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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- September 25, country as a whole received 838 mm rainfall, which is 3% less than the normal rainfall of the country for the same period (865 mm). Districts which received rainfall less than or more than 50% of normal during 1 June to 25 September were identified and depicted in Figure 1 as well as Tables 2 and 3.

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

The total sown area of crops as on 23 September, 2016 as per the reports received from states, stands at 1067 lakh hectare as compared to 1031 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	387	377
Pulses	146	113
Coarse Cereals	189.6	183.6
Oilseeds	189	183.7
Sugarcane	45.8	49.6
Jute & Mesta	7.6	7.7
Cotton	102	116
Total	1067	1031

(Area in Lakh hectare)

3. Agromet Advisories

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

Karnataka

Rainfall received so far during south west monsoon in meteorological sub-divisions of Karnataka is as follows:

South Interior Karnataka – 511 mm (19% deficit); North Interior Karnataka – 511 mm (8% surplus) and Coastal Karnataka – 2399 mm (21% deficit)

North Interior Karnataka

- Wherever sufficient profile-wetting rainfall is received, the following contingent measures are suggested to be taken up based on soil type and district concerned.
 - Sowing of sunflower, desi cotton, rabi sorghum, chick pea, safflower, castor or horse gram may be taken up with suitable varieties recommended for the region.
 - To overcome the failure of crops during drought situations instead of sowing sole crops recommended intercropping systems like *rabi* sorghum + chick pea (2:1), chick pea + safflower (4:2) or chick pea + linseed (4:2) may be taken up.
- Priority should be given to seed cum fodder crops like *rabi* sorghum and horsegram so as to avoid scarcity of fodder for live stock.

Mahrashtra

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

Vidarbha – 991 mm (6% surplus); Marathwada – 813 mm (24% deficit);

Madhya Maharashtra- 807 mm (16% surplus) and Konkan- 3533 mm (24% surplus)

Vidarbha

- Apply foliar spray of 2% Urea (200 g Urea +10 litre water) at flowering stage and 2% DAP at boll development stage of cotton.
- Taking advantage of adequate soil moisture due to recent rain events, early *rabi* sowing (from last week of September) of rainfed *rabi* crops like safflower (AKS- 207, Bhima, Nari- 6, AKS 311, Nari- NH-1), chickpea (Jaki 9218, Vijay, Phule G- 5, ICCV- 2, PKV Kabuli 2 &4), Sorghum for grain & fodder (CSH-15R, CSH-19R, AKSV- 13R, SPV- 504, CSV- 14R, CSV- 18R, SPV- 1359, Maldandi 35-1, Ringni) and sunflower (PKVSH- 27, KBSH- 1 & 44, DRSH-1, PKVSF- 9, Morden, TAS- 82) is recommended.
- Use of bio-inoculants (Azatobacter/PSB) to promote plant growth and use of seed treatment with bio-fungicide Trichoderma to prevent seed borne diseases for better germination and plant stand be followed for *rabi* crop sowings.

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.

West Bengal

Sub-Himalayan West Bengal has received 1950 mm (1% surplus) and Gangetic West Bengal has received 1132 mm (1% surplus) rainfall so far during the season.

- To recover the loss due to irregular monsoon and flood, use good quality seeds only for rabi season. Early varieties of mustard (like *Panchali*, *Agrani*, *Biniyoy*) should be selected so that after harvest of mustard, one can opt for boro-rice.
- Prevailing cloudy weather is congenial for the incidence of downy mildew in vegetables; spray Metalaxyl 8% + Mancozeb 64% @ 2g per litre of water.
- Due to humid and warm weather in Gangetic West Bengal, infestation of bacterial blight and brown leaf spot in rice crop is likely to increase; spray Validamycin @ 2ml/lit of water.

Himachal Pradesh

The state has received 622 mm rainfall (23% deficit) so far during the season.

- If maize cobs and stem color turns yellow, maize harvesting is advised. Since, light rainfall is forecasted for next three - four days in all the districts of the state, weather outlook must be kept in mind before commencing maize harvesting.
- Field preparation should be started for sowing of early sowing of mustard and wheat.
- Attack of fruit fly expected in this weather in cucurbitaceous crops use of 'Methyl Eugenol' trap is advised. After detecting the symptoms, spraying of Dimethoate @ 2 ml / litre water at 50 litres / hectare is advised.

Chattisgarh

The state as a whole has received 1096 mm rainfall (3% deficit) so far during the season.

- To control Tikka disease of groundnut apply two sprays of Hexaconazole (0.2 per cent) or Carbendazim (0.1 per cent) + Mancozeb (0.2 per cent) or Tebuconazole (0.15 per cent) or Difenoconazole (0.1 per cent).

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.

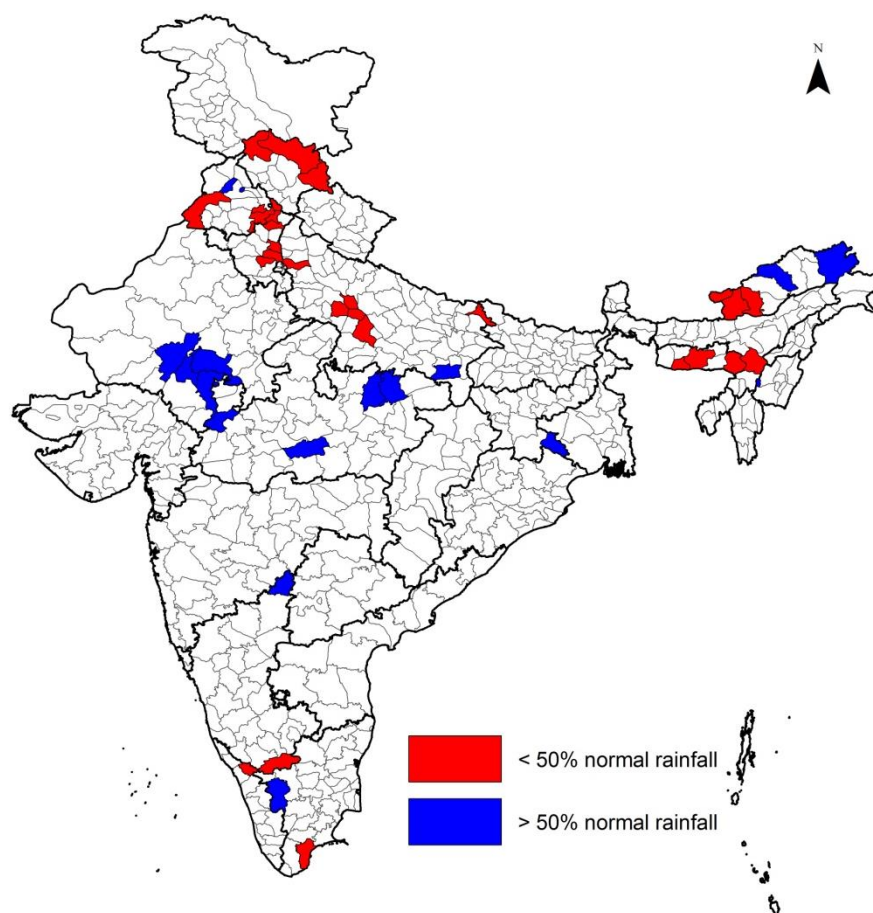


Fig. 1: Districts received > 50% deficit (29) and excess (16) rainfall compared to normal during 1 June-25 September 2016

Table 2: Districts which received more than 50% deficit rainfall compared to normal (1 Jun to 25 September 2016) (Source: IMD)

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)	CAT.
Arunachal Pradesh					
1.	East Kameng	517	1208	-57	D
2.	Tawang	1135	2415	-53	D
3.	West Kameng	920	2415	-62	S
Assam					
4.	N.C Hills	457	952	-52	D
Meghalaya					
5.	Jaintia Hills	659	4538	-85	S
6.	South Garo Hills	150	1637	-91	S
7.	West Khasi Hills	743	2718	-73	S
Uttar Pradesh					
8.	Farrukhabad	277	731	-62	S
9.	Kannauj	309	763	-60	S

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)	CAT.
10.	Kanpur Dehat	295	750	-61	S
11.	Kushinagar	334	1121	-70	S
12.	Ghaziabad	238	624	-62	S
13.	Mainpuri	290	644	-55	D
	Haryana	331	453	-27	D
14.	Ambala	421	893	-53	D
15.	Kurukshetra	180	552	-67	S
16.	Panchkula	393	935	-58	D
17.	Panipat	248	512	-52	D
18.	Rohtak	247	504	-51	D
19.	Sonipat	219	527	-58	D
	Delhi (Ut)				
20.	North East Delhi	280	627	-55	D
	Punjab				
21.	Fatehgarh Sahib	251	534	-53	D
22.	Firozpur	105	347	-70	S
23.	Patiala	241	594	-59	D
	Himachal Pradesh				
24.	Chamba	641	1386	-54	D
25.	Kinnaur	116	257	-55	D
26.	Lahul&Spiti	102	446	-77	S
	Tamil Nadu				
27.	Tuticorin	19	67	-72	S
	Karnataka				
28.	Chamarajanagar	145	295	-51	D
	Kerala				
29.	Wayanad	1060	2587	-59	D

(D = Deficient and S=

Scanty)

Table 3: Districts which received more than 50% excess rainfall compared to normal (1 Jun to 25 September 2016) (Source: IMD)

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)
	Arunachal Pradesh			
1.	Lower Dibang Valley	3282	1024	221
2.	Upper Subansiri	1350	754	79
	Manipur			
3.	Imphal West	2176	947	130
	Jharkhand			
4.	Purbi Singhbhum	1858	1024	81
	Uttar Pradesh			
5.	Mirzapur	1357	885	53

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)
	Punjab			
6.	Kapurthala	668	412	62
	Rajasthan			
7.	Pali	849	445	91
8.	Bhilwara	909	576	58
9.	Chittaurgarh	1300	701	85
10.	Rajsmand	801	501	60
	Madhya Pradesh			
11.	Hoshangabad	2090	1274	64
12.	Ratlam	1292	852	52
13.	Panna	1660	1062	56
14.	Satna	1582	941	68
	Tamil Nadu			
15.	Coimbatore	281	173	63
	Karnataka			
16.	Bidar	1059	667	59