



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

**Thursday, 12<sup>th</sup> April, 2007**

(For the period 12<sup>th</sup> April to 16<sup>th</sup> April, 2007)

The extended version of the bulletin is also available at <http://imdagramet.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 two weeks and mainly dry conditions will prevail for next three days, apply irrigation to **summer sunflower, sugarcane, wheat and horticultural crops.**
- Weather remained dry in the State during the period and likely to remain dry for next 4-5 days. In view of expected dry weather conditions heat wave conditions may also develop in some pockets of the State in next 3-4 days. Farmers are advised to take advantage of expected weather to harvest the matured crops. Sun dry harvested produce before taking them indoor / safer places.
- Complete planting of early maturing varieties of **sugarcane** i.e COJ 64, COH 56 and COH 92 and mid season varieties CO 7717, COH 99 and COS 8436.
- Start harvesting of high yielding varieties of **wheat** as soon as fully ripe to avoid grain shattering. Harvesting can be started five days earlier than dead ripe for quality of grain. Remove **loose smut** affected earhead so that spores of the fungus do not spread.

**Haryana**

Rainfall occurred at isolated places in the State on 9<sup>th</sup> April. Weather remained dry in the State during rest of 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 State.

**Advisories**

- As there was no rain during last two weeks and mainly dry conditions will prevail for next three days, apply irrigation to **summer sunflower, sugarcane, wheat and horticultural crops.**
- Weather remained dry in the State during the period and likely to remain dry for next 4-5 days. In view of expected dry weather conditions heat wave conditions may also develop in some pockets of the State in next 3-4 days. Farmers are advised to take advantage of expected weather to harvest matured crops. Sun dry harvested produce before taking them indoor / safer places.
- Complete planting of early maturing varieties of **sugarcane** i.e CO J-64, COH 56 and COH 92 and mid season varieties CO 7717, COH 99 and COS 8436.
- Start harvesting of high yielding varieties of **wheat** as soon as fully ripe to avoid grain shattering. Harvesting can be started five days earlier than dead ripe for quality of grain. Remove **loose smut** affected earhead so that spores of the fungus do not spread.

**Rajasthan**

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

**Advisories**

- **Heat wave conditions** prevailed over isolated pockets of Rajasthan during last week. As the crops are at harvesting stage, crop damage will be lesser.

- Continue harvesting of matured crops of **cumin, wheat and barley**.
- This is proper time for sowing of **cotton, zaide moong** and **fodder** in irrigated areas. Select among K-851, MUM-2, RMG-268 etc. for sowing **moong**. Undertake seed treatment with *Rhizobium* before sowing **moong**.

### Uttar Pradesh

Light rain occurred at isolated places in Varanasi, Allahabad, Kanpur and Jhansi divisions. Weather was mainly dry in remaining divisions of U.P. on 9<sup>th</sup> April. Weather was mainly dry in all divisions of U.P. on 10<sup>th</sup> and 11<sup>th</sup> April.

Mainly dry weather is likely over West U.P. Gradual rise in day temperatures over West U.P. Isolated rain / thundershowers are likely over East U.P.

#### Advisories

- As mainly dry condition prevailed in most of the districts in the State during last two weeks and mainly dry weather is likely over west U.P and isolated rain / thundershowers are likely over East U.P. for the next three days, apply irrigation to **wheat (in grain development stage)** and **summer vegetable crops**.
- To control **mosaic** disease in **ladies finger**, spray the solution of Dimethoate 30 EC @ 1.6 ml / litre of water.
- Start harvesting of matured crops of **onion** and **garlic**.
- The blossoms of **Mango** (30-45 cm in length) are affected with **malformation** disease. Destroy it & to save the fruits spray Naphthalene Acetic Acid 15 @ ppm or Planofix @ 4ml / 9 litres of water.
- Continue the sowing of **maize** and **sugarcane**.

### Himachal Pradesh

The weather was mainly dry.

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

#### Advisories

- As there was no rain during last two weeks 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.
- 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 State.

#### Advisories

- As mainly dry weather prevailed for last two weeks and likely to continue for next three days over the State, Apply light irrigation to **mango, potato** and **wheat crops (in dough stage)**.
- Start harvesting of matured crops of **wheat**.
- Undertake chemical control for **mango** and **litchi** as dry weather expected. Maintain cleanliness in the orchards.
- Undertake mulching to conserve soil moisture and to prevent weeds in **apple**.

## Jammu & Kashmir

Weather remained mainly dry over J & K state.

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

### Advisories

- There was no rainfall during last week and dry weather is likely to prevail for the next three days over the State. Under the circumstances, apply irrigation to **wheat** and **vegetable** crops in Kashmir division.
- Complete harvesting the matured crops of **mustard**, **gram**, **lentil** and **pea** in Jammu division. Start harvesting of **wheat** at proper maturity stage.
- 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. Continue land preparation and sowing of **bhindi** (variety: Pusa, Varsha Uphar, A-4, Parbhani kranti) and **raddish** (variety Pusa Chetki).
- Start land preparation and sowing of **maize** in the main field and **rice** in the nursery in Kashmir division. Undertake seed treatment with *Azospirillum* before sowing.

## 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 few weeks over the State and mainly dry weather is likely for next three days, apply irrigation to **vegetables**.
- 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.
- Harvest the 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 teeth.

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

### Kerala

Rain / thundershowers occurred at many places in the State on 10<sup>th</sup> & 11<sup>th</sup> April and at isolated places on 9<sup>th</sup> April.

Rain / thundershowers are likely at a few places over the State.

### Advisories

- There was excess rainfall in most of the districts during last week except in Kannur, Kasarkod, Kozhikode, Malappuram and Wayanad and rain / thundershower is likely to occur at a few places over the State for the next three days. Under the circumstances, postpone irrigation to plantation crops viz., **coconut**, **arecanut**, **rubber** and **banana**. Apply irrigation in the above mentioned districts to bring the soil moisture to field capacity.
- Attack of **rice bug** is reported in **puncha rice**. To control rice bug, spray Malathion 50 EC @ 2 ml per litre on a non rainy day. Keep the fields and bunds free of weeds.
- Attack of **powdery mildew** is reported in **rubber**. Spray Wettable sulphur @ 0.2% or Carbendazim @ 0.05% on a non rainy day to control the disease.
- Attack of **spindle bug** is reported in **arecanut**. Spray Carbaryl @ 4 g / litre of water on a non rainy day to control the pest.
- Attack of **leaf rot** is reported in **coconut**. Spray crowns and leaves with 1% Bordeaux mixture or 0.5% Copper Oxy Chloride formulation or 0.4% Mancozeb on a non rainy day 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 on a non rainy day 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.

- 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% on a non rainy day. 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.

### Tamilnadu

Rainfall occurred at many places over South Tamilnadu and at isolated places over North Tamilnadu on 10<sup>th</sup> April, at a few places over South Tamilnadu and at isolated places over North Tamilnadu on 9<sup>th</sup> April and at a few places over the State on 11<sup>th</sup> April.

Rain / thundershowers are likely at a few places over south Tamil Nadu and isolated rain / thundershowers are likely over rest part of the State.

### Advisories

- There was no significant rainfall for the last week except in Kanyakumari, Madurai, Ramanathapuram, Tirunelveli, Tuticorin and Virudunagar districts. Under this circumstance, apply irrigation to **rice, millets, sunflower, maize, sugarcane, pulses, cotton** and **groundnut** to bring the soil moisture to its field capacity. Postpone irrigation in the above mentioned districts as there was excess rainfall during last week and rain/thundershowers is likely to occur at a few places for the next three days.
- Monitor **rice** for **stem borer** and **mealy bug** and if the pest population crosses ETL, spray Methyl Parathion 50EC @ 350 ml / ha to control **stem borer** and spray Dimecron 100 EC @ 0.5 ml / litre of water to control mealy bug. Spraying may be continued on a non rainy day in south Tamil Nadu.
- 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. Spraying may be continued on a non rainy day in south Tamil Nadu.
- Start harvesting **rice fallow pulses** on bright sunny days.
- This is proper time for planting **mid season sugarcane**. Adopt 30000 nos. of two budded setts for planting one acre.

### Karnataka

On 9<sup>th</sup> April Rainfall occurred at isolated places over Coastal Karnataka and North Interior Karnataka and dry weather prevailed over South Interior Karnataka. On 10<sup>th</sup> April rainfall occurred at a few places over Coastal Karnataka and at isolated places over South Interior Karnataka and mainly dry weather prevailed over North Interior Karnataka. On 11<sup>th</sup> April rainfall occurred at isolated places over the State.

Isolated rain / thundershowers are likely to occur over the State.

### Advisories

- Apply irrigation to **summer groundnut, sunflower, sugarcane** and **rice** as rain / thundershower is likely to occur only at isolated places 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**.
- Undertake earthing up in **groundnut** and apply gypsum @ 200 kg / ha as the crop is now at pod formation stage.
- Monitor **ratoon sugarcane** for **wooly aphids** and if the pest population crosses ETL, release *Dipha sp*, adopt wider spacing, inter-cropping with soyabean and pulses of short duration as plant protection measures against wooly aphids in Mysore, Mandya and Hassan districts. Also monitor the crop for army worm in Bidar and Bagalkote districts and if the pest population crosses ETL, undertake plant protection measures.

### Andhra Pradesh

Isolated rain occurred over Telangana on 11<sup>th</sup> April. Mainly dry over coastal Andhra Pradesh on 11<sup>th</sup> April and over Telangana on 10<sup>th</sup> April and dry weather prevailed over rest of the State during the week.

Isolated rain / thundershowers are likely to occur over the State.

### Advisories

- Complete harvesting of **red gram**. Continue harvesting of matured crops of **groundnut** and **rice**.

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

#### Assam

Light to moderate rain occurred at most places with isolated heavy falls on 9<sup>th</sup> & 11<sup>th</sup> and heavy to very heavy falls on 10<sup>th</sup> April over the state.

Rain / thundershowers are likely at many places over the State during next 24 hours and decrease thereafter.

### Advisories

- As rain / thundershowers are likely at many places over the State during next 24 hours, postpone irrigation to the crops.
- Maintain 3 – 5 cm water in the **boro rice** field and **early ahu rice**.
- Mild incidence of **Brown Plant Hopper**, **Yellow stem borer** and **blast** and **sheath blight** diseases in **boro rice** and **early ahu 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.
- Apply plant protection measures after current spells of rain.
- Harvest matured crops of **wheat** on bright sunny days after current spells of rain. Wheat is ready for harvest when grain will produce cracking sound while pressed between teeth.
- Prepare land after current spells of rain and continue sowing of summer vegetables like **ladies finger**, **ridge gourd**, **cucumber** etc. and sowing of **jute** and **maize**.
- 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.
- As rain / thundershowers are likely at many places over the State during next 24 hours, postpone intercultural operation to **jute** and **maize**. As **maize** crop is highly susceptible to water logging, make arrangement for surface drainage to remove excess water from the field.

#### Arunachal Pradesh

Light to moderate rain occurred at most places on 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> April.

Rain/thundershowers are likely at a few places over the State during next 24 hours and decrease thereafter.

### Advisories

- As there was excess rainfall in most of the districts over the State during last week, and rain / thundershowers are likely at a few places over the State during next 24 hours and decrease thereafter, postpone irrigation to **summer vegetables**, **millet**, **maize**, **jhum paddy** and **ginger**.
- Complete harvesting of the matured wheat crops on bright sunny days.
- Land should be thoroughly prepared and final puddling should be done 4 – 5 days before transplanting of wet seeded (**WRC**) **rice**. Transplanting should be completed by last week of this month.

## Bihar

Weather remained dry during the period.

Isolated rain / thundershowers are likely over the State.

### Advisories

- As there was no significant rainfall for last few weeks over the State and isolated rain / thundershowers are likely over the State for next three days, apply irrigation to **vegetables**, **summer 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.
- Continue to give regular irrigation in mango / litchi orchards and spray insecticides / fungicides with planifix if required.
- Harvest the **wheat** in morning hours. It will facilitate better harvesting and least grain shedding. Temperature has substantially increased and there is also the effect of westerly wind. Under the situations continue to thresh the grain and dry well before storage.

## Jharkhand

Rain or thundershower occurred at a few places.

Isolated rain / thundershowers are likely over the State.

### Advisories

- As there was no significant rainfall in most of the districts and isolated rain / thundershowers are likely over the State for the next three days, apply irrigation to wheat.
- Continue harvesting of the matured **vegetable** crops and sowing of **summer vegetables**.
- Maintain 3 – 5 cm water in the **boro rice** field.
- Maintain regular irrigation in **mango & litchi**. To protect the fall of **litchi** fruits, planofix hormone @ 4 ml / litre of water should be sprayed.

## Sikkim

Sky remained generally cloudy during the period. Moderate to nearly heavy rain occurred at most places on 8<sup>th</sup> and 11<sup>th</sup> April and moderate rain occurred at many places on 9<sup>th</sup> and 13<sup>th</sup> April. Light rain occurred at a few places on 5<sup>th</sup> and 7<sup>th</sup> April over East Sikkim. Rainfall was excess during the period.

Rain / thundershowers are likely at a few places over the State.

### Advisories

- As there was excess rain in the State during last week and rain / thundershower is likely to occur at a few places for the next three days, postpone irrigation to **large cardamom**, early sown **maize** and **ginger**.
- Continue harvesting of matured crops of **wheat** on bright sunny days. Complete harvesting of **mustard**.
- Monitor **large cardamom** for **stem borer** and if the pest population crosses ETL, spray Endosulfan 35 EC @ 1 ml / litre of water on a non rainy day to control the pest. **Chirkey** and **Foorkey** affected plants may be destroyed by burning.
- Continue transplanting of vegetable crops like **tomato**, **green chilly**, **capsicum** and **brinjal**. In early transplanted crops undertake weeding followed by application of fertilizers.
- Monitor **orange** for **leaf miner** and **trunk borer**. Spray neem based insecticides on a non rainy day to control leaf miner. Plug the holes with cotton swabbed with kerosene to control trunk borer.

## West Bengal

During the said period very light to light rain at many places along with moderate rain occurred at a few places on 9<sup>th</sup>, heavy rain at isolated places on 10<sup>th</sup>, very light to light rain at most places with rather heavy rain at isolated places on 11<sup>th</sup> April over Sub-Himalayan West Bengal. But light to moderate rain occurred at isolated places on 9<sup>th</sup>, very light rain at isolated places on 11<sup>th</sup> April over Gangetic West Bengal. Moreover very light to light rain occurred at most places along with moderate to rather heavy rain at a few places on 10<sup>th</sup> April. Weather was

mainly dry over rest of the State.

Rain / thundershowers are likely at a few places over the State.

### Advisories

- As there was no significant rain in Burdwan, Murshidabad, Purulia, 24 Pargana (S), Darjeeling and Malda districts of the State during last week and rain / thundershowers are likely at a few places for next three days, apply irrigation to **sugarcane**, **sesamum**, **groundnut** and **green gram** crops to bring soil to field capacity. Apply light irrigation to the crops in remaining districts as these districts received excess rain during last week.
- 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.
- There is mild chance of attack of brown plant hopper in **boro rice**. If 10 or more pests are seen in 10 hills of different places, apply dust endosulphone 2%. After 7 – 10 days apply emidaclopride 17.6% @ 1 ml per 7.5 litres of water. 750 litres of water will be required for one hectare of land. Apply chemicals on a non-rainy day.
- 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 on a non-rainy day at 25 – 30 days after sowing.
- Prepare land on a non-rainy day 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**. Set 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 on a non-rainy day 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

Dry weather prevailed during the period.

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

#### Advisories

- As there was no rain during last few weeks in the State and mainly dry weather will prevail along with gradual rise in day temperature 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**.

#### Chhattisgarh

Rainfall was recorded at one or two places in Raipur and Bilaspur division on 9<sup>th</sup> April and at one two places in Bilaspur and Bastar divisions.

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 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**.
- Complete intercultural operation in **groundnut** at flowering stage (within 6 weeks of sowing).

## Maharashtra

Light rain occurred at isolated places in Madhya Maharashtra, Marathwada and East Vidarbha on 9<sup>th</sup> April. Mainly dry weather prevailed over rest of the state.

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

## Advisories

- As there was no significant rain during last few weeks in the State and mainly dry weather will prevail for next three days, apply irrigation to **sugarcane (Pre-seasonal), summer groundnut, summer sunflower, summer bajra, summer maize and sugarcane (Suru)**.
- Complete 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 in Vidarbha & third dose of 40 kg Nitrogen / ha may be applied after 60 days from transplanting in Konkan. 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.
- Third dose of 25 kg Nitrogen / ha may be applied after 12 to 14 weeks from planting of **sugarcane (Suru)**. Use 1 kg Neem cake powder with 6 kg Urea at the time of application of Nitrogen.
- 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.
- This is the time for sowing of **irrigated Cotton**. Select a variety from high yielding varieties like LRH-5166, JLH-168 & hybrid varieties like Fule-492, Fule-388, Sankar-6 & 10, PKV-4 & 5. Seeds may be treated with 250 gm Azotobacter / 10 kg seeds before sowing. Sowing may be done at 90 X 90 cm in medium, at 120 X 90 cm distance in rich soil for hybrid variety and at 90 X 90 cm for high yielding variety. 20 kg Nitrogen, 50 kg P<sub>2</sub>O<sub>5</sub> & 50 kg K<sub>2</sub>O / ha may be applied at the time of sowing.

## Madhya Pradesh

Rainfall occurred at isolated places in South East M.P. on 9<sup>th</sup> April and dry weather prevailed over rest of the State for the remaining period.

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

## Advisories

- 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 **moong**. Do set treatment with *Azospirillum* before planting sugarcane. Apply light irrigation to early sown crops as dry weather is likely to prevail for the next three days.



## Orissa

Rainfall occurred at isolated places over the State during the period.

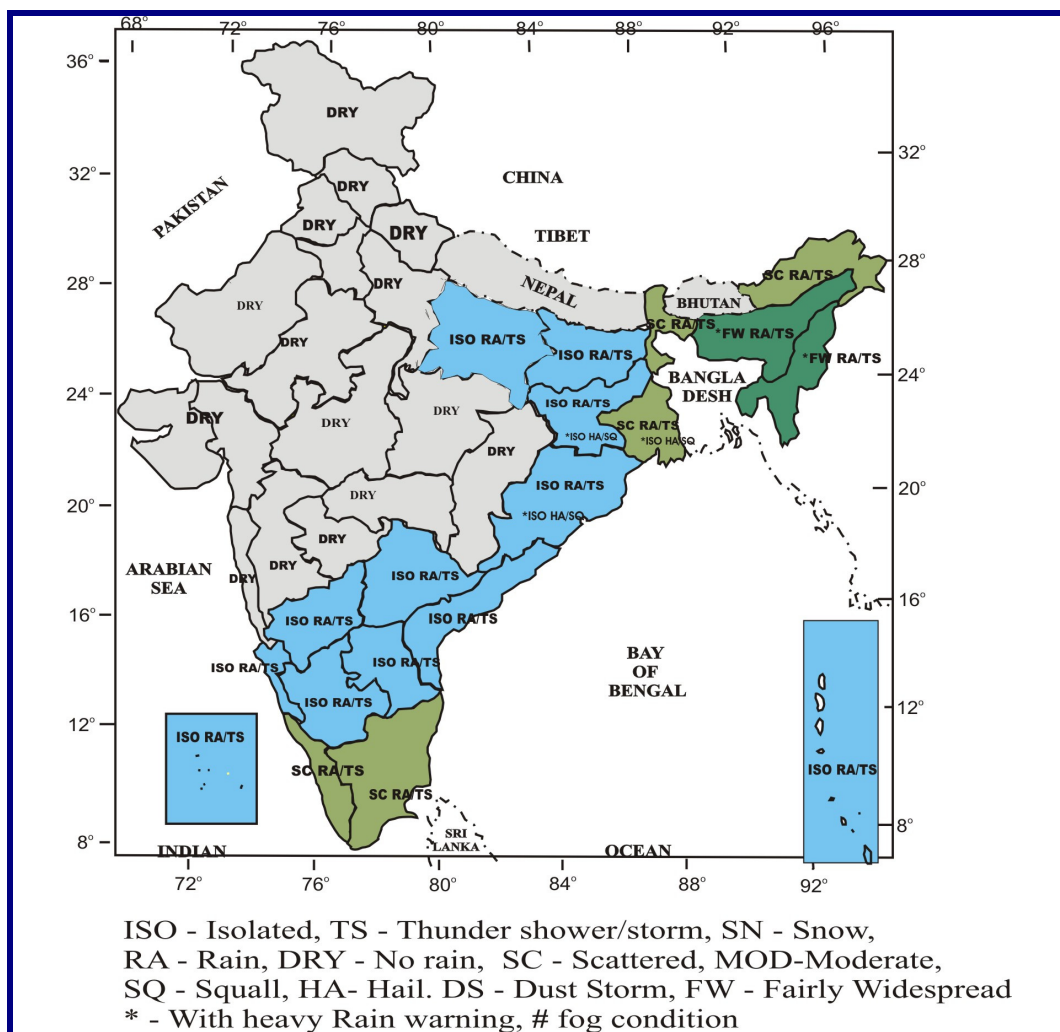
Isolated rain / thundershowers are likely over the State.

### Advisories

- There was no significant rainfall in most of the districts of the State during last week and isolated rain /thunder showers are likely for next three days., apply irrigation to **vegetables, sugarcane and pulses.**
- Complete 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.
- Monitor infestation of *Spodoptera* in summer pulse crop. To manage the pest, spray Chloropyriphos @ 2 ml per litre of water. To control the Yellow vein mosaic spray methyl demeton @ 2 ml per litre of water.
- Start harvesting of the earlier planted crop of *Dalua* rice if 85% of the grain in the ear head have matured.

## Forecast Map

Valid upto 15<sup>th</sup> April 07



## Salient weather features for the week ending 11/04/07

### METEOROLOGICAL ANALYSIS

- A cyclonic circulation lay over Comorin area with a trough from the system extending to south Tamil Nadu at lower levels during 5-8<sup>th</sup> April. Under the influence of the cyclonic circulation, a low pressure area developed over Comorin area on 9<sup>th</sup> April. The associated cyclonic circulation extended upto mid-tropospheric level. The low pressure area became less marked on 10<sup>th</sup> April. However, the associated cyclonic circulation lay over Sri Lanka and

neighbourhood extending upto mid-tropospheric level. Again, it was seen as a low pressure area over Gulf of Mannar and neighbourhood with associated cyclonic circulation extending upto mid-tropospheric level on 11<sup>th</sup> April.

- A cyclonic circulation lay over south Pakistan and adjoining West Rajasthan extending upto 1.5 km a.s.l. on 6<sup>th</sup> April. It lay over West Rajasthan and neighbourhood on 7<sup>th</sup> April, central Rajasthan and neighbourhood on 8<sup>th</sup> April, central Madhya Pradesh on 9<sup>th</sup> April, Chhattisgarh on 10<sup>th</sup> April and Bihar on 11<sup>th</sup> April.
- A trough in the westerlies in lower tropospheric levels ran from Bihar to north Orissa on 5<sup>th</sup> & 6<sup>th</sup> April and from Bihar to north Bay on 7<sup>th</sup> April. An embedded cyclonic circulation lay over north Orissa and Gangetic West Bengal on 5<sup>th</sup> April and Jharkhand and adjoining Bihar on 6<sup>th</sup> and 7<sup>th</sup> April. The cyclonic circulation extending upto 0.9 km a.s.l with a trough aloft lay over Bangladesh and adjoining Assam & Meghalaya on 8<sup>th</sup> April, Assam & Meghalaya and neighbourhood on 9<sup>th</sup> April, Assam & Meghalaya and adjoining Nagaland, Manipur, Mizoram & Tripura on 10<sup>th</sup> April and Arunachal Pradesh and neighbourhood on 11<sup>th</sup> April.

## **RAINFALL**

Under the influence of the above systems

- Scattered rain/thundershowers occurred over northeastern States and Sub-Himalayan West Bengal & Sikkim during 5-7<sup>th</sup> April. Fairly widespread/widespread rain/thundershowers occurred over these regions thereafter. Isolated heavy to very heavy rainfall also occurred over northeastern States on a few days during the week.
- Isolated rain/thundershowers occurred over Orissa, Gangetic West Bengal and Jharkhand during a few days of the week.
- Isolated rain/thundershowers occurred over Rajasthan, Haryana, Chandigarh and Delhi during 7-9<sup>th</sup> April, over Vidarbha on 8<sup>th</sup> April and over Uttar Pradesh and Chhattisgarh on 9<sup>th</sup> April.
- Isolated to scattered rain/thundershowers occurred over south Tamil Nadu and Kerala during 6-9<sup>th</sup> April. Fairly widespread rain/thundershower occurred over these regions thereafter. Isolated rain/thundershowers occurred over Lakshadweep Islands and remaining parts of south Peninsula on a few days of the week.
- Mainly dry weather prevailed over the remaining parts of the country during the week.

## **MAXIMUM TEMPERATURES**

- Heat wave conditions prevailed over some parts of Gujarat on 5<sup>th</sup> & 6<sup>th</sup> April, West Madhya Pradesh on 6<sup>th</sup> & 7<sup>th</sup> April and Rajasthan on 6<sup>th</sup>, 10<sup>th</sup> & 11<sup>th</sup> April.
- The maximum temperature were above normal by 2-5 °C over central & west India and by 2-3 °C over south India during the week.
- They were above normal by 2-3 °C during first half and normal during the second half of the week over northwest and east India.
- They were normal during first half and below normal by 3-6 °C during second half of the week over northeast India.

## **RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 11<sup>TH</sup> APRIL, 2007)**

Rainfall was excess/normal in 12, deficient/scanty in 17 and no rain in 7 out of 36 meteorological sub-divisions (Actual: 8.3 mm, Normal: 8.1 mm and Departure: +3%).

## **CUMULATIVE SEASONAL RAINFALL (1<sup>ST</sup> MARCH TO 11<sup>TH</sup> APRIL, 2007)**

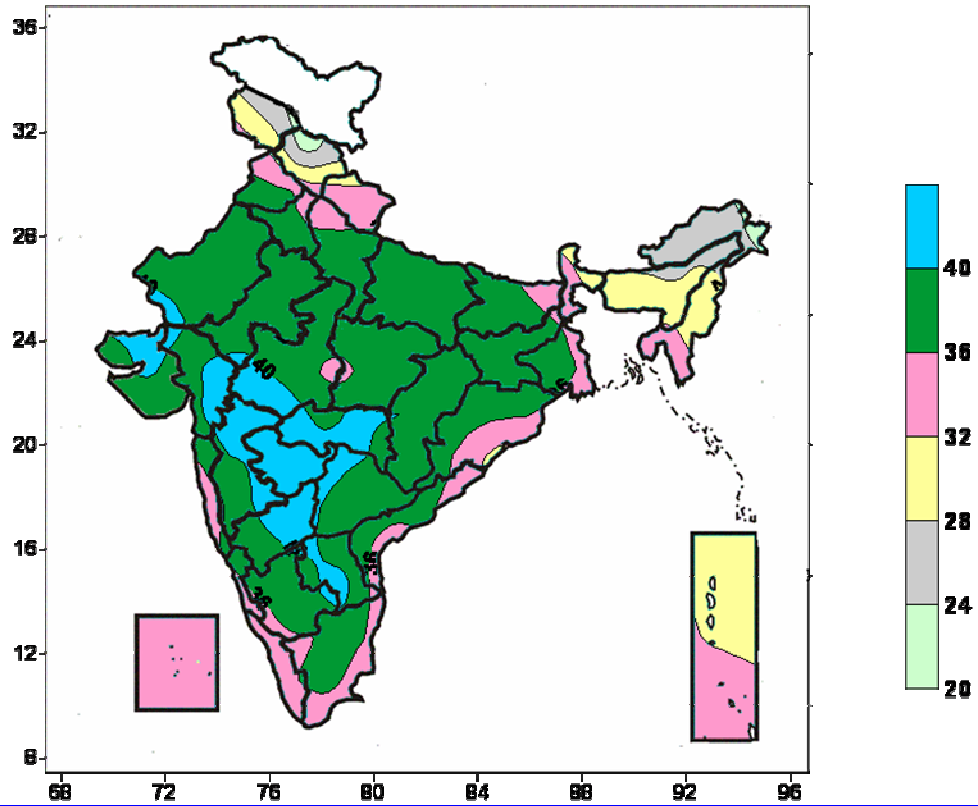
Rainfall was excess/normal in 15 and deficient/scanty in 21 and out of 36 meteorological sub-divisions. (Actual: 44.4 mm, Normal: 43.4 mm and Departure: +2%).

## **OUTLOOK FOR THE WEEK ENDING ON 18<sup>TH</sup> APRIL, 2007.**

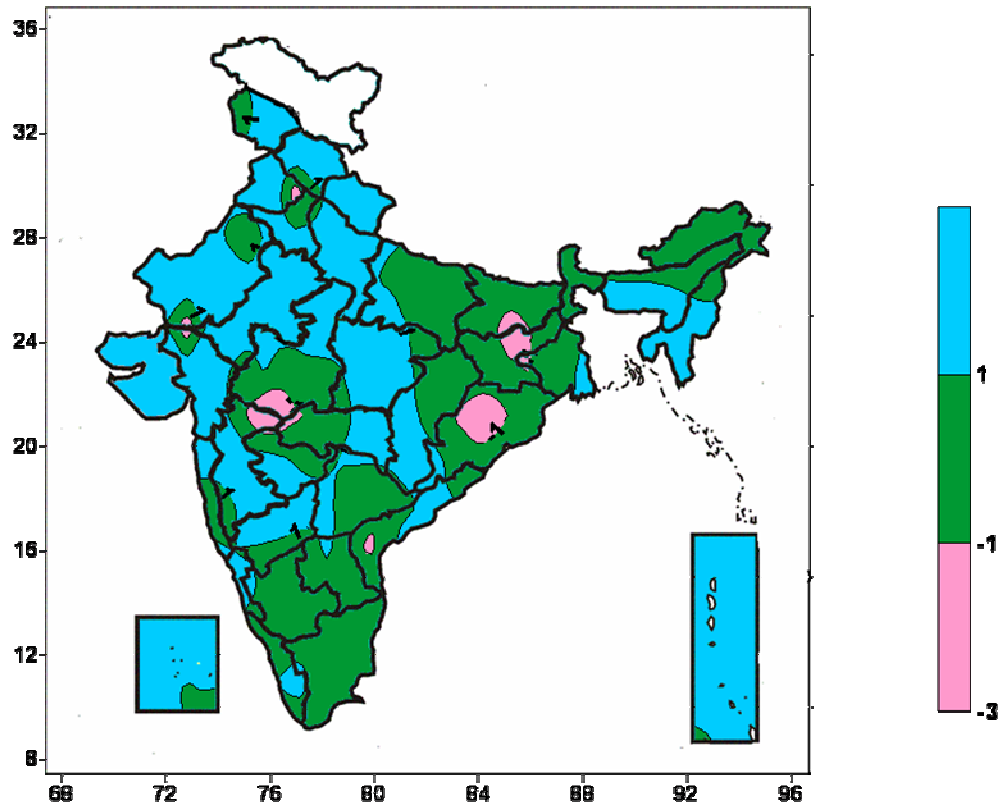
- Gradual rise in day temperatures over northwest and central India leading to heat wave conditions in some areas.
- Scattered rainfall activity over northeastern States and extreme south Peninsula.
- Generally dry weather conditions over northwest and central India.

## Contour maps for the week ending 11<sup>th</sup> April, 2007

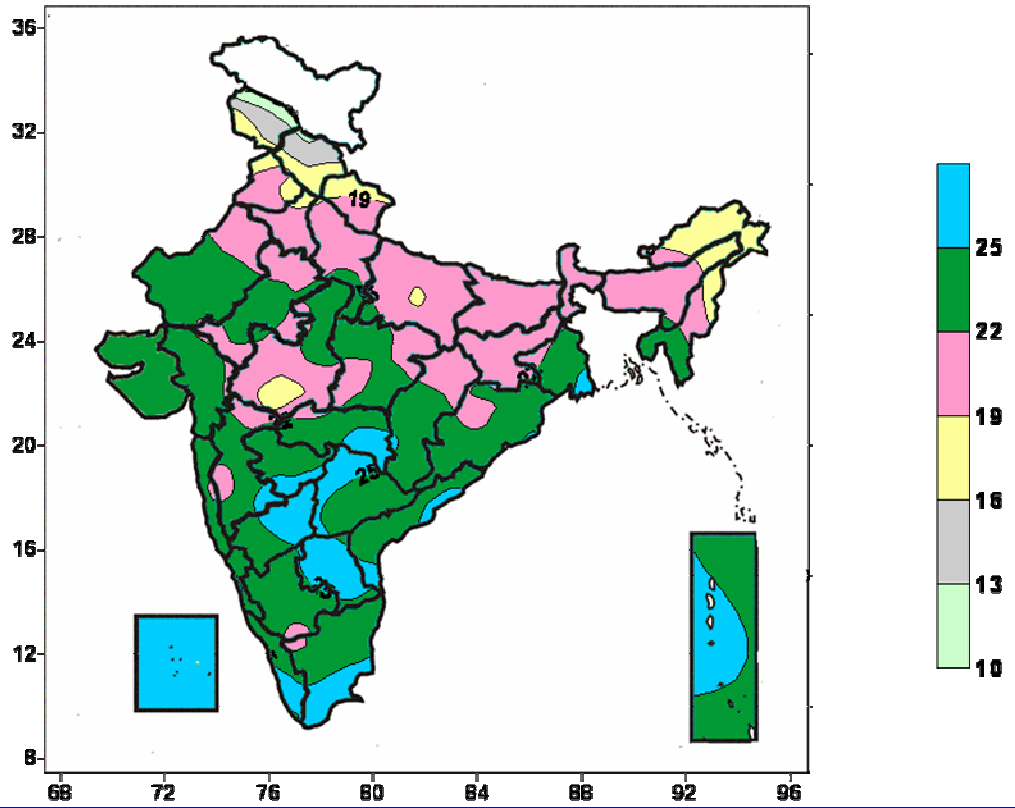
Actual mean maximum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 11.04.07



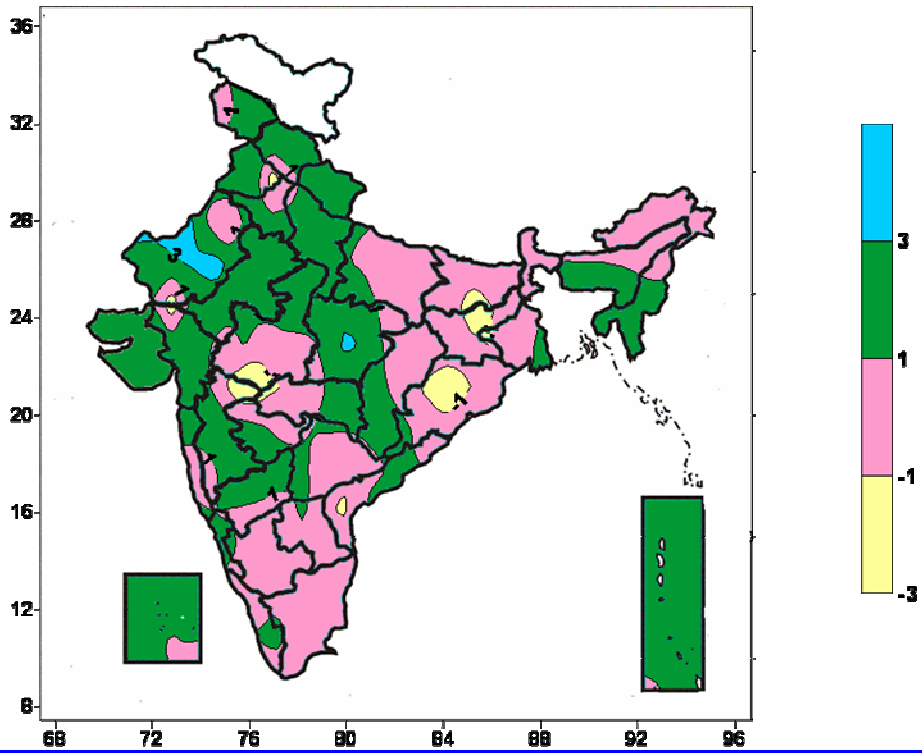
Maximum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 11.04.07



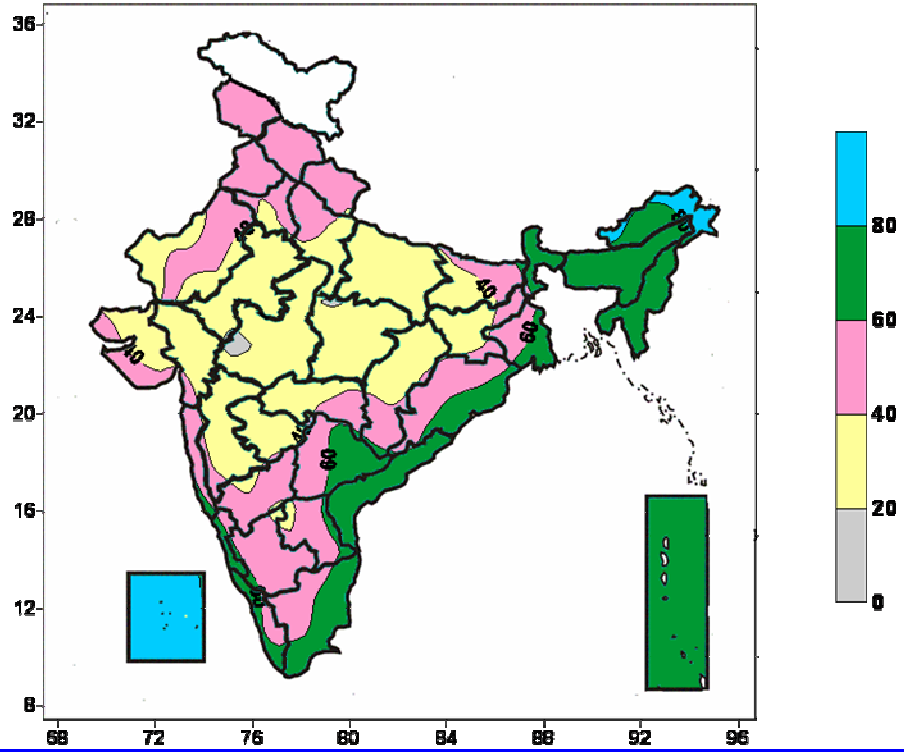
**Actual mean Minimum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 11.04.07**



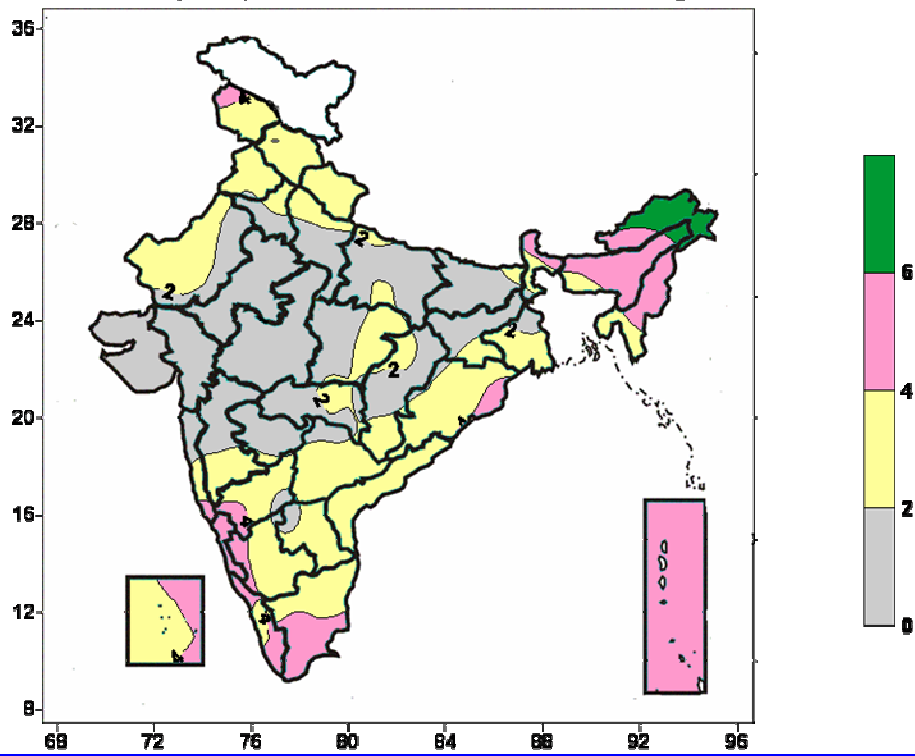
**Minimum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 11.04.07**



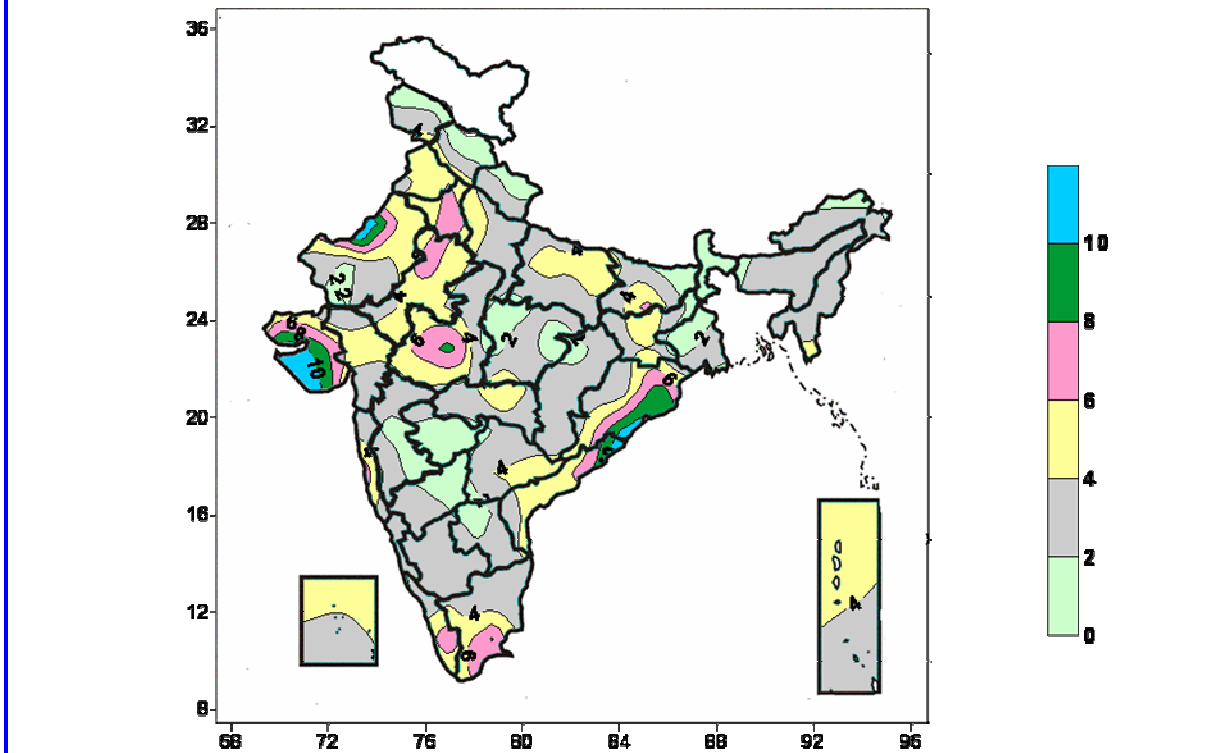
Relative humidity (%) over India for the week ending 11.04.07



Cloud amount (okta) over India for the week ending 11.04.07



**Wind speed (knots) over India for the week ending 11.04.07**



## Desert Locust Forecasting



Rainfall (mm)							
Station Name	05.04.07	06.04.07	07.04.07	08.04.07	09.04.07	10.04.07	11.04.07
Amritsar	-	-	-	-	-	-	-
Barmer	-	-	-	-	-	-	-
Sriganganagar	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	-	-
Kota	-	-	-	0.3	-	-	-
Deesa	-	-	-	-	-	-	-
Churu	-	-	-	0.4	1.0	-	-

Temperature (degree Celcius)							
Station Name	05.04.07	06.04.07	07.04.07	08.04.07	09.04.07	10.04.07	11.04.07
Amritsar	-	23.5	25.0	28.0	24.0	25.5	26.0
Barmer	25.5	33.5	34.0	33.0	31.0	31.5	32.5
Sriganganagar	26.5	27.5	28.0	28.0	28.0	28.5	29.5
Jaisalmer	32.0	32.5	33.5	32.0	30.0	31.5	32.0
Kota	31.0	32.5	33.0	33.0	32.5	31.0	33.0
Deesa	31.5	32.5	33.5	32.0	32.0	31.5	32.0
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</b>	<b>Early sown summer vegetable crops</b>	<b>Wheat</b>	<b>Gram</b>
Maturity / harvesting	Sowing	Vegetative	Maturity / harvesting	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 / harvesting	Maturity	Grain development/ maturity
	<b>Horticultural crop</b>			
	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>
Milk / dough	Pod formation	Nursery sowing /Transplanting	Vegetative/flowering / fruiting / harvesting	Grain formation
<b>Onion</b>	<b>Rape seeds and Mustard</b>			
Bulb formation	Pod maturity/Harvesting			

### Jammu & Kashmir

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

### Punjab

<b>Sugarcane</b>	<b>Early sown Sugarcane</b>	<b>Gram/Lentil</b>	<b>Horticultural crop</b>	<b>Wheat</b>
Sowing	Vegetative	Maturity/Harvesting	Vegetative	Grain development/ maturity stage
	<b>Summer Sunflower</b>	<b>Rabi oilseeds</b>		
	Early vegetative	Maturity/Harvesting		

### Rajasthan

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

### Uttar Pradesh

<b>Wheat / Barley</b>	<b>Rabi Pulses</b>	<b>Sugarcane</b>	<b>Maize</b>	<b>Winter Vegetables</b>
Maturity (early varieties) Grain development (late varieties)	Harvesting / Urad & Moong Seedling/Early vegetative/(Lobia) Sowing	Sowing	Seedling/early vegetative	Maturity/ harvesting stage
<b>Bajra</b>	<b>Summer Sunflower</b>	<b>Mango</b>	<b>Early sown Summer Vegetables</b>	<b>Summer Vegetables</b>
Sowing	Seedling /early vegetative	Fruit setting	Seedling/ early vegetative	Sowing

### Uttarakhand

<b>Potato</b>	<b>Mango/Litchi/ Apple</b>	<b>Wheat</b>	<b>Sugarcane</b>	
Seedling / vegetative growth	Flowering / fruit setting	Dough milky / pre- maturity / maturity	Early vegetative	

### Assam

<b>Summer vegetables</b>	<b>Early sown Summer vegetables</b>	<b>Ahu rice</b>	<b>Boro Rice</b>	<b>Maize</b>
Sowing	Germination/ early vegetative / vegetative/Flowering	Early vegetative/Tillering	Dough / maturity	Land preparation/ Sowing
<b>Early sown Maize</b>	<b>Wheat</b>	<b>Jute</b>	<b>Early sown Jute</b>	
Germination/Early vegetative	Harvesting	Land preparation/ Sowing	Germination/Early vegetative	



**Arunachal Pradesh**

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

**Bihar**

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

**Jharkhand**

<b>Boro rice</b>	<b>Rabi Maize</b>	<b>Wheat</b>	<b>Early sown wheat</b>
Tillering / panicle initiation	Maturity	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>Early sown Maize &amp; Ginger</b>	<b>Summer vegetables</b>	<b>Wheat</b>	<b>Large Cardomom</b>
Sowing	Early vegetative	Sowing	Harvesting	Flowering
<b>Orange</b>	<b>Early sown vegetables</b>	<b>Mustard</b>		
Flowering	Early vegetative	End Harvesting		

**West Bengal**

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

**Chattisgarh**

	<b>Vegetables (Tomato, chilli, brinjal)</b>	<b>Green Gram</b>	<b>Sugarcane</b>	<b>Wheat</b>
	Fruiting / harvesting	Flowering/Pod formation	Early vegetative/vegetative	Harvesting
<b>Sunflower, Groundnut</b>	<b>Summer sesamum</b>	<b>Summer Vegetables</b>	<b>Summer rice</b>	
Flowering /Head formation	Vegetative / flowering/Capsule formation	Vegetative	Panicle initiation /Flowering	

**Gujarat**

<b>Sugarcane</b>	<b>Rice</b>	<b>Summer Groundnut</b>	<b>Summer Bajra</b>	
Vegetative	Tillering	Vegetative	Tillering	

**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	Tasseling / silking / cob initiation	Sprouting/Early vegetative	Floral bud formation/Flowering (Head formation 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.)	<b>Irrigated cotton</b> (Madhya Maharashtra, Marathwada & Vidarbha)		
Flowering / pegging / Pod formation in Latur (Pegging / pod formation in Thane, Raigad & Ratnagiri & pod formation / pod maturity in Sindhudurga district)	Tillering – in Vidarbha. Tillering / flag leaf initiation in Kolhapur . Flag leaf initiation/Flowering in Thane, Raigad, & Ratnagiri dist. Panicle initiation/Flowering/Grain formation in Sindhudurg dist.	Sowing		

**Madhya Pradesh**

<b>Irrigated Wheat</b>	<b>Summer moong and sugarcane</b>	<b>Early sown Summer moong and sugarcane</b>		
Harvesting	Sowing / planting	Germination/sprouting		

**Orissa**

<b>Vegetables</b>	<b>Dalua Rice</b>	<b>Mustard</b>	<b>Rabi Pulses</b>	<b>Summer pulses</b>
Fruiting / Harvesting	Grain formation / maturity	Pod maturity/Harvesting	Harvesting	Early vegetative
<b>Summer Vegetables</b>	<b>Sugarcane</b>	<b>Rabi Groundnut</b>	<b>Summer Groundnut</b>	
Early vegetative	Vegetative	Pod maturity/Harvesting	Sowing	

**Andhra Pradesh**

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

**Karnataka**

<b>Sugarcane (Ratoon crop)</b>	<b>Sunflower</b>	<b>Summer groundnut</b>	<b>Summer rice</b>	
Vegetative	Grain filling	Pod formation	Tillering	

**Kerala**

<b>Rubber</b>	<b>Puncha rice</b>			
Tapping	Milking			

**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>
Grain formation/development	Vegetative	Vegetative	Harvesting	Vegetative
<b>Sunflower</b>	<b>Summer gingelly/ Maize</b>	<b>Early sown Summer gingelly /Maize</b>	<b>Mid season Sugarcane</b>	
Vegetative	Sowing	Early vegetative/vegetative	Planting	

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