

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

1. Status of southwest monsoon

During June 1- August 15, country as a whole received 593 mm rainfall, which is 1% more than the normal rainfall of the country for the same period (589 mm). Districts which received rainfall less than and more than 50% of normal during 1 June to 8 August were identified and depicted in Figure 1 and Table 2 and 3.

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

The total sown area of crops as on 12th August, 2016 as per reports received from States, stands at 954 lakh hectare as compared to 896 lakh hectare, as on this date last year (Table 1).

Table 1: Progress in kharif sowing in India as on 12th August 2016 (Source: Press Information Bureau & Ministry of Agriculture, Govt of India)

Crop	Area sown in 2016-17	Area sown in 2015-16
Rice	326	304.7
Pulses	130	97.7
Coarse Cereals	173.6	163.7
Oilseeds	172	163.8
Sugarcane	45.5	49.5
Jute & Mesta	7.5	7.7
Cotton	99	108.7
Total	954	896

(Area in Lakh hectare)

3. Agromet Advisories

The following Agromet advisories were issued during the week followed for the crops/cropping systems of the below mentioned states.

Kerala

The state so far has received 1151 mm rainfall, which is 28% deficit compared to the normal (1606 mm).

- Paddy: crop is in panicle initiation stage. There is a chance for incidence of Sheath blight disease during rainy season. Apply Propiconazole 25 EC @ 500 ml per 1 hectore to control Sheath blight.
- Cardamom: Take necessary phyto-sanitary measures to manage capsule rot (Azhukal disease) and spray 1% Bordeaux mixture (500-1000 ml/plant).
- Nutmeg: During rainy season, there is a chance for fruit rot disease in nutmeg and splitting of fruit before ripening due to the deficiency of Potassium and Boron. To control this, apply 1% Bordeaux mixture.

Gujarat

Saurashtra & Kutch region has received 288 mm rainfall (15% deficit) while other regions of Gujarat received 477 mm (22% deficit) so far. Aravalli, Devbhoomi Dwarika, Jamnagar and Valsad districts received excess rainfall. Districts of south Saurashtra (Rajkot, Amreli, Porbandar, Jundagh and Gir Somnath) and west middle Gujarat (Mahisagar, Panchmahals, and Dahod), Gandhinagar, Navsari and Dangs received normal rainfall. Rest of the parts of the state are under deficient condition.

In case of failure of first crop due to dry spell, following crops can be adopted as mid-season corrections.

- Sorghum (fodder purpose) - CSH-6, GFS-4, GFS-5, GAFS-11
- Sunflower - EC-68414, Modern GS-1, 2 & 3
- Sesame - Gujarat sesame -1, 2, 3 & 4
- Castor - GAUCH-1, GCH-2, GCH-4, 5, 6 & GCH-7

Tamilnadu

The state has received 161 mm of rainfall (8% surplus) so far in the season.

- Farmers should stop *khari* sowing as the sowing window ended with second week of August in all the districts of Tamil Nadu.
- Foliar spraying of 1 % KCl spray or 3 % Kaolin spray or 100 ppm salicylic acid is advocated to save dryland crops from mid season drought.
- In Cauvery delta zone, farmers are advised to give irrigation up to the depth of 2.5 cm immediately after disappearance of water to wetland paddy crop to save irrigation water.

Maharashtra

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

Vidarbha – 760 mm (19% surplus); Marathwada – 476 mm (15% surplus); Madhya Maharashtra- 615 mm (25% surplus) and Konkan- 2711 mm (21% surplus)

Vidarbha

- Sowing in unsown/delayed sowing areas can be taken up till this week with pigeonpea (C-11, Asha, PKV- Tara and BSMR-736 with closer 60x20 spacing). Alternative crops include sunflower, Pearlmillet, Sesame, Castor or intercropping systems viz., pearl millet+pigeonpea (4:2), sunflower+pigeonpea (2:1) or sesame+pigeonpea (4:1).

Chhattisgarh

The state as a whole has received 767 mm rainfall (1% surplus) so far in the season.

- In the deficit rainfall areas, there is possibility of infestation of Cutworm in rice crop. Therefore, farmers should keep vigilant watch in that area. If cut worm is observed in the field, spray Dichlorvas @ 1 ml/200 liter water per acre. Apply 1 liter kerosene oil/acre in available water in the rice field and move rope from one side to another side.

Rajasthan

Due to heavy rainfall received during last fortnight, flood situation exists in many parts of East Rajasthan. East Rajasthan has received 626 mm rainfall (55% surplus) while West Rajasthan has received 226 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, in the areas where heavy rainfall occurred.
- Procure improved varieties of fodder crops like guar, bajra 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.

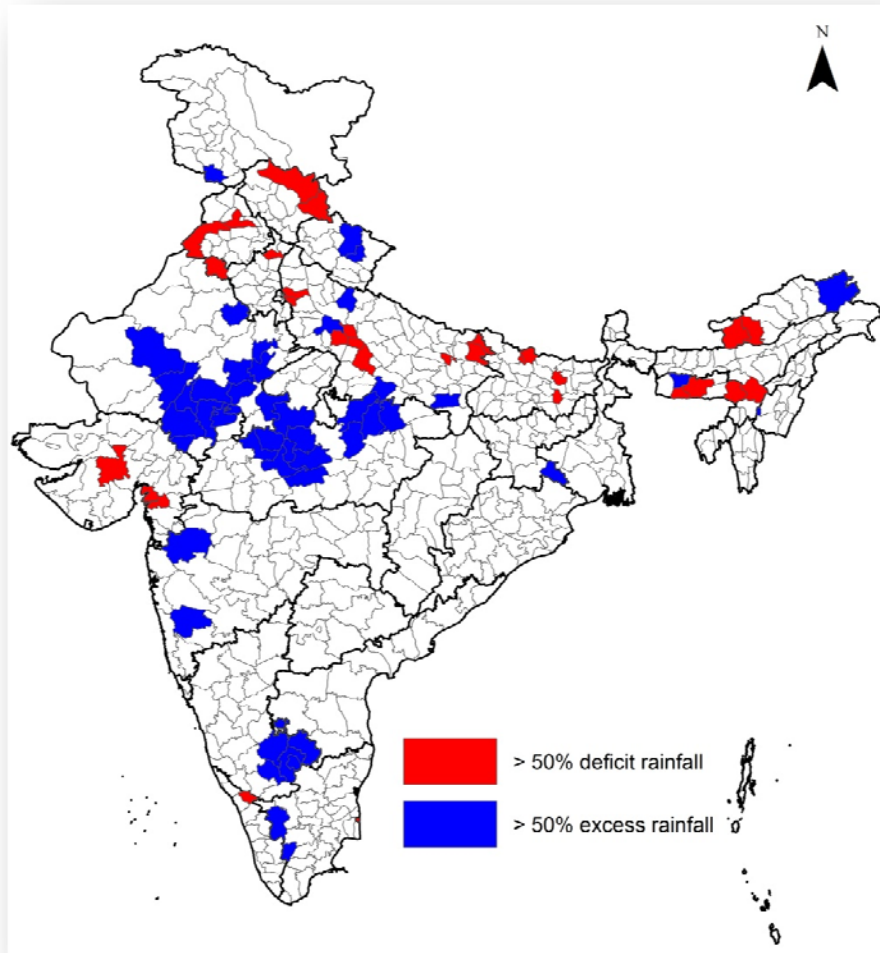


Fig. 1: Districts received > 50% deficit (30) and excess (46) rainfall compared to normal during 1 June -15 August 2016

Table 2: Districts which received more than 50% deficit rainfall compared to normal (1 Jun to 15 August 2016) (Source: IMD)

S.No.	State/District	Actual (mm)	Normal (mm)	Departure (%)	Category
	Arunachal Pradesh				
1.	East Kameng	365	838	-56	D
2.	West Kameng	813	1711	-52	D
	Assam				
3.	N.C Hills	312.	692	-55	D
	Meghalaya				
4.	Jaintia Hills	92	3387	-97	S
5.	South Garo Hills	132	1151	-89	S
6.	West Khasi Hills	591	2003	-70	S
	Bihar				
7.	Munger	282	605	-53	D
8.	Saharsa	422.	968	-56	D
9.	Sheohar	303	743	-59	D
10.	Sitamarhi	336	743	-55	D
	Uttar Pradesh				
11.	Ambedkarnagar	174	573	-70	S
12.	Deoria	271	601	-55	D
13.	Farrukhabad	186	475	-61	S
14.	Kannauj	158	469	-66	S
15.	Kanpur Dehat	189	458	-59	D
16.	Kushinagar	211	742	-72	S
17.	Gautambudhnagar	86	349	-75	S
18.	Ghaziabad	156	390	-60	S
19.	Mainpuri	177	412	-57	D
	Haryana				
20.	Kurukshetra	126	365	-66	S
21.	Sirsa	61	161	-62	S
	Delhi (Ut)				
22.	East Delhi	158	420	-62	S
	Punjab				
23.	Firozpur	49	232	-79	S
24.	Jalandhar	162	363	-55	D
	Himachal Pradesh				
25.	Kinnaur	68	152	-55	D
26.	Lahul&Spiti	59	290	-80	S
	Gujarat				
27.	Bharuch	252	532	-53	D

S.No.	State/District	Actual (mm)	Normal (mm)	Departure (%)	Category
28.	Surendranagar	156	342	-54	D
	Tamil Nadu				
29.	Karaikal	66	142	-53	D
	Kerala				
30.	Wayanad	872	2147	-59	D

(D = Deficient and S= Scanty)

Table 3: Districts which received more than 50% excess rainfall compared to normal (1 Jun to 7 August 2016) (Source: IMD)

S.No.	State/District	Actual (mm)	Normal (mm)	Departure (%)
	Arunachal Pradesh			
1.	Lower Dibang Valley	2390	721	231
	Meghalaya			
2.	East Garo Hills	2144	1181	82
	Manipur			
3.	Imphal West	1288	702	84
	Jharkhand			
4.	Purbi Singhbhum	1085	691	57
	Uttar Pradesh			
5.	Banda	842	531	59
6.	Mirzapur	951	543	75
7.	Bareilly	914	542	69
8.	Etah	621	385	61
	Uttarakhand			
9.	Bageshwar	906	581	56
10.	Chamoli	885	586	51
	Jammu & Kashmir			
11.	Jammu	975	621	57
	Rajasthan			
12.	Jodhpur	322	186	73
13.	Pali	643	298	116
14.	Baran	954	531	80
15.	Bhilwara	716	382	88
16.	Bundi	670	442	52
17.	Chittaurgarh	976	447	118
18.	Dausa	636	418	52
19.	Dungarpur	640	411	56
20.	Jhunjhunun	449	283	59

S.No.	State/District	Actual (mm)	Normal (mm)	Departure (%)
21.	Rajsmad	590	331	78
22.	Swaimadhapur	751	457	64
23.	Tonk	609	386	58
24.	Udaipur	661	383	73
	Madhya Pradesh			
25.	Bhopal	1093	630	74
26.	Guna	1070	601	78
27.	Hoshangabad	1742	794	119
28.	Nimach	726	480	51
29.	Raisen	1146	708	62
30.	Rajgarh	935	567	65
31.	Sehore	1184	666	78
32.	Shajapur	877	560	57
33.	Videsha	1132	652	74
34.	Chhatarpur	931	618	51
35.	Damoh	1125	702	60
36.	Panna	1030	684	51
37.	Satna	980	617	59
	Maharashtra			
38.	Nasik	930	610	52
39.	Satara	826	509	62
	Tamil Nadu			
40.	Coimbatore	241	97	147
41.	Teni	116	69	67
	Karnataka			
42.	Bangalore Rural	398	213	86
43.	Banglore Urban	360	227	59
44.	Kolar	326	182	80
45.	Mandhya	221	121	83
46.	Tumkur	289	169	71

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