



National Agromet Advisory Services Bulletin

Date of issue: 30 December 2022

based on

Extended Range Weather Forecast (ERFS)

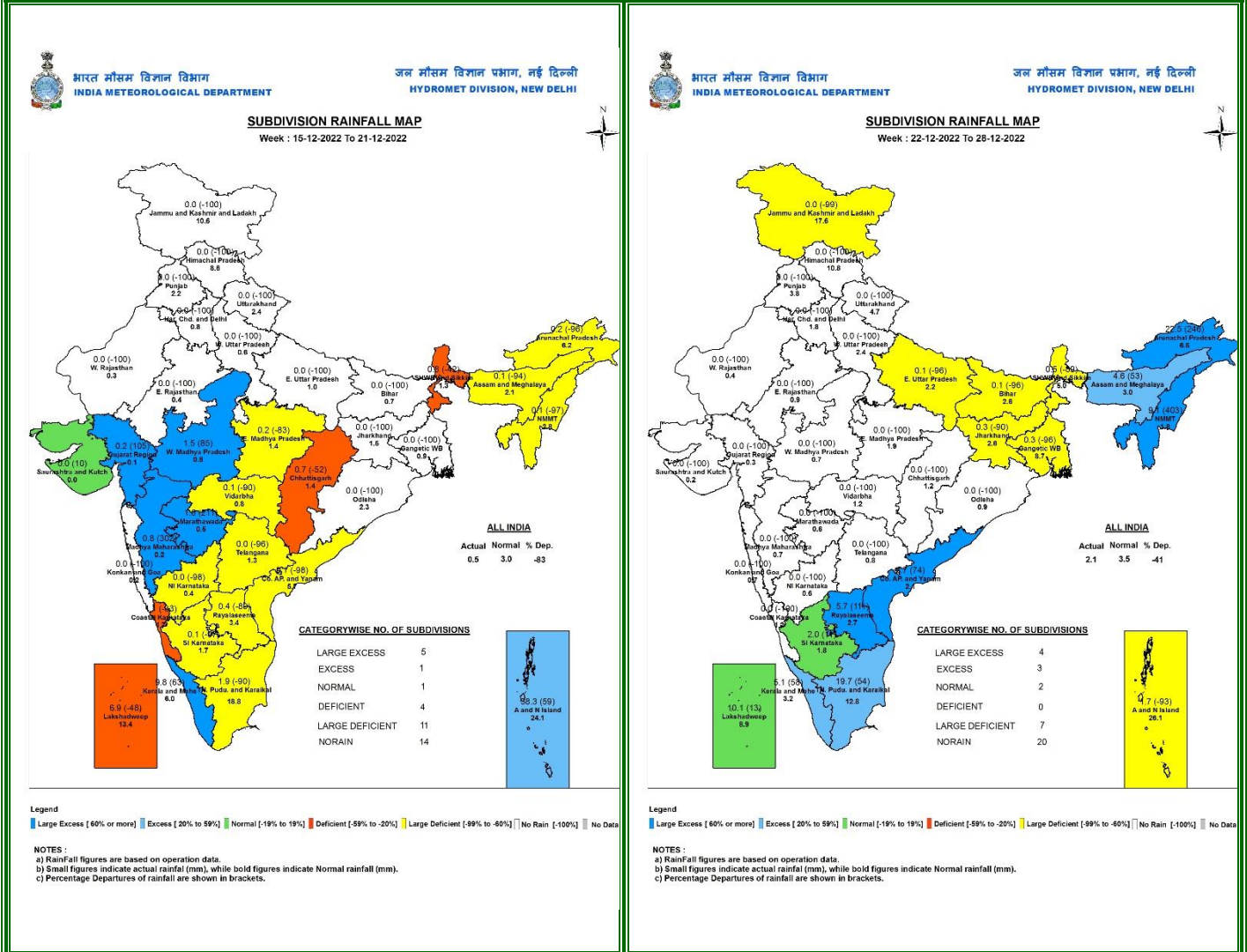
Validity: 30 December 2022 - 12 January 2023

Issued by

**AICRP on Agro-Meteorology (AICRPAM)
Central Research Institute for Dryland Agriculture (CRIDA)
Indian Council of Agricultural Research (ICAR)
&
India Meteorological Department (IMD)
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

Realized Rainfall (15th to 28th December, 2022)

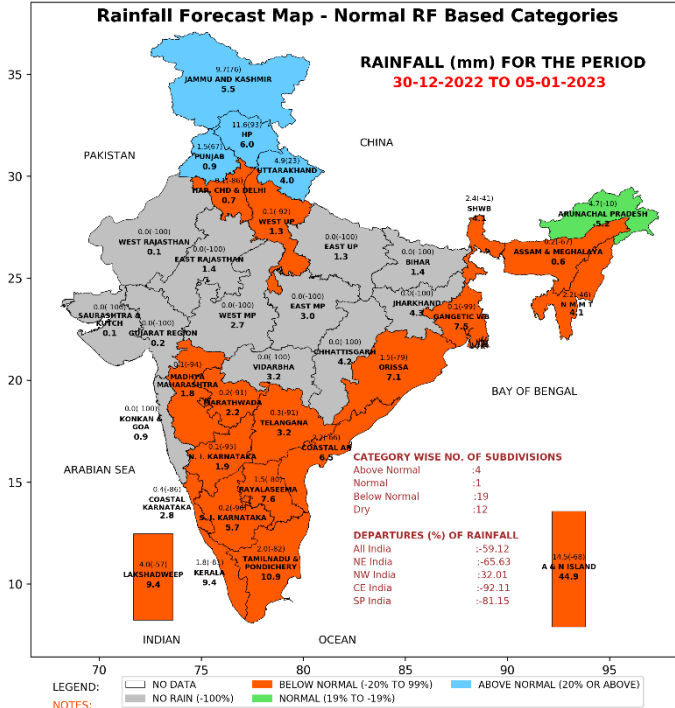


- Normal or above normal rainfall occurred in both the weeks in Kerala & Mahe.
- Normal or above normal rainfall occurred in either of the two weeks in Gujarat, West Madhya Pradesh, Madhya Maharashtra, Marathwada, Assam & Meghalaya, Arunachal Pradesh, Nagaland Manipur Mizoram Tripura (NMMT), South Interior Karnataka, Andhra Pradesh & Yanam, Tamil Nadu Puducherry & Karaikal, Lakshadweep and Andaman & Nicobar Islands.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.

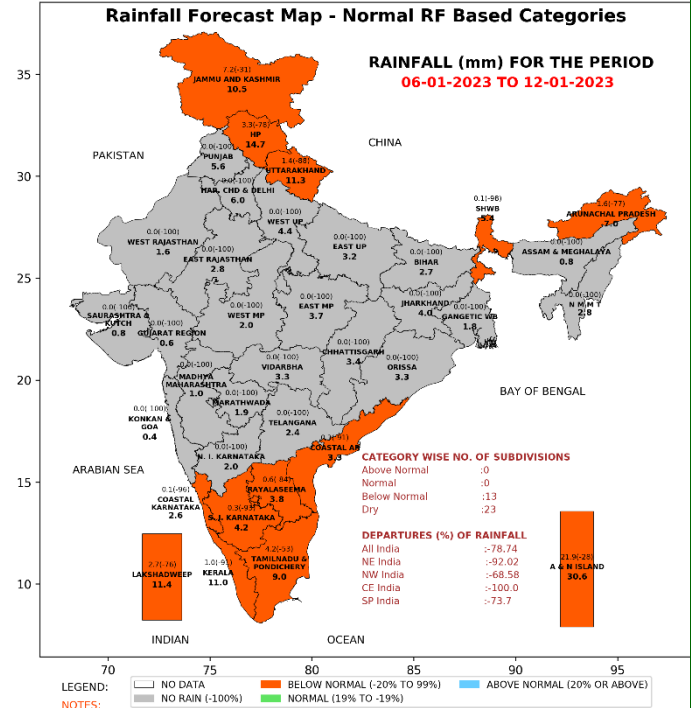
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 28th December) (30th December, 2022 to 12th January 2023)

INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



LEGEND: NO DATA (Grey), NO RAIN (-100%) (White), BELOW NORMAL (-20% TO 99%) (Orange), NORMAL (19% TO -19%) (Green), ABOVE NORMAL (20% OR ABOVE) (Blue)

NOTES:
(a) Rainfall figures are based on MME forecast data.
(b) Small figures indicates actual rainfall (mm) while bold figure indicates normal rainfall (mm)
Percentage departures of rainfall are shown in brackets.

LEGEND: NO DATA (Grey), NO RAIN (-100%) (White), BELOW NORMAL (-20% TO 99%) (Orange), NORMAL (19% TO -19%) (Green), ABOVE NORMAL (20% OR ABOVE) (Blue)

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(a) Rainfall figures are based on MME forecast data.
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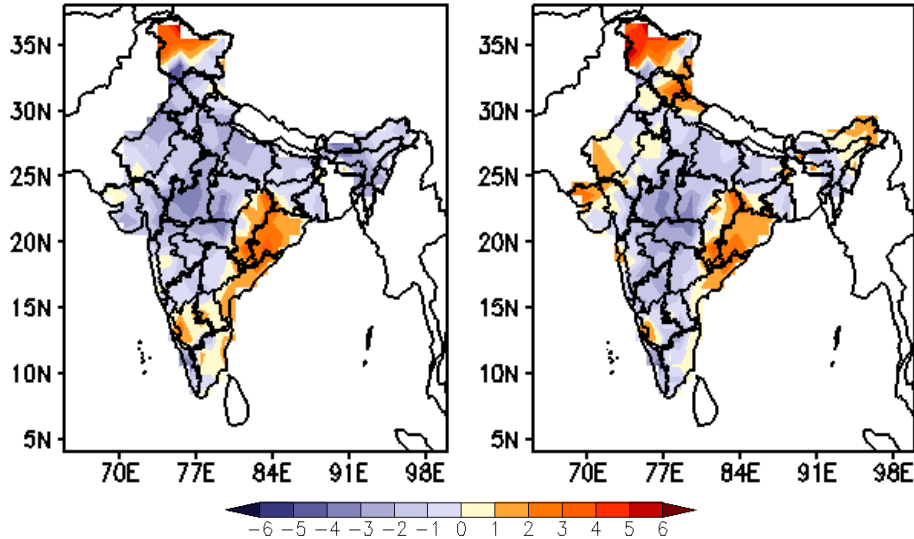
- **Week 1(30.12.2022 to 05.01.2023):** Rainfall is likely to be slightly above normal over Jammu & Kashmir, Ladakh, Himachal Pradesh, Punjab and Uttarakhand.
- **Week 2 (06.12.2022 to 12.01.2023):** No significant rainfall activity is over the country.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 28th December)
(30th December, 2022 to 12th January 2023)**

MME forecast Tmax anomaly (Deg C)

(Week1: 30Dec-05Jan)

(Week2: 06Jan-12Jan)



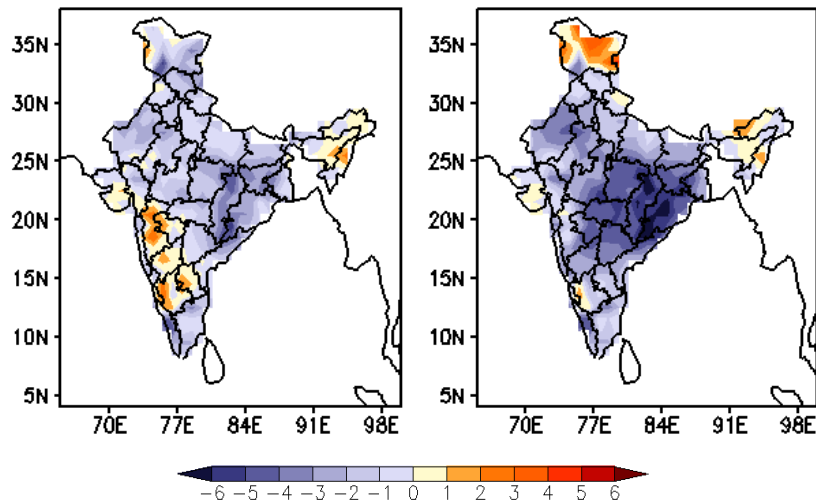
Maximum Temperature (Tmax)

- **Week 1 (30.12.2022 to 05.01.2023):** Tmax will be above normal over parts of east coast and adjoining areas.
- **Week 2 (06.12.2022 to 12.01.2023):** Tmax will be above normal over east coast and adjoining areas and Northwest India.

MME forecast Tmin anomaly (Deg C)

(Week1: 30Dec-05Jan)

(Week2: 06Jan-12Jan)



Minimum Temperature (Tmin)

- **Week 1 (30.12.2022 to 05.01.2023):** Tmin is likely to be slightly below normal over many parts of the country except western parts of the peninsula and northeast India.
- **Week 2 (06.12.2022 to 12.01.2023):** Tmin is likely to be below normal over most parts of the country except northeast India.

Agromet Advisories

Tamil Nadu

The amount of rainfall received over Tamil Nadu was 445 mm (1% excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is below normal for week-1 and week-2.

- Irrigation may be given to standing crops, since dry weather is expected for the coming weeks.
- Prevailing weather conditions are congenial for mealy bug incidence in guava. For the management, it is advised to apply Triazophos 2 ml+ Neem oil 5 ml/l or Phosalone 35 EC 1.5 ml+ Neem oil 5 ml/l.

Kerala

The amount of rainfall received over Kerala was 476 mm (-3% deficit) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is below normal for week-1 and; week-2.

- Under prevailing weather condition there is a chance of thrips attack in chilli. For management it is advised to apply 2% Neem oil garlic emulsion or spray 2 g Thiamethoxam per ten litres of water.
- For the management of coffee berry borer, farmers are advised to spray Quinalphos (0.05%) 400 ml in 200 liters of water.

Maharashtra

161 mm (56% excess) rainfall over Madhya Maharashtra; 134 mm (39% excess) in Marathwada; 172 mm (22% excess) in Konkan region and 88 mm (15% excess) over Vidarbha was recorded during 01 October - 30 December 2022. The extended range weather forecast (rainfall) for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is below normal over Madhya Maharashtra and Marathwada and no rainfall over Konkan and Vidarbha for week-1 and; no rainfall over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week-2, respectively.

Vidarbha

- Application of organic mulches in tree basins is advisable for thermal insulation to reduce cooling of soil surface during cold weather period. Create air blanket of smoke over the field by burning waste materials/weeds and crop residues in the evening/ night.
- Under prevailing weather condition, transplanting of 4-6 weeks old seedlings of tomato, brinjal, cabbage and cauliflower and seed sowing of coriander, spinach, fenugreek, radish, carrot, dolichos bean and ivy gourd is advised during this period.

Marathwada

- For management of fall armyworm in late sown maize crop, take a spray of Emamectin Benzoate 5 % @ 4 g or Spinetoram 11.7 SC @ 4 ml per 10 litres of water.
- For the management of pod borer in late sown pigeon pea, it is advised to spray 5% NSKE or Quinalphos 25% @ 20 ml or Emamectin Benzoate 5% 4.5 g per 10 litres of water.

Konkan

- Due to fall in minimum temperature, it is advised provide irrigation to nursery, new fruit crop plantation and vegetable crops during evening hours.
- Due to dry weather, there is possibility of incidence of rugose spiralling white fly on coconut. If incidence is noticed, it is advised to apply three spray of Neem oil 0.5% @ 50 ml per 10 litres of water at 15 days interval followed by three sprays of water by pressure pump at 10 days interval.

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 149 mm (255% large excess) and over West Uttar Pradesh was 140 mm (376% large excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is no rainfall over East Uttar Pradesh and below normal over West Uttar Pradesh for week-1 and; no rainfall over East Uttar Pradesh and West Uttar Pradesh for week-2.

Western Uttar Pradesh

- Light irrigation is advised to provide in pulses and vegetable crops for protection from fog and frost.
- Because of no rainfall forecast in coming weeks, farmers are advised to control of grassy leaved weed of timely sown wheat, spray Clodinafop-propargyl 15% WP @ 400 g/ha, grassy and broad leaves weed spray Sulfosulfuron 75% WP @ 33g/ha with 500-600 litres of water.

Eastern Uttar Pradesh

- Keeping in view of dry weather conditions, farmers are advised to irrigate wheat crop which is in CRI stage (21-25 days after sowing); after 3-4 days of irrigation, broadcasting of second dose of nitrogen is recommended.

Bihar

The amount of rainfall received over Bihar was 82 mm (22% excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is no rainfall for week-1 and week-2.

- Under prevailing weather condition, sowing of late varieties of wheat crop such as *PBW-373*, *HD-2285*, *HW-2045*, *HUW-234*, *WR-544*, *DBW-14*, *HD-2643*, *HD-2967*, *NW-2036* are advised for North Bihar region.
- Monitoring of pod borer is advised in gram crop . For management, spraying of Profenofos 50 EC 1.5 litres mixed in 600-800 litres of water for one hectare area is advised.

Odisha

The amount of rainfall received over Odisha was 126 mm (-10% deficit) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over Odisha is below normal for week-1 and; no rainfall for week-2.

- To protect the paddy nursery, from cool low temperature, it is advised to apply a thin layer of well decomposed FYM in wet bed to keep the bed relatively warm.
- Cover the recently planted cole crops with paper pockets during night time to avoid low temperature.

Jammu

114 mm of rainfall (-9% deficit) was received over Jammu during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over Jammu is below normal for week-1 and; week-2.

- Due to the chances of rainfall in next first week, it is advised to continue sowing of very late sown wheat varieties viz: *WH-1080*, *Raj-3077* with enhanced seed rate 125 kg /ha or wherever sufficient moisture is available in soil under rainfed conditions
- Due to congenial weather for collar rot and root rot in gram, it is advised to rogue out affected plants and drench the affected patches of the field with Thiram or Captan @ 2g/litre of water.

Assam

The amount of rainfall received over Assam during 01 October - 30 December 2022 was 226 mm (19% excess). The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over Assam is below normal for week-1 and; no rainfall for week-2.

- Low night temperature coupled with dense fog is favorable for aphid infestation in rapeseed. To control aphid attack, it is advised to spray Thiamethoxam 25 WG @ 3 g per 10 litres of water.
- Most of the regions of the state is experiencing rainfall deficit condition since last couple of weeks. Farmers are advised to provide irrigation in the rabi vegetable crops like cauliflower, cabbage, brocolli, knolkhol, brinjal, radish, beans, leafy vegetables etc.

Karnataka

Rainfall received during 01 October - 30 December 2022 over South Interior Karnataka was 300 mm (51% excess), 169 mm (29% excess) over North Interior Karnataka and 196 mm (-26% deficit) over Coastal Karnataka. The extended range weather forecast (rainfall) for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is below normal over Coastal Karnataka, North Interior Karnataka and South Interior Karnataka for week-1 and; no rainfall over North Interior Karnataka and below normal over Coastal Karnataka and South Interior Karnataka for week-2.

South Interior Karnataka

- To protect the pulse grains from storage pests, it is advised to apply oils of Castor/ linseed/honge/neem oil @ 3-5 ml per kg of grains.
- To protect animals from a sudden drop in temperature, keep the animals in a covered shed/area during the night. The bedding/hay in the animal sheds must be kept dry and changed/aired every day.

Chhattisgarh

The amount of rainfall received over Chhattisgarh was 74 mm (-2% deficit) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over Chhattisgarh is no rainfall for week-1 and; week-2.

- Under prevailing weather condition, sowing of improved varieties of sunflower like *Modern, TNAU, SUF-7, BSH-1, KBSH-1, DRSH-1, Jwalamukhi, Surya* etc is advised.

Anantapur

The amount of rainfall received over Coastal Andhra Pradesh was 342 mm (6% excess) and over Rayalaseema was 288 mm (22% excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is below normal over Coastal Andhra Pradesh and Rayalaseema for week-1 and; week-2.

- Present weather conditions are favorable for collar rot incidence in chickpea grown in Ananthapuramu, Kurnool districts. To control collar rot, farmers are advised to drench soil with Carbendazim @ 1 g or Mancozeb @ 3 g /litre of water.

Gujarat

The amount of rainfall received over Gujarat was 37 mm (14% excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over Gujarat is no rainfall for week-1 and; week-2.

- If termite infestation is observed in the standing wheat crop, immediately apply Fipronil 5 SC @ 1.6 litres or Chlorpyrifos 20 EC @ 1.5 litres with 100 kg of sand or soil per hectare and after that, lightly irrigate the crop.

West Bengal

The amount of rainfall received over Gangetic West Bengal was 109 mm (-37% deficit) and Sub Himalayan West Bengal was 203 mm (21% excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) is below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week-1 and; no rainfall over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal for week-2.

- Deficient rainfall pattern is observed in the southern districts of West Bengal. Farmers are advised not to go for the sowing of Boro rice.

Jharkhand

The amount of rainfall received over Jharkhand was 92 mm (3% excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over Jharkhand is no rainfall for week-1 and; week-2.

- For the management of leaf curling in potato crop, it is advised to spray Caldan 50 SP @ 1 g per litre of water.

Uttarakhand

The amount of rainfall received over Uttarakhand was 120 mm (123% large excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over Uttarakhand is above normal for week-1 and; below normal for week-2.

- Under prevailing weather condition, it is advised to apply irrigation in standing crops as needed. Intercultural operations are also advised for conserving the moisture and removing weeds in all crops.

Madhya Pradesh

The amount of rainfall received over East Madhya Pradesh was 88 mm (59% excess) during 01 October - 30 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (30 December 2022 - 05 January 2023 and 06 - 12 January 2023) over East Madhya Pradesh is no rainfall for week-1 and week-2.

- Due to dryness in the atmosphere in the coming days, a light irrigation is needed at 30-35 DAS in mustard crop.

Disclaimer:

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