

ICAR-Central Research Institute for Dryland Agriculture
All India Coordinated Research Project on Agrometeorology (AICRPAM)
Santoshnagar, Hyderabad-500059

Status of Monsoon, *Kharif* Sowing and Agromet Advisories for Some Deficit/Excess Rainfall Areas

1. Status of southwest monsoon

During June 1- September 18, country as a whole received 788 mm rainfall, which is 5% less than the normal rainfall of the country for the same period (830 mm). Districts which received rainfall less than or more than 50% of normal during 1 June to 18 September were identified and depicted in Figure 1 and Tables 2 and 3.

2. Status of *kharif* sowing (Source: Press Information Bureau, Govt of India)

The total sown area of crops as on 16 September, 2016 as per the reports received from states, stands at 1059 lakh hectare as compared to 1022 lakh hectare, as on this date last year (Table 1).

Table 1: Progress in *kharif* sowing in India as on 16 September 2016 (Source: Press Information Bureau & Ministry of Agriculture and Farmers Welfare, Govt of India)

Crop	Area sown in 2016-17	Area sown in 2015-16
Rice	382	372
Pulses	145	112
Coarse Cereals	188	183
Oilseeds	188	183
Sugarcane	45.8	49.6
Jute & Mesta	7.6	7.7
Cotton	102	115
Total	1059	1022

(Area in Lakh hectare)

3. Agromet Advisories

The following Agromet advisories may be followed for the crops/cropping systems of the above mentioned states.

Kerala

The state has received 1313 mm rainfall so far, which is 32% deficit compared to the normal.

- Rubber: Tapping can be resumed. Apply Trichoderma mixture around the base of the vine to control foot rot. To control bud rot in rubber plants, apply 1% Bordeaux mixture. Spray Copper oxy chloride 4g/L on new sprouts in newly planted gardens and apply Indofil M 45 4g/L water as a control measure against fungal diseases. Pink disease can be controlled by chiseling out the affected bark and applying Bordeaux paste.
- Ginger: To control soft rot, drench the soil with 1% Bordeaux mixture/0.3% mancozeb.

Mahrashtra

Rainfall received in major meteorological sub-divisions of the state are as follows:

Vidarbha – 943 mm (4% surplus); Marathwada – 675 mm (9% deficit);

Madhya Maharashtra- 741 mm (12% surplus) and Konkan- 3190 mm (14% surplus)

Konkan

- There is a possibility for incidence of bacterial blight on rice. For management of bacterial blight spray 25 g of Copper oxychloride and 5 g of streptomycin sulphate in 10 liters of water.

Marathwada

- In citrus, to control fruit dropping undertake a spray of NAA @ 1 gm + Carbendazim @ 100 gm + 1 kg urea in 100 litre of water.
- After harvest of kharif green gram and black gram, prepare the field for rabi crops. Sowing of Sorghum (Maldandi, Yashoda, Parbhani moti) and Safflower (Bhima, DCH-129, NAARI) can be done during this week.

Vidarbha

- Rainfed crop of safflower (Bhima, AKS-207, PKV-Pink) can be sown from 4th week of September to 1st week of October. Follow seed treatment with biofungicide Trichoderma and biofertilizers Azatobacter/PSB.

Gujarat

Saurashtra & Kutch region has received 381 mm rainfall (17% deficit) so far, while rest of the region in the state has received 647 mm (26% deficit) rainfall so far during the season.

- Soil cracks should be closed by inter-culturing operation to avoid the evaporation losses of soil moisture.
- Keep the crop in weed free condition.
- Thinning of plant population is recommended.
- In current hot and humid weather, animal feed should be provided to cattle before 10AM and after 5PM.

Odisha

The state has received 945 mm rainfall (12% deficit) so far during the season.

- Go for sowing of pre-rabi pulse crops like green gram, black gram, horse gram in the upper and upper-medium lands.
- The current weather is favourable for infestation of fruit and shoot borer in brinjal. To control them, install Pheromone trap and spray 4 g Sevin WP or 2 ml Malathion in 1 litre water alternatively.
- Complete papaya planting. Grow Honeydew, Kurg honeydew, Coimbatore-1, Coimbatore-2, Pusa Delicious, Pusa Majestic, Pusa Dwarf, Pusa Giant, Sholey and Ranchi etc.

Himachal Pradesh

The state has received 608 mm rainfall (22% deficit) so far during the season.

- Advised to remove lower 5-6 leaves in maize crop after complete tasselling and use as fodder to reduce transpiration losses.
- In mid hill regions, direct sowing of radish, carrot, broccoli, lettuce and transplanting of cauliflower and cabbage seedlings is advised.

Jharkhand

The state as a whole has received 1000 mm rainfall (2% deficit) so far during the season.

- Potato and pea: Those farmers, who are wishing to cultivate early maturing potato and green peas are advised to prepare their field and arrange seeds, fertilizers and manures etc. Improved varieties of potato are Kufri Ashok and Kufri Kanchan. Improved varieties of green pea are Arkel, Kashi Nandini, PE-6, Birsa Matar etc.

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.

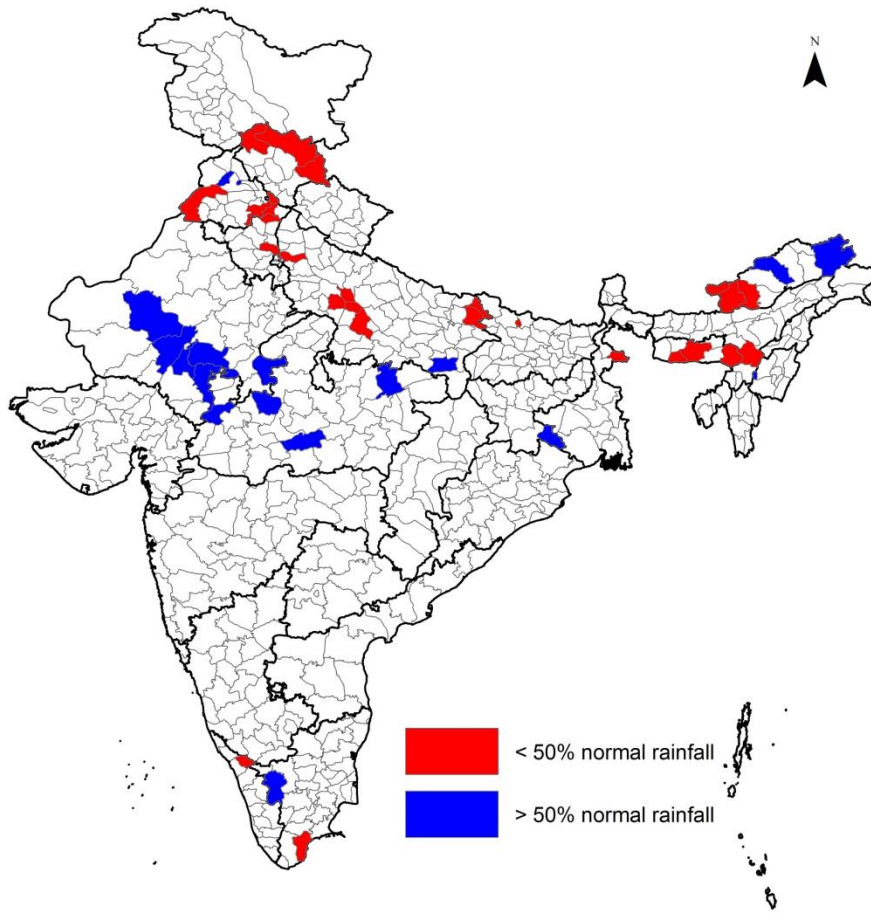


Fig. 1: Districts received > 50% deficit (28) and excess (17) rainfall compared to normal during 1 June-18 September 2016

Table 2: Districts which received more than 50% deficit rainfall compared to normal (1 Jun to 18 September 2016) (Source: IMD)

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)	CAT.
	Arunachal Pradesh				
1.	East Kameng	476	1151	-59	D
2.	Tawang	1077	2314	-53	D
3.	West Kameng	882	2314	-62	S
	Assam				
4.	N.C Hills	442	905	-51	D
	Meghalaya				
5.	Jaintia Hills	659	4406	-85	S
6.	South Garo Hills	145	1574	-91	S
7.	West Khasi Hills	720	2612	-72	S
	West Bengal				
8.	Dakshin Dinajpur	506	1084	-53	D
	Bihar				
9.	Sheohar	474	1024	-54	D
	Uttar Pradesh				
10.	Deoria	407	888	-54	D
11.	Farrukhabad	256	715	-64	S
12.	Kannauj	289	743	-61	S
13.	Kanpur Dehat	277	724	-62	S
14.	Kushinagar	264	1083	-76	S
15.	Ghaziabad	238	610	-61	S
16.	Mainpuri	290	628	-54	D
	Haryana				
17.	Ambala	410	861	-52	D
18.	Kurukshetra	180	534	-66	S
19.	Panchkula	381	907	-58	D
20.	Sonipat	219	515	-57	D
	Delhi (Ut)				
21.	North East Delhi	276	616	-55	D
	Punjab				
22.	Ferozpur	105	331	-68	S
23.	Patiala	241	568	-58	D
	Himachal Pradesh				
24.	Chamba	636	1339	-52	D
25.	Kinnaur	106	237	-55	D
26.	Lahul&Spiti	101	418	-76	S
	Tamil Nadu				
27.	Tuticorin	19	57	-67	S
	Kerala				
28.	Wayanad	1033	2541	-59	D

(D = Deficient and S= Scanty)

Table 3: Districts which received more than 50% excess rainfall compared to normal (1 Jun to 18 September 2016) (Source: IMD)

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)
	Arunachal Pradesh			
1.	Lower Dibang Valley	3192	969	229
2.	Upper Subansiri	1176	720	63
	Manipur			
3.	Imphal West	1987	909	119
	Jharkhand			
4.	Purbi Singhbumi	1767	984	80
	Uttar Pradesh			
5.	Mirzapur	1305	852	53
	Punjab			
6.	Kapurthala	665	394	69
	Rajasthan			
7.	Jodhpur	403	266	52
8.	Pali	849	436	95
9.	Baran	1161	769	51
10.	Bhilwara	909	563	61
11.	Chittaurgarh	1292	687	88
12.	Rajsmand	797	486	64
	Madhya Pradesh			
13.	Hoshangabad	1947	1236	58
14.	Rajgarh	1306	853	53
15.	Ratlam	1265	818	55
16.	Satna	1586	911	74
	Tamil Nadu			
17.	Coimbatore	290	153	89