



# Summary of Agromet Advisory Services for different States of the country

Issued by

Agricultural Meteorology Division, India Meteorological  
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(For the period 15<sup>th</sup> May to 19<sup>th</sup> May, 2008)

The extended version of the bulletin is also available at <http://imdagrmet.org>

## *Forecast for the 2008 Monsoon Onset Over Kerala*

The onset forecast model suggests that the monsoon onset over Kerala in 2008 is likely to be on 29<sup>th</sup> May with a model error of  $\pm 4$  days.

### *Agromet Advisory*

*North West India (Haryana, Punjab, Rajasthan, Uttar Pradesh, Delhi, Himachal Pradesh, Jammu & Kashmir and Uttarakhand)*

#### **Punjab**

- Isolated rain / thundershowers likely over the State.

#### **Advisories**

- As there was no significant rainfall in most of the districts of the State during last week and isolated rain / thundershowers likely over the State, apply irrigation to the standing crops.
- Monitor the sugarcane crop for thrips and *pyrilla* & if exceeds economic threshold level, for effective control spray 350 ml Endosulfan 50 EC in 600 liter of water / acre.
- Apply 15 kg nitrogen / ha in early sown sunflower hybrids.
- Continue sowing of summer moong and mash.
- Harvesting of wheat may be continued as weather will remain dry for next three days.
- Continue sowing of radish.

#### **Haryana**

- Isolated rain/thundershowers likely over the State.

#### **Advisories**

- As there was no significant rainfall in most of the districts of the State during last week and isolated duststorm / thunderstorm is likely over the State, apply irrigation to sugarcane, oilseeds, pulses and Horticultural crops.
- Monitor the sugarcane crop for thrips and *pyrilla* & if exceeds economic threshold level, for effective control spray 350 ml Endosulfan 50 EC in 600 liters of water / acre.
- Apply 15 kg nitrogen / ha to sunflower hybrids.
- Continue sowing of summer moong and mash.
- Undertake sowing of radish.
- Farmers are advised to prepare the fields for cotton sowing and to start the sowing of *desi* cotton with varieties HD-107, HD-123, HD-324 and AAH-1 and american cotton with varieties HS - 6 and H - 117 with certified seeds. Treat the seeds before sowing.

#### **Rajasthan**

- Rain / thundershower occurred at a few places in all the divisions of the State.
- Isolated duststorm / thunderstorm is likely over Rajasthan.

#### **Advisories**

- As there was no significant rainfall during last week, apply irrigation to vegetable crops.
- Monitor summer tomato, bhindi and chilli from collar rot disease in and around Jaipur, Ajmer, Dausa and Tonk and if the damage crosses ETL, apply Blitox-50 @ 8 kg per hectare near roots and immediately provide light irrigation.
- Continue land preparation and sowing of summer cotton in and around Jaipur, Ajmer, Dausa and Tonk. Select among RG-8 (170-180 days, Desi), Bikaneri Nerma (190-200 days, American) and RST-9 (190-200 days, American).
- Undertake summer ploughing after the harvest of wheat, barley and gram in and around Alwar, Dholpur, Bharatpur, Karauli and Sawai Madhopur to conserve summer rains and to kill insect pupae and pathogens.

#### **Uttar Pradesh**

- Isolated rain/thundershower likely over the State.

#### **Advisories**

- As there was no significant rainfall in the State and no significant rainfall is likely over the State for the next three days, apply irrigation to vegetables, summer pulses and sunflower crops.
- Harvest the matured winter vegetables, turmeric and potato.
- To control internal rotten disease in mango, spray the solution of 5-6 gm Borax / litre of water.
- Weeding, hoeing, intercultural operations and application of fertilizers may be done as per requirement in summer sugarcane and vegetable crops.

#### **Himachal Pradesh**

- Isolated rain / thundershowers likely over the State.

#### **Advisories**

- As there was no significant rainfall in the State during last week and only isolated rain / thundershower is likely over the State for next three days, apply irrigation to vegetables.
- Harvest already matured crops of wheat, barley and gram on bright sunny days. Wheat is ready for harvest when grain will produce cracking sound while pressed between the teeth.
- Prepare land and transplant summer vegetables like tomato, brinjal, capsicum and chillies and sow ageti bhindi (var. Prabhini kranti, Arka anamika), cucumber, bitter gourd in the field.
- To have crop of raddish in summer sow Pusa Chetakin or early minowwhite varieties.
- It is time for sowing of nursery in areas where summer vegetables like brinjal, Shimla mirch, pepper and tomato are taken as rainfed crop during rainy season. The nursery is ready by 15<sup>th</sup> June and can be successfully transplanted during second fortnight of June before onset of monsoon. Before sowing of nursery treat soil with 2% folidol dust mixed with 1 kg sand and mix in one kanal area.
- Red pumpkin beetle and fruit fly may appear in the already transplanted cucurbitaceous crops. If noticed, spray malathion / endosulphon @ 0.15 percent at 10 days interval to control the insect.

#### **Uttarakhand**

- Isolated rain / thundershowers likely over State.

#### **Advisories**

- As there was no significant rainfall during last week and isolated rain/thundershowers likely over the State for the next three days, apply irrigation to sugarcane, potato and orchard trees.
- Undertake intercultural operations in orchards and sugarcane to keep the field weed free.
- Monitor mango trees for powdery mildew and litchi for mite incidences. Undertake need based plant protection measures.

### **Jammu & Kashmir**

- Isolated rain / thundershowers likely over Jammu & Kashmir.

#### **Advisories**

- As rain / thundershower is likely only at isolated places over Jammu & Kashmir during next three days, apply irrigation to the standing crops.
- Preparation of seed beds for early raising of vegetable seedlings such as capsicum, chillies, brinjal, paprika etc. and filling of polybags for sowing of cucurbits under polyhouse conditions may be continued in Kashmir division.
- Undertake sowing of maize in the main field and rice in the nursery in Kashmir division
- Undertake top dressing of nitrogen in cauliflower, knoll-khol, potato, spinach, methi and garlic @ 60, 50, 20, 20, 20 and 20 kg/ha in Jammu division.
- Rouge out virus effected plants from brinjal, tomato, cauliflower and cabbage crop in Jammu division.
- Complete harvesting of wheat, barley and oats in Jammu division. Continue harvesting of wheat in Kashmir division.
- Monitor cucurbits for fruit fly and spray Endosulfan 35 EC @ 2ml / litre of water if the damage crosses ETL in Jammu division.
- Undertake summer ploughing in order to destroy the weed seeds, pathogens and insect eggs in Jammu division.

### **Delhi**

- Isolated rain / thundershowers likely over State.

#### **Advisories**

- As there was no significant rain during last week and rain / thundershower is likely only at isolated places over the State for next three days, apply irrigation to vegetables crops.
- Due to increasing temperature and high wind, apply frequent irrigation in sugarcane.
- There is chance of occurrence of powdery mildew in cucurbitaceous crops. If noticed, apply karathane @ 1 litre or wettable sulphur @ 3 kg / ha dissolved in 1000 litres of water.
- Weather condition is favourable for yellow mosaic in groundnut. If noticed, apply rogor or monocrotophos @ 1.25 litres / ha dissolved in 800 – 1000 litres of water.
- Prepare land and undertake sowing of arhar with assured irrigation facilities. Select varieties from UPAS-120 and 121.
- Summer ploughing is advised wherever sufficient rains / moisture is available in the fields. It will help in effective pest / weed management for the coming *Kharif* crops due to soil solarization.

## ***Southern Region (AP, Tamilnadu, Karnataka and Kerala)***

### **Kerala**

- Rain / thundershowers occurred at a few places in Kerala on 12th and at isolated places on 13th & 14th May.

- Rain / thundershowers are likely at a few places over Kerala.

### **Advisories**

- As there was no sufficient rainfall in most of the districts over the State during last week except in Wayanad and rain / thundershower is likely to occur at a few places during next three days, apply irrigation to plantation crops viz., coconut, arecanut, rubber and banana. Postpone irrigation in Wayanad as there was excess rainfall during last week.
- Abnormal leaf fall is observed in rubber. Undertake prophylactic spray of Bordeaux mixture @ 1% on a non rainy day.
- Attack of bud rot, Eriophoid mite and rhinoceros beetle is reported in coconut. To control bud rot, apply 1% Bordeaux mixture on a non rainy day. As a prophylactic measure to prevent Eriophoid mite attack, spray 2% neem oil + garlic emulsion in the crown and bunches (2<sup>nd</sup> to 7<sup>th</sup>) on a non rainy day avoiding unpollinated inflorescence. Fill the leaf axils with 25 gm. Sevidol 8 G and fine sand 200 gm on a non rainy day to control rhinoceros beetle.
- Attack of mahali disease is reported in arecanut. Apply 1% Bordeaux mixture on a non rainy day to control the disease.
- Continue land preparation and nursery preparation of *virippu* rice and pepper.
- Planting of coconut seedlings can be done in south zone. Planting may be done in the pits of dimension 1m x 1m x 1m at a spacing of 7.6 x 7.6 m (approximately 70 palms per acre). Select quality seedlings with at least 10 – 12cm collar girth and 6 - 8 leaves.

### **Tamilnadu**

- Rain/thundershowers likely at a few places over south Tamil Nadu and isolated rain/thunder showers likely over north Tamil Nadu.

### **Advisories**

- Apply irrigation to groundnut, sugarcane and pulse crops as there was no significant rainfall during last week and rain / thundershowers likely at a few places over south Tamil Nadu and isolated rain / thunder showers likely over north Tamil Nadu.
- Monitor sugarcane for shoot borer and if the pest population crosses ETL, undertake spraying of Endosulfan 35 EC or Monocrotophos 40 EC @ 1.5 litres / ha. Release parasite @ 1 cc per time for stem borers after 15 days of spraying. Release parasite @ 1 cc per time for the control of stem borers.
- Start land preparation and nursery sowing of *sornavari* rice. Treat the seeds first with *Pseudomonas florescence* @ 10g / kg of seeds then with *Azospyrillum* @ 600gms + Phosphobacteria @ 600gms/ ha of seeds before 30 minutes on the day of sowing.
- Undertake summer ploughing in order to conserve soil moisture and destruction of pupa and larvae of insects.
- Continue picking of cotton in and around Kannivadi region. Picking may be done during early morning hours to maintain the quality of kapas.
- Monitor cotton for sucking pests and undertake spraying of Monocrotophos @ 200 ml / acre in and around Kovilpatty.

### **Karnataka**

- Rainfall occurred at isolated places on 7<sup>th</sup> May and dry weather prevailed for all the remaining days over South Interior Karnataka; dry weather prevailed on all the days over Coastal Karnataka and North Interior Karnataka.
- Mainly dry weather is likely over the State.

### **Advisories**

- As there was no sufficient rainfall in the State during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane.
- Conserve moisture in summer crop fields where the crops are at maturity stage.
- Undertake intercultural operations and propping in sugarcane to prevent the crop from lodging. Monitor the crop for white woolly aphids and release predators like *Dipha* sp., adopt wider spacing, inter-cropping with soybean and pulses of short duration as plant protection measures against woolly aphids.
- Monitor summer rice for blast attack and undertake need based plant protection measures.
- Continue land preparation and sowing of early *kharif* crops like green gram, black gram, jowar and sunflower.

### **Andhra Pradesh**

- Mainly dry weather is likely over the State.

### **Advisories**

- As there was no significant rainfall in the state during last week and mainly dry weather is likely to prevail for the next three days, apply irrigation to sugarcane and chillies.
- Continue harvesting of rice and groundnut crops on bright sunny days.
- The incidence of thrips, dieback, Cercospora leaf spot, Choanephora blight and powdery mildew is noticed in chillies. To control thrips spray Fipronil @ 2.0 ml per litre of water. To control dieback spray Captan @ 1.5 g per litre of water. To control Cercospora leaf spot, spray Mancozeb @ 2.5 g or Carbendazim @ 1 g per litre of water.
- The deficiency of Zinc and Boron is noticed in Chilli. To correct the zinc deficiency, spray ZnSO<sub>4</sub> @ 2g per litre of water. To correct boron deficiency, spray boron @ 1.5 g per litre of water.
- The incidence of woolly aphids, Pyrilla, scale insects and early shoot borer is noticed on sugarcane in Nizamabad district. To control woolly aphids spray Malathion @ 3 ml or Dimethoate @ 2 ml or Acephate @ 1 g per litre of water. If severity is more, spray Acephate @ 1 g + Dichlorvas @ 1 ml per litre of water. To control Pyrilla spray Endosulfan or Malathion @ 2 ml per litre of water. To control scale insects spray Malathion or Dimethoate @ 2 ml per litre of water. To control early shoot borer, spray Endosulfon @ 2ml per litre of water.
- Prevailing weather conditions are congenial for the spread of anthracnose in mango. To control anthracnose spray Carbendazim @ 1 g or Copper- Oxy-Chloride @ 3 g per litre of water.

## ***Eastern Region (Assam, Arunachal Pradesh, Bihar, Jharkhand, Sikkim, West Bengal)***

### **Assam**

- Light to moderate rain occurred at isolated places on 12<sup>th</sup>, 13<sup>th</sup> & 14<sup>th</sup> with isolated rather heavy falls on 13<sup>th</sup> over the State.
- Rain/thundershower likely at a few places over the State.

### **Advisories**

- As there was no significant rain during last week and rain is likely to occur only at a few places over the state for next three days, apply irrigation to the crops.
- Maintain 3 – 5 cm of water in early ahu rice field.
- Drain out water from the field 10 – 15 days before harvesting of boro rice. Start harvesting of already matured crops on bright sunny days.

- Continue sowing of jute. Varieties of capsularies such as JRC 212, JRC 321, JRC- 7447, UPC-94 etc. should be collected from reputed sources and sown in line at a spacing of 25 cm row to row and 5-7 cm plant to plant. Seeds @ 800-900 gm are required for sowing one bigha.
- Prepare land applying FYM and Urea @ 12 Kg, SSP @ 17 Kg and MOP 4 Kg per bigha for sowing of broadcasted regular ahu rice. 14 kg seeds are required for broadcast of one bigha of land. For transplanted regular ahu rice, seed bed of 10 m in length and 1.25 m in breadth with 30 cm gap between two seedbeds should be prepared. Well germinated seeds are to be sown @ 650-1000 g per bed. For transplanting one hectare of land 40-45 kg seeds are required. 7 –10 days before uprooting of the ahu rice seedlings from the nursery, apply Carbofuran @ 3 g / sq. m. area in the seedbed to protect the seedlings from stem borer, gall midge, leaf folder etc. in the main field. Alternatively root-dip treatment may also be done. For this the uprooted seedlings are to be washed and root portion of the seedling is dipped in 0.02% solution of Chloropyrophos (1 ml in 1 litre of water) along with 1% of urea for three hours.
- Prepare land for sowing of maize. Seeds of hybrid varieties viz. Ganga-5, Ganga-101, Hi-star and composite varieties such as Kishan, Vijay, Vikram, Diara etc. may be collected from reputed sources for sowing and depending upon the size, 2.5-3 kg seeds are required for sowing one bigha of land.
- Upland area free from water stagnation should be selected for planting of sugarcane. Trenches / furrows should be made in well prepared soil at a distance of 75-90 cm. Bottom of the trenches should be loosened by light hoeing before application of manures / fertilizers. Further, 40 kg urea, 60 kg SSP and 15 kg MOP per bigha is to be applied and setts are to be treated before planting by dipping them in 0.2% solution of captaf / diathine M-45.
- Infestation of pest and disease such as fruit fly insect and powdery mildew disease is reported in summer vegetables in some localities.
- For control of fruit fly in summer vegetables, malathion 50 EC @ 2.5 ml per litre of water should be applied. Also for control of disease such as powdery mildew apply bavistan @ 2.5 ml / litre of water or Diathine Z-78 or Captaf @ 2 g / litre of water.
- Apply pesticides on a non rainy day.

### **Arunachal Pradesh**

- Rain/thundershower likely at a few places over the State.

### **Advisories**

- Farmers are advised to continue sowing of summer vegetables like ladies finger, cucurbits, pumpkin etc.
- Undertake sowing of ginger.
- As there was no significant rainfall during last week in most of the districts and rain / thundershower likely at a few places over the State for the next three days, apply irrigation to the early sown summer vegetables.
- Continue sowing / transplanting of wet seeded (WRC) rice.

### **Bihar**

- Isolated rain / thundershower likely over the over the State.

### **Advisories**

- As there was no significant rainfall in most of the districts of the State during last week and only isolated rain / thundershower likely over the State, apply irrigation to vegetables, arhar, and sugarcane.
- Complete sowing of summer vegetables and moong.

- Maintain 3– 5 cm standing water in the summer rice field.

## **Jharkhand**

- Isolated rain/thundershower likely over the State.

### **Advisories**

- As there was no significant rainfall in most of the districts of the State during last week and only isolated rain/thundershower likely over the State, apply irrigation to the vegetable, summer moong and til crops.
- Prepare field and undertake sowing of summer vegetables.
- Topdressing of urea after 50 days of transplanting can be done in summer rice.
- Site selection and land preparation may be done for planting of fruit crops on receipt of rain.

## **Sikkim**

- Rain/thundershower is likely to occur at a few places over the State

### **Advisories**

- As there was no significant rainfall during last week and rain / thundershower likely at a few places over the state for the next three days, apply irrigation to orange, large cardamom, early sown maize and vegetable crops.
- Monitor large cardamom for caterpillar / shoot borer and infected plants may be hand picked and destroyed mechanically.
- Dry grasses used for mulching near the orange trees must be removed just before rain. Also apply FYM/Compost @ 5 kg around trees 1-4 years, @ 25 kg around trees 5-10 years old and @ 50 kg around trees of 11-25/40 years old on a non rain day.
- Continue land preparation and sowing of pre-treated, healthy & certified seeds of vegetables in appropriate and well prepared nursery beds in the vegetable garden. The climbing plants (vegetables) should be sown in the lowermost terrace of the vegetable garden.

## **West Bengal**

- Very light to light rain at an isolated places with rather heavy at an isolated places on 13<sup>th</sup> May and very light to light rain at many places with moderate at an isolated places on 14<sup>th</sup> May over Sub-Himalayan West Bengal. Weather was mainly dry on 13<sup>th</sup> and 14<sup>th</sup> May over Gangetic West Bengal.
- Rain/thundershowers are likely at a few places over the State.

### **Advisories**

- As there was no significant rain during last week in most of the districts and rain is likely to occur only at a few places over the State for next three days, apply irrigation to sesamum, groundnut, green gram, jute and sugarcane.
- Maintain 3 – 5 cm standing water in boro rice field wherever crops are at dough stage. Start harvesting of already matured crops on bright sunny days. Drain out water from the field 10 – 15 days before harvesting of the crops.
- Apply 6.5 kg urea per bigha as top dressing for second time in jute.
- Mango is now in fruit development stage. Apply irrigation or spray water along with Planofix @ 0.25 ml per litre of water to restrict fruit drop.
- Infestation of rice bug is reported in some places. To control rice bug apply Carbaryl @ 2 g per litre of water.
- Infestation of pod borer is reported in sesame in some places. Apply endosulfan @ 2 ml per litre of water to control pod borer.

- Infestation of fruit and shoot borer in brinjal is reported in some places. Apply Triazophos 40 EC @ 1.5 ml, Spinosad 45 EC @ 0.2 ml or Cartap Hydrochloride @ 0.75 g per litre of water alternatively.
- Infestation of white fly in bhindi is reported in some places. To control white fly apply Confidor @ 0.25 ml per litre of water.
- Apply fertilizers and plant protection measures on a non-rainy day.

## ***Central Region (Gujarat, Chhattisgarh, Maharashtra, MP & Orissa)***

### **Gujarat**

- Mainly dry weather is likely over the State.

### **Advisories**

- As there was no rain during last week over the State and mainly dry weather is likely for next three days, apply irrigation to sugarcane, summer groundnut, summer bajra and other field and horticultural crops.
- Maintain 3 – 5 cm water in summer rice field.
- Apply 75 kg Nitrogen / ha as top dressing after 45 days from planting of sugarcane. Carry out light earthing up at 90 days after planting.
- If groundnut crop appears yellowish spray mixture of 100 g ferrous sulphate + 10 g citric Acid (Lemon arck) dissolved in 10 liters of water & spray over the crop in 500 liters of water.
- In ber pruning should be done between 15<sup>th</sup> and 25<sup>th</sup> May.
- There is mild chance of occurrence of powdery mildew in mango and cucurbits and citrus canker in lemon in North Saurashtra Zone.
- For the control of powdery mildew in mango and cucurbits, wettable sulphur @ 25 gm in 10 litres of water should be sprayed.
- For the control of citrus canker in lemon, copper oxy chloride @ 40 gm or streptocycline @ 5 gm in 10 litres of water should be sprayed at an interval 15 days.

### **Chhattisgarh**

- Isolated rain/thundershower is likely over the State.

### **Advisories**

- As there was no significant rainfall during last week and rain / thundershower is likely only at isolated places over the State for next three days, apply irrigation to sugarcane, vegetables, sunflower, groundnut, sesame and green gram.
- Maintain 5 cm water in summer rice field.
- Top dressing of sugarcane with Nitrogen may be done at knee high stage.
- Prepare nursery of chilli, tomato and brinjal in shadow.
- There is mild chance of attack of stem borer in summer rice in Baster Plateau zone. If attack crosses economic threshold level, apply Carbofuran 3G @ 33 kg / ha or Phoret 10G @ 8 to 10 kg / ha.
- Summer ploughing is advised wherever sufficient rains / moisture is available in the fields. It will help in effective pest / weed management for the coming *Kharif* crops due to soil solarization.

### **Maharashtra**

- Mainly dry weather is likely over the State.

### **Advisories**



- As there was no significant rain during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane (pre-seasonal), sugarcane (*suru*), summer groundnut and summer sunflower.
- Maintain 3 – 5 cm standing water in summer rice field.
- 5-6 ton trash may be applied in the field of sugarcane (pre-seasonal) and sugarcane (*suru*) to control evaporation.
- Harvest mango fruits at 80% ripening stage & at morning upto 10 am and after 4 pm & keep fruits in shadow.
- Start harvesting of already matured crops of green gram, groundnut (in Sindhudurga district), summer rice (in South Konkan) and summer bajra on bright sunny days.
- If the incidence of stem borer is noticed in summer rice, spray Endosulphan 35 EC @ 17ml or Quinalphos 25 EC @ 10 ml / 10 liters water.
- Incidence of red mites on bhindi crop is reported in Pune. If attack crosses economic threshold level, spray Omite @ 2 ml or Dicofol @ 2 ml or Vertimec @ 0.5 ml per litre of water.
- Brinjal is infested by aphids, jassids & white fly in Western Maharashtra Scarcity Zone (Rahuri). For the control of jassids spray, Imidacloprid @ 4 ml in 10 liters of water. For the control of white fly spray, 5 % Neem seed extract or Methyl dimeton @ 10 ml in 10 liters of water.
- Land may be prepared for the sowing of irrigated cotton. Select a variety from LRH-5166, JLH-168 as improved variety & Phule-492, Phule-388, Sankar-6 & 10, PKV-4 & 5 as hybrid variety. Seeds may be treated with 250 gm Azotobacter / 10 kg seeds. Sowing may be at 90 X 90 cm in medium, at 120 X 90 cm distance in black soil for Hybrid variety and at 90 X 90 cm for improved variety. Nitrogen @ 20 kg and Phosphorus and Potash @ 50 kg each / ha may be applied at the time of sowing.

### **Madhya Pradesh**

- Rainfall occurred at isolated places in West M.P. on 12<sup>th</sup> May, North west M.P. on 13<sup>th</sup> May and Southwest M.P. on 14<sup>th</sup> May. Mainly dry / dry weather prevailed over the State for remaining period.
- Isolated rain / thundershower is likely over north Madhya Pradesh and mainly dry weather is likely over the rest region.

### **Advisories**

- As there was no significant rain during last week in the State and isolated rain/thundershower or mainly dry weather is likely over Madhya Pradesh for the next three days, apply irrigation to summer moong and sugarcane.
- Undertake intercultural operation in sugarcane to keep the field weed free.

### **Orissa**

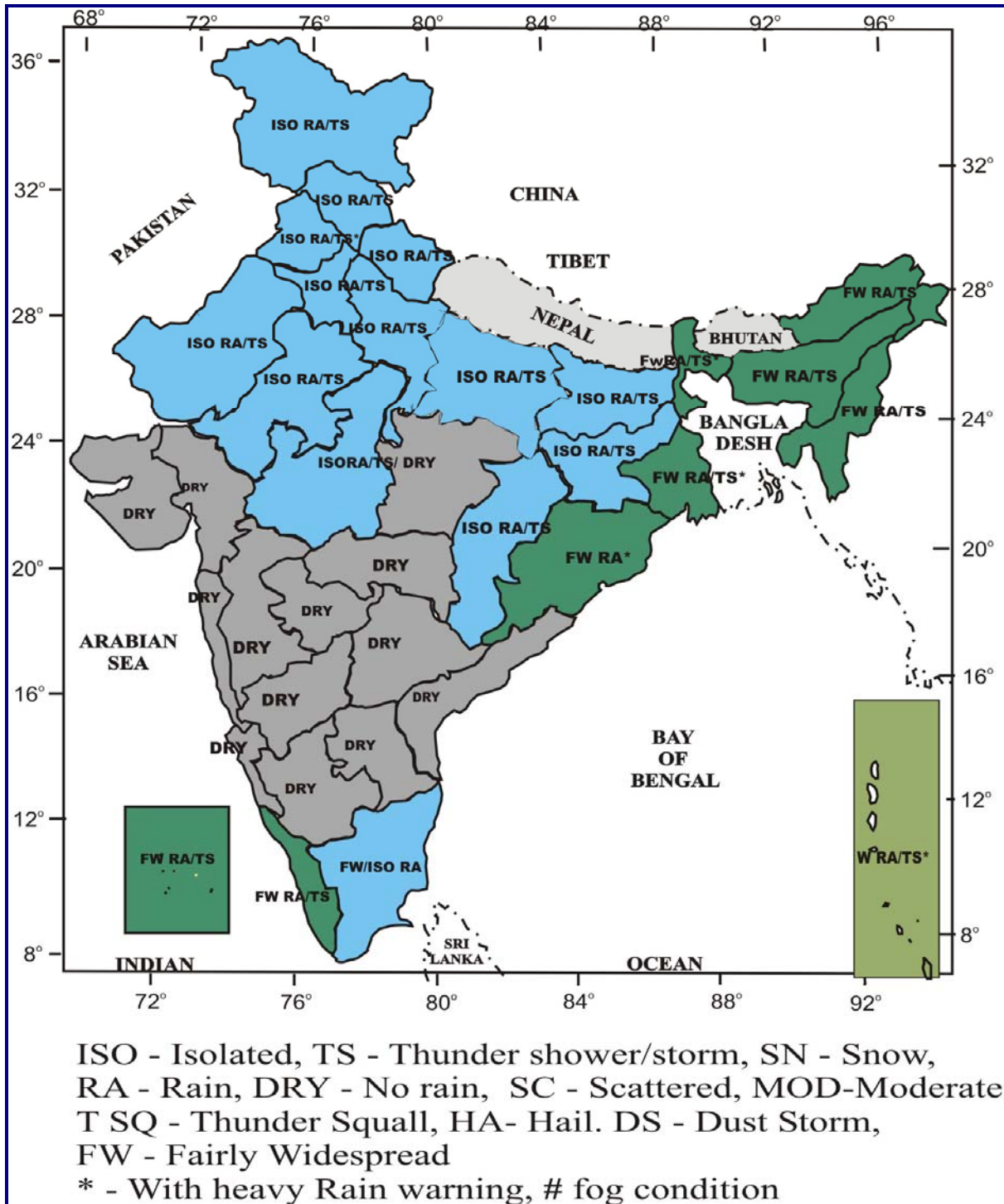
- Rain/thundershower likely at a few places over the State.

### **Advisories**

- As there was no rainfall during last week in most of the districts and rain / thundershower likely at a few places over the State for next three days, apply irrigation to vegetables, moong and early sown sugarcane.
- There is mild chance of occurrence of aphids in vegetables. If population crosses economic threshold level, spray Dimethoate or Methyl demeton @ 2 ml per litre of water. Also monitor the crop for leaf blight and spray Mancozeb @ 4-5 gm / litre of water to control leaf blight. Spray pesticides on a non rainy day.
- Continue harvesting the matured vegetable and dalua rice crops.

- Monitor sugarcane for early shoot borer and undertake need based plant protection measures.

*Forecast Valid upto 15th May, 2008*



## *Salient weather features for the week ending 14/05/08*

### **MAIN EVENTS OF THE WEEK**

- Southwest Monsoon set in over some parts of southeast Bay of Bengal, Nicobar Islands and Andaman Sea on 10th May. It further advanced into some more parts of southeast Bay of Bengal, Andaman & Nicobar islands, entire south Andaman Sea and most parts of north Andaman sea on 12<sup>th</sup>.
- The onset forecast model suggests that the monsoon onset over Kerala in 2008 is likely to be on 29th May with a model error of  $\pm 4$  days.
- A low pressure area formed over north Andaman Sea and adjoining east central Bay of Bengal on 13th May. It lay over east central Bay of Bengal and adjoining coastal areas of Myanmar on 14<sup>th</sup> May.
- Isolated to scattered heavy to very heavy falls occurred over Andaman & Nicobar Islands on most days of the week.
- Squall with wind speed of 80-105 kmph was experienced over Delhi and adjoining areas at 1000 hours IST of 14<sup>th</sup> May 2008.
- Heat wave conditions prevailed over some parts of Coastal Andhra Pradesh and Tamil Nadu on many days of the week.
- **MONSOON WATCH**
- With the favourable conditions of persistent convection over Andaman Sea and adjoining southeast Bay of Bengal, strengthening and deepening of westerly/southwesterly winds over the region, increase of pressure gradient over Bay of Bengal and widespread rainfall activity with isolated heavy to very heavy falls over Andaman & Nicobar Islands, Southwest Monsoon set in over some parts of southeast Bay of Bengal, Nicobar Islands and Andaman Sea on 10<sup>th</sup> May. It further advanced into some more parts of southeast Bay of Bengal, Andaman & Nicobar islands, entire south Andaman Sea and most parts of north Andaman sea on 12th May 2008.
- The northern limit of monsoon passed through Lat. 5.0° N /Long. 86.0° E, Lat. 8.0° N /Long. 87.0° E and Lat. 10.0° N /Long. 89.0° E, Lat. 12.0° N /Long. 91.0° E, Mayabander, Lat. 14.0° N /Long. 95.0° E and Lat. 15.0° N /Long. 98.0° E on 12<sup>th</sup> May.

### **METEOROLOGICAL ANALYSIS**

- An upper air cyclonic circulation extending upto mid-tropospheric level lay over north Andaman Sea and neighbourhood on 11<sup>th</sup> and 12<sup>th</sup>. Under its influence, a low pressure area formed over north Andaman Sea and adjoining east central Bay of Bengal on 13<sup>th</sup>. It lay over east central Bay of Bengal and adjoining coastal areas of Myanmar on 14<sup>th</sup> May.
- Last week's upper air cyclonic circulation in lower tropospheric levels over Coastal Andhra Pradesh and neighbourhood became less marked on 8<sup>th</sup>. However, an upper air trough extending upto 0.9 km above mean sea level (a.m.s.l.) ran from Bihar to Coastal Tamil Nadu on 8<sup>th</sup> and 9<sup>th</sup>, Sub-Himalayan West Bengal to Coastal Tamil Nadu on 10<sup>th</sup>, Jharkhand to coastal Tamil Nadu on 11<sup>th</sup> and 12<sup>th</sup> and from Chhattisgarh to Tamil Nadu on 13<sup>th</sup>.
- Last week's western Disturbance as an upper air system over Jammu & Kashmir and neighbourhood lay over Jammu & adjoining Punjab on 8<sup>th</sup> & 9<sup>th</sup>, Himachal Pradesh and neighbourhood on 10<sup>th</sup>, Uttarakhand on 11<sup>th</sup> and moved away eastwards thereafter.
- A fresh western Disturbance lay over north Pakistan and neighbourhood on 11<sup>th</sup> and central Pakistan and neighbourhood during 12<sup>th</sup> to 14<sup>th</sup>. A trough from the system ran upto northeast Arabian Sea during this period. Another cyclonic circulation in lower levels lay

over Punjab and neighbourhood on 12<sup>th</sup>, Haryana and adjoining Uttar Pradesh on 13<sup>th</sup> and 14<sup>th</sup>.

- Last week's upper air cyclonic circulation in lower tropospheric levels over West Uttar Pradesh and neighbourhood persisted on 8<sup>th</sup> and became less marked on 9<sup>th</sup> May.
- A cyclonic circulation in lower tropospheric levels lay over East Uttar Pradesh and neighborhood on 12<sup>th</sup>, over Jharkhand and adjoining Bihar on 13<sup>th</sup>.
- Another cyclonic circulation in lower tropospheric levels lay over East Uttar Pradesh and neighborhood on 14<sup>th</sup>.
- Last week's cyclonic circulation over east Arunachal Pradesh and neighbourhood in lower levels persisted on 8<sup>th</sup> & 9<sup>th</sup> and moved away eastwards on 10<sup>th</sup>.
- A cyclonic circulation lay over Sub-Himalayan West Bengal & Sikkim and neighbourhood on 10<sup>th</sup>, over Assam & Meghalaya and adjoining Bangladesh on 11<sup>th</sup>, over Nagaland, Manipur, Mizoram & Tripura and neighbourhood on 12<sup>th</sup> and became less marked on 13<sup>th</sup>. Another cyclonic circulation lay over Sub-Himalayan West Bengal & Sikkim and neighbourhood between 1.5 & 4.5 Km a.m.s.l. on 13<sup>th</sup> and between 2.1 & 5.8 Km a.m.s.l. on 14<sup>th</sup>.

### **RAINFALL**

- Fairly widespread to widespread rain/thundershower with isolated to scattered heavy to very heavy falls occurred over Andaman & Nicobar Islands on most days of the week.
- Isolated to scattered rain/thundershower occurred over northeastern States, West Bengal & Sikkim, Orissa, Jharkhand on most days and isolated rain/thundershower also occurred over Bihar and Uttar Pradesh on a few days of the week.
- Isolated to scattered rain/thundershower occurred over Northwest India, Rajasthan and West Madhya Pradesh on many days and isolated rain/thundershower occurred over East Madhya Pradesh and Chhattisgarh during second half of the week.
- Isolated rain/thundershower occurred over Tamil Nadu & Puducherry, Coastal Andhra Pradesh and Kerala on many days and South Interior Karnataka on a few days of the week.
- The detailed rainfall distribution over different subdivisions is given in Table-1.

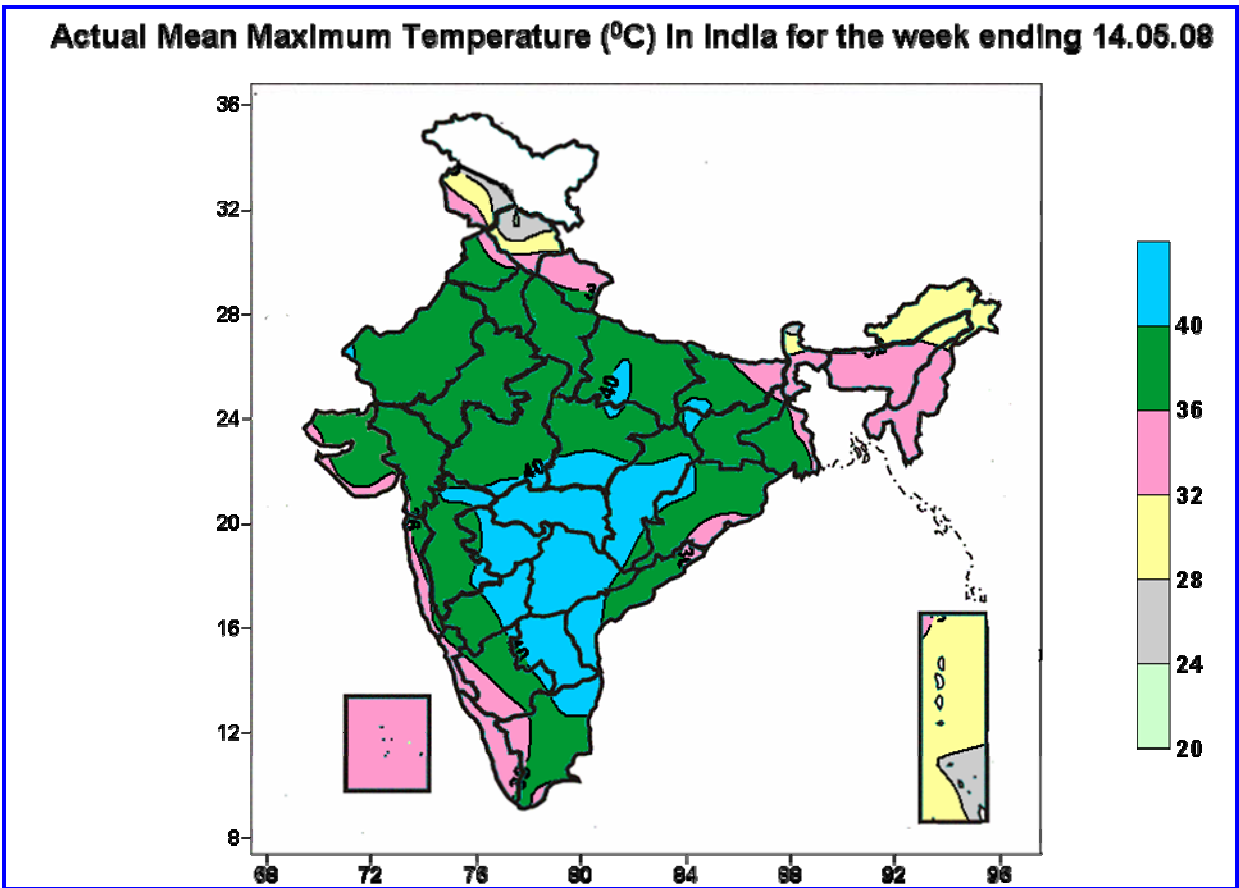
### **MAXIMUM TEMPERATURE**

- Heat wave conditions prevailed over some parts of Coastal Andhra Pradesh and Tamil Nadu on many days of the week.
- The maximum temperatures were appreciably to markedly above normal over northeastern States during many days of the week.
- The details of maximum temperature distribution over different sub-divisions during the week are given in Table -1.

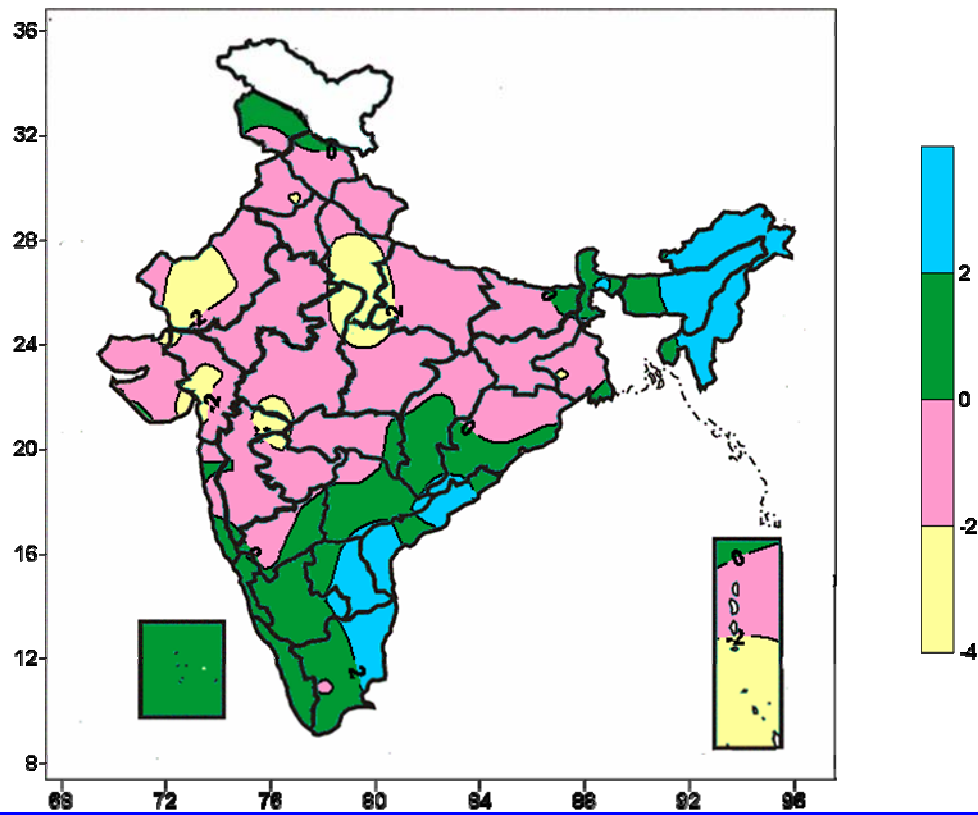
### **Outlook For The Week Ending On 21<sup>st</sup> May 2008**

- Under the influence of well marked low pressure area over east-central & adjoining northeast Bay of Bengal and coastal areas of Myanmar, fairly widespread rainfall with isolated heavy falls is likely over Andaman Islands during first half of the week.
- Isolated to scattered rain/thundershowers likely over Indo-Gangetic plain, extreme south peninsula, Gangetic West Bengal and Orissa.
- Scattered to fairly widespread rain/thundershowers are likely over Sub-Himalayan West Bengal & Sikkim and northeastern States.

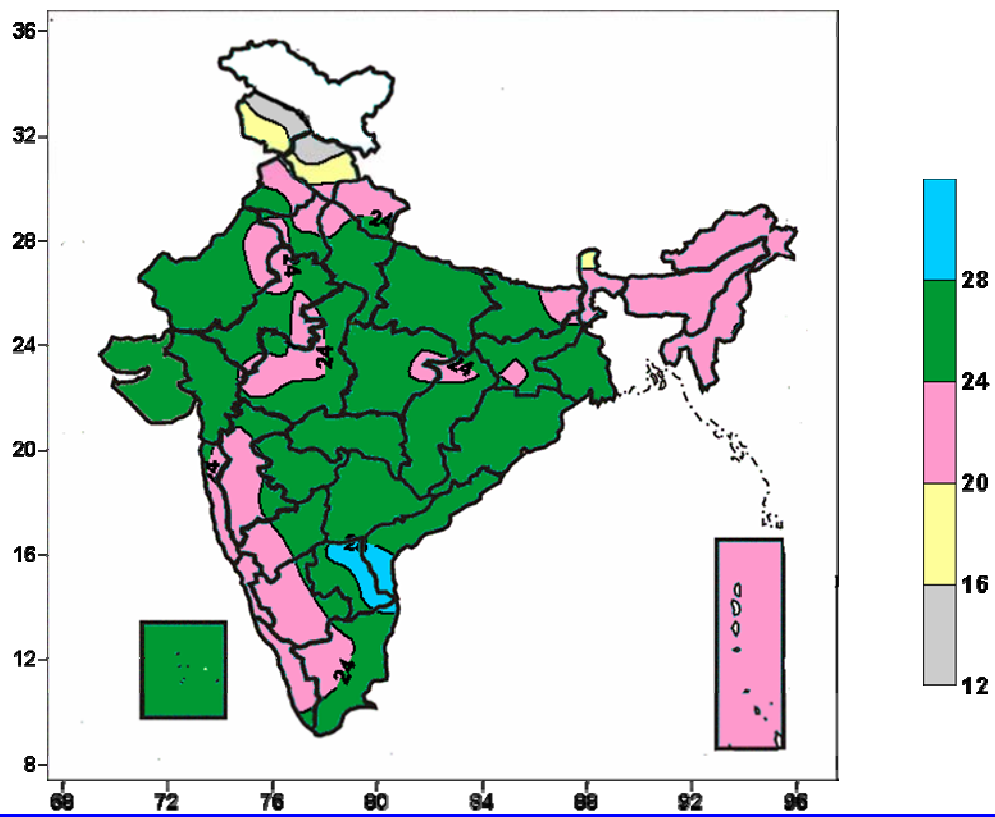
## Contour maps for the week ending 14<sup>th</sup> May, 2008



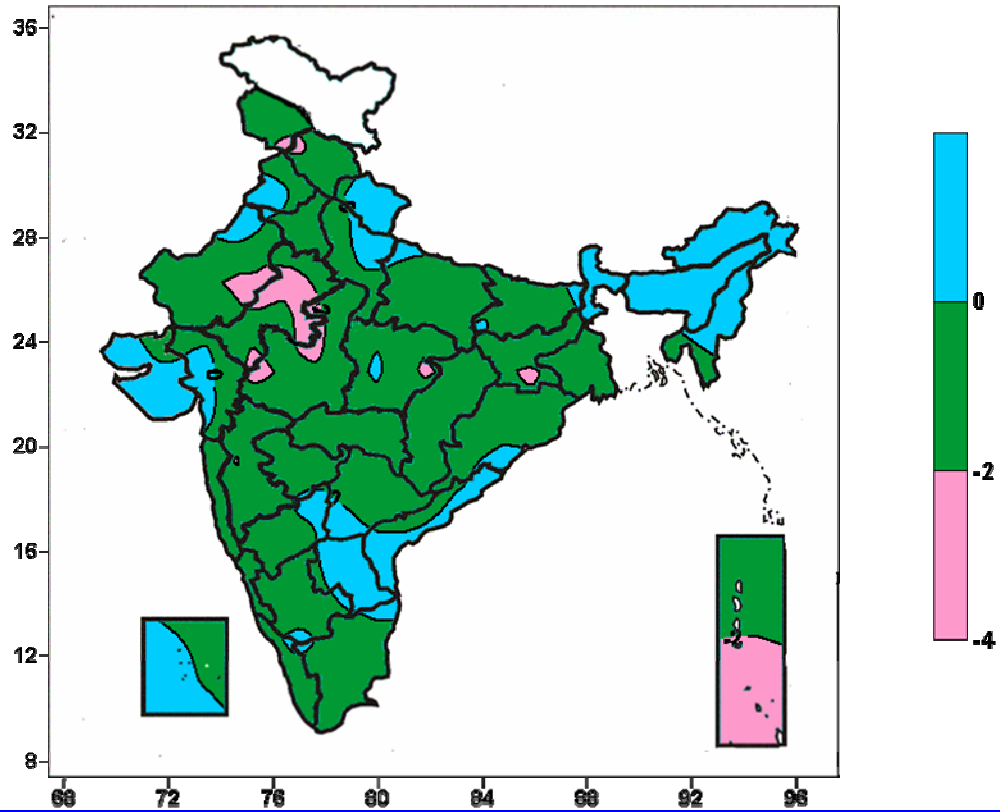
**Maximum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 14.05.08**



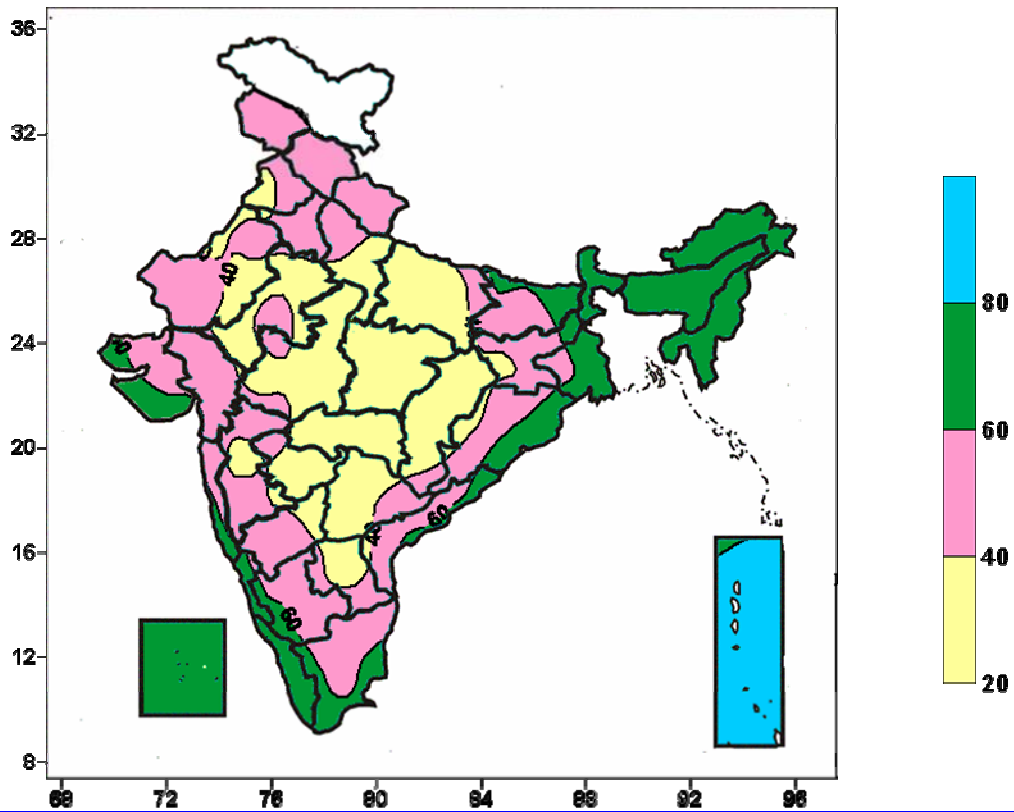
**Actual Mean Minimum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 14.05.08**



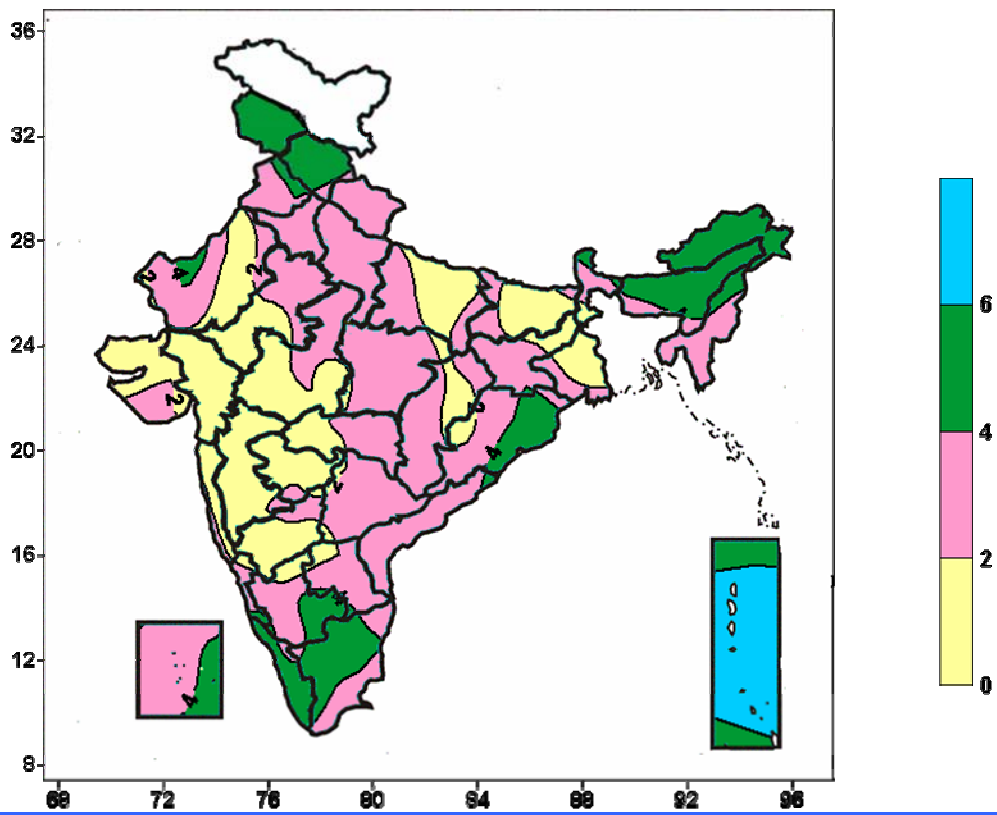
Minimum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 14.05.08



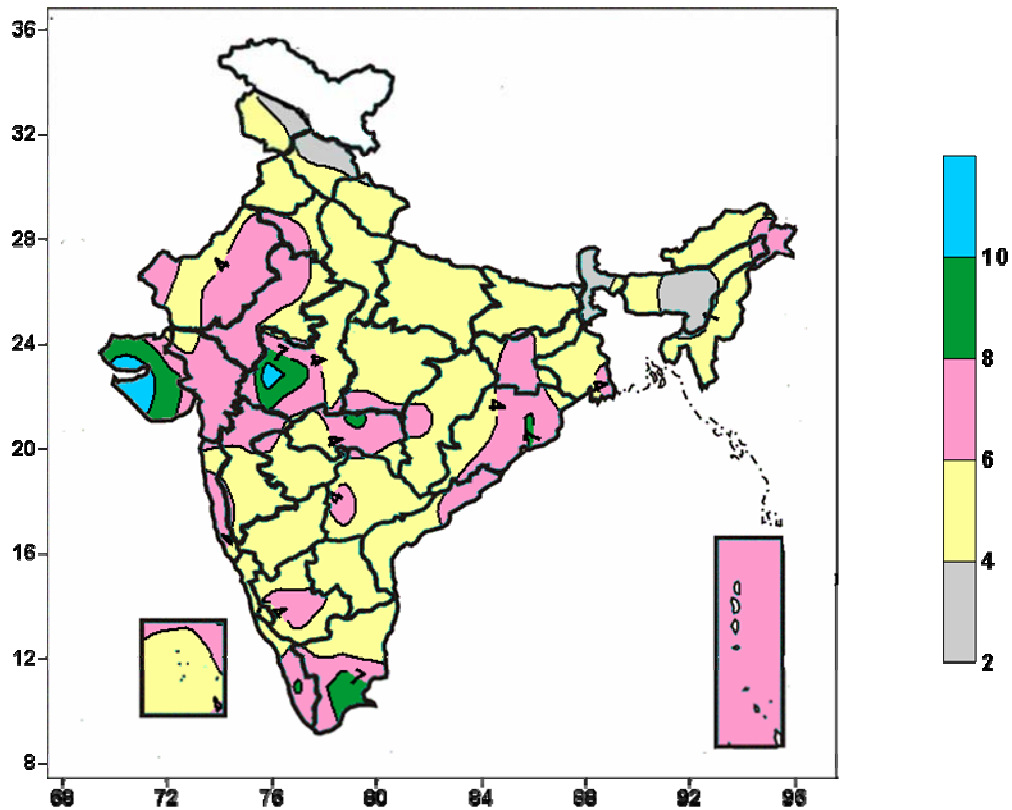
Relative Humidity (%) over India for the week ending 14.05.08



**Cloud amount (okta) over India for the week ending 14.05.08**



**Wind speed (knots) over India for the week ending 14.05.08**







<b>Amritsar</b>	SE	06	ENE	07	-	-	-	-	-	-	SE	06	SW	18
<b>Barmer</b>	W	13	-	-	-	-	-	-	W	07	WNW	06	W	12
<b>Sriganganagar</b>	-	-	-	-	-	-	-	-	-	-	SE	18	-	-
<b>Jaisalmer</b>	W	14	-	-	-	-	-	-	-	-	SW	12	W	05
<b>Kota</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Deesa</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Churu</b>	-	-	-	-	-	-	-	-	-	-	S	22	WNW	10

Under the prevailing weather conditions, there is no chance of locust infestation in Rajasthan and the adjoining areas during this week.

### *CROP – STATE – STAGE*

New Delhi

<b>Vegetables</b>	<b>Arhar</b>			
Vegetative / flowering / fruiting/ harvesting	Land preparation/ sowing			
<b>Haryana</b>				
<b>Autumn sugarcane</b>	<b>Horticultural crops</b>	<b>Sunflower</b>	<b>Summer Pulses</b>	
Vegetative	Vegetative	Vegetative	Sathe moong-complete sowing Moong-sowing	

#### Himachal Pradesh

<b>Vegetables (Ladies finger/ Cabbage, Cauliflower)</b>	<b>Ladies finger</b>	<b>Barley</b>	<b>Gram</b>	<b>Wheat</b>
Vegetative/flowering/fruiting/harvesting	Fruiting/harvesting	Maturity/harvesting	Pod maturity/harvesting	Maturity/harvesting
<b>Potato</b>	<b>Oilseeds (Torai, Rapeseed and mustard)</b>	<b>Apple</b>		
Tuber formation	Pod maturity/harvesting	Fruit development		

#### Jammu & Kashmir

<b>Vegetable crops</b>	<b>Wheat</b>	<b>Pulses</b>	<b>Brown Sarson, Mustard</b>	<b>Barley, Oat</b>
Vegetative	Harvesting	Vegetative	Capsule harvesting in Jammu	Harvesting-Jammu

#### Punjab

<b>Autumn sugarcane</b>	<b>Wheat</b>	<b>Summer pulses</b>	<b>Sunflower</b>	<b>Horticultural crops</b>
Vegetative	Harvesting	Early vegetative	Vegetative	Vegetative
<b>Oilseeds</b>				
Vegetative				

#### Rajasthan

<b>Cotton</b>	<b>Summer Vegetable crops</b>			
Sowing	Vegetative			

#### Uttar Pradesh

<b>Summer Sugarcane</b>	<b>Vegetables</b>	<b>Summer pulses</b>	<b>Sunflower</b>	<b>Mango</b>
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Early vegetative	Fruiting / maturity	Vegetative	Vegetative	Fruit setting
<b>Oilseeds</b>				
Vegetative				

#### Uttarakhand

<b>Mango/Litchi</b>	<b>Sugarcane</b>	<b>Potato</b>	<b>Apple</b>	
Fruiting	Vegetative	Tuber formation	Vegetative	

#### Assam

<b>Regular Ahu rice</b>	<b>Maize</b>	<b>Horticultural plants</b>	<b>Boro rice</b>	<b>Summer vegetables</b>
Land preparation/ sowing	Land preparation/ sowing	Planting	Maturity/harvesting	Vegetative / flowering /fruiting/harvesting
<b>Early Ahu rice</b>	<b>Jute</b>	<b>Early sown Jute</b>	<b>Sugarcane</b>	
Tillering	Land preparation/ sowing	Germination / early vegetative	Land preparation/ sowing	

#### Arunachal Pradesh

<b>Jhum Rice/Wet seeded rice</b>	<b>Summer Vegetables</b>	<b>Ginger</b>		
Land preparation/sowing/transplanting	Vegetative	Land preparation for sowing		

#### Bihar

<b>Vegetables &amp; fruit crops</b>	<b>Summer Maize</b>	<b>Summer rice</b>	<b>Sugarcane</b>	<b>Potato</b>
Vegetative/fruiting	Vegetative	Vegetative	Vegetative	Tuber formation

#### Jharkhand

<b>Summer rice</b>	<b>Litchi / Mango</b>	<b>Vegetables (Tomato, Brinjal, Bhendi)</b>	<b>Wheat</b>	<b>Summer moong and til</b>
Early vegetative/ Vegetative	Vegetative (tree)	Vegetative	Harvesting	Vegetative

#### Sikkim

<b>Orange</b>	<b>Vegetables</b>	<b>Large Cardamom</b>	<b>Wheat</b>	<b>Maize</b>
Fruiting/Harvesting	Sowing	Capsule Development	Harvesting	Grain development

#### West Bengal

<b>Sugarcane</b>	<b>Jute</b>	<b>Sesamum</b>	<b>Groundnut</b>	<b>Green Gram</b>
Early vegetative / vegetative	Germination / seedling / early vegetative	Flowering/ pod formation/seed formation	Pod formation/seed formation	Pod formation
<b>Boro rice</b>				
Dough / early maturity/ maturity				

#### Chhatisgarh

<b>Sugarcane</b>	<b>Sesame</b>	<b>Summer Rice</b>	<b>Vegetables</b>	<b>Green gram</b>
Autumn sugarcane – Vegetative	Flowering / pod formation / seed formation	Milk/dough	Vegetative / flowering / fruiting/harvesting	Vegetative / flowering
<b>Sunflower</b>	<b>Groundnut</b>			
Head formation / seed formation	Pod formation/seed formation			

#### Gujarat

<b>Sugarcane</b>	<b>Summer rice</b>	<b>Summer groundnut</b>	<b>Summer bajra</b>	
Vegetative	Grain formation/early maturity	Pod formation	Grain formation	

#### Maharashtra

<b>Sugarcane Preseasonal (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Sugarcane (Suru) (Madhya Maharashtra, Marthwada and Vidarbha)</b>	<b>Summer sunflower</b>	<b>Mango</b>	<b>Summer green gram</b>
Elongation / cane development	Active growth / elongation	Head formation/seed formation	Fruit development/ fruit maturity/harvesting	Pod maturity/harvesting

<b>Potato (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Summer Rice</b>	<b>Summer bajra</b>	<b>Summer groundnut</b>	<b>Irrigated cotton</b>
Vegetative	Flowering/grain formation Grain maturity-south konkan	Grain maturity/harvesting	Pod formation Pod maturity- Sindhudurg	Land preparation and sowing

**Madhya Pradesh**

<b>Sugarcane</b>	<b>Sugarcane</b>	<b>Summer moong</b>		
Grand growth	Vegetative	Pod formation		

**Orissa**

<b>Vegetable crops</b>	<b>Rice</b>	<b>Sugarcane</b>	<b>Moong</b>	
Flowering/fruitlet/harvesting	Grain maturity/harvesting	Vegetative	Vegetative	

**Andhra Pradesh**

<b>Rice</b>	<b>Groundnut</b>	<b>Chillies</b>	<b>Sugarcane</b>	
Harvesting	Harvesting	Vegetative	Vegetative	

**Karnataka**

<b>Summer rice, Maize, Sunflower</b>	<b>Annual sugarcane</b>	<b>Early kharif Crops</b>	<b>Rabi Cotton</b>	
Grain maturity/harvesting	Tillering	sowing	End picking	

**Kerala**

<b>Virippu- rice</b>	<b>Rubber</b>	<b>Coconut</b>	<b>Banana</b>	<b>Pepper</b>
sowing	Planting	Land preparation for new planting	Planting	Land preparation for new planting

**Tamil Nadu**

<b>Rice (Samba)</b>	<b>Sugarcane (Early, Mid season)</b>	<b>Maize/Jowar/Bajra/Samai</b>	<b>Groundnut/Black gram/Green gram/Red gram</b>	<b>Special season sugarcane</b>
Grain development/maturity	Cane development / maturity	Grain development	Pod development	Grand growth
<b>Sorghum</b>				
Sowing				

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