

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

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

During 1 June - 28 Sept 2015, the country as a whole received 759 mm rainfall, which is 14% less than the normal (839 mm). The region-wise Southwest Monsoon rainfall status is: East and Northeast India: 8% deficit, Northwest India: 17% deficit, Central India: 16% deficit and South peninsula: 15% deficit. Out of 36 meteorological sub divisions in the country, 17 are facing deficit rainfall condition; 18 are under normal rainfall condition and one region is with excess rainfall condition. Districts which received rainfall less than 50% of normal during 1 June to 20 September were identified and depicted in figure 1. Rainfall received during 1 June - 28 September, and agromet advisories for deficit/excess rainfall conditions and the crops/cropping systems in different states/regions are mentioned as under:

**1. Uttar Pradesh**

Rainfall status: East and West UP are facing a deficit rainfall of 47 & 42%, respectively.

- In drought areas where *kharif* crops have lost, preparation for sowing of early *rabi* crops can be taken.
- Life saving irrigation in cereals, pulses and oilseed crops to maintain proper moisture.
- Undertake intercultural operation to conserve soil moisture.
- Emphasis on drip/ sprinkler irrigation.
- Soil and water conservation should be adopted properly.
- Under drought condition farmers are advised to adopt the crops of low water requirement and short duration preferably catch/ cash crops.
- Ensure the supply of water in canal to tail end and prevent the more number of diversion to reduce the seepage loss and to reach the water at tail point.

**2. Maharashtra**

Rainfall status: Marathwada region is reeling under drought conditions with 39% deficit rainfall. Madhya Maharashtra, Konkan and Vidarbha regions are also facing deficit rainfall of 32%, 31% and 11%, respectively.

**Marathwada**

- Preparation of field for sowing of *rabi* sorghum and safflower.
- On vapsa condition, undertake sowing of *rabi* sorghum, safflower and sunflower.

- For taking *rabi* crops, prepare compartmental bunding to conserve moisture wherever sowing is not carried out.
- Continue harvesting of kharif crops like green gram, black gram and pearl millet after current spell of rain.
- Keep the harvested produce in safe place.

### **Madhya Maharashtra**

- Prepare flat beds and ridges and furrows for conservation of soil and water in rabi proposed fields.
- For planting of winter onion (Rangada) select seed of following varieties like, N-2-4-1, Pusa Red, Agrifound Light Red, Arka Niketan, Phule Safed, Phule Suvarna and plant seed on nursery bed.

### **3. Madhya Pradesh**

Rainfall: West MP has received 5% excess rainfall and East MP has received 29% deficit rainfall.

- Soybean: At pod development stage: Early maturing varieties need to be harvested. For late maturing varieties, control of hairy caterpillar by Trizophos 40 EC at 800 ml/ha.
- Maize: At silking stage. Green cob hybrids used for vegetables like sweet corn needs to be harvested.
- Rice: Late planted rice varieties needs light irrigation , and construct bunds around field to conserved water.
- Sesame: Leaf-spot disease control by applying Mancozeb at 1 kg/ha at 500-600 litres of water.
- Fruits: Apply recommended dose of fertilizers. Apply insecticides as per the recommendations in Guava, Pomegranate, and Citrus fruits for controlling leaf-eating caterpillar.
- Vegetables: For onion, white grub control need Thimet 10 G at 8 kg/acre.

### **4. West Bengal**

Rainfall status: while Sub-Himalayan WB has received 5% deficit rainfall, Gangetic WB has received 10% excess rainfall.

- In uplands black gram (T9, Pant urd 30 and Pant urd 19), green gram (T44, Samrat), pigeon pea (Bahar, Pusa 9 and Narendra Arhar 1), groundnut (TAG 24, TG 44) and horse gram (DV 7, BR 5, BR 10, S67/26, 14,31) can be sown with available seeds in locality/seed agencies.
- Priority should be given for *in situ/ex situ* rainwater harvesting during the remainder of the season.

- Irrigation in paddy crop as to maintain proper moisture at tillering/PI stage.
- Undertake intercultural operation and mulch with crop residue to conserve soil moisture in vegetable crop field (cabbage, cauliflower, chilli, onion etc.).
- Apply protective irrigation in standing crops in case of water stress condition.
- Undertake weeding operation in crop field.
- There is a chance for stem fly infestation in vegetables due to low rainfall and partly cloudy weather. Spray Chlorpyrifos @ 25 ml per 10 litres of water.
- Prevailing cloudy weather is congenial for the incidence of downy mildew in cucurbits; spray Metalaxyl 8% + Mancozeb 64% @ 20 g in 10 litres of water.

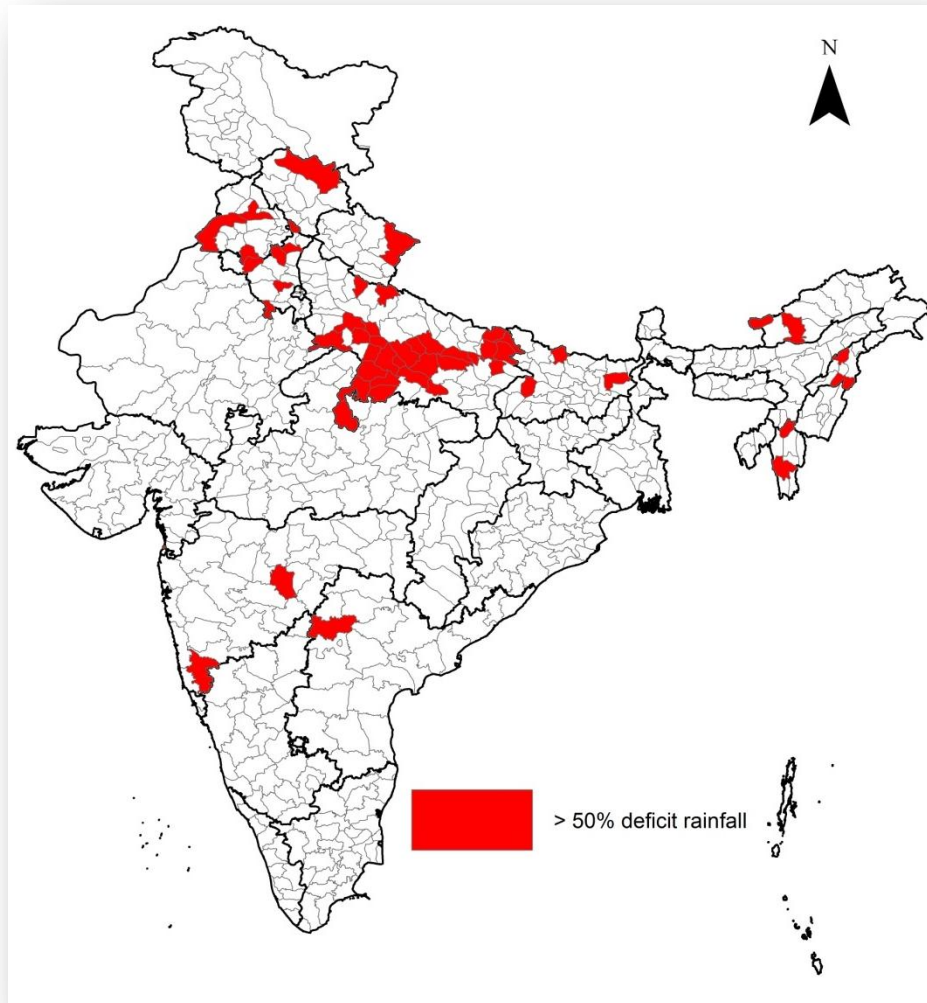
## 5. Assam

Rainfall status: the state as a whole has received 2% deficit rainfall so far.

- Rice: Seedling: Fertilizer management- Apply 2nd split of urea in long duration varieties like Manohar Sali, Gitesh, Mahsuri etc after 20 to 30 DAT.
- Prepare to sow seeds of green gram and black gram. Green gram : T-44, Kopergaon, K-851, ML-56, ML-131. Black gram : T-9, T-27, Pant U-19, T-122 are recommended.
- Sesame: Well-drained sandy-loam soil is preferable. Seed rate: 500 g/bigha, Spacing: 30cm (row to row) X 15 cm (plant to plant). FYM @1.3 qt/bigha, Urea: SSP: MOP: 9:19:5. Improved varieties are, SP-1181(Madhahi), Gauri, Binayak, ST 1683, Punjab Tall No.1

*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.*

- The following map was generated by AICRPAM, CRIDA (with the data provided by IMD), Hyderabad to identify the districts experiencing more than 50% deficit condition.



**Figure 1: Districts (53) experiencing more than 50% rainfall deficit (From 1 June - 27 September, 2015)**

Table 1 depicts the details of districts experiencing more than 50% rainfall deficit

**Table 1. Details of the districts experiencing more than 50% rainfall deficit from 01 June to 27September 2015**

S.No.	STATE	DISTRICT	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
1.	Arunachal Pradesh	East Kameng	400.9	1225.3	-67	S
2.		Tawang	1149.0	2440.8	-53	D
3.	Nagaland	Mokokchung	555.0	1667.4	-67	S
4.		Phek	349.0	1290.5	-73	S
5.	Mizoram	Kolasib	272.0	1667.1	-84	S
6.		Lunglei	673.0	1840.2	-63	S
7.	Bihar	Bhojpur	371.8	916.6	-59	D
8.		Purnia	565.6	1278.7	-56	D
9.		Sitamarhi	481.7	1070.2	-55	D
10.	Uttar Pradesh	Ambedkar Nagar	118.0	890.8	-87	S
11.		Barabanki	448.4	917.8	-51	D
12.		Deoria	387.3	940.8	-59	D
13.		Faizabad	457.8	973.0	-53	D
14.		Farrukhabad	346.9	733.1	-53	D
15.		Fatehpur	97.7	803.0	-88	S
16.		Gorakhpur	563.9	1164.1	-52	D
17.		Kannauj	326.5	765.2	-57	D
18.		Kanpur Nagar	272.1	685.1	-60	S
19.		Kanpur Dehat	164.0	752.5	-78	S
20.		Kaushambi	141.5	759.0	-81	S
21.		Kushinagar	245.9	1136.6	-78	S
22.		Lucknow	336.5	758.9	-56	D
23.		Maharajganj	435.2	1203.7	-64	S
24.		Mau	381.2	991.6	-62	S
25.		Rae Bareli	231.8	739.3	-69	S
26.		Sultanpur	399.7	831.3	-52	D
27.		Unnao	342.9	777.0	-56	D
28.		Agra	213.2	680.2	-69	S
29.		Auraiya	232.7	690.5	-66	S
30.		Etah	275.3	611.3	-55	D
31.		Hamirpur	324.1	789.0	-59	D
32.		Jalaun	334.5	765.9	-56	D
33.		Jhansi	389.9	830.6	-53	D

S.No.	STATE	DISTRICT	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
34.		Lalitpur	321.3	932.8	-66	S
35.		Mahoba	251.8	767.6	-67	S
36.		Mainpuri	237.9	647.8	-63	S
37.		Pilibhit	364.8	981.0	-63	S
38.		Rampur	335.5	912.4	-63	S
39.		Pithoragarh	827.5	1676.0	-51	D
40.	Haryana	Fatehabad	114.1	281.4	-59	D
41.		Kaithal	182.2	380.9	-52	D
42.		Kurukshetra	259.9	559.9	-54	D
43.		Mahendragarh	175.1	394.4	-56	D
44.		Panchkula	422.1	943.6	-55	D
45.		Rohtak	194.5	506.1	-62	S
46.	Punjab	Firozpur	109.8	350.8	-69	S
47.		Jalandhar	182.9	545.1	-66	S
48.		Mansa	85.5	333.1	-74	S
49.	Himachal Pradesh	Lahul & Spiti	158.5	453.8	-65	S
50.	Daman and Diu	Daman	1022.2	2281.8	-55	D
51.	Maharashtra	Kolhapur	803.3	1716.0	-53	D
52.		Parbhani	344.9	745.9	-54	D
53.	Andhra Pradesh	Medak	355.8	730.7	-51	D

*D- Deficit; S- Scanty*