## All India Coordinated Research Project on Agrometeorology (AICRPAM)

ICAR-Central Research Institute for Dryland Agriculture Santoshnagar, Hyderabad – 500059

### Weather Conditions and Agromet Advisories Issued during July 2017

#### 1. General Weather Conditions

Southwest monsoon has covered the entire country on 19 July 2017. During 1- 31 July 2017, the country as a whole has received 460 mm rainfall, which is 2% more, than the normal rainfall for the same period (453 mm). The month witnessed heavy rainfall events and subsequent flood in southern parts of Rajasthan, northern parts of Gujarat, parts of Odisha, West Bengal and Assam. Out of 36 meteorological sub-divisions, rainfall was largely excess in 2 sub-divisions; excess in 4 sub-divisions; normal in 22 sub-divisions and deficient in 8 sub-divisions. The rainfall received during 1 - 31 July, is depicted in Fig. 1.

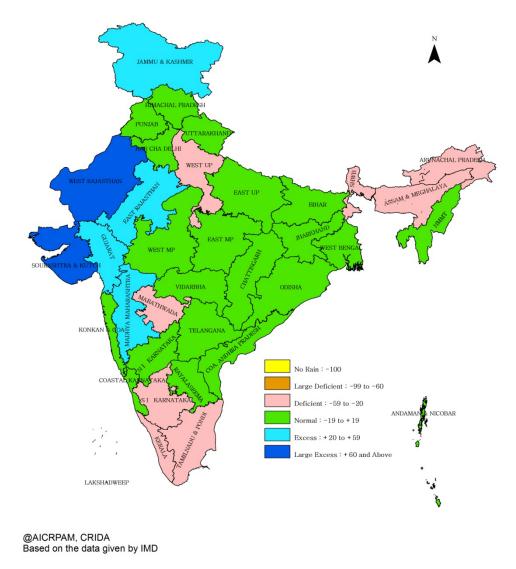


Fig. 1: Meteorological sub-divisional-wise rainfall received during 1 June – 31 July, 2017

## 2. Progress in kharif sowing (Source: Press Information Bureau and Ministry of Agriculture and Farmers' Welfare, Govt. of India)

The total sown area of major crops as on 28<sup>th</sup> July, 2017 (as per reports received from states), stands at 791 lakh hectare as compared to 766 lakh hectare, as on this date last year (Table 1). Area under cotton, rice and pulses has increased and area under oil seeds has decreased substantially (nearly 14 lakh hectares during the current year compared to last year).

Table 1: Progress	in kharif sowing in	India as on 28 <sup>th</sup> Jul	ly 2017 (A	Area in Lakh hectare)

Crop	Area sown in 2017	Area sown in 2016
Rice	216.23	211.20
Pulses	114.88	107.44
Coarse Cereals	150.19	145.40
Oilseeds	142.31	156.65
Sugarcane	49.15	45.22
Jute & Mesta	7.03	7.55
Cotton	111.15	92.33
Total	791.34	765.79

# 3. Agromet Advisories issued by centres of ICAR-All India Coordinated Research Project on Agrometeorology (AICRPAM) during June 2017

Date of	AICRPAM	Agromet Advisory issued
issue	Center	
3-7-2017	Akola, Maharashtra	<ul> <li>Nine Districts of the state have been affected by flood in which Karimganj district being the worst hit. Other flood hit districts are Lakhimpur, Sivasagar, Golaghat, Jorhat, Sonitpur, Hojai and Cachar.</li> <li>Community nursery may be raised to meet the requirement of seedlings at flood affected areas.</li> <li>Late and staggered planting with the old seedlings (50-60 days old seedlings) of varieties like Profulla and Gitesh (If field is heavily damaged).</li> <li>Hoeing in between lines for aeration in root Zone is recommended after flood as post-flood management.</li> <li>With sufficient rainfall received, continue sowing of cotton, soybean, pigeonpea, green gram, black gram and sorghum.</li> <li>Feasible risk minimizing intercropping systems include: cotton + greengram/blackgram (1:1), pigeon pea + greengram / blackgram/soybean (2:4), sorghum + greengram/pigeonpea (3:3) and cotton+sorghum+pigeonpea+sorghum(3:1:1:1), cotton+soybean+pigeonpea+soybean (3:2:2:2). Also in soybean, after every 6 or 9 rows one row of pigeonpea may be sown.</li> <li>As far as possible, follow broad-bed and furrow (BBF) layout for sowing <i>kharif</i> crops, particularly soybean, green gram and black gram.</li> </ul>
10-7-2017	Thrissur, Kerala	<ul> <li>Paddy: Transplanting of <i>virippu</i> paddy is over. In order to control sheath blight in one month old crop, spray Pseudomonas culture 10 g/ 1 litre of water</li> <li>Arecanut: Provide proper drainage facilities. Spray 1% Bordeaux mixture as a prophylactic measure to control mahali and bud rot</li> </ul>

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		diseases.  • Banana: Due to the monsoon showers, there is chance of Sigatoka disease in banana. As a precaution, spray Pseudomonas 20g/L. In case of severe attack, spray 1 g Bavistin by mixing it with gum in 1 litre of water on lower surface of leaves.
		• Cashew: Root and stem borer - Chisel out the grubs and swab the tree trunk with Acephate 2g/l of water. Swabbing (adult trees only) with coal tar kerosene mixture at 1:2 proportion is also recommended.
	Mohanpur, West Bengal	<ul> <li>Maintain proper drainage channel for vegetable and jute field as good amount of rainfall received during last couple of days and also rainfall forecast is there for coming five days.</li> <li>Transplanting operation of kharif rice should be completed as early as</li> </ul>
		possible.  • Due to humid and warm weather, infestation of blight in vegetable crops is likely to increase; spray Mancozeb @ 2 g per liters of water, if the weather is sunny.
		• Water harvesting tank can be made in low lying regions for facilitating the jute retting with the harvested rain water.
	Anand, Gujarat	Many places in districts of Morbi, Surendranagar, Jamnagar, Rajkot and Kutch witnessed flood like condition with receipt of heavy rainfall during past 3 days.
		<ul> <li>Drain out excess water from fields.</li> <li>In case of damage or loss of <i>kharif</i> crops due to flood, re-sowing is recommended. Sowing of pulses and below listed crops is advised.</li> </ul>
17-7-2017		<ul> <li>Sorghum (grain purpose): GJ-38, GJ-39, GJ-40, GJ-41</li> <li>Sorghum (fodder purpose): CSH-6, GFS-4, GFS-5, GAFS-11</li> <li>Sunflower: EC-68414, Modern GS-1, 2 &amp; 3</li> </ul>
		<ul> <li>Sesame: Gujarat sesame -1, 2, 3 &amp; 4</li> <li>Castor: GAUCH-1, GCH-2, GCH-4, 5, 6 &amp; GCH-7</li> </ul>
	Kovilpatti, Tamilnadu	• In Cauvery delta zone, Maize/sunflower/groundnut can be sown instead of dry seeded rice under laterite and red soil conditions.
		• In high rainfall zone (Kanyakumari district), banana planting with Rasakathali, Poovan, Nendhran, Matti and Red banana varieties is advocated.
	Jorhat, Assam	Flood situation prevails in many parts of the state due to heavy rains in catchment area of rivers flowing in Assam. Lakhimpur, Biswanath, Barpeta, Morigaon, Nagaon, Golaghat, Jorhat, Sivasagar and Karimganj districts are worst affected due to flood.
		Contingency measures to be taken under flood  • Suitable paddy cultivars for flood prone area: Luit
24-7-2017		• Suitable paddy cultivars tolerant to submergence for 15 days: Swarna Sub-1, Jalashree, Jalkunwari, Plaban
		• Suitable paddy cultivars for delayed transplanting with aged seedling: Padumoni, Prafulla, Gitesh
		• Suitable paddy cultivars for normal planting: Ranjit, Bahadur, Maniram, Kushal, Piolee, Pankaj, Lakhimi
	Udaipur,	• Suitable medium duration paddy cultivars: Satyaranjan, Basundhara  Severe flood conditions prevails in southern parts of Rajasthan due to
31-7-2017	Rajasthan	heavy rainfall during last week. Sirohi, Jalore, Pali are the worst affected due to flood. Mount Abu received 730 mm rainfall on 25 July 2017, which was highest during the last 100 years.
		• Drain out excess rain water, where water logging condition prevailed in

	the field due heavy rainfall.
	• Perform weeding in kharif crops by uprooting the weeds as fields are not
	under workable condition for hoeing due to continuous rainfall.
	• In soybean, weed management to be taken up, where the crop is of 15-20
	days old, by manual weeding or application of herbicides. The
	recommended herbicides for the control of weeds in soybean are
	Imazethapyr @100g/ha or Quizalofop ethyl @ 50g/ha.
Mohanpur, Wes	Districts of Gangetic West Bengal received heavy rainfall during last
Bengal	week. Purulia, Birbhum and Bankura districts are worst affected due to
	floods.
	• Due to heavy rainfall vegetable crops, which faced inundated condition
	for few days are severely infected by rotting and other fungal infections.
	Spray mixture of Carbendazim and Mancozeb @ 2 g per liters of water,
	if the weather is sunny.
	• Maintain proper drainage channel for vegetable field as good amount of
	rainfall was received during last week and also light rainfall forecast is
	there for coming five days.
	• Jute should be harvested as early as possible. Prevailing water logging in
	low lying areas will deteriorate the quality of the Jute.