



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन National Agromet Advisory Services Bulletin

जारी करने की तिथि/ Date of issue: 14 May 2023

आधारित/based on

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

वैधता/Validity: 12 - 25 May 2023

जारीकर्ता/Issued by

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

AICRP on Agro-Meteorology (AICRPAM)

केंद्रीय बारानी कृषि अनुसंधान संस्थान

Central Research Institute for Dryland Agriculture (CRIDA)

भारतीय कृषि अनुसंधान परिषद

Indian Council of Agricultural Research (ICAR)

और

भारतीय मौसम विज्ञान विभाग

India Meteorological Department (IMD)

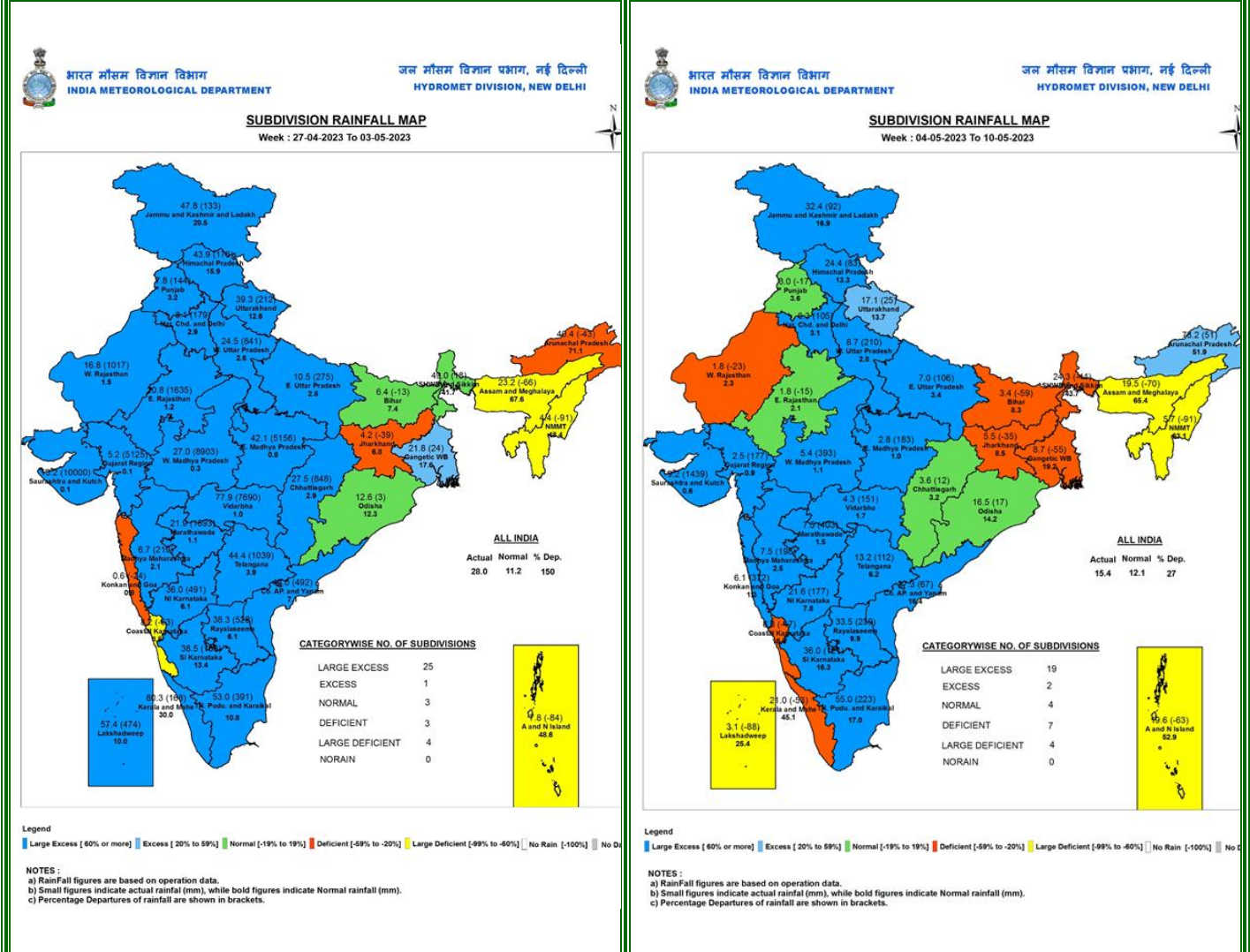
पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

Realized Rainfall

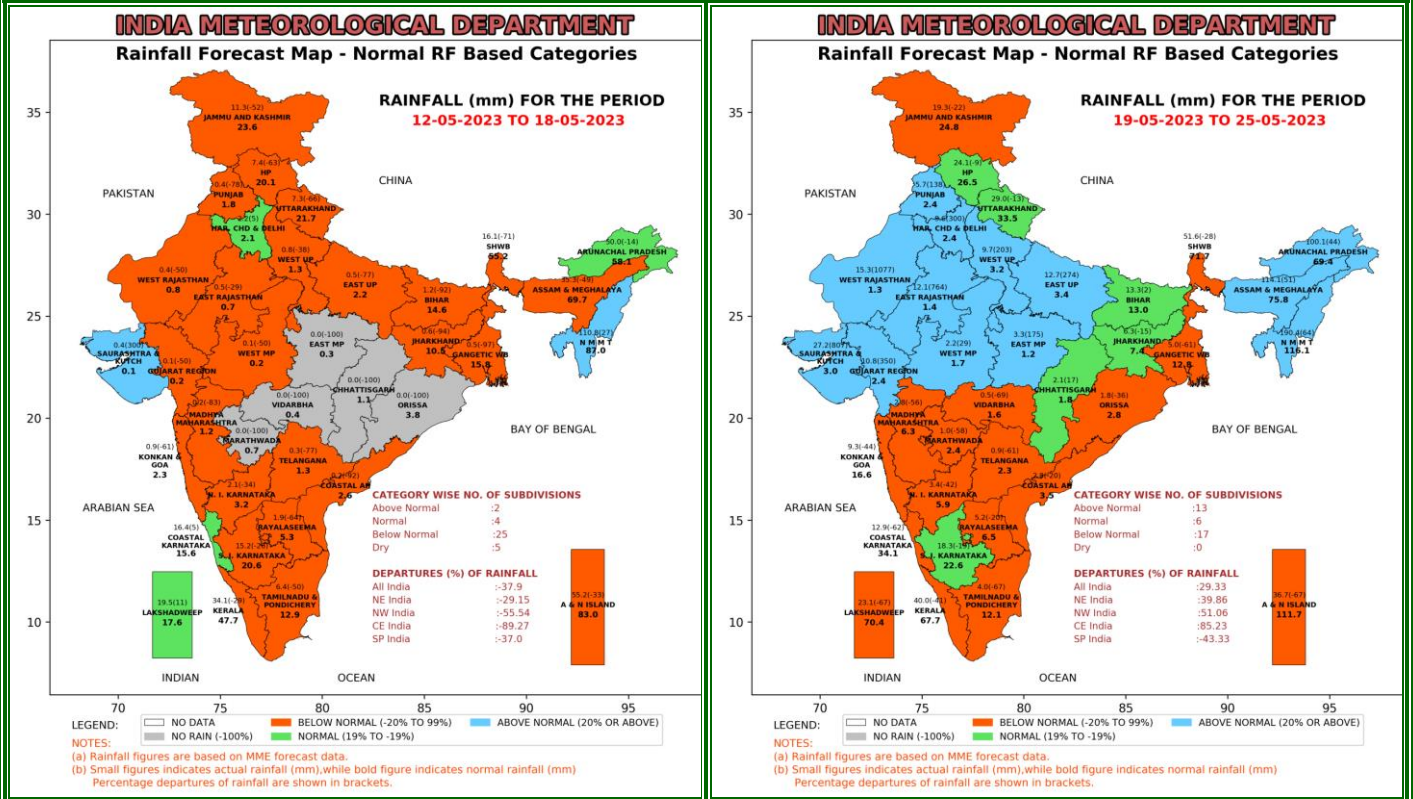
(27th April to 10th May 2023)



- Normal or above normal rainfall occurred in both the weeks in Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Odisha, Gujarat, Madhya Maharashtra, Marathwada, Vidarbha, Telangana, Andhra Pradesh & Yanam, Interior Karnataka and Tamil Nadu Puducherry & Karaikal.
- Normal or above normal rainfall occurred in either of the two weeks over West Rajasthan, Bihar, West Bengal & Sikkim, Arunachal Pradesh, Konkan & Goa, Kerala & Mahe and Lakshadweep.
- Below Normal rainfall/no rain occurred in both the weeks over Assam & Meghalaya, Nagaland Manipur Mizoram & Tripura (NMMT), Jharkhand, Coastal Karnataka and Andaman & Nicobar Islands.

Extended Range Forecast System

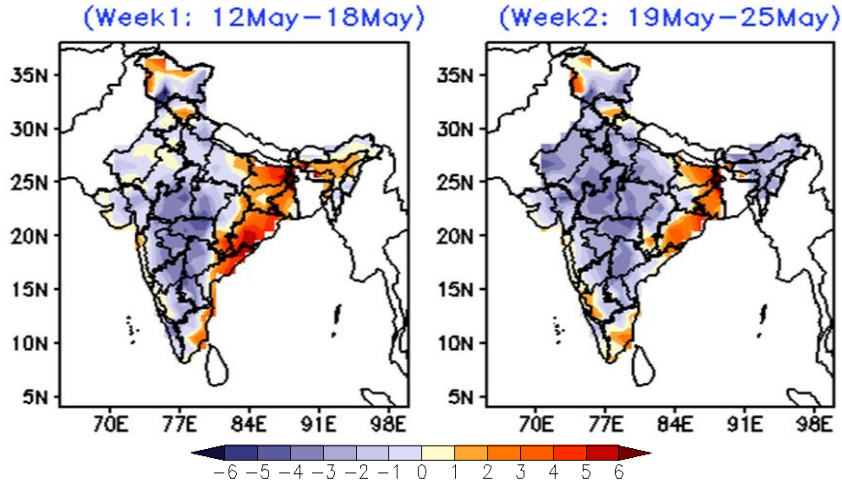
Rainfall forecast maps for the next 2 weeks (IC- 10th May) (12th to 25th May 2023)



- **Week 1 (12.05.2023 to 18.05.2023):** Rainfall activity associated with cyclonic storm is likely over Andaman & Nicobar Islands and northeast India. Rainfall is likely over southern Peninsula.
- **Week 2 (19.05.2023 to 25.05.2023):** Rainfall activity associated with Western Disturbance is likely over northwest India. Rainfall is likely to continue over southern Peninsula and likely to increase over northeast India.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 10th May)
(12th to 25th May 2023)**

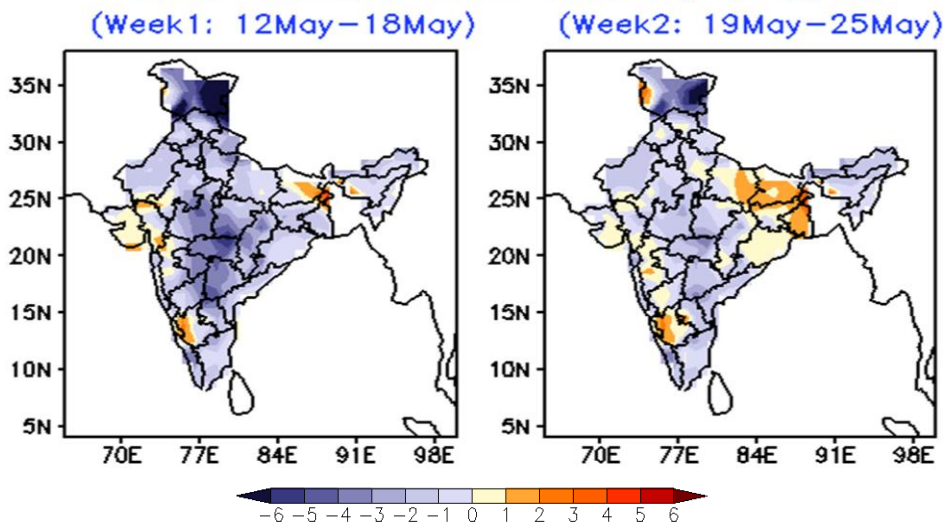
MME forecast Tmax anomaly (Deg C)



Maximum Temperature (Tmax)

- **Week 1 (12.05.2023 to 18.05.2023) and Week 2 (19.05.2023 to 25.05.2023):** Tmax is likely to be below normal over the country except parts of Chhattisgarh, Odisha, Jharkhand, Bihar, Gangetic West Bengal, Coastal Andhra Pradesh and coastal Tamil Nadu.

MME forecast Tmin anomaly (Deg C)



Minimum Temperature (Tmin)

- **Week 1 (12.05.2023 to 18.05.2023):** Tmin is likely to be below normal over most parts of country.
- **Week 2 (19.05.2023 to 25.05.2023):** Tmin is likely to be below normal over many parts of country and slightly above normal over Odisha, Jharkhand, Bihar, West Bengal and western parts of country.

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 49 mm (151% large excess) and over West Uttar Pradesh was 75 mm (253% large excess) during 01 March - 11 May 2023. The extended range weather forecast (rainfall) for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) is below normal over East Uttar Pradesh and West Uttar Pradesh for week-1 and; above normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

Western Uttar Pradesh

- As per the forecast of below normal rainfall and hot weather in next week, farmers are advised for light irrigation in *zaid* maize, which is at silking stage, during evening time. Weeding and top dressing should also be done at proper soil moisture.
- Due to hot weather and forecast of below normal rainfall during next week, farmers are advised to harvest wheat crop, dry in the sun and thresh as early as possible and store the produce in a safer place.
- For the management of food borer in brinjal crop at flowering/fruitings stage, farmers are advised to spray Azadirachtin 1.0% EC (1000ppm).
- Broadcast of Phorate 10% CG 10 kg/ha insecticide for protection of stem borer in *zaid* maize at silking stage.

Eastern Uttar Pradesh

- For the management of food borer in brinjal crop at flowering/fruitings stage, farmers are advised to spray Azadirachtin 1.0% EC (1000ppm).
- To protect the vegetables (tomato/chilli/ladyfinger) from cut worms, it is advised to spray Profenofos @ 0.5ml/litre of water, sprayed 10 cm away from the root zone at 15 days intervals.
- Before the onset of monsoon, it is advised to immunize the farm cattle, goat, buffalo, etc. against FMD (Foot & Mouth Disease), HS (Hemorrhagic Septicemia) and BQ (Black Quarter) disease after consultation with local veterinary doctor.
- For protection against infectious Brusal disease (Gumboro), vaccinate 12-14 days old poultry birds. Vaccinate the 1-month-old ducklings with cholera vaccine in order to immunize them against avian cholera.

Haryana

70 mm (135% large excess) rainfall was received over Haryana during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Haryana is normal for week-1 and; above normal for week-2.

- Farmers are advised to prepare the field and procure the recommended *desi* cotton crop with certified seeds of *HD 123*, *HD 324* and *HD 432*.
- Due to possibility of dry weather and increase in the air temperature, it is advised to keep the animals under sheds during daytime and provide the drinking water as per their requirements.
- It is also advised to maintain the water level in the pond and keep it clean.

Uttarakhand

176 mm (52% excess) rainfall was received over Uttarakhand during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Uttarakhand is below normal for week-1 and; normal for week-2.

- Due to forecast of below normal rainfall and increase in temperature during week-1, it is advised to harvest the mature *rabi* crops, dry it thoroughly in the sunlight, then thresh and store it.
- Farmers are advised to sow the summer crops. Before sowing the seeds, it is advised to treat the seeds with fungicides to protect from soil borne disease and also give a boost to the seedlings.
- Farmers are advised to harvest the mature tomato fruits and install pheromone trap @ 25 per hectare to control the insects.
- Maintain proper ventilation in mushroom crop room. Fix insect proof net in the window to control flies. Avoid over watering to the mushroom bags.

Himachal Pradesh

222 mm (10% excess) rainfall received over Himachal Pradesh during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Himachal Pradesh is below normal for week-1 and normal for week-2.

- Sowing of maize as fodder crop is advised in the irrigated areas. For improving the quality of green fodder, farmers may opt for cowpea or soybean as intercrop in maize.
- It is the optimum time of sowing of pea in upper hills of the region with recommended varieties *Azad P-1*, *Palam Priya*, *Palam Samool*, *GS 10* and *Pb 89*
- Transplanting of vegetables like chillies, tomato and brinjal from nursery to main field is advised in lower and mid hills. Varieties recommended for chilies: *Surjamukhi*, for tomato: *Palam Pink*, *Palam Pride*, *Hybrid 7711*, *Rakshitae* and *Palam Tomato* and for brinjal: *Arka Nidhi*, *Arka Keshav* and *Hissar Shymal*.

- Farmers are advised to pluck the tea leaves (two leaf and a bud) at 8-10 days interval to maintain the quality and productivity.

Chhattisgarh

101 mm (294% large excess) rainfall received over Chhattisgarh during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Chhattisgarh is no rainfall for week-1 and; normal for week-2.

- Inter-cultural operations, fertilizer application, earthing followed by irrigation are advised in sugarcane at tillering stage.
- Due to increase in temperature and forecast of no rainfall during next week, it is advised to irrigate as per need during flowering and pod formation stage in summer sesamum crops.
- Looking into increasing temperature, farmers are advised to keep their animals in shade and provide regular water to them.
- Under prevailing weather condition, digging of mature summer groundnut crop is advised.

Madhya Pradesh

83 mm (294% large excess) rainfall received over East Madhya Pradesh during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over East Madhya Pradesh is no rainfall for week-1 and; above normal for week-2.

- Irrigation is advised in autumn sown sugarcane (knee height stage) at weekly intervals and also tie the canes together to prevent from lodging due to gusty winds.
- As the day temperature is increasing, it is advised to irrigate the fruit trees viz., pomegranate, sapota and lemon at fruit formation stage at 4-5 days intervals to avoid fruit cracking.
- Farmers are advised to apply residue mulch in between the rows in vegetables crop fields to avoid excess loss of soil water through evaporation.
- In brinjal, okra and tomatoes, spray Quinalphos 25 EC at 1.5-2 ml/litre water or Spinosad 45 % SC at 10 ml ai/ha for control of borers.

Odisha

146 mm (85% large excess) rainfall received over Odisha during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Odisha is no rainfall for week-1 and; below normal for week-2.

- Farmers are advised to go for land preparation for sowing of baby corn. May to June is the optimum time for baby corn sowing. Grow suitable hybrid varieties of baby corn like VL-42, Early composite: *MEH-114*, *MEH-133*.

- During last week, as most part of the district received a very good amount of rainfall, it is advised to go for summer ploughing to reduce weed infestation, to destroy eggs and larvae of hibernated soil insects and to increase soil profile recharge.
- After harvesting of blackgram and greengram, it is advised to dry the seeds until the optimum moisture content is attained and store it at clean dry safe place.
- Under prevailing weather condition, there is a chance of sucking pest like aphids, jassids, thrips and whiteflies in okra (flowering to fruiting stage). To control, it is advised to spray Thiamethoxam 25 % WG @ 40g/acre or Acetamiprid 20 % SP @ 50g/acre by mixing it in 200 litres of water.

Jammu

The amount of rainfall received over Jammu was 232 mm (-18% deficit) during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Jammu is below normal for week-1 and; week-2.

- Sowing of Mash (var.) *Pant U-19, Uttara* and Moong (var.) *PDM-54, ML-131, ML 818, PS-16, PS-7* after the receipt of rain in fallow fields.
- Sowing of summer mixed fodder (maize+cowpea+charri) and bajra is recommended during clear weather. In case of already sown crop, top dressing of Nitrogen is recommended.
- It is the right time to start bee keeping, especially for beginners, as pollen and nectar are in plenty and bee activity is at its peak. Migrate bee colonies near floral resources. Prepare colonies for honey flow.

Punjab

The amount of rainfall received over Punjab was 91.5 mm (113% large excess) during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Punjab is below normal for week-1 and; above normal for week-2.

- Harvest the cucurbits and other vegetables like tomato, chilli, brinjal and okra at regular intervals to get maximum yield. Irrigate crops regularly at the interval of 4-5 days to avoid water stress.
- Farmers are advised to prepare field for *kharif* season and to save water and for ease in management of paddy straw, prefer PAU recommended short duration rice varieties are *PR-126, PR-127, PR-130* and *HKR-47*.
- Due to rise in temperature, fruit drop is increasing. Farmers are advised to continuously keep the soil moist in peach and plum orchards. In citrus, pear, litchi and mango apply light and frequent irrigations.

Jharkhand

The amount of rainfall received over Jharkhand was 72 mm (50% excess) during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Jharkhand is below normal for week-1 and; normal for week-2.

- At the grain filling stage in summer rice, farmers are advised to maintain moisture in the field.
- Ploughing in moong bean crop at flowering stage is advised to manage moisture in the soil which can remain for a maximum number of days.
- Farmers who wish to prepare papaya seedlings, may sow the seeds in polythene bags filled with soil and well-rotted cow dung manure. After seeding irrigate them as per requirement.
- To control the attack of gundhi bug insects in summer rice at grain filling stage, farmers are advised to apply Malathion dust 5 % @ 8 kg per acre or Malathion 50 EC @ 2 ml per liter of water during evening hours.

Tamil Nadu

The amount of rainfall received over Tamil Nadu was 175 mm (110% large excess) during 01 March - 11 May 2023. The extended range weather forecast (rainfall) for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) is below normal for week-1 and; week-2.

- As heavy rainfall occurred during last week, it is advised to provide adequate drainage to the rice crop.
- To manage the shoot fly infestation in sorghum crop, it is advised to treat the seeds with Imidacloprid 70 WS @ 10 g/kg of seeds.
- Since the maximum temperature is increasing, it is advised to ensure clean cool drinking water to the animals at all time. Vitamins and electrolytes can be mixed with water. Quality green fodder should be provided to prevent the production loss.

Kerala

179 mm (-12% deficit) received over Kerala during 01 March - 11 May 2023. The extended range weather forecast (rainfall) for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) is below normal for week-1 and; week-2.

- To control downy mildew in snake gourd, it is advised to spray Mancozeb @ 4g /litre of water.
- To control sigatoka leafspot disease in banana, it is advised to cut and remove all severely affected leaves and spray Propiconazole 1ml/ liter of water.

- During the beginning of southwest monsoon season, one-kilogram lime is advised to apply per one matured palm by opening the coconut basin.
- The paddy crop, which attained maturity stage can be harvested as early as possible.

Maharashtra

28 mm (112% large excess) rainfall over Madhya Maharashtra; 44 mm (203% large excess) in Marathwada; 15 mm (158% large excess) in Konkan region and 125 mm (530% large excess) over Vidarbha was recorded during 01 March - 11 May 2023. The extended range weather forecast (rainfall) for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) is below normal over Konkan and Madhya Maharashtra and no rainfall over Marathwada and Vidarbha for week -1 and; below normal over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week -2, respectively.

Vidarbha

- In groundnut crop at pod development stage, it is advised to maintain adequate moisture in the soil profile to reduce the impact of heat stress, and provide irrigation at early morning or late evening.
- For control of sap sucking pests of jassids, thrips and white fly in summer sunflower it is advised to spray of Imidacloprid 17.8 % EC @ 2.0 ml per 10 liters of water
- For the control of tikka disease in groundnut, it is advised to spray Chlorothalonil 75% WP @ 20g or Propiconazole 25% EC @ 10 ml or Tebuconazole 25.9% EC @ 10 ml per 10 litres of water.

Marathwada

- As there is a forecast of no rainfall and increase in temperature during week-1, it is advised to provide shade to newly planted and young plants and also mulching should be done around the stem.
- Harvesting of timely sown and mature summer groundnut crop is advised.
- As per forecast of no rainfall and below normal rainfall during next week-1 and week-2, it is advised for irrigation management especially in vegetable crops during early in the morning or at evening with the help of micro irrigation system.

Madhya Maharashtra

- Farmers are advised for soil moisture conservation operations in field like leveling, bunding etc after *rabi* crop harvesting.
- Do not burn the organic residues or trash left in the field after harvest of *rabi* crops. It can be used for preparation of organic manure.

- For the control of Fall Armyworm in maize (dough stage), it is advised to use Tricho-cards @ 5 numbers per ha. If outbreak is more, then spraying of Emamectin benzoate 4 % SG @5g or Chlorantraniliprole 18.5 % SC @4ml per 10 lit of water is recommended .
- Apply Bordeaux mixture paste upto 1 meter height from soil level to avoid trunk cracking in mango.

Konkan

- Due to forecast for rise in temperature, provide irrigation to first four years old coconut orchard at 3 to 4 days interval and for above four years old orchard provide irrigation at 4 to 5 days interval.
- Due to prevailing high temperature and forecast of no rainfall and below normal rainfall during week-1 and week-2, it is advised to use straw mulch to reduce evaporation losses.

Anantapur

126 mm (190% large excess) rainfall received over Rayalaseema and 161 mm (164% large excess) rainfall received over Coastal Andhra Pradesh during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) is below normal over Rayalaseema and Coastal Andhra Pradesh for week-1 and; week-2.

- In Kurnool, Chittoor, Vizianagaram, West Godavari, Krishna, Guntur, Ananthapuramu and Kadapa districts, present weather conditions are favourable for incidence of mealy bug incidence in mango. To control mealy bug, spraying of Imidacloprid @ 0.3ml or Dimethoate @ 2.0 ml/litre of water is recommended.
- Present weather conditions are congenial for the incidence of fruit borer in brinjal grown in East Godavari, Krishna, Guntur and Nellore districts. To control, spraying of Cypermethrin 1 ml/litre of water is recommended.
- Due to possibility of increase in temperature and below normal rainfall during next week-1 and week-2, it is advised for proper ventilation for free circulation of air in the animal sheds and also provide clean drinking water to animals and water troughs should be regularly cleaned.

Gujarat

20 mm (801% large excess) rainfall received over Gujarat during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) over Gujarat is below normal for week-1 and; above normal for week-2.

- For control of whitefly and thrips in vegetables, spray Neem seed extract 5% or 40 ml Neem oil with Diafenthiuron 15 g or Profenofos 20 ml or Lambda cyhalothrin 5% EC 15 ml /10 liters of water.

- To prevent damage of psylla and thrips in lemon plantation, spray Imidacloprid 30.5 % 5 ml / 10 liters of water.

Karnataka

100 mm (24% excess) rainfall received over South Interior Karnataka, 20 mm (-68 large deficit) over Coastal Karnataka and 85 mm (97% large excess) rainfall received over North Interior Karnataka during 01 March - 11 May 2023. The extended range weather forecast (rainfall) provided for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) is below normal over South Interior Karnataka, North Interior Karnataka and normal over Coastal Karnataka for week-1 and; below normal over Coastal Karnataka and North Interior Karnataka and normal over South Interior Karnataka for week-2.

South Interior Karnataka

- Harvest matured mango fruit.
- Periodically water spray is advised during peak hot hours to lowers the temperature and consequently reduces the heat load on animals.

North Interior Karnataka

- Considering the forecast of rainfall during next two weeks, farmers are advised to harvest matured wheat, groundnut and sunflower under clear weather condition with necessary precautionary measures.
- Under prevailing weather condition, it is advised to apply 4-6 inch thick hay thatch as a roofing material. Water can be used for spraying the floor and roof of shelter periodically during peak hot hours which lowers the temperature and consequently reduces the heat load on animals.

West Bengal

112 mm (5% excess) rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 261 mm (3% excess) during 01 March - 11 May 2023. The extended range weather forecast (rainfall) for the next two weeks (12 - 18 May 2023 and 19 - 25 May 2023) is below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week-1 and; week-2.

- Labeling and power tiller operation is advised in the fields after boro rice harvesting for Jute sowing.
- To prevent fruit fly attacks in mango orchard, it is advised to install methyl eugenol traps.
- To save the cattles from ectoparasite infestation it is advised to keep the cattle shed clean. Neem oil application can be done inside the shed.

Disclaimer:/अस्वीकरण:

मौसम की भविष्यवाणी कई कारकों पर निर्भर करती है जो प्रकृति में गतिशील हैं। यहां दी गई कृषि मौसम संबंधी सलाहों की सफलता मौसम पूर्वानुमान की सटीकता पर निर्भर करती है। किसी भी स्थिति में, भारतीय मौसम विज्ञान विभाग (IMD) और भारतीय कृषि अनुसंधान परिषद (ICAR) उपयोगकर्ता या किसी तीसरे पक्ष के लिए किसी भी प्रत्यक्ष, अप्रत्यक्ष, आकस्मिक, परिणामी, विशेष या अनुकरणीय नुकसान या खोए हुए लाभ के लिए इस बुलेटिन में प्रस्तुत जानकारी का उपयोग या दुरुपयोग करने के लिये उत्तरदायी नहीं होंगे।

The predictability of weather depends on many factors which are dynamic in nature. The success of Agromet advisories provided here depends on the accuracy of the weather forecast. In no event, India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) will be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information presented in this bulletin.