

All India Coordinated Research Project on Agrometeorology (AICRPAM)
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**Status of Monsoon, Kharif Sowing and Agromet Advisories for Some Deficit/Excess
Rainfall Areas**

1. Status of southwest monsoon

During June 1- August 28, country as a whole received 671 mm rainfall, which is 3% less than the normal rainfall of the country for the same period (693 mm). Districts which received rainfall less than or more than 50% of normal during 1 June to 28 August were identified and depicted in Figure 1 and Tables 2 and 3. Flood situation prevails in Eastern parts of Bihar, Eastern Uttar Pradesh and West Madhya Pradesh.

2. Progress in kharif sowing (Source: Press Information Bureau, Govt of India)

The total sown area of crops as on 26th August, 2016 as per reports received from States, stands at 1019 lakh hectare as compared to 973 lakh hectare, as on this date last year (Table 1).

Table 1: Progress in kharif sowing in India as on 26th August 2016 (Source: Press Information Bureau & Ministry of Agriculture, Govt of India)

Crop	Area sown in 2016-17	Area sown in 2015-16
Rice	363	352
Pulses	139	104
Coarse Cereals	183	173
Oilseeds	178	174.5
Sugarcane	45.5	49.6
Jute & Mesta	7.6	7.7
Cotton	103	113
Total	1019	973

(Area in Lakh hectare)

3. Agromet Advisories

Bihar, Uttar Pradesh, West Bengal and Madhya Pradesh states are reeling under flood situation. The following Agromet advisories were issued during the week for the crops/cropping systems of these states.

Bihar

The state has received 624 mm rainfall so far, which is 20% deficit compared to the normal. However, flood situation prevails in many parts of Eastern Bihar due to over flowing Ganges. The flood has damaged seriously the standing crops like rice, maize, arhar, banana and vegetables. Scores of cattleheads have died. Fodder shortage is reported from many districts.

- Farmers were advised to wait for flood water to recede from the crop fields. Under condition of severe damage to standing crops, sowing of pigeon pea, black gram and early cauliflower, tomato, radish, brinjal, pointed gourd is suggested in the upland areas.
- In medium land situation *toria*, sunflower can be sown at the end of this month. In lowland areas, after complete receding of water, sowing of mustard, lentil, chick pea can be taken up with residual soil moisture in the months of October-November.
- Farmers should avoid grazing of cattles in the areas from where flood water has just receded to avoid possible diseases.

Uttar Pradesh

East UP has received 626 mm (8% deficit) and West UP has received 578 mm (4% deficit) rainfall so far during the season. Varanasi, Gazipur, Ballia and Allahabad districts are worst affected by over flowing Ganga and Yamuna rivers.

- Farmers are advised to wait for flood water to recede from the crop fields
- Drain out excess water from cereals, pulses and oil seed crops, except paddy.
- Undertake weeding in late planted paddy.
- Due to humid and warm weather in Kanpur region during this week, infestation of Bacterial blight or Blotch in rice crops is likely to increase; spray Mancozeb @ 25 g per 10 liters of water.

West Bengal

Gangetic West Bengal has received 928 mm (8% excess) and Sub-Himalayan West Bengal has received 1429 mm (8% deficit) of rainfall so far in the season.

Due to excess rainfall occurred in southern parts of West Bengal, following measures are recommended

- Flood affected lowland area where rice seedlings were already damaged; farmers were advised to wait few days to cultivate early mustard, potato and winter vegetables.
- Start preparation of field for Cabbage, cauliflower, knolkhol etc.
- Apply 1st split dose of urea in rice crop during active tillering initiation stage (3 to 4 weeks after transplanting).
- Due to humid and warm weather, infestation of blight in vegetable crops is likely to increase; spray Mancozeb @ 2 g per liters of water.

Madhya Pradesh

East Madhya Pradesh has received 1086 mm (32% excess) and West Madhya Pradesh has received 931 mm (38% excess) so far during the season. Sagar, Rewa, Sidhi, Chattarpur, Panna, Katni, Damoh and Satna districts are the worst affected due to flood. Incessant rains have affected Vindhya and Bundelkhand regions of Madhya Pradesh. Major rivers and streams like Son, Ken and Tamas are flowing above the danger mark.

- Farmers are advised to wait for flood water to recede from the crop fields
- Carry out intercultural operations in early sown maize, soybean, black gram and green gram. Maize crop is at 40 to 45 days stage, apply 2nd dose of nitrogen
- Prepare nurseries of cauliflower for mid season (November to December)

Rajasthan

Due to heavy rainfall received during last fortnight, flood situation prevails in many parts of East Rajasthan. East Rajasthan has received 751 mm rainfall (50% surplus) while West Rajasthan has received 274 mm (27% surplus), so far during the season.

- Provide adequate drainage in heavy rainfall areas.
- Drain out excess rain water from field crops as soon as possible.
- Avoid top dressing of urea in maize and other cereal crops till rain water receded where heavy rainfall occurred.
- Procure improved varieties of fodder crops like cluster bean, pearl millet and sorghum for sowing in areas where the crops are damaged due to heavy rainfall as and when the field comes under normal condition.

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.

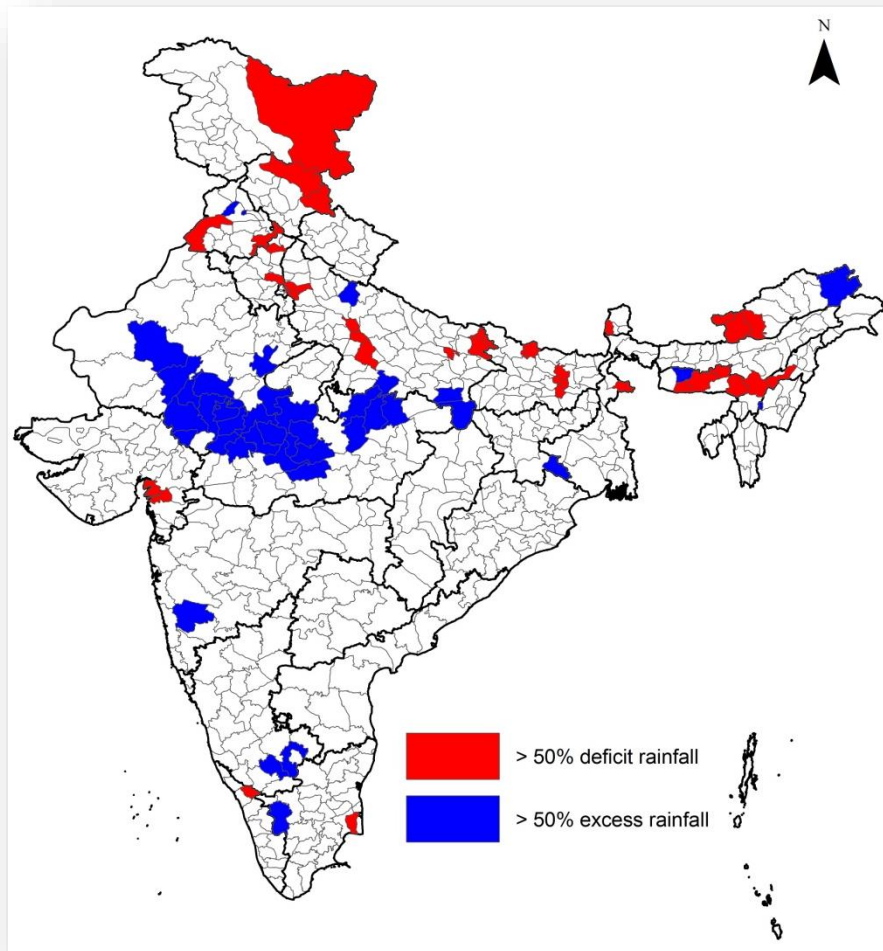


Fig. 1: Districts received > 50% deficit (37) and excess (39) rainfall compared to normal during 1 June-28 August 2016

Table 2: Districts which received more than 50% deficit rainfall compared to normal (1 Jun to 28 August 2016) (Source: IMD)

S.No.	Sub Division / District	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
	Arunachal Pradesh				
1.	East Kameng	397	946	-58	D
2.	Tawang	953	1949	-51	D
3.	West Kameng	794	1949	-59	D
	Assam				
4.	N.C Hills	311	785	-60	S
	Meghalaya				
5.	Jaintia Hills	658	3787	-83	S
6.	Ri Bhoi	539	1133	-52	D

S.No.	Sub Division / District	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
7.	South Garo Hills	136	1320	-90	S
8.	West Khasi Hills	648	2263	-71	S
	Nagaland				
9.	Kohima	500	1016	-51	D
	Sikkim				
10.	West Sikkim	644	1379	-53	D
	West Bengal				
11.	Dakshin Dinajpur	438	889	-51	D
	Bihar				
12.	Khagaria	366	773	-53	D
13.	Munger	356	722	-51	D
14.	Saharsa	447	1097	-59	D
15.	Sheohar	307	886	-65	S
16.	Sitamarhi	355	886	-60	S
	Uttar Pradesh				
17.	Ambedkarnagar	338	684	-51	D
18.	Deoria	305	723	-58	D
19.	Farrukhabad	217	586	-63	S
20.	Kannauj	250	594	-58	D
21.	Kanpur Dehat	272	577	-53	D
22.	Kushinagar	218	896	-76	S
23.	Gautambudhnagar	89	441	-80	S
24.	Ghaziabad	182	503	-64	S
	Haryana				
25.	Kurukshetra	139	462	-70	S
26.	Panchkula	364	756	-52	D
27.	Sonipat	201	441	-54	D
	Delhi (Ut)				
28.	East Delhi	158	515	-69	S
29.	North East Delhi	242	515	-53	D
	Punjab				
30.	Firozpur	91	278	-67	S
31.	Patiala	220	490	-55	D
	Himachal Pradesh				
32.	Kinnaur	88	188	-53	D
33.	Lahul&Spiti	74	347	-79	S
	Gujarat				

S.No.	Sub Division / District	ACTUAL (mm)	NORMAL (mm)	% DEP.	CAT.
34.	Bharuch	283	613	-54	D
	Tamil Nadu				
35.	Thiruvapur	89	183	-51	D
36.	Tuticorin	16	37	-56	D
	Kerala				
37.	Wayanad	957	2369	-60	S

(D = Deficient and S= Scanty)

Table 3: Districts which received more than 50% excess rainfall compared to normal (1 Jun to 28 August 2016) (Source: IMD)

S.No.	Sub Division / District	ACTUAL (mm)	NORMAL (mm)	% DEP.
	Arunachal Pradesh			
1.	Lower Dibang Valley	2477	791	213
	Meghalaya			
2.	East Garo Hills	2146	1337	60
	Manipur			
3.	Imphal West	1316	792	66
	Uttar Pradesh			
4.	Banda	1095	653	68
5.	Mirzapur	1158	647	79
6.	Sonbhadra	1086	683	59
7.	Bareilly	1016	665	53
	Punjab			
8.	Kapurthala	624	335	86
	Rajasthan			
9.	Jodhpur	351	226	55
10.	Pali	774	362	114
11.	Baran	1130	651	74
12.	Bhilwara	849	475	79
13.	Chittaurgarh	1233	569	117
14.	Dungarpur	792	508	56
15.	Jhalawar	1036	680	52
16.	Pratapgarh	1125	650	73
17.	Rajsmand	741	409	81
18.	Swaimadhampur	863	558	55
19.	Udaipur	816	468	74

S.No.	Sub Division / District	ACTUAL (mm)	NORMAL (mm)	% DEP.
	Madhya Pradesh			
20.	Bhopal	1331	770	73
21.	Guna	1233	755	63
22.	Hoshangabad	1866	978	91
23.	Mandsaur	948	606	57
24.	Nimach	979	587	67
25.	Raisen	1346	867	55
26.	Rajgarh	1269	701	81
27.	Ratlam	1173	669	75
28.	Sehore	1320	820	61
29.	Shajapur	1125	679	66
30.	Ujjain	993	635	56
31.	Videsha	1397	812	72
32.	Chhatarpur	1348	757	78
33.	Damoh	1423	848	68
34.	Panna	1581	833	90
35.	Satna	1514	740	105
	Maharashtra			
36.	Satara	854	567	51
	Tamil Nadu			
37.	Coimbatore	257	117	120
	Karnataka			
38.	Bangalore Rural	416	270	54
39.	Mandhya	232	151	54