



National Agromet Advisory Services Bulletin

Date of issue: 24 February 2023

based on

Extended Range Weather Forecast (ERFS)

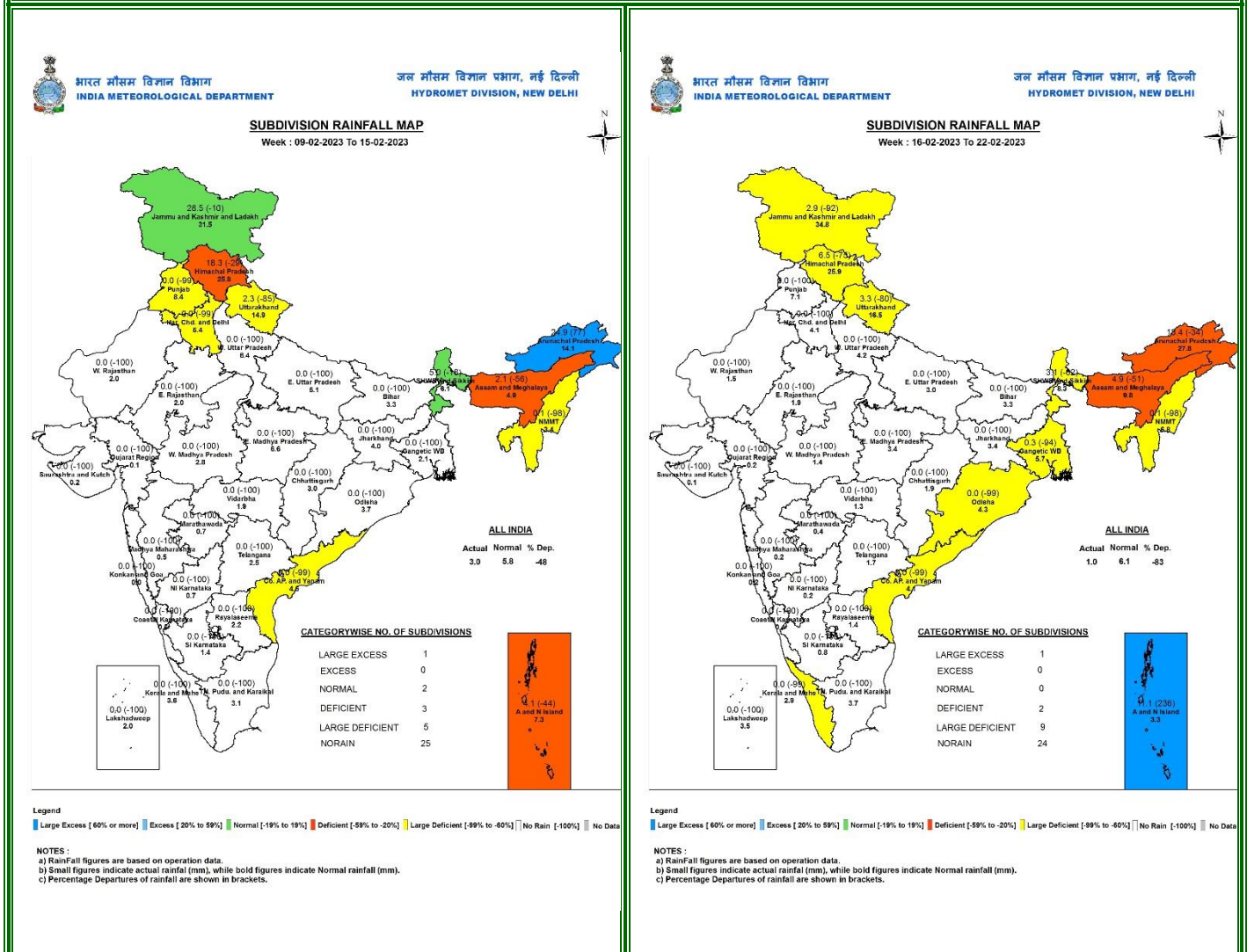
Validity: 24 February - 09 March 2023

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 (9th February to 22nd February 2023)



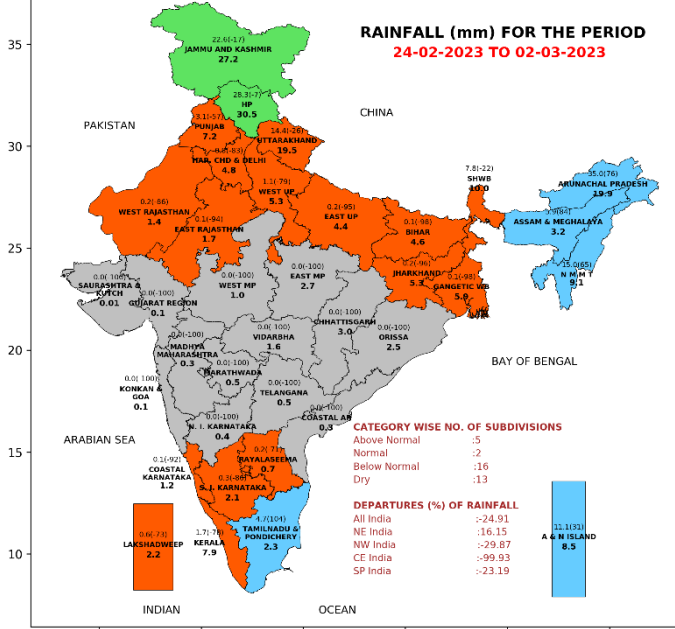
- Normal or above normal rainfall occurred in either of the two weeks in Jammu Kashmir & Ladakh (UTs), Sub-Himalayan West Bengal, Arunachal Pradesh and Andaman & Nicobar Islands.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 22nd February) (24th February to 9th March 2023)

INDIA METEOROLOGICAL DEPARTMENT

Rainfall Forecast Map - Normal RF Based Categories



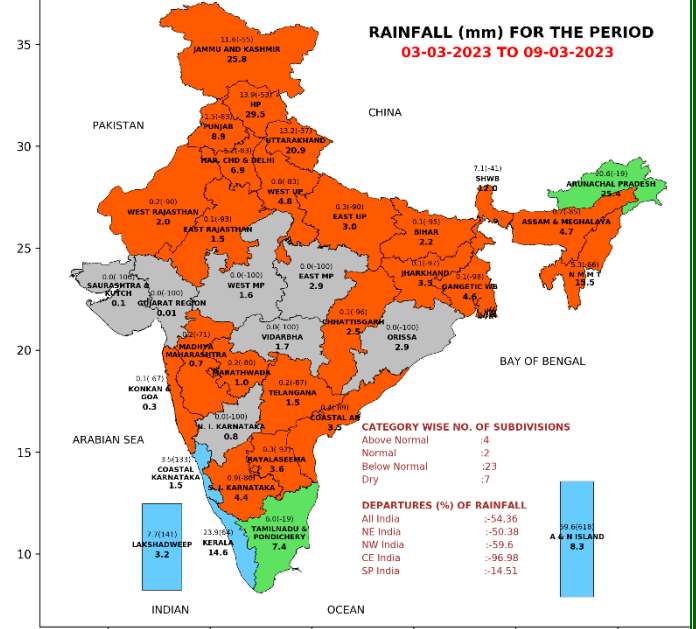
LEGEND: NO DATA NO RAIN (-100%) BELOW NORMAL (-20% TO 99%) NORMAL (19% TO -19%) ABOVE NORMAL (20% OR ABOVE)

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.

INDIA METEOROLOGICAL DEPARTMENT

Rainfall Forecast Map - Normal RF Based Categories



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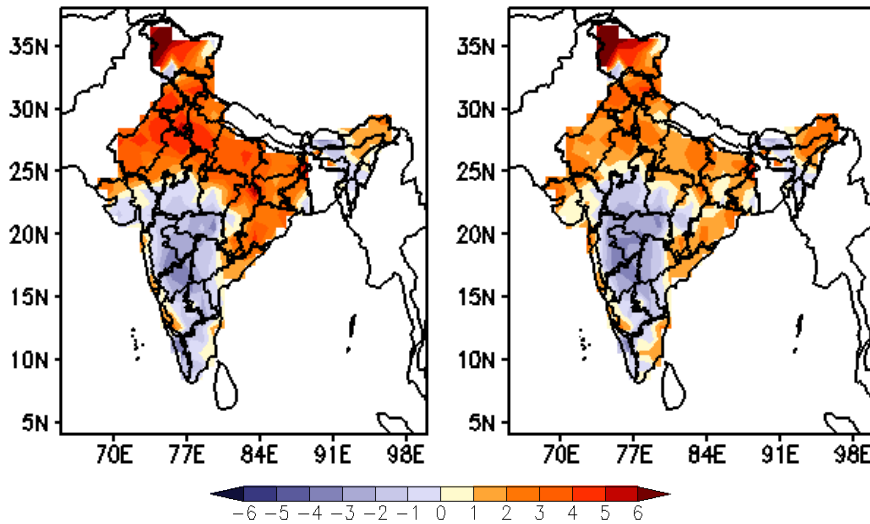
- **Week 1 (24.02.2023 to 02.03.2023) and Week 2 (03.03.2023 to 09.03.2023):** Rainfall activity associated with Western Disturbances is likely over extreme north India and parts of Northeast India in week 1 and week 2. Increase in rainfall activity is expected over Kerala and A&N islands in week 2.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 22nd February)
(24th February to 9th March 2023)**

MME forecast Tmax anomaly (Deg C)

(Week1: 24Feb-02Mar)

(Week2: 03Mar-09Mar)



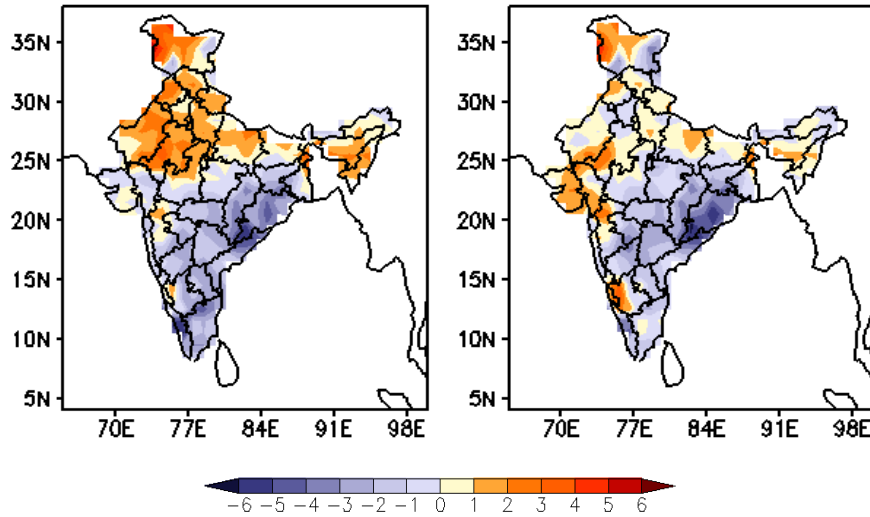
Maximum Temperature (Tmax)

- **Week 1 (24.02.2023 to 02.03.2023) and Week 2 (03.03.2023 to 09.03.2023):** Tmax is likely to be above normal over most parts of northern and adjoining central India.

MME forecast Tmin anomaly (Deg C)

(Week1: 24Feb-02Mar)

(Week2: 03Mar-09Mar)



Minimum Temperature (Tmin)

- **Week 1 (24.02.2023 to 02.03.2023) and Week 2 (03.03.2023 to 09.03.2023):** Tmin is likely to be above normal over north and northwest India. However, it is likely to be slightly below normal over east central parts of India.

Agromet Advisories

Uttar Pradesh

04 mm (-82% large deficit) rainfall was received over East Uttar Pradesh and 12 mm of rainfall received over West Uttar Pradesh (-58% deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) is below normal over East Uttar Pradesh and West Uttar Pradesh for week-1 and; week-2.

Western Uttar Pradesh

- During last week, the average weekly maximum and minimum temperature were 4.9 °C and 1.1 °C higher than normal. As weather will remain dry during this week, farmers are advised to irrigate wheat crop. Light irrigation should be taken up at PI, anthesis and milking stage which are the critical stages of wheat.
- Due to above normal temperature prevailing during second fortnight of February, farmers are advised to provide irrigation to barley crop (milk stage) and chickpea (pod formation stage).

Eastern Uttar Pradesh

- Due to the dry and warming weather conditions, farmers are advised to monitor aphid infestation on vegetable crops. To control, spraying of Imidacloprid @ 0.25 to 0.5 ml per litre of water is recommended.
- Under prevailing weather condition, farmers are advised to start field preparation for early sowing of okra with recommended varieties like A-4, Parbani Kranti, Arka Anamika etc.

Punjab

15 mm (-64% large deficit) rainfall received over Punjab during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Punjab is below normal for week-1 and; week-2.

- Prevailing high temperature conditions are not favourable for pollination and fertilization stage of the wheat crop, which is currently at anthesis stage. Therefore, farmers are advised to apply light irrigation to the wheat crop or apply two sprays of 2% Potassium nitrate (13:0:45) by dissolving 4 kg potassium nitrate in 200 litres of water at boot leaf and anthesis stages or apply two sprays of salicylic acid by dissolving 15 gram salicylic acid in 450 ml of ethyl alcohol using 200 litres of water per acre at boot leaf and early milk stages.
- Due to prevailing dry weather condition, farmers are advised to apply need-based irrigation to the crops.
- Due to rise in temperature, there may be a chance of aphid infestation on mustard crop. If population observed above ETL, then it is advised to spray Actara @ 40 g 25 WG or 400 ml of Rogor 30 EC or 600 ml Dursban/Coroban 20 EC in 80-125 liters of water per acre.

Rajasthan

23 mm (133% large excess) rainfall received over East Rajasthan during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over East Rajasthan is below normal for week-1 and; week-2.

- Keeping in view of increasing temperature, farmers are advised to provide light irrigation in standing crops like wheat, which is at milk stage and vegetables as per requirement.
- To overcome the effect of higher temperature in wheat and barley crop, farmers are also advised to spray KCl 0.2% or CaCl₂ 0.1% dissolved in 500 litres of water as foliar spray.
- At present, timely sown gram crop is at maturity stage. Therefore, farmers are advised to start the harvesting of gram.

Haryana

12 mm (-58% deficit) rainfall received over Haryana during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Haryana is below normal for week-1 and; week-2.

- Due to possibility of dry and clear weather, farmers are advised to apply the irrigation and fertilizer in wheat and barley crop as per need.

Uttarakhand

37 mm (-59% deficit) rainfall received over Uttarakhand during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Uttarakhand is below normal for week-1 and; week-2.

- Farmers are advised to irrigate the crops/orchards to reduce the impact of high temperature.
- Farmers are also advised to add mulch material in the space between two rows of vegetable crops for soil moisture conservation and maintaining the soil temperature.

Assam

The amount of rainfall received over Assam was 19 mm (-48% large deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) is above normal for week-1 and; below normal for week-2.

- Since deficit to large deficit in rainfall was received in most districts of Assam, a standing water of 5±2 cm depth in the boro rice is advised to maintain optimum crop growing environment.
- Protect the banana bunches from low temperature stress by covering it with white polythene bags.
- Under prevailing dry period (December- March), irrigation is advised in coconut orchard at 15 days interval to reduce the immature nut fall from the bunch.

Madhya Pradesh

The amount of rainfall received over East Madhya Pradesh was 04 mm (-86% large deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over East Madhya Pradesh is no rainfall for week-1 and; week-2.

- As day temperature is rising, it is advised to provide light irrigation in sugarcane field and vegetable crops.

Chhattisgarh

The amount of rainfall received over Chhattisgarh was 0.1 mm (-99% large deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Chhattisgarh is no rainfall for week-1 and; below normal for week-2.

- Prevailing temperature is suitable for proper germination of summer vegetables like pumpkin, bitter gourd, bottle gourd, okra etc. Hence, sowing of these vegetables should be completed at the earliest.
- Summer season banana crop is generally affected by heat waves. To protect banana crop, it is advised to grow chari, jowar and sunhemp crops in the periphery of banana fields so that during summer, it will grow up and protect banana crop from heat waves.

Odisha

The amount of rainfall received over Odisha was 0.1 mm (-99% large deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Odisha is no rainfall for week-1 and; week-2.

- Due to prevailing dry and increasing temperature condition, farmers are advised to provide light and frequent irrigation in their crop field.
- Ridge and furrow irrigation is advised to practiced to conserve soil moisture in the main field.
- Mulching is also advised to reduce the evaporation from soil in orchard crops.

Jammu

The amount of rainfall received over Jammu was 175 mm (-11% deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Jammu is normal for week-1 and; below normal for week-2.

- Apply light irrigation at pod initiation stage in late sown mustard/gobi sarson crop to reduce the effect of increasing temperature.

Tamil Nadu

The amount of rainfall received over Tamil Nadu was 20 mm (-10% deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) for the next two weeks (24

February - 02 March 2023 and 03 - 09 March 2023) is above normal for week-1 and; normal for week-2.

- Prevailing weather conditions are congenial for rice blast incidence in rice crop. For the management, it is advised to spray Carbendazim or Tricyclazole at 2 g/litre of water for 1 kg of seed.

Kerala

The amount of rainfall received over Kerala was 15 mm (-15% deficit) during 01 January - 23 February 2023. The extended range weather forecast (rainfall) for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) is below normal for week-1 and; above normal for week-2.

- Due to the increase in temperature, there may be the chances of sucking pests infestation on vegetable crops. To control, it is advised to spray *Leccanicilium leccani* 20 g per litre at weekly intervals at the initial stage of infestation.
- Since dry and hot weather condition is prevailing, farmers are advised to provide irrigation in banana and coconut orchard as per requirement and mulching is also advised to conserve soil moisture.

Maharashtra

No rainfall over Madhya Maharashtra and Konkan region and 0.5 mm (-97% large deficit) rainfall over Vidarbha and 0.6 mm (-90% large deficit) rainfall was recorded over Marathwada during 01 January - 23 February 2023. The extended range weather forecast (rainfall) for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) is no rainfall over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week -1 and; below normal over Konkan, Marathwada and Madhya Maharashtra and; no rainfall over Vidarbha for week-2, respectively.

Vidarbha

- Due to prevailing dry and hot weather conditions, farmers are advised to ensure irrigation at milk stage in timely sown wheat and at anthesis stage in late sown wheat.
- Farmers are advised to complete the sowing of summer green gram (var. *Pusa Vaishakhi*, *PKV-AKM-4* (Vaibhav)) preferably by second week of February. Under assured irrigation facility during peak summer months, sowing can be extended till 15 March.

Marathwada

- Due to increase in temperature, irrigation management is advised in summer groundnut as per requirement.
- For the management of aphids in safflower crop, it is advised to spray Dimethoate 30% @ 13 ml or Acephate 75% @ 10 gram per 10 litres of water.

Konkan

- Due to increase in temperature, there is a possibility of wild fires in fruit orchard. To protect the mango, cashewnut fruit crop orchard from fire, it is advised to prepare fire breaks in the orchards.
- The prevailing weather is congenial for incidence of thrips on mango. To control, it is advised to spray Spinosad 45%SC @ 2.5 ml per 10 litres of water. If incidence is severe, then take second spray of Thiamethoxam 25%WG @ 2 g per 10 litres of water at an interval of 8 days.
- Due to forecast for rise in temperature, it is advised to apply 150 to 200 litres of water to nut bearing trees also use straw mulch to reduce evaporation losses.

Madhya Maharashtra

- Mulching is advised to reduce the evaporation from soil in orchard crops.

Karnataka

No rainfall was received during 01 January - 23 February 2023 over Coastal Karnataka and the amount of rainfall received over South Interior Karnataka is 1.3 mm (-73% large deficit) and 0.2 mm (-94% large deficit) rainfall was received over North Interior Karnataka. The extended range weather forecast (rainfall) for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) is below normal over Coastal Karnataka and South Interior Karnataka and no rainfall over North Interior Karnataka for week-1 and; no rainfall over North Interior Karnataka and below normal over South Interior Karnataka and above normal over Coastal Karnataka for week-2.

South Interior Karnataka

- Due to continuous dry spell in January, the termite infestation is common in horticulture, forest tree and shrubs. Hence, to control, it is advised to apply Aldrin termiticides.
- Under prevailing weather condition, it is advised to provide irrigation in mango orchard (marble stage), for the better development of fruits .

Anantapur

The amount of rainfall received over Coastal Andhra Pradesh was 1 mm (-93% large deficit) and 0.2 mm (-97% large deficit) rainfall received over Rayalaseema during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) is no rainfall over Coastal Andhra Pradesh and below normal over Rayalaseema for week-1 and; below normal over Coastal Andhra Pradesh and Rayalaseema for week-2.

- Present weather conditions are favourable for gram pod borer infestation in chickpea grown in Ananthapuramu, Kurnool and Prakasam districts. To control the pod borer, farmers are advised to spray Indoxacarb @ 1.0 ml Rynaxypyr @ 0.2 ml/litre of water. Further, the farmers are advised to provide light irrigation to the crop at 55-60 DAS for getting higher yields.

Gujarat

3.0 mm (116% large excess) rainfall received over Gujarat during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Gujarat is no rainfall for week-1 and; week-2.

- To prevent powdery mildew disease in coriander, it is advised to spray Hexaconazole @ 15 ml/10 liters of water.

Jharkhand

No rainfall received over Jharkhand during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Jharkhand is below normal for week-1 and; week-2.

- Present temperature is suitable for germination of french bean, radish etc. Suitable seedlings of creeper vegetables like cucurbits, tomatoes and chilies is advised to transplant in main field during this week.
- Keeping in view the possibility of rise in temperature, it is advised to apply light irrigation to crops and vegetables as per requirement.

Himachal Pradesh

116 mm (-29% deficit) rainfall received over Himachal Pradesh during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Himachal Pradesh is normal for week-1 and; below normal for week-2.

- In lower areas of the state, there has been a rise in temperature which may have an adverse impact on the flowering, grain formation & grain filling of wheat as well as other crops. For protecting the crops from this, farmers are advised to go for light and frequent irrigations, wherever available. Farmers can also go in for the spray of salicylic acid or calcium chloride for protecting their crops from this heat stress.
- Add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.

Uttarakhand

37 mm (-59% deficit) rainfall received over Uttarakhand during 01 January - 23 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (24 February - 02 March 2023 and 03 - 09 March 2023) over Uttarakhand is normal for week-1 and; below normal for week-2.

- Due to dry weather prevailing, farmers are advised to keep continue the sowing of summer vegetables like tomato, capsicum, pumpkin, cucumber, okra etc.

Disclaimer:

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