

**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 February 2017**

**1. General Weather Conditions**

During 1 January -22 February 2017, the country as a whole has received 37.9 mm rainfall, which is 5% more, compared to the normal rainfall for the same period (36.1 mm). Out of 36 meteorological sub-divisions, rainfall was largely excess in 62 districts under 15 subdivisions; excess in 37 districts under 13 subdivisions; normal in 64 districts of 14 subdivisions; deficient in 94 districts of 18 subdivisions and largely deficient in 159 districts under 23 subdivisions. The remaining 212 districts belongs to 21 subdivisions did not receive rain. The rainfall received during 1 January -22 February 2017 is depicted in Fig. 1.

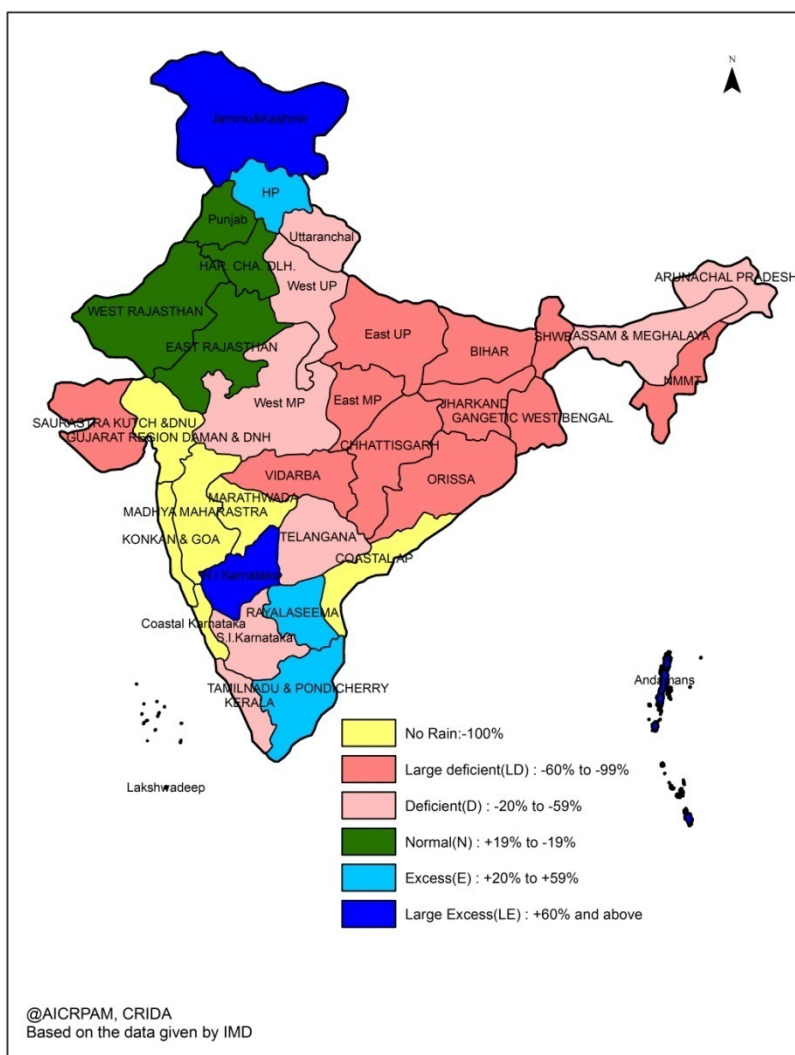


Fig. 1: Meteorological sub-divisional-wise rainfall received during 1 January -22 February 2017

## 2. Progress in *rabi* sowing-2017 (Source: Press Information Bureau and Ministry of Agriculture and Farmers' Welfare, Govt. of India)

As per preliminary reports received from the States, the total area sown under *rabi* crops as on 27<sup>th</sup> January, 2017 stands at 637 lakh hectares as compared to 600 lakh hectare this time in 2016 (Table 1). The increase in *rabi* crop area was mostly due to increase in area under pulses, wheat and oil seed crops. As per 2nd Advance Estimates, the production of major crops (estimated) during 2016-17 is also presented in Table 1.

Table 1: Progress in *rabi* sowing in India as on 27<sup>th</sup> November 2016, compared to the area sown during last year this time and 2nd advanced production estimates of different crops.

Crop	Area sown in 2016-17	Area sown in 2015-16	Percent change	2 <sup>nd</sup> Advanced production Estimates of major crops during 2016-17 in million tonnes
Wheat	315.6	292.5	+7.9	96.64
Rice	21.8	25.6	-15.1	108.86
Pulses	159.3	143	+11.3	22.14
Coarse cereals	56.9	60.2	-5.5	44.34
Oil seeds	83.8	78.6	+6.7	33.60
<b>Total</b>	<b>637.3</b>	<b>600</b>	<b>+6.2</b>	

(Area in Lakh hectare)

## 3. Agromet advisories issued by ICAR-All India Coordinated Research Project on Agrometeorology (AICRPAM) centers during February 2017

Date of issue	AICRPAM Center	Agromet Advisory issued
1 <sup>st</sup> Feb	Bangalore	Prolonged dry spell situation is favorable for higher flowering and Powdery mildew diseases in Mango. Spray Lamda Cyhalothrin 5EC@ 0.5 ml/ litre of water or sulphur dust (SULTAF) 80 W @3g/litre of water against the Powdery mildew diseases
3 <sup>rd</sup> Feb	Ranchi	Broadcast urea in 10 - 12 days old seedlings @ 2 kg per 10 dismil of nursery bed and maintain the soil moisture of nursery bed. Cloudy and cold weather favour the infestation of powdery mildew in mustard and pulses. Spray 1 kg Cuppor Oxchloride or 800 g Dethane-M 45/acre in 200 litre water to Leaf blight disease.
3 <sup>rd</sup> February	Bhubaneswar	The current temperature may favour the infestation of thrips infestation in gopundnut. Spray 400 ml Dimethoate or 50 ml Imidachlopid in 200 litre wate per acre to control it. Place paper packets above the freshly planted vegetable seedlings during night time. To protect fish from cold stress, maintain water to a depth of 1 to 1.5 m and apply 80 kg lime to pond of 1 acre.. To protect the poultry from cold weather, cover the poultry shed by gunny bags or polythene during the night time.
3 <sup>rd</sup> February	Chatha	<ul style="list-style-type: none"> <li>Farmers are advised to schedule the zinc sulphate @ 0.2% spray after rains in wheat. In Mustard, with the forecast of rainfall on 5th and 6th Feb, farmers are advised to apply plant protection measures against insect, pest and diseases in mustard and Gobi sarson afterwards. In rabi pulses, Farmers are advised to watch carefully the incidence of wilt &amp; blight in pulse crops. if symptoms observed drench the affected spots with carbendazin@1 ml in 1 lit. of water during clear weather.</li> </ul>

3rd February	Palampur	प्रदेशकेअधिकतरजिलोंमें 1-2 दिनकेबाददरम्यानीवर्षकिसाथतापमानमेंकमीजारीरहनेकीसम्भावनाहै। ऐसेमौसममेंगेहूँमेंपीलारतुआकेलक्षणदिखनेपरप्रोपिकोनाज़ोल (टिल्टयाशाइन 25 ई० सी०) दवाई 1 मि०ली०/लीटरपानीमेंघोलबनाकरछिड़कावकरें।
4 <sup>th</sup> February	Kanpur	<ul style="list-style-type: none"> <li>Farmers are advised to provide irrigation in timely sown wheat crop which is in panicle initiation stage. Application of 30 kg nitrogen/ha after irrigation. Farmers are advised to provide 2<sup>nd</sup> irrigation in late sown wheat crop, which is in 40-55 days stage. It is time for flowering initiation in mango and litchi. to protect from the infestation of Powdery mildew and hoppers under this condition, Spraying of Sulpher 80WP @2.0gm/liter of water and Imidacloprid 17.8 SL@0.5ml/liter of water is advised on the foliage of the trees.</li> </ul>
4th February	Ananthapur	Powdery mildew incidence was noticed in the Greengram and Blackgram. Spray Penconazole 10% EC@ 20ml diluted in 200 l of water/acre. Spray Hexaconazole@2ml/l. Sucking pest incidence was noticed in the rabi groundnut growing under assured irrigated conditions. For the control of the thrips spraying of Monocrotophos @ 320 ml + neem oil 1lit + detergent powder 1kg in 200 lit of water per acre is recommended.
4 <sup>th</sup> February	Palampur	Weather conducive for attack of stored grains pests like rice weevil, lesser grain borer and rice moth advised to put one pouch of Celhpos (3g) or Quickphos (12g) or Fumino pouch in a wet cloth in the middle of grain storage bins and keep the bin airtight for some time. Spraying of 2 % urea or potassium sulphate is advised for proper growth of pods this also protect pea crop from frost injury. Protect the nurseries of vegetables, fruit and forests plants by covering with polythene sheet and crops from frost in lower regions. Put polythene grass thatch on north side of the plant.
7 <sup>th</sup> February	Bhubaneswar	Complete the sowing of summer groundnut and sunflower by this week . Use 60 kg pods per acre. Go for off-season production of cole crops. Go for nursery raising for late planting. Late duration varieties suitable for delayed planting such as cabbage- Drum head, Sri ganesh goal, Cauliflower- Pusa snowbell and Pusa hybrid-2 can be taken
7 <sup>th</sup> February	Chatha	<ul style="list-style-type: none"> <li>The weather condition is favour for yellow rust in the late sown wheat under such situation farmers are advised to regularly monitor wheat fields for yellow rust and if noticed apply Propiconazole (Tilt) @ 25ml in 25 lits. of water/kanal on clear sunny day. The weather condition favours the outbreak of aphids in late sown mustard crop under such situation farmers are advised to regular monitor for attack of aphids. In Gram crop the weather is congenial for the outbreak of wilt/blight If the symptom observed farmers are advised drench the affected spots with carbendazin@1 ml in 1 lit. of water during clear weather.</li> </ul>
10 <sup>th</sup> Feb	Bangalore	Advised for harvested redgram and ragi crops cleaning, drying and storage in dry gunny bag. Protect milch animals from cold weather. Farmers are advised to keep the animal habitation dry to avoid hoof infection & to prevent fly breeding.
11 <sup>th</sup> Feb	Ranchi	In the forecasted weather, there is ample chance for outbreak of aphids in the mustard. If insect population is observed above ETL, spraying of Dimethoate 30EC @ 1.0 ml/litre of water is advised..
11 <sup>th</sup> Feb	Bangalore	<ul style="list-style-type: none"> <li>Present weather is favourable for emergence of spodoptera in ground nut, it can be managed by applying the following management skills 1. Release 50,000 tilinomous parasite eggs per acre 2. Spray 100 larvae NPV extract per acre preferably in the evening 3. Spray 2 ml quinolphos or 5 ml neem oil per litre of water 4. Under present weather conditions light irrigations are required</li> </ul>

17 Feb	Bhubaneswar	<ul style="list-style-type: none"> <li>• Due to cloud weather downey mildew has been found in cucurbits. To control it spray 3 ml Endophyl-M-45 per litre of water. Cloudy weather favours the infestation of aphids and powdery mildew in pulses. Spray 50 ml Imidacloprid or 400 ml Dimethoate or Metasystox in 200 litre water per acre to control aphid and spray 5 g Sulfex in 1 litre water to control powdery mildew. Current moderate temperature favours thrips infestation in groundnut. Spray 400 ml Dimethoate or 50 ml Imidachloprid in 200 litre water per acre. Likely rise in temperature will favour Leaf eating caterpillar and leaf minor in sunflower. Spray 400 ml Endosulphan/acre. Increased difference between daily maximum and minimum temperature may favour the infestation of blast in rice. Spray 1 g Beam in one litre water.</li> </ul>
17 <sup>th</sup> Feb	Chatha	<p>The weather condition favours the outbreak of aphids in late sown mustard crop under such situation farmers are advised to regular monitor for attack of aphids, if the 10 cm of the branch have more than 20 aphids spray the crop with imidacloprid @ 0.3 ml / lits. of water or (Dimethoate) rogor 30 EC @ 1ml/lits. of water before 19<sup>th</sup> February or after 22<sup>nd</sup> February. Keeping in view to light to moderate rainfall on 19<sup>th</sup> to 22<sup>nd</sup> of February, farmers are advised to make a proper drainage facility to avoid water stagnation. Use dry gunny bags as bedding material for protection against low night temperatures.</p>
17 <sup>th</sup> Feb	Solapur	<p>The growth of the onion crop is affected by water stress. Hence, crop should be irrigated according to the soil &amp; weather condition at an interval of 6-8 days. Considering the present dry weather &amp; rise in temperature the mango plants should be given irrigation @ 150 to 200 litres of water per plant at an interval of 15 days. Newly planted mango saplings should be protected from sunlight heat by providing shade.</p>
18 Feb	Anantapur	<p>Prevailing conditions are favourable for incidence of hoppers in mango. For the control spraying of Imidacloprid 0.3ml/lit + Carbendazim 1gm/lit is recommended. If fruits are in marble size spray Fenthion @ 1ml/lit + Nuvan (Dichlorovos) 0.5ml/lit. Occurrence of fog during morning hours and diurnal variation in day and night temperatures may enhance the powdery mildew in blackgram. If its intensity is more, farmers were advised for management of these problem spray mancozeb+dinocab @ 3 grams or tridimorph @ 1 gram or belaton @ 1 gram per liter of water</p>
18 Feb	Palampur	<p>Sufficient rainfall during past week, farmers are advised to stop irrigation for next few days as sufficient moisture is available in all the crops. In case of poultry, save them from cold winds by providing curtains so that temperature of shed does not fall below 16° C. Provide artificial heat to chicks. Increase energy contents of ration by 5-8 per cent. Also add coccidiostats in the ration, to prevent its occurrence. Replace the poultry houses with fresh litter to avoid wetting. Protect the birds from cold and increase the feed by 10%. Put marbel (calcium) grits for calcium for layers. For the attack of cocksedia disease consult the nearby veterinarian. Temperature is falling so farmers are advised to make the arrangements for protection of cold in the poultry houses.</p>
21 Feb	Chatha	<ul style="list-style-type: none"> <li>• Farmers may go for spring season planting. Keep the area clean. Postpone irrigation due to chances of rain.</li> <li>• If attack of alternaria blight/white rust is observed in mustard crop, spray Chlorpyriphos 20EC @ 0.05% or Monocrotophos 36 WSC @ 0.04% or Methyldemeton 25EC @ 0.03%, if 50-60 aphids observed per plant. Install yellow sticky trap @ 10/kanal to control aphid..</li> <li>• Spray copper oxychloride @ 3gm/lt of water to control dieback, gummosis and canker and Dimethoate @ 1mg/lt to control leaf miner, citrus psylla and lemon butterfly in citrus after receipt of rain. Apply alkathene or sticky grease band 15-20 cm wide on mango plants to control upward movement of mango mealy bug.</li> </ul>
22 <sup>th</sup> Feb	Kanpur	<ul style="list-style-type: none"> <li>• Keeping in view of increasing temperature, farmers are advised to monitor thrips infestation in onion crop. If insect population is above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised. Add sticker@ 1ml/L of water for better result. Provide light and frequent irrigation at an interval of 10-12 days as per requirement..</li> </ul>

23 <sup>rd</sup> Feb	Bhubaneswar	<ul style="list-style-type: none"> <li>• Cloudy weather favours the infestation of aphids and powdery mildew in pulses. Spray 50 ml Imidacloprid or 400 ml Dimethoate or Metasystox in 200 litre water per acre to control aphid and spray 5 g Sulfex in 1 litre water to control powdery mildew. Pod borer has occurred in gram and pea. Spray 250 LE NPV/ac in 200 litre in the afternoon or spray 1kg BT product in 200 litre water. If the pest is not controlled by above method, spray 200 ml Endosulphan /ac in 200 l water.</li> <li>• Current moderate temperature favours thrips infestation in groundnut. Spray 400 ml Dimethoate or 50 ml Imidachloprid in 200 litre water per acre. Tika disease and white ant attack have occurred. Spray 500 g Blitox - 50 in 200 litre water per acre for Tika and spray 2 ml Chloropyriphos in 1 litre water for controlling white ant attack. Bacterial wilt has been found in summer groundnut. Spray 1 g Streptocycline/10 litre water thoroughly to the root zone to control it.</li> <li>• Increased difference between daily maximum and minimum temperature may favour the infestation of blast in rice. Spray 1 g Beam in one litre water</li> <li>• Transplanted rice is at 3 week stage. Apply 16 kg nitrogen per acre. Keep the field saturated. Increased difference between daily maximum and minimum temperature favours the infestation of blast in main field as well as nursery . Likely rise in temperature will favour Leaf eating caterpillar and leaf minor in sunflower . Spray 400 ml Endosulphan/acre</li> </ul>
23 <sup>rd</sup> Feb	Ananthapur	<ul style="list-style-type: none"> <li>• Present weather conditions (fog in morning, variation in minimum and maximum temperature) favourable for rice blast in rabi rice under tank irrigated areas of Prakasam. If the intensity is more it can be managed by spraying with 1.5 ml Isoprothionale per liter of water. Under present dry weather conditions for avoiding the moisture loss from the soil placed/spread the harvested leaves and trash of cane on the ground there by reduces the moisture loss.</li> <li>• Due to increase in temperatures the following precautionary measures has to be taken. Water tank and lines may be covered with gunny bags to provide cool water. Ensure cool drinking water available throughout the day. Foggers and sprinklers will help to reduce temperature. Roof may be covered with coconut tree leaves or grass. White washing of roof and water tank to reduce heat absorption. Ensure proper cross ventilation to avoid ammonia accumulation. Pedestrian fans may be used to increase air flow. Distribute feed in cooler parts of the day (early morning or late evening).</li> </ul>
24 <sup>th</sup> Feb	Kanpur	<ul style="list-style-type: none"> <li>• Sowing of sunflower is advised. <i>Mordane, Surya, CO-1 and Pairadevik</i> and <i>DRSF-108</i> are composite varieties and <i>BSH-1, KBSH-1, MSFH-1, MSFH-8, MSFH-17</i> and <i>KBSH-44</i> varieties are hybrid type, which are recommended for sowing in North Bihar. Application of 10-15 ton FYM, 30-40 kg Nitrogen, 80-90kg Phosphorus and 40 kg Potash per hectare is advised during land preparation. Seed rate@ 5 kg /ha for hybrid and 8 kg/ha for composite varieties is advised. Before sowing, seed should be treated with <i>Thiram</i> or <i>Captaf</i>@2gm/kg of seed.</li> <li>• Sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard is advised. Monitoring is advised for aphid infestation in vegetables crop. If insect population is above ETL, spraying of Imidacloprid @ 1ml/3 liters of water is advised. Irrigation is suggested in standing vegetables crop such as pea, tomato, brinjal, chilli, cabbage etc</li> </ul>
24 <sup>th</sup> Feb	Ranchi	<p>Late sown crop is in maximum tillering to jointing stage, apply rest dose of urea @ 52 kg per acre after irrigation. Due to raise in temperature and humidity, infestation of loose smut may occur, if the crop is affected, remove the affected plant and buried it in soil. For Alternaria blight, spraying of Indofil M-45 or Diathen Z-78 @ 2 gm per lit water. Irrigate the crop in flowering and milking stage.</p>
28 <sup>th</sup> Feb	Kanpur	<p>Harvesting of mustard is advised which is in matured stage. Monitoring is advised for infestation of aphid in late sown mustard crop. If insect population is observed above ETL, spraying of Dimethoate 30EC @ 1.0 ml/litre of water is advised. Farmers are advised to maintain proper soil moisture in wheat crop which is in grain forming/milking stage.</p>