

**ICAR-Central Research Institute for Dryland Agriculture**  
**Hyderabad**

**Status of monsoon and agromet advisories/ contingency plans for some deficit/excess rainfall areas**

After covering the entire country on 26 June, the monsoon has weakened. During June 1- July 5, the country as a whole received 207 mm rainfall, which is equal to the normal (~206 mm). The region-wise SWM rainfall status is: East and Northeast India (4% deficit), Northwest India (5% excess), Central India (2% excess) and South peninsula (2% excess). Out of 36 meteorological sub divisions in the country, 12 are facing deficit rainfall condition; 15 are facing normal rainfall condition and 9 with excess rainfall condition. Districts where rainfall during 1 June to 1 July was less than 50% of normal are identified and is depicted in figure 1. The following is the amount of rainfall received during June 1- July 5 and contingency measures that are to be followed for the crops/cropping systems in the states mentioned.

**Kerala**

Kerala received 591 mm rainfall (26% deficit compared to the normal). Major varieties sown are Uma, Jyothi and Ponmani.

- Rice: Due to intermittent rain there is a chance of leaf folder and stem borer attack. To control them, use trichogramma cards @ 2 cc per acre. If the attack is severe, apply quinalphos (2ml per litre of water) or cartap hydrochloride (25g per hectare)
- Rhinoceros beetle attack is reported in coconut. Apply 250 gm neem cake mixed with equal volume of sand in the innermost 2-3 leaf axils.

**Karnataka**

South interior Karnataka (226 mm) received 27% excess rainfall; North interior Karnataka (94 mm) and coastal Karnataka (781 mm) received 23 and 27% deficit rainfall, respectively.

**a) North Karnataka**

- To make efficient use of available soil and water resources and to get higher returns, the intercropping system can be taken up in light and medium black soils. Pearl millet + Pigeonpea in 2:1 row proportion; Pigeonpea + Sesame in 1:2 or 2:4 row proportion.
- Pigeonpea: the recommended variety is TS-3R where the crop is susceptible for wilt disease.
- Farmers are also advised to spare some land exclusively for fodder crops or give preference for grain cum fodder crops.

## **Maharashtra**

Vidarbha (269 mm) received surplus rainfall (25%); Konkan (840 mm) and Madhya Maharashtra (178 mm) regions received normal rainfall (6%, 2% deficit rainfall respectively, compared to normal), while Marathwada (124 mm) received 27% deficit rainfall.

### **a) Marathwada**

- Continue sowing of *kharif* cotton, soybean, sunflower, sorghum
- For sowing of cotton use spacing of 120 x 45 cm and a seed rate of 2.5 to 3.0 kg/ha
- Undertake light hoeing and mulching in already sown crops for conservation of soil moisture

## **Gujarat**

Saurashtra and Kutch region received 136 mm rainfall (14% surplus) whereas Gujarat region received 136 mm rainfall (23% deficit).

- Cotton: the crop is in early vegetative stage. Carry out intercultural operations, weeding and gap filling in early sown crops to conserve soil moisture and to maintain optimum plant population.
- Groundnut: cv. GG-5, 7,2, 20 can be sown wherever assured irrigation facilities are there.
- Pearl millet: moderate duration varieties like GHB-744, early maturing varieties like GHB538,GHB719 are recommended.

## **Uttar Pradesh**

Western UP has received 86 mm rainfall (14% deficit) and Eastern UP received 102 mm (29% deficit) rainfall.

- Rice: transplanting of long duration varieties and direct sowing of medium duration varieties can be taken up.
- Sowing of sunflower, sorghum, pearl millet, black gram, pigeonpea, groundnut, soybean, maize can be taken up.
- Planting of sugarcane and nursery raising of *kharif* onion.

## **Bihar**

149 mm rainfall was received so far in the state, which is 32% deficit.

- Sowing of *kharif* maize (Suwaan, Devki Shaktimaan-1,shaktimaan-2 for North Bihar) can be undertaken.
- *Kharif* onion: AgriFound Dark Red (ADR), N-53, Bhima super, Arka kalyan are the recommended varieties. Maintain a seed rate of 8-10 kg per hectare

## **Jharkhand**

The state received 223 mm rainfall (10% deficit) so far.

- Rice: For direct seeding of rice, select short duration varieties like Birsa Dhan - 108, Birsa Vikas Dhan 109 & 110, Vandana etc.
- Black gram: recommended varieties are Birsa Urad-1, T-9 and Pant U-19. 8 kg of seeds are needed for the cultivation in 1 acre.
- The recommended inter cropping of this region is as follows: Pigeonpea + Groundnut/Rice/Black gram : Between the 2 rows of Pigeonpea (75 cm between row & 20 - 25 cm between plant) 2 rows of Groundnut /Rice /Black gram. Pigeonpea + Maize : one row Pigeonpea and one row Maize (75 cm between row).

## **Rajasthan**

Western Rajasthan received 61 mm rainfall (42% excess) and Eastern Rajasthan received 109 mm rainfall (24% excess) so far.

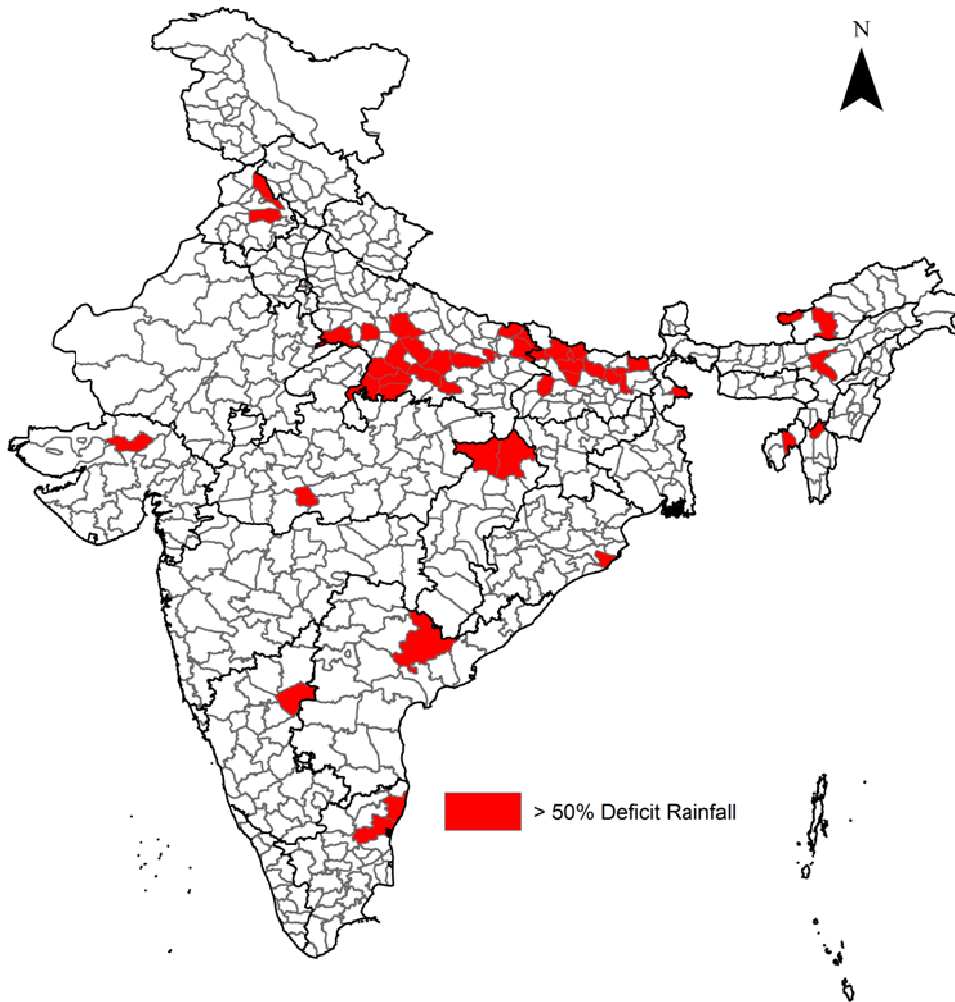
- Weeding and hoeing in maize should be done where the maize crop is 15-20 days old. Undertake thinning in maize and keep the plant to plant distance at 20-25 cm.
- Sowing of maize and sorghum may be avoided after 15 July; instead, sowing of pulses, sesame and cluster bean may be taken.

## **Jammu**

The state received 124 mm rainfall (44% excess) so far.

- Paddy: farmers can go for the transplanting of early rice varieties (Jaya, RR-8585, IET-1410, Ratna, PC-19) from nursery to field area and transplant 2-3 seedling per hill with a spacing of 20 x 15 cm.
- Maize: farmers are advised to go for sowing of maize crop (cv. Vivek-25, HM-5 and HQPM-1) with seed rate of 20-30 kg/ha as and when the sky remain clear.
- Live stock: supplementary mineral mixture with 50 gm iodized salt regularly to the milking and pregnant animals Provide clean water for drinking to the animals at frequent intervals to save animals from heat stroke.

*Note: The above is a general overview for the states. However, ICAR (CRIDA) has prepared district level contingency plans (covering all farming situations within the district) and placed in the websites of the Ministry of Agriculture & Cooperation, Government of India ([www.agricoop.nic.in](http://www.agricoop.nic.in)) and CRIDA ([www.crida.in](http://www.crida.in)) for further details.*



**Fig. 1: Districts (51) with more than 50% rainfall deficit (1 June – 1 July 2015)**