



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन National Agromet Advisory Services Bulletin

जारी करने की तिथि / Date of issue: 08 January 2024

आधारित / based on

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

वैधता / Validity: 05 - 18 January 2024

जारीकर्ता / Issued by

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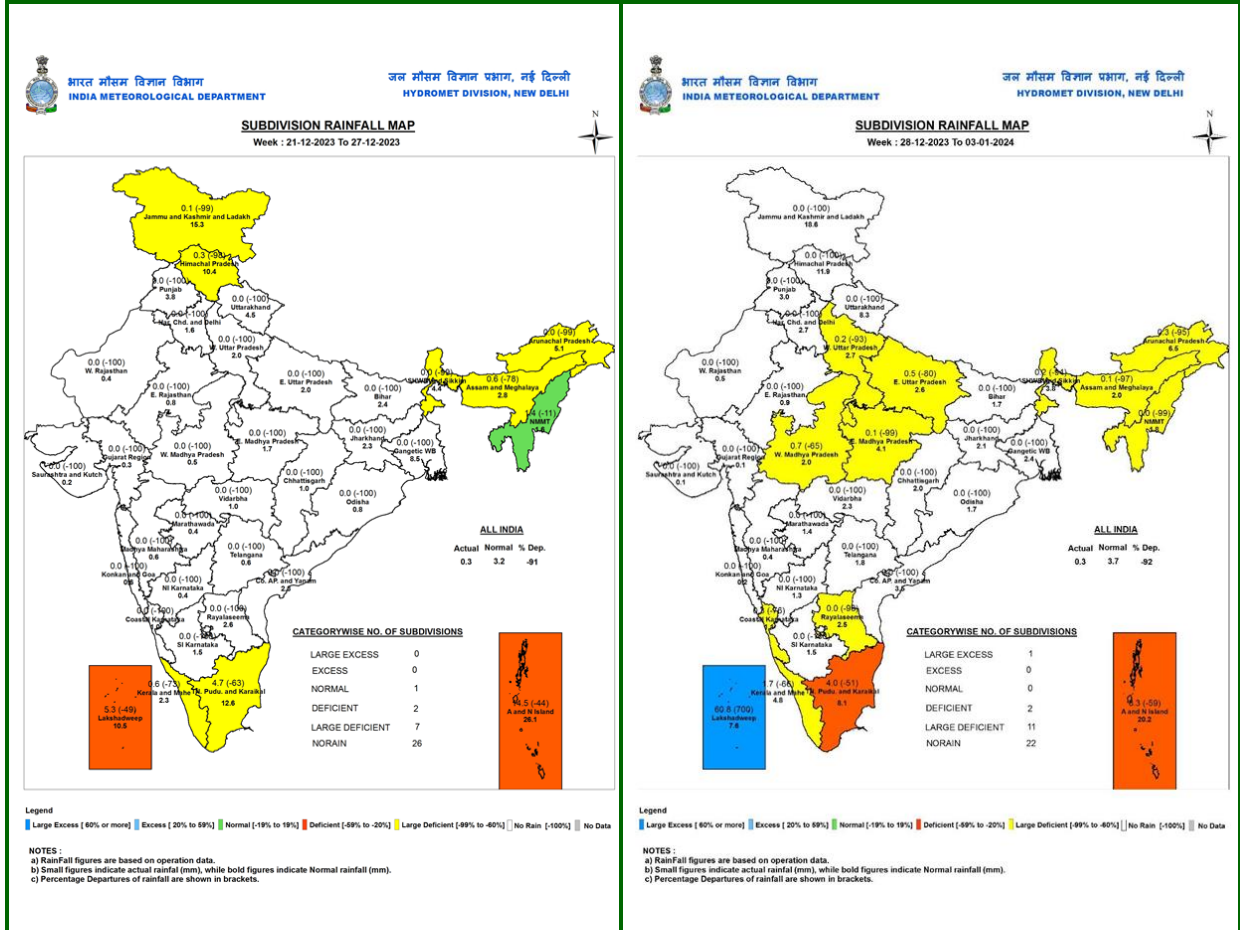
पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Realized Rainfall and Extended Range Forecast

Realized Rainfall

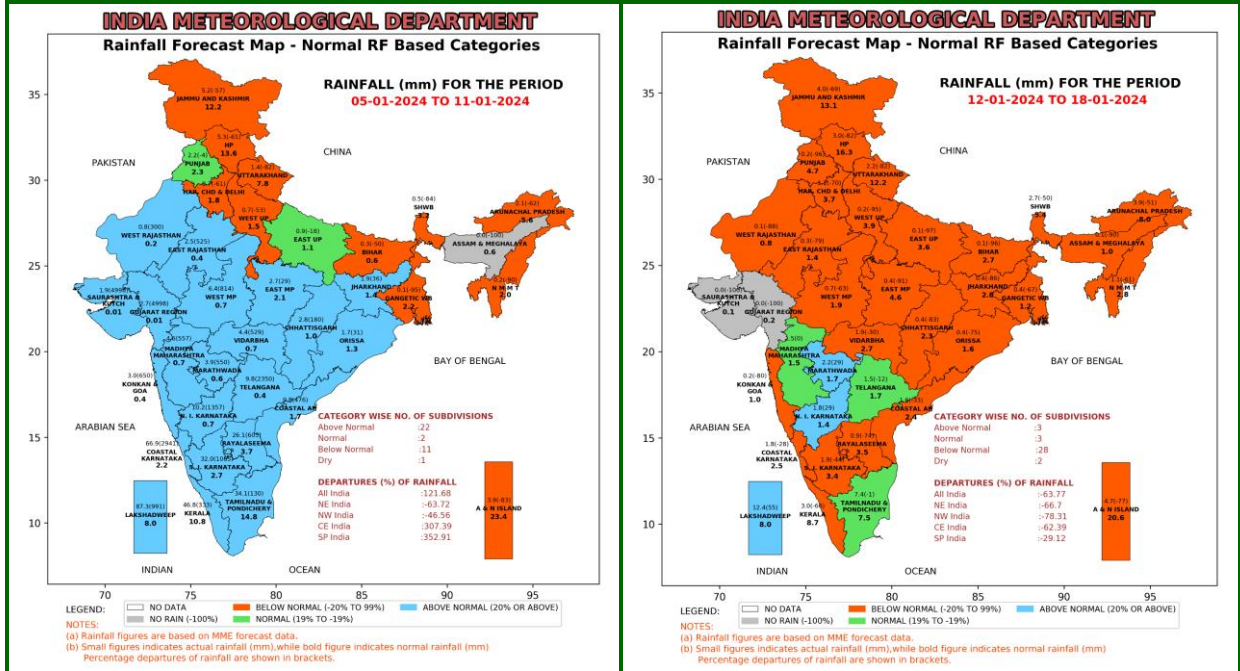
(21st December, 2023 to 03rd January, 2024)



- Normal or above normal rainfall occurred in either of the two weeks over Nagaland Manipur Mizoram & Tripura (NMMT) and Lakshadweep.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 03rd January, 2024) (05th to 18th January, 2024)



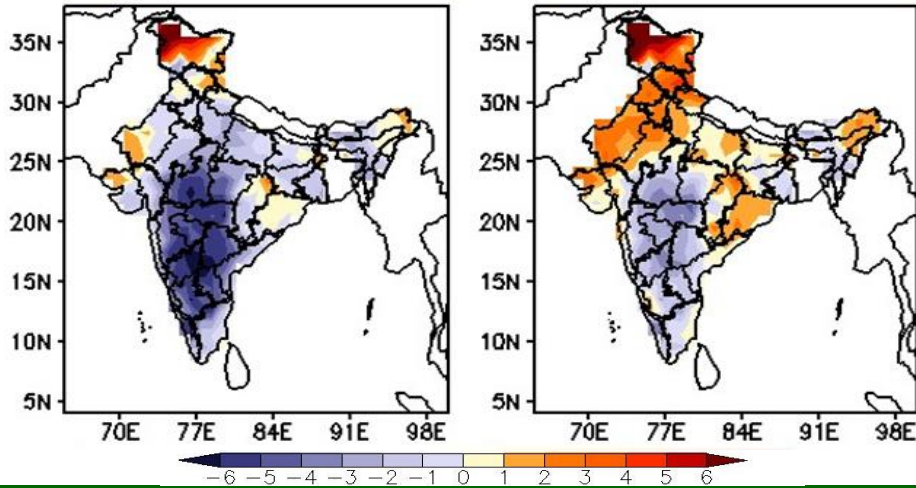
- **Week 1 (05.01.2024 to 11.01.2024):** Rainfall is likely to be above normal over South India and the adjoining sea areas.
- **Week 2 (12.01.2024 to 18.01.2024):** Rainfall is likely to be normal over coastal Tamil Nadu.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 03rd January, 2024)
(05th to 18th January, 2024)**

MME forecast Tmax anomaly (Deg C)

(Week1: 05Jan–11Jan)

(Week2: 12Jan–18Jan)



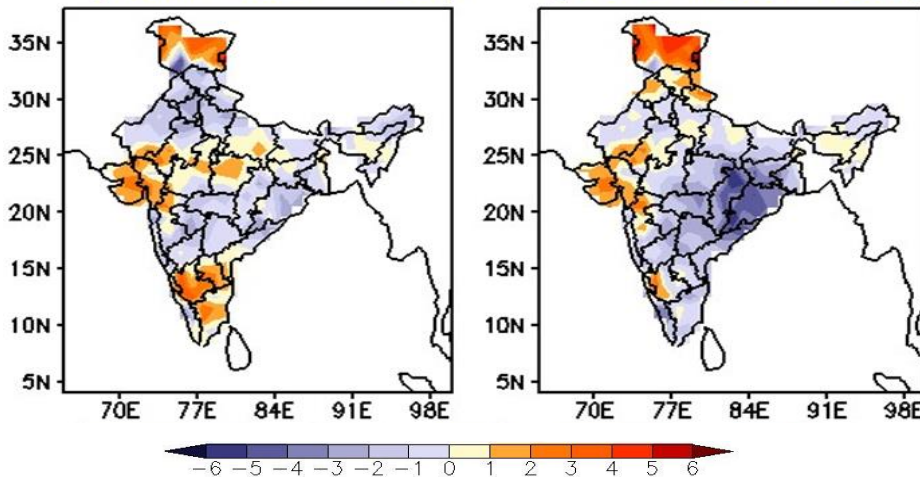
Maximum Temperature (Tmax)

- **Week 1 (05.01.2024 to 11.01.2024):** Maximum temperature is likely to be below normal over most parts of the country. It likely to be above normal over parts of North West and East India.
- **Week 2 (12.01.2024 to 18.01.2024):** Maximum temperature is likely to be above normal over North West India and some parts of East and North East India.

MME forecast Tmin anomaly (Deg C)

(Week1: 05Jan–11Jan)

(Week2: 12Jan–18Jan)



Minimum Temperature (Tmin)

- **Week 1 (05.01.2024 to 11.01.2024):** Minimum temperature is likely to be below normal over some parts of North, Central & East India and Kerala.
- **Week 2 (12.01.2024 to 18.01.2024):** Minimum temperature is likely to be below normal over most parts of the country except over Jammu Kashmir and some parts of some parts of Gujarat, Rajasthan and Karnataka.

Strategic Agricultural Planning based on rainfall till 18 January 2024

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 3 mm (52% excess) and over West Uttar Pradesh was 0.5 mm (-77% large deficit) during 01 - 07 January 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) is below normal rainfall over West Uttar Pradesh and normal over East Uttar Pradesh for week-1 and below normal rainfall over West Uttar Pradesh and East Uttar Pradesh for week-2.

Western Uttar Pradesh

- Due to rainfall received during last week, farmers are advised to skip irrigation up to 10 Jan, 2024 in wheat, pea and mustard crop. Top dress $\frac{1}{4}$ urea at optimum moisture in tillering initiation stage.
- Farmers are advised to dig out early sown potato crop.
- To protect pea crop from powdery mildew disease at vegetative stage, farmers are advised to spray 0.5 % Mancozeb.
- To protect the animals from the cold wave it is advised to provide paddy straw or ash as in animal houses and also provide a balanced diet to milch animals.

Himachal Pradesh

No rainfall was received over Himachal Pradesh during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over Himachal Pradesh is below normal for week-1 and; week-2.

- Under prevailing weather condition, farmers are advised to irrigate timely sown wheat crop and top dress with urea @ 125 kg / ha (5 kg urea/kanal) and in timely sown rainfed crop, farmers should wait for the rains before topdressing urea.
- 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.
- Under prevailing weather condition, farmers are advised to ensure fresh and clean drinking water to animals. Dry bedding may be provided to save the animals from cold. Avoid direct entry of cold winds in animal sheds. Young calves must be kept in sheds during nights.
- To avoid adverse effect of frost on the vegetable crops and fruit trees due to decline in temperature, farmers are advised to go for light and frequent irrigations. Farmers can also protect their crops from frost by generating smoke through burning plant material in the fields.
- Farmers are advised to prepare the pits for planting the fruit plants like apple, walnut, almond, plum and peach.
- For controlling weeds in onion, farmers are advised to spray Pendimethalin @ 3 litre/ha or alachlor @ 2 litre/ha.

Jammu

No rainfall was received over Jammu during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over Jammu is below normal for week-1 and; week-2.

- Farmers are advised that very late sown wheat varieties (PBW-757 & HD-3298) may be sown by 15th January with 25% increase in the seed rate due to sufficient moisture in soil, if sowing is not done yet.
- For early production of summer season vegetables (bitter melon, bottle gourd, pumpkin, chilli, capsicum, brinjal etc.), sowing under protected conditions (polyhouses) within 7-10 days is recommended.
- Farmers are advised to apply irrigation to late sown mustard crops. Application of 1st dose of nitrogen fertilizer as top dressing after irrigation during the afternoon is recommended.

Rajasthan

No rainfall was received over East Rajasthan during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over East Rajasthan is above normal for week-1 and; below normal for week-2.

- First irrigation is advised to provide to late sown wheat crop at 21-25 days old as per requirement. After 3-4 days of irrigation broadcasting of rest half dose of nitrogen is recommended.
- Prevailing weather is suitable for sowing of rabi onion with seed rate- 10 kg/ha. Before sowing seeds should be treated with Captan @ 2.5 g/ kg of seeds.
- Make proper arrangements to protect animals from the cold wave. Appropriate vaccination with the advice of a veterinarian to protect animals from sputum disease.

Hisar

No rainfall was received over Hisar during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over Hisar is below normal for week-1 and week-2.

- Due to forecast of below normal rainfall, farmers are advised to provide need base irrigation in *rabi* crops and manual weeding is advised in mustard and chickpea crop.
- Farmers are advised to apply irrigation as per need in *rabi* crops viz., mustard, chickpea, wheat and potato. Do manual weeding for proper weed management.

Punjab

No rainfall was received over Punjab during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over Punjab is normal for week-1 and; below normal for week-2.

- Farmers are advised to start the sowing of wheat cultivars *PBW 771 and PBW 752* under irrigated conditions.
- In early sown raya, apply 45 kg urea per acre with first irrigation. In rainfed conditions, apply 35 kg urea and 50 kg single superphosphate per acre by drilling at the time of sowing.

- This time is accurate for transplanting of tomato, brinjal, chilli and capsicum for early and higher yield. Sowing of nursery of onion is advised @ 4 to 5 kg seed to raise seedlings for transplanting in an acre.

West Bengal

No rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 0.1 mm (-97% large deficit) during 01 - 07 January 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) is below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week-1 and; week-2.

- Farmers are advised to provide support to tomato plants (reproductive stage) with the help of sticks if necessary.
- To monitor and control aphid, jassid, mite, whitefly and other sucking pest in brinjal crop at flowering stage, sticky traps are suggested to install. Apply Alike against sucking and chewing pests like flies and aphids.
- Application of Imidacloprid 17.80 % SL @0.4 ml/litre or Spiromesifen 22.90 % SC@ 1-1.25 ml/litre or Lambda-cyhalothrin 05 % EC @ 0.5 ml/litre water is advised in tomato crop at vegetative stage to prevent mite infestation.

Chhattisgarh

No rainfall was received over Chhattisgarh during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over Chhattisgarh is above normal for week-1 and; below normal for week-2.

- For management of caterpillar in chickpea, farmers are advised to use (caterpillar parasite) Braconid 6-8 cards per acre.
- In timely sown gram crop, topping/nipping is advised to do after 35-40 days or crop reaching at 15-20 cm height.
- Under prevailing weather condition, in late sown mustard crop thinning is advised after 15-20 days and farmers are also advised to provide first irrigation in mustard at 20-25 days after sowing.

Odisha

No rainfall received over Odisha during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over Odisha is above normal for week-1 and; below normal for week-2.

- During cool winter days to protect the paddy nursery, apply a thin layer of well decomposed FYM in wet bed to keep the bed relatively warm.
- Farmers are advised to cover the recently planted cole crops with paper pockets during night time to avoid low temperature.
- Farmers are advised to apply light irrigation preferably bore well water to the paddy nursery area in the evening to maintain the soil temperature favourable for seedling growth.

- Farmers are advised to provide light irrigation to standing vegetables and field crops during morning hours to prevent damage from fog, low temperature and moisture stress.
- Due to low night temperature and fog condition, there is a chance of infestation of sucking pests, leaf blight, powdery mildew in the *rabi* crops and vegetables. It is advised to monitor the crops and vegetables, if symptoms are noticed and undertake appropriate plant protection measures.
- Under prevailing weather condition, there is a chance of powdery mildew disease in black gram and green gram (sowing to vegetative stage). To control this disease, it is advised to spray Sulphur 80% WP @ 800 g/acre or Hexaconazole 5% EC @ 300 ml/acre.

Gujarat

No rainfall received over Gujarat during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) over Gujarat is above normal for week-1 and; no rainfall for week-2.

- Carry out nipping in chickpea crop after 30-40 days of sowing. Spraying of 2% urea is advised in chickpea during flowering and pod formation stage to increase production in non-irrigated areas.
- For management of leaf curl virus of chilli, it is advised to remove infected plant parts and control whitefly vectors by spraying Acetamiprid 20 % SP @ 3 g/10 liter of water.

Maharashtra

0.2 mm (-49% deficit) rainfall over Madhya Maharashtra; 0.3 mm (-87% large deficit) rainfall over Vidarbha; 0.1 mm (-89% large deficit) rainfall over Marathwada; and 0.2 mm (25% excess) in Konkan region was recorded during 01 - 07 January 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) is above normal over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week-1 and; below normal over Konkan, and Vidarbha, normal over Madhya Maharashtra, above normal over Marathwada for week-2, respectively.

Parbhani

- As per forecast of isolated light rainfall during this week, harvesting of pigeon pea is advised as early as possible and store the harvested produce at safe places. Harvested pigeon pea crop should be stored at safe places.
- Due to deviation in maximum and minimum temperature along with partially cloudy weather, infestation of pod borer may observe in timely sown chickpea crop. For management of pod borer, it is advised to use T shaped bird perches @ 20 per acre and two pheromone traps per acre.
- Intercultural operations are advised for weed management in vegetable crops. Harvesting of mature vegetable crops is also recommended.

Vidarbha

- Farmers are advised for clean picking of cotton with variety wise and store in dry safe storage. Harvest of first and second picking of Desi improved variety and keep it separately to use its cotton seed for next year sowing.
- In timely sown irrigated wheat crop, top dressing of nitrogenous fertilizer @ 50 kg N/ha 20-25 days after sowing (CRI stage) at the time of irrigation is advised. And, in case of limited water availability, it is advised to apply three irrigations at 21, 42- and 65-days crop stage.
- Intermittent cloudy weather favour infestation of pod borer in early sown chickpea crop. IPM practices is advised to follow for the control of *Helicoverpa* by using 5 Pheromone traps per hectare.
- With decrease in night temperature, suitable protection measures may be taken to protect newly born calf, milch animals and poultry birds from cold.

Konkan

- To protect the mango inflorescence from hopper pests and powdery mildew diseases, it is advised to spray of Lambda cyhalothrin 5% EC @ 6 ml + Hexaconazole @ 5 ml or wetttable Sulphur 80% @ 20 g per 10 litres in water.
- To minimize the pre-mature fruit-drop of mango, application of 150 to 200 litres of water per tree after fruit setting (pea to Arecanut size) at 15 days intervals for 3 to 4 times is recommended.

Solapur

- At the pod filling stage in chickpea crop, if the crop suffers from water stress spraying of 2% Urea and after 10 to 15 days of Urea spray a second spray of 2 % KNO₃ (10 kg per 500 litres of water per hectare) is recommended.
- To control aphids on tender twigs of acid lime/Kagzi lime spraying of Dimethoate 30 EC @ 20 ml per litre of water is recommended.

Kerala

44 mm (1989% large excess) received over Kerala during 01 - 07 January 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) is above normal for week-1 and; below normal for week-2.

- In order to reduce the micronutrient deficiency in paddy, spray 10 g of Sampoorna mixture of paddy in one litres of water. Sampoorna mixture of paddy is available at the Kerala Agricultural University.
- Since dry weather condition is prevailing, there is a chance of white fly attack in tomato. To manage, it is advised to apply 2% neem oil+ garlic emulsion under the leaf surface at 10 days intervals. If the attack is severe, apply 4 g Thiamethoxam per ten litres of water.

Tamil Nadu

11.2 mm (161% large excess) received over Tamil Nadu during 01 - 07 January 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 January 2024 and 12 - 18 January 2024) is above normal for week-1 and; normal for week-2.

- Due to forecast of above normal rainfall during next week, farmers are advised to postpone the irrigation in irrigated crops.
- Continuous rainfall and wind may damage the crop stand. Hence, farmers are requested to practice earthing-up and propping to avoid lodging in banana crop.
- The low (20 °C) minimum temperature may affect the leaf aroma of curry leaf. Hence, irrigate during the evening hours or through sprinkler irrigation to modify microclimate.

Anantapur

0.1 mm (-82% large deficit) rainfall was received over Rayalaseema and no rainfall was received over Coastal Andhra Pradesh during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) is above normal over Rayalaseema and Coastal Andhra Pradesh for week-1 and; below normal over Rayalaseema and Coastal Andhra Pradesh for week-2.

- Present weather conditions are congenial for the incidence of jassid and leaf eating caterpillars in groundnut at vegetative stage. To control the jassids, spraying of Dimethoate @ 2 ml or Acetamiprid @ 0.3 ml/litre of water is recommended.
- Farmers are advised to monitor the fall army worm incidence in maize crop at vegetative stage. If there is any incidence of fall army worm, then farmers are advised to spray Chlorantraniliprole @ 0.4 ml or Emamectin benzoate @ 0.4 g per litre of water.
- Farmers are advised 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.

Karnataka

7.2 mm (1338% large excess) rainfall received over South Interior Karnataka, 18.3 mm (4487% large excess) over Coastal Karnataka and 0.9 mm (83% large excess) rainfall received over North Interior Karnataka during 01 - 07 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 January 2024 and 12 -18 January 2024) is above normal over North Interior Karnataka, Coastal Karnataka and South Interior Karnataka for week-1 and; above normal over North Interior Karnataka and below normal over Coastal Karnataka and South Interior Karnataka for week-2.

South Interior Karnataka

- The grains of the harvested crops should be properly dried by retaining moisture percentage of cereals 11-12 %, pulses-9%, oilseeds-8% and vegetable seeds 5-6% for long storage & also minimize the store pest damage.

- Farmers are advised to spray Lambda Cyhalothrin 5 EC @ 0.5 ml/litre of water or sulphur dust (SULTAF) 80 W @ 3 g/litre of water against the powdery mildew diseases in mango orchard. If the incidence of leaf hopper is severe spray Azadirachtin (10,000 ppm) @ 7.0 ml/ litre of water.

North Interior Karnataka

- Early sown groundnut crop is at harvesting stage. Farmers are advised for harvesting operations during early morning and evening hours.
- For October-November plantation of sugar cane it is advised to use short duration variety like COC-671 (10-11 Months) or medium duration Variety CO-86032 (Nayana, 12-14 Months) or SNK632 (11-13 Months).
- Harvest the matured crops like pigeon pea, groundnut, onion, cotton and sugarcane crops.

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