



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

Issued by

**Agricultural Meteorology Division, India Meteorological  
Department, Pune, India**

Thursday, 17<sup>th</sup> April, 2008

(For the period 17<sup>th</sup> April to 21<sup>st</sup> April, 2008)

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

## **Forecast for the 2008 South-west monsoon rainfall**

IMD's long range forecast for the 2008 south-west monsoon season (June to September) is that the rainfall for the country as a whole is likely to be Near Normal.

Quantitatively, monsoon season rainfall is likely to be 99% of the long period average with a model error of  $\pm 5\%$ . The Long period average rainfall over the country as a whole for the period 1941-1990 is 89 cm.

### ***Agromet Advisory***

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

#### **Punjab**

- Mainly dry weather is likely over the State.
- Rise in maximum temperature from tomorrow onwards.

#### **Advisories**

- As there was no significant rainfall in the State during last week and mainly dry weather is 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 undertaken as weather remain dry for next three days.
- Undertake sowing of radish.

#### **Haryana**

- Mainly dry weather is likely over the state.
- Rise in maximum temperature from tomorrow onwards.

#### **Advisories**

- As there was no significant rainfall in the State during last week and mainly dry weather is likely over the State, apply irrigation to sugarcane, *rabi* 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 liter of water/acre.
- Apply 15 kg Nitrogen/ha to early sown sunflower hybrids.
- Continue sowing of summer moong and mash.
- Undertake sowing of radish.

## **Rajasthan**

- Rain / thundershowers occurred at isolated places in Kota division on 14<sup>th</sup> April, 2008 and weather remained mainly dry in all the divisions of the state.
- Mainly dry weather is likely over the state.
- Rise in maximum temperature over the state from tomorrow onwards.

### **Advisories**

- Continue harvesting of matured crops of wheat, barley, mustard, gram and potato.
- Monitor summer vegetable crops like bitter gourd and ridge gourd for fruit fly in and around Jaipur, Ajmer, Dausa and Tonk. Spray Malthion or Dimethoate @ 1 ml / litre of water.
- Monitor summer tomato, brinjal and chilli from blight and viral disease in and around Jaipur, Ajmer, Dausa and Tonk and if the damage crosses ETL, spray Mancozeb @ 2 g/litre of water to control blight. Spray Endosulfan @ 1.5 ml / litre of water to control vector to prevent viral disease.
- 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).

## **Uttar Pradesh**

- Isolated rain/thundershowers likely over the state during next 24 hours and mainly dry weather thereafter.

### **Advisories**

- As there was no significant rainfall in the State and only isolated rain/thundershowers likely during next 24 hours and mainly dry weather thereafter, apply irrigation to vegetable crops.
- Harvest the matured sugarcane, winter vegetables, turmeric, wheat and potato.
- Continue field preparation and sowing of sugarcane, urd and moong.
- 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 during next 24 hours and mainly dry weather thereafter.
- Rise in maximum temperature from tomorrow onwards.

### **Advisories**

- As Kinnaur and Kullu districts of the state received excess rain during last week, postpone irrigation to the crops in these districts. As remaining districts of the State received no significant rain during last week and rain/thundershowers are likely only at isolated places over the state during next 24 hours and mainly dry weather thereafter, apply irrigation to vegetables, potato, toria, rapeseed, mustard, wheat, barley and gram.
- Remove smut infected plants of wheat and cover smut infected plants of barley from the field and destroy completely to avoid further spread of these diseases.
- There is mild chance of attack of leaf spot disease in cabbage and cauliflower. If attack crosses economic threshold level, spray Dithane M – 45 to control the disease.
- Monitor oilseeds for aphids and if 50 aphids or 4 mm aphid infestation level per central shoot is noticed, spray 750 ml cypermethrin 10 EC or 750 ml methyl demeton 25 EC or 750 ml Dimethoate 30 EC or 1.5 litre Formothion 25 EC or 200-250 ml Phosphamidon in 750 L water / ha.

- Spray Horticulture Mineral oil at break of dormancy stage to avoid the attack of mite in apple. Spray Boric acid (200gm) + Bavistin (100gm) at pink bud stage to avoid the attack of fungus.

### **Uttarakhand**

- Isolated rain/thundershowers likely over the state during next 24 hours and mainly dry weather thereafter.
- Rise in maximum temperature from tomorrow onwards.

### **Advisories**

- As there was no significant rainfall during last week and rain/thunder shower is likely at isolated places over the state during next 24 hours and mainly dry weather thereafter, apply irrigation to sugarcane, potato and orchard trees.
- Undertake intercultural operations in orchards and sugarcane to keep the field weed free.
- Continue sowing of potato in hilly areas.
- Continue sowing of sugarcane crop.
- Monitor mango trees for powdery mildew and litchi for mite incidences. Undertake need based plant protection measures.

### **Jammu & Kashmir**

- Rain/thundershowers likely at a few places over the state.
- Rise in maximum temperature from tomorrow onwards.

### **Advisories**

- As rain/thundershowers likely at a few places over the state during next three days, apply irrigation to the standing crops.
- Monitor onion crop for aphids and thrips attack in Jammu division and spray the crop with Endosulphan @ 0.07% or Malathion @ 0.05% if required on a non rainy day.
- Continue sowing of vegetables and transplanting of tomato, brinjal and chilies.
- Preparation of seed beds for early raising of vegetable seedlings such as capsicum, chilies, brinjal, paprika etc. and filling of poly bags for sowing of cucurbits under poly house conditions may be continued in Kashmir division.
- This is proper time for transplanting of poplar from nursery to field area during these days in Jammu division and pruning in grapevine, phaliso, peach and plum crop. Keep the orchard free from weeds by intercultural operation. Farmers can also plan for plantation of new orchards during these days. Apply nitrogenous fertilizer in orchards on a non rainy day.

### **Delhi**

- Mainly dry weather is likely over the State.
- Rise in maximum temperature from tomorrow onwards.

### **Advisories**

- As there was no significant rain during last week and mainly dry weather is likely over the state for next three days, apply irrigation to vegetables crops.
- There is mild chance of attack of red pumpkin beetle on cucurbits. If infestation of red pumpkin beetle is noticed on cucurbits, apply carbaryl 50 WP @ 750 – 1000 g per ha.
- Continue harvesting of already matured crops of wheat on bright sunny days. When colour of wheat crop changes into golden or reddish, the crop will be ready for harvest
- Continue harvesting of already matured crops of barley and gram on bright sunny days.

- Prepare land and undertake sowing of Pusa Chetkin variety of raddish.
- Prepare land and undertake sowing of fodder bajra and lobia.

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

### **Kerala**

- Rain / thundershowers occurred at a few places in Kerala on 16<sup>th</sup> and at isolated places on 15<sup>th</sup> April.
- Isolated rain/thundershowers likely over the state during next 24 hours and mainly dry weather thereafter.

### **Advisories**

- As there was no sufficient rainfall in most of the districts over the State during last week except in Alappuzha, Kottayam and Thiruvananthapuram and rain/thundershowers is likely to occur at isolated places only for the next 24 hours and mainly dry weather thereafter, apply irrigation to plantation crops viz., coconut, arecanut, rubber and banana. Postpone irrigation in the above districts as there was excess rainfall during last week.
- Abnormal leaf fall is observed in rubber. Undertake prophylactic spray of Bordeaux mixture @ 1%.
- Attack of stem bleeding is reported in coconut. To control stem bleeding, chisel out completely the affected tissues and paint the wound with tridemorph 5%. Apply coal tar after 1-2 days. Root feed with Tridemorph 5% to prevent further spread of lesions.
- Attack of pseudo stem weevil, banana rhizome weevil, sigatoka leaf spot and bunchy top disease is reported in banana. Adopt strict field sanitation. If the attack is severe, spray Quinalphos @ 0.05%. Spraying / drenching may be done on the leaf axils, rhizome, surrounding soil and all around the entire pseudo stem. Apply 12.5 gm Phorate 10G or 10 gm Carbofuran 3G per plant in leaf axil or 25 gm Phorate or 20 gm Carbofuran per pit in soil, 70 days and again 165 days after planting to control bunchy top disease.
- Continue harvesting of matured *puncha* rice on bright sunny days.
- Continue land preparation and nursery preparation of *virippu* rice and pepper.
- To protect young trees of areca nut and rubber from sun scorching basal portion of the trunk may be painted with lime.

### **Tamilnadu**

- Isolated rain/thundershowers likely over south Tamil Nadu during next 24 hours and mainly dry weather thereafter.
- Mainly dry weather is likely over the rest of the state.

### **Advisories**

- Apply irrigation to groundnut, sugarcane and pulse crops as rain/ thundershowers likely only at isolated places over south Tamil Nadu during next 24 hours and mainly dry weather thereafter.
- 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.
- Continue land preparation and sowing of summer irrigated sorghum variety K8 around Kovilpatty.
- Undertake summer ploughing in order to conserve soil moisture and destruction of pupa and larvae of insects.
- Start picking of cotton in and around Kannivadi region. Picking may be done during early morning hours to maintain the quality of kapas.

## **Karnataka**

- Mainly dry weather likely over the state.
- Rainfall occurred at isolated places on 16<sup>th</sup> and dry weather prevailed on all the remaining days over Coastal Karnataka, North interior Karnataka & south interior Karnataka.

### **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 and summer crops.
- Undertake intercultural operations in sugarcane and early sown summer crops to keep the field weed free and propping in sugarcane to prevent the crop from lodging.
- Continue harvesting of matured *rabi* sunflower, groundnut and maize crops. Complete picking of cotton.
- Continue land preparation and sowing of early *kharif* crops like green gram, black gram, jowar and sunflower.
- Monitor summer rice for blast and sucking pests. Adopt need based plant protection measures.

## **Andhra Pradesh**

- Isolated rain occurred over Coastal Andhra Pradesh on 10<sup>th</sup> & 16<sup>th</sup> April 2008. Dry weather prevailed elsewhere over the state during the week.
- Mainly dry weather is likely over the state.

### **Advisories**

- As there was no sufficient rainfall during last week over the State and mainly dry weather is likely to prevail during next three days, apply irrigation to groundnut.
- Start harvesting of the matured rice crop on bright sunny days.
- To control incidence of thrips in groundnut spray Monocrotophos @ 1.6 ml or Dimethoate @ 2ml per litre of water.

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

### **Assam**

- Light to moderate rain occurred at most places on 14<sup>th</sup> and at a few places on 15<sup>th</sup> & 16<sup>th</sup> with isolated rather heavy falls on 15<sup>th</sup> April, 08 over the state.
- Rain/thundershower is likely at many places over the state during next 24 hours and scattered thereafter.

### **Advisories**

- As rain / thundershower is likely at many places over the state during next 24 hours, postpone irrigation to the crops
- Maintain 3 – 5 cm of water in *boro* rice and early *ahu* rice field.
- 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.

- 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.
- As maize is very susceptible to water logging, arrange for surface drainage in the field.
- Monitor *boro* rice for blast disease. As soon as one or two spots on leaves are seen, Hinosan 50 EC @ 1 ml or Blitox 4 g per litre of water is to be sprayed and spraying is to be continued till the disease is controlled. For control of Sheath blight disease apply bavistin @ 1gm per litre of water. For control of pests like Hispa, brown plant hopper etc., insecticide like Chloropyphos 20 EC @1.5 ml or Phosphamidon @1ml per litre of water is to be sprayed.
- Infestation of pest and disease such as fruit fly, epilachna beetle, aphids and red Pumpkin beetle and powdery mildew, downy mildew and anthracnose in summer vegetables in some localities is reported. For control of pests such as fruit fly, epilachna beetle, aphids and red Pumpkin beetle in summer vegetables, malathion 50 E.C. @2 ml per litre of water should be applied. Also for control of diseases such as powdery mildew, downy mildew and anthracnose, apply Bavistan @ 1 g / litre of water or Diathine Z-78 or Captaf @ 2 g / litre of water should be applied
- Apply pesticides after current spells of rain.

### **Arunachal Pradesh**

- Rain/thundershower is likely at many places over the state during next 24 hours and scattered thereafter.

### **Advisories**

- Harvest the matured crops of pea, vegetables and *rabi* maize.
- Farmers are advised to continue sowing of summer vegetables like ladies finger, cucurbits / pumpkin etc.
- Undertake sowing of ginger.
- As rain/thundershower is likely at many places over the state during next 24 hours and scattered thereafter, postpone irrigation to the standing crops.

### **Bihar**

- Weather was mainly dry.
- Mainly dry weather is likely over the state.

### **Advisories**

- As there was no significant rainfall during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to vegetables, arhar, wheat, gram, fodder maize and sugarcane.
- Harvest the matured crops of wheat as early as possible to avoid shattering of grain.
- Complete sowing of summer vegetables and moong.

### **Jharkhand**

- Weather remained mainly dry.
- Isolated rain/thundershowers likely over the state during next 24 hours and mainly dry weather thereafter.

### **Advisories**

- Apply irrigation to the vegetables as there was no significant rain in the State during last week and isolated rain/thundershowers likely over the state during next 24 hours and mainly dry weather thereafter.
- Prepare field and undertake sowing of summer vegetables, moong and til.
- Harvest the matured crops of wheat.
- Topdressing of urea after 50 days of transplanting can be done in summer rice.

### **Sikkim**

- Rain/thundershowers likely at a few places over Sikkim.

#### **Advisories**

- As there was excess rainfall during last week, postpone 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 rainy day.
- Undertake weeding, thinning and intercultural operations in maize on a non rainy 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**

- Rain/thundershower is likely at a few places over Sub-Himalayan West Bengal.
- Isolated rain/thundershowers likely over Gangetic West Bengal during next 24 hours and mainly dry weather thereafter.

#### **Advisories**

- As there was no significant rain during last week and no significant rain is likely to occur for next three days in most of the districts of the State, apply irrigation to sesamum, groundnut, green gram and early planted sugarcane.
- Maintain 3 – 5 cm standing water in *boro* rice field.
- Complete harvesting of matured crops of arhar and wheat on bright sunny days.
- Keep vigilance against occurrence of blast disease in *boro* rice. If this disease appears at least one leaf or 25% of the leaves of the plant, then spray water soluble Ediphenphos 50% @ 1 ml or Triamiphos 48% @ 1 ml or Carbendazyme 50% @ 1 gm or Tricyclogol 75% @ 0.5 ml per litre of water. 750 litre of water is required for spraying 1 hectare of land. Keep vigilance against attack of stem borer. Chemicals may be applied under attack of at least 1 larvae or matured pest per hill. Spray pesticides on a non rainy day in Sub-Himalayan West Bengal.

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

### **Gujarat**

- Mainly dry weather is likely over the region.

#### **Advisories**

- As there was no significant rain during last few weeks over the State and mainly dry weather is likely to occur for next three days, apply irrigation to sugarcane, summer groundnut and summer bajra.
- 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.

### **Chhattisgarh**

- Mainly dry weather is likely over the State.

#### **Advisories**

- As mainly dry weather is likely over the State for next three days, apply irrigation to sugarcane, vegetables, sunflower, groundnut and sesame.
- Maintain 3 – 5 cm water in summer rice field.
- Top dressing of sugarcane with Nitrogen may be done.
- Aphids were observed in vegetable crops, hence, it is advised to monitor the crops and if necessary spray Endosulphon or Metasystox @ 2 ml / liter of water.
- Prepare land and undertake sowing of summer vegetables with assured irrigation facilities.
- Prepare land and continue sowing of green gram.

### **Maharashtra**

- Mainly dry weather is likely over the region.

#### **Advisories**

- As there was no significant rain during last week and no significant rain is likely to occur over the State for the next three days, apply irrigation to sugarcane (pre-seasonal), sugarcane (*suru*) and summer groundnut, summer green gram, summer sunflower and summer bajra.
- 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.
- Due to cloudy weather there is mild attack of thrips in mango. For control measure spray Imidocloprid @ 3 – 4 ml or 30% Diamethoate @ 15 ml / 10 liter water.
- Harvest mango fruits at 80% ripening stage & at morning upto 10 am and after 4 pm & keep fruits in shadow.
- Complete last intercultural operation to keep the field weed free wherever groundnut is at flowering stage.

### **Madhya Pradesh**

- Mainly dry weather is likely over the state.

#### **Advisories**

- As there was no significant rain during last week in the State and mainly dry weather is likely over the State, apply irrigation to sugarcane.
- Undertake intercultural operation in sugarcane to keep the field weed free.
- Continue land preparation and sowing/planting of summer moong and sugarcane.



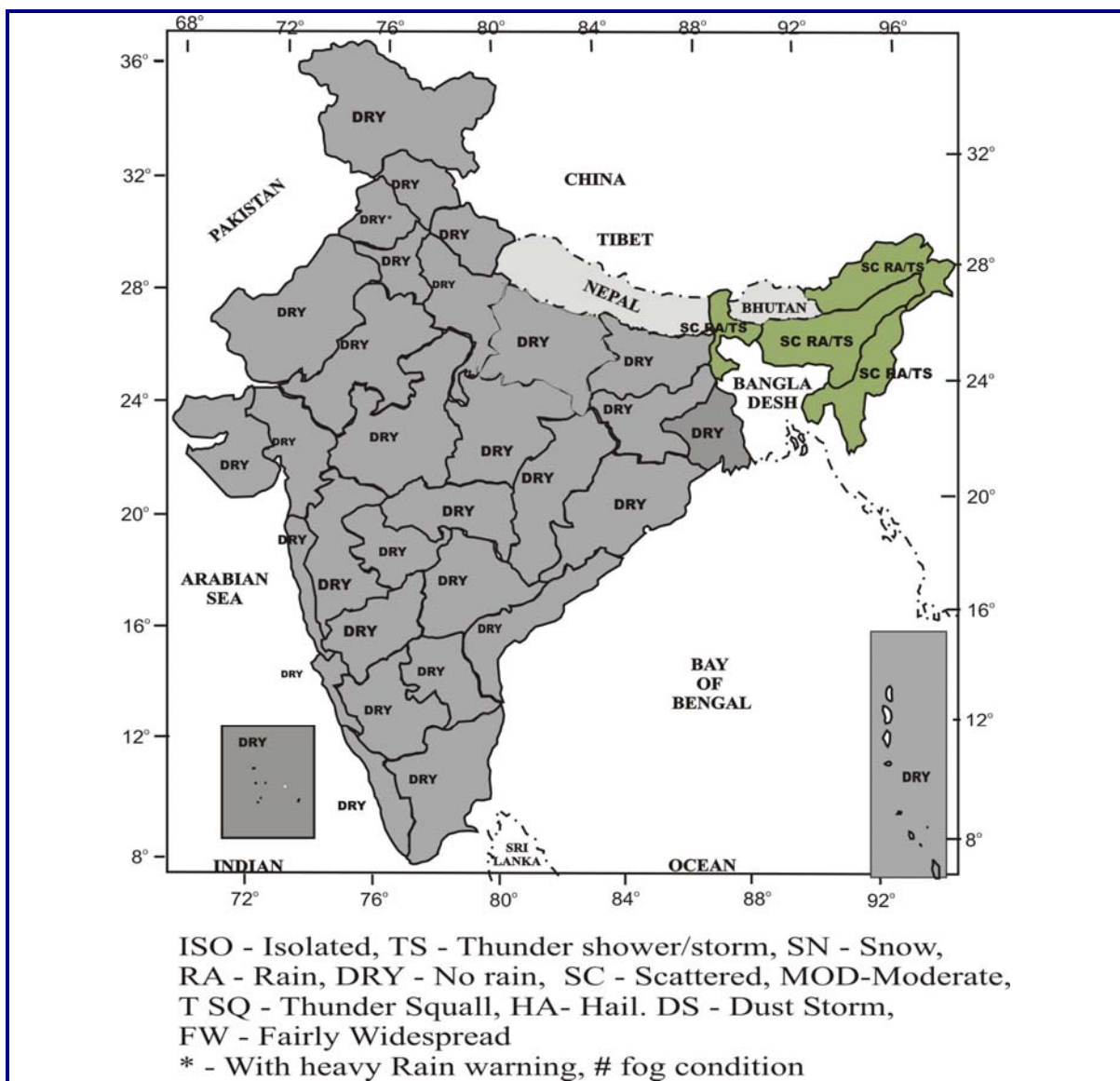
## Orissa

- Mainly dry weather is likely over the rest region.

## Advisories

- As there was no significant rainfall during last week in most of the districts and mainly dry weather is likely to prevail for next three days over the State, apply irrigation to vegetables, oil seed crops, 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.
- Continue harvesting the matured pulses, vegetable and oilseed crops.
- In transplanted *Dalua* paddy, apply 6 to 8 kg Nitrogen per acre as second top-dressing. Monitor the crop for stem borer and blast and spray Monocrotophos @ 2ml. per litre of water to control stem borer and to control blast disease spray Ediphenophos @ 1ml. per litre of water

### *Forecast Valid upto 20th April, 2008*



## *Salient weather features for the week ending 16/04/08*

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

- Two western disturbances affected northwest India causing scattered to fairly widespread rain/thundershower over Jammu & Kashmir during the week. Isolated rain/thundershower accompanied by squall/hail also occurred over plains of northwest India and adjoining Rajasthan during a few days of the week.
- **METEOROLOGICAL ANALYSIS**
- A western disturbance as an upper air system lay over north Pakistan and neighbourhood on 10<sup>th</sup>, north Pakistan and adjoining Jammu & Kashmir on 11<sup>th</sup>, Jammu & Kashmir and neighbourhood on 12<sup>th</sup>, Himachal Pradesh and neighbourhood on 13<sup>th</sup> and moved away eastwards thereafter.
- An induced upper air cyclonic circulation in lower tropospheric levels lay over south Pakistan and adjoining Rajasthan on 10<sup>th</sup> & 11<sup>th</sup>, West Rajasthan and neighbourhood on 12<sup>th</sup> and central Rajasthan on 13<sup>th</sup> and became less marked on 14<sup>th</sup>.
- Another western disturbance as an upper air system lay over north Pakistan and adjoining Jammu & Kashmir on 15<sup>th</sup> and over Jammu & Kashmir and neighbourhood on 16<sup>th</sup>.
- Another upper air cyclonic circulation extending upto 1.5 Km amsl lay over West Uttar Pradesh and neighbourhood on 16<sup>th</sup>.
- An upper air cyclonic circulation extending upto 1.5 Km above mean sea level (amsl) lay over Sub-Himalayan West Bengal & Sikkim and neighbourhood during 10-13<sup>th</sup>, Assam and neighbourhood on 14<sup>th</sup>, Arunachal Pradesh and neighbourhood on 15<sup>th</sup> and moved away eastwards thereafter.
- An upper air cyclonic circulation in lower tropospheric levels lay over Sub-Himalayan West Bengal & Sikkim and neighbourhood on 16<sup>th</sup>.
- An upper air cyclonic circulation in lower tropospheric levels lay over Arunachal Pradesh on 11<sup>th</sup> & 12<sup>th</sup> and moved away eastwards thereafter.
- An upper air cyclonic circulation extending upto 0.9 Km amsl lay over East Madhya Pradesh and neighbourhood on 12<sup>th</sup> & 13<sup>th</sup> and over Chhattisgarh during 14-15<sup>th</sup> and became less marked on 16<sup>th</sup>.
- A upper air cyclonic circulation at lower levels lay over southwest Bay of Bengal off Sri Lanka coast on 10<sup>th</sup>, over Comorin area on 11<sup>th</sup>, extreme south peninsula and neighbourhood during 12-13<sup>th</sup> and become less marked thereafter. A trough from this cyclonic circulation extended upto Coastal Karnataka during 11<sup>th</sup> -13<sup>th</sup>. A trough/line of wind discontinuity prevailed over south India during 14<sup>th</sup>-16<sup>th</sup>.

### **RAINFALL / SNOWFALL**

Under the influence of the above systems:

- Scattered/ fairly widespread rain/thundershower occurred over Jammu & Kashmir during many days of the week.

- Isolated rain/thundershower occurred over Himachal Pradesh, Uttarakhand and West Rajasthan during many days and Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Madhya Pradesh during a few days of the week.
- Scattered rain/thundershower occurred over Sub- Himalayan West Bengal & Sikkim and northeast India during 13-15<sup>th</sup> and activity was isolated on 16<sup>th</sup>. Isolated/scattered rain/thundershower also occurred over Gangetic West Bengal during 13<sup>th</sup>-16<sup>th</sup>.
- Isolated/scattered rain/thundershower occurred over Tamil Nadu, Kerala, Lakshadweep and Andaman & Nicobar Islands during many days of the week.
- The details of the rainfall distribution is given in Table -3.

#### **MAXIMUM TEMPERATURE**

- The maximum temperatures were above normal to appreciably above normal over Haryana, Chandigarh, Delhi, Uttar Pradesh, Uttarakhand, Rajasthan and West Madhya Pradesh during many days and over East Madhya Pradesh, Jharkhand, Saurashtra & Kutch, Konkan & Goa and Coastal Andhra Pradesh during a few days of the week.
- The details of the temperature distribution during the week ending on 16<sup>th</sup> April 2008 are given in Table -3.

#### **RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 16<sup>TH</sup> APRIL, 2008)**

- The chief amount of rainfall (1 cm and above) reported over various stations are given in Annexure-I.
- Rainfall was excess/normal in 6, deficient/scanty in 21 and no rain in 9 out of 36 meteorological sub-divisions (Actual: 5.9 mm, Normal: 8.5 mm and Departure: -30 %).

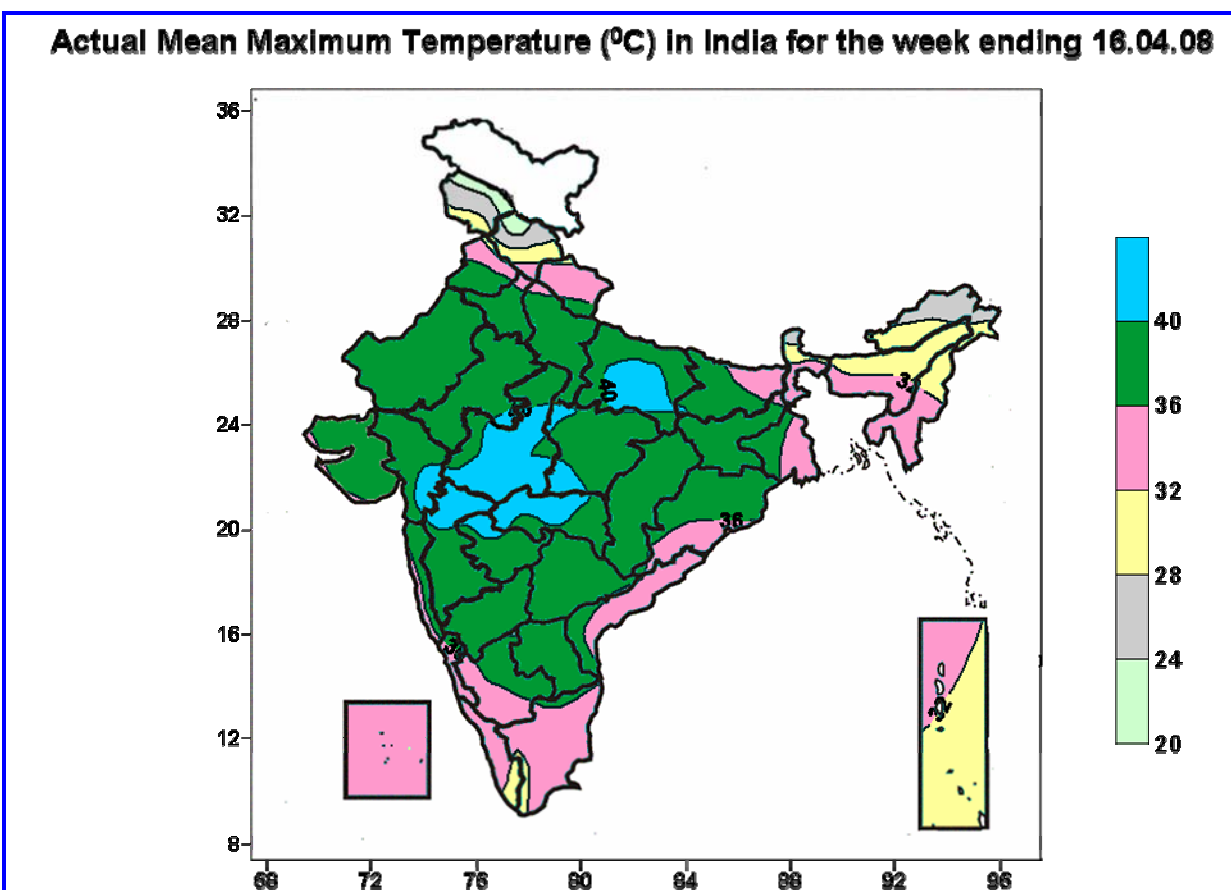
#### **CUMULATIVE SEASONAL RAINFALL (1ST MARCH TO 16<sup>TH</sup> APRIL, 2008)**

- Rainfall was excess/normal in 26 and deficient/scanty in 10 out of 36 meteorological sub-divisions. (Actual: 61.0 mm, Normal: 49.7 mm and Departure: +23%).
- The sub-division-wise weekly and seasonal rainfall distribution is presented in the enclosed map.
- A comparative data of cumulative seasonal rainfall during the corresponding period of last five years is given in *Table-1*. District-wise distribution of excess, normal, deficient and scanty rainfall is shown in *Table-2*.

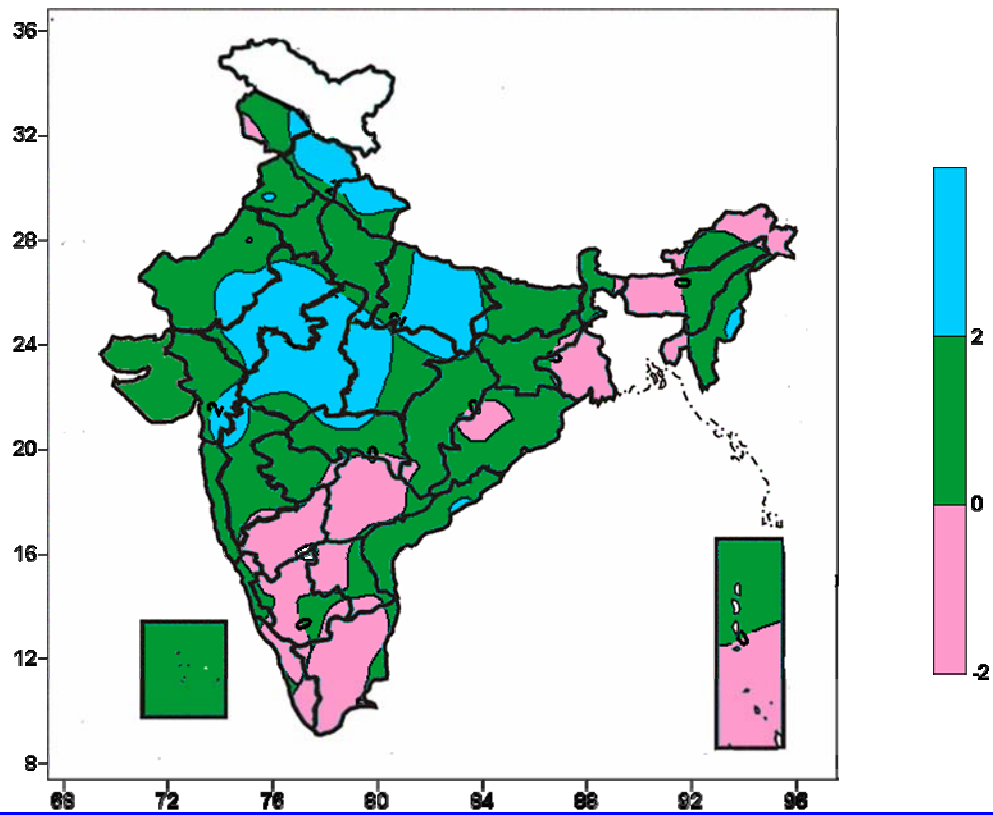
#### **OUTLOOK FOR THE WEEK ENDING ON 23<sup>RD</sup> APRIL, 2008.**

- Under the influence of a north-south trough, fairly widespread/scattered rain/thundershower activity is likely over Sub-Himalayan West Bengal & Sikkim and northeastern states during first half of the week.
- The maximum temperature over northwest India is likely to show an increasing trend from 18<sup>th</sup> onwards.
- A feeble western disturbance may affect western Himalayan Region from 22<sup>nd</sup> onwards.

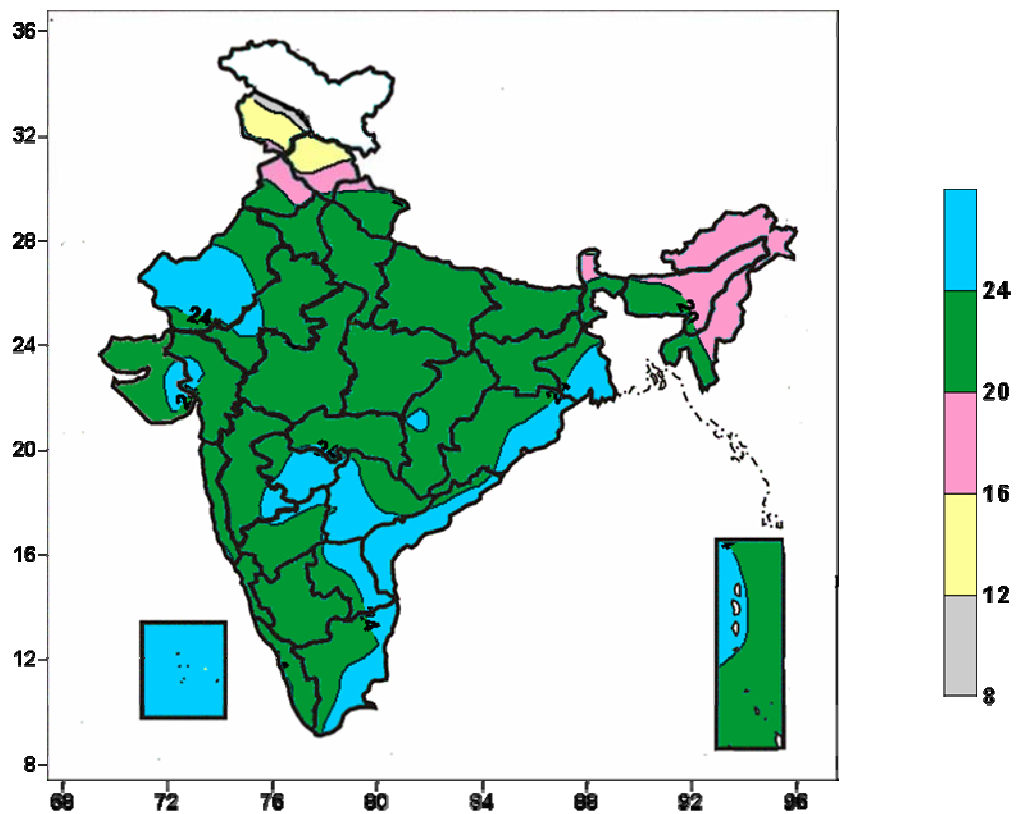
## Contour maps for the week ending 16<sup>th</sup> April, 2008



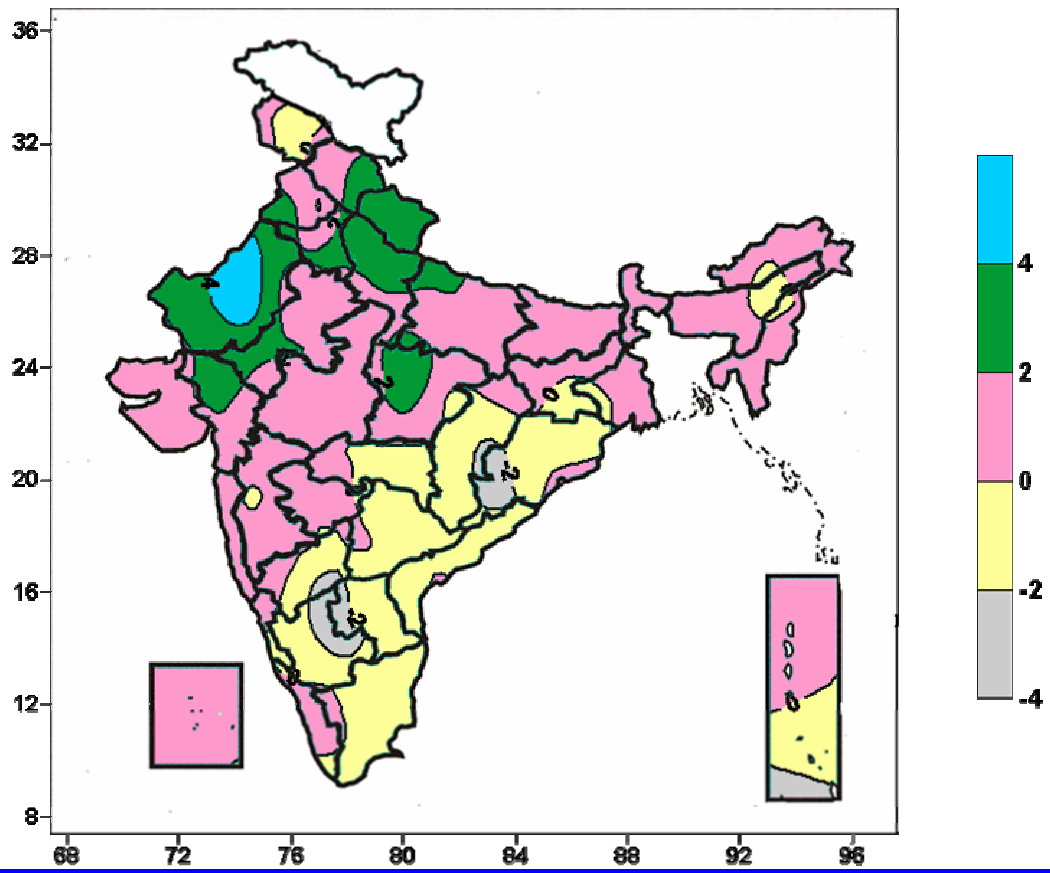
**Maximum Temperature (°C) Anomaly in India for the week ending 16.04.08**



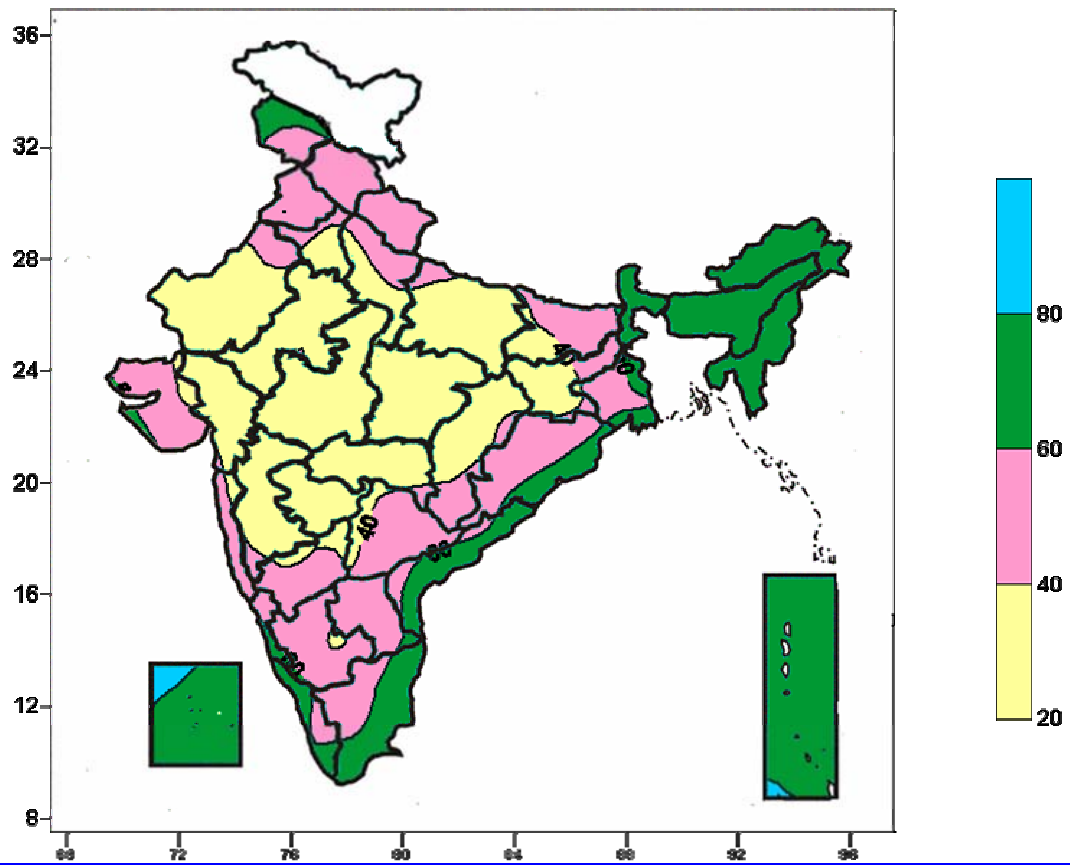
**Actual Mean Minimum Temperature (°C) in India for the week ending 16.04.08**



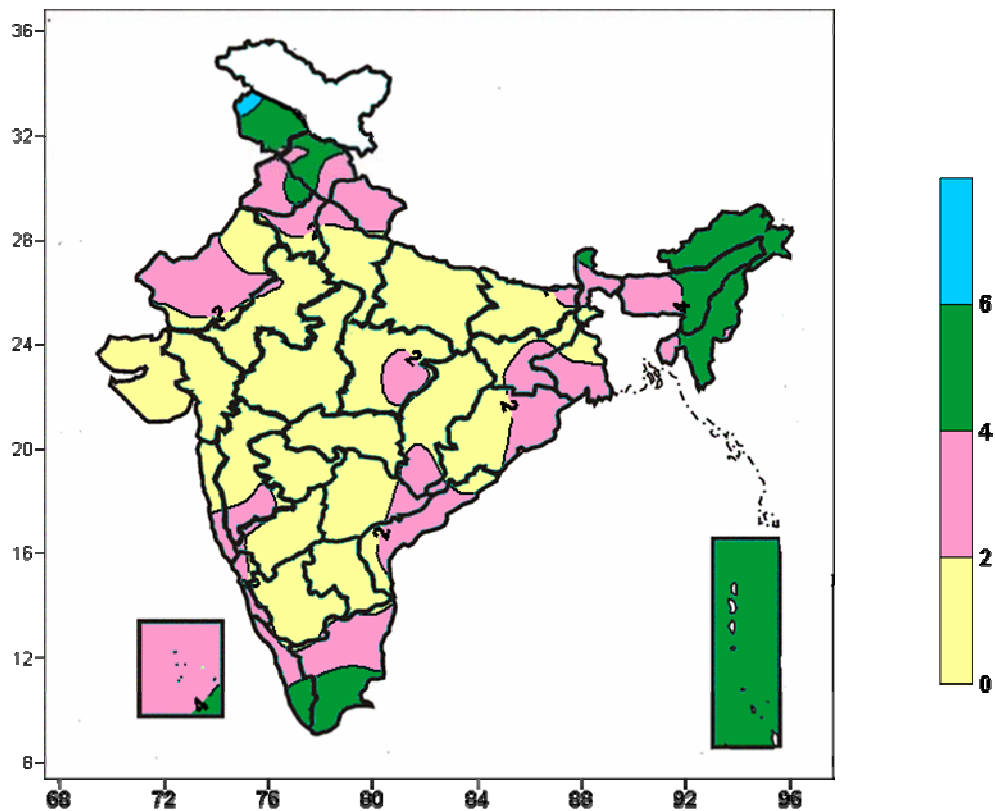
Minimum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 16.04.08



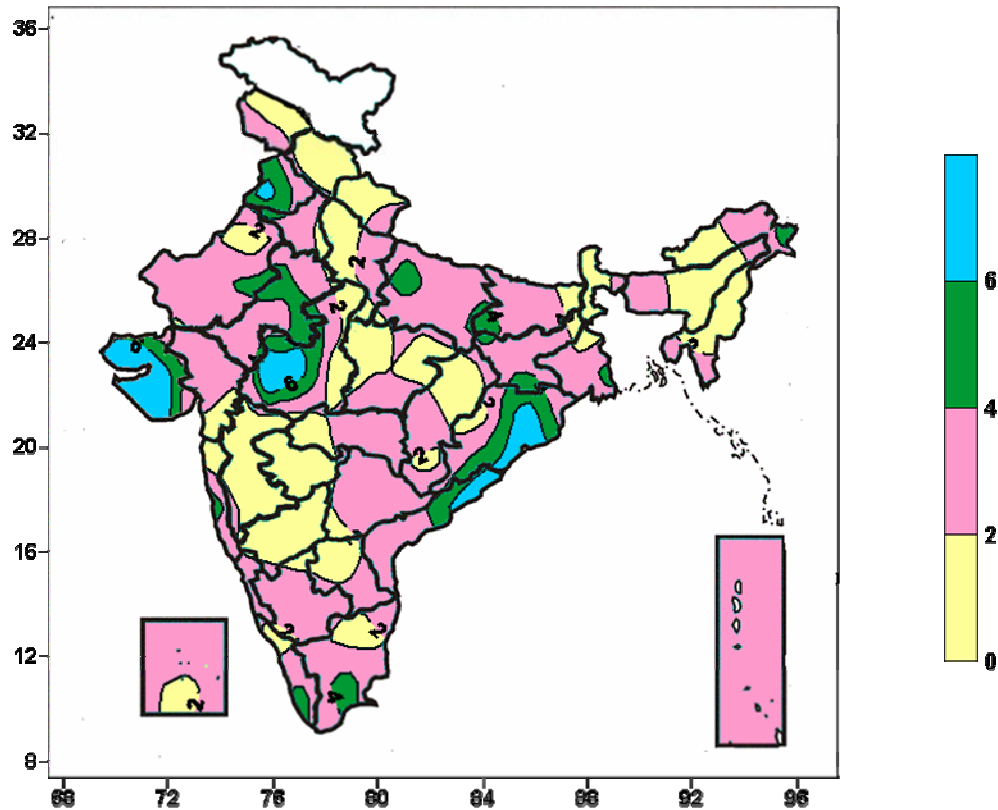
**Relative Humidity (%) over India for the week ending 16.04.08**



**Cloud amount (okta) over India for the week ending 16.04.08**



### Wind speed (knots) over India for the week ending 16.04.08



### Desert Locust Forecasting



Rainfall (mm)							
Station Name	10/04/08	11/04/08	12/04/08	13/04/08	14/04/08	15/04/08	16/04/08
Amritsar	00.0	00.0	00.0	00.0	00.0	04.0	13.2
Barmer	00.0	00.0	00.0	00.0	00.0	00.0	00.0
Sriganganagar	00.0	00.0	02.6	00.0	00.0	00.0	00.0
Jaisalmer	00.0	00.0	00.0	00.0	00.0	00.0	00.0
Kota	00.0	00.0	00.0	00.0	02.4	00.0	00.0
Deesa	00.0	00.0	00.0	00.0	00.0	00.0	00.0
Churu	00.0	00.0	00.0	00.3	00.0	00.0	00.0

### Temperature (°C)

Station Name	10/04/08	11/04/08	12/04/08	13/04/08	14/04/08	15/04/08	16/04/08
Amritsar	23.5	25.0	-	25.5	-	24.0	22.0
Barmer	32.5	-	32.5	34.0	32.5	31.5	32.5
Sriganganagar	28.0	-	28.5	29.0	-	30.0	-
Jaisalmer	31.5	31.5	-	32.5	31.0	31.0	28.0
Kota	31.5	33.5	32.5	-	33.5	34.0	34.0
Deesa	31.0	30.5	31.0	31.0	30.0	30.0	31.5
Churu	30.5	-	-	31.0	31.5	-	29.5

### Wind



Station Name	10/04/08		11/04/08		12/04/08		13/04/08		14/04/08		15/04/08		16/04/08	
	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed
<b>Amritsar</b>	ENE	05	ENE	05	-	-	ENE	02	-	-	-	-	-	-
<b>Barmer</b>	WNW	17	SSW	10	-	-	-	-	WSW	09	W	20	NNW	17
<b>Sriganga nagar</b>	NE	07	N	06	WNW	19	-	-	-	-	N	32	WSW	03
<b>Jaisalmer</b>	W	17	WSW	16	-	-	-	-	-	-	NNE	03	N	03
<b>Kota</b>	-	-	-	-	-	-	-	-	SE	04	W	27	WNW	19
<b>Deesa</b>	NNW	05	W	18	WNW	09	WSW	11	W	13	-	-	-	-
<b>Churu</b>	NE	08	SSE	06	W	18	-	-	-	-	-	-	NE	18

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

### CROP - STATE - STAGE

#### Delhi

Vegetables	Gram	Wheat	Barley	Fodder bajra and lobia
vegetative / flowering / fruiting/ harvesting	Harvesting	Maturity/harvesting	Harvesting	Land preparation/ sowing
<b>Haryana</b>				
<b>Autumn sugarcane</b>	<b>Horticultural crops</b>	<b>Sunflower</b>	<b>Wheat</b>	<b>Rabi Pulses</b>
Vegetative	Vegetative	Early vegetative	Maturity	Harvesting

#### Himachal Pradesh

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Ladies finger	Barley	Gram	Wheat
Vegetative/flowering/fruiting/harvesting	Fruiting/harvesting	Grain formation	Pod formation	Milk/dough
<b>Potato</b>	<b>Oilseeds (Torai, Rapeseed and mustard)</b>			
Tuber formation	Pod formation			

#### Jammu & Kashmir

Vegetable crops	Wheat	Pulses	Brown Sarson, Mustard	Barley, Oat
vegetative	Grain development - Jammu Grain formation- Kashmir	vegetative	Capsule development/ maturity in Jammu Grain formation/ development in Kashmir	Grain formation in- Kashmir Grain development- Jammu

#### Punjab

Autumn sugarcane	Wheat	Rabi pulses	Sunflower	Horticultural crops
Vegetative	Maturity	Harvesting	Early vegetative	Vegetative

#### Rajasthan

Wheat & barley	Gram	Early sown mustard, taramira	Potato	Summer Vegetable crops
Maturity/harvesting	Maturity/harvesting	Harvesting	Harvesting	Vegetative
<b>Cotton</b>				
Sowing				

#### Uttar Pradesh

Sugarcane	Vegetables	Summer pulses	Sunflower	Mango
-----------	------------	---------------	-----------	-------

Cane maturity/harvesting	Fruiting / maturity	Early vegetative	Vegetative	Fruit setting
<b>Wheat</b>				
Harvesting				

**Uttarakhand**

<b>Mango/Litchi</b>	<b>Wheat</b>	<b>Sugarcane</b>	<b>Potato</b>	<b>Apple</b>
Flowering	Maturity	Vegetative	Vegetative growth	Vegetative

**Assam**

<b>Regular Ahu rice</b>	<b>Maize</b>	<b>Horticultural plants</b>	<b>Boro rice</b>	<b>Summer vegetables</b>
Broadcasted & Transplanted-Land preparation and sowing	Land preparation/ sowing	Planting	Flowering/milk/ dough	Vegetative / flowering /fruiting
<b>Early Ahu rice</b>	<b>Jute</b>	<b>Early sown Jute</b>		
tillering	Land preparation/ sowing	Germination / early vegetative		

**Arunachal Pradesh**

<b>Ginger</b>	<b>Rabi maize</b>	<b>Pea</b>	<b>Mustard</b>	<b>Wheat</b>
Land preparation for sowing	Harvesting	Harvesting	Maturity/harvesting	Grain formation
<b>Rabi Vegetables</b>	<b>Jhum Rice</b>			
Harvesting	Land preparation			

**Bihar**

<b>Vegetables &amp; fruit crops</b>	<b>Maize</b>	<b>Arhar</b>	<b>Other Rabi pulses</b>	<b>Wheat</b>
vegetative/fruited	Maturity	Harvesting	Harvesting	Grain maturity/harvesting
<b>Sugarcane</b>	<b>Potato</b>	<b>Summer rice</b>		
Vegetative	Tuber formation	Early vegetative		

**Jharkhand**

<b>Summer rice</b>	<b>Litchi / Mango</b>	<b>Vegetables (Tomato, Brinjal, Bhendi)</b>	<b>Wheat</b>	
Early vegetative/ Vegetative	Vegetative (tree)	Vegetative	Maturity/harvesting	

**Sikkim**

<b>Orange</b>	<b>Vegetables</b>	<b>Large Cardamom</b>	<b>Wheat</b>	<b>Mustard</b>
Flowering	Sowing	Flowering/capsule formation	Harvesting	Harvesting
<b>Maize</b>				
Vegetative				

**West Bengal**

<b>Sugarcane</b>	<b>Early Planted Sugarcane</b>	<b>Rabi Arhar</b>	<b>Groundnut</b>	<b>Green Gram</b>
Planting	Sprouting/early vegetative	Harvesting	Vegetative/flowering/ pegging	Early vegetative / vegetative
<b>Boro rice</b>	<b>Wheat</b>	<b>Sesamum</b>		
Panicle initiation / flowering/ milk	Harvesting	Vegetative/flowering / pod formation		

**Chhatisgarh**

<b>Sugarcane</b>	<b>Sesame</b>	<b>Summer Rice</b>	<b>Vegetables</b>	<b>Wheat</b>
Autumn sugarcane – Vegetative	Vegetative / flowering / pod formation	Panicle initiation / flowering/ milk	Fruiting/harvesting	Harvesting
<b>Green gram</b>	<b>Sunflower and groundnut</b>			
Sowing	Vegetative/ flowering			

**Gujarat**

<b>Sugarcane</b>	<b>Summer rice</b>	<b>Summer groundnut</b>	<b>Summer bajra</b>	
Vegetative	Tillering/ panicle initiation	Vegetative	Tillering	

**Maharashtra**

<b>Sugarcane Preseasonal (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Sugarcane (Suru) (Madhya Maharashtra, Marathwada and Vidarbha)</b>	<b>Summer sunflower</b>	<b>Mango</b>	<b>Summer green gram</b>
Elongation / cane development	Active growth / elongation	Vegetative	Fruit development/ fruit maturity	Early vegetative / vegetative
<b>Potato (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Summer Rice</b>	<b>Summer bajra</b>	<b>Summer groundnut</b>	
Vegetative	Active tillering/ panicle initiation	Ear initiation / flowering	Flowering/pegging	

**Madhya Pradesh**

<b>Sugarcane</b>	<b>Summer Moong and Sugarcane</b>			
Grand growth	sowing/ planting			

**Orissa**

<b>Vegetable crops</b>	<b>Rice</b>	<b>Sugarcane</b>	<b>Pulses</b>	<b>Oilseeds</b>
Flowering/fruitletting/harvesting	Flowering	Vegetative	Pod maturity/ harvesting	Harvesting
<b>Moong</b>				
Vegetative				

**Andhra Pradesh**

<b>Rice</b>	<b>Groundnut</b>			
Harvesting	Pod development			

**Karnataka**

<b>Early sown maize, groundnut, sunflower</b>	<b>Annual sugarcane</b>	<b>Early kharif Crops</b>	<b>Rabi Cotton</b>	<b>Summer rice</b>
Grain formation /development/maturity	Active vegetative / tillering	sowing	End picking	Flowering

**Kerala**

<b>Puncha rice</b>				
Harvesting				

**Tamil Nadu**

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

\*\*\*