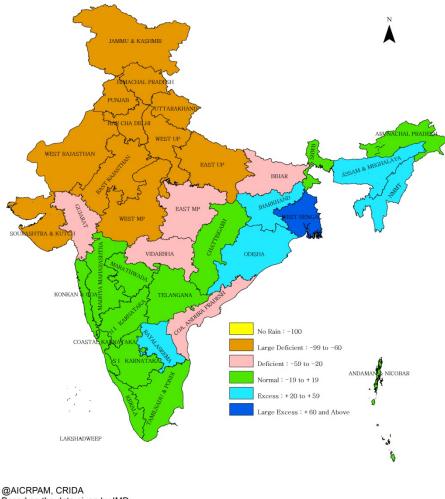
Monthly Report-11 / November 2017

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 November 2017

1. General Weather Conditions

During 1- 30 November 2017, the country as a whole has received 95.9 mm rainfall, which is 13% deficit compared to the normal rainfall for the same period (110 mm). Out of 36 meteorological sub-divisions, rainfall was large excess in 1 sub-division; excess in 5 sub-divisions; normal in 13 sub-divisions; deficient in 6 sub-divisions and large deficient in 11 sub-divisions. The rainfall received during 1 October - 30 November, is depicted in Fig. 1.



Based on the data given by IMD

Fig. 1: Meteorological sub-division-wise rainfall received during 1 October - 30 November, 2017

2. Progress in rabi sowing (Source: Department of Agriculture cooperation and Farmers' Welfare, Govt. of India)

The total sown area of major crops as on 24th November, 2017 (as per reports received from states), stands at 315.86 lakh hectare as compared to 320.55 lakh hectare, as on this date last year (Table 1).

Table 1: Progress	in rabi sowing	g in India as on 24	th November. 2017	(Area in Lakh hectare)
				(

Crops	Normal of Rabi Area	Progress of Corresponding week (lakh hectares)		Departure in 2017-18 area of Corresponding week (lakh hectares)		% increase/decrease of 2017-18 over area of Corresponding week		
	(lakh hectares)	Normal	2017-18	2016-17	Normal	2016-17	Normal	2016-17
Wheat	301.74	144.54	110.66	126.35	-33.88	-15.69	-23.44	-12.42
Rice	36.53	8.42	9.49	7.32	1.07	2.17	12.73	29.67
Total Pulses	139.52	88.77	101.43	89	12.66	12.44	14.26	13.97
Gram	86.81	62.73	72.96	62.83	10.23	10.12	16.3	16.11
Lentil	14.16	9.55	11.73	9.72	2.18	2.02	22.88	20.74
Fieldpea	9.93	5.9	6.45	6.39	0.55	0.05	9.31	-0.84
Kulthi	2.25	3.26	3.04	2.37	-0.22	0.67	-6.88	28.18
Urdbean	7.9	1.94	1.9	2.04	-0.05	-0.15	-2.35	-7.28
Moongbean	9.54	0.77	0.58	0.77	-0.2	-0.2	-25.34	-25.33
Lathyrus	5.06	2.37	2.22	2.53	-0.15	-0.31	-6.37	-12.32
Other Pulses	3.87	2.25	2.56	2.33	0.32	0.23	14.13	9.89
Total Coarse cereals	64.28	39.65	36.35	33.93	-3.31	2.42	-8.34	7.13
Jowar	37.53	29.6	25.51	24.54	-4.08	0.97	-13.8	3.97
Bajra	3.85	0.16	0.1	0.08	-0.06	0.02	-38.3	27.63
Ragi	0.35	0.33	0.55	0.08	0.22	0.47	66.47	598.73
Maize	15.8	5.2	6.49	5.32	1.28	1.17	24.69	21.93
Barley	6.75	4.37	3.7	3.92	-0.67	-0.22	-15.3	-5.56
Total Oilseeds	81.47	63.67	57.93	63.96	-5.73	-6.02	-9.01	-9.41
Rapeseed & Mustard	60.91	55.87	51.37	57.86	-4.5	-6.49	-8.05	-11.22
Groundnut	8.22	2.28	2.56	2.44	0.29	0.3	12.69	5.26
Safflower	1.96	0.87	0.49	0.53	-0.39	-0.04	-44.25	-8.13
Sunflower	4.33	2.22	1.12	0.95	-1.1	0.17	-49.64	17.95
Sesamum	2.97	0.26	0.19	0.13	-0.07	0.05	-28.45	38.78
Linseed	2.93	1.88	2.07	1.73	0.19	0.34	10.19	19.62
Other Oil seeds	0.15	0.29	0.14	0.31	-0.16	-0.8	-53.63	-56.46
Total Rabi Crops	623.53	345.05	315.86	320.55	-29.19	-4.69	-8.46	-1.46

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

Date of issue	AICRPAM centre	Agromet Advisory issued in this week based on IMD forecast		
	Jammu	 Farmers were advised to go for sowing of wheat, wherever soil moisture was available and recommended varieties were PBW-175, PBW-396, RSP-81(Jitto), WH-1080 and PBW-644. Farmers are also advised for sowing of barley (var. Ratna, Jyoti and Sonu) with seed rate 100 kg/ha in rainfed areas, Mustard (Irrigated) Varieties were also advised to be sown (RSPR-01, RSPR-03, Kranti, Pusa Bahar, Pusa Basant, Varuna) during this week. Farmers were advised for sowing of Rabi pulses (Chickpea/Pea/ Lentil): Complete the sowing of Pea (var., AP-1, Bonnevillea, Rachna and Arkel); Chickpea (var., K-468, Gourav); Lentil(var., L-4147 and L-9/12,PL-406). 		
	Parbhani	 Farmers are advised to complete the sowing of wheat crop before 20th November, Sowing of irrigated chickpea crop should be done up to 10th November, Sowing of irrigated safflower crop should be done up to 10th November. Farmers are also advised for Planting of Pre-seasonal sugarcane up to 15th November. In vegetables, farmers are recommended to go for the application of nitrogen in newly planted vegetable crops. Apply light irrigation at evening in vegetable crops. Farmers are advised to sow improved varieties like Ruchira R-4-11, Maldandi 35-1, Nilva, MP Chari, Pusa Chari, IS – 4776, ASG - 14, MKV Chari etc. for sowing of fodder sorghum. 		
03 11 2017	Hisar	 Due to possibility of dry weather farmers are advised to procure proper seeds and prepare the field having good moisture and start the sowing of Barley, oat and Berseem fodder crop with recommended high yielding varieties. Keeping in view of dry weather farmers are advised to complete the picking of cotton crop thereafter wheat crop may be sown in the field timely. Farmers are advised to complete the sowing of mustard crop with recommended varieties. Due to possibility of dry weather farmers are advised to take up thinning and weeding in timely sowing mustard crop. 		
03-11-2017	Ranchi	 Farmers are recommended to do inter - culture operation in 20-25 days wheat sown crops, which is essential for conserving soil moisture as well as to control weeds. After inter-culture operation irrigate the field and broadcast urea @ 22 kg per acre, next day of irrigation. If the weeds are vigorous in the field, then spray weedicide Isoproburon (0.30 kg a.i.) and 2,4 - D (0.20 kg a.i.) in 240 litre of water per acre between 30 and 35 days of sowing of the crop. Farmers wishing to cultivate wheat after harvesting of rice are advised to take up sowing immediately. They have to select one of the late Irrigated varities like N.W1014, Raj-3765 or H.W2045. Late sown crops require a little higher dose of seed rate (60 kg per acre), lesser distance between Rows (18-20 cm) and lower dose of fertilizer (Urea 70 kg, Single Super Phosphate 100 kg and Muriate of Potash 20 kg per acre). Before sowing, seeds must be treated with Bavistin @ 2gm per kg of seed. At present weather condition, Leaf spot disease may appear in crop. Spray immediately fungicide Indofil M-45 @ 2 gm per liter of water as and when symptoms appear on leaves. 		
	Karnataka, Bijapur	 As per the forecast dry weather is going to prevail in the district during the next five days in the district. Plant protection measures may be taken up. Farmers are recommended for sowing of chickpea, Diccocum wheat and wheat in medium black soils under irrigated condition If there is sufficient soil moisture sowing of rabi crops may be completed as early as possible For Soil and moisture conservation farmers were advised to sow the crop in rows across the slope. This will facilitate better conservation of moisture in the soil and also recommended to take up hand weeding and inter-cultivation in already sown crops. Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and Haemorrhagic Septcaemia. Care should be taken that excess moisture is not there in the Vermi-compost pits. Vaccinate (ET vaccine) sheep and goats against Enterotoximia 		

	Jammu	 Farmers are advised to go for sowing of wheat varieties viz. PBW-550, HD-2967 under irrigated conditions and var. viz.PBW-644, PBW-396 and WH-1080 under unirrigated/rainfed conditions. Farmers are also recommended for sowing Rabi Mustard (Late sown) with varieties like (RSPR-01, Kranti) can be taken up in irrigated areas whereas under rainfed areas sowing of RSPR-03 can be carried on fields having conserved moisture. Rabi pulses (Chickpea/Pea/Lentil): Complete the sowing of Pea (var., AP-1, Bonnevillea, Rachna and Arkel); Chickpea (var., K-468, Gourav); Lentil(var., L-4147, L-9/12, PL-406). Weeding & hoeing is recommended in cole crops (knol khol, cabbage, cauliflower and broccoli) to conserve soil moisture.
	Parbhani	 Farmers are recommended for hoeing operation in Rabi sorghum. Prevailing weather condition is suitable for Helicoverpa armigera in pigeon pea and leaf spot disease in turmeric. So farmers are advised to spray Quinalphos 25 EC @ 28 ml or Chloropyriphos @20 EC per 10 liter of water to control Helicoverpa armigera and Bavistin or Mancozeb and drenching of 20 % Chlorophyriphos to control leaf spot disease. Incidence of pink bollworm is more in cotton crop so farmers are recommended to avoid in cotton crop. Farmers are advised for irrigation management in banana orchard and earthing up operation. To protect the animals from cold, during early morning, fix curtains of gunny bags for animal shed. Use electric bulbs in poultry shed
	Hisar	 Due to possibility of dry weather farmers are advised to procure quality seeds and prepare the field having sufficient moisture and sowing of anyone of the following crops with suitable varieties, Barley with recommended varieties BH 393, BH 902, BH885, BH 986. Before sowing seeds should be treated with Bavistin or Vitavex 2.0 g per Kg of seed. Sowing of oat and Berseem fodder crop with recommended certified seeds and Berseem (verities Hisar Berseem 1, Hisar Berseem 2). Sowing of 3wheat with recommended timely sowing varieties like WH 283, WH 542, DBW 17, WH 711, WH 1105. Before sowing seeds should be treated with Bavistin or Vitavex 2.0 g per Kg of seed. Possibility of fall in night temperature, protect the animal under sheds and cleans around to control fly and mosquito in cattle shade. To provide the cattle /animal 50 grams iodized salt and 50 to 100 grams mineral mixture daily along with animal feed/fodder, green fodder to keep them
10-11-2017	Ranchi	 healthy. For one month old potato crops, farmers are recommended to apply urea @ 40 kg per acre after earthing up and irrigate the crop at an interval of 10-15 days. Attack of Blight disease in crop is expected so farmers are advised to spray fungicide Saaf @ 2 gm per litre of water or Redomyl @1.5 gm per litre of water to control the disease as and when symptoms appear.
	Karnataka, Bijapur	 There is sufficient moisture in soil. So farmers are advised for sowing of rabi crops as early as possible Farmers are advised taking up sowing of chickpea, Diccocum wheat and wheat under irrigated condition. Recommended varieties are A-1, GBS-964,JG-11, JG-11, BGD-103, and GB-1105. Before sowing farmers are advised to practice seed hardening and seed treatments techniques in chick pea. Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and Haemorrhagic Septcaemia. Care should be taken that excess moisture is not there in the Vermi-compost pits. Vaccinate (ET vaccine) sheep and goats against Enterotoximia.
	Jammu	 Farmers are advised to continue the recommended varieties of wheat are (PBW-396, PBW-175 and RSP-81 (jitto) for rainfed areas and (PBW-550, DBW-17, Raj-3077, RSP-303, WH-542, PBW-502, HD-2687) under irrigated area. Farmer are advised to go for hoeing and weeding in mustard crop in order conserve moisture. And weeding, hoeing and earthing up followed by irrigation in potato.

		• For late sowing of wheat crop, farmers are recommended to use 125 kg / ha seed rate. Row to row
		spacing must be 18 cm. Use NIAW-34, LOK-1, HI-8663, AKAW-381, AKAW-1071 varieties for
		sowing. Fertilizer dose should be 80:40:40 NPK/ha.
	.	• To control attack of Helicoverpa armigera in gram crop, farmers are advised to take a spray of
	Parbhani	Quinalphos or Chlorpyrifos @ 20 ml per 10 liter of water.
		• To control attack of safflower aphids, advised to take a spray of Dimethoate @ 10 ml per 10 liter
		of water.
		• Possibility of dry weather and favorable temperature farmers are advised to sowing of Barley with
		recommended varieties BH 393, BH 902, BH885, BH 986. Before sowing, seeds should be
		treated with Bavistin or Vitavex 2.0 g per Kg of seed.
		• Farmers are advised for sowing of oat and Berseem fodder crop with recommended certified
		seeds and Berseem (verities Hisar Berseem 1, Hisar Berseem 2).
	Hisar	• Farmers are advised to sowing of wheat with recommended varieties like WH 283, WH 542, DBW 17, WH 711, WH 1105. Before sowing seeds should be treated with Bavistin or Vitavex 2.0
		g per Kg of seed. Farmers are advised to keep in mind changing weather before the sowing.
		• Possibility of fall in night temperature and variable weather, it is advised to keep the animal under
		sheds and cleans around to control fly and mosquito in cattle shade. To provide the cattle /animal
17-11-2017		50 grams iodized salt and 50 to 100 grams mineral mixture daily along with animal feed/fodder,
		green fodder to keep them healthy.
		Arhar (Pigeon pea) - Timely sown pea crops are at fruiting stage. Attack of Fruit borer insect is
	Ranchi	possible at this stage. Spray immediately the insecticide Endoxacarb @ 0.5 ml per liter of water to
		control the insect.
		• As sufficient moisture is available in the soil, Farmers are recommended for sowing of diccocum
		wheat.
	Karnataka	• For Soil and moisture conservation farmers are recommended to sow the crop in rows across the slope and recommended to take up hand wooding and inter cultivation in already sown crops
	Karnataka, Bijapur	slope and recommended to take up hand weeding and inter-cultivation in already sown crops.Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease
	Dijapui	(BC vaccination) and Haemorrhagic Septcaemia. Care should be taken that excess moisture is not
		there in the Vermi-compost pits. Vaccinate (ET vaccine) sheep and goats against Enterotoximia
		• Due to sufficient moisture in soil, farmers are recommended to continue sowing of wheat
		varieties. (PBW-550, PBW-502, DPW-621-50, DBW-17, Raj-3077, HD-2967, HD-2687 and
		RSP-303) under irrigated conditions.
		• Farmers are advised to irrigate the normal sown mustard crop if it 35-40 days old under irrigated
		condition. Apply Ist dose of nitrogen fertilizer as top dressing after irrigation. Give hoeing,
	T	weeding and thinning.
	Jammu	• Farmers are advised to use healthy & disease free seeds for sowing of brinjal and tomato. Treat
		seed with carbendazim @ 1gm/1kg seed to reduce chances of seed borne inoculums. Nursery beds should be made raised to prevent the water stagnation hence Pythium.
		• Farmers are advised to irrigate the horticulture plants wherever necessary. Drench wilt affected
		guava orchards with carbendazim @ 1gm/lt. Remove dry shoots and destroy them to control
		mango scale and shoot borer. Irrigate (flood) mango orchards to kill the eggs of mealy bugs.
		• Prevailing weather conditions are favour for the incidence of pest and disease, farmers are
		recommended for the following plant protection measures in respect to the crops:
		1. To control attack of Helicoverpa armigera in gram crop take a spray of Quinalphos or
		Chlorpyrifos @ 20 ml per 10 liter of water.
	Parbhani	2. To control attack of safflower aphids take a spray of Dimethoate @ 10 ml per 10 liter of
		water. Irrigation management should be done by using only sprinkler irrigation system in safflower crop.
		3. To control attack of shoot borer and fruit borer in brinjal crop make use of 100 pheromon trap
		per hector in brinjal crop.
A 11 AAT		• Due to favorable temperature farmers are advised to sowing of wheat crop with the recommended
24-11-2017		varieties are WH 1105, WH 711, WH 1096 under irrigated condition and limited irrigation area
		WH 1080, WH 1025 for area with limited irrigation. Before sowing seeds should be treated with
		Bavistin or Vitavex 2.0 g per Kg of seed. Farmers are advised to apply the 1st irrigation after 21
	Hisar	days after sowing
		• Due to favorable weather, farmers are advised to sow Barley crop with certified seeds.
		• Farmers are advised to do intercultural operations for conserving the moisture and removing

	 weeds in mustard crop and regular check the mustard crop. Due to possibility of dry weather, farmers are advised to carry out thinning and weeding operation in timely sown mustard crop. Due to possibility of favorable temperature farmers are advised to complete the sowing of Berseem crop. Rhizobium culture must be used as per the recommendation at the sowing of Berseem. Due to possibility of fall in night temperature, keep the animals in sheds during night hours Provide 50 grams iodized salt and 50 to 100 grams mineral mixture daily with animal feed/fodder to keep them healthy.
Rano	• Timely sown Rapeseed/ Mustard crops at flowering stage are vulnerable of the attack of Aphids. To control the aphid's farmers are advised to spray the insecticide Monocrotophos @ 2 ml per