



National Agromet Advisory Services Bulletin

Date of issue: 23 September 2022

based on

Extended Range Weather Forecast (ERFS)

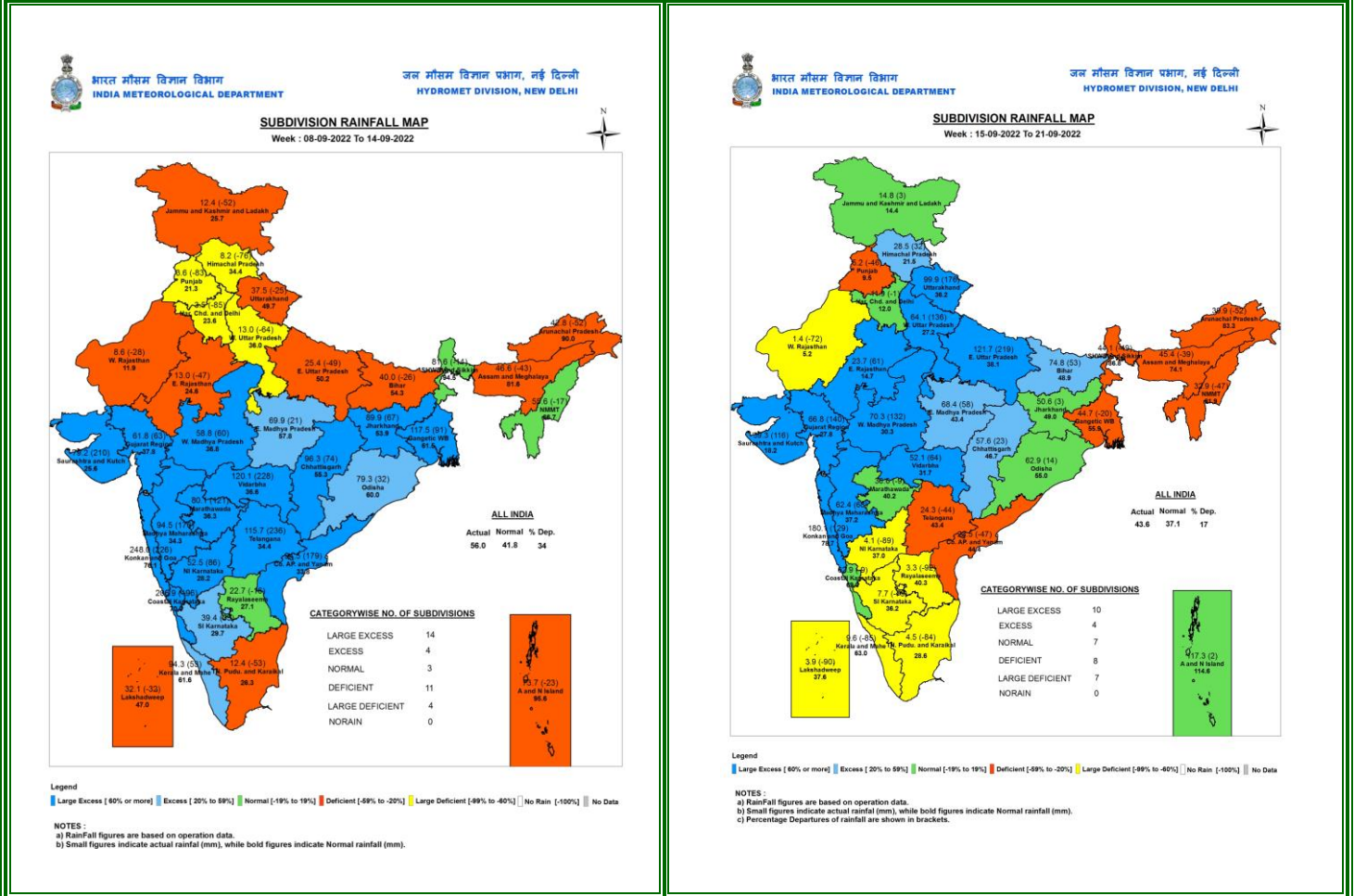
Validity: 23 September - 06 October 2022

Issued by

**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)

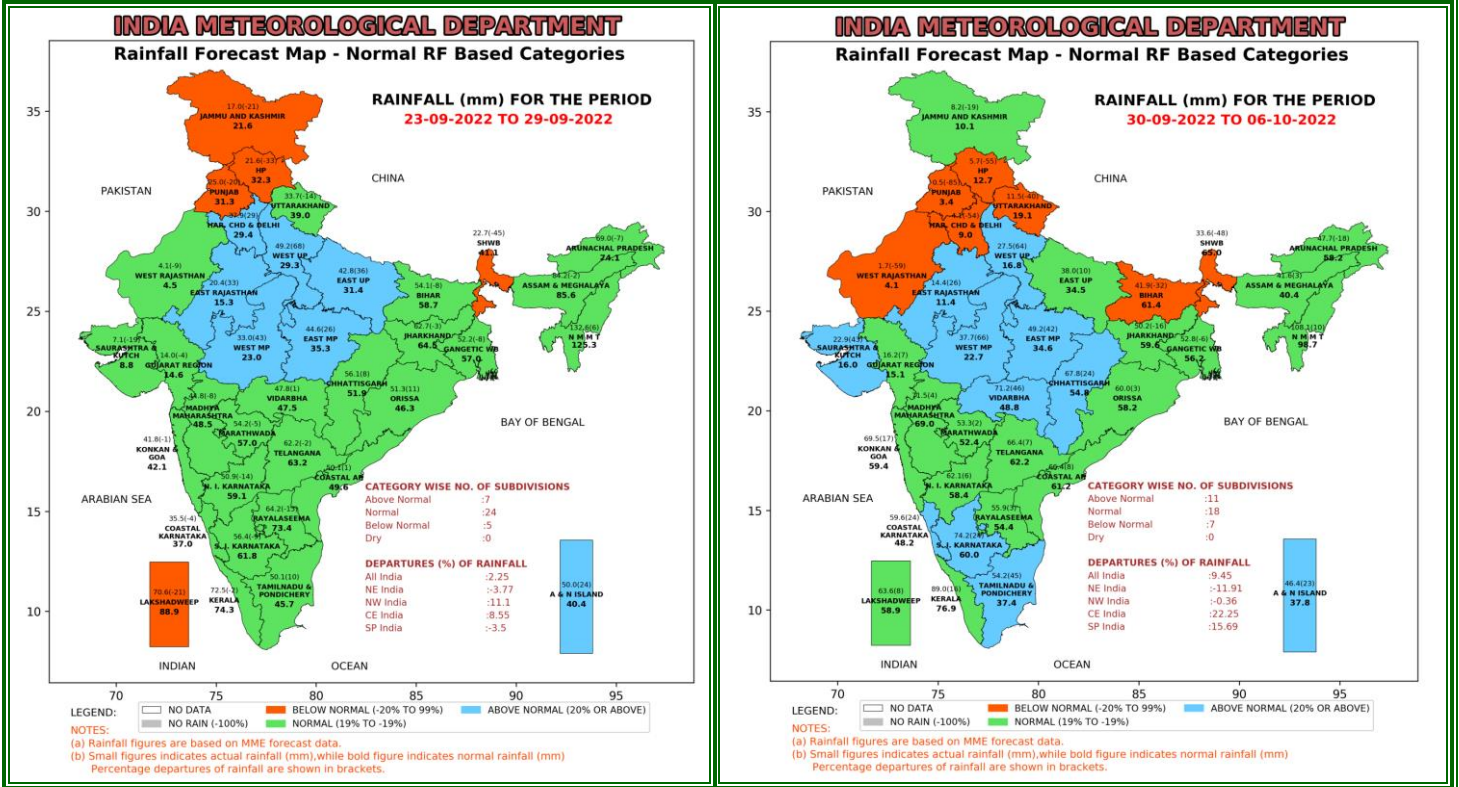
Realized Rainfall (8th to 21st September, 2022)



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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 21st September) (23rd September to 06th October 2022)



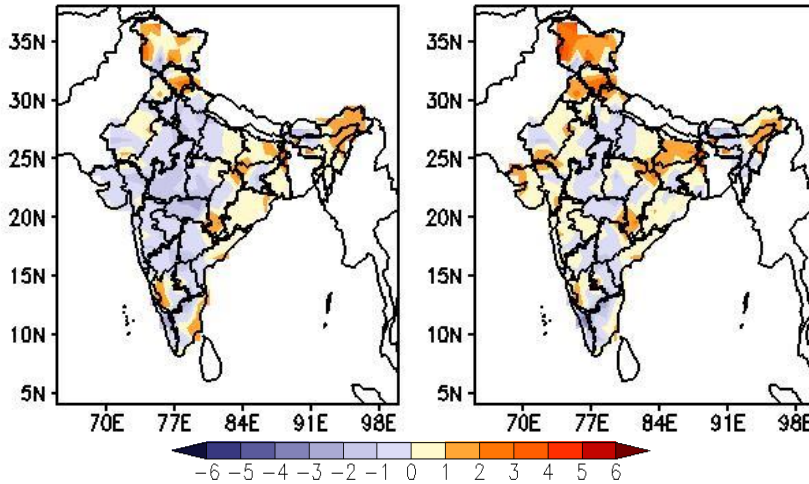
- **Week 1 (23.09.2022 to 29.09.2022):** Rainfall is likely to be normal to slightly above normal over parts of north India and adjoining central India.
- **Week 2 (30.09.2022 to 06.10.2022):** Rainfall is likely to increase over central India.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC- 21st September)
(23rd September to 06th October 2022)**

MME forecast Tmax anomaly (Deg C)

(Week1: 23Sep-29Sep)

(Week2: 30Sep-06Oct)



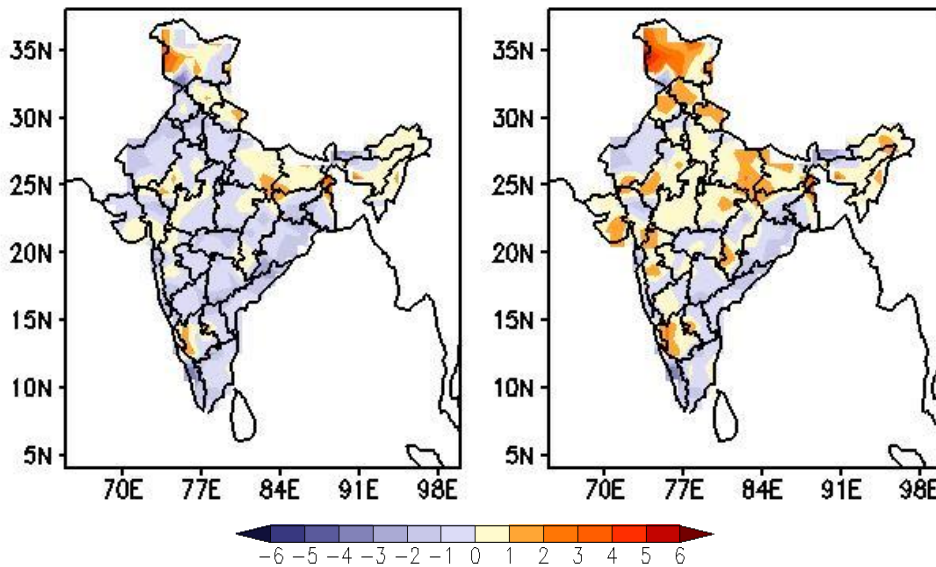
Maximum Temperature (Tmax)

- **Week 1 (23.09.2022 to 29.09.2022) and Week 2 (30.09.2022 to 06.10.2022):** Tmax will be above normal over some parts of north India, northwest India and east coastal region.

MME forecast Tmin anomaly (Deg C)

(Week1: 23Sep-29Sep)

(Week2: 30Sep-06Oct)



Minimum Temperature (Tmin)

- **Week 1 (23.09.2022 to 29.09.2022) and Week 2 (30.09.2022 to 06.10.2022):** Tmin will be above normal over eastern, central and northern parts of India.

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 524 mm (-32% deficit) and over West Uttar Pradesh was 429 mm (-35% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) is above normal over East Uttar Pradesh and West Uttar Pradesh for week-1; above normal over West Uttar Pradesh and normal over East Uttar Pradesh for week-2.

Western Uttar Pradesh

- 143.4 mm rainfall occurred during last week against 32.0 mm normal rainfall. Therefore, farmers are advised to drain out excess rain water in all vegetables, pulse, oilseed, maize and nurseries of the vegetable's crops.
- Under prevailing rainy weather condition, farmers are advised to skip irrigation and spraying of insecticide in pearl millet.
- For the control of shoot borer or leaf roller in crops, it is advised to apply 2% dust of Phenthoate @ 25 to 30 kg/ha or Chlorantraniliprole 18.5% SC @ 150 ml/ha with 500 to 600 litres of water during clear day.

Eastern Uttar Pradesh

- Due to prevailing rainy condition and possibility of rainfall in the next week, farmers are advised to withhold irrigation in all the crops.
- If farmers have already given irrigation to crops, then under optimum moisture condition, they are advised for topdressing of fertilizer application at topdressing.
- In view of the high humidity and the possibility of rain in next two weeks, the farmers are advised to keep the animal sheds clean, sprinkle lime outside the animal shelter to prevent infection from outside.

Jharkhand

The amount of rainfall received over Jharkhand is 780 mm (-20% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) is normal for week-1 and week-2.

- Farmers wish to cultivate French bean, may select one of the improved varieties like *Swarn Priya*, *Pant*, *Anupama*, *Arka Komal*, *Stingless* (Bushy variety) and *Kentki Wonder*, *Birsa Priya*, *Swarn Lata* etc. (creeper variety).
- Under assured irrigation facility, farmers are advised to cultivate potato with recommended varieties like *Kufri Ashoka*, *Kufri Pukhraj*, *Kufri Chandramukhi* etc.

Bihar

The amount of rainfall received over Bihar is 653 mm (-30% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September

2022 and 30 September - 06 October - 2022) is normal for week-1 and below normal for week-2.

- With the receipt of light to medium rainfall in this week across many areas over Bihar, sowing of vegetables like brinjal, cauliflower, radish etc. is advised.
- Nursery sowing of early varieties of cabbage is advised. *Pride of India*, *Golden Acre*, *Pusa mukta*, *Pusa agate* and *early drum head* varieties of cabbage are recommended for sowing under North Bihar agro-climatic condition.

West Bengal

The amount of rainfall received over Gangetic West Bengal was 849 mm (-22 deficit) and Sub Himalayan West Bengal was 1755 mm (-2% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) is normal over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal during week-1 and week-2.

- Due to forecast of normal rainfall in coming next two weeks, it is advised to harvest matured rice cultivars as early as possible.
- To control chili leaf curl, it is advised to spray Imidacloprid @ 0.2ml/litre of water at the evening hour.

Kerala

The amount of rainfall received over Kerala is 1731 mm (-11% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) is normal for week-1 and week-2.

- 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 Oxychloride @ 3g per litres of water is advised.
- September to December is the suitable time to cultivate cucurbitaceous vegetables like bitter gourd, snake gourd, cucumber, pumpkin, ash gourd etc. Farmers are advised to go for land preparation and collect the quality of seeds of cucurbitaceous vegetables.

Tamil Nadu

The amount of rainfall received over Tamil Nadu is 461 mm (+58% excess) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) is normal for week-1 and above normal for week-2.

- Irrigation may be skipped since there is a normal/moderate rainfall forecast for the next two weeks.
- 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

929 mm (32% excess) rainfall over Madhya Maharashtra; 764 mm (26% excess) in Marathwada; 3098 mm (+11% surplus) in Konkan region and 1211 mm (33% excess) over Vidarbha was recorded during 1 June - 22 September 2022. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) is normal over Madhya Maharashtra, Vidarbha, Marathwada and Konkan for week-1 and; normal over Konkan, Madhya Maharashtra and Marathwada and above normal over Vidarbha for week-2, respectively.

Madhya Maharashtra

- Due to cloudy weather condition, there may be a chance of leaf eating caterpillar infestation 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.
- For the management of aphids, jassids and mites during early stages of crop growth dusting of Quinalphos 1.5% @10 kg/ha is recommended.

Vidarbha

- Due to rainy/cloudy weather condition, incidence of phytophthora blight observed in pigeon pea. To control, spraying of Fosetyl AL 80% WP @ 25 g per 10 litres of water is advised.
- For *rabi* season cultivation, undertake nursery sowing of tomato, brinjal, cabbage, cauliflower and sowing of spinach, fenugreek, radish, and carrot, dolichols bean and ivy gourd.

Marathwada

- For management of fruit drop and to improve fruit size it is advised to spray Gibberellic acid @ 1 g per 100 litres of water during clear weather condition.
- As per forecast of normal rainfall during next two weeks, it is advised to remove excess amount of stagnated water in cotton crop by proper drainage precaution should be taken that the field may be in wapsa condition and also postponed spraying operations.

Konkan

- Due to cloudy weather condition, there is possibility of incidence of blast disease on rice crop. If incidence is noticed, it is advised to spray Coper oxychloride @ 25 g per 10 litres of water during clear weather (no rainfall).

Odisha

The amount of rainfall received over Odisha was 1159 mm (+5% excess) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Odisha is normal for week-1 and week-2.

- Due to light to heavy rain/thundershower at different districts of Odisha, farmers are advised to make provision for draining out excess water in standing rice crop by keeping drain ends open and withhold application of fertilizer and pesticide until rain water recedes.
- Rainfall after a dry spell may aggravate infestation of fall army worm in maize. For control

the it is advised to spray biopesticide *Beauveria bassiana* @ 1200 g/acre by mixing in 200-litres of water.

Gujarat

The amount of rainfall received over Gujarat was 1100 mm (23% excess) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Gujarat is normal for week-1 and week-2.

- Under prevailing weather condition, thrips and jassids infestations may occur in cotton. In case of infestation, it is advised to spray Acephate 50% + Imidacloprid 1.8% SP @ 10 ml/10 litres of water.

Jammu

557 mm of rainfall (6% excess) was received over Jammu during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Jammu is below normal for week-1 and normal for week-2.

- Prevailing weather is congenial for hairy caterpillar infestation in *kharif* pulses. Farmers are advised to kill young larvae in gregarious phase. If population is high, spray Quinalphos @ 0.03% or Dichlorvos @ 0.05% during clear weather.
- Under prevailing weather condition, it is advised to sow direct sown vegetables like methi, spinach beet, coriander, radish, carrot, beet root and spinach within first fortnight of September for good germination and crop stand.

Assam

The amount of rainfall received over Assam during 1 June - 22 September 2022 was 1558 mm (-7% deficit). The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Assam is normal for week-1 and week-2.

- Due to heavy rainfall at some places of Assam, farmers of that region are advised to repair the bunds in the paddy fields to conserve rain water and maintain standing water of 5±2 cm depth.
- Under prevailing weather condition, farmers are advised for sowing of mid-season varieties of Broccoli like *Green Sprouting Medium*, *Corsair*, *Cruiser*, *Emerald*, *Corona* etc. can be continued for seedling raising.

Karnataka

Rainfall received during 1 June - 22 September 2022 over South Interior Karnataka was 1005 mm (+59% excess) and 619 mm (+41% excess) over North Interior Karnataka and 3218 mm (+6% surplus) over Coastal Karnataka. The extended range weather forecast (rainfall) for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) is normal over North

Interior Karnataka, South Interior Karnataka and Coastal Karnataka for week-1 and; normal over North Interior Karnataka and above normal over Coastal Karnataka and South Interior Karnataka during week-2.

South Interior Karnataka

- To control of leaf folder infestation in red gram, it is advised to spray Methomyl 40 SP @ 2 g/litre of water before flowering of crop.
- Under prevailing weather following crops with recommended varieties are advised:

Finger millet: (var. *Indaf-5,7,9, ML-365, KMR-301*), horse gram: (var. *PHG-9, KBH-1, Niger*), field bean (var. *HA-3 and 4*) and sunflower: (*KBSH-1,41,42, 44 and 53*), cowpea (*KBC-1, TVX-944 and PKB-4* for vegetable purpose), Maize: (var. *Ganga-11, Deccan -103*), Vijaya composite, Composite *NAC- 6004, 6002*, Hybrid-*Nityashree (NAH-2049)*, Hybrid *Hema (NAH-1137)*.

North Interior Karnataka

- Cloudy condition with moderate rainfall is expected during the next two weeks. Taking advantage of the situation, sowing of following *kharif* crops may be completed immediately.
- In medium black to deep black soils, sowing of Bajra, Pigeonpea, Groundnut, Chilli, Castor, Setaria (Navane), Sesamum, Groundnut + Pigeonpea (4:2), Bajra + Groundnut (2:4), Bajra + Pigeonpea (2:1), may be taken up.
- In shallow and red soils sowing of Bajra, Pigeonpea, Groundnut, Castor, Sesamum, Niger, Setaria (Navane), Horse gram, Bajra + Groundnut (2:4), Bajra + Pigeon pea (2:1), Bajra + Castor (2:1), Groundnut + Pigeon pea (4:2) may be taken up. Use short duration varieties of pigeon pea for sowing. Use wilt resistant variety TS-3R.
- To induce drought resistance in crops, it is advised to follow special cultivation practices as suggested below before sowing.
- Bajra: Soak the seeds in water for 10 hrs and dry under shade and then go for recommended seed treatment. Take up sowing in wider row spacing up to 135 cm.
- Pigeon pea: Soak seeds in CaCl₂ solution (2%) for 1 hour and dry under shade for 7 hours and then go for recommended seed treatment.
- Niger: Soak the seeds in water for 6 hours and dry under shade and then go for recommended seed treatment.

Punjab

The amount of rainfall received over Punjab was 336 mm (-20% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Punjab is below normal for week-1 and week-2.

- Due to deficit rainfall condition in coming next two weeks, farmers are advised to irrigate vegetable crops at weekly intervals.

- To manage fall armyworm in maize crop, it is advised to spray the crop with Coragen 18.5 SC @ 0.4 ml per litre of water.

Himachal Pradesh

The amount of rainfall received over Himachal Pradesh was 652 mm (-8% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Himachal Pradesh is below normal for week-1 and; week-2.

- Because of reduced rainfall in the major paddy growing areas of the state, adequate bunding is advised to ensure standing water in the paddy fields. Bunds should be higher and wider so that more rain water can be collected and retained in the fields.
- Under prevailing weather conditions, sowing of root vegetables like radish (*Japanese White, Chinese Pink, Miro Early*), Turnip (*PTWG*), Carrot (*Nantes, Chanteney, Pusa Yamdagni*) and leafy vegetable like Spinach (*Pusa Harit, Pusa Bharti*) and Fenugreek (*IC-74, Palam Soumava, Pusa Kasuri*) is advised.

Andhra Pradesh

The amount of rainfall received over Coastal Andhra Pradesh was 603 mm (8% excess) and over Rayalaseema was 441 mm (+19% excess) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Coastal Andhra Pradesh and Rayalaseema is normal for week-1 and week-2.

- The present weather conditions are favourable for incidence of pink boll worm in cotton grown in Srikakulam, Prakasam, Guntur, Krishna, Ananthapuram, YSR Kadapa, and Kurnool districts. To control the pink boll worm, spraying of Profenofos @ 2 ml or Thiodicarb 1.5g/ litre of water is recommended.
- In Ananthapuramu, Kurnool and Nandyal districts, prevailing weather conditions are favourable for incidence of semi looper and spodoptera in castor. Farmers are advised to spray Flubendiamide @0.2ml/litre or Profenofos @ 1ml/litre of water.

Chhattisgarh

The amount of rainfall received over Chhattisgarh was 1233 mm (+12% surplus) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Chhattisgarh is normal for week-1 and above normal for week-2.

- Looking into the forecast of light to moderate rainfall in coming days farmers are advised to drain excess water.
- Under prevailing weather condition, winter vegetables like cauliflower, cabbage and *knolkhol* early varieties are advised for nursery sowing.

Madhya Pradesh

The amount of rainfall received over East Madhya Pradesh was 1121 mm (+10% surplus) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Madhya Pradesh is above normal for week-1 and week-2.

- Under humid and heavy rainfall conditions, citrus canker may occur in the citrus tree. For management, the affected leaves and twigs are destroyed by breaking, after that, spray of solution @ 180 g of Copper oxychloride and @ 6 g of Streptocycline in 60 litres of water is advised.

Haryana

The amount of rainfall received over Haryana was 356 mm (-16% deficit) during 1 June - 22 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (23 - 29 September 2022 and 30 September - 06 October - 2022) over Haryana is above normal for week-1 and below normal for week-2.

- The existing variable weather condition may favour the infestation of sucking pest, farmers were advised to keep vigil on white fly infestation (under late sown crop). If infestation of white fly above the economical threshold level (ETL) then spray 1 liter Nimbecidin mixed with 250 litres water per acre, when sky remain clear.

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