

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

ICAR-Central Research Institute for Dryland Agriculture

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### Weather Conditions and Agromet Advisories Issued during May 2016

#### 1. General Weather Conditions

Due to thunderstorm activity in most parts of the country for all the four weeks and cyclonic storm 'Roanu', the country as a whole experienced 7% excess rainfall than its long period average during May. Out of 36 meteorological subdivisions, 25 sub divisions either received excess or normal rainfall during the month of May. Deficient and scanty rainfall was confined to few states viz., Jammu & Kashmir, Rajasthan, Gujarat, Maharashtra and two island sub divisions i.e., Andaman & Nicobar Islands and Lakshadweep (Fig. 1).

Maximum, minimum and mean temperatures are 0 to 1 or 1 to 2 °C above normal at most of the places of the country (Fig. 2). At some isolated places negative anomalies in temperature (maximum, minimum and mean were also noticed).

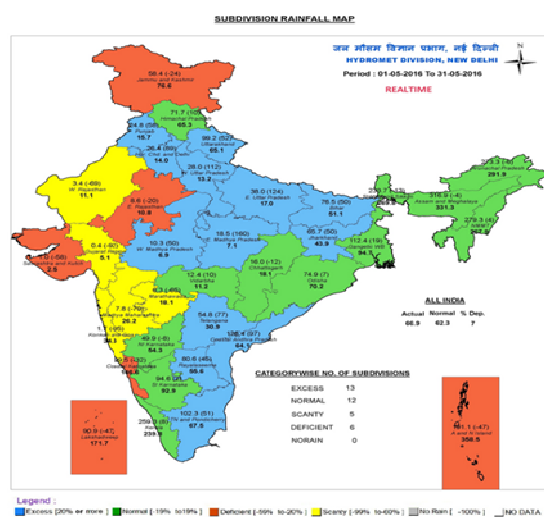


Fig. 1: Rainfall distribution across the country during May 2016

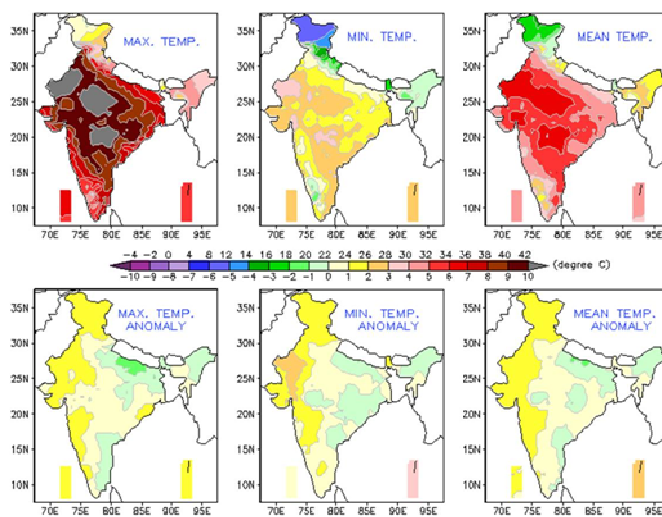


Fig. 2: Temperature distribution and anomaly across the country during May 2016

Southwest monsoon advanced in to some parts of south Bay of Bengal, entire South Andaman sea and Nicobar Islands and some parts of north Andaman sea on 18<sup>th</sup> May. It further advanced in to some more parts of southeast Bay of Bengal, remaining parts of Andaman sea and Andaman Islands on 20<sup>th</sup> May.

#### 2. Aberrant weather conditions observed

##### 2.1 Heat wave conditions prevailed over different parts of the country during the entire month of May and the details are:

- First week:** Heat wave conditions at many places and severe heat wave conditions at isolated places of Punjab, Himachal Pradesh, Jammu & Kashmir, Odisha and Bihar were observed. Heat wave conditions also prevailed at isolated places over Kerala on many days and over Gangetic west Bengal, East Uttar Pradesh, west Rajasthan, Vidarbha, Telangana and Rayalaseema on one or two days.

- **Second week:** Heat wave conditions prevailed at isolated places over west Rajasthan and north Kerala on 10<sup>th</sup> and 11<sup>th</sup>.
- **Third week:** Severe heat wave conditions prevailed at some places over Rajasthan, West Madhya Pradesh and Gujarat on one or two days. Heat wave conditions also prevailed over East Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha on many days. Heat wave conditions also prevailed for one or two days to few days over west Uttar Pradesh, West Rajasthan, Haryana, Chandigarh & Delhi, Punjab, Saurashtra & Kutch, Madhya Maharashtra and Marathwada.
- **Fourth week:** Heat wave conditions prevailed for many days at many places over west Rajasthan; few places over Vidarbha, Madhya Pradesh, Odisha, Telangana, Coastal Andhra Pradesh and isolated places over Haryana, Punjab, Gujarat, north Madhya Maharashtra for 1 to 2 days to many days.
- **Fifth week:** Heat wave conditions prevailed at isolated places over Telangana and Coastal Andhra Pradesh.

## 2.2 Thunderstorm activity:

Thunderstorm activity was observed either for one week or more of May of the country. In sixteen states all the weeks of months experienced thunderstorm activity in one part or other.

## 2.3 Hail storm

- Due to hail, high velocity winds, heavy and untimely rain on 10<sup>th</sup> and 11<sup>th</sup> May, wheat crop suffered in Himachal Pradesh.
- Harvesting and threshing of wheat crop was interrupted due to hail, high velocity winds, heavy and untimely rain on 20<sup>th</sup> and 22<sup>nd</sup> May in Kangra, Mandi and Hamirpur districts of Himachal Pradesh.

## 3. Agromet advisories issued by ICAR-All India Coordinated Research Project on Agrometeorology (AICRPAM) centers during May 2016

Standard Meteorological week	AICRPAM Center	Agromet Advisory issued
7-5-2016	Anantapur, Andhra Pradesh	<b>Mango:</b> Present weather conditions (high humidity and low temperature) are highly favourable for infestation of fruit fly in mango orchards. To control it, erect plastic trays with 2 ml. methyl eugenol and 3 g carbofuran 3G granules mixed with 1L of water in mango orchards.
	Raipur, Chhattisgarh	<b>Cattle/Poultry:</b> It is advised to move animals to shaded area and whole body mop is recommended frequently with wet cloth. Arrange fogger in animal shed and sprinkling should be done every four to five hours. Cover poultry sheds with wetted gunny bags on either side so that temperature inside may be maintained as normal.
13-5-2016	Thrissur, Kerala	<b>Rubber:</b> Start arrangements for guarding the tapping panel from rain. In order to control fungal diseases in young budded plants, spray copper oxychloride @ 4g/litre of water. Subsequent tapping can be done only after drying of latex.
	Parbhani, Maharashtra	<b>Summer groundnut:</b> dry the harvested crop of groundnut in shade before storage. For safe storage the moisture percent should be reduced to 8 to 10%. Due to forecast of rainfall, the harvested crop should be stored at safe place.
	Mohanpur, West Bengal	Farmers are advised to arrange seeds of following varieties for up-coming <i>kharif</i> season For the areas receiving scanty rainfall:

		<ul style="list-style-type: none"> <li>▪ Dry sowing of paddy seeds is recommended. Collect IET-4094, Swarna, Shatabdi, Lalat, IET 9947, IET 1444, IET 2233 seed. Long duration varieties should be avoided.</li> </ul> <p>For the areas prone to flash flood:</p> <ul style="list-style-type: none"> <li>▪ In areas where flood or stagnation occurred, tall variety like Ranjit may be selected. Short duration variety (like <i>Daya</i>, which matures in 95 days) may be selected.</li> </ul>
20-5-2016	Thrissur, Kerala	<b>Banana:</b> Sigatoka leaf spot disease may become severe due to increase in relative humidity, if found severe spray 1% Bordeaux mixture or Propiconazole 25 EC (1ml/lit of water) after cutting the severely affected leaves and burning it.
	Bhubaneswar, Odisha	<p>Advisories for cyclonic storm '<b>Roanu</b>'</p> <ul style="list-style-type: none"> <li>▪ Heavy rainfall is likely to occur in the next two days and may be associated with high wind speed on 19 to 20<sup>th</sup> May. Do not keep harvested paddy in the field and place them in safe storage structures.</li> <li>▪ Harvest matured pods of pulses before rain or immediately after rain to avoid viviparous germination of seeds in the pods itself. Dry the pods.</li> <li>▪ Harvest the matured groundnut to avoid viviparous germination of kernels and rotting may occur if not harvested immediately after rain. Make bundles of the harvested plants and dry them in such a way that the pods should be in the up side and plants down</li> </ul>
21-5-2016	Jorhat, Assam	<b>Cattle:</b> As temperature is expected to rise, farmers are advised to provide cool and clean drinking water 5 to 6 times a day. Provide green fodder and concentrate feed in the ratio of 70:30 amounting 1/10 <sup>th</sup> of the body weight.
27-5-2016	Bangalore, Karnataka	<p>As good rainfall was received in interior parts of Karnataka, following activities can be taken up in south interior Karnataka</p> <ul style="list-style-type: none"> <li>• Sowing of Pigeonpea (TTB-7, BRG-1, 2, 4, 5), groundnut (TMV-2, JL-24, KCG-6), and maize in Eastern Dry Zone.</li> <li>• Continue planting of ginger and turmeric.</li> <li>• Sowing of finger millet (Indaf -9, ML-365) in Eastern Dry Zone in 1st week of June</li> </ul>
	Anantapur, Andhra Pradesh	<p>Advisory for coastal Andhra Pradesh:</p> <ul style="list-style-type: none"> <li>• Complete sowing of sesame in North Coastal Zone. The recommended varieties are: Hima, Sarada (YLM 66)</li> <li>• Utilizing the available soil moisture, famers are advised to take up sowing of green manure crops like Sunhemp or Daincha in paddy fields in north coastal and Godavari districts</li> </ul>

#### 4. Operationalization of district crop contingency plans

Seven interface meetings for 'Operationalization of district agricultural contingency plans' were organized in the states: Andhra Pradesh (11 May); Maharashtra (14 May); Telangana (17 May); Jharkhand (24 May); Karnataka (26 May); Bihar (30 May) and West Bengal (31 May)