

**Advisory for DD Kisan dated 19.07.19**  
**(Agromet Advisories mentioned in the inputs are prepared by different**  
**Agromet Field Units in the country)**

**Significant Weather Features**

- The southwest monsoon has further advanced into remaining parts of West Rajasthan and thus has covered the entire country today, the 19<sup>th</sup> July, 2019.
- The western end of monsoon trough at mean sea level is near its normal position and its eastern end is south of its normal position.
- An east-west shear zone runs roughly along Latitude 15.0°N between 4.5 & 5.8 km above mean sea level.
- Under the influence of shear zone and strong winds at lower levels over southern parts of West Coast, active to vigorous monsoon conditions with widespread rainfall with heavy to very heavy at a few places and extremely heavy falls at isolated places are very likely to occur over Kerala & Mahe and Coastal & South Interior Karnataka mainly during 19<sup>th</sup> -22<sup>nd</sup> July.

**Realised Weather**

**(From 0830 hours IST of yesterday to 0830 hours IST of today)**

- **Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today):** at most places over Himachal Pradesh, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam, Konkan & Goa, Coastal Karnataka, Kerala & Mahe, Andaman & Nicobar Islands and Lakshadweep; at many places over Jammu & Kashmir, Jharkhand, Odisha, Interior Karnataka, Tamilnadu & Puducherry and Nagaland, Manipur, Mizoram & Tripura; at a few places over Haryana, Chandigarh & Delhi, East Rajasthan, Gangetic West Bengal, Assam & Meghalaya, Vidarbha, Marathawada and East Madhya Pradesh and at isolated places over Uttarakhand, West Rajasthan, East Uttar Pradesh, Bihar, Gujarat, Madhya Maharashtra, Rayalaseema and Telangana.
- **Heavy to very heavy rainfall** observed at many places over Kerala & Mahe; at isolated places over Konkan & Goa and South Interior Karnataka. Heavy rainfall observed at isolated places over Haryana, Chandigarh & Delhi, Odisha, Lakshadweep, Coastal Karnataka and Tamilnadu, Puducherry & Karaikal.
- **Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today):** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Jammu & Kashmir, Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Konkan & Goa, Chhattisgarh, Coastal & North Interior Karnataka, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Tamil Nadu, Puducherry & Karaikal, Kerala, Jharkhand, Odisha and West Bengal & Sikkim.

**Weather Forecast for next 5 days upto 0830 hours IST 24<sup>th</sup> July 2019**

- Meteorological sub-division wise detailed 5 days precipitation forecast is given in Table-1.
- No significant change in maximum temperatures likely over major parts of the country during next 3-4 days

**Table -1**

**5 Day Rainfall Forecast (MID-DAY)**

19-July-2019

Met-Sub-Division	19-Jul Today	20Jul Sat	21Jul Sun	22Jul Mon	23Jul Tue
1. Andaman & Nicobar Islands	WS	WS	WS	FWS	FWS
2. Arunachal Pradesh	SCT	FWS	WS	WS	FWS
3. Assam & Meghalaya	SCT	FWS	FWS	FWS	SCT
4. N. M. M. & T.	FWS	FWS	FWS	FWS	SCT
5. S.H. West Bengal & Sikkim	SCT	FWS	WS	WS	WS
6. Gangetic West Bengal	SCT	ISOL	ISOL	ISOL	SCT
7. Odisha	FWS	SCT	SCT	SCT	SCT
8. Jharkhand	SCT	ISOL	SCT	FWS	FWS
9. Bihar	ISOL	ISOL	ISOL	FWS	FWS
10. East Uttar Pradesh	ISOL	ISOL	ISOL	SCT	SCT
11. West Uttar Pradesh	SCT	ISOL	ISOL	ISOL	ISOL
12. Uttarakhand	FWS	FWS	FWS	WS	WS
13. Haryana, Chd & Delhi	FWS	ISOL	ISOL	ISOL	ISOL
14. Punjab	SCT	ISOL	ISOL	ISOL	ISOL
15. Himachal Pradesh	WS	FWS	FWS	FWS	WS
16. Jammu & Kashmir	SCT	SCT	SCT	SCT	SCT
17. West Rajasthan	ISOL	ISOL	ISOL	ISOL	ISOL
18. East Rajasthan	ISOL	SCT	ISOL	ISOL	SCT
19. West Madhya Pradesh	SCT	SCT	FWS	FWS	FWS
20. East Madhya Pradesh	FWS	SCT	SCT	SCT	FWS
21. Gujarat Region	SCT	FWS	FWS	SCT	SCT
22. Saurashtra & Kutch	ISOL	SCT	SCT	ISOL	ISOL
23. Konkan & Goa	WS	WS	WS	WS	WS
24. Madhya Maharashtra	FWS	WS	WS	WS	FWS
25. Marathwada	FWS	WS	WS	WS	FWS
26. Vidharbha	WS	WS	FWS	SCT	SCT
27. Chhattisgarh	WS	FWS	SCT	SCT	SCT
28. Coastal A. P. & Yanam	WS	FWS	SCT	SCT	SCT
29. Telangana	WS	FWS	FWS	FWS	SCT
30. Rayalaseema	FWS	SCT	SCT	SCT	SCT
31. T.N.,Puducherry & Karaikal	SCT	SCT	SCT	SCT	SCT
32. Coastal Karnataka	WS	WS	WS	WS	WS
33. North Interior Karnataka	WS	WS	WS	WS	FWS
34. South Interior Karnataka	WS	WS	WS	WS	WS
35. Kerala & Mahe	WS	WS	WS	WS	WS
36. Lakshadweep	WS	WS	WS	WS	WS

**% Station Reporting Rainfall**

% Stations	Category	% Stations	Category
76-100	Widespread (WS/Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)
No Rain	Dry		

## Weather Warning

### Thunderstorm accompanied with lightning

19 July (Day 1)	Thunderstorm accompanied with lightning very likely at isolated places over Jharkhand, Odisha and Gangetic West Bengal.
20 July (Day 2) & 22 <sup>nd</sup> , 23 <sup>rd</sup> July	Thunderstorm accompanied with lightning very likely at isolated places over Odisha.

### Heavy rainfall

19 July (Day 1)	<b>Heavy to very heavy rainfall</b> at a few places with <b>extremely heavy falls</b> at isolated places very likely over Kerala & Mahe and South Interior Karnataka and <b>Heavy to very heavy rainfall with extremely heavy falls</b> at isolated places over Coastal Karnataka; <b>Heavy to very heavy rainfall</b> at a few places over Konkan & Goa and Lakshadweep; at isolated places over Madhya Maharashtra and Tamilnadu, Puducherry & Karaikal and heavy rainfall at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Vidarbha, Chhattisgarh, Odisha, Andaman & Nicobar Islands, Marathwada, Coastal Andhra Pradesh, Rayalaseema, Telangana and North Interior Karnataka.
20 July (Day 2)	<b>Heavy to very heavy rainfall</b> at a few places <b>with extremely heavy falls</b> at isolated places very likely over Kerala & Mahe and South Interior Karnataka and Heavy to very heavy rainfall with extremely heavy falls at isolated places over Coastal Karnataka; <b>Heavy to very heavy rainfall</b> at a few places over Lakshadweep; at isolated places over Konkan & Goa and heavy rainfall at isolated places over Vidarbha, East Rajasthan, Andaman & Nicobar Islands, Gujarat Region, Marathwada, Coastal Andhra Pradesh, Telangana, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal and North Interior Karnataka.
21 July (Day 3)	<b>Heavy to very heavy rainfall</b> at a few places <b>with extremely heavy falls</b> at isolated places very likely over Kerala & Mahe and South Interior Karnataka and <b>Heavy to very heavy rainfall with extremely heavy falls</b> at isolated places over Coastal Karnataka; Heavy to very heavy rainfall at a few places over Lakshadweep; <b>heavy rainfall</b> at isolated places over West Madhya Pradesh, Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Gujarat Region, Konkan & Goa, Marathwada, Telangana, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal and North Interior Karnataka.
22 July (Day 4)	<b>Heavy to very heavy rainfall</b> at a few places <b>with extremely heavy falls</b> at isolated places very likely over Kerala & Mahe and Coastal & South Interior Karnataka; <b>Heavy to very heavy rainfall</b> at isolated places over Lakshadweep; heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal and North Interior Karnataka.

23 July (Day 5)	<b>Heavy to very heavy rainfall</b> at isolated places over Coastal & South Interior Karnataka and Kerala & Mahe and <b>heavy rainfall</b> at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, North Interior Karnataka, Konkan & Goa, Madhya Maharashtra and Tamilnadu, Puducherry & Karaikal.
<b>Advisory for Heavy rainfall</b>	Postpone intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields. Provide mechanical support to banana, young fruit plants and staking in vegetables to prevent the crops from lodging due to heavy rain.

### Rough to very rough sea conditions

19 July (Day 1) & 20 July (Day 2)	Rough to very rough sea conditions (with wind speed reaching 40-50 kmph) are likely to prevail over southwest and central Arabian Sea, along & off Maldives area, Comorin area, Lakshadweep, Gulf of Mannar, South Bay Of Bengal, Gujarat coast and Kerala coast. Fishermen are advised not to venture into these areas.
21 July (Day 3) To 23 July (Day 5)	Rough to very rough sea conditions (with wind speed reaching 40-50 kmph) are likely to prevail over southwest & central Arabian Sea. Fishermen are advised not to venture into these areas.

### State-wise Advisories

#### Assam, Manipur, Arunachal Pradesh, and Tripura

- In flood affected areas of Assam where the paddy was completely destroyed, farmers are advised to undertake sowing of seeds for replanting with medium to short duration varieties in nursery bed within 1st week of August, Direct seeding with the photo insensitive short duration variety and adoption of submergence tolerance varieties for repeat flood prone areas. In partially affected fields, drain excess water and apply 1/3rd N2 + 50% K2O as top dressing during the tillering stage after current spells of rain.
- In Meghalaya undertake transplanting of rice seedlings (of 20-25 days old). Maintain proper drainage in ginger, turmeric and maize fields.
- In Tripura, maintain good drainage in maize and groundnut field.

#### Jammu & Kashmir

- In Cold Arid Zone, undertake harvesting of barley.
- In Jammu & Kashmir, complete sowing of kharif pulses. Provide proper drainage in already sown kharif pulses.

#### Punjab and Haryana & Delhi

- In Punjab, complete sowing of cotton including Bt cotton or desi Cotton, mash and moong and planting of turmeric. Complete the transplanting of rice.
- In Haryana, continue sowing of cotton, transplanting of matured seedlings of tomato, cauliflower, cabbage in prepared field and complete the sowing of ladyfinger, bottle gourd, cucumber, ridge gourd and summer radish. Complete transplanting of rice and continue land preparation for sowing for pulses i.e. green gram, lobia, moth.

- In Delhi, undertake transplanting of nursery for early cauliflower, tomato, chilli, brinjal whose seedlings are ready and land preparation of rice. Undertake sowing of soybean, maize, bajra and short duration varieties of pigeon pea.

### **Bihar and Jharkhand**

- In Bihar, undertake transplanting of 20 to 22 days old rice in medium to low land areas. Continue sowing of pigeon pea.
- In Jharkhand, undertake transplanting of rice and undertake sowing of sweet potato, soybean, til, urd and cowpea crops.

### **Madhya Pradesh**

- In Jabhua Hill and Satpura Plateau Zone, continue sowing of soybean and maize. Continue sowing of bottle gourd, pumpkin, cucumber, bitter gourd and ridge gourd. Earlier sown kharif crops suffering moisture stress condition, undertake intercultural and use bio mulch in between the rows of the crop for retaining soil moisture..
- In Satpura Plateau Zone, continue line sowing through seed drill for the crops like soybean, maize, arhar, urad and moong crops after proper seed treatment.
- In Central Narmada Valley Zone, continue nursery sowing of rice of early and medium duration varieties of rice. Continue sowing of soybean and maize. Undertake planting for new orchards.
- In Malwa Plateau Zone, continue sowing of pigeon pea and cotton and undertake planting of ginger and turmeric.

### **Chhattisgarh**

- In North Hill Zone, complete the transplanting of rice as early as possible. Continue sowing of soybean, arhar, sesamum, and maize crops. In upland areas undertake intercropping of maize with urd.
- In Chhattisgarh Plain Zone, continue nursery sowing of rice. Soybean and other pulses crops like arhar should be sown with proper drainage.

### **Gujarat**

- In Middle Gujarat, continue land preparation for transplanting of tobacco and vegetable crops (tomato, chili, etc) and continue transplanting where seedlings are ready. Carry out gap filling in early sown pearl millet, green gram and groundnut crops.
- In North Gujarat, undertake sowing of groundnut, pearl millet, sesame, maize, green gram, black gram and cluster bean crops after receipt of sufficient rainfall. Undertake sowing of short duration pulses as inter crop in orchards.

### **Uttar Pradesh and Uttarakhand**

- In East Uttar Pradesh, undertake transplanting of rice. Undertake sowing of groundnut, arhar, soybean, sunflower, lobia, jowar, bajra and maize. Undertake planting of new fruit orchards.
- In West Uttar Pradesh, continue transplanting of paddy.
- In Bhabar and Tarai Zone of Uttarakhand, undertake transplanting of rice. Continue transplanting of cole crops. Drain out excess water from vegetable fields.
- In Sub-Humid Sub-Tropic Zone of Uttarakhand, continue transplanting of rice. Drain out excess water from vegetable fields.

## ~~Handbook for the field scientists~~

- In Gangetic West Bengal the Aman paddy ( wet seeded) is facing moisture stress due to receipt of deficient rainfall. Provide life saving irrigation.
- In Sub-Himalayan West Bengal, provide drainage in Mandarin orange, ginger and turmeric fields.

### Maharashtra

- In Konkan region,continue transplanting of rice seedlings (20 to 22 days old) . Drain out excess water from already sown fields, Complete sowing of groundnut.
- In Madhya Maharashtra, undertake sowing of alternate crops like soybean, cotton, hybrid sorghum, hybrid pearl millet, sunflower, maize and kharif onion with intercropping pearl millet + pigeon pea (2:1), sunflower + pigeon pea (2:1), soybean + pigeon pea.
- In West Vidarbha, in deficient areas with insufficient soil moisture condition remaining sowing of kharif crops should be done upon receipt of sufficient rains. Preferably use early duration varieties with 20% higher seed rate. As far as possible avoid sowing of cotton. Otherwise under late sowing condition upon receipt of sufficient rains (use only short duration varieties).
- In East Vidarbha, continue transplanting of rice seedling (20 to 22 days old).

### Tamilnadu and Kerala

- In Cauvery Delta Zone of Tamilnadu, continue transplanting of kuruvai rice.
- In Coastal Zone of Tamilnadu, as an alternate crop for kuruvai rice, transplanting of ragi (TRY 1) can be undertaken or direct sowing may be done in coarse textured soil.
- In Kerela provide proper drainage facilities to the tranplated viruppu rice, coconut , vegetables fields and provide mechanichal support to banana to avoid damage due to heavy rainfall and suspected pest & diseases during the rainy period. Keep the rice fields free from weeds either by hand weeding or by use of herbicides

### Andhra Pradesh and Telangana

- Due to receipt of deficient rainfall in South Telangana undertake direct sowing of rice.
- In North Coastal Andhra Pradesh, continue sowing of rice.
- In Scarce rainfall Zone of Rayalaseema, continue sowing of groundnut, redgram, bajra, fox tail millet, castor after receipt of sufficient rainfall for sowing.
- In High altitude tribal zone of North Coastal Andhra Pradesh continue nursery sowing of rice & Finger millet, and sowing of maize
- In Krishna Godavari Zone of Andhra Pradesh, undertake sowings of cotton as favorable weather conditions are prevailing. Continue field preparation for planting of sugarcane
- In Southern Zone of Andhra Pradesh, undertake transplanting of paddy. Cut the tips of the plants before transplanting and make 20 cm alleyways at every 2 mt. apart to facilitate free aeration and take up pest management practices.