



**Summary of Agromet Advisory Services for different States of the country**  
**Issued by**  
**Agricultural Meteorology Division, India Meteorological**  
**Department, Pune, India**

**Thursday, 5<sup>th</sup> April, 2007**  
(For the period 5<sup>th</sup> April to 9<sup>th</sup> April, 2007)

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

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

**Punjab**

Weather remained dry in the State during the period and likely to remain dry for next 4-5 days.

Mainly dry weather is likely over the State. Gradual rise in day temperatures over the plains of the State.

**Advisories**

- As there was no rain during last week and mainly dry condition will prevail for next three days, apply irrigation to **summer sunflower, wheat and horticultural crops.**
- Weather remained dry in the State during the period and likely to remain dry for next 4-5 days. Current meteorological analysis indicates weakening of prevailing northwesterly strong surface winds and as a result day temperatures are expected to register rise in next 3-4 days. Farmers are advised to take advantage of expected weather and undertake / start harvesting of matured crops.
- Undertake planting of early maturing varieties of **sugarcane** i.e COJ 64, COH 56 and COH 92 and mid season CO 7717, COH 99 and COS 8436.
- Attack of **aphids** is reported in **wheat**. Continue spraying of fentitrothion 50 EC @ 250 ml / ha to control the aphids. Remove loose smut affected earhead so that spores of the fungus do not spread.

**Haryana**

Weather remained dry in the State during the period and likely to remain dry for next 4-5 days.

Mainly dry weather is likely over the State. Gradual rise in day temperatures over the plains of the State.

**Advisories**

- As there was no rain during last week and mainly dry conditions will prevail for next three days, apply irrigation to **summer sunflower, wheat and horticultural crops.**
- Weather remained dry in the State during the period and likely to remain dry for next 4-5 days. Current meteorological analysis indicates weakening of prevailing northwesterly strong surface winds and as a result day temperatures are expected to register rise in next 3-4 days. Farmers are advised to take advantage of expected weather and undertake / start harvesting of matured crops.
- Continue planting of early maturing varieties of **sugarcane** i.e CO J-64, COH 56 and COH 92 and mid season CO 7717, COH 99 and COS 8436.
- Continue sowing of **sunflower.**
- Attack of **aphids** and **loose smut** is reported in **wheat**. For controlling **aphids**, continue spraying of fentitrothion 50 EC @ 250 ml / ha. Remove loose smut affected earhead so that spores of the fungus do not spread.

**Rajasthan**

Weather remained dry in all divisions of the State.

Mainly dry weather is likely over the State.

## Advisories

- Heat wave conditions are likely to prevail over south Rajasthan during next 48 hours. As the crops are at harvesting stage, crop damage will be lesser. Arrange immediately for harvesting of the matured crop of wheat.
- Continue harvesting of matured crops of cumin, gram, mustard and barley.
- This is proper time for sowing of cotton and zaide fodder in irrigated areas.

## Uttar Pradesh

Heat wave conditions prevailed over some parts of the State on 2<sup>nd</sup> April and abated from the State on 3<sup>rd</sup> & 4<sup>th</sup> April. Weather was dry in all divisions of the State.

Mainly dry weather is likely over the State. Gradual rise in day temperatures over the plains of west U.P. No significant change in day temperatures in East U.P.

## Advisories

- As mainly dry condition prevailed in most of the districts of the State and mainly dry weather is likely over the State for the next three days, apply irrigation to wheat in grain formation stage and winter vegetable crops (onion).
- Monitor the violet spot in onion. To control the disease spray the solution of Mancozeb 0.2% @ 2 g / liter of water if damage exceeds ETL.
- The blossoming in mango by 30-45 cm in length affected with malformation disease and to control Bhunga insect, spray the solution of Monocrotophos 1 ml / litre of water or Dimethoate 1.6 ml / litre of water and to control Black rotten disease or internal rotten disease in mango, spray the solution of Barex 0.6 % @ 6 g / litre in water.
- Harvesting of winter vegetables and sugarcane may be continued as dry condition will prevail for next three days.
- Continue the sowing of summer urad, moong, maize, sunflower and sugarcane.

## Himachal Pradesh

Mainly dry weather is likely over the State.

## Advisories

- As there was no rain during last week over the state and weather will be mainly dry for next three days, apply irrigation to vegetables, wheat, barley, gram and onion.
- Continue land preparation and nursery sowing and transplanting of cauliflower and cabbage in low and mid hills and sowing of bhindi.
- There is mild chance of attack of powdery mildew in vegetables. If attack crosses economic threshold level, spray carbendazime 0.5 % to control the disease.
- There is mild chance of attack of pod borer in gram. If attack crosses economic threshold level, spray Monocrotophos (Monocil 36 EC/SL) or Carbaryl 50 WP (Sevin) @ 875 ml or Endosulfan 35 EC (Thiodan/Hindon/Endocel) @ 1250 ml in 625 litres of water per ha. Spraying can be repeated at 15 days interval, if the pest still persists.
- There is mild chance of attack of purple blotch disease in onion. If attack crosses economic threshold level, spray mancozeb 0.25 % to control the disease.

## Uttarakhand

Mainly dry weather prevailed during the period. Sky remained mainly clear to partly cloudy during the period.

Mainly dry weather is likely over the region. Gradual rise in day temperatures over the plains.

## Advisories

- Mainly dry weather occurred during last week and likely to continue for next three days over the region. Apply light irrigation to **mango, potato and wheat**.
- Field preparation and sowing / ratooning of **sugarcane** may be continued.
- Undertake chemical control for **mango and litchi** as dry weather expected. Maintain cleanliness in the orchards.
- Monitor crop for smut disease and for zinc deficiency in **wheat**.
- Undertake mulching to conserve soil moisture and to prevent weeds in apple.

## Jammu & Kashmir

Light to moderate rain occurred at a few places on 2<sup>nd</sup> April. Weather remained mainly dry for rest of the days over J & K State.

Isolated rain thundershowers are likely over J & K on 7<sup>th</sup> and 8<sup>th</sup> April.

## Advisories

- Rouge out **loose smut** and **flag smut** affected **wheat** and **barley** crops in Jammu and destroy them completely to prevent further spread.
- Continue harvesting the matured crops of **mustard, gram, lentil and pea** in Jammu division.
- Continue land preparation and sowing of **summer mash** and **moong** in Jammu division. Sowing of **summer vegetable** crops should be completed without any further delay. Transplanting of **tomato, brinjal and chillies** from nursery to field area may be undertaken during this period.

## Delhi

Weather remained mainly dry.

Mainly dry weather is likely over the state. Gradual rise in day temperatures over the state.

## Advisories

- As there was no significant rainfall during last week over the State and mainly dry weather is likely for next three days, apply irrigation to **vegetables and wheat**.
- Prepare land and perform sowing of **radish**. Use Pusa Chetki variety for sowing.
- Monitor red pumpkin beetle in **cucurbits** and if attack exceeds economic threshold level, spray carbaryl 50% WP @ 750 – 1000 gms / ha.

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

### Kerala

Rain / thundershowers occurred at a few places on 2<sup>nd</sup> April and at isolated places on 3<sup>rd</sup> April. Dry weather prevailed on 4<sup>th</sup> April.

Isolated rain/thundershowers are likely over Kerala.

## Advisories

- Apply irrigation to plantation crops viz., **coconut, arecanut, rubber and banana** as there was no significant rainfall during last few weeks and rain / thundershower is likely to occur only at isolated places for the next three days over the state.
- Maintain 4-5 cm standing water in the **puncha rice** field.
- Attack of **leaf folder, stem borer, brown plant hopper, rice bug and gall midge and blast and blight** diseases is

reported in *puncha rice*. Spray Carbaryl 50% @ 2 kg / ha to control stem borer, leaf folder, brown plant hopper and gall midge. Spray Carbendazim @ 1 g / litre of water to control blast and blight diseases. As a prophylactic measure against rice bug, keep the fields and bunds free of weeds. If severe attack is found, spray malathion 50 EC @ 2 ml per lit.

- Attack of *powdery mildew* is reported in *rubber*. Spray Wettable sulphur @ 0.2% or Carbendazim @ 0.05% to control the disease.
- Attack of *pseudostem weevil* is reported in *banana*. In endemic area, first remove the outer sheath of all infested and uninfested plants and spray Quinalphos @ 0.05% or Chlorpyrifos @ 0.03% or Carbaryl @ 0.2%. Spraying / drenching may be done on leaf axils, rhizome, surrounding soil and all the bore holes of pseudo stem made by larvae. Repeat the treatment after three weeks if infestation persists.
- Attack of *spindle bug* is reported in *arecanut*. Spray Carbaryl @ 4 g / litre of water to control the pest.
- Attack of *coried bug* and *leaf rot* is reported in coconut. Spray Sevin @ 4 g / litre of water to control coried bug. Spray crowns and leaves with 1% Bordeaux mixture or 0.5% Copper Oxy Chloride formulation or 0.4% Mancozeb to control leaf rot. In the leaf rot affected plants, remove the rotten portions from spear and two adjacent leaves and pour 300 ml fungicidal solution at the base of the spear which can be prepared by mixing Hexaconazole 5 EC @ 2 ml or Mancozeb @ 3 gm in 300 ml of water.
- Protect the *plantation crops* from scorching by applying lime.

## Tamilnadu

Rainfall occurred at one or two places over the State on 2<sup>nd</sup> April, at South Tamilnadu on 4<sup>th</sup> April, dry weather prevailed over North Tamilnadu on 4<sup>th</sup> April and over the State on 3<sup>rd</sup> April.

Isolated rain / thundershowers are likely over south Tamil Nadu. Mainly dry weather is likely over rest region of the State.

### Advisories

- Apply irrigation to *rice, millets, sunflower, maize, sugarcane, pulses, cotton* and *groundnut* as there was no significant rainfall for the past few weeks and mainly dry weather is likely to prevail over the State for the next three days.
- Undertake intercultural operations to keep the field weed free and application of fertilizers in *groundnut, cotton* and *sunflower*.
- Monitor *rice* for *stem borer* and *mealy bug* and if the pest population crosses ETL, spray Methyl Parathion 50 EC @ 350 ml / ha to control stem borer and spray Dimecron 100 EC @ 0.5 ml / litre of water to control mealy bug.
- Monitor *groundnut* for *aphids* and if the pest population crosses ETL, spray Dimecron 100 EC or Metasystox 25 EC @ 1 ml / litre of water to control the pest.
- Continue land preparation and sowing of *summer gingelly*. Adopt 5 kg / ha seed rate for sowing. Apply M.N. mixture or Manganese Sulphate @ 5 kg / ha after sowing.

## Karnataka

Rainfall occurred at isolated places over South Interior Karnataka and dry weather prevailed over Coastal Karnataka and North Interior Karnataka on 2<sup>nd</sup> April. Rainfall occurred at isolated places over North Interior Karnataka and dry weather prevailed over South Interior Karnataka and Coastal Karnataka on 3<sup>rd</sup> April. Rainfall occurred at isolated places over Coastal Karnataka and North Interior Karnataka and dry weather prevailed over South Interior Karnataka on 4<sup>th</sup> April.

Mainly dry weather is likely over the State.

### Advisories

- Apply irrigation to *summer groundnut, sunflower, sugarcane* and *rice* as there was no significant rainfall during last few weeks and mainly dry weather is likely over the state for the next three days.

- Monitor **rice** for **leaf roller**, **stem borer** and **thrips** and if the pest population crosses ETL, spray Methyl parathion 50 EC @ 350 ml / ha to control stem borer. Spray Dimecron 100 EC @ 0.5 ml / litre of water to control thrips and leaf roller.
- Monitor **groundnut** for **leaf miner** and if the pest population crosses ETL, spray Methyl Demeton @ 0.02%. Apply gypsum @ 200 kg / ha as the crop is now at pegging stage.

## Andhra Pradesh

Isolated rain occurred over Rayalaseema on 3<sup>rd</sup> April and coastal Andhra Pradesh on 4<sup>th</sup> April. Dry weather prevailed over the State during the rest of the period.

Mainly dry weather is likely over the State.

### Advisories

- Attack of **Brown Plant Hopper** is noticed in **rice**. Incidence of **stem rot** and **sheath blight** is noticed in **East Godavari** district. Incidence of **blast** is noticed in **Nellore, Prakasm, East Godawari, West Godawari, Guntur** and **Nizamabad** districts. Avoid spraying as the crop is now at maturity stage.
- Continue harvesting of matured crops of **groundnut** and **red gram**.

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

### Assam

Light to Moderate rain occurred at few places on 2<sup>nd</sup> & 3<sup>rd</sup> and light rain on 4<sup>th</sup> April over the state.

Scattered rain / thundershowers are likely over the State.

### Advisories

- Maintain 3 – 5 cm water in the **boro rice** field.
- Mild incidence of **Brown Plant Hopper**, **Yellow stem borer** and **blast** and **sheath blight** diseases in **boro rice** is reported in a few localities.
- Monitor attack of **Brown Plant Hopper** and **blast** and **sheath blight** diseases in **boro rice**. If attack crosses economic threshold level, to control **Brown Plant Hopper** insecticides like Chloropyriphos 20 E.C. @ 1.5 ml per litre of water or Phosphamidon @ 1ml per litre of water is to be applied. For control of **Blast** diseases as soon as 1 or 2 spots on leaf are seen Hinosan 50 E.C. @ 1ml per litre of water or Blitox @ 4gm per litre of water is to be applied and spraying is to be continued at an interval of 10-15 days till the diseases is controlled. For control of **sheath blight** diseases Carbendazim (Bavistin) @ 0.5 gm per litre of water is to be applied.
- To control rat in **wheat** field use Celphos / Quickphos tablet (1 or 2 per hole) or prepare poison bait using 80 gm Atta / Crushed Maize, 5gm Gur, 5 gm Dry fish and 5 gm Zinc Phosphate.
- Apply plant protection measures on a non-rainy day.
- Harvest already matured crops of **wheat** on bright sunny days. Wheat is ready for harvest when grain will produce cracking sound while pressed between teeth.
- Prepare land and continue sowing of summer vegetables like **ladies finger**, **ridge gourd**, **cucumber** etc., transplanting of **early ahu rice** and sowing of **jute** and **maize**.
- Field should be prepared well for transplanting of **early ahu rice** and well rotten FYM or compost manure has to be applied @ 1.5 tonnes per bigha in addition to Urea @ 12 Kg, single super phosphate @ 18 Kg & MOP @ 3 Kg per bigha. The roots of uprooted seedlings are to be washed and dipped in 0.02% solution of chloriphos 40 E.C @ 1 ml per litre of water along with 1% Urea for 3 hours as a protective measure against Stem borer, Gall midge and plant hoppers. Maintain 2 – 3 cm water in the field 2 – 3 days after transplanting.
- Plough land and ladder 5 -6 times to obtain a fine seed bed for sowing of **jute**. In termite and cricket infested field the soil is to be treated with Malathion 5% dust @ 30 kg per hectare. Use seeds of varieties JRC 212, 321, 7447 etc. for sowing.
- Well drained soil is suitable for Maize cultivation. Apply Compost @ 1 tonne along with Urea @ 18 kg, SSP

@ 33 kg and MOP @ 9 kg per bigha at the time of land preparation for sowing of **maize**. Use seeds of varieties Ganga-5, Hi- Starch, Campo – NLD, Naviot etc. for sowing.

## **Arunachal Pradesh**

Rain / thundershower occurred at most places on 4<sup>th</sup> April, at many places on 3<sup>rd</sup> April and at a few places on 2<sup>nd</sup> April.

Scattered rain / thundershowers are likely over the state.

### **Advisories**

- As there is no significant rain over the State during last week, apply irrigation to **summer vegetables, millet, maize, jhum paddy** and **ginger**.
- Harvest the matured crops of **wheat** on bright sunny days.
- Land should be thoroughly prepared and final puddling should be done 4 – 5 days before transplanting of **WRC rice**.

## **Bihar**

Weather was dry.

Mainly dry weather is likely over the State. No significant change in day temperature.

### **Advisories**

- As there was no significant rainfall for last few weeks over the State and mainly dry weather is likely for next three days, apply irrigation to **vegetables, maize, green gram** and **sesamum**.
- If **onion** crop is affected due to thrips insect and purple blotch disease and tips are burning, spray Acephate @ 800 g / ha and companion @ 2 kg / ha with sticker.
- Maintain 3– 5 cm water in the **boro rice** field.
- In **mango**, if fruits have formed give frequent irrigation and spray insecticides / fungicides with planifix.

## **Jharkhand**

Weather remained mainly dry.

Mainly dry weather is likely over the State.

### **Advisories**

- Mainly dry weather prevailed in the State during last week and mainly dry weather is likely for next three days. Under the circumstances, apply irrigation to late sown **wheat, mango** and **litchi**.
- Maintain 3 – 5 cm water in the **boro** rice field.
- Maintain regular irrigation in **mango** and **litchi**. To protect the fall of **litchi** fruits, planofix hormone @ 4 ml / litre water should be sprayed.

## **Sikkim**

Moderate to nearly heavy rain occurred at most places on 4<sup>th</sup> April and moderate rain occurred at many places on 3<sup>rd</sup> April. Light rain occurred on 1<sup>st</sup> April over East Sikkim. No rain occurred on 29<sup>th</sup> to 31<sup>st</sup> March and 2<sup>nd</sup> April. Rainfall was excess during the period.

Isolated rain/ thundershowers are likely over the state. No significant change in day temperatures.

### **Advisories**

- As there was excess rain in the State during last week and isolated rain is expected, postpone irrigation to the

crop.

- Continue harvesting of matured crops of **wheat** and **mustard** on bright sunny days. **Wheat** is ready for harvest when grain will produce cracking sound while pressed between teeth.
- Monitor **large cardamom** for stem borer and if the pest population crosses ETL, spray Endosulfan 35 EC @ 1 ml / litre of water to control the pest. Chirkey and Foorkey affected plants may be destroyed by burning.
- Continue land preparation and sowing of **maize** and **ginger**. Pre treated healthy and certified seeds of **ginger**, preferably rhizome weighing 50-60gms and having 2-3 eyes to be selected for sowing.

## West Bengal

During the said period very light to light rain occurred at isolated places on 2<sup>nd</sup>, very light to light rain at many places along with moderate to rather heavy rain at a few places on 3<sup>rd</sup>, light rain along with moderate to rather heavy rain at isolated places occurred on 4<sup>th</sup> April over the districts of Sub Himalyan West Bengal. Weather was mainly dry over rest of the state.

Isolated rain / thundershowers are likely over the State. No significant change in day temperatures.

### Advisories

- As there was no significant rain in the State during last few weeks and isolated rain / thundershowers are likely for next three days, apply irrigation to **sugarcane**, **sesamum**, **groundnut** and **green gram** crops.
- Continue harvesting of matured crops of **wheat** on bright sunny days. Wheat is ready for harvest when grain will produce cracking sound while pressed between teeth.
- Apply second split dose of 25 – 30 kg N / ha at 6 weeks after transplanting of **boro rice**. Maintain 3 – 5 cm water in the field after 2 – 3 days of application of fertilizer.
- No supplementary fertilizer dose of N is required if **sesame** is sown after harvesting of potato crop. Otherwise apply 12.5 kg N per ha at 25 – 30 days after sowing.
- Prepare land and continue planting of **sugarcane**. Select early maturing varieties (10 months) form C.O.J. 7218, C.O. 62197, C.O. 87263 and medium maturing varieties (10 – 12 months) form B.O.91, C.O. 62033, C.O. 7202, C.O. 7224, C.O. 1148, C.O. 87268, C.O.S. 776 etc. for planting of **sugarcane**. Sett rate is 50 – 62.5 q / ha. Use top 1/3<sup>rd</sup> portion of the cane as a seed for best germination. Soak in water for 24 hours for better sprouting. Treat the seed in 100 gm Mithoxy Ethyl Mercuric chloride per 40 litres of water for 20 minutes and then dry in shade. Alternatively you can treat the seeds by Carbendazim 50% @ 1 gm / litre of water.
- Prepare land for sowing of **jute** in North Bengal. Apply compost manure @ 7.5 – 12.5 tonnes / ha. Apply N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O each @ 25 kg / ha also before last land preparation. Select improved variety from Shyamali, Sonali & Sobujsona etc. for *C. capsularis* and Chaitali, Basudev, Baisakhi, Nabin etc. for *C. olitorius* for sowing. Seed rate is 7.5 kg per ha for *C. capsularis* and 5 kg per ha for *C. olitorius*. Seeds may be treated with 1 gm carbendazime per kg of seeds before sowing.

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

### Gujarat

Hot day conditions prevailed in parts of Coastal Saurashtra on 2<sup>nd</sup> April & in Coastal Saurashtra, Kutch on 3<sup>rd</sup> April.

Mainly dry weather is likely over the state. Heat Wave conditions are likely over some parts of Gujarat during next 48 hours.

### Advisories

- As there was no rain during last few weeks in the State and mainly dry weather will prevail along with the probability of Heat Wave condition in some parts of the State which may cause higher evapotranspiration loss from the crops for next three days, apply irrigation to **new sugarcane crop**, **summer groundnut** and **summer bajra** to bring the soil moisture to field capacity.
- Maintain 3 – 5 cm water in the **rice** field. Apply 30 kg N / ha as a supplementary dose to the crop at tillering stage. Water may be drained out before fertilizer application & maintain water level after 2 days.

- Apply 75 kg N / ha as top dressing at 45 days after planting of new sugarcane crop. For saving of 25% Nitrogen fertilizer apply 2 kg Bio fertilizer azetobactor mixed with 100 kg FYM / ha in furrows at an interval of 30 & 60 days from sowing.
- If groundnut appears yellowish spray mixture of 100 gm ferrous sulphate + 10 gm citric acid (lemon arc) dissolved in 10 liters of water and spray over the crop in 500 liters of water.
- Apply 60 kg N as a supplementary dose to summer bajra.
- Continue harvesting of Castor and Wheat.

## Chhattisgarh

Weather remained dry over the state.

Mainly dry weather is likely over the State. Gradual rise in day temperatures over the State.

### Advisories

- As there was no rain during last few weeks in the State and mainly dry weather will prevail along with the probability of increase in temperature which may cause higher evapotranspiration loss from the crops for next three days, apply irrigation to new sugarcane crop, vegetables, sunflower, summer groundnut, sesamum and green gram crops.
- Maintain 3 – 5 cm water in summer rice field.
- Apply 75 kg N / ha as top dressing at 45 days after planting of sugarcane.
- Apply 30 kg Nitrogen / ha after 25 - 30 days from sowing of sunflower.
- Apply 15 kg Nitrogen / ha after 25 - 30 days from sowing of sesamum.

## Maharashtra

Mainly dry weather prevailed all over the State.

Mainly dry weather will prevail all over the state. Gradual rise in day temperatures in Vidarbha.

### Advisories

- As there was no rain during last few weeks in the State and mainly dry weather will prevail along with the probability of increase in temperature in North Marathwada and Vidarbha which may cause higher evapotranspiration loss from the crops for next three days, apply irrigation to sugarcane (Pre-seasonal), summer groundnut, summer sunflower, summer bajra, summer maize and sugarcane (Suru).
- Apply 140 kg Nitrogen / ha along with 85 kg each of P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O at the time of earthing up in sugarcane (Pre-seasonal).
- Undertake intercultural operation wherever summer groundnut crops are at flowering stage (within 6 weeks of sowing) to keep the field weed free.
- Maintain 3 – 5 cm water in summer rice field. Second dose of 40 kg Nitrogen / ha may be applied after 30 days from transplanting. Use 1 kg Neem cake powder in 6 kg urea at the time of above application. Water may be drained out before fertilizer application & maintain water level after 2 days.
- To increase pollination at flowering stage, hand covered with woolen cloth may be moved 3 to 5 times on floral disc of summer sunflower smoothly early in the morning.
- Second dose of 100 kg Nitrogen / ha may be applied after 6 to 8 weeks from transplanting of sugarcane (Suru). Use 1 kg Neem cake powder with 6 kg Urea at the time of application.
- Mild incidence of sap sucking insects and tikka disease in Latur in summer groundnut is reported.
- Monitor summer groundnut for sap sucking insects and if exceeds economic threshold level, spray Chlorpyrifos or Rogor @ 15 ml in 10 liters of water. Use 500 liters of above solution for spraying one hectare of land.



- Monitor **summer groundnut** for **tikka disease** and if exceeds economic threshold level, spray Carbendazim (Bavistin) @ 5 gm or Tridemorf @ 7 ml in 10 liters water. Use 500 liters above solution for spraying one hectare of land.

## **Madhya Pradesh**

Heat wave condition prevailed in parts of North M.P. on 2<sup>nd</sup> April. Dry weather prevailed over the State.

Mainly dry weather is likely over the State. Gradual rise in day temperatures over the State.

### **Advisories**

- As dry weather prevailed over the State during last week and mainly dry weather is likely for next three days, apply irrigation to **pulse** crops.
- Continue harvesting of matured crop of **irrigated wheat**.
- Continue land preparation and sowing / planting of **summer moong** and **sugarcane**. Undertake seed treatment with *Rhizobium* before sowing of **moong**.
- Do set treatment with *Azospirillum* before planting **sugarcane**.

## **Orissa**

Weather was dry during the whole period.

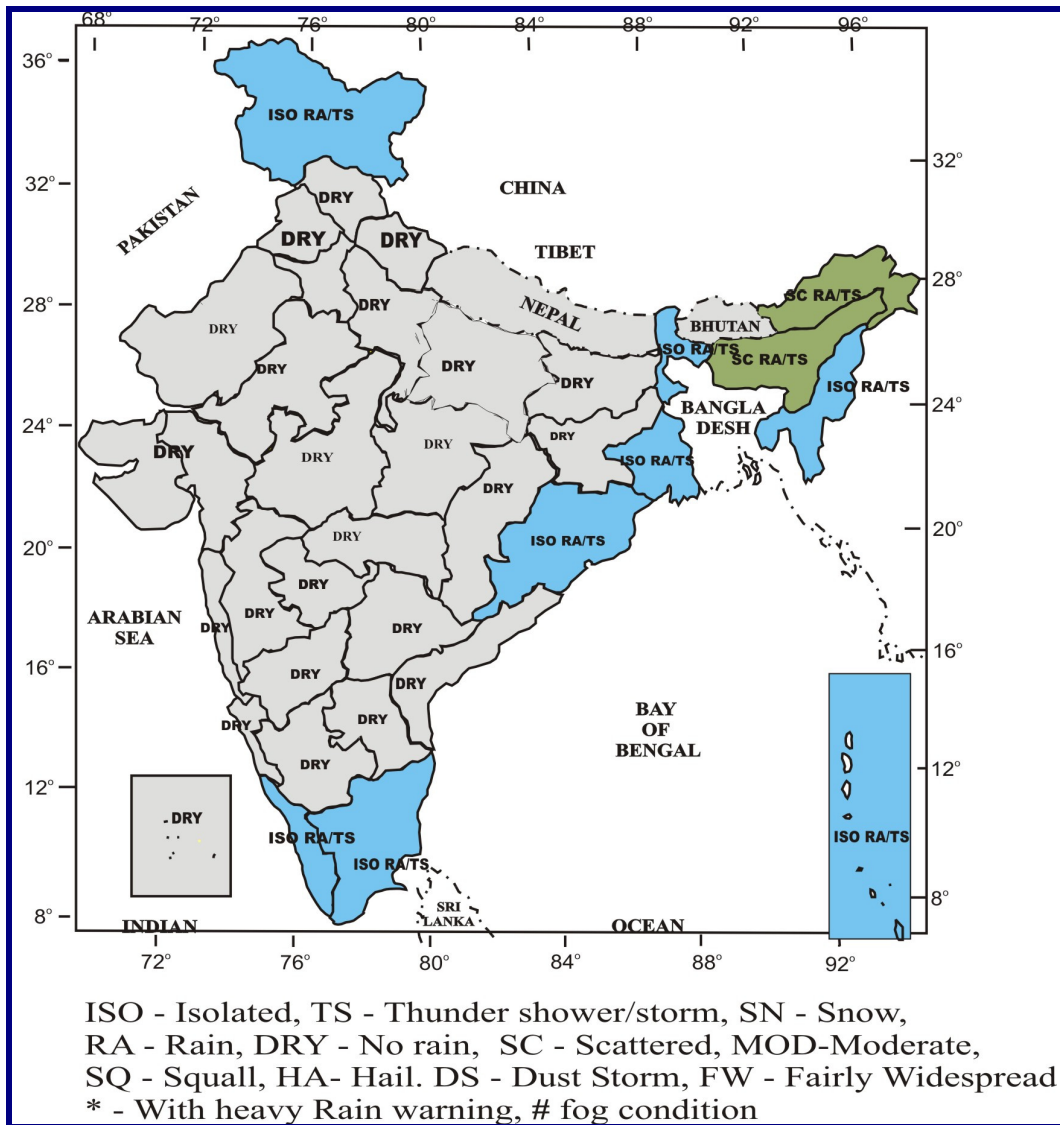
Isolated rain / thundershowers are likely over the State.

### **Advisories**

- Weather was dry over the State during last week. Mainly dry weather with isolated rain / thunder showers are likely over the State for next three days. Under the circumstances, apply irrigation to **vegetables, sugarcane** and **pulses**.
- Continue sowing of **summer moong** with basal application of 8 kg N, 16 kg P<sub>2</sub>O<sub>5</sub> and 8 kg K<sub>2</sub>O / acre.
- The prevailing weather conditions may favour the infestation of **Spodoptera** in **summer pulse** crop. To manage the pest, spray Chloropyrifos @ 2 ml per litre of water. To control the **Yellow vein mosaic** spray methyl demeton @ 2 ml per litre of water.

## Forecast Map

Valid upto 8<sup>th</sup> April 07



### *Salient weather features for the week ending 05/04/07*

#### **METEOROLOGICAL ANALYSIS**

- A western disturbance as an upper air system lay over north Pakistan and neighbourhood on 31<sup>st</sup> March. It lay over Jammu & Kashmir and adjoining north Pakistan on 1<sup>st</sup> April and moved away eastward on 2<sup>nd</sup> April.
- Another feeble western disturbance as an upper air system lay over north Pakistan and adjoining Jammu & Kashmir on 4<sup>th</sup> April.
- Strong northwesterly winds at lower tropospheric levels prevailed over northwest India and adjoining east India during 2<sup>nd</sup> to 4<sup>th</sup> April
- An upper air trough ran from Sub-Himalayan West Bengal & Sikkim to north Chhattisgarh extending upto 1.5 km a.s.l. on 31<sup>st</sup> March. It ran from Sub-Himalayan West Bengal & Sikkim to north Orissa on 1<sup>st</sup> April and from Sub-Himalayan West Bengal & Sikkim to north Bay of Bengal during 2<sup>nd</sup> to 4<sup>th</sup> April.
- A trough in the easterlies at lower tropospheric levels ran across south Peninsula during 31<sup>st</sup> March to 4<sup>th</sup> April.

## **RAINFALL**

Under the influence of the above systems

- Light rain/thundershowers occurred at a few places over Jammu & Kashmir on 2<sup>nd</sup> April.
- Isolated to scattered rain/thundershowers occurred over Sub-Himalayan West Bengal & Sikkim and northeastern States during 1<sup>st</sup> to 4<sup>th</sup> April.
- Isolated rain/thundershowers occurred over Nicobar Islands on 1<sup>st</sup> and over extreme south peninsula during 1<sup>st</sup> to 4<sup>th</sup> April.
- Mainly dry weather prevailed over the remaining parts of the country during the week.

## **MINIMUM TEMPERATURES**

- The minimum temperatures over northwest India were above normal by 2-4 °C during 29<sup>th</sup> March to 2<sup>nd</sup> April and were below normal by 2-3 °C thereafter.
- They were above normal by 2-7 °C during 29<sup>th</sup> March to 2<sup>nd</sup> April and normal thereafter over west India.
- They were above normal by 2-4 °C over central India during 30<sup>th</sup> March to 3<sup>rd</sup> April, over east India on 2<sup>nd</sup> & 3<sup>rd</sup> April and over northeast India during 31<sup>st</sup> March to 4<sup>th</sup> April. They were normal over these regions during remaining days of the week.
- They were generally normal over south India throughout the week.

## **MAXIMUM TEMPERATURES**

- Heat wave conditions prevailed over some parts of Gujarat during 29-30<sup>th</sup> March, over Rajasthan during 29<sup>th</sup> –31<sup>st</sup> March, over some parts of West Madhya Pradesh on 30<sup>th</sup> March to 1<sup>st</sup> April, over north Maharashtra during 30<sup>th</sup> –31<sup>st</sup> March and over Haryana, Delhi and East Uttar Pradesh on 31<sup>st</sup>. The maximum temperatures were above normal by 2-4 °C over remaining parts of northwest, west and central India during 29<sup>th</sup> March to 1<sup>st</sup> April. While they were normal over northwest India, they were above normal by 2-4 °C over many parts of west and central India thereafter.
- They were above normal by 2-4 °C over east and northeast India during many days of the week.
- They were normal during first half of the week and above normal by 2-4 °C during second over south India.

## **RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 4<sup>TH</sup> APRIL, 2007)**

Rainfall was excess/normal in 1, deficient/scanty in 11 and no rain in 24 out of 36 meteorological sub-divisions (Actual: 1.7 mm, Normal: 7.1 mm and Departure: -76%).

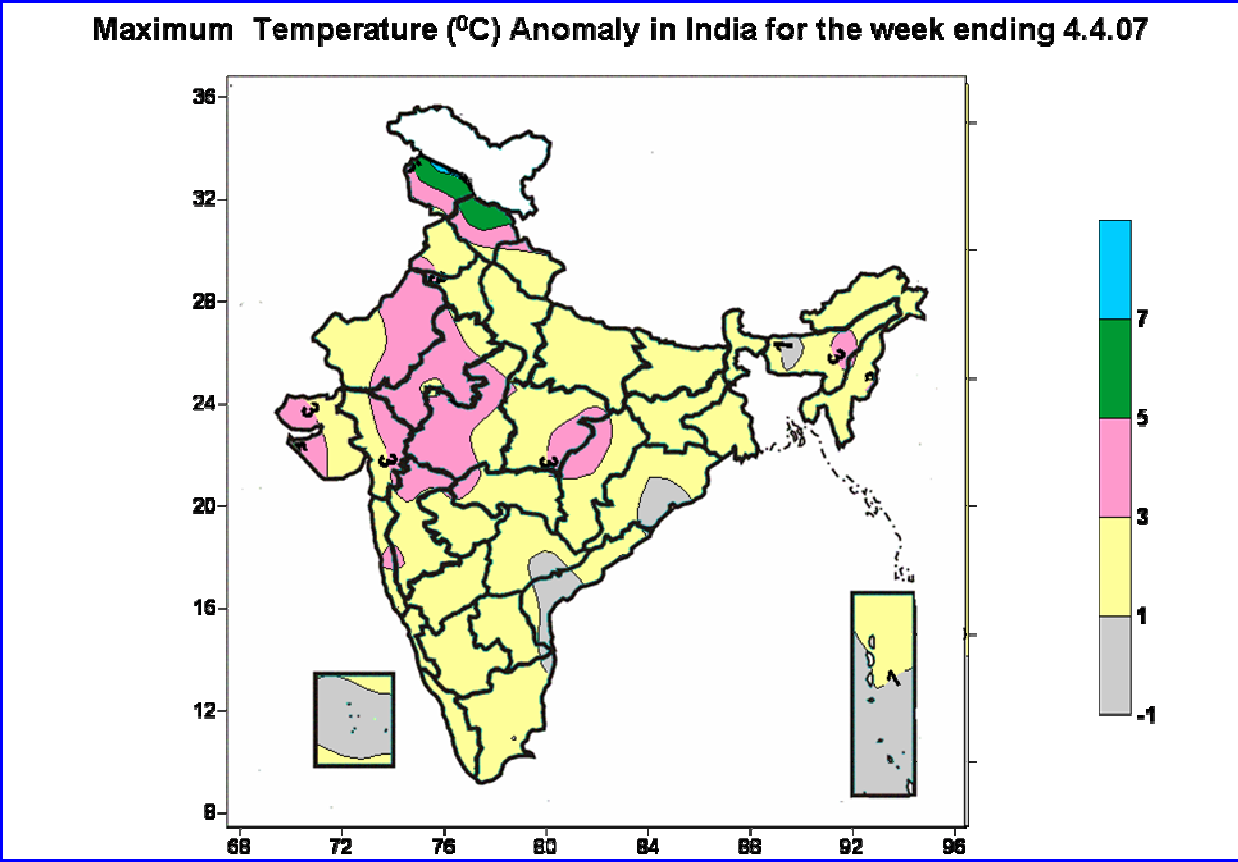
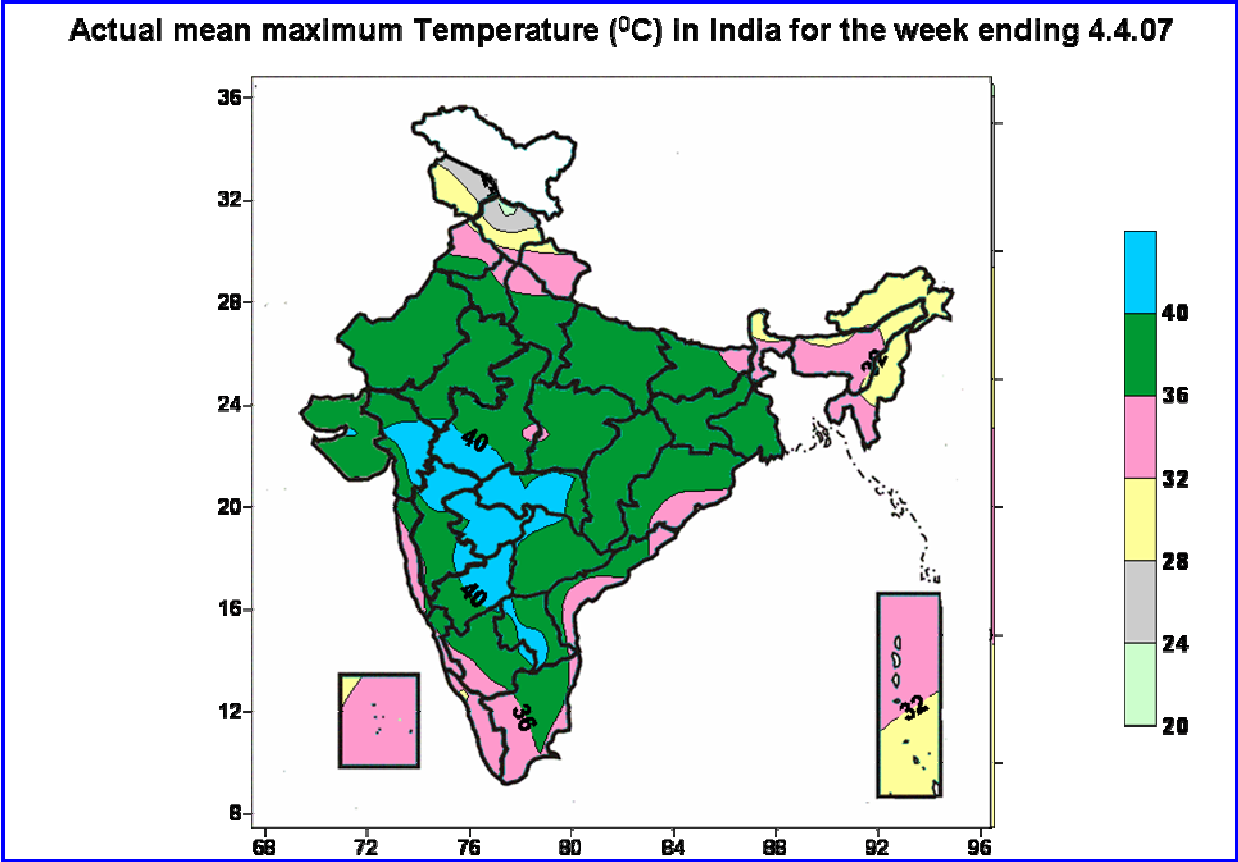
## **CUMULATIVE SEASONAL RAINFALL (1<sup>ST</sup> MARCH TO 4<sup>TH</sup> APRIL, 2007)**

Rainfall was excess/normal in 12, deficient/scanty in 21 and no rain in 3 out of 36 meteorological sub-divisions. (Actual: 35.9 mm, Normal: 35.4 mm and Departure: +2%).

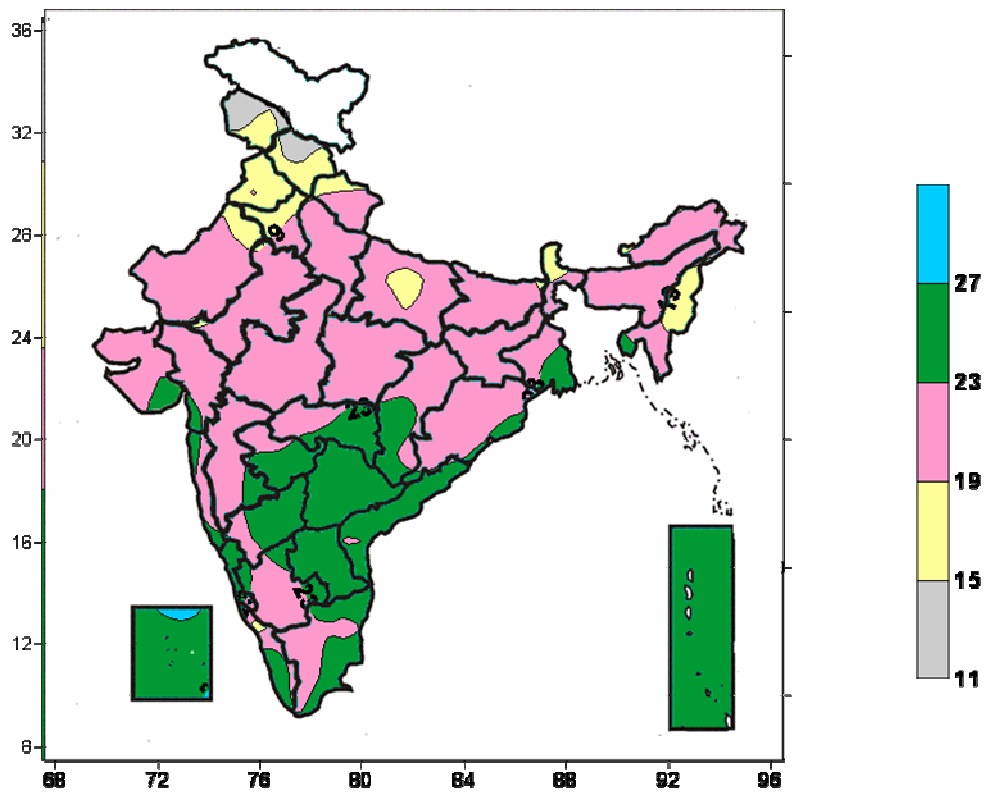
## **OUTLOOK FOR THE WEEK ENDING ON 11<sup>TH</sup> APRIL, 2007.**

- Isolated to scattered rainfall activity over northeastern States during first half of the week and increase thereafter.
- Increase in rainfall activity over south peninsula during first half of the week.
- Gradual rise in day temperatures over northwest and east India.

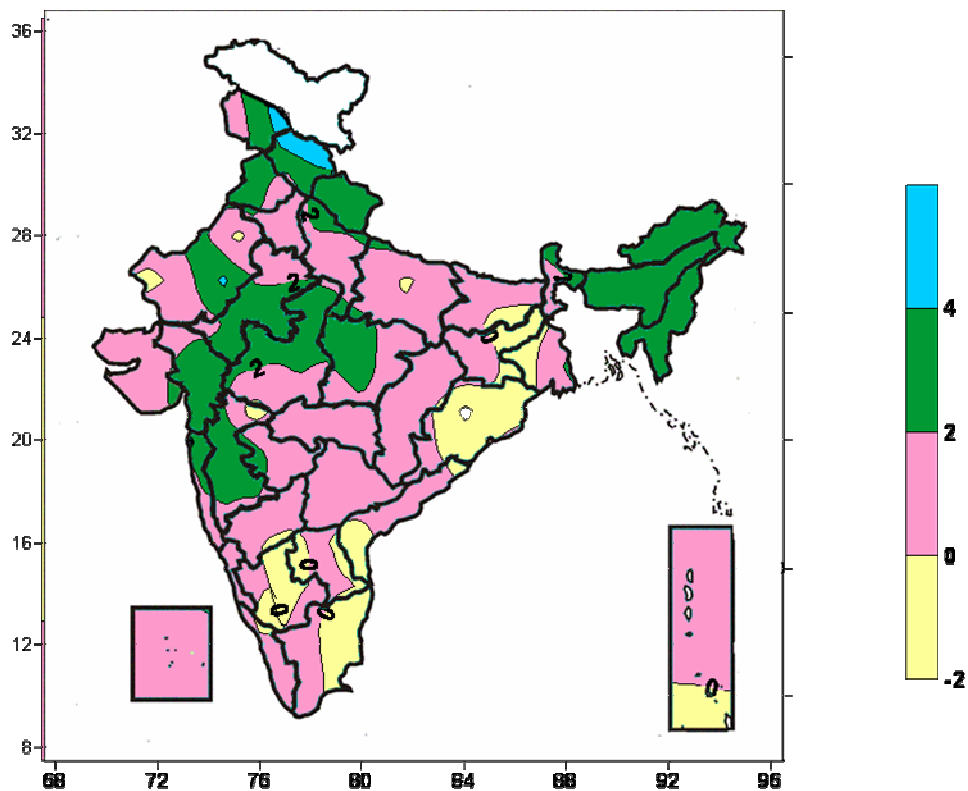
Contour maps for the week ending 4<sup>th</sup> April, 2007



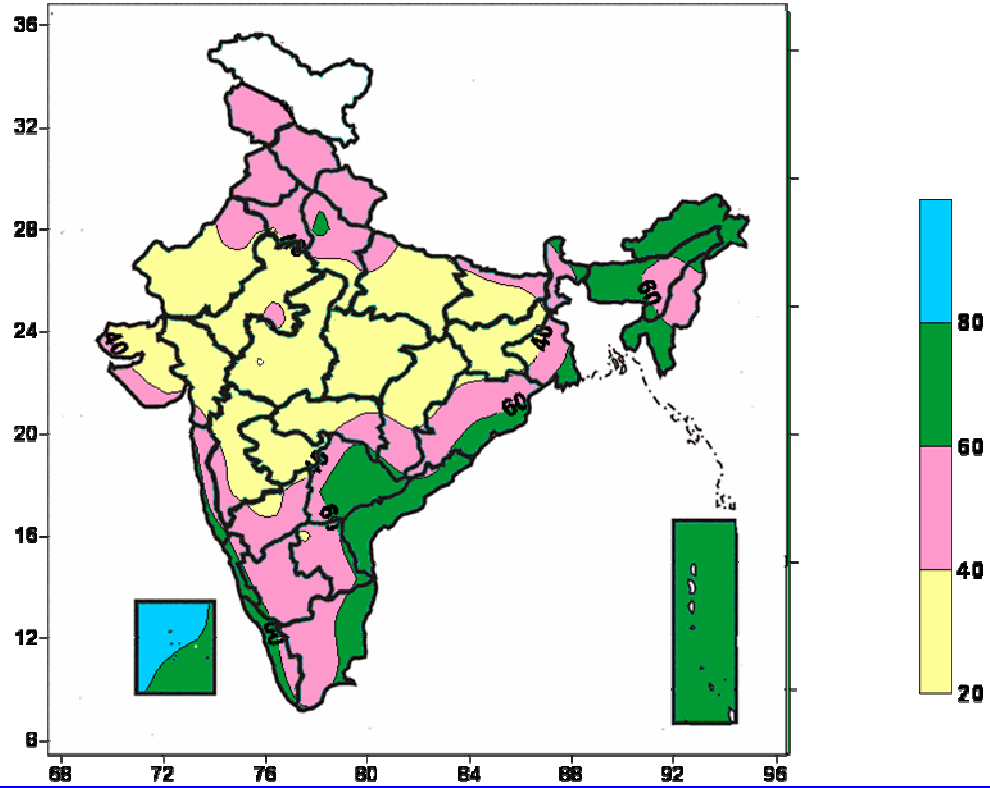
Actual mean Minimum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 4.4.07



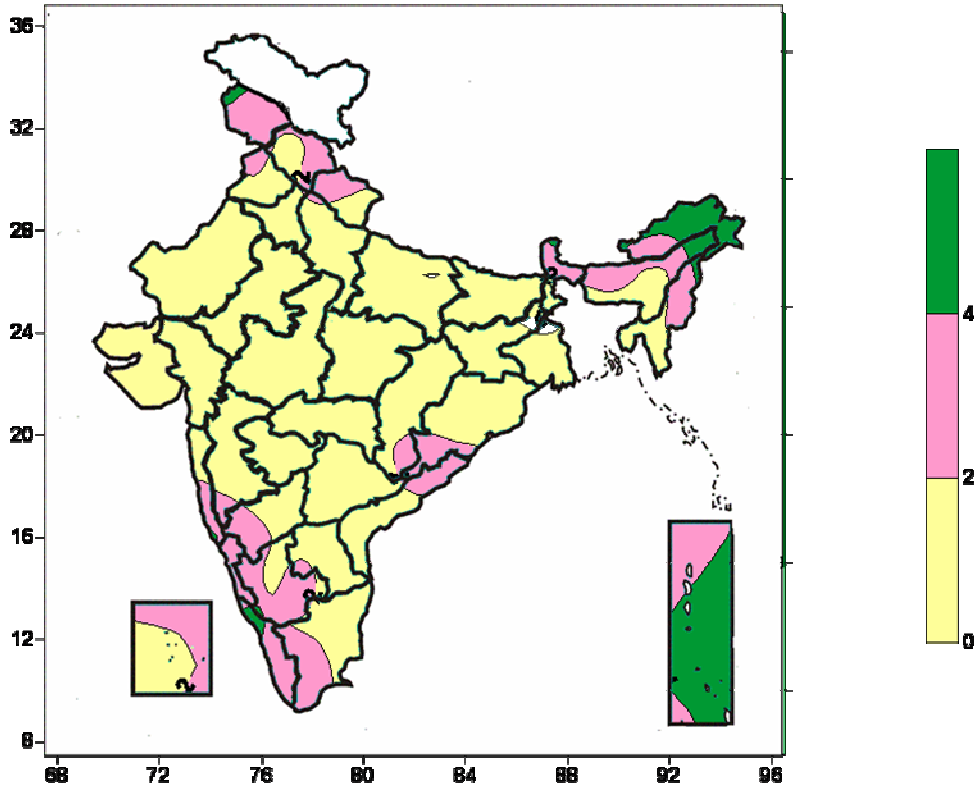
Minimum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 4.4.07



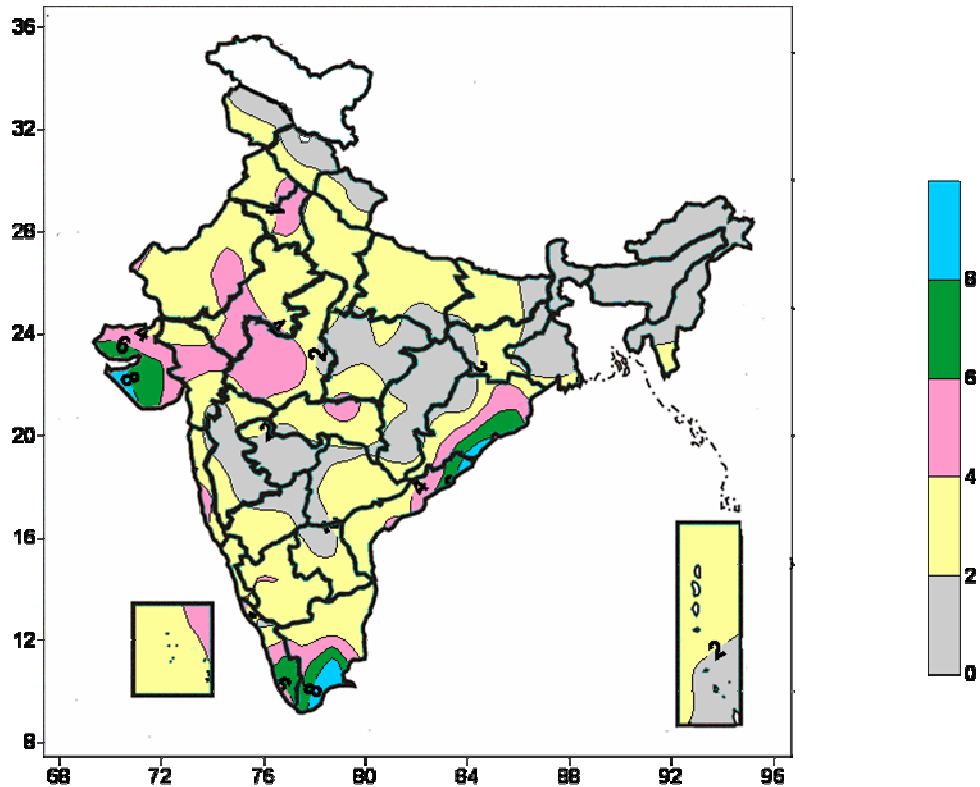
Relative humidity (%) over India for the week ending 4.4.07



Cloud amount (okta) over India for the week ending 4.4.07



**Wind speed (knots) over India for the week ending 4.4.07**



## Desert Locust Forecasting



Rainfall (mm)							
Station Name	29.03.07	30.03.07	31.03.07	01.04.07	02.04.07	03.04.07	04.04.07
Amritsar	Nil						
Barmer							
Sriganganagar							
Jaisalmer							
Kota							
Deesa							
Churu							

Temperature (degree Celcius)							
Station Name	29.03.07	30.03.07	31.03.07	01.04.07	02.04.07	03.04.07	04.04.07
Amritsar	23.5	25.0	25.5	25.0	23.5	22.5	22.0
Barmer	20.5	31.5	30.0	-	27.5	28.0	28.5
Sriganganagar	-	-	29.0	-	25.5	23.5	26.5
Jaisalmer	30.0	30.0	29.5	-	26.5	26.0	-
Kota	29.5	31.0	33.0	-	33.0	30.0	-
Deesa	31.0	32.0	31.5	32.0	-	28.0	28.5
Churu	-	-	-	-	-	-	-

There is no chance of locust infestation in Rajasthan and the adjoining areas during this week.

## CROP – STATE – STAGE

### Delhi

<b>Barley</b>	<b>Vegetables (Brinjal, Chilly, Cauliflower and cabbage, raddish, carrot, and turnip)</b>	<b>Early sown vegetable crops</b>	<b>Wheat</b>	<b>Gram</b>
Maturity / harvesting	Sowing	Vegetative/ flowering/ fruiting/ harvesting	Milk / dough / maturity	Pod maturity / harvesting

### Haryana

<b>Early sown Sugarcane</b>	<b>New Sugarcane</b>	<b>Gram /Lentil</b>	<b>Rabi oilseeds</b>	<b>Wheat</b>
Vegetative	Sowing	Maturity	Maturity	Grain formation / milking
<b>Summer Sunflower</b>	<b>Horticultural crop</b>			
Early vegetative	Vegetative			

### Himachal Pradesh

<b>Wheat</b>	<b>Gram</b>	<b>Summer vegetables (Cauliflower, Cabbage in low and mid hills)</b>	<b>Vegetables (Tomato, brinjal, ladies finger)</b>	<b>Barley</b>
Flowering / milk	Pod formation	Nursery sowing /Transplanting	Vegetative/flowering / fruiting / harvesting	Flowering / grain formation
<b>Onion</b>	<b>Rape seeds and Mustard</b>	<b>Fruit plants</b>		
Bulb formation	Pod maturity	Prune		

### Jammu & Kashmir

<b>Vegetable crops</b>	<b>Brown Sarson</b>	<b>Wheat / Barley (in Kashmir division)</b>	<b>Pea/Lentil/ Mustard</b>	<b>Wheat / Barley (in Jammu)</b>
Fruiting/ Harvesting (in Jammu Division) Vegetative- in Kashmir Division	Seed formation – in Kashmir Division	Flowering	Harvesting	Grain development
<b>Fruit crops</b>	<b>Summer mash and moong</b>			
Plantation	Sowing (Jammu div.)			

### Punjab

<b>Sugarcane</b>	<b>Early sown Sugarcane</b>	<b>Gram/Lentil</b>	<b>Horticultural crop</b>	<b>Wheat</b>
Sowing	Vegetative	Maturity	Vegetative	Grain formation / Milking
<b>Toria</b>	<b>Summer Sunflower</b>	<b>Rabi oilseeds</b>	<b>Summer Vegetables</b>	
Harvesting	Early vegetative	Maturity	Field preparation	

### Rajasthan

<b>Mustard</b>	<b>Wheat</b>	<b>Cumin</b>	<b>Gram</b>	<b>Barley</b>
Harvesting	Grain maturity	Harvesting	Pod harvesting	Harvesting
<b>Zaide Moong, Zaide Fodder, Cotton</b>				
Sowing				

### Uttar Pradesh

<b>Wheat / Barley</b>	<b>Rabi Pulses</b>	<b>Sugarcane</b>	<b>Summer Sugarcane</b>	<b>Winter Vegetables</b>
Maturity (early varieties) Grain formation (late varieties)	Harvesting / Sowing (Moong,Urad)	Sowing	Field preparation	Flowering/harvesting
<b>Rabi Oilseeds(Rai and Mustard)</b>	<b>Early sown Summer Sunflower</b>	<b>Summer Sunflower</b>	<b>Early sown Summer Vegetables</b>	<b>Summer Vegetables</b>
Harvesting	Seedling /early vegetative	Sowing	Seedling/ early vegetative	Sowing
<b>Mango</b>				
Fruit setting				

### Uttarakhand

<b>New crop Potato</b>	<b>Mango/Litchi/ Apple</b>	<b>Wheat</b>	<b>Sugarcane</b>	<b>Potato</b>
Germination/Vegetative growth	Flowering	Flowering / milky / dough	Sowing and ratooning	Germination / vegetative growth

### Assam

<b>Summer vegetables</b>	<b>Sugarcane</b>	<b>Wheat</b>	<b>Boro Rice</b>	<b>Early sown Ahu rice</b>
Sowing	Harvesting	Maturity / harvesting	Dough / maturity	Early vegetative



<b>Ahu rice</b>	<b>Early Summer vegetables</b>	<b>Jute</b>	<b>Maize</b>	
Transplanting	Germination/ early vegetative / vegetative	Land preparation/ Sowing	Land preparation/ Sowing	

**Arunachal Pradesh**

<b>Mustard</b>	<b>Ginger</b>	<b>Potato</b>	<b>Wheat</b>	<b>Summer vegetables</b>
Maturity / harvesting	Vegetative	Harvesting	Harvesting	Germination / early vegetative / vegetative
<b>WRC Rice</b>	<b>Foxtail millet</b>	<b>Jhum Paddy</b>	<b>Maize</b>	
Land preparation / transplanting	Germination / early vegetative / vegetative	Germination / early vegetative / vegetative	Germination / early vegetative / vegetative	

**Bihar**

<b>Summer Vegetables/ Fruit crops</b>	<b>Boro Summer Rice</b>	<b>Wheat</b>	<b>Potato</b>	<b>Rabi Maize</b>
Vegetative	Tillering / panicle initiation	Harvesting	Harvesting	Maturity
<b>Early sown Summer Maize</b>	<b>Summer Maize</b>	<b>Sesamum</b>	<b>Green Gram</b>	
Early vegetative / vegetative	Sowing	Vegetative / flowering	Vegetative	

**Jharkhand**

<b>Boro rice</b>	<b>Rabi Maize</b>	<b>Wheat</b>	<b>Early sown wheat</b>
Early vegetative/tillering	Maturity	Milking / grain development	Harvesting
<b>Rabi vegetables (Tomato, Cabbage, Cauliflower, Brinjal, Chilli)</b>	<b>Summer vegetables</b>		<b>Potato</b>
Harvesting	Sowing		Tuber Maturity

**Sikkim**

<b>Maize /Ginger</b>	<b>Mustard</b>	<b>Summer vegetables</b>	<b>Wheat</b>	<b>Large Cardomom</b>
Sowing	Harvesting	Sowing	Harvesting	Flowering
<b>Orange</b>	<b>Early sown vegetables</b>			
Flowering	Early vegetative			

**West Bengal**

<b>Boro rice</b>	<b>Wheat</b>	<b>Sesamum</b>	<b>Groundnut</b>	<b>Green gram</b>
Tillering/Panicle initiation / flowering / grain formation	Harvesting	Early vegetative / vegetative / flowering / pod formation	Early vegetative / vegetative	Early vegetative / vegetative
<b>New Crop Sugarcane</b>	<b>Early sown Sugarcane</b>	<b>Early sown Sesamum</b>	<b>Jute</b>	
Planting	Sprouting/Early vegetative/Vegetative	Germination/Early vegetative	Land preparation / sowing	

**Chattisgarh**

<b>Gram, Mustard</b>	<b>Vegetables (Tomato, chilli, brinjal)</b>	<b>Green Gram</b>	<b>Sugarcane</b>	<b>Wheat</b>
Harvesting	Fruiting / harvesting	Vegetative / flowering	Sprouting/Early vegetative/vegetative	Harvesting
<b>Sunflower, Groundnut</b>	<b>Summer sesamum</b>	<b>Summer Vegetables</b>	<b>Summer rice</b>	<b>Linseed</b>
Vegetative / flowering	Vegetative / flowering	Vegetative	Tillering / panicle initiation	Harvesting

**Gujarat**

<b>Kharif Cotton</b>	<b>Wheat</b>	<b>Rice</b>	<b>Castor</b>	<b>Summer Bajra</b>
Picking	Harvesting	Tillering	Harvesting	Tillering
<b>Mustard</b>	<b>Summer Groundnut</b>	<b>New Sugarcane</b>		
Harvesting	Vegetative	Vegetative		

**Maharashtra**

<b>Sugarcane Preseasonal (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Summer Maize (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Sugarcane (Suru) (Madhya Maharashtra, Marathwada and Vidarbha)</b>	<b>Summer Sunflower (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Summer Bajra (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>
Early vegetative/active growth	Vegetative / Tasseling / silking / cob formation	Sprouting/Early vegetative	Vegetative / floral bud formation (flowering in Latur and Amravati)	Vegetative / flag leaf initiation (flowering in Nasik)

<b>Summer Groundnut</b> (Madhya Maharashtra, Marathwada, Vidarbha & Konkan)	<b>Summer Rice</b> (Konkan, Vidarbha & Kolhapur dist.)			
Flowering / pegging (Pegging / pod formation in Thane, Raigad & Ratnagiri & pod formation / pod maturity in Sindhudurga district)	Early tillering / tillering – in Vidarbha. Tillering / flag leaf initiation in Kolhapur . Flag leaf initiation in Thane, Raigad, & Ratnagiri dist. Flowering / panicle initiation in Sindhudurg dist.			

**Madhya Pradesh**

<b>Irrigated Wheat</b>	<b>Summer moong and sugarcane</b>			
Harvesting	Sowing / planting			

**Orissa**

<b>Vegetables</b>	<b>Dalua Rice</b>	<b>Mustard</b>	<b>Pulses</b>	<b>Summer pulses</b>
Flowering / Fruiting / Harvesting	Tillering / panicle initiation / flowering	Pod maturity/Harvesting	Pod formation Maturity	Germination/Early vegetative
<b>Early sown Sugarcane</b>	<b>Sugarcane</b>	<b>Rabi Groundnut</b>		
Harvesting	Vegetative	Pod maturity/Harvesting		

**Andhra Pradesh**

<b>Rabi Groundnut</b>	<b>Rabi red gram</b>	<b>Rabi rice</b>		
Pod harvesting	Pod harvesting	Grain maturity		

**Karnataka**

<b>Sugarcane (Ratoon crop)</b>	<b>Sunflower</b>	<b>Summer groundnut</b>	<b>Summer rice</b>	
Vegetative	Budding	Pegging	Tillering	

**Kerala**

<b>Rubber</b>	<b>Puncha rice</b>			
Tapping	Flowering / milk			

**Tamil Nadu**

<b>Rice (Navarai)</b>	<b>Early planted Sugarcane</b>	<b>Cotton</b>	<b>Rice fallow Pulses (Blach gram and Green gram)</b>	<b>Oilseeds (Groundnut)</b>
Flowering	Vegetative	Vegetative	Pod formation / maturity	Vegetative
<b>Sunflower</b>	<b>Summer gingelly/ Maize</b>	<b>Early sown Summer gingelly /Maize</b>		
Vegetative	Sowing	Early vegetative		

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