



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

**Validity: 09 to 23 November 2018**

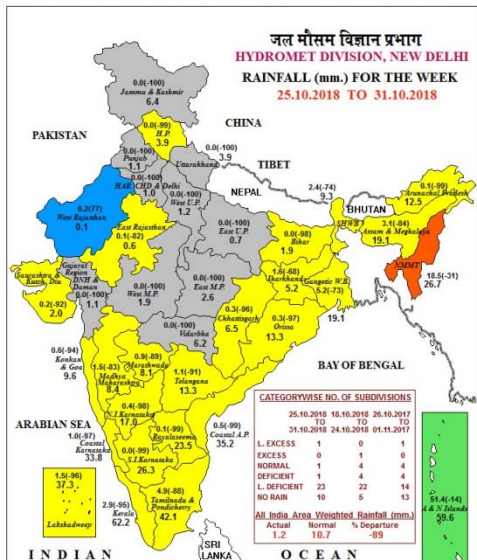
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**&**  
**Earth System Science Organization**  
**India Meteorological Department**

# Realized Rainfall

(25<sup>th</sup> October 2018 to 7<sup>th</sup> November 2018)

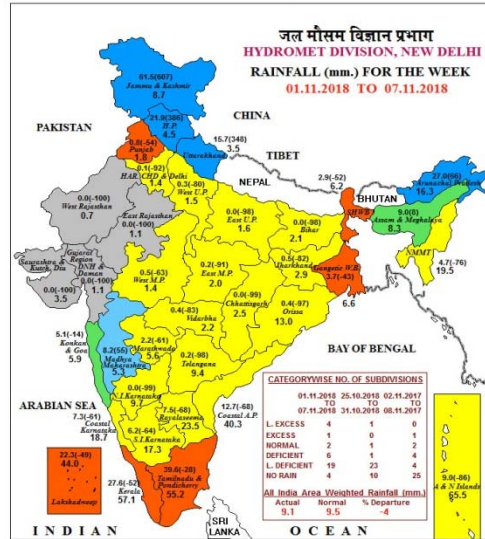
## भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



**LEGEND:** ■ L. EXCESS (+160% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+15% 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.)  
Percentage Departures of Rainfall are shown in Brackets.

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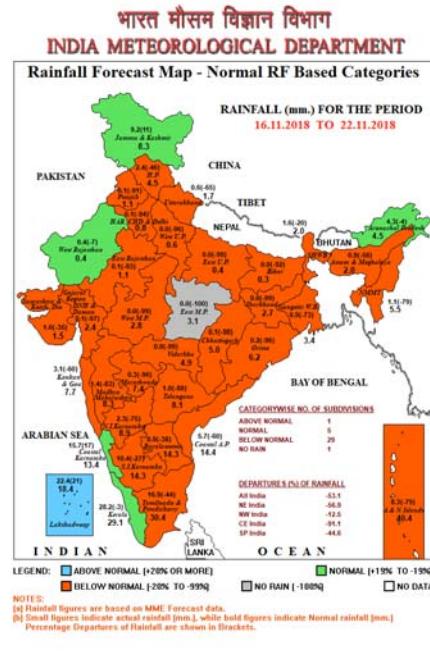
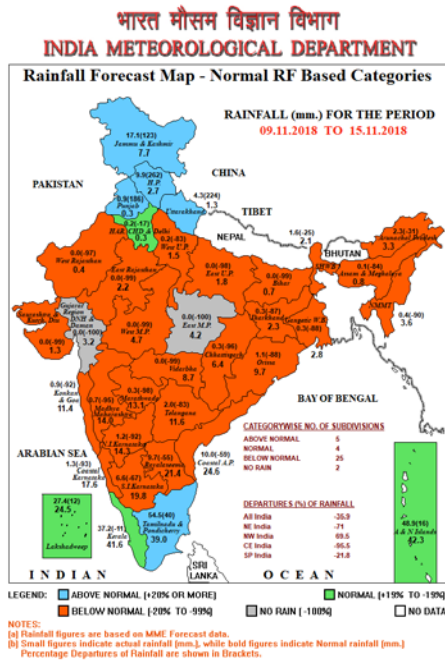
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**NOTES:**  
[a] Rainfall figures are based on operational data.  
[b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
Percentage Departures of Rainfall are shown in Brackets.

- Normal or above normal rainfall occurred in either of the last two weeks in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, West Rajasthan and Andaman & Nicobar Islands
- Below normal rainfall occurred in both the weeks in Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Nagaland, Manipur, Mizoram & Tripura, Marathwada, Karnataka, Telangana, Andhra Pradesh Kerala, Lakshadweep and Tamil Nadu.
- Below normal rainfall / no rain occurred in either of the two weeks in East Rajasthan, Uttar Pradesh, Punjab, Haryana, Chandigarh & Delhi, Madhya Pradesh, Saurashtra & Kutch and Vidarbha.
- No rain occurred in both the weeks in Gujarat region.

# Extended Range Forecast System

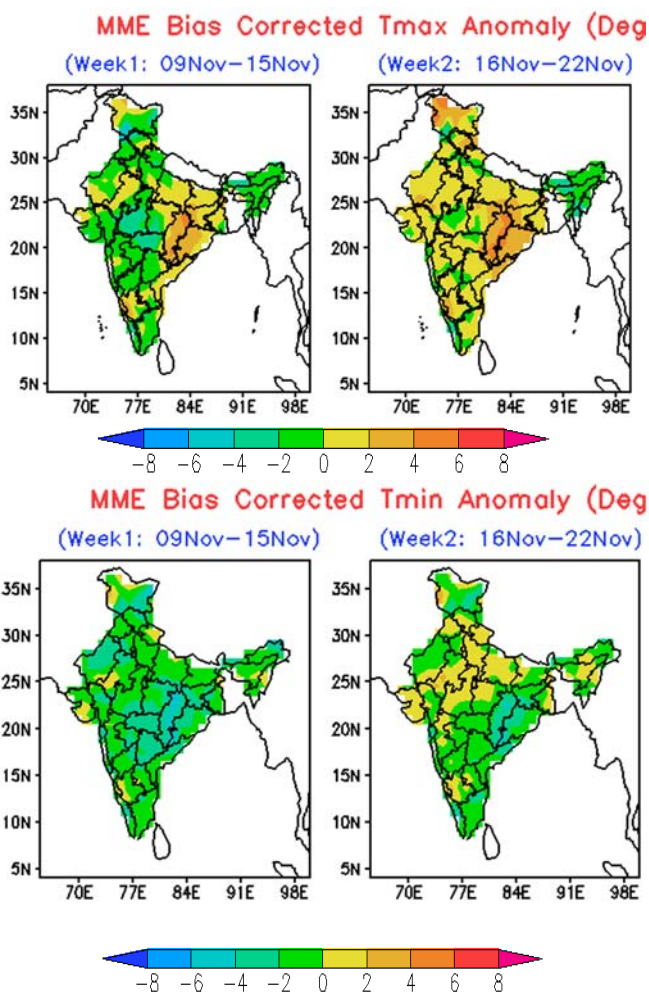
## Rainfall forecast maps for the next 2 weeks (IC – 07 November) (9<sup>th</sup> to 22<sup>nd</sup> November 2018)



### Extended Range Rainfall Forecast

- **Week 1 (09.11.2018 to 15.11.2018):** Above normal rainfall is expected over Tamil Nadu, Jammu & Kashmir, Himachal Pradesh, Punjab and Uttarakhand. Also normal rainfall expected over Haryana, Chandigarh & Delhi, Kerala, Andaman & Nicobar Islands and Lakshadweep.
- **Week 2 (16.11.2018 to 22.11.2018):** Normal rainfall over Jammu & Kashmir, West Rajasthan, Arunachal Pradesh, Coastal Karnataka and Kerala and above normal over Lakshadweep. However, northeast monsoon rainfall is expected to be below normal.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 07 November)  
(9<sup>th</sup> to 22<sup>nd</sup> November 2018)**



**Maximum Temperature (Tmax)**

- **Week 1 (09.11.2018 to 15.11.2018):** Western part of India is expected to be slightly below normal, whereas rest of India is expected to be above normal. The Tmax anomaly over Odisha, Chhattisgarh and adjoining region is expected to be 4 to 6 degree C above normal
- **Week 2 (16.11.2018 to 22.11.2018):** The above normal Tmax area increases during the period with almost entire India. Tmax is above normal. The Tmax anomaly over Odisha, Chhattisgarh and adjoining region is expected to be 4 to 6 degree C above normal.

**Minimum Temperature (Tmin)**

- **Week 1 (09.11.2018 to 15.11.2018):** Mostly below normal Tmin during week 1 over most of India.
- **Week 2 (16.11.2018 to 22.11.2018):** Mostly below normal Tmin over the eastern coastal states of India, whereas above normal over rest of India.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 15<sup>th</sup> November 2018**

### **Agromet Advisories**

#### **Kerala**

Rainfall received during the period from 01<sup>st</sup> October to 08<sup>th</sup> November 2018 over Kerala is 331.9 mm, which is 5% deficit than normal. The extended range weather forecast provided for next two weeks shows that the rainfall will be above normal for both week-1 (9<sup>th</sup> – 15<sup>th</sup> November) and week-2 (16<sup>th</sup> to 22<sup>nd</sup> November).

- As paddy is in seedling stage, apply 2CC *Trichogramma chilonis* card per acre to control leaf folder and 2CC *Trichogramma japonicum* card per acre to control stem borer.
- For Coconut, after thorough cleaning of the crown region, apply cartap hydrochloride 4G @ 20 g mixed with fine sand 200 g to the inner most leaf axils surrounding the spindle leaf or a mixture of fipronil 0.3 G @ 20 g and fine sand @ 200 g to the inner most leaf axils.
- Destroy the Spodoptera affected leaves in banana, if attack is severe and spray quinalphos 2ml per one litre of water or chlorantraniliprole 3 ml per 10 litre of water.
- In Pepper, yellowing was observed due to flood situation followed by physiological drought. Soil drenching with 2g kocide/litre of water, followed by a foliar spray and soil drenching with 20 g of pseudomonas per litre of water after two weeks is recommended.
- For Cardamom, employ necessary phyto-sanitary measures to manage capsule rot (Azhukal disease) and spray 1% Bordeaux mixture (500-1000 ml/plant). Drench the soil with 2-3 liters of copper oxychloride (0.25%) solution to control rhizhome rot.

#### **Tamil Nadu**

Rainfall received during the period from 01<sup>st</sup> October to 08<sup>th</sup> November 2018 over Tamil Nadu is 197.3 mm, which is 16% deficit as compared to the normal. The extended range weather forecast provided for next two weeks shows that the rainfall will be above normal for week-1 (9<sup>th</sup> – 15<sup>th</sup> November) and below normal for week-2 (16<sup>th</sup> to 22<sup>nd</sup> November).

- Adopt soil and water conservation practices like broad bed and furrow, compartmental bunding and ridges and furrows for the dryland crops to be raised during the ensuing north east monsoon season.
- Due to delayed onset of monsoon, farmers are advised to sow sunflower, cumbu, horsegram, bengalgram, coriander and senna in rainfed farming by adopting recommended spacing.
- Deworming may be advised to the goat and sheep by utilizing the facility from nearby veterinary hospital.
- Apply NPK fertilizers @ 40:20:40 kg/ha for Cotton, 40:20:0 kg/ha for Sorghum, 60: 30: 30 kg/ha for Maize and 12.5: 25: 12.5 kg/ha for pulses.
- To control leafhopper in cotton, spray Imidacloprid 200 SL 100 ml/ha or Fipronil 5%SC 1500-2000 ml/ha.
- Apply Foliar spray of neem formulation 3 ml/litre or dimethoate 30 EC 500 ml/ha to control yellow mosaic virus in pulses.

- To control root rot disease in cotton, spot drench with 0.1% Carbendazim or 0.05% Benomyl.

### West Bengal

Rainfall received over Gangetic West Bengal during 01 October to 08 November 2018 is 69.9 mm, which is 49% deficient compared to normal. The extended range weather forecast provided for next two weeks says that the rainfall will be below normal for both week-1 (9<sup>th</sup> – 15<sup>th</sup> November) and week-2 (16<sup>th</sup> to 22<sup>nd</sup> November).

- Complete the harvesting of aman rice at the earliest. To control BPH, apply Diclorovos or Carbaryl @ 1 ml/litre of water. To prevent the blast disease apply Tricyclazole 0.6 gm or Hexaconazole @ 1ml/litre of water.
- Start nursery bed preparation for boro rice. Treat the seeds with mercurial pesticide and Soak the seeds in carbendazim mixed water (@ 1gm in 1.5 litre water) and dry under shade.
- Start sowing of Sita, Vagirathi etc varieties of mustard. Maintain seed rate as 1kg per hectare. Before final land preparation, apply 11.5 kg Urea, 33 kg SSP and 8.5 kg MOP per Bigha.

### Jharkhand

Rainfall received over Jharkhand during 01 October to 08 November 2018 is 24.3 mm, which is 69% deficient compared to normal. The extended range weather forecast provided for next two weeks says that the rainfall will be below normal for both week-1 (9<sup>th</sup> – 15<sup>th</sup> November) and week-2 (16<sup>th</sup> to 22<sup>nd</sup> November).

- Sowing of wheat may be done by broadcasting the seeds and after 15 days of sowing apply recommended dose of fertilizer (Urea 85 kg, DAP 50 kg and Muriate of Potash 25 kg/acre).
- Sowing of other rabi crops may be started and the recommended varieties of various crops are Sweta, Shubhra, T-397 for linseed Jyoti, Ratna, D.L.-36, B.R.-32 and B.R.-31, K.-125 for Barley, B.G.-372, B.G.-256, K.W.R.-108, Pant G.-186, Pant G. –114 for Chick pea, P.L.- 406, P.L.-639, D.P.L.- 15, D.P.I.- 62 for lentil and Kufri Ashoka, Kufri Pukhraj, Kufri Lalima, Kufri Pushkar and Kufri Kanchan for potato.

### Assam

Rainfall received over Assam is 55.8 mm (66% deficit) during 01 October to 08 November 2018. The extended range weather forecast provided for next two weeks shows that the rainfall will be below normal for both week-1 (9<sup>th</sup> – 15<sup>th</sup> November) and week-2 (16<sup>th</sup> to 22<sup>nd</sup> November).

- Install the poison bait (10-15g) alongside the bunds or inside the live burrow and block the burrow to control field rat infestation in matured Sali rice crop. To control rice bug infestation, farmers are advised to apply Malathion 5% dust @20 kg/ha.
- Farmers are advised to continue the land preparation and planting of potato. Apply 19 kg urea, 45 kg SSP and 12 kg MOP per bigha during the time of final land preparation. Select recommended potato varieties like Kufri Chandramukhi, Kufri Jyoti, Kufri Megha, Kufri Badshah, Kufri Sindhuri, Pukhraj etc for higher production.
- Farmers are advised to sow seeds of improved brinjal varieties like Pusa Kranti, Pusa Purple Long, Pusa Purple Round, Pusa Purple Cluster, Pusa Vairab, Kuchia, Pant Samrat, JC-1, JC-1 etc. For planting one bigha of land with a spacing of 75 cm (R-R) × 60 cm (P-P) 95-105g seeds are required.

## Haryana

Rainfall received over Haryana is 3.1 mm rainfall (84% deficit) during 01 October to 01 November 2018. The extended range weather forecast provided for next two weeks (09 to 15 and 15 to 22 November) is normal for week-1 and below normal for week-2.

- Farmers are advised to treat the gram seed with Bioderma 4 gram and 1 gram Vitavex mix with 5 ml water for 1 kg seed to controlling of fungal disease.
- Harvest rice threshing should be on same day or next morning. Plough the paddy straw /residue up in the soil as it improves the soil fertility and prevent air pollution.
- Farmers' are advised for picking the cotton due to dry weather and it should be done after sun rises when dew evaporates from cotton ball.
- Due to fall in night temperature keep the animals under shed. Provide 50 grams iodized salt and 50 to 100 grams mineral mixture daily with animal feed/fodder to keep them healthy.

## Punjab

Rainfall received over Punjab is 5.1 mm rainfall (79 % deficit) during 01 October to 08 November 2018. The extended range weather forecast provided for next two weeks (09 to 15 and 15 to 22 November) is above normal for week-1 and below normal for week-2.

- Farmers are advised to sow early sown wheat varieties i.e. Unnat PBW 343, PBW 1 Zn, PBW 725, PBW 677, HD 3086, WH 1105, HD 2967 and PBW 621. Treat wheat seed with 13 ml Raxil Easy/Orius 6 FS by dissolving in 400 ml water or 120 g Vitavax Power 75 WS or 80 g Vitavax 75 WP or 40 g Seedex 2 DS/Exzole 2 DS per 40 kg seed, using seed treatment drum to control loose smut and flag smut of wheat.
- Complete the sowing of Gobhi Sarson varieties GSC 7, GSC 6, Hyola PAC 401, GSL 2 and GSL 1.
- Farmers are advised for hoeing to control weeds in pea and avoid early sowing of peas in wilt disease prone areas.
- Avoid heavy irrigation to deciduous fruit tree like pear, peach, plum and grapes.
- Apply 500 g urea, 1250 g Single Super Phosphate and 750 g Muriate of Potash to the fully grown guava plants and apply 200 ml Crocodile/ Confidor 17.8 SL (imidacloprid) or 160 g Actara 25 WG (thiamethoxam) in 500 litres of water to control leaf minor in citrus.

## Himachal Pradesh

Himachal Pradesh has received 33.5 mm of rainfall during 01 October to 08 November 2018, which is 29% deficit. The extended range weather forecast provided for next two weeks (09 to 15 and 15 to 22 November) is above normal for week-1 and below normal for week-2.

- Before rabi crop sowing, add well decomposed FYM or compost as it improves the physical and biological properties of the soil and also increases water retention and nutrient status of the soil.
- Complete mustard sowing immediately.
- Sowing of timely sown wheat (varieties) may be continued.

- For sowing, farmers are advised to arrange quality seeds.

### Jammu

Rainfall received during 01 October to 08 November 2018 over Jammu is 83.5 mm, which is 75% excess. The extended range weather forecast provided for next two weeks (09 to 15 and 15 to 22 November) over Jammu is above normal for week-1 and normal for week-2.

- Sowing of wheat varieties viz. PBW-550, HD-2967 under irrigated conditions and var. viz. PBW-644, PBW-396 and WH-1080 under rainfed conditions.
- Sowing of barley (var. Ratna, Jyoti and Sonu) with seed rate 100 kg/ha in rainfed areas.
- Harvest paddy when 80 per cent grains in panicle are golden colour without any delay.
- Sowing of mustard var. (RSPR-01, Kranti) can be taken up in irrigated areas whereas under rainfed areas sowing of RSPR-03 can be carried on fields having conserved moisture.
- Continue the sowing of Pea (var., AP-1, Bonnevillea, Rachna and Arkel); Chickpea (var., K-468, Gourav); Lentil (var., L-4147, L-9/12, PL-406) is in progress.
- Hoeing & weeding is recommended in cole crops (knol khol, cabbage, cauliflower and broccoli).
- Sowing of Potato (var. Kufri Badshah, K.Sinduri, K.Chipsona & K.Sona) may be taken up.
- Give light spray of Urea to weak and pale plants.

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