



National Agromet Advisory Service Bulletin
Based on
Extended Range Weather Forecast (ERFS)

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&
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**Realized Rainfall and Extended Range Forecast
(Rainfall and Temperatures)**

**Realized Rainfall
(31st May to 13th June 2018)**



- Normal or above normal rainfall occurred during last two weeks in Himachal Pradesh, Uttarakhand, Punjab, Haryana Chd & Delhi, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Nagaland, Manipur, Mizoram & Tripura, East Madhya Pradesh, Chhattisgarh, Maharashtra & Goa, Andhra Pradesh, Telangana, South Interior Karnataka, North Interior Karnataka, Tamil Nadu and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the last two weeks in West Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Coastal Karnataka and Kerala.
- Below normal rainfall occurred in both the weeks in Jammu & Kashmir, East Uttar Pradesh, West Rajasthan, Gujarat, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, and Lakshadweep.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 13 June)

(15th June to 28th June 2018)



Extended Range Rainfall Forecast

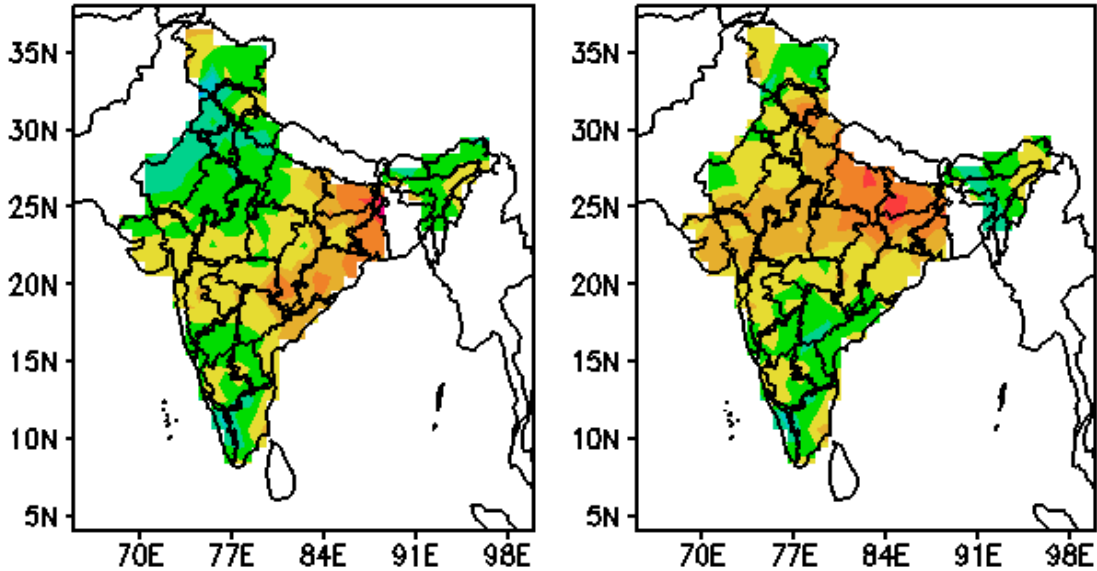
- Week 1 (15.06.2018 to 21.06.2018) and Week 2 (22.06.2018 to 28.06.2018):** Except Northeast India and parts of southern peninsula, below normal rainfall is expected over rest of India during these two weeks period. Northwest India and northern part of central India will remain subdued rainfall during the week 2. However, in south peninsula and adjoining parts of central India revival of monsoon is likely.

Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast for next 2 weeks (IC – 13 June)
(15th June to 28th June 2018)

MME Bias Corrected Tmax Anomaly (Deg)

(Week1: 15Jun–21Jun)

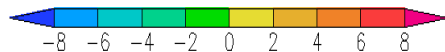
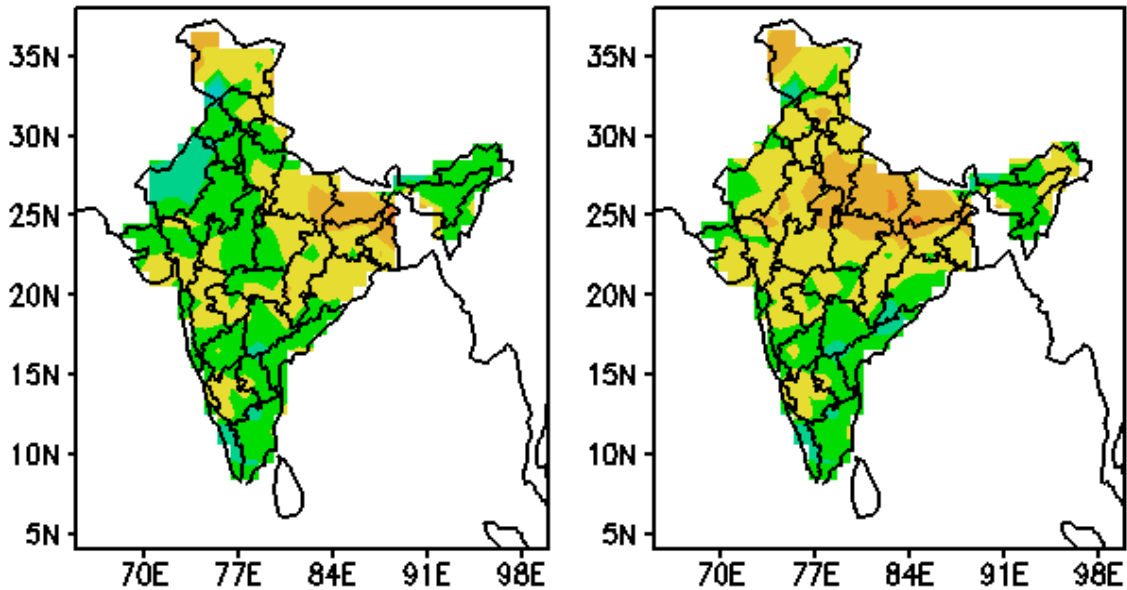
(Week2: 22Jun–28Jun)



MME Bias Corrected Tmin Anomaly (Deg)

(Week1: 15Jun–21Jun)

(Week2: 22Jun–28Jun)



Tmax (Maximum Temperature)

- **Week 1 (15.06.2018 to 21.06.2018)** : Tmax positive anomaly to continue over central and eastern parts of the country.
- **Week 2 (22.06.2018 to 28.06.2018)**: Tmax is likely to be above normal over central and northern parts of India.

Tmin (Minimum Temperature)

- **Week 1 (15.06.2018 to 21.06.2018) and week 2 (22.06.2018 to 28.06.2018)**: Slightly above Normal Tmin over eastern parts of India during week 1 and most of central and northern India in week 2.

Strategic Agricultural Planning based on rainfall during next two weeks till 28th June 2018

Agromet Advisories

Tamil Nadu

Rainfall Situation

Rainfall received during the period of 01 June to 13 June 2018 over Tamil Nadu is 31.5 mm, which is 40% excess as compared to the normal. The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) are Below Normal for week-1 and week-2.

- Prevailing weather condition is favorable for sucking pest incidence in chilli. The affected plants show symptoms of crinkling and upward curling of leaves and elongation of petiole. For controlling this pest spray imidacloprid 17.8 % SL @ 3 ml/ 10 litre of water or Dimethoate 30 % EC @1.0 ml/litre.
- Prevailing weather condition is favorable for pod borer incidence in pulses. To control spray Indoxacarb 15.8 % SC 333 ml/ha.
- Prevailing weather condition is favorable for incidence of leaf folder. For control to spray any one of the following insecticides, Phosalone 35 EC 1500 ml / ha or Phosphamidon 40 SL 1250ml/ ha.

Kerala

Rainfall Situation

Rainfall received during the period of 01 to 13 June 2018 over Kerala is 352.8 mm, which is 40% excess than normal. The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) Normal for both week-1 and week-2.

- Paddy : (Land preparation to transplanting)- Transplant seedlings at 4-5 leaf stage. Soak seed for 30 minutes in a solution of Pseudomonas culture @10g/litre per kg of seeds. The above seed treatment can also be used to control sheath blight, sheath rot, leaf spot disease etc.
- Coconut : (Bud rot)- Three numbers of perforated Mancozeb sachet (5 gm) can be hung around spindle leaves as a prophylactic measure for bud rot.
- Banana : (Sigatoka disease)- Due to the pre monsoon showers, there is chance of Sigatoka disease in banana. As a precaution, Spray Pseudomonas 20g/litre. In case of severe attack spray 1 gm Bavistin by mixing it with gum in 1 litre of water on lower surface of leaf.
- Pepper : (Quick wilt) - There is a chance of Quick wilt disease due to high relative humidity. Apply trichoderma or pseudomonas culture in soil or 1% Bordeaux mixture can be sprayed on the leaves and small branches.
- Ginger/Turmeric : (Planting) - Suitable time for Ginger and turmeric planting. Prepare land for ginger

and turmeric, to avoid foot rot in ginger, sock the plant suckers in 0.3% mancozeb.

Karnataka

Rainfall Situation

Rainfall has received during the period of 01 June to 13 June 2018 over different meteorological sub-divisions of Karnataka viz, North Interior Karnataka is 80.7 mm (99 % excess), South Interior Karnataka is 123.8 mm (139 % excess) and Coastal Karnataka is 424 mm (55 % excess). The extended range weather forecast provided from 15 to 21 June and 22 to 28 June over North Interior Karnataka is normal for week-1 and above normal for week-2, over South Interior Karnataka is below normal for week-1 and normal for week-2 and over Coastal Karnataka is above normal for both week-1 and week-2.

North Interior Karnataka

- The farmers are advised to take up plant protection measures in horticultural crops like Pomegranate for bacterial blight, Lime for leaf minor, tomato for fruit borer and watermelon for sucking pests.
- Sowing of *Kharif* crops like Green gram, Black gram, Soybean, Maize, Bt. Cotton, Red gram, Bajra, Sesamum and Groundnut (bunch type) has been advised to take up on preference.
- Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic septicaemia*.
- Care should be taken that excess moisture is not there in the Vermin-compost pits.
- Vaccinate (ET vaccine) sheep and goats against Enterotoxemia.

South Interior Karnataka

- Wind speed is high, provide staking support to Banana and vegetable crop to protect from uprooting of crops.
- Before sowing take up land preparation and strengthen the bund which will facilitate conservation of rainwater of monsoon showers.
- Mango: Farmers are advised to take up summer plough to expose the soil to kill the different stages of insect.
- Vaccinate the cow against the Foot and Mouth Disease (FMD)

Maharashtra

Rainfall Situation

Rainfall received during 01 June to 13 June 2018 over different meteorological sub divisions of the state viz., Konkan: 308.3 mm (78% excess), Madhya Maharashtra: 54.5 mm (18% excess), Vidarbha: 97.5 mm (176% excess) and Marathwada: 114.1 mm (143 % excess). The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) are below normal for week-1 and above normal for week-2 over Marathwada, over Vidarbha is below normal for week-1 and normal for week-2, over Madhya Maharashtra is below normal for week-1 and normal for week-2, over Konkan and Goa is normal for both week-1 and week-2.

Marathwada

- **Sugarcane** : Crops like groundnut, soybean, cowpea and vegetable crops can be cultivated as intercropping in sugarcane during Kharif season.
- Intercropping of Cotton + Pigeon pea (6:1 or 8:2 or 10 :2), Cotton + Soybean (1:1), Cotton + Green gram (1:2), Cotton + Black gram (1:1) serve as an insurance against crop failures and as a preventive against soil erosion.
- For planting of Mrig bahar banana apply 50:160:50 gm NPK per plant and irrigate the orchard. Given support to the plant by stick to avoid physical damage and lodging of plants due to heavy wind .
- Application of fertilizer should be done in mango orchard. After harvesting of mango fruits pruning should be done to remove infected and dried branches with the help of secateurs. After pruning take a spray of 1 % Bordeaux mixture (10 gm per litre of water).

Madhya Maharashtra

- Sowing of short duration pulses or cereals like cowpea, green gram, black gram, moth bean, urdbean or bajra should be done if sufficient moisture availability in the field after the received rain.
- Use two bowl ferti-seed drill for sowing of seed and fertilizer at a time.
- Before plantation of fruit crops dig a pits of (1X1X1m³) dimension. Fill the pits with 20 kg FYM+ 5 gm (19:19:19) + 1 kg SSP.
- The recommended dose of fertilizer i.e. for green gram is 20 kg Nitrogen + 40 kg Phosphorus and for Black gram 25 kg Nitrogen will be given at the time of sowing by using two bowl ferti- seed drill.
- For sowing of kharif crops, farmers are advised to use seeds of recommended varieties and should be purchased from authorized seller only.

Vidarbha

- Subdued rainfall activity is forecasted from 13 June to subsequent period and maximum temperatures are likely to be in the range of 40 to 42° C over the region during next 48 hours, hence application of irrigation is advisable in already sown/seed emerging fields and also orchards.
- For cotton, recommended desi varieties include AKA-7 with seed rate 12 to 15kg/ha and spacing of 60 x 15 cm. American improved varieties include AKH-081, AKH 9916 with seed rate of 12 to 15 kg/ha and spacing 60x15cm or 60x30 cm depending on the soil type. Cotton desi hybrid PKVDH-1 is recommended with seed rate @ 3.0 to 3.5 kg/ha and spaced at 60x45 cm. Recommended Bt cotton varieties may also be preferred.

Chhattisgarh

Rainfall situation

71.1 mm of rainfall received over Chhattisgarh during 01 June to 13 June 2018 which is 93% excess as compared to normal . The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) are below normal for week-1 and above normal for week-2.

- Vegetable nursery should be sown in 15 cms high raised beds . In case nursery is protected by white agronet (mosquito net), viral diseases infection will not be there. Sowing should be done after seed treatment with fungicides against stem rot diseases.
- Mulching should be done in ginger and turmeric crops and water drainage should be well managed before rainy season.
- Monsoonal ornamental flowers seeds and other plantation material arrangement should be made and sowing/ planting should be started.
- Vaccinate the poultry bird to prevent Ranikhet disease.
- Wheat, gram and lathyrus straw should be stored in safe place for feeding to animals.

Bihar

Rainfall situation

44.8 mm of rainfall received over Bihar during 01 June to 13 June 2018 which is 1% deficit as compared to normal . The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) are below normal for week-1 and for week-2.

- Farmers are advised to apply nitrogen @30 kg per hectare and Furadan @33 kg per hectare in sugarcane crop following which the work of earthing up is suggested in the crop field. Also apply irrigation upon earthing up.

- In view of timely onset of monsoon in Bihar, farmers are advised to start the sowing of paddy in the nurseries. For long duration varieties of paddy, seeding upto 10 June is advised. However, for medium duration varieties, farmers can sow it during 10-25 June.
- Picking of matured pods of black gram/green gram crop is advised.
- Ploughing of litchi orchard and application of fertilizers and FYM is advised to farmers after harvesting of litchi fruits.
- Vaccination of cattle is advised against Anthrax, Black Quarter.

Rajasthan

Rainfall situation

Rainfall received over West and East Rajasthan during 01 June to 13 June 2018 is 2.7mm (64%deficit) and 10.5mm (20% deficit) than normal respectively. The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) for West and East Rajasthan are below normal for both the weeks.

- Procure certified seeds of pearl millet, sorghum and maize for sowing in coming season. The onset of monsoon in the state is likely after 20th June.
- Farmers are advised to incorporate FYM in fields where kharif maize or sorghum crop is to be sown.
- Sowing of cotton should be completed by the 15th June. Those farmers who want to sow Bt cotton, they should use non Bt cotton(approx. 20 % area) around the Bt cotton fields.
- Farmers who want to establish new plant or orchards, are advised for digging of pits and keep it open for few days during this month to kill harmful insect- pest and weed seed.

Gujarat

Rainfall situation

Rainfall received over Gujarat Region and Saurashtra & Kutch during 01 June to 13 June 2018 is 3.3mm (87%deficit) and 1.1mm (-94% deficit) than normal respectively. The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) for Gujarat Region and Saurashtra & Kutch are below normal for both the weeks.

- Procurement of good quality seeds is advised for groundnut and cotton growing farmers.
- To control sucking pests in vegetable, spray Acetamiprid 20% SP @5 gm in 10 litre of water.
- Reduce irrigations interval in vegetables to avoid high temperature stress.
- To control thrips in chilly crop, spray Profenofos @ 20 ml in 10 litre of water.
- Paddy nursery preparation is advised in 1/10th of the field.
- Keep animals under shade or in sheds during noon hours of the day. Provide 30-35 gm mineral mixture to animals in daily diet.

Assam

Rainfall Situation

Rainfall received over Assam is 106.5 mm rainfall (46% deficit) during 01 June to 13 June 2018. The extended range weather forecast provided for (15 to 21 June and 22 to 28 June) is normal for week-1 and week-2.

- **Sali Rice** : Farmers are advised to Sow the well germinated seeds of Sali rice in the nursery bed. The nursery bed should be of 10 m length and 1.25 m wide in levelled well- puddled soil. About 6-7 such beds will be required to transplant one bigha of land. Apply 20 kg FYM, 80 gm urea, 80 gm SSP and 40 gm MOP in each bed and mixed thoroughly. Around 650g to 1 kg of seeds per nursery bed is recommended. The seeds should be treated with any one of the fungicides like Thiram, Captaf or Indofil M-45 @ 2.5 gm/kg of seeds before sowing.
- **Citrus (Assam Lemon):** Collect local cultivar of citrus viz. Assam lemon for planting in the orchard or homestead garden. Select high land with uniform soil texture for planting. Prepare pits of 0.5m×0.5m size with a spacing of 3m×3m and refilled with soil-manure mixture (1:1) and then allowed to settle.
- Farmers were advised to take preventive measure against Foot & Mouth and other bacterial diseases in cattle and Buffaloes, since predicted weather conditions is congenial for occurrence of these diseases.

West Bengal

Rainfall Situation

Rainfall received over Gangetic West Bengal is 98.2 mm rainfall (19% excess) during 01 June to 13 June 2018. The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) are below normal.

- **Jute:** Complete the intercultural operations. No rainfall is forecasted for next few days, though, mainly cloudy sky is expected. Thus, farmers are advised to apply irrigation as per the rainfall scenario.
- **Aman Rice:** As there is no rainfall forecast in the next few days, farmers are advised to delay seed sowing operation. Those, who have already prepared nursery bed and sowed the seed in it, are advised to apply irrigation as per the requirement. Others, complete the nursery-bed preparation, as per suggestions provided last week. Sow 7 to 8 Kg seeds in the seed-bed for transplanting of one bigha of land. Use suitable and improved varieties like IET-4094, 2233, Ratna, Bikash, Kitish, Sasya-shree, IR-42, Swarna, Mashuri, IET-8002, etc.
- **Sesame:** Timely sown sesame is now in pod development and maturity stage. Protect your crops from lodging from rainfall. To reduce pod borer infestation apply Endosulphan @2ml per litre of water.
- **Summer Vegetables:** Brinjal Fruit and shoot borer is very severe in maximum places. Apply Triazophos 40 EC @ 1.5 ml, Spinosad 45 EC @0.2 ml or Cartap Hydrochloride @0.75 g per litre of water alternatively. To reduce attack of Fruit fly and hopper apply Monocrotophos @1.5 ml per litre of water. In

pointed gourd, attack of fruit-rot due to fungus may be high. Remove the infected fruits from the land.

- Spray Blitox (4 gm per litre) or Blue copper oxide. In case of other vegetables like sweet-gourd, attack of powdery mildew may be seen. Keep vigilance.
- Mango: Attack of fruit borer is common, spray Dichlorvos @ 1.5-2.0 ml per litre of water.

Punjab

Rainfall Situation

Rainfall received over Punjab is 23.2 mm rainfall (107% excess) during 01 June to 13 June 2018. The extended range weather forecast provided for (15 to 21 June and 22 to 28 June) is normal for week-1 and below normal for week-2.

- Apply need based irrigation to paddy nursery.
- Complete direct seeding of rice variety PR 126 during the first fortnight of June. Spray 2.5 l/ha stomp in 500 litre of water in wet field within 2 days of sowing to control weeds. Optimum time to sow the nursery of basmati varieties Punjab Basmati 5, Punjab Basmati 4, Punjab Basmati 3, Punjab Basmati 2 and Pusa Basmati 1121. Farmers are advised to transplant rice after 20th June.
- To prevent the incidence of mealy bug on the crop, remove all the weeds growing around the crop fields.
- It is the optimum time for sowing of maize varieties/hybrids PMH 1, PMH 2, Parbhat and Kesri using 8 kg seed per acre. It is the optimum time for sowing of recommended soybean varieties SL 958, SL 525 using 25-30 kg seed per acre. Apply rhizobium culture to seed before sowing.

Haryana

Rainfall Situation

Haryana has received 17.2mm of rainfall during 01 June to 13 June 2018, which is 36% excess. The extended range weather forecast provided for next two weeks (15 to 21 June and 22 to 28 June) is below normal for week-1 and week-2.

- **Rice:** Apply frequent need based irrigation in rice nursery. Prepare the field for rice transplanting.
- **Cotton:** Farmers are advised to apply irrigation in sown cotton crop. They are also advised to do intercultural/hoeing operation for removal of weed and conserved the soil moisture.
- **Moong:** Farmers are advised to apply requirement based irrigation.
- **Arhar:** Farmers are advised to do sowing with recommended certified seeds of UPAS 120, Manak and Paras of Pigeonpea.
- **Sugarcane:** Farmers are advised to apply need based irrigation and avoid chemical spray during gusty

winds.

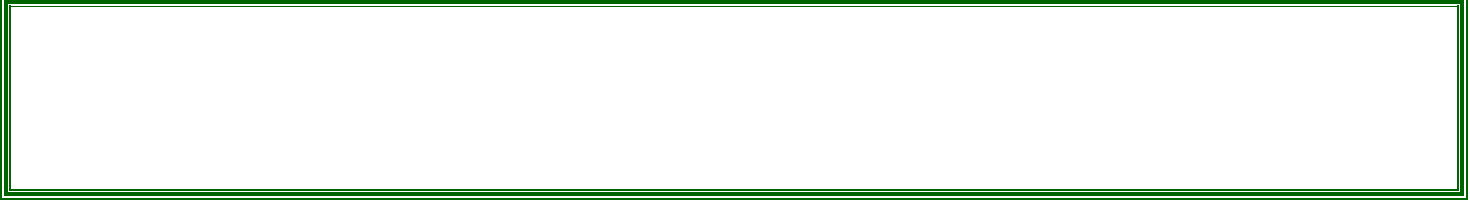
- Farmers are advised to apply irrigation in vegetable and fruit vegetable. Keep proper management to protect the small fruit crop from heat waves. Farmers are advised to complete the sowing of leafy vegetable, lady's finger, bottle gourd, cucumber, ridge gourd and summer radish at the earliest.
- Keep animals inside of shade while dusty winds. Provide clean drinking water sufficiently. Give shower to animals to overcome the heat stress. Provide balanced feed.

Jammu

Rainfall Situation

Rainfall received during 01 June to 13 June 2018 over Jammu is 17.6 mm, which is 31% deficit. The extended range weather forecast provided for next two weeks (15 to 21 and 22 to 28 June) over Jammu are normal.

- **Paddy:** Due to chances of rainfall, farmers are advised to bund their fields for insitu storage of rain water and utilize the same for puddling. Keep the already sown nursery area free from weeds by mechanical methods.
- **Maize:** Farmers are advised to postpone sowing till weather gets clear.
- **Vegetables:** Due to chances of rain suspend irrigation. Postpone application of plant protection measures. Postpone sowing till weather gets clear.
- **Horticulture and Floriculture :** Farmers are advised Postpone transplanting of rainy seasonal annuals (gaillardia, balsam, cosmos, portulaca, kochia, sunflower, morning glory, gomphrena, celosia etc.) till weather gets clear.



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