



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन National Agromet Advisory Services Bulletin

जारी करने की तिथि / Date of issue: 25 September 2023

आधारित / based on

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

वैधता / Validity: 22 September - 05 October 2023

जारीकर्ता / Issued by

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

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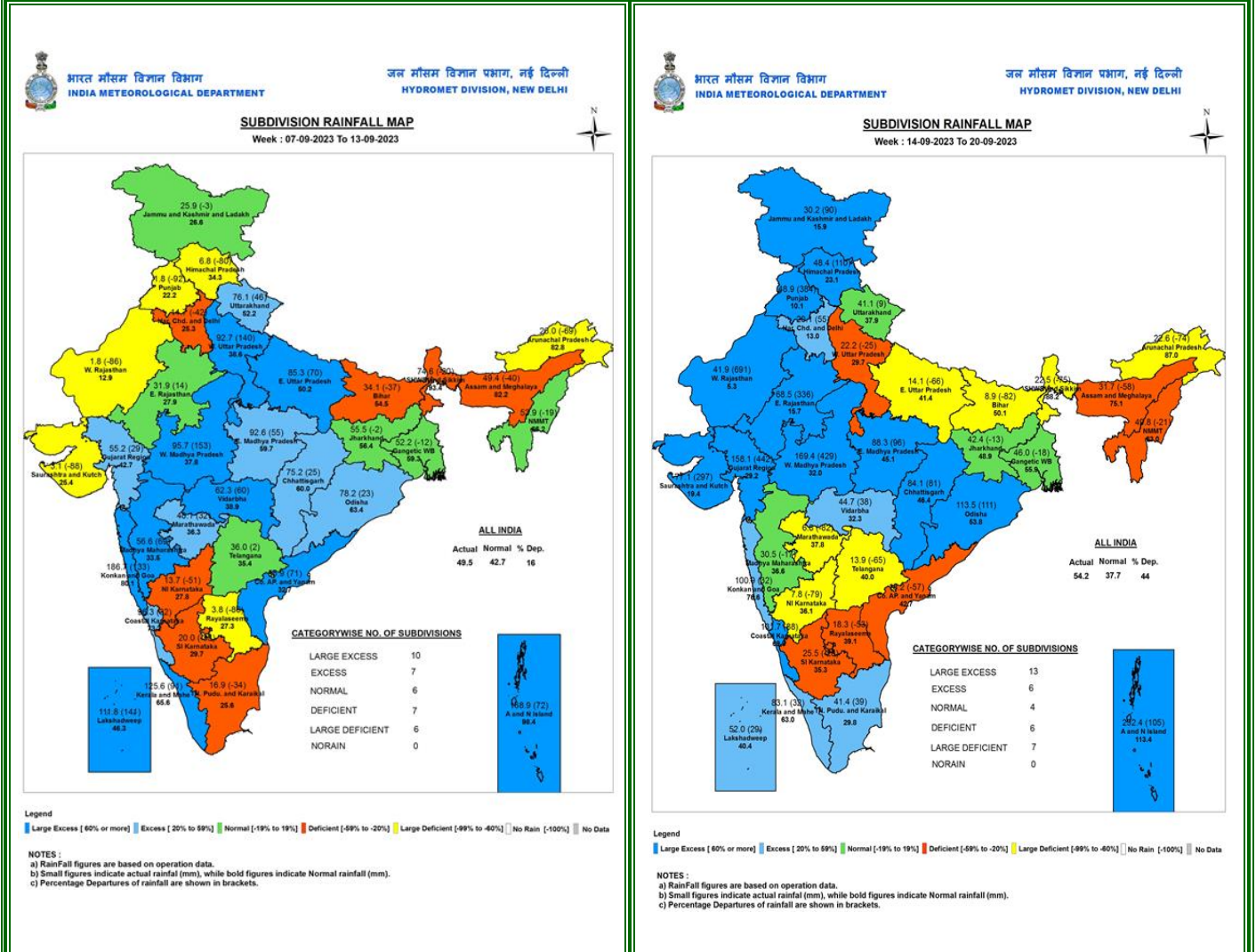
पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Realized Rainfall and Extended Range Forecast

Realized Rainfall

(7th to 20th September, 2023)

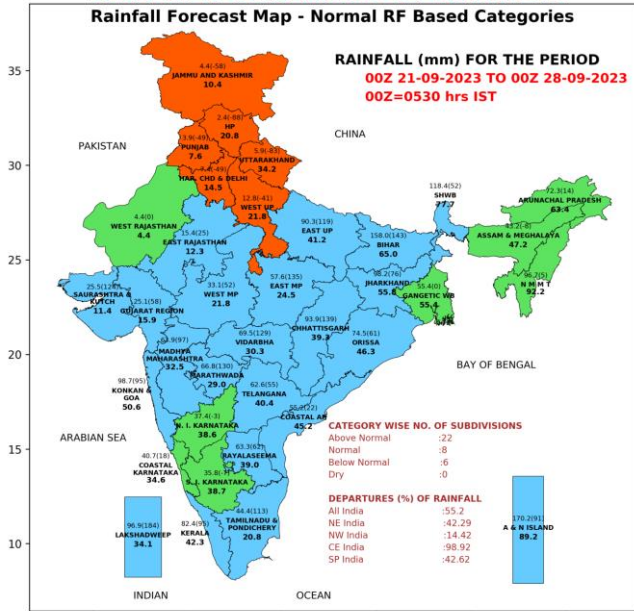


- Normal or above normal rainfall occurred in both the weeks over Jammu & Kashmir and Ladakh (UTs), Uttarakhand, East Rajasthan, Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand, Gangetic West Bengal, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Vidarbha, Coastal Karnataka, Kerala & Mahe, Lakshadweep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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 20th September) (22nd September to 05th October, 2023)

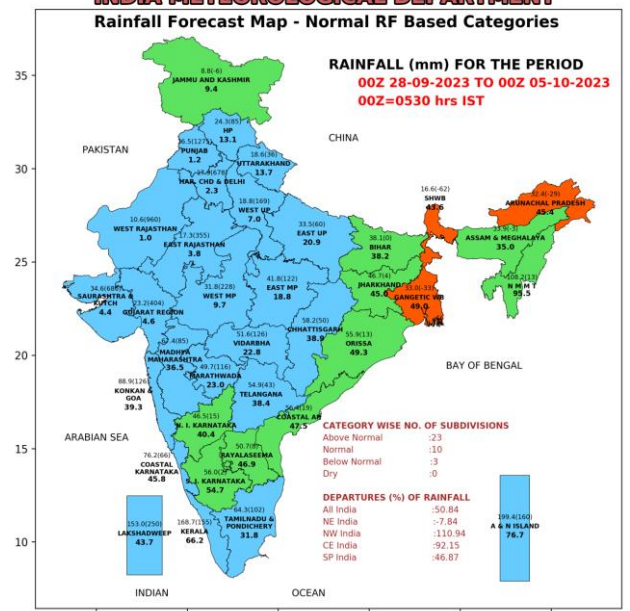
INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



LEGEND: NO DATA BELOW NORMAL (-20% TO 99%) ABOVE NORMAL (20% OR ABOVE)
 NO RAIN (-100%) NORMAL (19% TO -19%)

NOTES:
 (a) Rainfall figures are based on MME forecast data.
 (b) Small figures indicates actual rainfall (mm), while bold figure indicates normal rainfall (mm)
 Percentage departures of rainfall are shown in brackets.

INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



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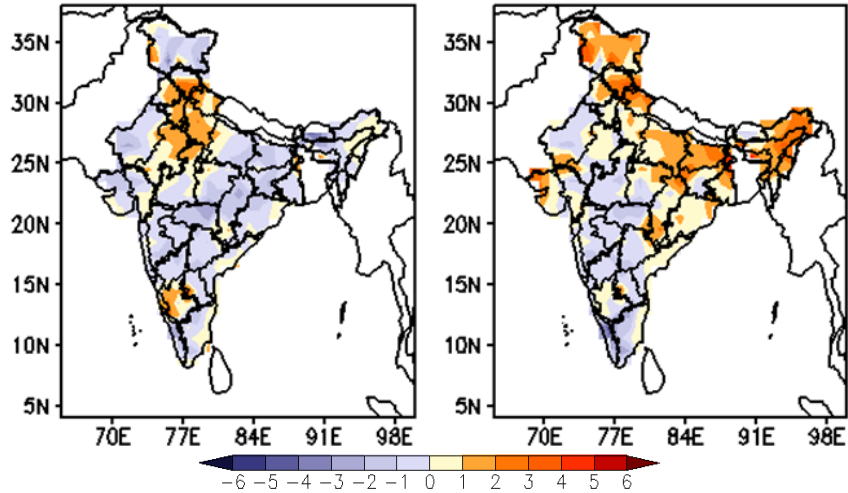
- **Week 1 (22.09.2023 to 28.09.2023):** Rainfall is likely to be normal to above normal over most parts of the country except North India.
- **Week 2 (29.09.2023 to 05.10.2023):** Rainfall is likely to be normal to above normal over most parts of the country.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 20th September)
(22nd September to 05th October, 2023)**

MME forecast Tmax anomaly (Deg C)

(Week1: 22Sep–28Sep)

(Week2: 29Sep–05Oct)



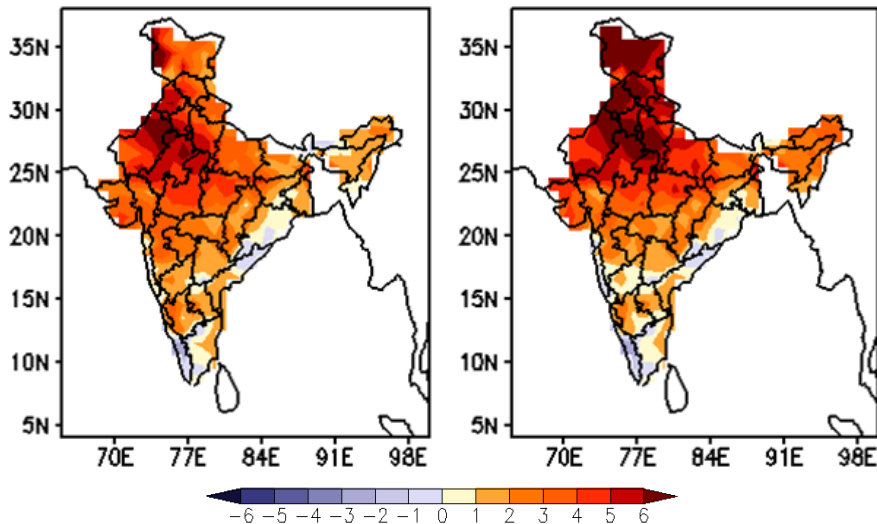
Maximum Temperature (Tmax)

- **Week 1 (22.09.2023 to 28.09.2023):** Tmax is likely to be above normal over parts of North West India and some parts of Karnataka.
- **Week 2 (29.09.2023 to 05.10.2023):** Tmax is likely to be above normal over most parts of North West India and parts of East & North East India.

MME forecast Tmin anomaly (Deg C)

(Week1: 22Sep–28Sep)

(Week2: 29Sep–05Oct)



Minimum Temperature (Tmin)

- **Week 1 (22.09.2023 to 28.09.2023) and Week 2 (29.09.2023 to 05.10.2023):** Tmin is likely to be above normal over most parts of the country.

Strategic Agricultural Planning based on rainfall till 05 October 2023

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 561 mm (-27% deficit) and over West Uttar Pradesh was 660 mm (5% excess) during 01 June - 22 September 2023. The extended range weather forecast (rainfall) for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) is below normal over West Uttar Pradesh and above normal over East Uttar Pradesh for week-1 and; above normal over West Uttar Pradesh and East Uttar Pradesh for week-2.

Western Uttar Pradesh

- Due to light to moderate rainfall in past week, farmers are advised not to irrigate the *khari* crops and drain out excess water from the crop fields.
- For the management of stem borer in maize crop which is at milk/dough stage, it is advised to spray Dimethoate 30 % EC @ 1ml/liter of water (660ml/ha) or Emamectin benzoate 5 % SG @ 0.4g/liter water (200g/ha) in clear sky.
- Farmers are advised for top dressing of remaining dose of Urea in rice crop which is at panicle initiation /flowering stage under proper moisture condition in the field.

Eastern Uttar Pradesh

- Withhold irrigation considering the above normal rainfall forecast in this week. Farmers are advised to drain out excess water from the field and crop protect from birds.
- Under prevailing weather condition, there may be attack by hairy caterpillar in soybean, till and black gram crops. To manage, it is advised to spray of Flubendiamide 20 % WG @ 0.5gram/litre water or Indoxacarb 15.80 % EC@0.5 ml/liter water.

Uttarakhand

1200 mm (6% excess) rainfall was received over Uttarakhand during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Uttarakhand is below normal for week-1 and; above normal for week-2.

- Propping is advised in barnyard millet which is at grain filling/physiological maturity stage to avoid crop lodging and harvest mature barnyard millet crops.
- Land preparation is advised for sowing of garlic at mid to high hill regions.
- Land preparation is also advised in lower hills for the sowing of potato.

Himachal Pradesh

874 mm (23% excess) rainfall was received over Himachal Pradesh during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Himachal Pradesh is below normal for week-1 and above normal for week-2.

- In low hills of the state, transplanting of mid – season cauliflower varieties (*Palam Uphar*, *Improved Japanese* and *F1 Megha*) is advised.

- In mid hills of the state sowing of early season pea varieties is advised. The varieties recommended are *Palam Triloki, Arkel, VL-7 and Matar Ageta*.
- Under prevailing weather condition, farmers are advised to make bund in major paddy growing areas of the state to ensure standing water.

Punjab

404 mm (-3% deficit) rainfall was received over Punjab during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Punjab is below normal for week-1 and; above normal for week-2.

- Farmers are advised to prevent the cotton crop from water stress during the flowering and fruiting phases to avoid significant flower and boll shedding, ultimately leading to lower yields. To accelerate boll opening, consider providing the final irrigation by the end of September.
- To manage rodent pests in rice crop, cover all the holes during evening and next day place 10 gm bait of Zinc phosphide inside these fresh holes at 6 inches depth. To get better results adopt this practice in whole village at same time.
- It is the optimum time for planting of evergreen pants such as citrus, guava, mango, litchi, sapota, jamun, bael, amla etc.

Rajasthan

601 mm (-2% deficit) rainfall was received over East Rajasthan during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over East Rajasthan is above normal for week-1 and week-2.

- Keeping in the view of the rainfall forecast in next two weeks, farmers are advised to do proper arrangement for storing rain water at one portion in the field so that this water can be used for irrigation in the crops at suitable time like during dry spell.
- Nursery raising of cabbage and cauliflower is advised.

Jammu

563 mm (7% excess) rainfall was received over Jammu during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Jammu is below normal for week-1 and; normal for week-2.

- Farmers are advised to sow direct sown vegetables like methi, spinach beet, coriander, radish, carrot, beetroot, and spinach within the first fortnight of September for good germination and crop stand.
- Due to forecast of below normal rainfall during next week, farmers are advised to give irrigation as per requirement of crop.

Assam

1373 mm (-18% deficit) rainfall was received over Assam during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Assam is normal for week-1 and week 2.

- As light to moderate rainfall is forecasted during week-1 and 2, farmers are advised to repair the bunds in the paddy fields to conserve rain water and maintain standing water of 5 ± 2 cm depth in the rice field.
- It is also advised to postpone top-dressing of urea fertilizer in standing rice crop due to light to moderate rainfall forecast during next week.
- As rainfall is forecasted in most of the districts of Assam during this week, farmers may postpone the land preparation for sowing of maize. As soon as rainfall recedes, farmers may go for final land preparation followed by sowing of seeds. The optimum sowing window is from mid-September to mid-October.
- Due continuous rainfall and water stagnation may lead to red rot in sugarcane crop. To avoid this, it is advised to drain out excess water, rogue affected plants and remove old and dry leaves from the cane.

Bihar

648 mm (-30% deficit) rainfall was received over Bihar during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Bihar is above normal for week-1 and normal for week 2.

- Regular monitoring of brown plant hopper (BPH) in paddy (vegetative to flowering stage) is advised. To protect the crop, spraying of Fenobucarb (BPMC) 50 % EC@1.5ml per litre of water or Triflumezopyrim 20% w/w WG @2.5gram/10 litre water is advised.
- Transplanting of mid duration varieties of cauliflower such as *Pusa aghani*, *Pusi*, *Patna men*, *Pusa synthetic-1*, *Pusa shubhra*, *Pusa sarad*, *Pusa medhna*, *Kaasi kuwari*, and *early snowball* is advised for those farmers whose seedlings are ready.

Chhattisgarh

977 mm (-11% deficit) rainfall was received over Chhattisgarh during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Chhattisgarh is above normal for week-1 and; week-2.

- Considering the above normal rainfall forecast in coming days, farmers are advised to drain out excess water from the fields.
- Due to the possibility above normal rainfall, the farmers are advised that to go for spray of insecticide on during clear weather condition.

Odisha

1068 mm (-3% deficit) rainfall received over Odisha during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Odisha is above normal for week-1 and; normal for week-2.

- Banana farmers are advised to drain out the excess water from the field and earthing up the newly planted banana. After rain apply the recommended dose of fertilizer
- Due to forecast of above normal rainfall, farmers are advised to wait for clear weather and remove excess water from field, before applying any fertilizer in the field.
- After rainfall there are chances of wilt disease in brinjal and chilli crop. To manage, it is advised that first uproot affected plants and destroy it away from the field. Drench the root zone of the plant with 200 ml of Tebuconazole mixed with 20 g of Streptocycline per acre. Use 200 litre of water per acre for spraying.

Gujarat

877 mm (-2% deficit) rainfall received over Gujarat during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) over Gujarat is above normal for week-1 and week-2.

- Due to prevailing rainy weather condition, farmers are advised to remove excess rain water from the transplanted bidi tobacco field.
- Keep the animals indoors during rainy conditions. Keep fodder at a safe place to avoid spoilage from rainfall. Spray phenyl in the animal shed to avoid flies and mosquitoes.

Maharashtra

557 mm (-20% deficit) rainfall over Madhya Maharashtra; 837 mm (-8% deficit) rainfall over Vidarbha; 454 mm (-24% deficit) rainfall over Marathwada; and 2994 mm (8% excess) in Konkan region was recorded during 01 June - 22 September 2023. The extended range weather forecast (rainfall) for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) is above normal over Konkan, Vidarbha, Madhya Maharashtra and Marathwada for week-1 and; week-2, respectively.

Vidarbha

- Keeping in the view of above normal rainfall forecast in week-1 and 2, farmers are advised to drain out excess water from the water-logged field.
- In cotton crop at flowering stage, monitor for presence of pink boll worm larvae within flowers. Collect and destroy rosette flowers/buds. Upon 5% infested flowers/buds it is advised to spray Fenprothrin 30 % EC@ 3ml per 10 litre water or Cypermethrin 10 % EC@1ml/litre water during clear weather condition.

Madhya Maharashtra

- For the control of shoot borer in pigeon pea crop which is at vegetative stage, it is advised to apply Azadirachtin 1500 ppm @ 50 ml per 10 litres water during clear weather condition.

Parbhani

- For the management of mites in citrus orchard, it is advised to spray 5% NSKE or Azadirachtin 1500 ppm @ 30 ml per 10 litres of water after two days.

Kerala

1190 mm (-39% deficit) received over Kerala during 01 June - 22 September 2023. The extended range weather forecast (rainfall) for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) is above normal for week-1 and; week-2.

- Due to the forecast of above normal rainfall, there is a chance of damage in paddy due to flooding. Ensure drainage in paddy fields and strengthen bunds.
- Due to prevailing rainfall condition, farmers are advised to spray insecticide and pesticide during clear weather condition (no rainfall).
- Adhesive /sticking agents is advised to use to prevent runoff of pesticide, fungicide under rainy weather condition.
- If cloudy condition is prevailed, there is a chance of leaf folder attack in Paddy. It can be controlled by using Trichogramma cards (2 CC per one acre). Cut the cards in to small pieces and fix in different regions of the field. If the infestation is severe, spray Quinalphos@25% EC @ 1 ml per litre or Acephate 75 % SP @2gram per litre of water.

Anantapur

281 mm (-23% deficit) rainfall was received over Rayalaseema and 533 mm (-3% deficit) rainfall was received over Coastal Andhra Pradesh during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) is above normal over Rayalaseema and Coastal Andhra Pradesh for week-1 and; normal over Rayalaseema and Coastal Andhra Pradesh for week-2.

- The present weather conditions are favourable for bacterial leaf blight incidence in pomegranate. The symptoms when observed during new growth stages, spraying of Streptocycline @ 0.5 g and Copper oxychloride @ 3 g/litre of water is recommended.
- Farmers are advised to take up foliar spray of KNO₃ @ 5 grams per litre of water to mitigate the adverse effect of dry spell.
- Farmers are advised to form dead furrows or conservation furrows after last intercultivation in flat method of sowing to conserve the moisture.

Karnataka

458 mm (-27% deficit) rainfall received over South Interior Karnataka, 2543 mm (-16% deficit) over Coastal Karnataka and 379 mm (-12% deficit) rainfall received over North Interior Karnataka during 01 June - 22 September 2023. The extended range weather forecast (rainfall) provided for the next two weeks (22 - 28 September 2023 and 29 September - 05 October 2023) is normal over

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

South Interior Karnataka

- Sowing of following crops is advised
 - Finger millet Ragi (Indaf-5, 7,9, ML-365, KMR-301),
 - Horse gram- PHG-9, KBH-1, Niger,
 - Field bean-HA- 3 and 4 and sunflower-KBSH-1, 41,42, 44 & 53,
 - Cowpea (KBC-1, TVX-944 and PKB-4
- Mulching is recommended for conserve the soil moisture in standing crops.

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