



National Agromet Advisory Services Bulletin

Date of issue: 09 December 2022

based on

Extended Range Weather Forecast (ERFS)

Validity: 09 - 22 December 2022

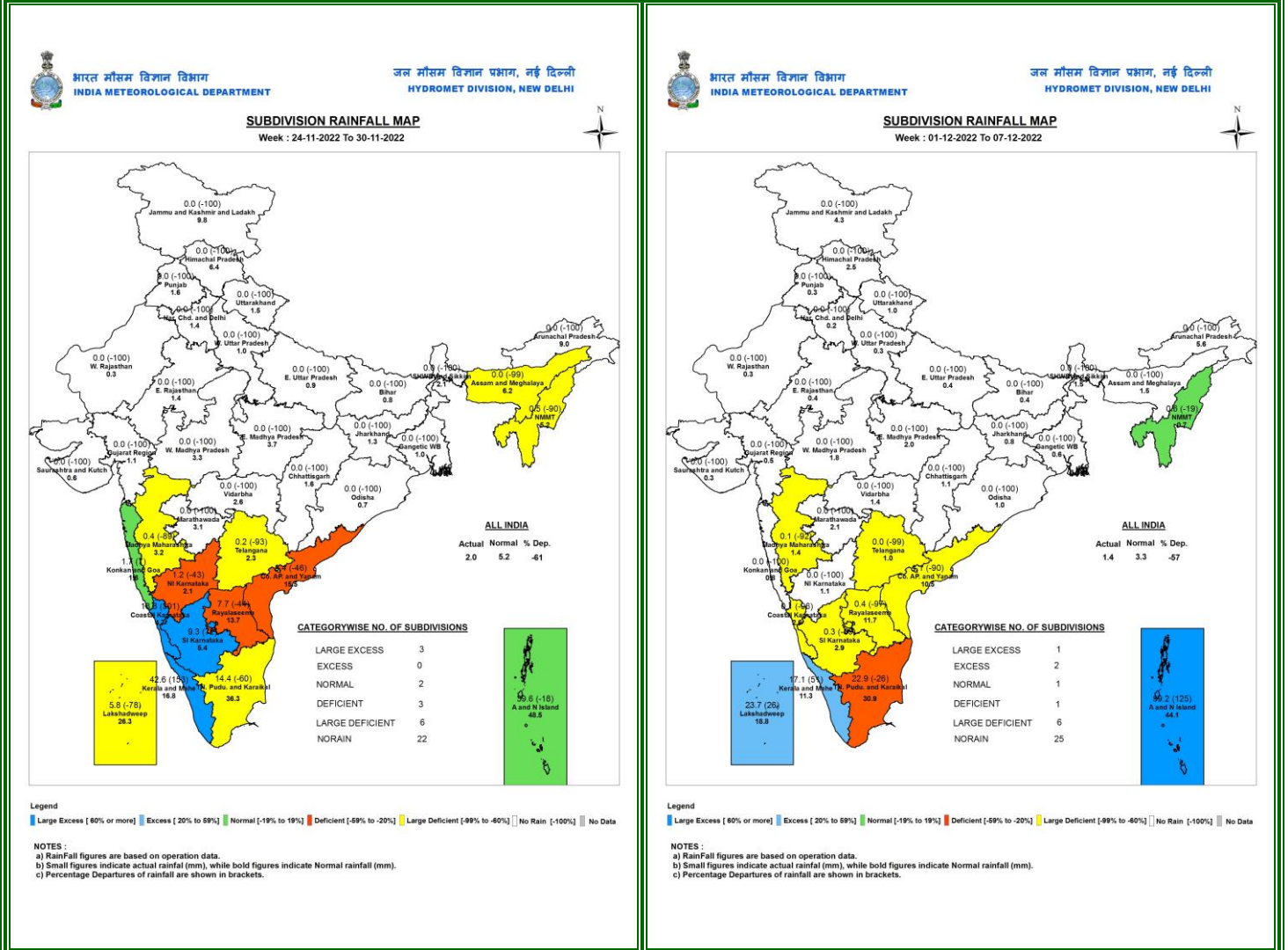
Issued by

**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

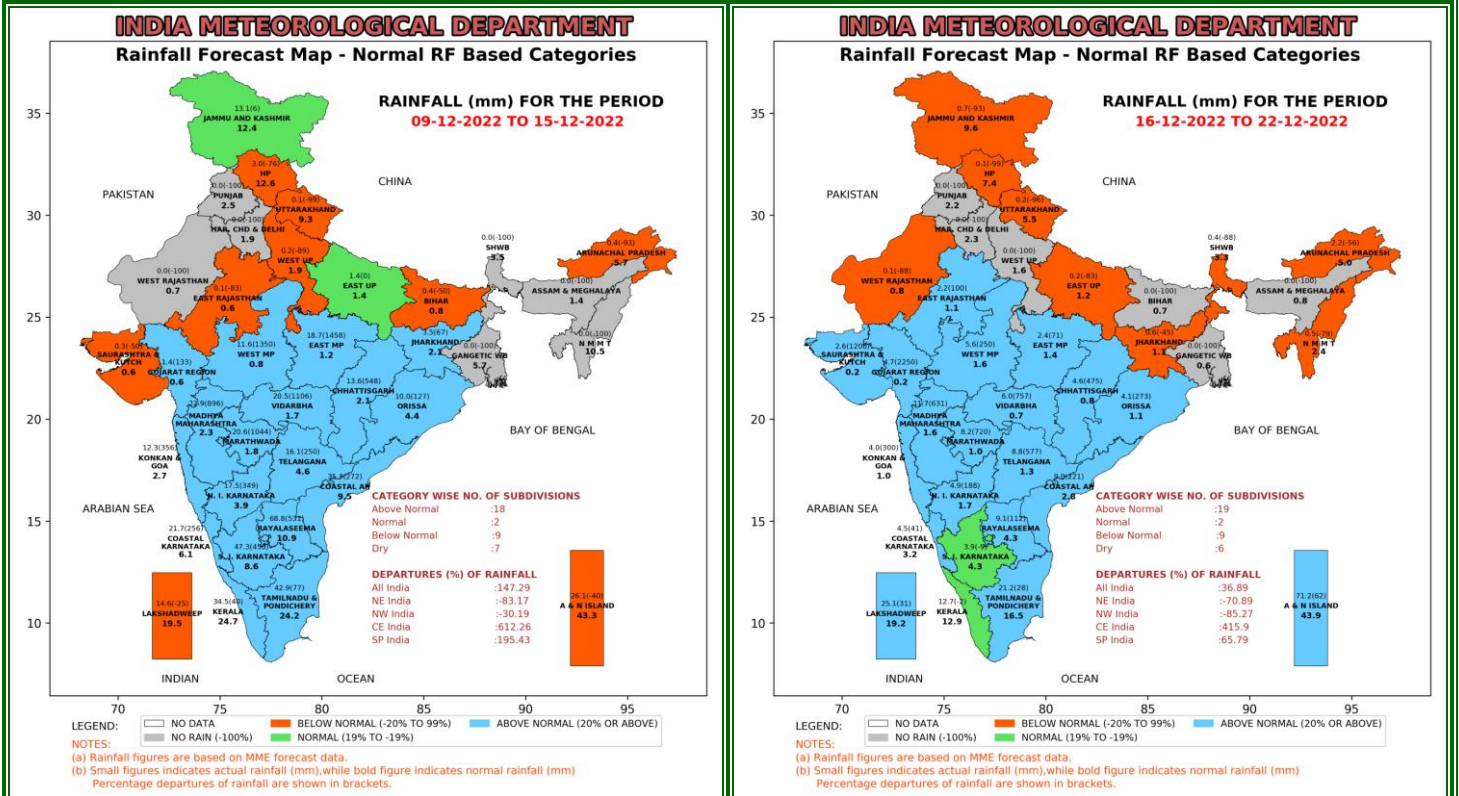
(24th November to 07th December, 2022)



- Normal or above normal rainfall occurred in both the weeks in Kerala & Mahe and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks in Nagaland Manipur Mizoram & Tripura (NMMT), Konkan & Goa, Coastal Karnataka, South Interior Karnataka and Lakshadweep.
- 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- 7th December) (09th December to 22nd December, 2022)



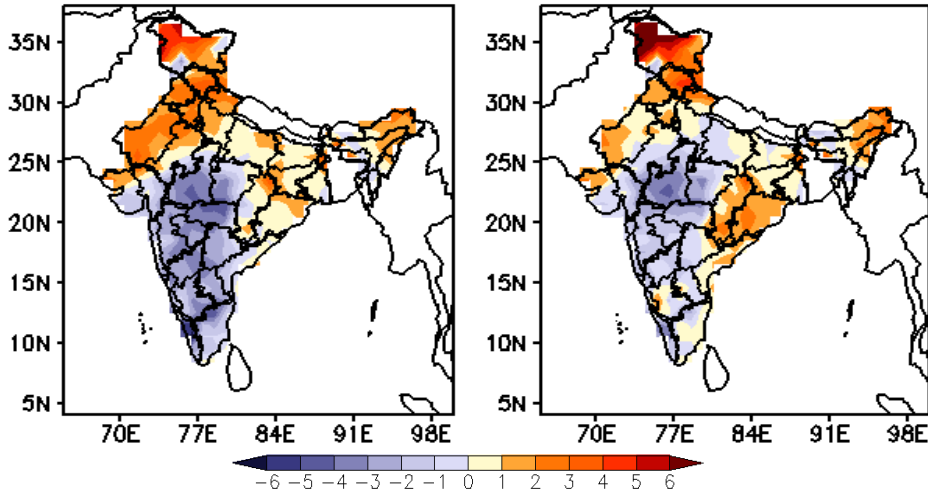
- **Week 1(09.12.2022 to 15.12.2022):** Rainfall is likely to be above normal over peninsular India and adjoining central India. It is likely to be normal over Jammu & Kashmir and Ladakh.
- **Week 2 (16.12.2022 to 22.12.2022):** Rainfall is likely to be slightly above normal over Tamil Nadu, Andaman & Nicobar Islands and Lakshadweep.

**Maximum and Minimum temperature anomaly ($^{\circ}$ C) forecast
for next 2 weeks (IC- 7th December)
(9th December to 22nd December, 2022)**

MME forecast Tmax anomaly (Deg C)

(Week1: 09Dec-15Dec)

(Week2: 16Dec-22Dec)



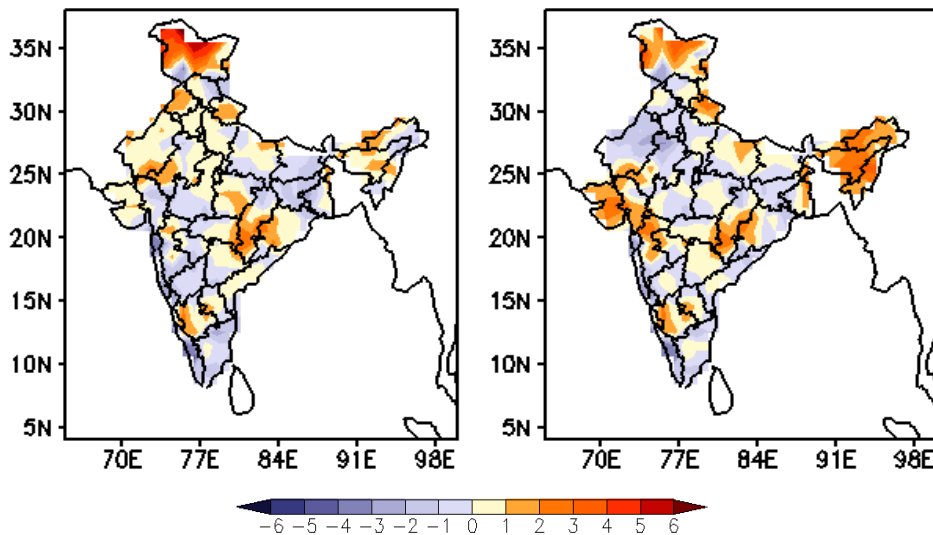
Maximum Temperature (Tmax)

- **Week 1 (09.12.2022 to 15.12.2022):** Tmax will be above normal over northwest India and parts of east & Northeast India.
- **Week 2 (16.12.2022 to 22.12.2022):** Tmax will be slightly above normal over parts of northwest, central, east & northeast India.

MME forecast Tmin anomaly (Deg C)

(Week1: 09Dec-15Dec)

(Week2: 16Dec-22Dec)



Minimum Temperature (Tmin)

- **Week 1 (09.12.2022 to 15.12.2022) and Week 2 (16.12.2022 to 22.12.2022):** Tmin is likely to be above normal over some pockets of northwest, central and northeast India.

Agromet Advisories

Tamil Nadu

The amount of rainfall received over Tamil Nadu was 367 mm (-5% deficit) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) is above normal for week-1 and; week-2.

- Heavy to very heavy rainfall along with high wind is expected in the northern Tamil Nadu. Farmers are instructed to take essential measure to protect crops and livestock from cyclone. Hence, farmers are advised to avoid fertilizer application, insecticides or pesticides spray during rainy days.
- In fruit trees, pruning/ cutting of excess branches may be done to avoid lodging of trees against the anticipated high wind speed.
- Since rainfall is expected in the forthcoming days, farmers are advised to prepare basins for horticultural crops and tree crops and also advised to apply coir compost to conserve moisture in banana, pepper, clove, nutmeg, cinnamon and coconut.

Kerala

The amount of rainfall received over Kerala was 403 mm (-15% deficit) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) is above normal for week-1 and; normal for week-2.

- During to cloudy weather condition, there is a chance of leaf folder attack in *Mundakan* paddy. It can be controlled by using Trichogramma cards (2CC per one acre). Cut the cards in to small pieces and fix in different regions of the field. If the attack is severe, spray Chlorantraniliprole @ 3ml per 10 litres of water.
- Under prevailing weather condition, there is a chance of thrips attack in chilli. To manage, it is advised to apply 2% neem oil garlic emulsion or spray 2 g Thiamethoxam per 10 litres of water.

Maharashtra

160 mm (58% excess) rainfall over Madhya Maharashtra; 132 mm (41% excess) in Marathwada; 171 mm (23% excess) in Konkan region and 87 mm (21% excess) over Vidarbha was recorded during 01 October - 08 December 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) is above normal over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week-1 and; week-2, respectively.

Vidarbha

- Prevailing intermittent cloudy weather condition favors the infestation of pod borer in early sown chickpea. To control, it is advised to install 5 *Pheromone* traps per hectare or one spray of 5 % NSKE and ETL based spray of Quinalphos 25 EC 20 ml or Emamectin benzoate 5

SG @ 3 g or Chlorantraniliprole 18.5 SC @ 2.5 ml per 10 litres of water.

- For the management of citrus (orange –mrig bahar and lemon) mite infestation, foliar application of Propargite 57 EC @ 10 ml or Ethion 50 EC @ 10 ml per 10 litres of water during active period of mites infestation is advised.

Marathwada

- Due to cloudy weather condition, there is possibility of jassid infestation in mango flowers. For management of jassid in Mango orchards, it is advised to spray Dimethoate 30% @ 13ml or Buprofezin 25% @ 20 ml or Thiamethoxam 25% 2 gm per 10 litres of water.
- Due to cloudy weather condition since last few days, infestation of pod borer is increased. For management, it is advised to spray of 5% NSKE or Quinalphos 25% @ 20 ml or Emamectin Benzoate 5% 4.5 g per 10 litres of water. For management of flower drop in late sown pigeon pea take a spray of NAA @ 3 ml per 10 litres of water.

Konkan

- Due to forecast of high rainfall and cloudy weather condition, there is possibility for anthracnose disease on mango flush and inflorescence. To manage, it is advised to spray Carbendazim 12% + Mancozeb 63% @ 10 g per 10 litres of water along with insecticides given as per blossom protection schedule.
- Under prevailing weather condition, there is a possibility of incidence of leaf miner in watermelon. If incidence is noticed, it is advised to spray 4% NSKE or Azadirachtin.

Madhya Maharashtra

- Spraying of 1% KNO₃ is advised under moisture stress condition on the *rabi* crops.
- Under prevailing weather condition, mulching is advised to reduce the evaporation from soil in orchard crops.

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 149 mm (300% large excess) and over West Uttar Pradesh was 140 mm (470% large excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) is normal over East Uttar Pradesh and below normal over West Uttar Pradesh for week-1 and; below normal over East Uttar Pradesh and no rainfall over West Uttar Pradesh week-2.

Western Uttar Pradesh

- Under assured irrigation, sowing of late sown wheat varieties are advised like *HUW-234, K-7903, UP-2338, K-9162, K-9533, HD-2643, HP-1744, NW-1014, K-8020, UP-2425, NW-2036, DBW-14, K-9423, PBW-524, NW-1076* and *HUW-510*.
- For managing leaf webber in pigeon pea, it is advised to spray Emamectin benzoate 5% SG

@ 250g/ha or Cypermethrin 25% EC @ 500ml/ha with 500 litres of water solution during clear weather condition.

Eastern Uttar Pradesh

- Under optimum moisture condition, farmers are advised for sowing of wheat with recommended cultivars like *HD-3226, HD-2967 HD-3086 and HD-CSW 18*.

Bihar

The amount of rainfall received over Bihar was 82 mm (31% excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) is below normal for week-1 and no rainfall for week-2.

- In view of low soil moisture and dry weather condition, farmers are advised to provide light irrigation in garlic fields at a regular interval.
- Monitoring is advised for infestation of fruit borers in brinjal, tomato, chilli, gram and pea. If infestation occurs, installation of pheromone traps @ 3-4 traps per acre is advised. If insect population is observed to be above ETL, then spraying of Spinosad 1.0 ml/4 litre of water is advised.

Odisha

The amount of rainfall received over Odisha was 125 mm (-7% deficit) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Odisha is above normal for week-1 and; week-2.

- To prevent damage from prevailing fog, low temperature and moisture stress condition, farmers are advised to provide light irrigation to standing vegetables and crops during morning hours.
- Due to decrease in minimum temperature and foggy condition, there may be a chance of late blight incidence in tomato. To avoid, it is advised to spray 2.5g Metalaxyl + Mancozeb/litre of water or mix 3 g Trichoderma with per kg of seed during seed treatment and avoid excess nitrogen fertilizer and close spacing of plants.
- Due to prevailing low temperature, farmers are advised to use low cost polythene to cover above the vegetables nursery to avoid poor germination.

Jammu

101 mm of rainfall (38% excess) was received over Jammu during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Jammu is normal for week-1 and; below normal for week-2.

- Cover All the nursery beds of onion with straw to maintain moisture and retain heat for proper germination.
- Due to the presence of sufficient moisture in the soil, farmers are advised to go for sowing of

late sown wheat varieties (up to 25th Dec) like *PBW-752*, *DBW-173*, *WH-1124*, *DBW-90* and *HD-3059*.

Assam

The amount of rainfall received over Assam during 01 October - 08 December 2022 was 221 mm (22% excess). The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Assam is no rainfall for week-1 and; week-2.

- Under prevailing weather condition, sowing of Boro rice is advised. Recommended varieties of Boro paddy like *Mahsuri*, *IR-50*, *Bishnu prasad*, *Jyoti prasad*, *Kanak lata* and *Dinanath* may be sown in the nursery bed during this month. The early sown varieties like *Boro-1*, *Boro-2*, *Dinanath* and *Swarnabh* for low lying areas are now ready for transplanting.
- To protect the fish population against various diseases prevalent in winter season it is advised to apply 1 kg turmeric along with 10 kg lime for 1 bigha pond and mix it uniformly in water.

Karnataka

Rainfall received during 01 October - 08 December 2022 over South Interior Karnataka was 257 mm (34% excess), 161 mm (26% excess) over North Interior Karnataka and 180 mm (-30% deficit) over Coastal Karnataka. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) is above normal over Coastal Karnataka, North Interior Karnataka and South Interior Karnataka for week-1 and; above normal over Coastal Karnataka, North Interior Karnataka and normal over 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 72 mm (1% excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Chhattisgarh is above normal 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.
- If moisture is present in the fields, then zero till seed drill is advised to use for *rabi* crops sowing like gram etc.

Anantapur

The amount of rainfall received over Coastal Andhra Pradesh was 265 mm (-14% deficit) and over Rayalaseema was 201 mm (-10% deficit) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 -

22 December 2022) is above normal over Coastal Andhra Pradesh and Rayalaseema for week-1 and; week-2.

- In Ananthapuramu, Kurnool and Kadapa districts, farmers are advised to sow rabi groundnut with recommended varieties *Dharani*, *Narayani*, *K6*, *K7*, *K8 Bold*, *Kadiri Amaravathi*, *TCGS-1157*, and *TCGS-1073*.

Gujarat

The amount of rainfall received over Gujarat was 37 mm (17% excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Gujarat is above normal for week-1 and; week-2.

- Regular monitoring of fruit and shoot borer in brinjal crop is advised. To manage, use 4-6 pheromone traps per acre or in case of heavy incidence, spray of Chlorpyrifos 50 EC 20 ml or Emamectin Benzoate 5 SG 3 g or Thiodicarb 50 WP 10 g in 10 litres of water is advised.

West Bengal

The amount of rainfall received over Gangetic West Bengal was 119 mm (-24% deficit) and Sub Himalayan West Bengal was 210 mm (32% excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) is no rainfall 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 to reject the sowing of Boro rice.

Uttarakhand

The amount of rainfall received over Uttarakhand was 120 mm (210% large excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Uttarakhand is below normal for week-1 and; week-2.

- Under prevailing weather condition, farmers are advised to irrigate the standing crops on need basis and use organic mulch for moisture conservation.

Himachal Pradesh

The amount of rainfall received over Himachal Pradesh was 58 mm (21% excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Himachal Pradesh is below normal for week-1 and week-2.

- Under adequate soil moisture, farmers are advised to go for the sowing of late sown wheat crop. If the moisture content in the soil is inadequate for ensuring proper germination, farmers are advised to wait for the rains and then go for sowing of wheat.
- Under prevailing weather condition, farmers are advised to add mulch material in space

between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.

Punjab

The amount of rainfall received over Punjab was 11 mm (-23% deficit) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Punjab is no rainfall for week-1 and; week-2.

- To protect vegetable crops from late blight, it is advised to spray Indofil M-45/mass M-45/Markzeb/Antracol/Kavach@500-700 g or copper oxychloride/ Mark copper @ 750-1000 litre /acre in 250-350 litres of water at 7 days interval.
- It is the optimum time for transplanting of tomato, brinjal, chilli and capsicum for early and higher yield.

Rajasthan

The amount of rainfall received over East Rajasthan was 69 mm (199% large excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over East Rajasthan is below normal for week-1 and above normal for week-2.

- In the coming days, there is a possibility of frost with a drop in the temperature. Therefore, farmers are advised to irrigate the crop and spray 0.1 percent sulfuric acid to protect damage from low temperature.

Haryana

The amount of rainfall received over Hisar was 37 mm (170% large excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Hisar is no rainfall for week-1 and week-2.

- Due to dry and clear weather and slightly fall in temperature, farmers are advised to complete the sowing of *rabi* season crop and apply the requirement-based irrigation in existing vegetable crops and monitor for insect-pests.
- Farmers are also advised to cover the young horticulture crops with the help of paddy straw or other crop residue to protect from night or low temperature.

Madhya Pradesh

The amount of rainfall received over Madhya Pradesh was 87 mm (75% large excess) during 01 October - 08 December 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 December 2022 and 16 - 22 December 2022) over Madhya Pradesh is above normal for week-1 and week-2.

- Due to dryness in the atmosphere in the coming days, farmers are advised to provide light irrigation at 30-35 DAS in mustard crop.

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