



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन  
**National Agromet Advisory Services Bulletin**

जारी करने की तिथि/ **Date of issue: 03 December 2024**

आधारित/**based on**

विस्तारित अवधि मौसम पूर्वानुमान/**Extended Range Weather Forecast (ERFS)**

वैधता/**Validity: 29 November – 12 December 2024**

जारीकर्ता/**Issued by**

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

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और

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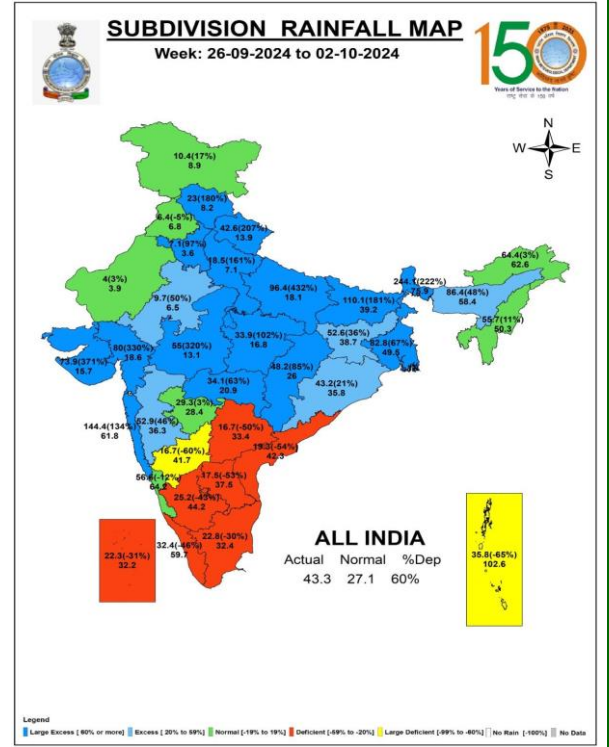
**India Meteorological Department (IMD)**

पृथ्वी प्रणाली विज्ञान संगठन

**Earth System Science Organization**

वास्तविक वर्षा तथा विस्तारित अवधि पूर्वानुमान  
**Realized Rainfall and Extended Range Forecast**  
 (वर्षा और तापमान)  
**(Rainfall and Temperature)**

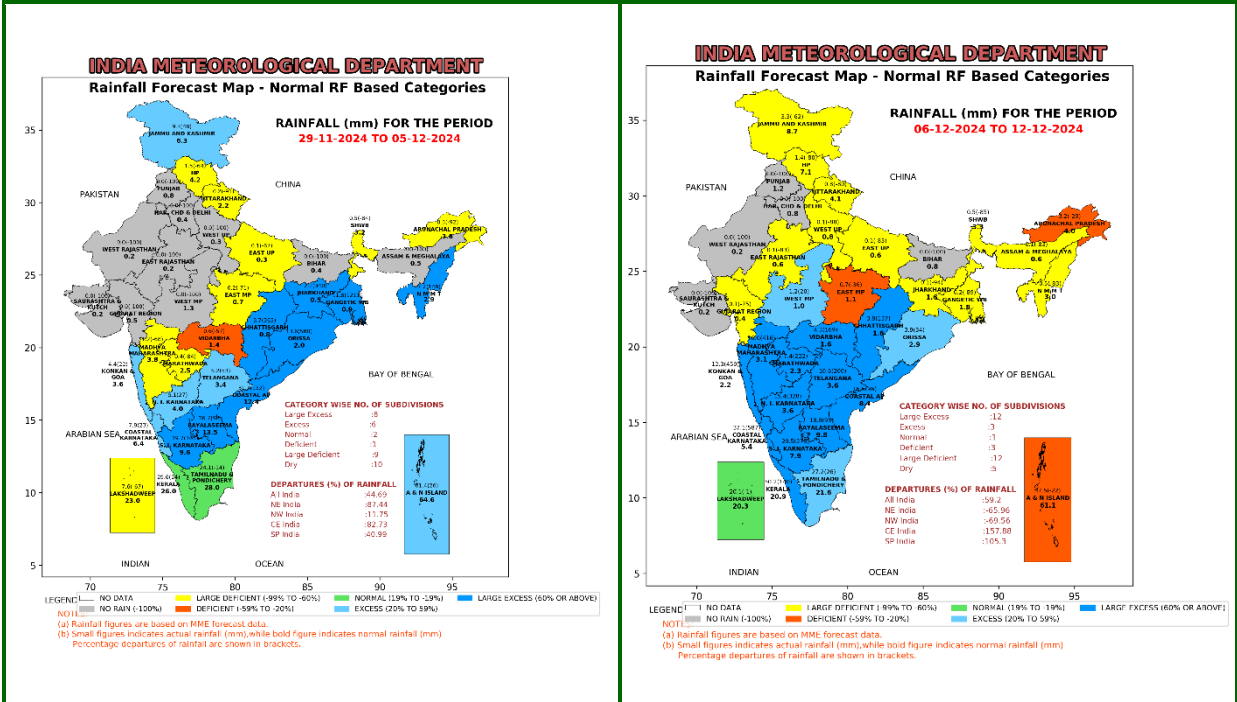
**Realized Rainfall**  
**(19<sup>th</sup> September to 02<sup>nd</sup> October, 2024)**



- Normal or above normal rainfall occurred in both the weeks over West Uttar Pradesh, Odisha, Maharashtra and Coastal Karnataka.
- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh & Delhi, East Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, Nagaland Manipur Mizoram & Tripura (NMMT), Rajasthan, Gujarat State, Madhya Pradesh, Chhattisgarh, Telangana, Andhra Pradesh & Yanam, North Interior Karnataka and Andaman & Nicobar Islands.
- Below Normal rainfall occurred in both the weeks over South Interior Karnataka, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC- 27<sup>th</sup> November, 2024) (29<sup>th</sup> November to 12<sup>th</sup> December, 2024)



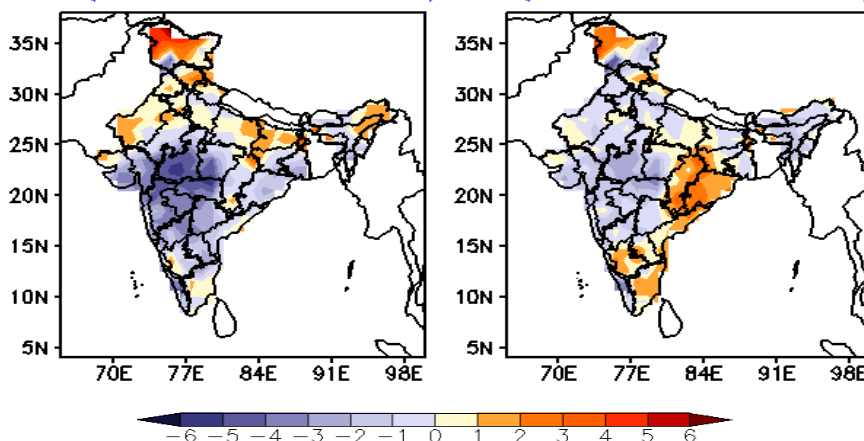
- **Week 1 (29.11.2024 to 05.12.2024):** Rainfall activity is likely over South India, Odisha, Gangetic West Bengal and Jammu & Kashmir. Rainfall is likely to be above normal over coastal regions of Andhra Pradesh and Odisha.
- **Week 2 (06.12.2024 to 12.12.2024):** Rainfall activity is likely over South India and Maharashtra. Rainfall is likely to be above normal over Kerala and Karnataka.

**Maximum and Minimum temperature anomaly ( $^{\circ}$ C) forecast  
for the next 2 weeks (IC- 27<sup>th</sup> November, 2024)  
(29<sup>th</sup> November to 12<sup>th</sup> December, 2024)**

**MME forecast Tmax anomaly (Deg C)**

(Week1: 29Nov-05Dec)

(Week2: 06Dec-12Dec)



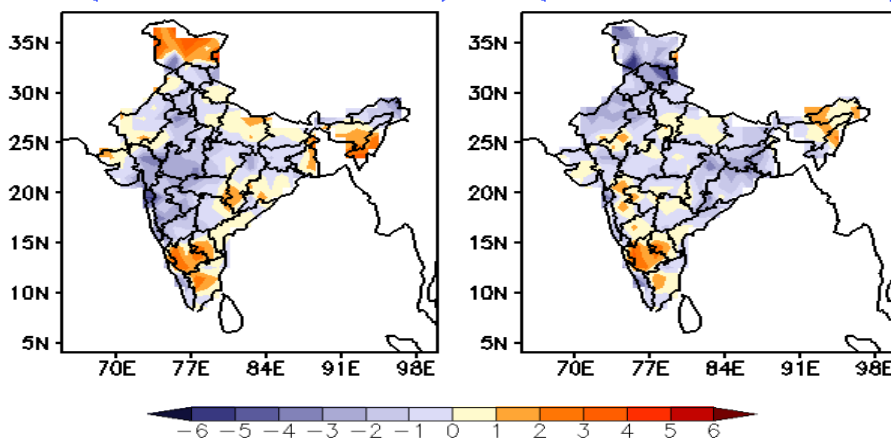
**Maximum Temperature (Tmax)**

- **Week 1 (29.11.2024 to 05.12.2024):** Maximum temperature is likely to be above normal over many parts of Northwest India, Bihar and some parts of Northeast India. It is likely to be below normal over West and Central India.
- **Week 2 (06.12.2024 to 12.12.2024):** Maximum temperature is likely to be above normal over South India, Odisha, Chhattisgarh and Jammu & Kashmir. It is likely to be below normal over many parts of Northwest, West, Central and Northeast India.

**MME forecast Tmin anomaly (Deg C)**

(Week1: 29Nov-05Dec)

(Week2: 06Dec-12Dec)



**Minimum Temperature (Tmin)**

- **Week 1 (29.11.2024 to 05.12.2024):** Minimum temperature is likely to be below normal over Central & West India and some parts of North West India. It is likely to be above normal over Jammu & Kashmir and parts of South & North East India and East Uttar Pradesh.
- **Week 2 (06.12.2024 to 12.12.2024):** Minimum temperature is likely to be below normal over many parts of Northwest, East and Central India. It is likely to be above normal over parts of Northeast, West and South India.

## Strategic Agricultural Planning based on rainfall till 12 December 2024

### Agromet Advisories

#### Kerala

396 mm (-15% deficit) rainfall was received over Kerala from 01 October to 02 December 2024. The extended range weather forecast (rainfall) for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is normal rainfall for week 1 and a large excess for week 2.

- To control and prevent bacterial leaf blight in paddy, it is advised to dissolve 20 g of cow dung in one litre of water and spray the supernatant liquid by mixing with 20 g of *pseudomonas*. If the attack is severe, spray 6 g of Streptocycline in 30 litres of water.
- As a prophylactic measure to Sigatoka leaf spot disease, spray 20 g of *pseudomonas* in one litre of water. If Sigatoka attack is seen, spray one milli litre Hexaconazole or one milli litre propiconazole per one litre of water on both the surface of the leaf.
- Vaccinate animals against foot and mouth disease and haemorrhagic septicaemia. If needed give medicine against worm infestation after dung examination.

#### Tamil Nadu

430 mm (18% excess) rainfall was received over Tamil Nadu from 01 October to 02 December 2024. The extended range weather forecast (rainfall) for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is a normal rainfall for week 1 and excess for week 2.

- To increase the yield of groundnut, apply a foliar spray of groundnut rich @ 2 kg per acre in 200 litres of water along with a sticking agent (during clear weather) at the time of flowering and pod formation stage.
- Since heavy rainfall is anticipated, provide drainage for the rice field. Avoid application of fertilizer, insecticides or pesticides and postpone irrigation. As continuous rainfall is expected in forthcoming days, withhold the sowing of groundnut.
- To alleviate the micronutrient deficiency as well as to improve the yield of ratoon sugarcane, foliar spraying of Sugarcane booster @ 1 kg/acre at the time of 45 days after planting, and 1.5 kg/acre at the time of 60 days after planting and @ 2 kg/acre at the time of 75 days after planting is recommended. Mix the booster with 200 litres of water along with the sticking agent.

#### Karnataka

260 mm (37% excess) rainfall over South Interior Karnataka; 284 mm (11% excess) rainfall over Coastal Karnataka and 127 mm (1% excess) rainfall over North Interior Karnataka was received from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is excess rainfall over Coastal Karnataka, North Interior Karnataka and large excess rainfall over South Interior Karnataka for week 1 and; large excess rainfall over Coastal Karnataka, North Interior Karnataka and South Interior Karnataka during week 2.

#### *South Interior Karnataka*

- It is the optimum time to for harvesting of matured finger millet ear head or whole plant.

- To control of aphids and white fly in field bean and cowpea crops which is at early vegetative and flowering stage, it is advised to spray Carbosulfan 25% EC @ 1.5 ml/ litre of water.

#### ***North Interior Karnataka***

- Under prevailing weather condition, it is advised to continue sowing of chickpea and safflower under irrigated conditions.
- To control rust in sugarcane, spray Hexaconazole/Propiconazole @1 ml per litre of water.
- Conserve the soil moisture by adopting mulching practices in horticultural crops.
- Nipping and spraying of NAA @ 20 ppm in chickpea crops is advised in 35 to 40 DAS crops which will improve the yield.

#### **Andhra Pradesh**

273 mm (28% excess) rainfall was received over Rayalaseema and 220 mm (-26% deficit) was received over Coastal Andhra from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is large excess rainfall over Rayalaseema and Coastal Andhra Pradesh for week 1 and; week 2.

- Farmers are advised to take up sowing of *rabi* groundnut up to 15th December and take up seed treatment with Imidacloprid @ 2 ml + Mancozeb @ 3 g or tebuconazole @1 per kg seed.
- In the North coastal zone of Andhra Pradesh, farmers are advised to go for sowing of rice fallow sun hemp with a seed rate of 10 kg/acre.
- Current weather conditions are congenial for wilt incidence in gram. For control, advised to spray Hexaconazole @ 2.0 ml per litre of water.

#### **Odisha**

78.5 mm (-42% deficit) rainfall was received over Odisha from 01 Oct - 06 Oct 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is large excess rainfall over Odisha for week 1 and excess rainfall for week 2.

- For early and maximum yield in Cole crops it is advised to spray Gibberellic Acid 0.001% litres (@ 75 ml/acre at 45 DAT and 65 DAT by mixing in 200 litres of water.
- In cole crops irrigation is advised at 7-8 Days interval depending upon soil moisture and weather conditions.
- There is a chance of powdery mildew disease in black gram and green gram. To control this disease, spray Sulphur 80% WP @800 g/acre or Hexaconazole 5% EC @ 300 ml/acre.

#### **Maharashtra**

103 mm (3% excess) rainfall over Madhya Maharashtra, 72 mm (-22% deficit) Marathwada, 240 mm (74% large excess) Konkan, and 42 mm (-42% deficit) rainfall over Vidarbha was recorded from 01 Oct to 06 Oct 2024. The extended range weather forecast (rainfall) for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is excess rainfall over Konkan, deficit rainfall over Marathwada, Madhya Maharashtra and large deficit rainfall over Vidarbha for week 1; and large excess rainfall over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week 2, respectively.

### ***Parbhani***

- Due to deficit rainfall conditions during this week, irrigation management is advised as per requirement in crops, orchards, vegetable and floricultural crops.
- Continue sowing of late sown wheat and transplanting of onion.
- For management of white fly in sugarcane crop which is at the planting stage, take a spray of Dimethoate 30% @ 36 ml per 10 litres of water.
- Due to the low minimum temperature in the past few days, aphids may be observed in safflower, to control spray Dimethoate 30 % @ 13 ml or Acephate 75 % @ 10 g per 10 litres of water.

### ***Vidarbha***

- Continue picking cotton and complete harvesting of rice. Keep the harvested produce at safer places.
- Undertake intercultural operations in timely sown mustard, sesame, rabi sorghum, safflower, linseed and chickpea.
- Apply need-based irrigation to pigeon pea, sesame, safflower, chickpea, sorghum, maize, mustard, turmeric, and vegetables.

### ***Madhya Maharashtra***

- To protect *rabi* crops pre-seasonal sugarcane, wheat, vegetable crops and fruit orchards and to reduce the cracking of grapes, from cold, apply light and frequent irrigation during evening hours.
- To protect bananas from cold, apply irrigation during evening hours. Also, cover the bunches with a white plastic bag with 6% porosity.
- As the minimum temperature was observed below 15°C in the last 2-3 days, aphid borne sugary (chikta) disease was observed in *rabi* sorghum, to control spray Dimethoate 30 EC @ 10 ml per 10 litres of water

### ***Konkan***

- Under prevailing weather conditions, it is advised to continue harvesting of matured arecanut and keep the harvested produce in safer places. Continue sowing of mustard, lablab bean, horse gram, cowpea, kadva val, watermelon, sweet corn and baby corn.
- To control tea mosquito bugs in a new flush of cashew nut due to cloudy weather, spray Lambda-cyhalothrin 5% EC @ 6 ml per 10 litres of water.



## Gujarat

41 mm (31% excess) rainfall was received over Gujarat from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) over Gujarat is no rainfall for week 1 and deficit for week 2.

- Undertake sowing of wheat, lucerne, chickpea and coriander. Carry out planting of potato. Apply need-based irrigation in banana, bidi tobacco, chilli, tomato and pigeon pea.
- Under prevailing weather conditions, it is advised to continue sowing of chickpea up to 15th December; before sowing, treat the seeds with Thiram or Captan @ 3 g per Kg seeds and Rhizobium or PSB culture @ 250 g per 8-10 kgs.
- Carry out picking of matured cotton bolls.

## Chhattisgarh

28 mm (-61% large deficit) rainfall was received over Chhattisgarh from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) over Chhattisgarh is large excess rainfall for week 1 and week 2.

- Use improved varieties of mustard like *Pusa Jai Kisan*, *Pusa Bold*, *Vardan*, *Varuna*, *Kranti Chhattisgarh Mustard* etc. for sowing with the seed rate @ 4-5 kg per hectare.
- Looking into the decrease in temperature and its possible adverse effects, dairy farmers are advised to keep the animals in the cattle shed with concrete/brick roof.
- Raise the seedlings of winter vegetables like cauliflower, cabbage, chilli, tomato, brinjal, etc.
- To control Alternaria blight in pigeon pea crops, it is advised to spray Mancozeb 75 WP @ 2 g or Carbendazim 50 WP @ 1g per litre of water.

## Assam

210 mm (16% excess) rainfall was received over Assam from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) over Assam is a no rainfall for week 1 and deficit rainfall for week 2.

- Due to favourable weather appearance of the Sigatoka leaf spot may be observed in the Banana plant. Spray Carbendazim @ 0.5 gm/litre of water at first appearance followed by 4 numbers of sprays at 30 day intervals. Maintain the banana orchard weed-free and avoid water stagnation.
- Harvesting and threshing of already matured Sali paddy may be continued in sunny weather. Harvesting at the right time is crucial to prevent losses and ensure good grain quality and high market value.
- Sawfly infestation can be seen in many vegetative toria fields; to control, spray Chlorantraniliprole 18.5 SC @ 0.2 ml or Neemacin 1500 ppm @ 3 ml per litre of water in early morning.



## **West Bengal**

204 mm (31% excess) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 173 mm (9% excess) from 01 Oct to 06 Oct 2024. The extended range weather forecast (rainfall) for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is large excess rainfall over Gangetic West Bengal and deficit rainfall over Sub-Himalayan West Bengal during week 1 and deficit rainfall over Sub-Himalayan West Bengal and Gangetic West Bengal for week 2.

- Raised bed cultivation/ridge & furrow planting helps onion plants to survive future excess rainfall and moisture conditions. In case of excess moisture in the field, farmers may prepare the seedlings in the seed bed and then transplant the seedlings @10-12 kg/ha. *Pusa red, N-53, Bhima Super, Agrifound light red* are the popular options within onion varieties.
- Sowing of mustard can be done after the kharif rice harvesting. The recommended seed rate is given 4-5 kg/ha. *Pusa Mustard 25 (NPJ 112), RH 749, NRCDR-2, and PM-28* are some of the promising mustard varieties that farmers may adopt.
- The cattle sheds should be covered from all sides to prevent cold air intrusion in the shed. The shed should be cleaned periodically to avoid any bacterial and fungal infestation

## **Jharkhand**

61 mm (-26% deficit) rainfall received over Jharkhand from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) over Jharkhand is a large excess for week 1 and a deficit for week 2.

- Timely sown chickpea is in the germinating stage. if available moisture is not enough in the soil for germination, farmers are advised to go for first irrigation.
- When transplanted cabbage and cauliflower seedlings are established in three weeks, go for hoeing, weeding and apply 55 kg urea per acre followed by irrigation.

## **Bihar**

20 mm (-68% large deficit) rainfall received over Bihar from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) over Bihar is no rainfall for week 1 and week 2.

- Weather is favourable for sowing of rabi crops; carry out preparing the field and sow the crops.
- Prepare the field for sowing wheat; if wheat is to be sown by sprinkling method then after ploughing, rake the soil to make it soft and crumbly. Seed treatment must be done before sowing; for seed treatment, use Carbendazim @ 2g/kg seed.

## **Uttar Pradesh**

3.1 mm (-92% large deficit) rainfall was received over Eastern Uttar Pradesh and rainfall received over Western Uttar Pradesh was 0.3 mm (-99% large deficit) from 01 Oct to 06 Oct 2024. The extended range weather forecast (rainfall) for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) is deficit rainfall over Eastern Uttar

Pradesh and no rainfall over Western Uttar Pradesh during week 1 and deficit rainfall over Eastern and Western Uttar Pradesh for week 2.

#### *Western Uttar Pradesh*

- As per the extended range weather forecast, no rainfall forecast from 29 Nov to 12 Dec, 2024 in the Central and Western zones of Uttar Pradesh therefore, farmers are advised to harvest mature paddy crops and threshing should be done as early as possible.
- As per the extended range weather forecast dry weather appearing from 29 Nov. to 12 Dec., 2024, farmers are advised continuously sowing of suitable wheat varieties at an irrigated condition such as *WH-542, K-9107, HUW-510, DBW-187, DBW-303, HP-1731, NW-1012, UP-2382, HD-2733, HD-2967, HD-3226 and K-307* etc and late sown wheat varieties are *K-402, K-607, K-1006, DBW-187, PBW-234, HD-2649, DBW-16, K-9162, Narendra Wheat-1076, HW-2045, UP-2425, HUW-234 and HD-3249*.

#### *Eastern Uttar Pradesh*

- Sowing should be done by recommended varieties of *Gram Avarodhi, KWR-108, Radhey, JG-16, KGD-1168 and K-850* with 80 kg/ha seed for unirrigated condition.
- Thinning is needed in mustard crop. Apply light sprinkler irrigation at 30-35 days after dry sowing conditions.

#### **Punjab**

2.5 mm (-81% large deficit) rainfall received over Punjab from 01 October to 02 December 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 November 2024 - 05 December 2024 and 06 December - 12 December 2024) over Punjab is no rainfall for week 1 and week 2.

- Irrigate all the vegetables in the field as the weather is expected to be dry during this week. It is the optimum time for sowing winter vegetables like carrot, radish, turnip, spinach etc.
- Apply irrigation to ber orchards as the trees are loaded with fruits. Irrigation should be done at 3-4-week intervals.
- To protect the young fruit plants from upcoming winters, arrangements should be made to prepare the thatches or kullies of sarkanda or farm waste materials on the plants during November.

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