



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

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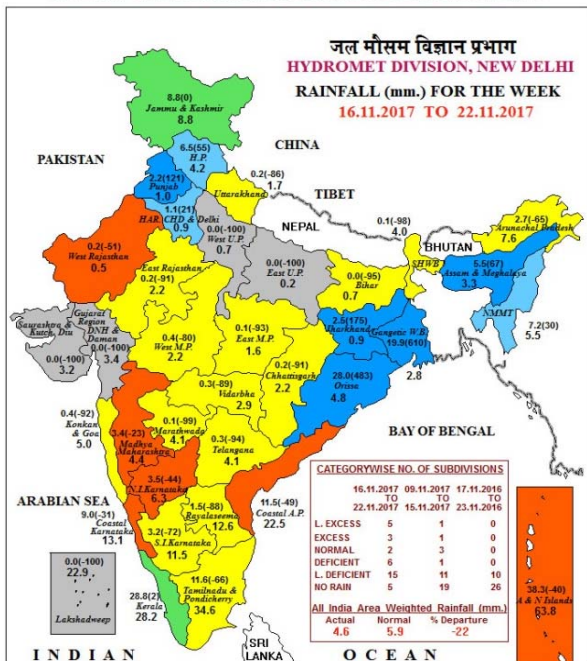
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(16th to 29th November 2017)

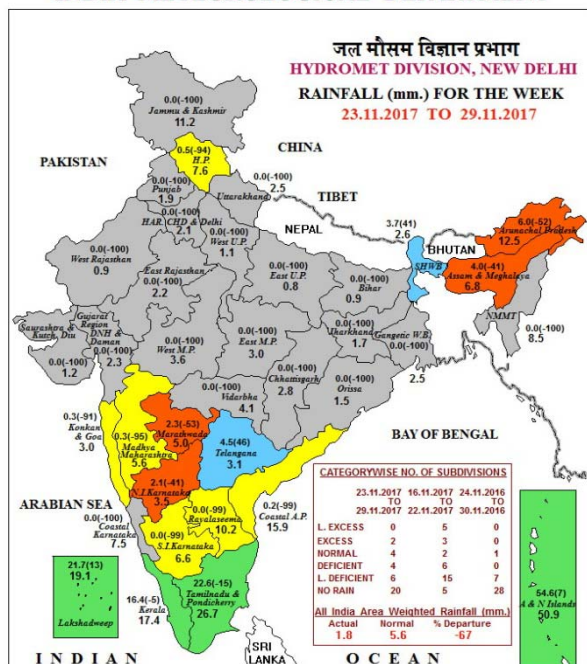
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: L. EXCESS (+60% OR MORE) EXCESS (+20% TO +59%) NORMAL (+19% 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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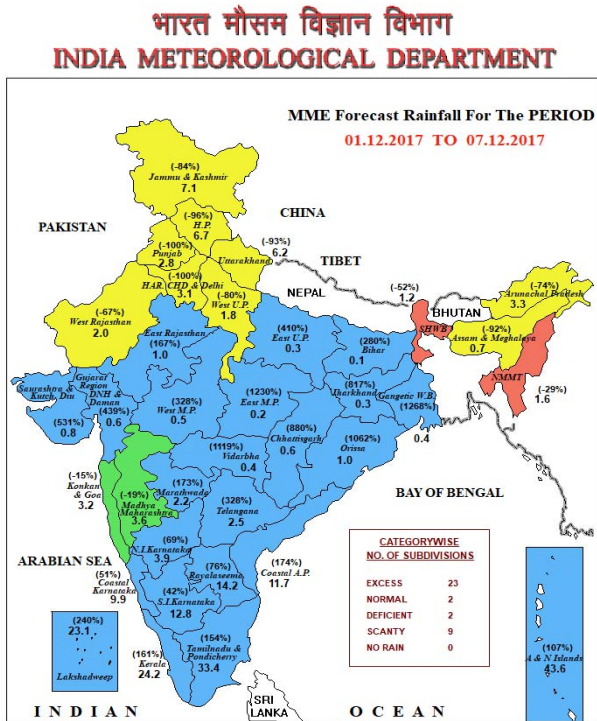
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Percentage Departures of Rainfall are shown in Brackets.

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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 29 November)

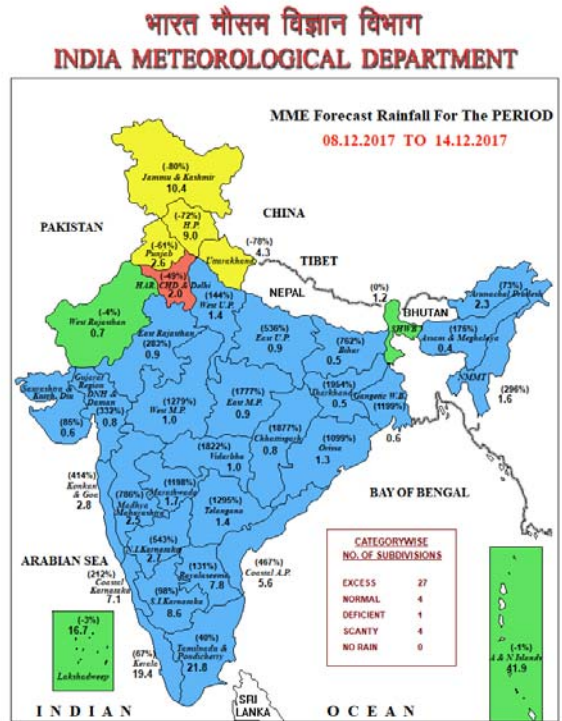
(1st to 14th December 2017)



LEGEND: ■ EXCESS (+20% OR MORE) ■ NORMAL (+19% TO -19%) ■ DEFICIENT (-20% TO -59%)
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NOTES:

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- [c] Percentage Departures of Rainfall are shown in Brackets.



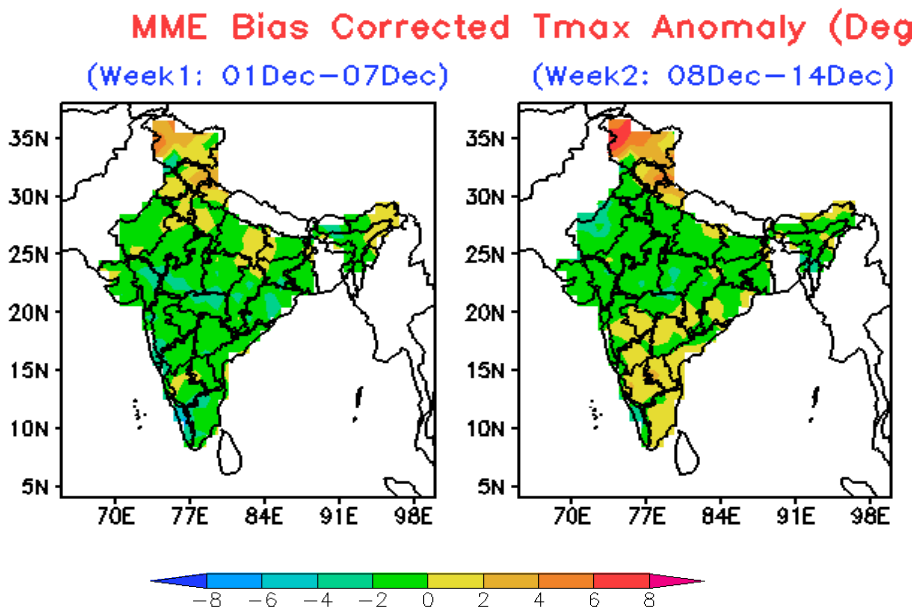
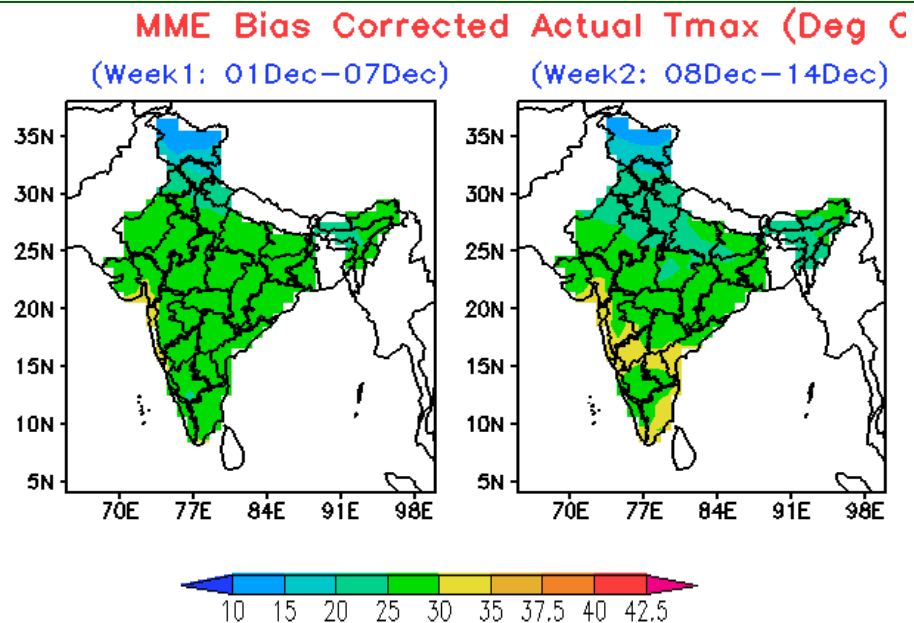
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- Extended Range Forecast indicates that during week 1 due to development of weather systems in Arabian Sea and Bay of Bengal western states, eastern states, central India and south peninsula will get above normal rainfall. The Northeast monsoon over south peninsula including Tamil Nadu (Tamil Nadu, Rayalaseema, South Interior Karnataka, Kerala and Coastal Andhra Pradesh) will be very active and receive above normal rainfall during the week.
- During week 2, the above normal rainfall of week 1 will continue over these regions during week 2 also with some more parts of central India is likely to get above normal rainfall.

**Maximum and Minimum temperatures and anomaly ($^{\circ}\text{C}$) for next 2 weeks (IC – 29 November)
(1st to 14th December 2017)**



- **T max (Max.Temperature):** Except over some parts of south peninsula and extreme north India, Tmax will be below normal during the next 4 weeks.
- **T min (Min.Temperature):** Winter has already set in and Tmin is expected to be below normal over most parts of India during week 1. During week 2 some parts of Northwest India will have below normal Tmin. However, the remaining regions will be above normal Tmin.

Strategic Agricultural Planning based on rainfall during next two weeks till

14th December 2017

Agromet Advisories

Tamil Nadu

Rainfall Situation

Rainfall received during the period of 01 October to 29 November 2017 over Tamil Nadu is 284.9 mm, which is 18% deficit than the normal. The extended range weather forecast provided for next two weeks (01 to 07 December and 08 to 14 December) for Tamil Nadu is above normal for both the weeks.

- Above normal rainfall is forecasted, and normal rainfall is recorded in previous week, So farmers are advised not to irrigate fields and drain out the excess water in rabi sown paddy field if any.
- Plant protection measures are also not recommended in upcoming weeks, as excess rainfall is forecasted.
- Expecting high wind velocity ranging from 45 - 65 km/hr in the next two weeks farmers are advised to prop up with Bamboo (or) Casurina poles in banana fields which may be provided to protect banana from lodging due to high wind velocity.

Kerala

Rainfall Situation

Rainfall received during the period of 01 October to 29 November 2017 over Kerala is 378.4 mm, which is 14% deficit from the normal. The extended range weather forecast provided for next two weeks (01 to 07 December and 08 to 14 December) for Kerala is above normal for both the weeks.

- Excess rainfall is forecasted. So, there is a chance of rice leaf folder in mundakan paddy (second crop) in seedling stage. Farmers are recommended to spray fame @ 2ml /10 litre of water after rainfall.
- If infestation of pseudostem weevil is noticed in banana fields, the leaf axils and holes on pseudo stem will be drenched with chlorpyrifos 2 ml or quinalphos 2 ml per litre of water.
- Take necessary phyto-sanitary measures for pollu disease and quick wilt. Apply Ecalux @ 2ml/litre if the attack of pollu beetle is found severe. Drench the soil with 0.2 % Copper oxychloride and spray the aerial part with 1% Bordeaux mixture as a prophylactic measure to control Quick wilt and pollu disease. Application of Trichoderma/ Psuedomonas culture will control the quick wilt infestation.

Maharashtra

Rainfall Situation

Rainfall received during the period of 01 October to 29 November 2017 over different meteorological sub divisions of the state are: Vidarbha: 57.8 mm (20% deficient); Marathwada: 102.8 mm (10% surplus); Madhya Maharashtra: 116.7 mm (15% surplus) and Konkan: 157.7 mm (10% surplus). The extended range weather forecast provided for (01 to 07 December) is normal for Konkan Goa and Madhya Maharashtra and excess for Vidarbha and Marathwada. For (08 to 14 December) all the subdivisions of Maharashtra

will receive above normal rainfall.

Madhya Maharashtra

- With the forecast of cloudy weather and rainfall, there is a chance of powdery mildew infestation in the standing vegetable crops such as guar, tomato, chilli, okra etc. So, farmers are advised to spray water soluble 80% sulphur @ 2 gm per litre and if the infestation gets severe is advised spray of diafenoconazole @ 0.5 ml + potassium bicarbonate 5 gm per litre of water.
- Present weather condition favors attack of thrips in chilli and to control it spray diamethoate 30% concentrate @ 15 ml or lambda psyalothrine 5% concentrate @ 6 ml per 10 litre of water.

Marathwada

- Ratooning must be avoided in cotton crop. Picking of bolls should be done before December. Remaining plant parts should be collected and destroyed properly.
- Due to cloudy condition in the last week Tur pod fly attack in pigeon pea was noticed. Farmers are recommended to spray of Monocrotophos @ 13 ml or Diamethoate @ 10 ml per 10 liter of water.
- Transplanting of vegetables like Tomato, Brinjal, Cauliflower and Cabbage should be done as early as possible.
- To protect the animals from low temperature effect during early morning apply curtains of gunny bags for animal shed. Maintain at 30 °C temperature of the shed using electric bulbs.

Jharkhand

Rainfall situation

Rainfall received over Jharkhand during the period of 01 October to 29 November 2017 is 106.2 mm, which is 26% excess than the normal. The extended range weather forecast provided for (01 to 07 December and 08 to 14 December) Jharkhand is Excess Rainfall for both the weeks.

- AS excess rainfall is forecasted, farmers are advised to do inter - cultural operations in 20-25 days sown wheat crops which are essential for control weeds. After inter-cultural operations broadcast urea @ 22 kg per acre. If weeds are vigorous in the field, then spray weedicide Isoproburon (@ 0.30 kg a.i.) and 2,4 - D (@ 0.20 kg a.i.) in 240 litre of water per acre between 30 and 35 days of sowing of the crop. Farmers wishing to cultivate wheat after harvesting of rice are advised to go for sowing immediately.
- Timely sown Rapeseed/ Mustard crops are at flowering stage and vulnerable to the attack of Aphids. Farmers are advised to control aphids by spraying the insecticide Monocrotophos @ 2 ml per litre of water or Emidachlorpyrd @ 1 ml per litre of water after the rainfall.

Rajasthan

Rainfall Situation

Rainfall received during the period of 01 October to 29 November 2017 over the meteorological subdivisions of Rajasthan are: West Rajasthan and East Rajasthan have received 0.5 mm and 0.2 mm rainfall respectively over the period, which is 93% deficient for West and 99% deficient for East

Rajasthan. The extended range weather forecast provided for (01 to 07 December and 08 to 14 December) West Rajasthan is below normal for 1st week and normal for 2nd week and for East Rajasthan it is above normal rainfall for both the weeks.

East Rajasthan

- Farmers are recommended for thinning and weeding in late sown mustard crop where the crop is at 15-20 days old. Irrigation of timely sown mustard crop (which is about 30-35 days old) and top dressing of urea @ 65 kg/ha is advised.
- Keeping in view of the dry weather conditions during next five days, farmers are advised to irrigate wheat crop which is in CRI stage (21-25 days after sowing) and top dress second dose of nitrogen i.e. 30 kg N/ha or 65 kg urea/ha.
- Under late sown conditions wheat varieties Raj-4037, Raj-4238, Raj-3077, Raj-3765, and HD-2932, with 25% higher seed rate i.e. 125 kg/ha are recommended to farmers.
- Farmers are advised to do intercultural operations in pulses and vegetables for controlling the weeds

Bihar

Rainfall Situation

Bihar received 49 mm of rainfall during the period of 01 October to 29 November 2011, which is 31% deficient to the normal. The extended range weather forecast provided for (01 to 07 December and 08 to 14 December) Bihar is excess for both the weeks.

- As excess rainfall is forecasted, farmers are advised to complete the sowing of wheat up to 10th December with the recommended varieties PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, and DBW-39. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing.
- Heavy rainfall is forecasted, so farmers are advised to avoid irrigation in early sown wheat crop which reached Crown Root Initiation (CRI) stage (21-25 days after sowing). Apply nitrogenous fertilizer 2-3 days after rainfall.
- Complete the sowing of maize at the earliest. Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, and Rajendra sanker varieties of hybrid maize and Dewki white, Lakshmi white and Suaan yellow varieties of composite maize are recommended for this region. Weeding is advised in 25-30 days old maize crop.

Haryana

Rainfall Situation

Rainfall received during the period of 01 October to 29 November 2017 over Haryana is 1.5 mm, which is 93% deficit than the normal. The extended range weather forecast provided for (01 to 07 December and 08 to 14 December) for Haryana is Scanty for both the weeks.

- As scanty rainfall is forecasted and anticipated dry weather condition, farmers are advised to irrigate the wheat field at CRI stage. The area where sowing is yet to be completed, farmers are

advised to complete sowing with recommended late varieties.

- Intercultural operations are advised for conserving the moisture and removing weeds in mustard crop. Apply irrigation in timely sown crop.
- Scanty Rainfall is forecasted and there is no rain in previous week, so farmers are advised to irrigate fodder berseem at 15-20 days interval and also the barley field.
- Due to possibility of fall in night temperature, protect the animals from cold winds and chill by keeping them in sheds during night hours.

Jammu

Rainfall Situation

Rainfall received during the period of 01 October to 29 November 2017 over Jammu and Kashmir is 11.6 mm, which is 81% deficit from the normal. The extended range weather forecast provided for (01 to 07 December and 08 to 14 December) over Jammu & Kashmir is scanty for both the weeks.

- As below normal rainfall is forecasted, farmers are advised to continue sowing of wheat varieties (WH-1021, PBW-590, PBW-373, Raj-3077, Raj-3765 and DBW-16) under irrigated conditions.
- Farmers are advised to irrigate the normal sown mustard crop, if it is 35-40 days old. Apply Ist dose of nitrogen fertilizer as top dressing after irrigation. Carry out hoeing, weeding and thinning. Complete the sowing of barley (var. Ratna, Jyoti and Sonu) with seed rate 100 kg/ha in rainfed areas.
- In potato farmers are recommended to carry out weeding, hoeing and earthing up followed by irrigation. Go for earthing-up as the crop attains height of 15-22 cm. Give first top dress of Nitrogen fertilizer. In rabi pulses, hoeing & weeding operations are recommended under irrigated conditions only.

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