



National Agromet Advisory Service Bulletin

Date of issue: 19 August 2022

based on

Extended Range Weather Forecast (ERFS)

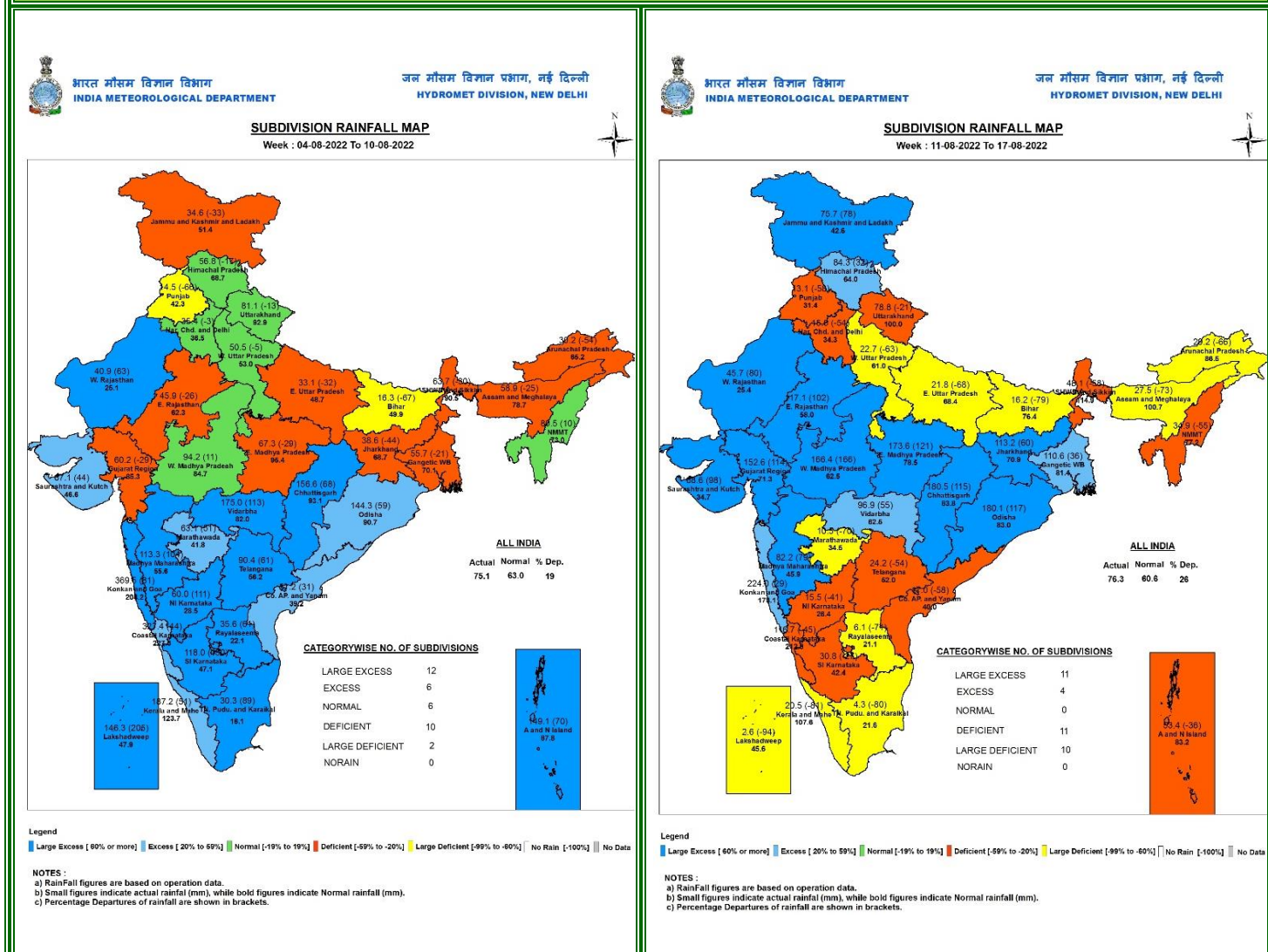
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**AICRP on Agro-Meteorology (AICRPAM)
Central Research Institute for Dryland Agriculture (CRIDA)
Indian Council of Agricultural Research (ICAR)
&
India Meteorological Department (IMD)
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

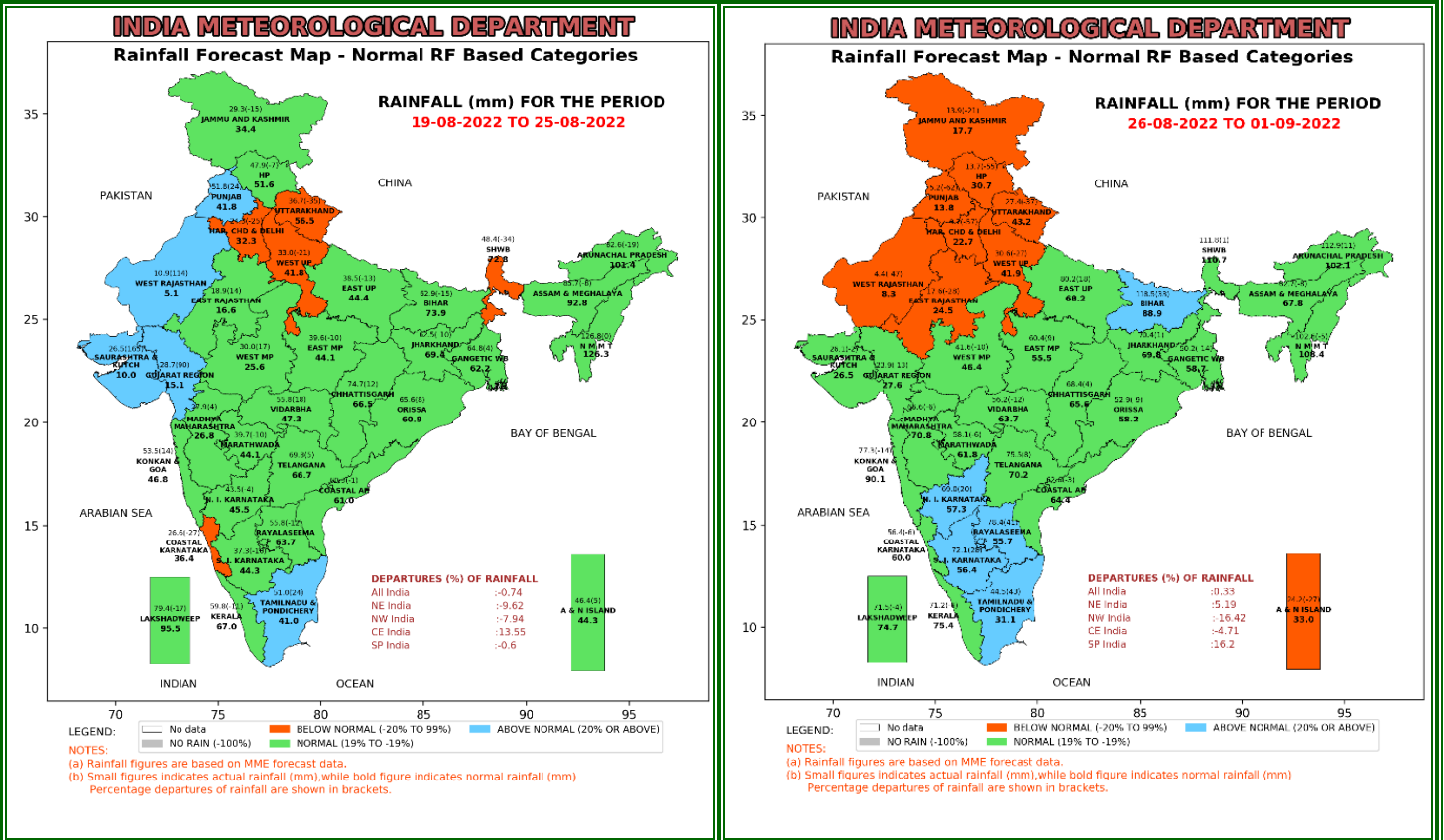
Realized Rainfall (4th to 17th August, 2022)



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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 17th August) (19th August to 1st September 2022)



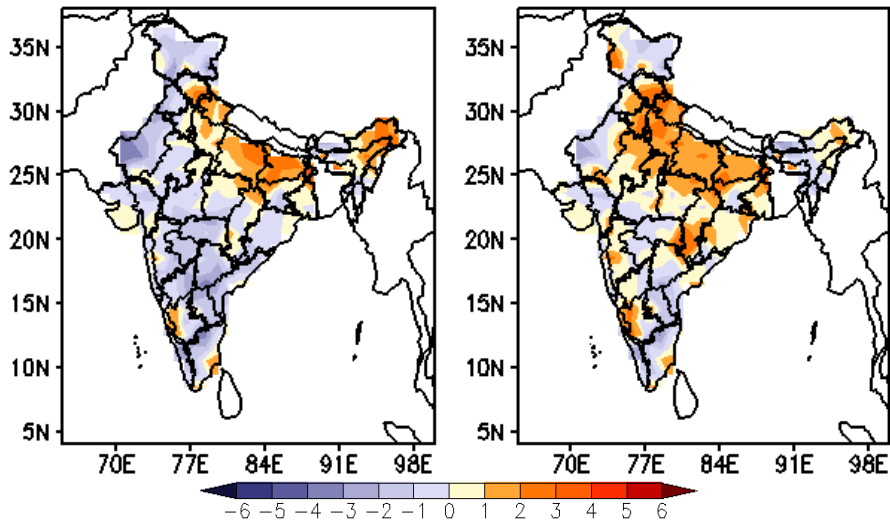
- **Week 1 (19.08.2022 to 25.08.2022):** Rainfall is likely to be mostly normal over central parts of India and below normal over West Uttar Pradesh.
- **Week 2 (26.08.2022 to 01.09.2022):** Rainfall is likely to decrease over northwest India and increase over east Uttar Pradesh, Bihar, Northeast India and south peninsular region.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 17th August)
(19th August to 1st September 2022)**

MME forecast Tmax anomaly (Deg C)

(Week1: 19Aug–25Aug)

(Week2: 26Aug–01Sep)



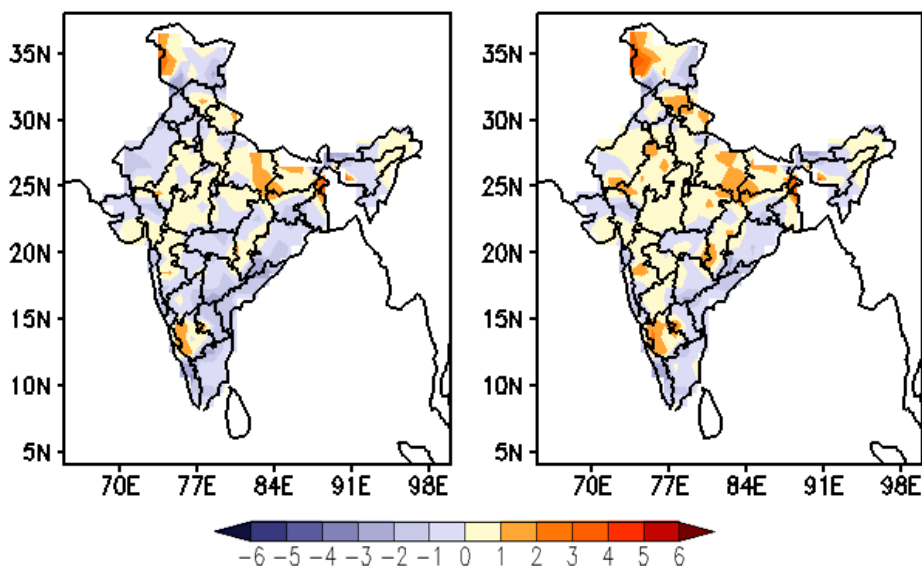
Maximum Temperature (Tmax)

- **Week 1 (19.08.2022 to 25.08.2022) and Week 2 (26.08.2022 to 01.09.2022):** Tmax will be above normal over some parts of Jharkhand, Uttar Pradesh, Bihar, Odisha, Chhattisgarh, North Madhya Pradesh and Rajasthan during the period whereas it will be below normal over central parts of India and northwest India in week 1.

MME forecast Tmin anomaly (Deg C)

(Week1: 19Aug–25Aug)

(Week2: 26Aug–01Sep)



Minimum Temperature (Tmin)

- **Week 1 (19.08.2022 to 25.08.2022):** Tmin will be close to normal over the country.
- **Week 2 (26.08.2022 to 01.09.2022):** Slight increase in Tmin over Indo Gangetic region and central India.

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 275 mm (-50% deficit) and 267 mm (-43% deficit) rainfall observed over West Uttar Pradesh during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is normal over East Uttar Pradesh and below normal over West Uttar Pradesh for week-1 and week-2.

Western Uttar Pradesh

- Foliar spray of 2.5 kg Urea +2.5 kg Potash in standing crop is recommended as a soil nutrient and moisture conservation measure
- Intercultural operations in field crops and use of weeds as mulch are recommended
- Under prevailing weather condition, sowing of late sown pigeon pea varieties like *Bahar*, *Amar*, *Azad*, *Pusa-9* etc. is advised.
- Farmers are also advised for sowing of Black Gram varieties like *Pant U-35*, *Pant U-30*, *Pant Urd-31* *Azad Urd-2*, *Azad Urd-3*, *Sekhar-1*, *Sekhar-2*, *Sekhar-3*, and *Narendra Urd-1* etc. Green Gram varieties like *Pant Moong-3,4*, *Samrat*, *Asha*, *HUM-16*, *MH-2-3*, *K.M.-2241*, *IPM-2-3*, *K.M.-2195* and *IPM-205-7* etc.
- Under prevailing weather condition, farmers are advised to harvest mature fruits of standing vegetable crops like brinjal and chilies.
- Wherever possible, provide lifesaving irrigation to standing crops

Eastern Uttar Pradesh

- As a soil moisture conservation practice, mulching with leaves of sugarcane and maize etc. is recommended.
- Spray of 2% Potash is recommended to alleviate the moisture stress due to deficit rainfall
- Earthing is advised in sugarcane crop, to prevent crop from lodging.
- In view of the possibility of normal rainfall in during week-1, farmers are advised to sow the seeds in nursery for *khari* onion by making beds and the seed rate for planting per hectare will be 12-15 kg per hectare.
- Farmers are also advised for transplanting of chilli, brinjal and cauliflower seedlings from nursery to main field.

Jharkhand

The amount of rainfall received over Jharkhand is 434 mm (-38% deficit) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is normal for week-1 and week-2.

- In fallow upland field, farmers may proceed for sowing of horse gram, niger or different

vegetables during favourable weather.

- Farmers who wish to cultivate horse gram may select improved varieties like *VLG-19*, *Indira kulthi-1* and *Birsa kulthi-1*.
- Also, farmers wishing to cultivate Niger may select improved varieties like *Birsa niger-1*, *Birsa niger- 2*, *Birsa niger-3*, and *Pooja-1*.

Bihar

The amount of rainfall received over Bihar is 391 mm (-42% deficit) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is normal for week-1 and; above normal for week-2.

- Provide lifesaving irrigation to the standing crops, wherever possible
- If there is no rainfall during next one week, try to provide irrigation to rice, which is in booting/panicle initiation stage, as moisture stress at this stage may be counterproductive and yield may decrease drastically
- Under prevailing weather condition, regular monitoring of leaf eating caterpillar (diamondback moth) is advised in early sown cauliflower. If infestation is observed in the field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition.
- Farmers are advised to complete the transplanting of early varieties of cauliflower such as *Kuwari*, *Patna early*, *Pusa katki*, *Pusa deepali* and *Hajipur agaat*.
- Early sowing of *rabi* crops like toria and early maturing cauliflower and other vegetables may be taken up in vacant fields of upland areas.

West Bengal

The amount of rainfall received over Gangetic West Bengal was 529 mm (-34% deficit) and Sub-Himalayan West Bengal was 1333 mm (+1% surplus) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is normal over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal during week-1; normal over Gangetic West Bengal and Sub-Himalayan West Bengal for week-2.

Gangetic West Bengal

- As a moisture conservation strategy, foliar application of 2% urea is recommended in rice and jute
- Prevailing high temperature condition may lead to infestation of thrips in rice nursery. For management, it is advised to apply Fipronil 5SC @ 2ml/litre of water or Thiamethoxam @

0.4g/litre of water.

- Prevailing weather condition is also congenial for fruit and shoot borer infestation. To control, it is advised to spray Emamectin benzoate @ 5gm/litre of water.

Hisar

The amount of rainfall received over Hisar is 319 mm (+5% surplus) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is below normal for week-1 and week-2.

- As hot and humid weather is prevailing during this period, farmers were advised to keep vigil for white fly, jassids and other sucking insect pests. Farmers are also advised to apply the irrigation as per the crop need.
- Under prevailing weather condition, farmers are advised to do sowing of sorghum, maize and lobia as a fodder crop.

Kerala

The amount of rainfall received over Kerala is 1290 mm (-20% deficit) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is normal for week-1 and week-2.

- Banana is prone to rhizome rot due to continuous rainfall. As a preventive measure, mix 20 g of *Pseudomonas* in one litre of water and drench each banana basin with 3 litres of *Pseudomonas* solution.
- There is a chance of foot rot disease in pepper due to high humidity caused by continuous rainfall. As a prophylactic measure, spray 1% Bordeaux mixture. As a precaution 2.5 to 3 g of Copper oxy chloride per one litre of water can be drenched at the basin for 3 to 5 times.

Tamil Nadu

The amount of rainfall received over Tamil Nadu is 295 mm (+72% large excess) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is above normal for week-1 and week-2.

- Prevailing weather condition is favorable for mealy bug incidence in guava. For management it is advised to apply Triazophos 2 ml+ Neem oil 5 ml/1 or Phosalone 35 EC 1.5 ml+ Neem oil 5 ml/1 or release *Cryptolaemus montrouzieri* beetles @ 10/tree.
- 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

691 mm (32% excess) rainfall over Madhya Maharashtra; 574 mm (42% excess) in Marathwada; 2502 mm (+10% surplus) in Konkan region and 946 mm (40% excess) over Vidarbha was recorded

during 1 June - 19 August 2022. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Konkan, Madhya Maharashtra, Vidarbha and Marathwada is normal for week-1 and; week-2, respectively.

Madhya Maharashtra

- Due to cloudy weather condition there may be a chance of infestation of leaf eating caterpillar in *kharif* crops like soybean, sunflower, pigeon pea, pearl millet etc. To control, it is advised to use pheromone traps @ 5/ha and also if required spraying of Profenofos/Chlorpyrifos @ 20 ml per 10 litres of water is advised.
- In areas where soil is affected with white grub and termites, application of phorate granules @ 15 kg per ha is recommended.
- For the control of aphids in green gram, black gram and cowpea, it is advised for spraying of Dimethoate @ 15 ml per 10 litres of water.

Konkan

- For minimizing fruit cracking in arecanut, it is advised to apply 600g micro nutrients (60 g Boron, 300 g Zinc, 60 g Manganese, 120 g Iron and 30g Copper) and also apply fertilizers when the intensity of rainfall is low.
- There is possibility for incidence of fruit fly on fruits of cucurbitaceous crops. For effective control of fruit fly it is advised to install cue lure 'Rakshak' trap @ 2 nos. per acre.

Vidarbha

- In waterlogged areas drain out any excess water from standing crop, vegetable and orchards field immediately.
- To manage the initial incidence of pink boll worm in earlier sown cotton, it is advised to spray 5% NSKE OR biopesticide *Metarhizium anisopliae* powder @ 50 g per 10 litres of water or install 4 to 5 pheromone traps/ha.

Marathwada

- For management of fall armyworm in fodder maize crop it is advised to remove infected plant parts and destroy them properly and spray 5% NSKE during clear weather condition.

Jammu

464 mm of rainfall (18% excess) was received over Jammu during 1 June - 19 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Jammu is normal for week-1 and below normal for week-2.

- Under prevailing weather conditions, farmers may go for intercultural operations (thinning, weeding and hoeing) at vattar condition (optimum moisture condition) keeping in view the moisture status of fields.

Assam

The amount of rainfall received over Assam during 1 June - 19 August 2022 was 1278 mm (normal rainfall). The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Assam is normal for week-1 and week-2.

- On account of favorable weather condition, farmers can go for sowing of green gram with recommended varieties like *Pratap*, *Sonai* and *SGC 16*.
- Weeding followed by application of fertilizer @ 4 kg Urea and 6 kg SSP in three months old turmeric crop may be advocated.

Karnataka

Rainfall received during 1 June - 19 August 2022 over South Interior Karnataka was 710 mm (+50% excess) and 417 mm (+42% excess) over North Interior Karnataka and 2640 mm (+4% surplus) over Coastal Karnataka. The extended range weather forecast (rainfall) for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) is normal over South Interior Karnataka, North Interior Karnataka and below normal over Coastal Karnataka for week-1 and; above normal over South Interior Karnataka and North Interior Karnataka and normal over Coastal Karnataka during week-2.

South Interior Karnataka

- Under prevailing weather condition, it is advised to take up land preparation and strengthen the bund with fodder grass which will facilitate conservation of rainwater due to pre-monsoon showers. Ploughing across the slope will make *insitu* soil moisture conservation.
- In long-duration field crops like pigeon pea and castor, earthing up is advised for better availability of soil moisture to the crop rows.

Punjab

The amount of rainfall received over Punjab was 305 mm (-4% deficit) during 1 June - 04 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Punjab is above normal for week-1 and below normal for week-2.

- As above rainfall is forecasted during first week, farmers are advised to avoid spraying any pesticides and drain out the excess rain water from sensitive crops like maize, cotton, vegetables, orchards, etc.
- 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 506 mm (-5% deficit) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Himachal Pradesh is normal for week-1 and; below normal for week-2.

- Weather conditions are favorable for the development of stalk rot in maize. For preventing this disease excess water from the fields should be drained off. Also, drenched the field with bleaching powder @ 16.5 kg / ha (650 g / kanal).

The farmers are advised to visit their polyhouses regularly and monitor the crops raised in them. For maintaining the optimum temperature in the polyhouses they should open the side vents during day time.

- In low hill of the state, it is the best time for sowing of root vegetables viz., radish (*Japanese White & Chinese Pink*), turnip, carrot (*Nantes, Pusa Kesar* and *Pusa Yamdagni*) and spinach (*Pusa Harit, All Green, Pusa Bharti* and *Benerjee Giant*).
- 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 411 mm (+10% excess) and over Rayalaseema was 292 mm (+31% excess) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Coastal Andhra Pradesh and Rayalaseema is normal for week-1 and; normal over Coastal Andhra Pradesh and above normal over Rayalaseema for week-2.

- The prevailing weather conditions in Ananthapuramu, Kurnool, Sri sathyasai, YSR Kadapa districts, are favourable for leaf miner incidence in groundnut crop. For control of leaf miner farmers are advised to spray Monocrotophos @ 1.6 ml or Chlorpyrifos @ 2.5 ml per litre of water.
- In Ananthapuramu, Kurnool, Kadapa, Chittoor and Prakasam districts, farmers are advised to select the redgram varieties like *LRG-41, LRG-52, PRG-176, ICPL 85063* and *ICPL 87119*. The optimum sowing time for redgram is June to August.

Chhattisgarh

The amount of rainfall received over Chhattisgarh was 930 mm (+17% surplus) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Chhattisgarh is normal for week-1 and week-2.

- In ginger and turmeric crops regular earthing up and second mulching is advised.
- For management of girdle beetle in soybean crop, it is advised to spray the crop with Thiocloprid 21.7 SC @ 650 ml/ha or Pronephros 50 EC @ 1.25 litre/ha.

Odisha

The amount of rainfall received over Odisha was 866 mm (10% excess) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25

August 2022 and 26 August - 01 September 2022) over Odisha is normal for week-1 and week-2.

- Under present weather condition, there are chances of sucking pest like aphids, jassids, thrips and whiteflies in okra crop. To manage these pests at early stage of infestation it is advised to spray neem-based pesticide (Neem Oil 1500 ppm @ 600 ml/acre by mixing it in 200 litres of water).
- During rainy season, it is advised to drain out the excess water from jute field as it affects the quality of fibre.

Gujarat

The amount of rainfall received over Gujarat was 907 mm (33% excess) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Gujarat is above normal for week-1 and normal for week-2.

- To prevent leaf spot disease infestation in groundnut crop, it is advised to spray Tebuconazole 18.3 % SC @ 10 ml in 10 litres of water as precautionary measure.
- Keep animal in shed during rainfall hours and spray Deltamethrin or Amitraz @ 2 ml/litre of water for the control of tick.

Madhya Pradesh

The amount of rainfall received over East Madhya Pradesh was 728 mm (normal rainfall) during 1 June - 19 August 2022. The extended range weather forecast (rainfall) provided for the next two weeks (19 - 25 August 2022 and 26 August - 01 September 2022) over Madhya Pradesh is normal for week-1 and week-2.

- Farmers are advised to follow cultural practices like weeding and inter-cultural operations both in late sown rice and vegetable crops.

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