



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

जारी करने की तिथि/ Date of issue: 27August 2024

आधारित/based on

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

वैधता/Validity: 23 August - 05 September 2024

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** 

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



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



- Week 1 (23.08.2024 to 29.08.2024): Rainfall is likely to be above normal over Central India, regions along West Coast and some parts of East India. However, it likely to be below normal over Northeast India, Himachal Pradesh and Uttarakhand.
- Week 2 (30.08.2024 to 05.09.2024): Rainfall is likely to be normal to above normal over most parts of the country.



• Week 2 (30.08.2024 to 05.09.2024): Minimum temperature likely to be above normal over most parts of Northwest India, Northeast India, Chhattisgarh, Gujarat, Madhya Pradesh, Madhya Maharashtra and Karnataka.

# Strategic Agricultural Planning based on rainfall till 05 September 2024

#### Agromet Advisories

# Kerala

1458 mm (-13% deficit) rainfall was received over Kerala from 01 June to 25 August 2024. The extended range weather forecast (rainfall) for the next two weeks (23 August - 29 August 2024 and 30 August - 05 September 2024) is above normal rainfall for week 1 and normal for week 2.

- As there is a forecast of above normal rainfall during this week, it is advised to postpone the application of plant protection chemicals in coconut gardens. And, provide drainage in vegetables.
- During rainy season, there is a chance of downy mildew attack in cucurbitaceous vegetables. Spray 2.5 g Mancozeb per one litre of water under the leaves.
- During rainy season, there is a chance of leaf fall in nutmeg. As a prophylactic measure to manage leaf fall in nutmeg, spray 1% Bordeaux mixture. Proper drainage facilities have to be ensured
- Proper drainage facilities must be provided for vegetables since heavy rains expected. Staking is recommended for vegetables in pandals. Application of plant protection chemicals can be postponed.

#### Tamil Nadu

334 mm (73% large excess) rainfall was received over Tamil Nadu from 01 June to 25 August 2024. The extended range weather forecast (rainfall) for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) is below normal rainfall for week 1 and normal for week 2.

- Under prevailing weather condition, it is advised to undertake transplanting of rice varieties by utilizing the expected rainfall and provide proper drainage facility to the nurseries in North Eastern Zone.
- As rainy weather is expected in the coming days strengthening the basins for coconut, nutmeg, pepper and cinnamon trees may be taken up for better harvesting of rains.
- Due to continuous rainfall, stem rot disease may appear in groundnut fields. Therefore, it is advised to provide proper drainage facility and for management, farmers are advised to apply Chlorothalonil @ 400 g/acre.
- Under this prevailing weather condition citrus canker disease incidence is noticed. To control spray Copper oxychloride 0.2% at fortnight intervals.

# Karnataka

668 mm (33% excess) rainfall over South Interior Karnataka; 3140 mm (18% excess) rainfall over Coastal Karnataka and 380 mm (19% excess) rainfall over North Interior Karnataka was received from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) is above normal over over Coastal Karnataka and North Interior Karnataka and normal over South Interior

Karnataka for week 1 and; normal over Coastal, North Karnataka and below normal over South Karnataka during week 2.

# South Interior Karnataka

- Drain out stagnated water, as it leads to wilting in black pepper wines, rotting of roots in ginger and turmeric, yellowing and dying of maize and cotton.
- Due to high humidity (warm and humid weather) possibility of pest and disease build up is more in already sown crops. Take prophylactic measures depending on the crops.
- Perform timely weeding, especially in crops like sorghum, chilli, and pulses, to reduce weeds and enhanced nutrients and water requirement for better crop growth.
- Apply organic mulch around crops like turmeric, ginger, and perennial plants (coconut, arecanut, cocoa, pepper) to retain soil moisture, suppress weeds, and improve soil health. The following crops are suggested for sowing:
  - Finger millet: GPU-28, 45,48 and 66, ML-365
  - Cowpea: TVX-944, KBC-1, Green gram: PS-16, PDM-84, 178
  - Black gram: Karagao-3, T-9, Rashmi (LBG-625).

# Andhra Pradesh

368 mm (47% excess) rainfall was received over Rayalaseema, and 506 mm (25% excess) was received over Coastal Andhra from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) is below normal over Rayalaseema and normal over Coastal Andhra Pradesh for week 1 and; normal over Rayalaseema and above normal over Coastal Andhra Pradesh for week 2.

- Farmers are advised to practice soil moisture conservation practices in rainfed groundnut. Form conservation furrows at the time of sowing or 20-30 days after sowing for one row every 3.6 m. Conservation furrows alleviate moisture stress during the dry spell period while also acting as a drainage channel during heavy rainfall.
- Rice crop is at nursery to transplanting stage grown in Rayalaseema districts of Andhra Pradesh. Farmers are advised to utilize the available soil moisture and transplant rice.
- The present weather conditions are favourable for bacterial leaf blight incidence in pomegranate. For management, it is advised that to remove infected fruits and burn it immediately. The symptoms observed to spray Streptocycline @ 0.5 g and Copper oxychloride @ 3 g/litre of water.
- In North Coastal Andhra Pradesh, if any moisture stress conditions prevail in rice nursery spray KNO3 (multi k) or 19:19:19 @ 5 g/l. and continue transplanting of rice.

# Odisha

764 mm (-10% deficit) rainfall was received over Odisha from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) is above normal over Odisha for week 1 and; normal for week 2.

- Application of fertilizer & pesticides may be withheld for the time being owing to high rainfall in paddy.
- Make drainage channels for removal of excess water from vegetable crops and prepare the bunds.
- To manage stem borer in paddy at early stage of crop, it is advised to apply Cartap Hydrochloride 4% G @ 8-kg/acre or Chlorantraniliprole 0.4% GR @ 4-kg/acre or Imidacloprid 0.3% GR @ 6-kg/acre by mixing it with sand at 1:1 ratio.
- August and September are the optimum time for tomato planting. Grow tomato verities like *Utkal Kumari (BT-10), Utkal Deepti (BT-2), Utkal Raja, Utkal Pragyan and Swarna Sampad.* For one acre planting 150 to 200 grams of seeds are required.

#### Maharashtra

803 mm (45% excess) rainfall over Madhya Maharashtra, 531 mm (19% excess) Marathwada, 3023 mm (27% excess) Konkan, and 872 mm (19% excess) rainfall over Vidarbha was recorded from 01 June to 25 August 2024. The extended range weather forecast (rainfall) for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) is above normal rainfall over Konkan, Madhya Maharashtra, Vidarbha and Marathwada for week 1; and week 2, respectively.

#### Parbhani

- Due to forecast of above normal rainfall during this week, it is advised to make arrangements to drain out excess water from standing crops, vegetables and orchards.
- Undertake intercultural operations in sapota, pomegranate and vegetables during clear weather.
- For management of fall armyworm in *kharif* sorghum crop take a spray of Emamectin Benzoate 5 % @ 4 g or Spinetoram 11.7 SC @ 4 ml per 10 litres of water during clear weather.
- Due water logging condition with low temperature and high humidity the Pokkah Boeng disease observed in sugarcane crop. For management it is advised to spray of Carbendazim 12% + Mancozeb 63% WP @ 50 g or Copper Oxychloride 50% WP 20 g per 10 litres of water with sticker 2-3 sprays for 10-12 days intervals during clear weather conditions.

# Vidarbha

- Due to continuous light rains, symptoms of para wilt may observe in cotton field, undertake drenching with Carbendazim 50% WP @ 20 g or Copper Oxychloride 50% WP @ 25 g + Urea 100 g in 10 litres of water in clear and calm weather after current spell of rains.
- In view of heavy to very heavy rainfall at isolated places, make arrangements to drain out excess water from standing crops, vegetables and orchards.
- Maintain optimum water level of 3 to 5 cm in transplanted rice fields.

• Due to forecast of above normal rainfall, it is advised to postpone intercultural operations in *kharif* crops like cotton, soybean and pigeon pea and postpone fertilizer application and spray of insecticides.

# Madhya Maharashtra

- Due to continuous rainfall, remove excess water from the field where water is stagnated due to high intensity and heavy rainfall.
- Due to forecast of above normal rainfall it is advised to provide mechanical support to vegetables and newly planted orchards. Maintain 3 to 5 cm water level in rice fields.
- For control of brown plant hopper in rice, it is advised to spray Fipronil 5 SC @ 20 ml per 10 litres of water on a non-rainy day.

#### Konkan

- Due to forecast for light to moderate rainfall, maintain optimum water level of 5 cm in rice field. External water sources can be used to maintain water level in the rice field. Arrangements should be made to keep the water in the rice paddies by making embankments.
- Undertake intercultural operations in red gram, black gram and finger millet when the intensity of rainfall is low.
- Apply second split dose of nitrogenous fertilizers @ 35 kg urea per acre to finger millet at tillering stage after weeding operation during clear weather (no rainfall).
- Due to intermittent rainfall and cloudy weather conditions, there is a possibility of incidence of blue beetle on lowland rice, to control spray Quinalphos 25% EC @ 10 ml or Lambda-cyhalothrin 5% EC @ 5 ml per 10 litres of water.

# Gujarat

731 mm (1% excess) rainfall was received over Gujarat from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Gujarat is above normal for week 1 and week 2.

- Under prevailing weather condition, it is advised to prop the sugarcanes by tying together the canes in clumps to protect against high wind speed. Remove 25% lower mature leaf to improve sugar content and yield in sugarcane. Drain out stagnant water from the field for management of sugarcane whitefly.
- Intercultural operations is advised in a timely sown pigeon pea crop for weed management and proper growth. Planting of yellow marigold around the field as well as between the crops for management of *Helicoverpa* caterpillars.
- For control of the yellow stem borer in paddy, it is advised to use a pheromone trap 35 to 40/ ha. In the heavy incidence of stem borer, spray Flubendiamide 20 % WG @ 2.5 gram or Indoxacarb 15.8 EC 10 ml in 10 liters of water.

# Chhattisgarh

952 mm (8% excess) rainfall was received over Chhattisgarh from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Chhattisgarh is above normal for week 1 and week 2.

- Rice crop is at tillering to booting stage in fields; undertake first top dressing with urea (40 kg/ha.) at tillering stage of rice for healthy tillers 2-3 days after cessation of rains. After 20-25 days weed control is advised in the late translating rice crop, spray Bispyribac sodium (10%) @ 250 ml /ha.
- For control of Girdle beetle in soybean, spray Thiacloprid 21.7 SC @ 750 ml/ha. After 20-25 days of sowing, to control weeds in black gram, green gram and pigeon pea, spray Imazethapyr 10% SL + Surfactant@ 2 ml/litre of water

# Madhya Pradesh

881 mm (10% excess) rainfall was received over East Madhya Pradesh from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Madhya Pradesh is above normal for week 1 and normal for week 2.

- Due to forecast of above normal rainfall during this week, crop lodging in sugarcane and maize plants may occur. Farmers are advised to upright the plants and tie with the neighbouring plants to prevent from lodging.
- Under prevailing weather condition, ensure drainage arrangement in maize, soybean, cotton and sugarcane to avoid waterlogging caused due to heavy rains.
- This is the optimum time to plant new fruitful plants, hence, plant saplings of mango, guava, Amla, jamun etc. in the prepared pits and before planting, use earthworm manure, neem cake for termites and drain off excess rain water.

#### Assam

1293 mm (-5% deficit) rainfall received over Assam from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Assam is normal for week 1 and week 2.

- As there is forecast of thunderstorm with lightning and heavy rain very likely at isolated places, farmers are advice for harvest all the matured vegetables like tomato, brinjal and chili etc. from the field and make proper drainage system for removing all the excess water from the crop field.
- As due to rainfall and high humidity condition shoot borer may attack the turmeric and ginger crop. Remove all the excess water from the field and as chemical control measures advice for spray Dimethoate(Rogar) 0.05% in clear weather condition only.

# West Bengal

710 mm (-16% deficit) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 1651 mm (17% excess) from 01 June to 25 August 2024. The extended range weather forecast (rainfall) for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) is above normal rainfall over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal during week 1 and normal rainfall over Gangetic West Bengal and Sub-Himalayan West Bengal week 2.

• Under prevailing weather condition, it is advised to make necessary arrangements for draining out excess water from crop fields in case of heavy rain. No extra irrigation is needed in paddy (PI to flowering stage). Transplanting of *aman* paddy of late sown short

duration variety is advised to complete immediately. It is the optimum time to cut the jute and prepare for retting.

- Use of CRIJAF-SONA @25-30 kg for 1 ha harvest of jute.
- Farmers are advised to avoid water stagnation inside betel vine garden and vegetable field with ridge furrow system. Avoid top dressing in watered *aman* paddy field.
- Drain out of excess water from vegetable nursery; to prevent wilting, drench the soil around seedlings with Dithane M-45 @ 2.5 g/litre of water during sunny days.

# Jharkhand

674 mm (-10% deficit) rainfall received over Jharkhand from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Jharkhand is above normal for week 1 and week 2.

- In view of the rains, farmers should make proper arrangements for drainage of water in the finger millet crop. In case of water logging, stem rot can be seen. To prevent this disease, farmers should apply Copper oxychloride @ 0.25% around the plant.
- Under prevailing weather condition, there is a chance of pod borer incidence in black gram and green gram crops. To control, it is advised to spray Imidacloprid 17.8 SL @ 1 ml/10 litres of water when sky is clear.
- Taking advantage of the rain in the coming days, sow fodder crops such as Napier IGFRI-6, 10, Berseem Bardan, Maize - African Tall, Cowpea - Bundel Cowpea - 1, 2 etc. Take Napier-1200 slips, Berseem 12 kg, Maize 12 kg and Cowpea at the rate of 16 kg per acre. For manure, apply FYM- 4-ton, Nitrogen 40-60 kg and Potash at the rate of 16-24 kg per acre.

# Bihar

561 mm (-23% deficit) rainfall received over Bihar from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Bihar is normal for week 1 and week 2.

- Weeding is advised in paddy on priority basis. Monitoring is advised for infestation of stem borer and leaf folder in paddy crop.
- There is a possibility of continuous drizzle and light rains along with cloudy weather, for transplanting brinjal and chilli seedlings, make ridges and plant them on the ridges only; the distance between ridges should be 90 cm and the distance between plants should be 60 cm. Cauliflower, cabbage and knol-khol plants can also be grown in beds and poly tunnel.
- Complete the transplanting of early varieties of cauliflower such as Kuwari, Patna early, *Pusa katki, Pusa deepali and Hajipur agaat.* Application of 10-15 kg Borax and 1.0 kg Ammonium molibdate per hectare is advised in boron/molybdenum deficient land. Regular monitoring of leaf eating caterpillar (diamondback moth) is advised in early sown cauliflower. If infestation is observed in the field, spraying of Imidacloprid @ 0.3 ml/litre of water is advised in clear day condition.

# Uttar Pradesh

461 mm (-10% deficit) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 517 mm (-12% deficit) from 01 June to 25 August 2024. The extended range weather forecast (rainfall) for the next two weeks (16 August - 22 August 2024 and 23

August - 29 August 2024) is above normal over Eastern Uttar Pradesh and normal over Western Uttar Pradesh during week 1 and normal over Eastern Uttar Pradesh and above normal Western Uttar Pradesh for week 2.

#### Western Uttar Pradesh

- As per extended range weather forecast of normal rainfall and above normal temperature forecast during this week (23 August to 05 September, 2024) in Central and Western Uttar Pradesh. Therefore, farmers are advised, farmers are advised of no need of irrigation in maize crop which is at vegetative/silking stage. Top dressing 1/4 dose of Urea at Knee high stage is advised.
- If *khaira* disease is visible in paddy, spray 20-25 kg zinc sulphate and 2.5 kg lime in 800 litres of water during clear weather. In paddy, apply the second top dressing of urea @ 60 to 65 kg per hectare, 55-60 days after transplanting.
- Weeding is advised in pearl millet, sorghum, sawa, pigeon pea etc and plant population also advised to maintain by thinning, drain out excess rain water.

# Eastern Uttar Pradesh

- Due to the forecast of above normal rainfall during this week, farmers are advice to do proper arrangement for drainage in all vegetables, pulse, maize and nurseries of the vegetables.
- Farmers are advised to monitor paddy crop regularly, if population of leaf folder or stem borer is above ETL, broadcast Cartap 4% granules @ 10 kg/acre. Install pest specific pheromone traps @ 3-4/acre in the paddy fields for monitoring of stem borer.

# Himachal Pradesh

444 mm (-23% deficit) rainfall was received over Himachal Pradesh from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Himachal Pradesh is below normal for week 1 and above normal for week 2.

- Heavy to rather heavy rainfall, landslides, cloudburst, mudflow and flood situation in different areas of the state (Date of occurrence: (All over the week). The Farmers are advised not to go crop fields near the banks of rivers. Ensure proper drainage of water in maize, soybean and vegetable fields.
- Keep the colonies of honeybees in shady places and protect from heavy showers of rains. Insert the brood chamber without frame for ensuring aeration. Dust Sulphur on sealed brood in the colony and not on larvae to control mites attack on honeybees.
- Conditions are favourable for the development of stalk rot in maize. For preventing this disease excess water from the fields should be drained off. Also, the field should be drenched with bleaching powder @ 16.5 kg / ha (650 g / kanal).
- Apply dose of nitrogen on the standing crop of the tomato, brinjal, capsicum and chilli. In low hills, transplant the healthy seedlings of early cauliflower (Palam Uphaar, Improved Japanese, Pusa Deepali and hybrid varieties Megha and Barkha).
- To control leaf spot and fruit rot diseases in tomato, brinjal, capsicum and chilli, Spray recommended insecticide for controlling leaf-spot and fruit-rot disease and managing fruit borer in brinjal. Install *Lucinodus Pheromone* traps @ 25 traps/ha.

#### Jammu

306 mm (-28% deficit) rainfall was received over Jammu from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Jammu is normal for week 1 and above normal for week 2.

- Due to forecast of above normal rainfall during this week, it is advised to postpone irrigation in rice. Apply urea as first top dress if the crop is 30-35 days (at mid tillering stage) during clear weather, Apply 2nd dose of N in early as well as normal transplanted rice crop as top dressing just before panicle initiation stage (55 65 DAT) during clear weather. Do not allow water to stagnate in maize, pulses and vegetable fields.
- Do not allow water to stagnate in pearl millet fields. Due to sufficient moisture availability, apply 2nd dose of nitrogenous fertilizer during clear weather.
- Keep the field weed free. Start field preparation for rabi season vegetable crops so that all the nurseries get ready by 20<sup>th</sup>-25<sup>th</sup> September.
- Rainy season plantation of new orchards and gap filling can be undertaken. Keep the basin area clean. To control fruit fly in fallen fruits, harvest fruit when hard in Guava. Use methyl eugenol traps.

#### Rajasthan

665 mm (32% excess) rainfall was received over Rajasthan from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Rajasthan is above normal for week 1 and week 2.

- As per extended range weather forecast of above normal rainfall during next two weeks, farmers are advised to proper management of drainage in standing crops and vegetable nurseries. Before spraying insecticides and weedicides, ensure that there is no rain for 3 to 4 hours. Otherwise postpone the spray.
- Foliar spray of Emamectin Benzoate 5 SG @ 0.4 g/l water is advised for the control of Fall Army Worm in maize. Spray should be done when sky is clear.
- Under present weather condition farmers are advised to monitor moong and urd crops regularly, if white flies or sucking pests is above ETL, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 lit. of water is recommended when sky remain clear.

# Haryana

274 mm (-17% deficit) rainfall was received over Haryana from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Haryana is above normal for week 1 and week 2.

- In view of the anticipated rainfall activity during next 2 weeks and sufficient soil moisture at present, the irrigation in the crops (paddy, pearl millet, cotton and horticultural crops) may be withheld and plan for excess water drainage, if required in case of heavy rainfall. The anticipated weather is favourable for insect-pests in the crop, so keep vigil and adopt recommended control measures.
- Due variable weather and light rain in the next three days, farmers are advised to vigil before the application of irrigation as per requirement of crop.

#### Punjab

226 mm (-34% deficit) rainfall was received over Punjab from 01 June to 25 August 2024. The extended range weather forecast (rainfall) provided for the next two weeks (16 August - 22 August 2024 and 23 August - 29 August 2024) over Punjab is above normal for week 1 and week 2.

- Due to forecast of above normal rainfall during this week, it is advised to withheld irrigation in maize, sugarcane, vegetables and orchards in view of possible rainfall during the period. Remove excess rain water from fruit plants, cotton, sugarcane, maize and vegetable fields after heavy rainfall.
- As forecast of above normal rainfall for next two weeks and cotton crop is highly sensitive to standing water during early growth stages. Therefore, drain out the excess water from the cotton fields. Eradicate the weeds like *kanghibuti, peelibuti, puthkanda* etc growing on cotton field bunds, waste lands, road side and irrigation channels/canals to avoid further spread of whitefly to cotton field. Regular survey of whitefly should be done on cotton and on other alternate host crops like moong.

#### 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.