



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

Validity: 29 December 2017 to 11 January, 2018

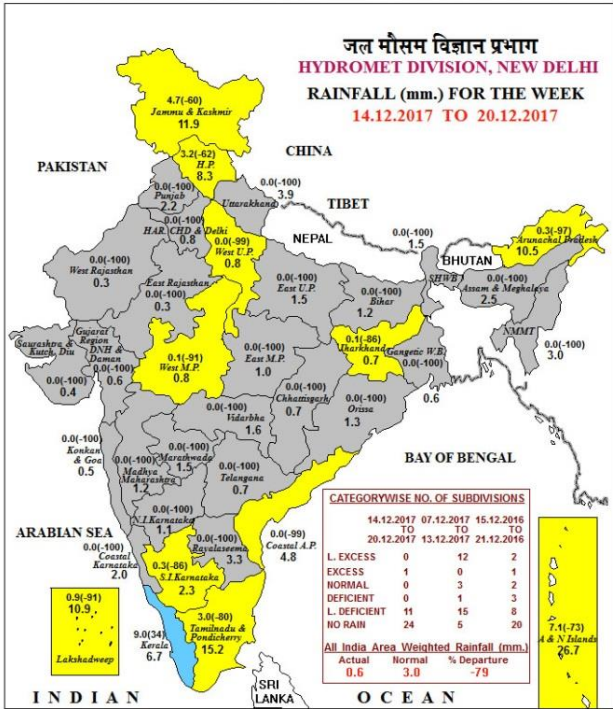
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&
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall (14th to 27th December 2017)

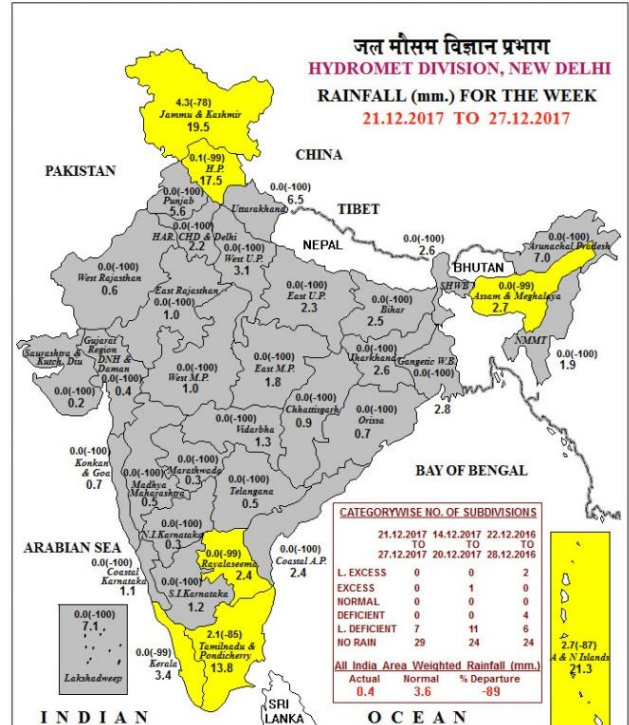
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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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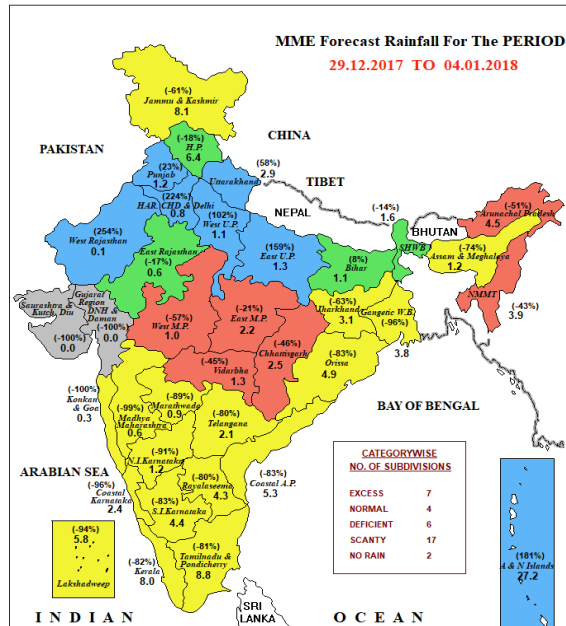
NOTES:
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[b] Small figures indicate actual rainfall [mm.], while bold figures indicate Normal rainfall [mm.]
Percentage Departures of Rainfall are shown in Brackets.

- Above normal rainfall occurred in either of the last two weeks in Kerala.
- Below normal rainfall/no rain occurred in the last two weeks over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC –27 December) (29th December 2017 to 11th January 2018)

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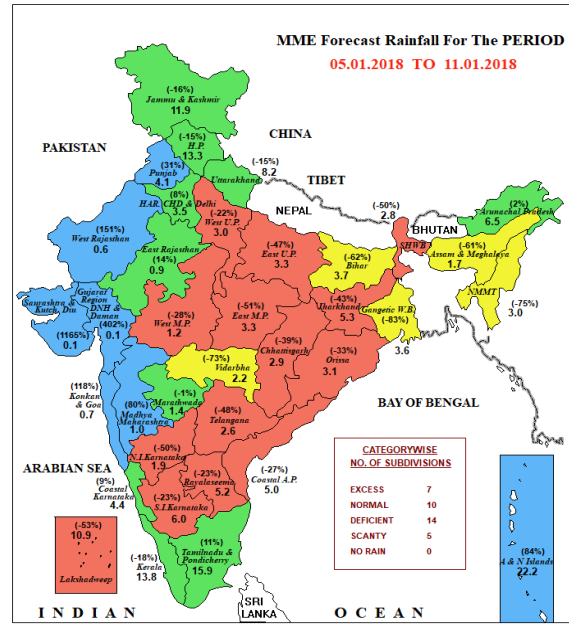


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- [a] Rainfall figures are based on MME Forecast.
- [b] Bold figures indicate Forecast Normal rainfall (mm.)
- [c] Percentage Departures of Rainfall are shown in Brackets.

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Extended Range Rainfall Forecast

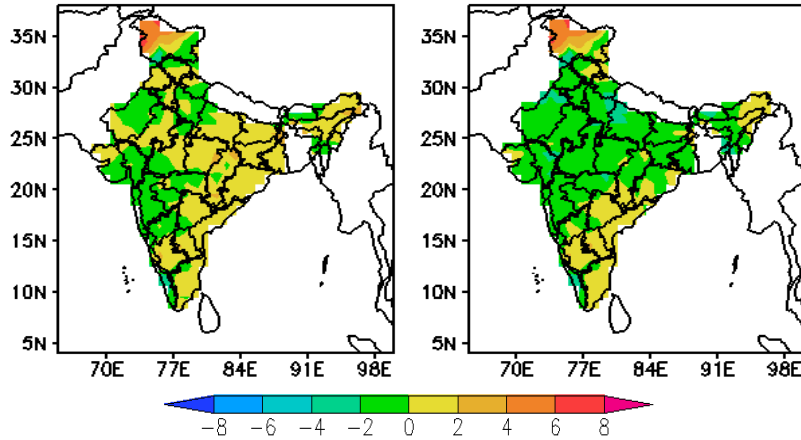
- **Week 1 (29 Dec. 2017 - 04 Jan. 2018):** No significant weather in terms of system and rainfall during the week is forecasted. Though the first figure shows excess rainfall over West Rajasthan, Punjab, Haryana, Chandigarh, Delhi, Uttarakhand and Eastern UP, the magnitude is very less. However, excess rainfall is forecasted over Andaman & Nicobar Islands in both the weeks.
- **Week 2 (05 - 11 Jan. 2018):** The Bay of Bengal will remain active particularly the southern part along with parts of south Peninsula (Kerala and Tamilnadu) associated with easterly wave. Some activities are also likely over the northern most met-subdivisions.

**Maximum and Minimum temperatures anomaly ($^{\circ}\text{C}$) forecast for next 2 weeks
(IC – 27 December) (29th December 2017 to 11th January 2018)**

MME Bias Corrected Tmax Anomaly (Deg)

(Week1: 29Dec–04Jan)

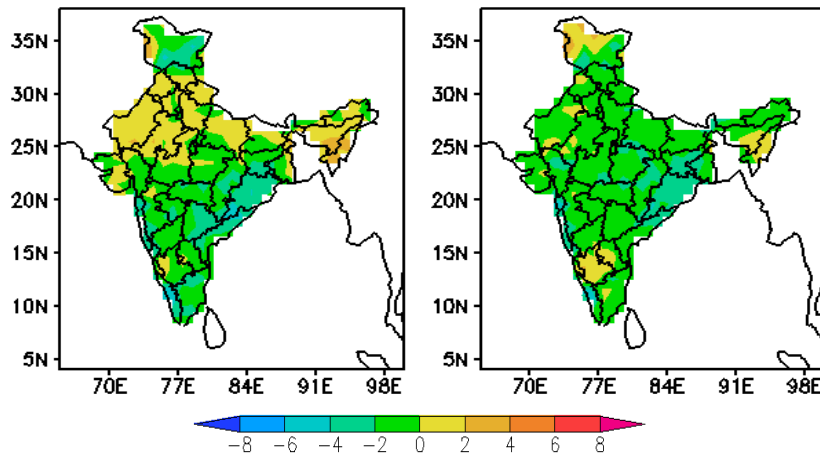
(Week2: 05Jan–11Jan)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 29Dec–04Jan)

(Week2: 05Jan–11Jan)



Tmax (Maximum Temperature)

- **Week 1 (29 Dec. 2017 - 04 Jan. 2018):** Mostly above normal Tmax over the eastern half of the country, whereas it will be normal to slightly below normal over western belt of the country.
- **Week 2 (05 - 11 Jan. 2018):** Tmax is likely to be below normal over northern, western and central parts of the country.

Tmin (Minimum Temperature)

- **Week 1 (29 Dec. 2017 - 04 Jan. 2018):** Over Eastern coastal regions, adjoining central India and regions of south peninsula Tmin will be below normal, whereas, it will be above normal over Northwest and adjoining northern India.
- **Week 2 (05 - 11 Jan. 2018):** Mostly below normal Tmin over major parts of India.

Strategic Agricultural Planning based on rainfall during next two weeks till

11th January 2018

Agromet Advisories

Tamil Nadu

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over Tamil Nadu is 394 mm, which is 9% deficit compared to the normal. The extended range weather forecast provided for next two weeks [29 December to 4 January (week-1) and 5 to 11 January (week-2)] for Tamil Nadu is below normal for week-1 and normal for week-2.

- Prevailing weather condition is congenial for leaf folder incidence in rice. So, farmers are advised to avoid excessive application of nitrogen fertilizer. Spray Phosalone 35EC @ 1500 ml / ha or Phosphamidon 40 SL @ 1250ml/ ha during week-1, as below normal rainfall is forecasted.
- Prevailing weather condition is congenial for the incidence of yellow mosaic virus and powdery mildew disease in green gram and black gram. So, farmers are advised to spray Dimethoate 30 EC @ 500ml/ha for Yellow Mosaic Virus (Vector-whitefly), spray Carbendazim at 500g (or) Wettable sulphur @1500g/ha at initial stage of the powdery mildew disease for its control.
- Prevailing weather condition is congenial for head borer incidence (*Helicoverpa armigera*) in sunflower. Farmers are advised to follow any one of the following recommendations
 - * Spray 5% Neem oil (or) Neem Seeds Kernal Extract before egg laying.
 - * Release Parasitoid *Trichogramma spp* @ 20,000 /acre.
 - * Spray Ha-NPV 250 LE/ha + 1kg Jaggery + 200ml Sandovit or Teepol: mixing and spray in the evening.

Kerala

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over Kerala is 441.3 mm, which is 8% deficit. The extended range weather forecast provided for next two weeks for Kerala is: below normal for week-1 and normal for week-2.

- Infestation of pseudostem weevil in banana is reported in many parts of the state. So, farmers are recommended to drench the leaf axils and holes on pseudo stem with chlorpyrifos @ 2 ml or quinalphos @ 2 ml per litre of water during week-1.
- Farmers are advised to take care of tapping panels in rain guarded plants. Apply Indofil M45 @ 4g/ litre of water on tapping panels. Spray Copper oxy chloride @ 3g/ litre on new sprouts in newly planted gardens during week-1.
- To control soft rot in ginger, farmers are advised to drench the soil with 1% Bordeaux mixture/0.3% mancozeb. Application of pseudomonas, split application of fertilizers and increased application of organic fertilizers are found to be effective in controlling the disease.

Karnataka

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over different meteorological sub-divisions of Karnataka are, North Interior Karnataka: 155.4 mm (7% excess); South Interior Karnataka: 201.2 mm (4% deficit); Coastal Karnataka: 215.9 mm (18% deficit). The extended range weather forecast provided for next two weeks over both the meteorological sub-divisions of Karnataka are below normal for all the sub-divisions for both the weeks, except for coastal Karnataka during week-2 (normal).

North Interior Karnataka:

- As below normal rainfall is forecasted, farmers are advised to take up repeated inter-cultivation and earthing up and keep the crops free from weeds. Provide irrigation to *rabi* crops, wherever possible.
- Farmers are advised to vaccinate (ET vaccine) sheep and goats against enterotoxaemia. For milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 litres of milk yield and feed all the animals with both green fodder and dry fodder.

South Interior Karnataka:

- As below normal rainfall is forecasted, process of harvesting, cleaning, drying and storage of early sown *rabi* pulses can be taken up.
- Farmers are advised for taking up deep ploughing in mango orchard to minimize the pest and disease incidence in next season.
- Clear the weeds in mango /guava/sapota orchards and put it under the basin as mulch.

Maharashtra

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over different meteorological sub divisions of the state are: Vidarbha - 57.8 mm (28% deficit); Marathwada - 105.4 mm (5% surplus); Madhya Maharashtra - 122.3 mm (14% surplus) and Konkan - 182.7 mm (23% surplus). The extended range weather forecast provided for next two weeks over different meteorological sub divisions of the state are: below normal for all the subdivisions of Maharashtra during week-1 and above normal for Madhya Maharashtra and Konkan; Normal for Marathwada and below normal for Vidarbha during week-2.

Madhya Maharashtra

- Hoeing should be recommended as a measure for proper soil and water conservation under continuous moisture stress condition expected during week-1.
- Due to lowering of temperature, possibility of aphid infestation in vegetable crops (Beans and peas) is increasing. Spray dimethoate @ 15 ml or Thiamethaxam @ 3 to 4 g in 10 litres of water during week-1.
- Attack of aphids increased due to lowering of temperature in *rabi* crops like safflower, sunflower and sorghum and to control these pests spray acephate @ 16 g or Acetamiprid @ 4-5 g in 10 lit of water.
- Present weather condition is congenial for thrips infestation in chili. Spray dimethoate 30% concentrate @ 15 ml and lambda cyhalothrine 5% concentrate @ 6 ml per 10 lit. of water, alternately.

Konkan and Goa

- Present weather condition is congenial for the incidence of mango hopper and Tea mosquito bug on cashew. If these pests are noticed, farmers are advised to spray Lambda Cyhalothrin @5% E.C. @ of 6 ml per 10 liter of water for mango hopper and profenophos 15% (10 ml. in 10 lit. of water) to protect new emerging flush of cashew from Tea mosquito bug .
- Protect the poultry birds from low temperature by provision of electric bulbs as per the need.

Marathwada

- As below normal rainfall is forecasted for both the weeks, farmers are advised to irrigate banana orchards during early morning. Apply potassium @ 80 g per plant.
- Weather condition is congenial for aphid infestation in *rabi* sorghum, bacterial blight on turmeric crop and infestation of mango hopper in mango. Spray Dimethoate 30 % @ 10 ml per 10 liter of water for aphids in sorghum, Mancozeb @ 20 g per 10 liter of water for blight in turmeric and buprofezin 25 % @ 10 ml or Thiamethoxam 25 % @ 2 g or Imidacloprid 17.8 % @ 2 ml per 10 liter of water for the control of mango hopper.

Vidarbha

- Farmers are advised for very late sowing of wheat (December 15- 7 January) with AKW-381 variety, wherever assured irrigation is available. Seed treatment with Thiram @ 3.0 g / kg seed OR *Vitavax 75 WP* @ 2.5 g / kg seed is advisable.
- In timely sown irrigated wheat, top dressing of nitrogen @ 50 kg per hectare, 20-25 days after sowing (CRI stage) after the irrigation is advised.

Madhya Pradesh

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over different meteorological subdivisions of Madhya Pradesh is: West Madhya Pradesh: 16 mm (69% deficit); East Madhya Pradesh: 19.5 mm (66% deficit). The extended range weather forecast provided for next two weeks over West Madhya Pradesh and East Madhya Pradesh are below normal for both the weeks.

East Madhya Pradesh

- As below normal rainfall is forecasted, late sowing of early maturing wheat varieties like MP 3366, Lok-1, and HD 2864 varieties are recommended only under irrigated areas.
- Farmers are advised to take up immunization of cattle and poultry birds (Ranikhet disease) against diseases. Provide heating system to maintain optimum night temperature under poultry shed. For dairy, spread of litter on the floor of dairy shed to raise the night temperature is recommended.

Jharkhand

Rainfall situation

Rainfall received over Jharkhand during the period of 01 October to 27 December 2017 is 106.4 mm, which is 17% excess. The extended range weather forecast provided for next two weeks over Jharkhand is below normal for both the weeks.

- As below normal rainfall is forecasted, farmers are advised to undertake intercultural operations in pulses and oilseed crops to conserve soil moisture and control weeds.

- In 22-25 days old wheat, intercultural operation is essential for conserving soil moisture as well as controlling weeds. After intercultural operation, irrigate the field and broadcast urea @ 22 kg per acre after next day of irrigation.

Bihar

Rainfall Situation

Bihar received 49.6 mm of rainfall during the period of 01 October to 27 December 2017, which is 35% deficit. The extended range weather forecast provided for next two weeks over Bihar is normal for week-1 and below normal for week-2.

- Farmers are advised to withhold 2nd irrigation in the crop, which is at 40-45 days stage, as normal rainfall is forecasted during week-1. Application of 30kg nitrogen per hectare is also advised after rainfall. If the attack of termite is observed in the wheat field, spray Chlorpyrifos 20 EC @ 2 litres mixed with 20-25 kg sand per acre.
- Under the prevailing low temperature and cold wave condition, farmers are advised to take proper care of milch animals. To maintain milk production, animals should be administered medicines such as Fatomax and M-Power and also probiotics to the animals to maintain proper digestion.

Rajasthan

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over the meteorological subdivisions of Rajasthan are: West Rajasthan and East Rajasthan have received 2.3 mm and 3 mm rainfall respectively over the period, which is 75% and 89% deficient, respectively. The extended range weather forecast provided over West Rajasthan is above normal for both the weeks and East Rajasthan is normal for both the weeks.

East Rajasthan

- Severe cold wave conditions prevail over many parts of the state. In frost sensitive crops, farmers are advised to apply irrigation or produce smoke in the fields for the protection against frost.
- To control mustard aphid, farmers are recommended to take up dusting of Methyl Parathion 2% or Carbaryl 5% dust @ 20 to 25 kg/ha or spray Chlorpyrifos 20 EC @ 600 ml/ha.

Uttar Pradesh

Rainfall situation

Rainfall received during the period of 01 October to 27 December 2017 over different meteorological subdivisions of Uttar Pradesh are, West Uttar Pradesh: 2.2 mm (96% deficit); East Uttar Pradesh: 3.0 mm, (95% deficit). The extended range weather forecast provided for next two weeks is above normal for week-1 and below normal for week-2 in both the subdivisions of the state.

West Uttar Pradesh

- As above normal rainfall is forecasted, farmers are advised to withhold irrigation in wheat sown after after 25 Nov, which is at CRI stage.
- Farmers are advised to undertake weeding and hoeing in gram, pea and lentil crop.

Himachal Pradesh

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over Himachal Pradesh is 55.2 mm, which is 44% deficit. The extended range weather forecast provided for Himachal Pradesh is normal for both the weeks.

- As normal rainfall is forecasted during the next week, farmers are advised to complete the sowing of *rabi* crops immediately with recommended late sown varieties, under rainfed and irrigated conditions.
- Cold wave condition is likely to prevail in low lying and valley areas of the state. So, farmers are advised to protect the animals from low temperature conditions likely to prevail during morning and evening.

Jammu

Rainfall Situation

Rainfall received during the period of 01 October to 27 December 2017 over Jammu and Kashmir is 93.1 mm, which is 21% deficit. The extended range weather forecast provided over Jammu & Kashmir for next two weeks are below normal for week-1 and normal for week-2.

- Due to decrease in minimum temperature, farmers are advised to go for sowing of very late sown wheat varieties such as Raj 3077, HD-2285, Raj-3765 and HD-2402.
- Due to congenial weather conditions, incidence of collar rot and root rot in gram may occur. Farmers are advised to rogue out affected plants and drench the affected patches of the field with thiram or captan @ 2g/L of water.

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