018 which is 28% deficit as compared to normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are above normal for both the weeks.

• Rice: After transplanting, maintain the bunds of the field for stagnation of water. Broadcast urea after 20-25 days of transplanting. To control the stem borer spray insecticide Monocrotophos 36 E.C. @ 1-2 ml per litre of water and mix Tipol in the solution.

West Bengal

Amount of Rainfall received over Gangetic West Bengal is 694.1 mm during 01 June to 23 August 2018 which is 14% deficit as compared to normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are above normal for both the weeks.

- Aman Rice: First weeding should be done at 3 weeks after transplanting and second weeding at 6 weeks after transplanting. Apply 4.5 kg Urea/bigha as 1st top dressing. Drain out the stagnant water from the field before applying Urea.
- Under high humidity and cloudy condition, combined attack of Downy mildew and Mosaic may be seen in bitter gourd and pointed gourd. Farmers are advised to apply Ridomil Gold MZ (@2 gm per litre) to control the attack.
- The present weather conditions are favorable for occurrence of thrips and mite in chillies. To control spray diphentiuran@ 1.25 gm/litre of water.

Odisha

Amount of Rainfall received over Odisha is 901.7 mm during 01 June to 23 August 2018 which is 10% excess as compared to normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) are normal for both the weeks.

- Stem borer infestation has been found in rice. To control, spray 20 g Cupper Oxychloride along with 10 g Plantomycin in 20 litre water.
- To control fungal wilt in vegetables, spray 1.5 g Carbendazim in each litre water.

Uttar Pradesh

Amount of rainfall received over West Uttar Pradesh is 490.9 mm (10% deficit) and East Uttar Pradesh is 529.4 mm (15% deficit) during 01 June to 23 August 2018. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) over East Uttar Pradesh is above normal for both the weeks and over West Uttar Pradesh is above normal for week-1 and normal for week-2.

- Weed control in the standing crops such as; rice, maize, and pigeonpea etc. have been advised to the farmers.
- Drainage of excess water through drainage channel should be made in the water lodged areas.

Rajasthan

Amount of rainfall received over West Rajasthan is 176.1 mm (12% deficit) and East Rajasthan is 441.0 mm (4% deficit) during 01 June to 23 August 2018. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) over West Rajasthan is below normal for both the

weeks and over East Rajasthan is above normal for week-1 and normal for week-2.

- In soybean, if insect population is above ETL than spray Imidacloprid 17.8 % SC@ 1.0 ml / 3 litre of water is recommended against white flies (sucking pests). Farmers are advised to monitor tobacco cater pillar in soybean, if this insect is above ETL than spray Quinolphos 25 EC 2 ml/litre or Triazophos 40 EC /litre of water
- Earthing up should be avoided in groundnut where the crop is at pegging stage.

Assam

Rainfall received over Assam is 897.2 mm rainfall (33% deficit) during 01 June to 23 August 2018. The extended range weather forecast provided for (24 to 30 August and 31 August to 06 September) is normal for both the weeks.

- Farmers are advised to remove all the suckers till shooting in banana crop followed by application of fertilizer at 3 months after planting. Recommended fertilizer dose per plant is 120gm Urea, 200gm SSP and 275gm MOP.
- In flood affected areas, if the water recedes in the field, then farmers may go for direct sowing of late *sali* rice varieties such as Luit, Kapilee and Dishang in the main field. Farmers are advised to go for top dressing of urea after 20-25 days of transplanting @ 3 Kg and 1.5 Kg per bigha of land for semi-dwarf and tall traditional varieties respectively.

Punjab

Punjab has received 319.3 mm of rainfall during 01 June to 23 August 2018, which is 13% deficit than normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) is below normal for both the weeks.

• When the damage caused by leaf folder larvae in rice reaches 10 % ETL, spray the crop with 20 ml Fame 480 SC or 170 g of Mortar 75 SG or 350 ml of Sutathion 40 EC or one litre of Coroban 20 EC or 560 ml of Monocil 36 SL in 100 litres of water per acre.

Haryana

Haryana has received 260.9 mm of rainfall during 01 June to 23 August 2018, which is 24% deficit than normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) is below normal for week-1 and normal for week-2.

- Due to favourable weather condition, there is chance for infestation of *Jassid* in cotton crop. Farmers are advised to keep on vigilance.
- Farmers are advised to do the weed management and maintain 5-6 cm water level in rice fields.
- Farmers are advised to keep the animals under well ventilated place and provide clean drinking water and green forage as per requirement. Provide the 50 grams iodized salt and 50 to 100 grams mineral mixture daily with feed & green fodder to keep them healthy.

Uttrakhand

Uttrakhand has received 834.5 mm of rainfall during 01 June to 23 August 2018, which is 10% deficit than normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) is above normal for week-1 and normal for week-2.

- As moderate to rather heavy rainfall forecasted in coming days, farmers are advised to postpone the sowing of vegetable pea, radish, toria.
- In this cloudy and high relative humidity weather condition increase fruit borer infestation on various vegetable crops in Polyhouse. Malathion 10 % at different corners of the field is advised to minimize insect population. Spray Neem Oil @5ml or Imidaclorpid @1ml per litre of water to control.
- If die back disease appears on citrus plants, farmers are advised to cut the affected branches and apply chaubatia paste on cut portion of plant.

Himachal Pradesh

Himachal Pradesh has received 594.4 mm of rainfall during 01 June to 23 August 2018, which is 4% deficit than normal. The extended range weather forecast provided for next two weeks (24 to 30 August and 31 August to 06 September) is below normal for both the weeks.

- Farmers are advised to monitor paddy crop against attack of rice blast and brown spot, if lesions appear, spray Carbendazim @ 2 gram per litre of water immediately.
- Farmers who wish to establish new orchards are advised to dig the pits, 1m X 1m X 1m and fill with well decomposed FYM. For prevention against termite and white grubs, the pits should be treated with 5ml of chloropyrifos 20 EC per litre water.

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