

**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 is vigorous over central India and active in the northern and northeast parts of the country. Excess rainfall was received in Sikkim, Delhi and Jammu & Kashmir during last week. During June 1- July 19, 2015, the country as a whole received 311.7 mm rainfall, which is 8% less than the normal (338.4 mm). The region-wise Southwest Monsoon rainfall status is: East and Northeast India (6% deficit), Northwest India (10% excess), Central India (16% deficit) and South peninsula (13% deficit). Out of 36 meteorological sub divisions in the country, 10 are facing deficit rainfall condition; 23 are under normal rainfall condition and 3 are with excess rainfall condition. Districts with rainfall less than 50% of normal during 1st June to 15 July were identified and depicted in figure 1. The following is the amount of rainfall received during June 1- July 19 and contingency measures that are to be followed for the crops/cropping systems in the states mentioned.

Kerala

Kerala received 827.7 mm rainfall (26% deficit compared to the normal).

- Paddy: irrigate the field before cracks appear in the soil. Keep the crops weed free
- In Banana crop if strong wind occurs care should be taken by Propping of banana plants, If *sigatoka* disease is a problem in Banana fields, apply Propiconazole (Tilt) 1ml/ litre on the lower side of leaves after cutting and removing the badly affected leaves. Farmers are advised to ensure that the cut leaves are not left in the field.
- Under the intermittent rainfall condition, high humidity may induce bud rot in coconut. Cut and remove the affected portion and apply Bordeaux paste. There is a chance of Mahali disease during rainy season. Apply 1% Bordeaux mixture.

Karnataka

South interior Karnataka (283.8 mm) received 3% excess rainfall; North interior Karnataka (117.9 mm) and coastal Karnataka (1182 mm) received 35 and 25% deficit rainfall, respectively.

a) North Karnataka

- Long dry spell has resulted in severe depletion of soil moisture, hampering the growth of seedlings of the sown crops.
- Sowing of Cotton crop and short duration pigeon pea (TS 3R) can be taken up in places wherever sowing rains have occurred in the districts Raichur, Kalaburgi and Yadgir.
- In cropped area wherever little rainfall has occurred potassium nitrate @1% can be sprayed to induce drought resistance to seedlings

Maharashtra

Vidarbha (297.5 mm) received normal rainfall; Konkan (938 mm), Madhya Maharashtra (191.1 mm) and Marathwada (129 mm) regions received deficit rainfall (33%, 35% and 47% deficit

rainfall respectively, compared to normal). As on July 18, 72.7% of normal *kharif* sown area has been covered in the state as a whole (10.56 m ha out of 14.53 m ha) under various crops.

a) Madhya Maharashtra

- Light hoeing, weeding and mulching with crop residue in early sown Jowar, soybean, green gram and black gram to conserve soil moisture.
- Thinning crops to maintain optimum plant population.
- Due to subdued rain in Western Maharashtra Scarcity Zone, early sown cotton might be affected leading to wilting. Prepare the mixture of 1.5 kg Urea + 1.5 kg P₂O₅ / 100 litres of water and apply 150 to 200 ml of this mixture for the affected plants

b) Marathwada

- Undertake light hoeing, mulch with crop residue to conserve soil moisture.
- Apply protective irrigation (drip or sprinkle method) to earlier sown crops like soybean, cotton, red gram and Jowar in view of prevailing water stress condition.
- Undertake weeding in green gram and black gram.
- Due to humid and warm weather in Marathwada region, infestation of blight in vegetable crops is likely to increase; spray Mancozeb @ 25 g per 10 liters of water. Also for control of sap sucking pest; spray Thiomethoxan @ 4 g per 10 liters of water.

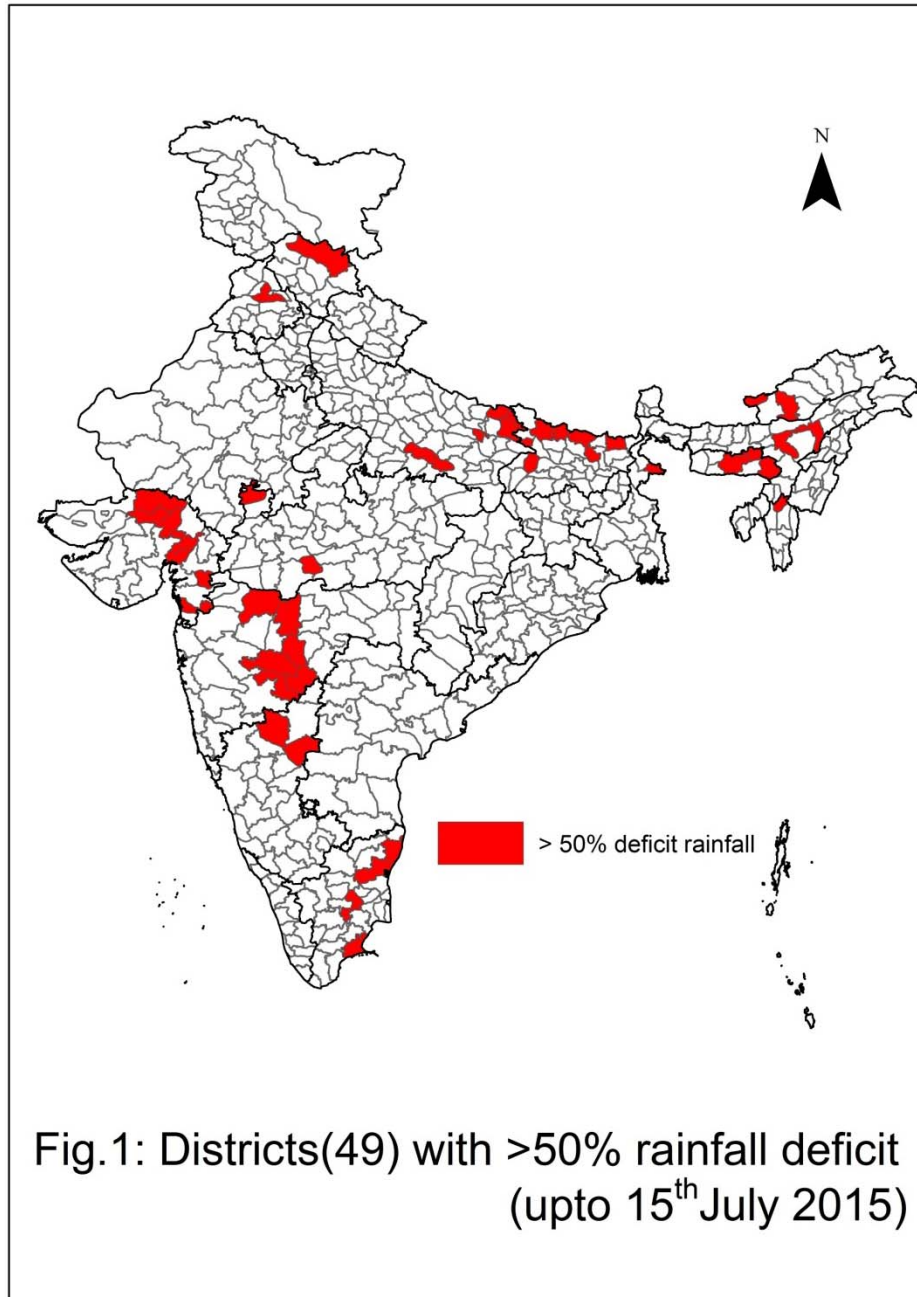
Gujarat

Gujarat region received 141.1 mm rainfall (58% deficit) whereas Saurashtra and Kutch region received 136.7 mm rainfall (33% deficit)

- Paddy: Transplanting: Karnataka rice hybrid 2: During next five days there is chances of light rainfall. If irrigation facilities are available and the growth of nursery seedling is sufficient then use it for transplanting. If Nursery is fail or not raised then use SRI technology for transplanted paddy. Transplanting of paddy varieties like GR-8, 9, Sathi 34-36, Ambica and Gurjari where canal water is available
- Intercultural operations, weeding in groundnut, soybean, pigeon pea and vegetable crops and gap filling in cotton, to conserve soil moisture and to maintain optimum plant population. provide light irrigation under moisture stress condition to groundnut crop.
- Mulching with crop residues

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) and CRIDA (www.crida.in) for further details.

- The following figure was generated by AICRPAM,CRIDA, Hyderabad to identify the districts experiencing more than 50% deficit condition.



- Table below shows the district wise cumulative rainfall data and its departures from Normals of different states

Table.1: Cumulative Rainfall data 01-jun to 15 july

state	district	act	nor	dep	category
Arunachal Pradesh	EAST KAMENG	150	535.2	-72%	S
Arunachal Pradesh	TAWANG	423	1070.5	-60%	S
Assam	GOLAGHAT	192.5	410	-53%	D
Assam	NAGAON	215.5	449	-52%	D
Bihar	ARARIA	232.7	476.7	-51%	D
Bihar	BHOJPUR	98.9	275.8	-64%	S
Bihar	EAST CHAMPARAN	137.5	319.6	-57%	D

Bihar	MADHUBANI	172.9	368.5	-53%	D
Bihar	SAHARSA	247.1	532	-54%	D
Bihar	SHEOHAR	161	377.5	-57%	D
Bihar	SITAMARHI	115	377.5	-70%	S
Bihar	SIWAN	145.6	309.5	-53%	D
Gujarat	ANAND	120.1	246.8	-51%	D
Gujarat	BANASKANTHA	51.3	166.3	-69%	S
Gujarat	BARODA	107.2	292.7	-63%	S
Gujarat	DANGS	182.7	588	-69%	S
Gujarat	GANDHINAGAR	100	210.2	-52%	D
Gujarat	KHEDA	109.2	248.6	-56%	D
Gujarat	MEHSANA	79.3	197.9	-60%	S
Gujarat	NARMADA	168.1	358.5	-53%	D
Gujarat	NAVSARI	264.4	663.1	-60%	S
Gujarat	PATAN	19.7	156.5	-87%	S
Gujarat	TAPI	201.6	502.4	-60%	S
Gujarat	KUTCH	37.2	115.4	-68%	S
Himachal Pradesh	Lahaul & Spiti	58.3	121.7	-52%	D
Karnataka	BIJAPUR	53.5	129.7	-59%	D
Karnataka	RAICHUR	48.5	124.8	-61%	S
Madhya Pradesh	BURHANPUR	79.3	253.8	-69%	S
Madhya Pradesh	HARDA	47.6	260.8	-82%	S
Madhya Pradesh	NEEMUCH	91	190.7	-52%	D
Maharashtra	JALGAON	100.3	220	-54%	D
Maharashtra	BEED	79.9	186.1	-57%	D
Maharashtra	LATUR	98.6	230	-57%	D
Maharashtra	OSMANABAD	89.1	196.4	-55%	D
Maharashtra	PARBHANI	99.5	247.6	-60%	S
Maharashtra	BULDHANA	111	226.7	-51%	D
Meghalaya	JAINTIA HILLS	945	2223.9	-58%	D
Meghalaya	RI-BHOI	255.2	542.9	-53%	D
Meghalaya	WEST KHASI HILLS	622	1263.4	-51%	D
Mizoram	KOLASIB	148	621.1	-76%	S
Punjab	JALANDHAR	58.5	147.4	-60%	S
Tamil Nadu	CHENNAI	53.1	115.2	-54%	D
Tamil Nadu	KANCHIPURAM	51.6	114.9	-55%	D
Tamil Nadu	RAMANATHAPURAM	10.8	26.1	-59%	D
Tamil Nadu	TRICHY	25.7	54.9	-53%	D
Tamil Nadu	VILUPPURAM	17.8	78.4	-77%	S
Uttar Pradesh	AMBEDKAR NAGAR	59	238.5	-75%	S
Uttar Pradesh	DEORIA	72.5	281.8	-74%	S
Uttar Pradesh	FATEHPUR	58.6	214.5	-73%	S
Uttar Pradesh	KAUSHAMBI	64.1	206.6	-69%	S
Uttar Pradesh	KUSHI NAGAR	89	373.1	-76%	S
Uttar Pradesh	MAHARAJGANJ	150.7	387.2	-61%	S
West Bengal	SOUTH DINAJPUR	188.5	477.5	-61%	S