



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

Validity: 07 to 20 September 2018

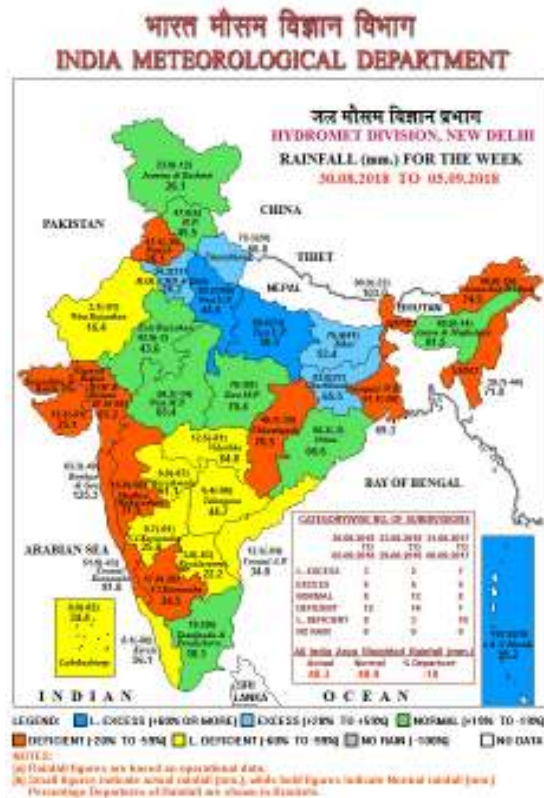
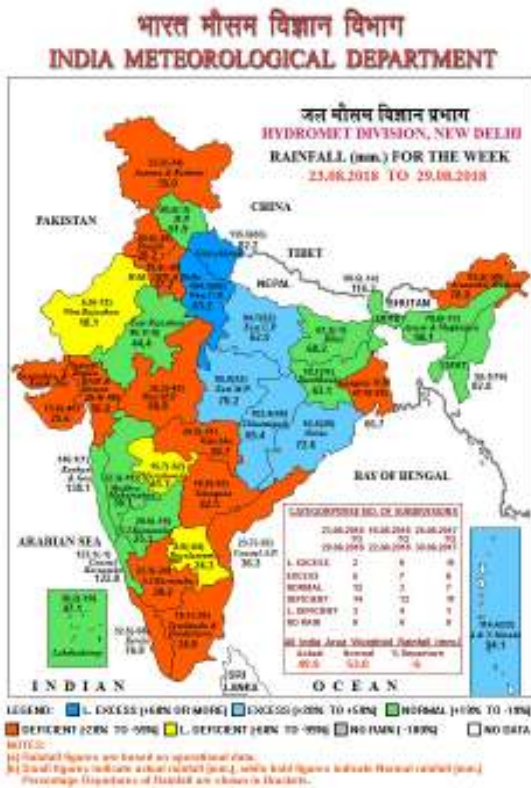
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&
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India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(23rd August to 5th September 2018)



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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 5 September) (7th to 20th September 2018)



Extended Range Rainfall Forecast

- **Week 1 (07.09.2018 to 13.09.2018):** Monsoon rainfall may mainly occur over eastern parts of India and adjoining central India and northeast India. Normal to above normal rainfall likely over Madhya Pradesh, east Rajasthan, Uttar Pradesh, Bihar, Jharkhand, Uttarakhand, north Chhattisgarh, Odisha, Gangetic West Bengal and parts of northeast India. Deficient or below normal rainfall may mainly experienced over northwest India, western coastal regions of India and south peninsular India.
- **Week 2 (14.09.2018 to 20.09.2018):** Mostly weak monsoon rainfall conditions prevail over the country except some parts of northeastern states and eastern coastal states.

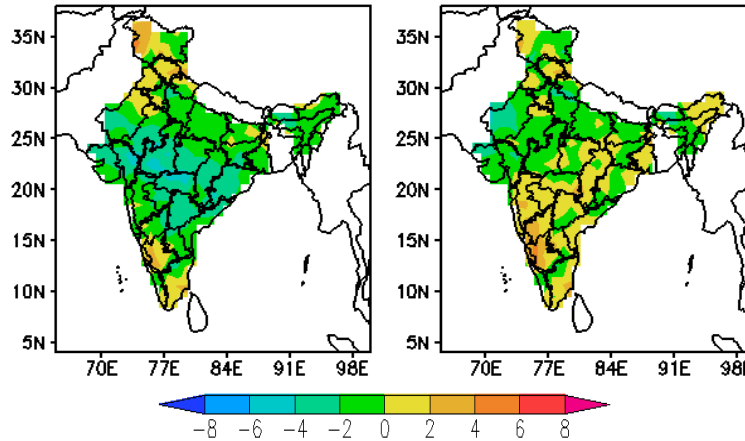
Maximum and Minimum temperature anomaly ($^{\circ}$ C) forecast for next 2 weeks (IC – 5 September)

(7th to 20th September 2018)

MME Bias Corrected Tmax Anomaly (Deg)

(Week1: 07Sep-13Sep)

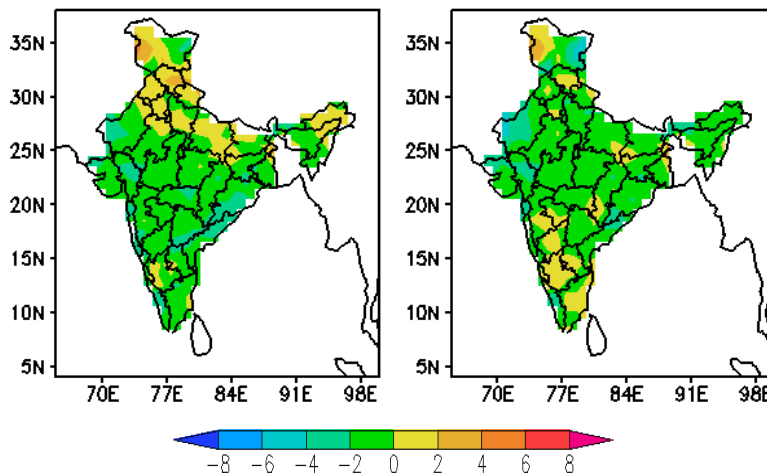
(Week2: 14Sep-20Sep)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 07Sep-13Sep)

(Week2: 14Sep-20Sep)



Maximum Temperature (Tmax)

- **Week 1 (07.09.2018 to 13.09.2018) and Week 2 (14.09.2018 to 20.09.2018):** Mostly normal to below normal Tmax may be experienced over the country as well as over the northwest India during week 2. However, over some pockets slightly above normal Tmax is likely to be experienced over eastern, southern and northern parts of the country during week 2.

Minimum Temperature (Tmin)

- **Week 1 (07.09.2018 to 13.09.2018) and Week 2 (14.09.2018 to 20.09.2018):** Mostly normal to below normal Tmin during the period.

Strategic Agricultural Planning based on rainfall during next two weeks till 20th September 2018

Agromet Advisories

Kerala

Rainfall received during the period from 01 June to 06 September 2018 over Kerala is 2432.3 mm, which is 33% excess than normal. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is below normal for both the weeks.

- To control Bacterial leaf blight in paddy, mix 200 g, of cow dung in 1 litre of water and spray the cow dung slurry by mixing with 20g pseudomonas twice at 10 days of an interval.
- 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 to control the disease.
- Due to monsoon showers, there is a chance of Sigatoka disease occurrence in banana. As a precaution, spray Pseudomonas 20g/litre. In case of severe attack, spray 2 ml hexaconazole or 1 ml propiconazole per one litre of water by mixing it with a sticker and spray on both the sides of the leaf.

Karnataka

Rainfall received during the period from 01 June to 06 September 2018 over different meteorological sub-divisions of Karnataka viz, North Interior Karnataka is 290.7 mm (23% deficit), South Interior Karnataka is 581.9 mm (8% excess) and Coastal Karnataka is 2987.4 mm (5% excess). The extended range weather forecast provided for 07 to 13 and 14 to 20 September over all the sub divisions of Karnataka is below normal for both the weeks.

North Interior Karnataka

- Green gram, black gram and soybean are in harvesting stage. Even though only very light rainfall is forecast, farmers should be careful while harvesting the crops and arrange for covering the produce effectively.
- 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

- Undertake inter-cultural operation in maize to control the weeds and to increase the moisture availability to crops.
- To control stem borer in Maize, Spray Quinalphos-25 EC @ 2ml/liter of water.
- As below normal rainfall is forecasted, farmers are advised to apply required irrigation to crops.

Tamil Nadu

Rainfall received during the period of 01 June to 06 September 2018 over Tamil Nadu is 195.2 mm, which is 9% deficit as compared to the normal. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is below normal for week-1 and normal for week-2.

- Prevailing weather condition is favorable for Citrus canker disease incidence. To control spray Copper Oxychloride 0.2% at fortnight intervals.
- In the prevailing weather with high cloud cover and moderate humidity, there is a chance for incidence of boll worm in cotton. For controlling this pest, spray Chlorantraniliprole 18.5% SC 150 ml/ha or Chlorpyrifos 20% EC @ 1250 ml/ha.
- Farmers are advised to monitor army worm incidence in maize. The larvae scrapping the leaves, makes small to medium elongated pin holes and causes loss of top portion of leaves. If symptoms were noticed, spray any one of the following pesticide to control the pest.
 - Thiodicarb 70 WP 2g/litre
 - Flubendiamide 480 SC 3 ml/10 litre

Maharashtra

Rainfall received during 01 June to 06 September 2018 over different meteorological sub divisions of the state viz., Konkan: 2806.7 mm (6% excess), Madhya Maharashtra: 626.2 mm (4% excess), Vidarbha: 801.3 mm (4% deficit) and Marathwada: 509.5 mm (8% deficit). The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) for all the sub divisions of Maharashtra is below normal for both the weeks.

Marathwada

- To control attack of sucking pests in okra, spray Fenprothrin 30 % @ 60 ml per acre. Protective irrigation should be applied as per availability and requirement of water.
- To avoid infestation of sucking pests in cotton, spray Fipronil 5 % @ 30 ml or Buprofezin 25 % @ 20 ml per 10 litre of water.
- To control downy mildew in pearl millet crop, spray Metalaxil @ 25 gm per 10 litre of water.
- As below normal rainfall is forecasted, farmers are advised to supply desired irrigation to crops if available.

Konkan

- If incidence of stem borer is noticed in rice field, broadcast phorate 10 % granules @10 kg/ha or 5 % Quinalphos granules @ 15 kg/ha or 3 % Carbofuron granules @ 16.5 kg/ha when there is sufficient moisture is available in the field.
- Clean the arecanut plants by removing dry leaves and other material and spray 1 % bordomixture or 0.375 % copper oxychloride 37.5 gm in 10 litre of water to control 'Koleroga' disease.
- If incidence of downy mildew is noticed on cucurbitaceous crop, remove and destroy diseased leaves and spray mancozeb @ 2.5 gm per litre of water at an interval of 10 to 15 days.

Vidarbha

- To control pink bollworm infestation, follow IPM practices such as , installation of pheromone traps @ 2 per acre for monitoring pink bollworm and spray of 5% neem extract or Azadirachtin 0.03% (300 ppm) @ 50 ml per 10 litres of water have to taken up to manage the initial incidence of pink boll worm in cotton.
- To control incidence of brown plant hopper in rice, farmers are advised to spray Azadirachtin 0.15% 40ml per 10 litres of water.

Chhattisgarh

Rainfall received over Chhattisgarh during 01 June to 06 September 2018 is 994.1 mm, which is 1% excess than normal. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is normal for both the weeks.

- At present rice crop is at tillering stage in most of the fields. Farmers are advised to go for first top dressing with urea (40 kg/ha.) for healthy tillers 2-3 days after cessation of rains. Farmers are advised to go for urea top dressing only after control of insects and weeds.
- In the places where water is stagnant in pigeon pea and other pulse crops, proper drainage management practices are advised.
- If leaf caterpillar is observed in Soybean crop, apply Trizofas @ 2 ml/ acre or Flubendiamide @ 0.5 ml / litre of water.

Bihar

Rainfall received over Bihar during 01 June to 06 September 2018 is 707.1 mm, which is 16% deficit. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is normal for week-1 and below normal for week-2.

- In upland areas, sowing of Pusa-9 and Sarad varieties of pigeon pea is advised. The weather condition for its sowing is getting favourable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised.
- Regular monitoring of brown plant hopper in paddy crop is advised. To control its infestation, farmers are advised to spray Imidacloprid 17.8 % SC @ 1.0 ml / 3 litre of water on any clear day.
- Monitoring of sucking pests such as white fly, leaf hopper and aphid is advised in vegetables nursery. These pests cause viral infections in the nursery crop. Spraying of Imidacloprid @ 0.3ml/litre of water is suggested to protect the nursery crop.

West Bengal

Rainfall received over Gangetic West Bengal during 01 June to 06 September 2018 is 794.6 mm, which is 16% deficit. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is normal for both the weeks.

- First weeding should be done 3 weeks after transplanting of Aman rice and second weeding at 6 weeks after transplanting. Drain out the stagnant water from the field before applying Urea.
- Under high humidity and cloudy condition, combined attack of Downy mildew and Mosaic virus may be seen in bitter and pointed gourd. 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 of diphentiuran@ 1.25 gm/litre of water is recommended.

Jharkhand

Rainfall received over Jharkhand during 01 June to 06 September 2018 is 707.9 mm, which is 21% deficit. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is normal for both the weeks.

- To control the attack of insect in black gram and green gram, spray the insecticide Quinolphos @ 2 ml per litre of water.
- In Rice crop, to control the attack of insect, dusting of Chlorpyrifos / Quinolphos / Methyl Parathion dust @ 10 kg per acre is recommended.

Odisha

Rainfall received over Odisha during 01 June to 06 September 2018 is 1060.5 mm, which is 10% excess. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is normal for both the weeks.

- High humidity, low temperature and cloudy weather favours the infestation of blast disease in rice. To control it, spray 1 g Beam and 1.5 g Hinosan in 2 litre twice at 15 days interval.
- To control fruit and shoot borer in brinjal release 20,000 Trichogramma Parasites per acre or spray 1 litre 300 ppm Neem based pesticides or 1000 g Carbaryl per acre.
- August and September are optimum time for brinjal planting. Grow resistant varieties like Utkal Madhuri, Green round, Green long, Ufala, Suchitra, Supriya, etc. Use 150-200 g seeds/acre. Plant the seedling at 60x45 cm spacing.

Rajasthan

Amount of rainfall received over East Rajasthan region is 524.6 mm (4% deficit) and West Rajasthan is 184.2 mm (21% deficit) during 01 June to 06 September 2018. The extended range weather forecast provided for two weeks (07 to 13 and 14 to 20 September) for West Rajasthan is below normal for both the weeks and East

Rajasthan is above normal for week-1 and below normal for week-2.

- Apply irrigation in soybean and maize crop in the region where no rain occurred during last 12-15 days.
- As dry weather condition is expected in coming days, plant protection measures should be taken up in cotton, soybean and pulses. Spray Imidacloprid @ 0.3 ml /litre of water or Trizophose 40 EC @ 1 ml/litre of water in cotton, soybean and pulses for the control of white fly and sucking pest.

Assam

Rainfall received over Assam is 1080.1 mm (29% deficit) during 01 June to 06 September 2018. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is above normal for week-1 and below normal for week-2.

- Due to favourable weather condition there may be outbreak of rice swarming caterpillar, to control this farmers are advised to spray Chlorpyrifos 20EC or Quinalphos 25EC @1ml/litre water under the clear weather condition.
- Spraying of 0.2%-0.3% Borax @ 220-320 g/100lt/bigha against browning disease in early cauliflower field on clear weather is advised.

Punjab

Rainfall received over Punjab is 357.3 mm rainfall (15% deficit) during 01 June to 06 September 2018. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is below normal for both the weeks.

- The Prevailing weather conditions are favourable for the development of false smut in rice. To manage it spray Kocide 46 DF @ 500 g in 200 litres of water per acre at boot stage.
- For the management of Thrips in cotton, spray either 500 ml Curacron 50 EC or 200 g Polo 50 WP or 800 ml Fosmite 50 EC in 150 litres of water per acre.
- It is right time for sowing of cauliflower nursery of mid season varieties.

Haryana

Haryana has received 324.7 mm of rainfall during 01 June to 06 September 2018, which is 20% deficit. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is below normal for both the weeks.

- Farmers are advised to do the weed management and maintain 5-6 cm water level in rice fields.
- Due to favourable weather condition, there may be chance for infestation of Jassid in cotton crop, farmers are advised to keep on vigilance. Due to chances of rainfall farmers are also advised to drain out the excess amount of water from cotton fields.
- Farmers are advised to keep the animals under well ventilated place and provide clean drinking water and green forage as per requirement.

Himachal Pradesh

Himachal Pradesh has received 692.3 mm of rainfall during 01 June to 06 September 2018, which is 4% deficit. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is 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 are advised to mend bunds for conserving rain water in rice fields.

Uttrakhand

Uttrakhand has received 1049.3 mm of rainfall during 01 June to 06 September 2018, which is 2% deficit. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) is above normal for week-1 and normal for week-2.

- Spray of Blitox50% WP @0.2% on cut portion of vegetable fruit plants like tomato, capsicum etc inside the Polyhouse to prevent fungus infestation.
- If die back disease appears on citrus plants, farmers are advised to cut the affected braches and apply chaubatia paste on cut portion of plant.
- Vaccination should be done in new born Lambs (Sheep & Goat).

Jammu

Rainfall received during 01 June to 06 September 2018 over Jammu is 496.0 mm, which is 8% excess. The extended range weather forecast provided for next two weeks (07 to 13 and 14 to 20 September) over Jammu is below normal for both the weeks.

- In okra remove yellow leaves with plants as and when seen in field. Spray cypermethrin @ 1ml/litre of water, against white fly during clear weather.
- Train and support the emerging vines of Bitter gourd. Monitor crop for the attack of fruit fly. Use pheromone traps @ 1 trap/10sq. m area to trap melon fly.

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