

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 11, country as a whole received 749 mm rainfall, which is 5% less than the normal rainfall of the country for the same period (789 mm). Districts which received rainfall less than or more than 50% of normal during 1 June to 11 September were identified and depicted in Figure 1 and Tables 2 and 3.

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

The total sown area of crops as on 9 September, 2016 as per reports received from states, stands at 1054 lakh hectare as compared to 1012 lakh hectare, as on this date last year (Table 1).

Table 1: Progress in *kharif* sowing in India as on 2 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	380	370
Pulses	144	111
Coarse Cereals	188	177
Oilseeds	187	182
Sugarcane	45.8	49.6
Jute & Mesta	7.6	7.7
Cotton	102	114
Total	1054	1012

(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 1286 mm rainfall so far, which is 32% deficit compared to the normal.

- Paddy: Crop is in milk stage. The light rains and high humidity predicted are favourable for the blast disease of rice, especially neck blast. To control this apply Carbendazim (Bavistin) 1gm/L.
- Cashew: Stem borer is seen in Cashew. To control the disease, chisel out the grubs and swab the tree trunk with Acephate @ 4g/L of water. Swabbing (adult trees only) with coal tar kerosene mixture at 1:2 proportion is also recommended.
- Rubber: Tapping can be resumed. Start arrangements for rain guarding. Subsequent tapping must be done after proper drying of tapping panel.

Karnataka

All the three meteorological sub-divisions of Karnataka, viz., Coastal Karnataka (2269 mm, 22% deficit), North Interior Karnataka (383 mm, 4% deficit) and South Interior Karnataka (477 mm, 14% deficit) are facing deficit rainfall conditions so far during the season.

Northern Karnataka

Wherever sufficient profile-wetting rainfall is received, the following activities are suggested to be taken up based on soil type and district concerned.

- Sowing of sunflower, desi cotton, castor, maize or horse gram may be taken up.
- Use available short and medium duration varieties, instead of long duration varieties of the above suggested crops.
- Drought resistance-inducing treatments recommended for different crops should be followed.
- Sowing of dual purpose crops like Sunhemp which may be used as fodder or may be incorporated in soil as green manure may be taken up in the fields earmarked for rabi crops.

Andhra Pradesh

Coastal Andhra Pradesh has received 482 mm (2% surplus) and Rayalaseema has received 315 mm (4% surplus) rainfall so far during the season. Pink boll worm incidence is noticed in Ananthapuramu, Kurnool, Kadapa districts. It has crossed ETL level in Ananthapuramu district. The following measures are suggested for control of pink boll worm

- Pheromone traps should be installed immediately at the field level for monitoring the incidence levels on community basis.
- Observation of rosette flowers and sampling of green bolls should be done regularly for monitoring the intensity of the disease incidence.
- Destroy rosette flowers and remove the dropped squares, dried flowers and pre-matured bolls periodically to suppress the pest population at the initial stage. Prophylactic spray of 5 % NSKE or neem oil at flowering stage to prevent egg laying.

- Need based use of insecticides, if it crosses ETL (8 moths/trap/day for 3 consecutive days or 1 larva/10 flowers or 10 green bolls) : Spraying of insecticides like thiodicarb 75 WP @ 1.5 g/l or profenophos 50 EC @ 2 ml/l or quinalphos 25 EC @ 2.5 ml/l or chlorpyriphos 20 EC @ 2.5 ml/l at 15 days interval.

Odisha

The state has received 903 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 parts of medium lands.
- It is time for niger sowing in the fallow uplands. Grow High Yielding varieties suitable for Orissa climate such as Deomali and IGP-76. Use 4 kg seeds/acre .
- 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.

Gujarat

Saurashtra & Kutch region has received 364 mm rainfall (17% deficit) so far, while rest of the region in the state has received 620 mm (27% deficit) rainfall so far during the season.

Following crops can be considered for sowing.

- Sesame : Guj-1, 2, 10
- Safflower : Bhima, Tara
- Sunflower : EC-68414, Modern
- Green gram: GM-4, K-851, Meha

General advisories

- Leaf spot disease can be prevented in groundnut by spray of Hexaconazole 10 ml or Tebuconazole 7 ml in 10 liters of water under clear sky conditions.
- Frequent light inter-culturing operations should be done to avoid the evaporation losses of soil moisture

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.

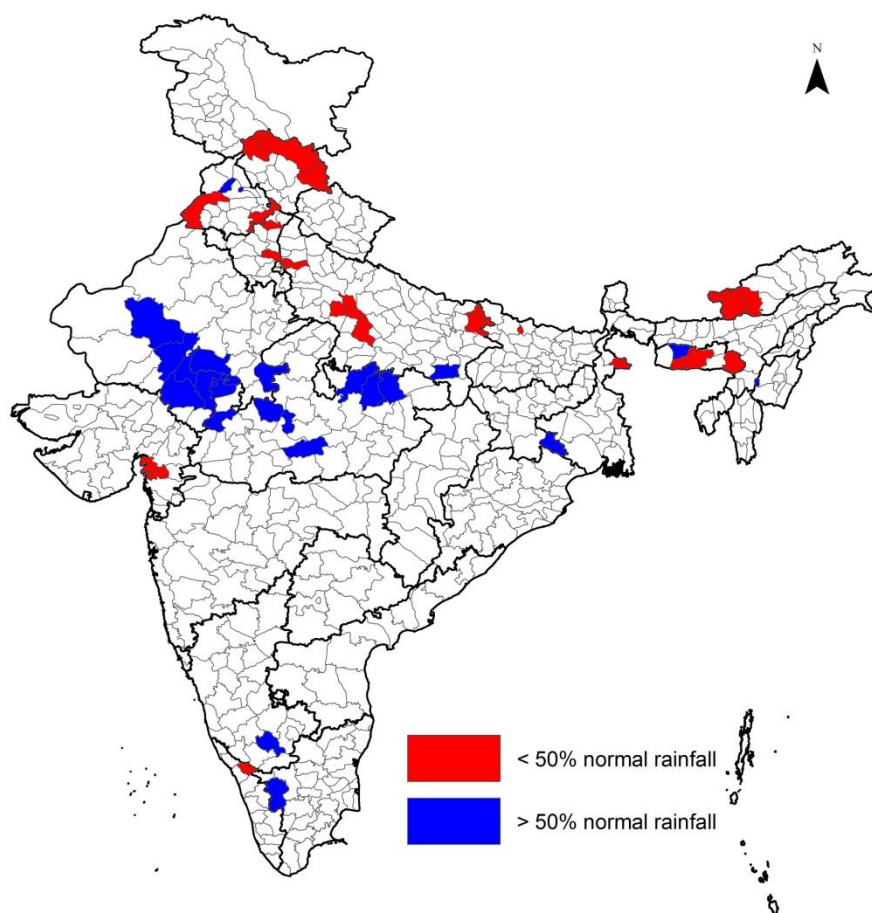


Fig. 1: Districts received > 50% deficit (27) and excess (22) rainfall compared to normal during 1 June-11 September 2016

Table 2: Districts which received more than 50% deficit rainfall compared to normal (1 Jun to 11 September 2016) (Source: IMD)

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)	CAT.
Arunachal Pradesh					
1.	East Kameng	466	1069	-56	D
2.	Tawang	1004	2163	-54	D
3.	West Kameng	858	2163	-60	S
Assam					
4.	Jaintia Hills	659	4198	-84	S
5.	South Garo Hills	141	1474	-90	S
6.	West Khasi Hills	655	2505	-74	S
West Bengal					
7.	Dakshin Dinajpur	480	1005	-52	D
Bihar					
8.	Sheohar	365	977	-63	S
Uttar Pradesh					
9.	Deoria	367	829	-56	D
10.	Farrukhabad	239	671	-64	S
11.	Kannauj	261	692	-62	S

12.	Kanpur Dehat	274	677	-60	S
13.	Kushinagar	260	1001	-74	S
14.	Ghaziabad	238	570	-58	D
15.	Mainpuri	285	581	-51	D
	Haryana				
16.	Kurukshetra	180	512	-65	S
17.	Panchkula	376	868	-57	D
18.	Sonipat	219	496	-56	D
	Delhi (Ut)				
19.	East Delhi	158	592	-73	S
20.	North East Delhi	276	592	-53	D
	Punjab				
21.	Ferozpur	105	320	-67	S
22.	Patiala	241	551	-56	D
	Himachal Pradesh				
23.	Chamba	623	1300	-52	D
24.	Kinnaur	106	221	-52	D
25.	Lahul&Spiti	99	398	-75	S
	Gujarat				
26.	Bharuch	314	714	-56	D
	Kerala				
27.	Wayanad	1012	2497	-59	D

(D = Deficient and S= Scanty)

Table 3: Districts which received more than 50% excess rainfall compared to normal (1 Jun to 11 September 2016) (Source: IMD)

S.No.	State/District	ACTUAL (mm)	NORMAL (mm)	DEP. (%)
	Assam			
1.	East Garo Hills	2353	1475	60
	Manipur			
2.	Imphal West	1914	878	118
	Odisha			
3.	Purbi Singbhum	1697	938	81
	Uttar Pradesh			
4.	Mirzapur	1249	777	61
	Punjab			
5.	Kapurthala	665	378	76
	Rajasthan			
6.	Jodhpur	403	260	55
7.	Pali	849	425	100
8.	Baran	1151	746	54
9.	Bhilwara	908	550	65

10.	Chittaurgarh	1292	669	93
11.	Rajsmant	797	476	67
12.	Udaipur	842	551	53
	Madhya Pradesh			
13.	Bhopal	1396	909	54
14.	Hoshangabad	1917	1163	65
15.	Nimach	1050	692	52
16.	Rajgarh	1302	822	58
17.	Ratlam	1259	787	60
18.	Chhatarpur	1370	897	53
19.	Panna	1602	968	65
20.	Satna	1531	859	78
	Tamil Nadu			
21.	Coimbatore	273	133	105
	Karnataka			
22.	Mandhya	287	183	57