



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन National Agromet Advisory Services Bulletin

जारी करने की तिथि / Date of issue: 17 January 2024

आधारित / based on

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

वैधता / Validity: 12 - 25 January 2024

जारीकर्ता / Issued by

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

AICRP on Agro-Meteorology (AICRPAM)

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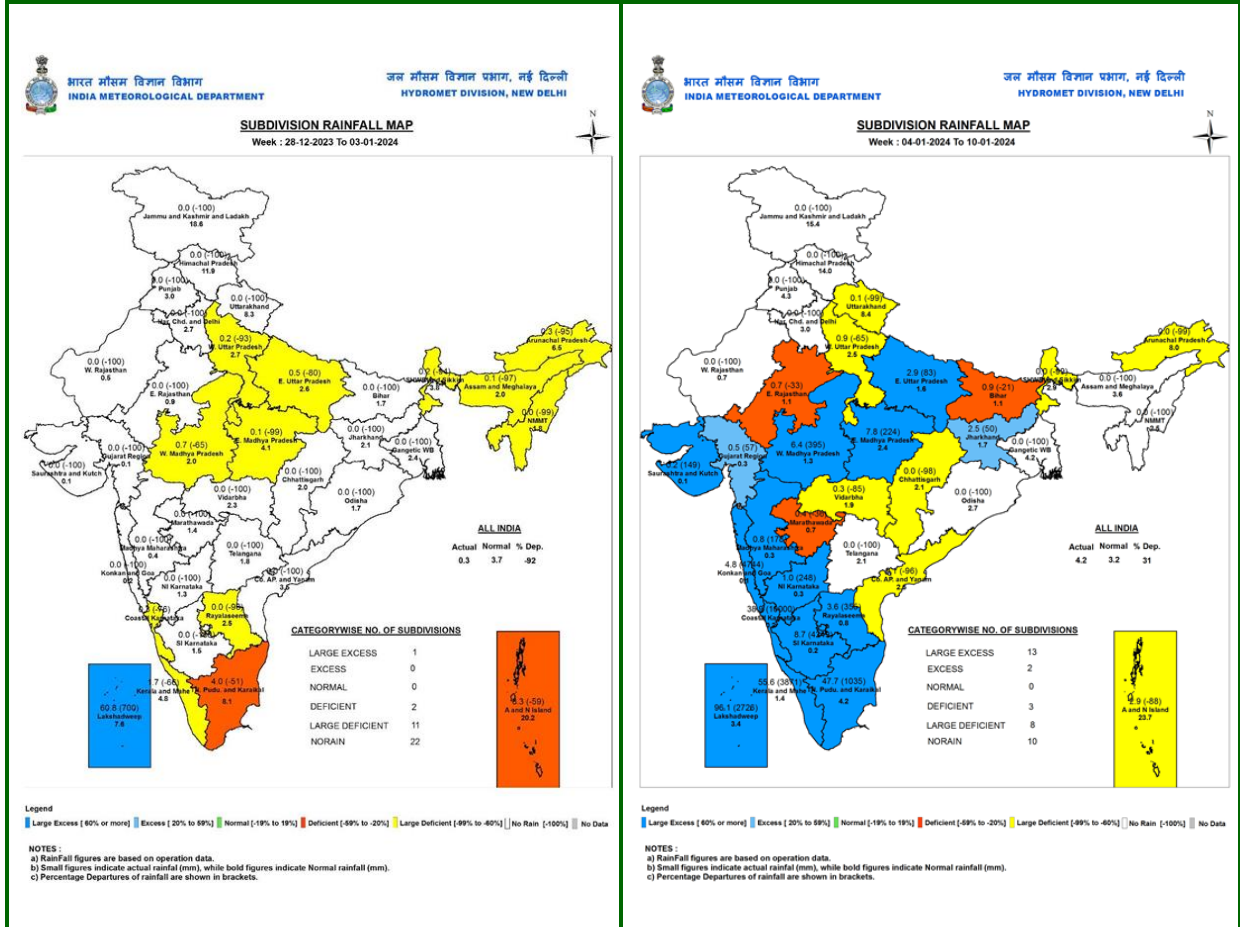
पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Realized Rainfall and Extended Range Forecast

Realized Rainfall

(28th December, 2023 to 10th January, 2024)

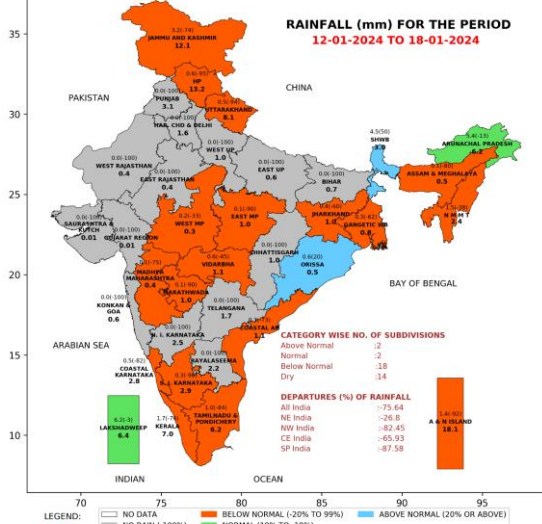


- Normal or above normal rainfall occurred in both the weeks over Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks over East Uttar Pradesh, Jharkhand, Gujarat State, Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Karnataka, Rayalaseema, Tamil Nadu Puducherry & Karaikal and Kerala & Mahe.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the country.

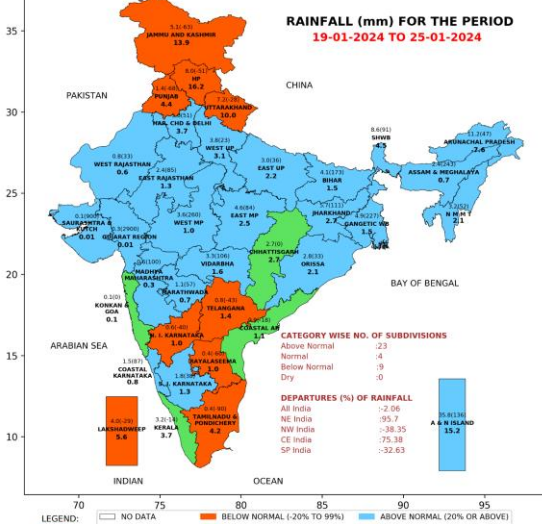
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 10th January, 2024) (12th to 25th January, 2024)

INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



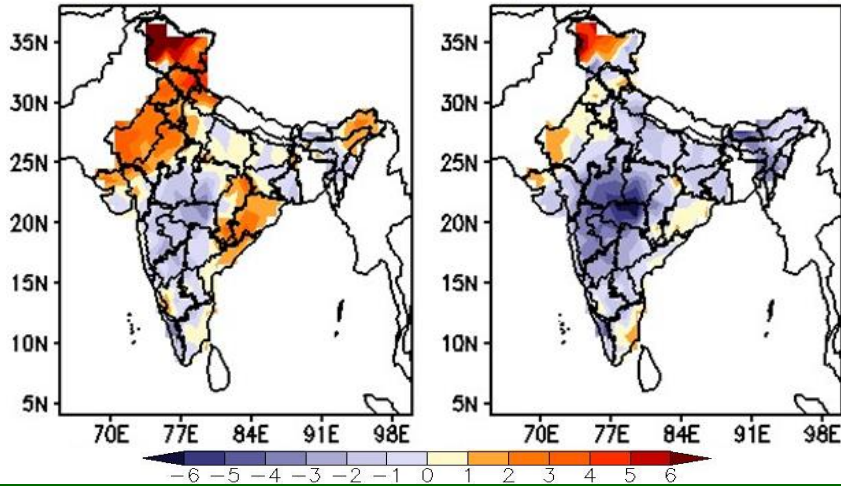
- **Week 1 (12.01.2024 to 18.01.2024):** Rainfall is likely over Sub Himalayan West Bengal & Sikkim.
- **Week 2 (19.01.2024 to 25.01.2024):** Rainfall is likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Madhya Pradesh, Jharkhand, Sub Himalayan West Bengal & Sikkim and Arunachal Pradesh.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 10th January, 2024)
(12th to 25th January, 2024)**

MME forecast Tmax anomaly (Deg C)

(Week1: 12Jan–18Jan)

(Week2: 19Jan–25Jan)



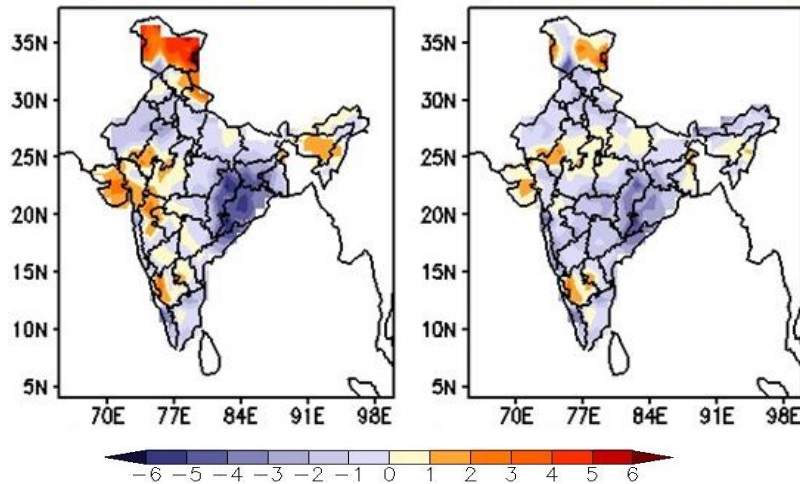
Maximum Temperature (Tmax)

- **Week 1 (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
- **Week 2 (19.01.2024 to 25.01.2024):** Maximum temperature is likely to be below normal over most parts of the country except Jammu & Kashmir, Rajasthan, Saurashtra & Kutch and Tamil Nadu.

MME forecast Tmin anomaly (Deg C)

(Week1: 12Jan–18Jan)

(Week2: 19Jan–25Jan)



Minimum Temperature (Tmin)

- **Week 1 (12.01.2024 to 18.01.2024):** Minimum temperature is likely to be below normal over many parts of the country except extreme North India & Gujarat and some parts of Rajasthan, Maharashtra, Karnataka and North East India.
- **Week 2 (19.01.2024 to 25.01.2024):** Minimum temperature is likely to be below normal over most parts of the country except over Jammu Kashmir and some parts of Gujarat, Rajasthan and Karnataka.

Strategic Agricultural Planning based on rainfall till 25 January 2024

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 3.4 mm (-29% deficit) and over West Uttar Pradesh was 1.1 mm (-79% large deficit) during 01 - 15 January 2024. The extended range weather forecast (rainfall) for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) is no rainfall over West Uttar Pradesh and East Uttar Pradesh for week-1 and above normal rainfall over West Uttar Pradesh and East Uttar Pradesh for week-2.

Eastern Uttar Pradesh

- Due to forecast of no rainfall during this week, farmers are advised to give first irrigation in 21 days old wheat crop which is at the Crown Root Initiation stage, and second irrigation in 35-40 days old crop which is at the active tillering stage which is a critical stage. After 2-3 days of irrigation, it is recommended to broadcast nitrogen.
- Under prevailing weather conditions, there is a possibility of incidence of shoot and fruit borer on brinjal crop. For management, it is advised to install a *Lucilure* pheromone trap @ 8 nos. per acre at the flowering stage of crop.
- Due to cloudy weather conditions, there is a possibility of insect infestation in chickpea crop at the flowering stage. To control caterpillars, it is advised to use 'T' shaped bird posture @ 20-25 per ha and a *Helilure* pheromone trap @ 8 trap/ha. Or, spray Emamectin benzoate 5 SG @ 5 grams/10 litre of water.

Himachal Pradesh

No rainfall was received over Himachal Pradesh during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) over Himachal Pradesh is below normal for week 1 and; week-2.

- Due to the cold wave in some parts of the state, particularly the Una district, there is damage to the wheat and other crops growing in the field. To protect these crops farmers are advised for frequent and light irrigations.
- Farmers are advised to cover the small horticulture plants with grass to avoid cold paralysis.
- Under prevailing weather conditions, 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 the adverse effect of frost on vegetable crops and fruit trees due to a 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 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 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) over Jammu is below normal for week-1 and; week-2.

- For early production of summer season vegetables (bitter gourd, 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

0.7 mm (-65% large deficit) rainfall was received over East Rajasthan during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) over East Rajasthan is no rainfall for week-1 and; above normal for week-2.

- Under prevailing weather conditions, farmers are advised to provide third irrigation in wheat at late jointing stage.
- Under present weather conditions constant monitoring of aphids is advised in mustard crop. If the insect population above ETL then spraying of Oxydemeton-methyl 25 EC @ or Dimethoate 30 % EC@ 1 ml/ litre water is recommended.
- For the control of the pod borer in the gram crop, installation of 5-6 Pheromone traps per acre with a distance of 50 meters @ 4-5 per acre. "T" shaped bird perches in and around crop fields is advised
- Make proper arrangements to protect animals from the cold wave. Appropriate vaccination with the advice of a veterinarian to protect animals from sputum disease.

West Bengal

No rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 0.1 mm (-98% large deficit) during 01 - 15 January 2024. The extended range weather forecast (rainfall) for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) is below normal over Gangetic West Bengal and above normal over Sub-Himalayan West Bengal during week-1 and; above normal over Sub-Himalayan West Bengal and Gangetic West Bengal for week-2.

- As there is a forecast of rainfall in the Sub-Himalayan West Bengal region during this week, farmers are advised to prepare drainage channels in the field and not apply irrigation to the crop during this week also farmers are recommended not to spray or apply pesticides or fertilizer before rainfall.

Bihar

0.9 mm (-73% large deficit) rainfall was received over Bihar during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) over Bihar is no rainfall for week-1 and; above normal for week-2.

- Farmers are advised to give 2nd irrigation in timely sown wheat crop, which is in 45-50 days stage and apply first irrigation at 21 -25 days after sowing (CRI stage) in late sown wheat crop. Application of 30 kg nitrogen per hectare is also advised after irrigation.
- Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised.
- Weeding is advised in late sown potato crop. Give irrigation at an interval of 10-15 days. Regular monitoring is also advised for infestation of insect-pest and diseases specially blight

Chhattisgarh

No rainfall was received over Chhattisgarh during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) over Chhattisgarh is no rainfall for week-1 and; normal for week-2.

- For management and monitoring of pod borer in pigeon pea at fruiting stage, farmers are advised to install pheromone traps and T-shaped pegs (for birds to sit) and change the pheromone septa every 15 days.
- In late sown linseed, crop thinning is advised at after 15-20 days.

Madhya Pradesh

7.8 mm (3% excess) rainfall was received over Madhya Pradesh during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) over Madhya Pradesh is below normal rainfall for week-1 and; above normal for week-2.

- A light irrigation is advised in tomato, brinjal and chilli vegetables to prevent from cold wave conditions.
- Earthing up and fertilizer application is advised, followed by light irrigation in the potato crop field.
- In potato, due to high dew formation, spread of early and late blight disease may occur. To control, it is advised to spray of Dithane (Mancozeb) at 2.5 g /litre water for control.

Odisha

No rainfall received over Odisha during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) over Odisha is above normal for week 1 and; week-2.

- Maintain saturated condition in the surface soil of the nursery bed by applying irrigation in furrow, for proper establishment and early growth of rice seedlings.
- Farmers are advised to cover the recently planted cole crops with paper pockets during night time to avoid low temperatures.
- Farmers are advised to mulch vegetable seedlings with straw or other mulching material to avoid cold injury.

- 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 conditions, there is a chance of powdery mildew disease in black gram and green gram (sowing to vegetative stage). If it cross above ETL, it is advised to spray Penconazole 10% EC@50ml/100Ltr. water and 500 litre per hectare is recommended
Or Azoxystrobin 18.2% + Difenoconazole 11.4% w/w SC @ 500 ml/ha or 1 ml/lit water is recommended.

Maharashtra

1.2 mm (53% excess) rainfall over Madhya Maharashtra; 0.4 mm (-92% large deficit) rainfall over Vidarbha; 0.5 mm (-76% large deficit) rainfall over Marathwada; and 4.9 mm (1535% large excess) in Konkan region was recorded during 01 - 15 January 2024. The extended range weather forecast (rainfall) for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) is no rainfall over Konkan, below normal rainfall Madhya Maharashtra, Marathwada and Vidarbha for week-1 and; normal over Konkan and above normal over Vidarbha, Madhya Maharashtra, Marathwada for week-2, respectively.

Parbhani

- Due to cloudy weather condition during last week, if infestation of pod borer is observed in timely sown chickpea crop for management of pod borer make use of 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 crop.
- Irrigation management is advised in various chickpea, safflower, citrus and turmeric crop.

Vidarbha

- Farmers are advised for clean pick of cotton with variety 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 a 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 the decrease in night temperature, suitable protection measures may be taken to protect newly born calf, milch animals and poultry birds from the cold.

Konkan

- Due to rainfall and increased humidity and low temperature, there is a possibility for anthracnose and powdery mildew disease on mango inflorescence. If it is above ETL, then spray Azoxystrobin 23SC@ 1ml/litre or Carbendazim12+ Mancozeb 63WP@ 1.5ml/litre water @or Hexaconazole 5% EC @1ml/1 litre water is recommended.
- For the control of tea mosquito bug and thrips on new flush and inflorescence and nut of cashewnut it is advised to spray Prophenophos 50% EC @ 10 ml at inflorescence stage and Lambda-cyhalothrin 5% EC @6 ml or Acetamiprid 20% SP @ 5 g per 10 litres at nut stage if incidence is noticed.

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.
- Irrigation is advised at flowering stage of drum stick to reduce the flower drop in drum stick.

Kerala

57 mm (1368% large excess) received over Kerala during 01 - 15 January 2024. The extended range weather forecast (rainfall) for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) is below normal for week-1 and; normal for week-2.

- During high humidity, there is a chance of Pollu disease in pepper plants. To control, shade in the garden and spray with 1% Bordeaux mixture. Also, Carbendazim and Mancozeb can be mixed and sprayed at the rate of one gram per litre of water.
- Boron deficiency is seen more during dry weather in banana orchard. To manage, it is advised to spray one-gram borax per one litre of water.

Tamil Nadu

49 mm (480% large excess) received over Tamil Nadu during 01 - 15 January 2024. The extended range weather forecast (rainfall) for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) is below normal for week-1 and; week-2.

- Due to forecast of above normal rainfall during next week, farmers are advised to postpone the irrigation in irrigated crops.
- Foliar spray of TNAU Pulse Wonder @ 2 kg/acre in 200 litres of water is advised at the flower initiation stage of red gram crop to decrease flower shedding and increase yield.

- 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

3.6 mm (46% excess) rainfall was received over Rayalaseema and 0.1 mm (-99% large deficit) rainfall was received over Coastal Andhra Pradesh during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) is no rainfall over Rayalaseema and above normal over Coastal Andhra Pradesh for week-1 and; below normal over Rayalaseema and normal over Coastal Andhra Pradesh for week-2.

- In view of no rainfall during this week in the Rayalaseema region, farmers are advised to give need based light irrigations in groundnut crop which is at the vegetative to flowering stage.
- 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.

Karnataka

8.7 mm (691% large excess) rainfall received over South Interior Karnataka, 39.1 mm (2695% large excess) over Coastal Karnataka and 1.1 mm (-19% deficit) rainfall received over North Interior Karnataka during 01 - 15 January 2024. The extended range weather forecast (rainfall) provided for the next two weeks (12 -18 January 2024 and 19 - 25 January 2024) is no rainfall over North Interior Karnataka, below normal rainfall over Coastal Karnataka and South Interior Karnataka for week-1 and; below normal over North Interior Karnataka and above normal over Coastal Karnataka and South Interior Karnataka for week-2.

South Interior Karnataka

- This is the right time for harvesting of matured pods or whole plants of redgram and place them in a dry place.
- There is a possibility occurrence of powdery mildew and anthracnose disease in mango, if it is above ETL, then spray of Azoxystrobin 23SC@ 1ml/litre or Carbendazim12+ Mancozeb 63WP@ 1.5ml/litre water @or Hexaconazole 5% EC @1ml/1litre water is recommended.
- If the incidence of leaf hopper is severe spray Azadirachtin (10,000 ppm) @ 7.0 ml/litre of water.

North Interior Karnataka

- As no rainfall was forecasted in this week, farmers are advised to provide protective irrigation to the already sown crops if necessary.

- For the 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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