



National Agromet Advisory Services Bulletin

Date of issue: 02 September 2022

based on

Extended Range Weather Forecast (ERFS)

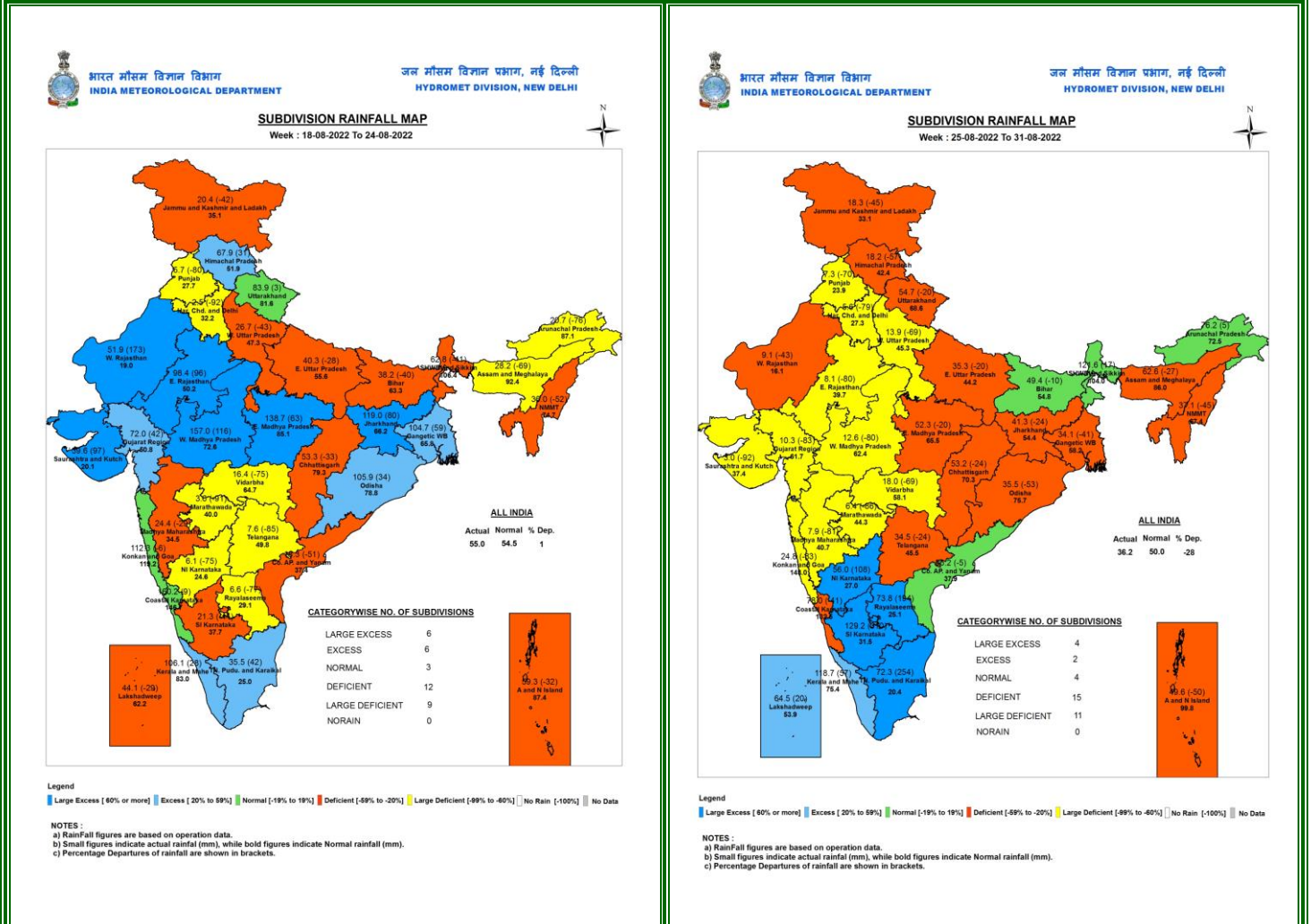
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**AICRP on Agro-Meteorology (AICRPAM)
Central Research Institute for Dryland Agriculture (CRIDA)
Indian Council of Agricultural Research (ICAR)
&
India Meteorological Department (IMD)
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

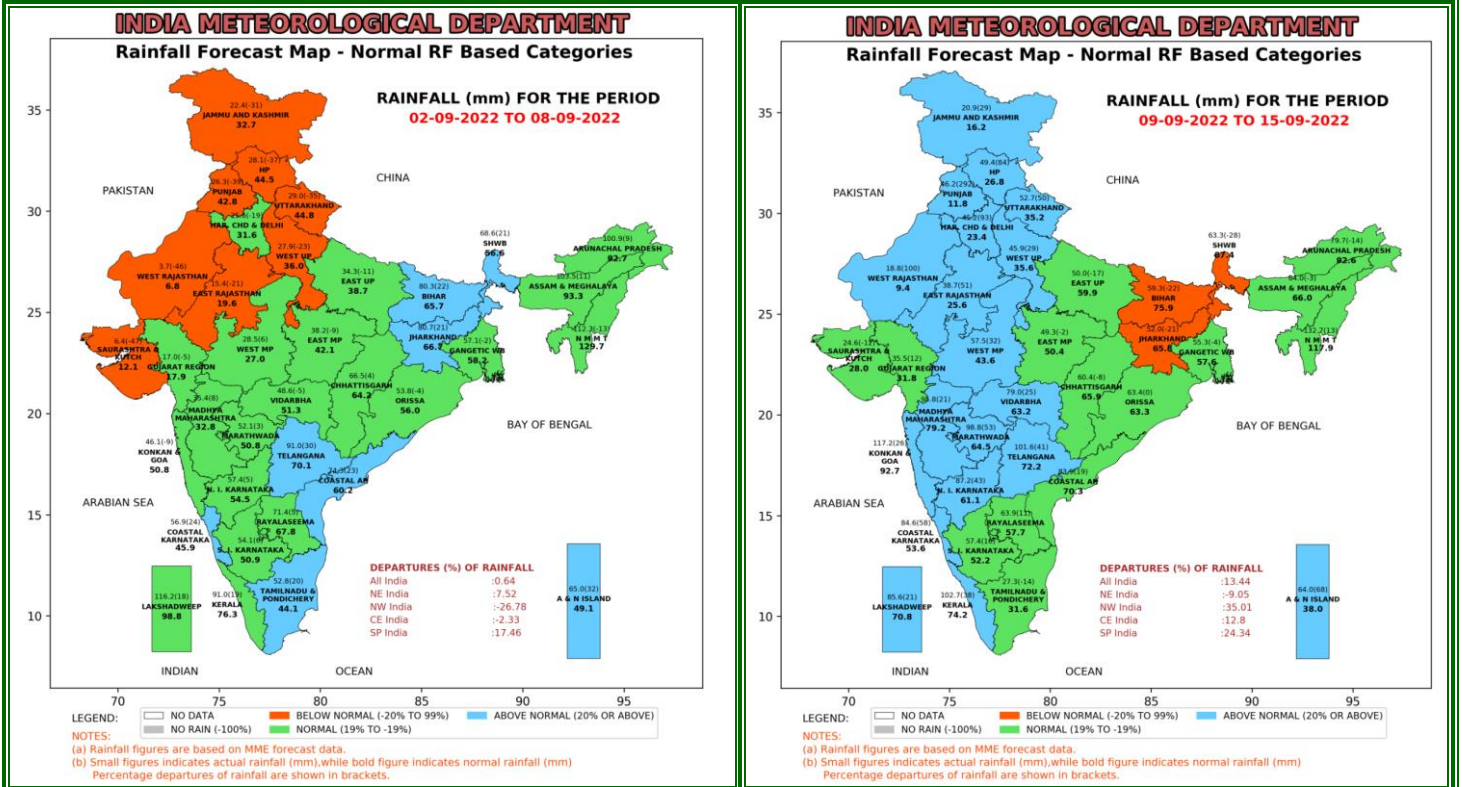
Realized Rainfall (18th to 31st August, 2022)



- Normal or above normal rainfall occurred in both the weeks in Kerala & Mahe and Tamil Nadu Puducherry & Karaikal.
- Normal or above normal rainfall occurred in either of the two weeks in Himachal Pradesh, Uttarakhand, Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Gujarat, Madhya Pradesh, Odisha, Konkan & Goa, Karnataka, Andhra Pradesh & Yanam and Lakshadweep.
- Below Normal rainfall occurred in both the weeks in Jammu & Kashmir and Ladakh (UTs), Punjab, Haryana Chandigarh & Delhi, Uttar Pradesh, Assam & Meghalaya, Nagaland Manipur Mizoram & Tripura (NMMT), Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Telangana and Andaman & Nicobar Islands.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 31st August) (02nd to 15th September 2022)



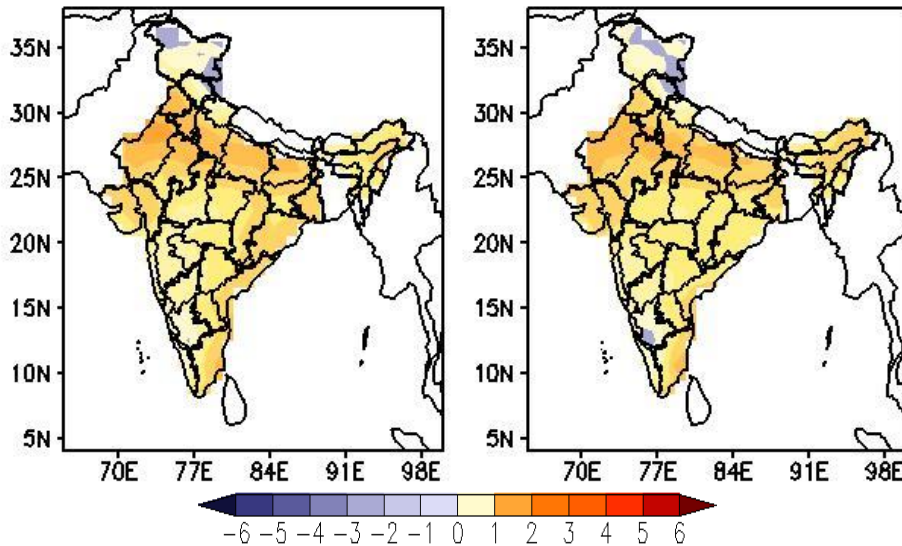
- **Week 1 (02.09.2022 to 08.09.2022):** Rainfall is likely to be normal to slightly below normal over northwest India and normal to slightly above normal over south peninsula, parts of west coast and the eastern India.
- **Week 2 (09.09.2022 to 15.09.2022):** Rainfall is likely to increase over West, Northwest and central India.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC- 31st August)
(02nd to 15th September 2022)**

MME Bias corrected forecast Tmax (Deg)

(Week1: 02Sep-08Sep)

(Week2: 09Sep-15Sep)



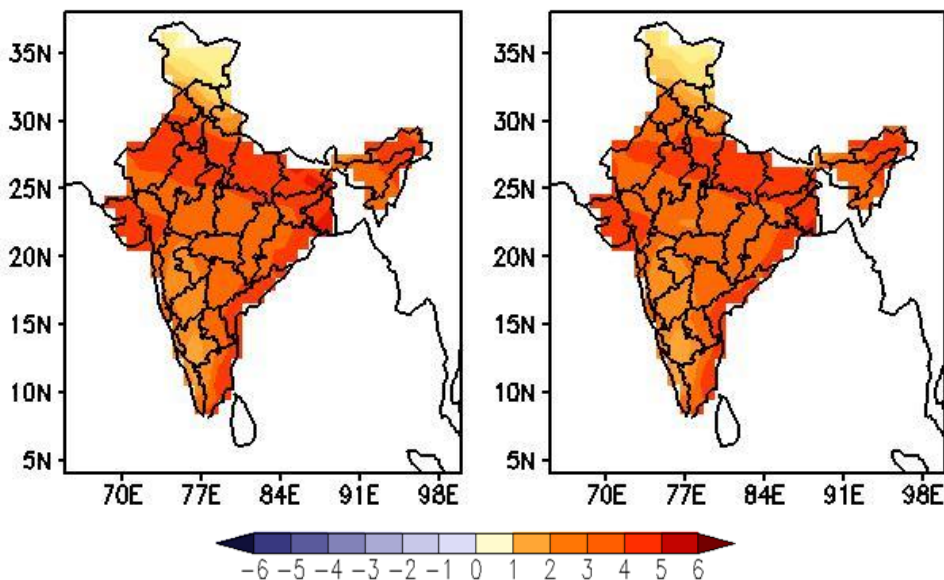
Maximum Temperature (Tmax)

- **Week 1 (02.09.2022 to 08.09.2022) and Week 2 (09.09.2022 to 15.09.2022):** Tmax will be above normal over some parts of Jharkhand, Uttar Pradesh, Bihar, Odisha, Chhattisgarh, North Madhya Pradesh and Rajasthan during the period with slightly higher anomaly in week 1.

MME Bias corrected forecast Tmin (Deg)

(Week1: 02Sep-08Sep)

(Week2: 09Sep-15Sep)



Minimum Temperature (Tmin)

- **Week 1 (02.09.2022 to 08.09.2022) and Week 2 (09.09.2022 to 15.09.2022):** Tmin will be close to normal over the country with slight increase over Indo Gangetic region and central India.

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 360 mm (-44% deficit) and over West Uttar Pradesh was 316 mm (-44% deficit) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) is normal over East Uttar Pradesh and below normal over West Uttar Pradesh for week-1; normal over East Uttar Pradesh and above normal over West Uttar Pradesh for week-2.

Western Uttar Pradesh

- Only 14.5 mm rainfall received during last week against the normal rainfall of 37 mm. Therefore, farmers are advised to irrigate the paddy crop which is at tillering/booting stage.
- Due to highly deficit rainfall condition (47 districts of Uttar Pradesh have received deficient rainfall), farmers are advised for sowing of following recommended short duration, late sown hybrid varieties of pearl millet viz., *Pusa-322*, *Pusa-32* and *ICMH-451*.
- Due to scanty and highly deficit rainfall condition, farmers are advised to take up land preparation of vacant field for the sowing of Toria.

Eastern Uttar Pradesh

- In view of the normal rainfall forecast in coming two weeks, farmers are advised to sow the seeds in nursery for *kharif* onion by making beds. The recommended seed rate for planting is 12-15 kg per hectare.
- Due to high humidity and the possibility of rain, the farmers are advised to keep animal sheds clean and sprinkle lime outside to prevent from mosquito and flies.
- For the prevention of root rot and phytophthora disease in citrus fruits, it is advised to spray Ridomil (2.5 g/litre water) and Alite (60-120 g/litre water) on the roots of plants.

Bihar

The amount of rainfall received over Bihar is 492 mm (-38% deficit) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) is above normal for week-1 and; below normal for week-2.

- Due to widespread rainfall during last week, farmers are advised to take up land preparation for sowing of pigeon pea in upland areas with recommended varieties *Pusa-9* and *Sarad*.
- Because of rainfall received during last week, planting of onion in field and fruit saplings in the orchards is advised.
- Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition.

Jharkhand

The amount of rainfall received over Jharkhand is 604 mm (-26% deficit) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) for the next two weeks (02 - 08

September 2022 and 09 - 15 September 2022) is above normal for week-1 and below normal for week-2.

- Different districts of Jharkhand received good amount of rainfall during last two weeks. Therefore, farmers are advised to ensure drainage of excess water from crops/vegetables and rice fields.
- In fallow upland fields, farmers may complete the sowing of horse gram and Niger as rainfed condition and vegetable cultivation in irrigated condition.
- Under prevailing weather condition, farmers may proceed for cultivation of green fodder of Maize (var.- *African tall* or *J-1006*), Lobia (var.- *UPC-5286*, *UPC-622*, *UPC-625*) or Rice bean/Moth (Var.- *Vidhaan-1*, *Ricebean-2*, *RBL-6*).

Kerala

The amount of rainfall received over Kerala is 1553 mm (-12% deficit) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) is normal for week-1 and above normal for week-2.

- There is a chance of quick wilt disease in pepper due to rain. To prevent, it is advised to spray 1% Bordeaux mixture or Copper oxy chloride @ 3g mixed in 1 litre of water.
- Because of high moisture content in the atmosphere, there is a chance for the development of mahali disease in arecanut and coconut. For management, spraying of Copper oxy chloride @ 3g per litres of water is advised.

Tamil Nadu

The amount of rainfall received over Tamil Nadu is 412 mm (+90% large excess) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) is above normal for week-1 and normal for week-2.

- Due to forecast of moderate rainfall during coming first week, irrigation in crop fields may be skipped.
- Prevailing weather condition is also favourable for mealy bug incidence in papaya. To control, it is advised to release *Acerophagus papayae* @ 100 parasitoids / field / village or block.

Maharashtra

750 mm (25% excess) rainfall over Madhya Maharashtra; 608 mm (22% excess) in Marathwada; 2630 mm (+4% surplus) in Konkan region and 989 mm (24% excess) over Vidarbha was recorded during 1 June - 02 September 2022. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Konkan, Vidarbha, Marathwada and Madhya Maharashtra is normal for week-1 and; above normal for week-2, respectively.

Madhya Maharashtra

- To conserve the soil moisture, spraying of KNO₃ and hoeing is advised under moisture stress condition.
- Due to cloudy weather condition, there may be a chance of leaf eating caterpillar in *kharif* crops like soybean, sunflower, pigeon pea, bajra etc. To manage, it is advised to use pheromone traps @ 5/ha and also if required spray Profenofos/Quinalphos/Chlorpyrifos @ 20 ml per 10 litre of water.
- In area where soils are affected with white grub and termites, application of Phorate granules @ 15 kg per ha is recommended.

Vidarbha

- For control of brown fruit rot in orange, it is advised to spray Fosetyl AL 80% WP@ 25 g or Copper oxychloride 50% WP @ 25 g or Captan 75% WP @ 25 g per 10 litre of water.
- For the management of weeds and improved soil aeration, inter-cultural operation (weeding/hoeing) in *kharif* crops is advised.

Marathwada

- Protective irrigation is advised to apply if water stress is observed in soybean crop during flowering to pod initiation stage.
- For the management of fall armyworm in late sown maize crop it is advised to spray Thiamethoxam 12.6 % + Lambda – cyhalothrin 9.5 ZC @ 5 ml or Spinetoram 11.7 SC @ 4 ml per 10 litres of water during clear weather condition.

Odisha

The amount of rainfall received over Odisha was 992 mm (+6% excess) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Odisha is normal for week-1 and week-2.

- Due to forecast of increase in temperature, there may be increase in infestation of thrips in paddy. To control it is advised to spray Lambda-cyhalothrin 5% EC @ 2 ml/ litre water or Thiamethoxam 25% WG @ 5g/ 15 litre water.
- Deficit in rainfall leads to infestation of Epilachna beetle in cucurbit crops. To manage it is advised to spray neem-based pesticide (Neem Oil 1500 ppm) @ 3 ml/litre of water at early stage of infestation.

Gujarat

The amount of rainfall received over Gujarat was 966 mm (22% excess) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Gujarat is normal for week-1 and week-2.

- To control early blight disease of tomato, it is advised to spray Mancozeb 75 WP @ 27 g or Chlorothalonil 75 WP 27 g or Neem fresh leaf extract 50 g in 10 litres of water during clear weather condition.
- To control fruit and shoot borer in okra, it is advised to spray Emamectin benzoate 5 SG 3 g or Lambda cyhalothrin 5 EC 5 ml in 10 litres of water.

Jammu

501 mm of rainfall (9% excess) was received over Jammu during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Jammu is below normal for week-1 and above normal for week-2.

- Prevailing weather is congenial for hairy caterpillar in *kharif* pulses, if observed then destroy young larvae in gregarious phase. If population is high, spray Quinalphos @ 0.03% or Dichlorvos @ 0.05% during clear weather.
- Under prevailing weather condition, farmers may go for land preparation for nursery raising of *rabi* crops under protected structures.

Assam

The amount of rainfall received over Assam during 1 June - 02 September 2022 was 1400 mm (-4% deficit). The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Assam is normal for week-1 and week-2.

- Under prevailing weather condition, farmers may continue land preparation for cultivation of radish. Select improved early varieties like *Pusa Desi*, *Pusa Himani*, *Pusa Chetki* etc. for obtaining higher yield.
- Farmers are advised to go for regular monitoring of coconut orchard for red palm weevil infestation. On occurrence of symptoms, immediately pour Endosulfan 35 EC @ 2 ml/litre of water in the trunk cavity and plug with mud.

Karnataka

Rainfall received during 1 June - 02 September 2022 over South Interior Karnataka was 882 mm (+64% large excess) and 503 mm (+44% excess) over North Interior Karnataka and 2894 mm (+3% surplus) over Coastal Karnataka. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) is normal over North Interior Karnataka and South Interior Karnataka and over Coastal Karnataka is above normal for week-1 and; above normal over Coastal Karnataka and North Interior Karnataka and normal over South Interior Karnataka during week-2.

South Interior Karnataka

- Farmers are advised to take up land preparation and strengthen the bund with fodder grass which will facilitate conservation of rainwater. Ploughing across the slope will make *insitu* soil moisture conservation.
- Due to moderate rainfall, it is advised to postpone the application of top dress fertilizer in red gram crop.

Punjab

The amount of rainfall received over Punjab was 318 mm (-14% deficit) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02

- 08 September 2022 and 09 - 15 September 2022) over Punjab is below normal for week-1 and above normal for week-2.

- To manage fall armyworm in maize crop, it is advised to spray Coragen 18.5 SC (@ 0.4 ml per litre of water).
- Prevailing weather condition is highly suitable for planting of citrus, guava, mango, litchi, sapota, jamun, bael, amla etc.

Himachal Pradesh

The amount of rainfall received over Himachal Pradesh was 582 mm (-7% deficit) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Himachal Pradesh is below normal for week-1 and; above normal for week-2.

- Farmers are advised for the picking in tea at 10-12 days interval to maintain the quality and productivity.
- Since rainfall is expected in coming second week, farmers are advised to ensure proper drainage in black gram, soybean and vegetable crops which are susceptible to waterlogged conditions.
- In mid-hills of the state, transplant seedlings of mid-season cauliflower varieties. Recommended varieties are *Palam Uphar*, *Pusa Deepali*, *F1 Megha*, *F1 Barkha* and *F1 White Excel*.

Andhra Pradesh

The amount of rainfall received over Coastal Andhra Pradesh was 465 mm (+4% excess) and over Rayalaseema was 379 mm (+35% excess) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Coastal Andhra Pradesh is above normal and Rayalaseema is normal for week-1 and; normal over Coastal Andhra Pradesh and Rayalaseema for week-2.

- In Vizianagaram, Srikakulam, Chittoor, Nellore, and Ananthapuramu districts, present weather conditions are favorable for incidence of fall army worm in maize. To control fall army worm, spraying of Thiodicarb @ 2g or Emamectin benzoate @0.4 g/litre of water is recommended.
- Present weather conditions are favourable for the incidence and spread of sigatoka leaf spot disease in banana grown in Vizianagaram and Nellore districts. To control, spraying of Propiconazole @ 0.1% (or) Tebuconazole + Trifloxystrobin @ 1ml/litre of water for 2-3 times in 25 days interval is recommended.

Chhattisgarh

The amount of rainfall received over Chhattisgarh was 1043 mm (+11% surplus) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Chhattisgarh is normal for week-1 and

week-2.

- The farmers who have not completed papaya transplanting till date can go for completing this operation now.
- For ginger and turmeric crops, regular earthing up and second mulching is advised.

Madhya Pradesh

The amount of rainfall received over East Madhya Pradesh was 930 mm (+7% surplus) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Madhya Pradesh is normal for week-1 and week-2.

- Monitoring of field for Tobacco caterpillar/ semi looper/ foliage feeder and girdle beetle. For management, it is advised to spray of Quinalphos 25 EC @ 1 litre/ha or Lambda Cyhalothrin 4.9 % CS @ 300 ml/ha.

Uttarakhand

The amount of rainfall received over Uttarakhand was 887 mm (-11% deficit) during 1 June - 02 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 September 2022 and 09 - 15 September 2022) over Uttarakhand is below normal for week-1 and above normal for week-2.

- Regularly monitoring for leaf webber in the amaranth crops field is advised. For control it is advised to spray Imidacloprid @1 ml/litre during clear weather.

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