



Summary of Agromet Advisory Services for different States of the country

Issued by

Agricultural Meteorology Division, India Meteorological
Department, Pune, India

Thursday, 17th January, 2008

(For the period 17th to 21st January, 2007)

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

Agromet Advisory

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

Punjab

- Weather was mainly dry during the period.
- Rain/thundershowers are likely at a few places over the State during next 36 hours and decrease thereafter.

Advisories

- As there was no significant rain in the State during last week and rain/thundershowers are likely at a few places over the State during next 36 hours and decrease thereafter, apply irrigation to sugarcane, *rabi* oilseeds, pulses, early sown wheat and Horticultural crops.
- Monitor the sugarcane crop for shoot borer infestation & if exceeds economic threshold level, for effective control spray Endosulfan 50 EC @ 600 ml in 600 liter of water/acre on a non rainy day.
- Late blight of potato has been observed in pockets. If required, spray Ridomil MZ or Curzate@700 g per acre. in 250 -350 liter of water on a non rainy day.
- Sowing of sunflower varieties i.e. H-88, DK 3890, 302 may be undertaken, taking advantage of realized rain.

Haryana

- Weather remained dry during the period.
- Rain/thundershowers are likely at a few places over north Haryana during next 36 hours and decrease thereafter. Isolated rain/thundershowers are likely over south Haryana. No significant change in minimum temperature is likely over plains of the State during next 48 hrs. and fall thereafter.

Advisories

- As there was no significant rain in the State during last week and rain/thundershowers are likely at a few places over north Haryana during next 36 hours and decrease thereafter and only isolated rain/thundershowers are likely south Haryana, apply irrigation to sugarcane, *rabi* oilseeds, pulses, timely sown wheat and Horticultural crops.
- Monitor the sugarcane crop for shoot borer infestation & if exceeds economic threshold level, for effective control, spray 600 ml Endosulfan 50 EC in 600 liter of water/acre. Spray pesticides on a non rainy day in north Haryana.
- Sowing of sunflower varieties i.e. H-88, DK 3890, 302 may be undertaken, taking advantage of realized rain.

Rajasthan

- Weather remained mainly dry in all divisions of the State.

- Isolated rain/thundershowers are likely over north Rajasthan and South Rajasthan during next 48 and 24 hours respectively and mainly dry weather thereafter. Mainly dry weather is likely over the rest region of the State. Fall in minimum temperatures over the State.

Advisories

- Apply irrigation and arrange for smoking in *rabi* crops viz., wheat, potato, mustard, barley, taramira and gram to prevent the crops from cold injury due to fall in temperature.
- Undertake intercultural operations in gram, mustard and tarmira to keep the field weed free.
- Monitor gram for pod borer and undertake plant protection measures if the pest population crosses ETL.

Uttar Pradesh

- Rain/thundershowers are likely at a few places over West U.P. during next 36 hours and decrease thereafter. Isolated rain/thundershowers are likely over northern parts of East Uttar Pradesh after 24 hours. Mainly dry weather is likely over the rest part of the State.

Advisories

- As there was no significant rainfall in the State during last week and rain/thundershowers are likely at a few places over West Uttar Pradesh during next 36 hours and decrease thereafter, isolated rain/thundershowers are likely over northern parts of East Uttar Pradesh after 24 hrs. and mainly dry weather is likely over the rest region, apply irrigation to wheat, vegetable, pulses, rai, and mustard.
- Prepare the field and undertake transplanting of onion.
- Spray the solution of Dimethoate 1.5 ml/litre of water to control stemborer in turmeric. Spray pesticide on a non rainy day in west U.P.
- Harvest the matured toria, sugarcane, winter vegetables and potato.

Himachal Pradesh

- Weather was mainly dry.
- Rain/snowfall is likely at many places over the State during next 36 hours and decrease thereafter. No significant change in minimum temperature is likely over plains of the State during next 48 hrs. and fall thereafter.

Warning: Isolated heavy snowfall is likely over the State during next 24 hours.

Advisories

- As rain/snowfall is likely at many places over the State during next 36 hours and decrease thereafter with isolated heavy snowfall is likely over the State during next 24 hours, postpone irrigation to vegetables and toria and wheat, barley, gram and rapeseed and mustard crops. Provide adequate drainage facilities to avoid water logging due to heavy snowfall.
- Postpone application of second dose of CAN @ 13 kg per Bigha or Urea @ 6.5 Kg per Bigha to cauliflower and cabbage.
- 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 after current spells of rain.
- Continue sowing of spinach, raddish and carrot in low and mid hills after current spells of rain.
- Continue sowing of Autumn varieties of potato after current spells of rain.

Uttarakhand

- Very light rain was recorded at a many places on 10th January, while mainly dry weather prevailed during rest of the week.

- Rain/snowfall is likely at many places over the State during next 36 hours and decrease thereafter. No significant change in minimum temperature is likely over plains of the State during next 48 hrs. and fall thereafter.

Advisories

- Due to decrease in minimum temperature, farmers are advised to arrange for smoking in the field and orchards to prevent the young crops from cold injury.
- As rain/snow fall is likely to occur at many places over the State, postpone irrigation to potato and wheat.
- Monitor mango for mealy bug. Undertake deep plough around the tree trunk and wrap 25 cm.wide, 400 gauge polythene around the trunk to prevent mealy bugs attack.
- Undertake intercultural operations after spells of rain in orchards to keep the field weed free.
- Undertake harvesting of matured crops of sugarcane, pea and toria.

Jammu & Kashmir

- Weather remained mainly dry over J&K divisions.
- Rain/snowfall is likely at many places over the State during next 36 hours and hours and decrease thereafter. No significant change in minimum temperature is likely over plains of the State during next 48 hrs. and fall thereafter.

Warning: Isolated heavy snowfall is likely over the State.

Advisories

- Due to decrease in minimum temperature, farmers are advised to arrange for smoking in the field to prevent the crops from cold injury.
- Postpone irrigation to vegetables, pulses, wheat and oilseed crops as rain/snow fall is likely at many places over the State. Arrange for drainage facilities as isolated heavy snow fall is expected in the next three days.
- Monitor tomato, brinjal, cabbage and cauliflower for virus infection. Rough out virus affected plants and destroy completely.
- Monitor mustard for collar rot and peas for wilt and root rot. Rouge out and destroy the affected plants to prevent further spread.
- Farmers are advised to go for late sowing of radish (varieties: Pusa Himani) and spinach (all green prickly seed) should be done without any delay.
- Apply first dose of urea in wheat (20-25 days crop) after spells of rain in Jammu division.
- Continue harvesting matured toria in Jammu division.

Delhi

- Isolated rain/thundershowers are likely over the State. No significant change in minimum temperature is likely over plains of the State during next 48 hrs. and fall thereafter.

Advisories

- As there was no rainfall in the State during last few weeks and rain/thundershowers is likely to occur at isolated places over the State for the next three days, apply light and frequent irrigation to vegetables, mustard, gram, barley and wheat. This also prevents the crops from cold injury.
- Prepare land and sow Nanteez variety of carrot and Pusa Himani variety of raddish.
- Transplant onion seedlings. Prepare land for transplanting of brinjal and tomato.
- To control Wild Oats and *Phalaris minor* in early sown wheat crop Apply Isoprotran 75% W.P. @ 1 kg/ha and 2,4-D. Amien Salt 58% E.C. @ 750-1000 ml/ha for controlling broad leaved weeds after 28-35 days. Apply half of the remaining dose of nitrogenous fertilizer at 21 – 25 days after sowing of wheat.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

- Dry weather prevailed over the State during this period.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall during last week and dry weather is likely to prevail for the next three days, apply irrigation to plantation crops viz., coconut, arecanut, rubber and banana.
- Attack of rhinoceros beetle, red palm weevil, mite and leaf rot is reported in coconut. Fill the leaf axils with Sevidol 8G @ 25 gm mixed with 200 gm fine sand to control rhinoceros beetle. In the leaf rot affected plants, remove the rotten parts from the spear and the 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. Prophylactic spraying with 2% neem oil + garlic emulsion may be done in the crown and bunches, 2nd to 7th bunches from top avoiding unpollinated inflorescence to control mite. Use pheromone trap to monitor and control red palm weevil.
- Attack of pseudo stem weevil, banana rhizome weevil 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 pepper on bright sunny days.
- Continue nursery sowing, intercultural operations and application of fertilizers.
- Harvest the matured *mundakan* rice crops in bright sunny days. Nursery raising and land preparation may be started for *puncha* rice crop in areas where *mundakan* crop is harvested.
- Attack of leaf folder, brown plant hopper and stem borer is reported in early transplanted *puncha* rice. Spray Monocrotophos @ 1.5 ml.litre of water to control the pests.

Tamilnadu

- Dry weather prevailed over the State on 14th, 15th, and 16th January.
- Mainly dry weather is likely over the State.

Advisories

- As there was no rainfall in the state during last week and mainly dry weather is likely to prevail for the next three days, apply irrigation to sugarcane and early sown maize, groundnut, black gram, green gram and pulses.
- Monitor rice for bacterial leaf blight (BLB) and blast in the current samba and Thaladi rice crops. To control the diseases spray Carbendazim @ 100g or Ediphenphos @ 200 ml or Tricyclozole @ 200g by mixing with 200litre of water using the hand sprayer.
- Monitor maize for stem borer and aphids and if the pest population crosses ETL, spray Carbaryl 50% WP @ 400 g/acre to control the pest.
- 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 picking of matured cotton bolls on bright sunny days. Picking may be done at early morning hours to maintain quality of kapas.
- Undertake intercultural operations to keep the field weed free.

Karnataka

- Dry weather prevailed over the State on all the days.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall over the state during last week and dry weather is likely to prevail for the next three days, apply irrigation to sugarcane, *rabi* jowar, maize, cotton and sunflower.
- Due to decrease in minimum temperature, farmers are advised to apply light and frequent irrigation and arrange for smoking in the field to prevent the crops from cold injury.
- Undertake intercultural operations in sugarcane to keep the field weed free and propping to prevent the crop from lodging.
- Monitor *rabi* sunflower for powdery mildew and undertake spraying of Wettable Sulphur @ 3 g/litre of water, if required.
- Spray NAA @ 40 ppm to enhance boll setting in cotton

Andhra Pradesh

- Weather remained dry over the State during the week.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall during last week and dry weather is likely over the State for the next three days, apply irrigation to red gram, groundnut, black gram and chillies.
- Continue picking cotton. Picking may be undertaken in the morning hours to maintain the quality of kapas.
- Prevailing weather conditions are congenial for incidence of blast in rice. Monitor the crop and spray Tricyclazole @ 0.6 g per litre of water as soon as the disease symptoms are noticed. To prevent the incidence of paddy stem borer in nursery apply Carbofuran @ 160 g per cent of nursery.
- Monitor red gram for *Maruca* pod borer and if the pest population crosses ETL, spray Dichlorvas @ 1 ml + Lamda Cyhalothrin @ 2 ml or Dichlorvas 1 ml + Chlorpyrifos @ 2.5 ml per litre of water.
- Monitor black gram for yellow vein mosaic and to control the vector to prevent further spread of the disease, spray Monocrotophos @ 1.6 ml/litre of water or Dimethoate @ 2 ml/litre of water. To control incidence of leaf spot in Guntur district, spray Mancozeb @ 2.5 g or Copper Oxy Chloride @ 3g per litre of water twice at 10 days interval.
- To control incidence of thrips in groundnut spray Monocrotophos @ 1.6 ml or Dimethoate @ 2ml per litre of water if the crop is between 15-40 days.

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

Assam

- Light rain occurred at isolated places on 14th January and weather was dry over the State during the rest period.
- Isolated rain/thundershowers are likely over the State after 24 hours.

Advisories

- As there was no significant rain in the State during last week and only isolated rain/thundershowers are likely after 24 hours, apply irrigation to arhar, winter vegetables, other *rabi* crops and wheat.

- Continue harvesting of matured crops of sugarcane. Red rot infested sugarcane may be harvested early and the field should be newly planted. Ratooning of infested plant should be discarded.
- Incidence of aphids and saw fly was noticed in mustard and rapeseed in few localities. Monitor mustard and rapeseed for aphids and saw fly and if the population exceeds economic threshold level, apply Rogor or Malathion @ 2 ml / litre of water to control the disease.
- Continue transplanting of *boro* rice seedlings in the main field.

Arunachal Pradesh

- Weather was mainly dry over the State during the period.
- Isolated rain/thundershowers are likely over the State on 18th January and scattered thereafter.

Advisories

- As there was no significant rainfall in the State during last week and only isolated rain/thundershowers are likely over Arunachal Pradesh on 18th January and scattered thereafter, apply irrigation to vegetables, wheat, potato, pea, *rabi* maize and mustard.
- Harvest the matured crops of ginger.
- Apply first top dressing (33 kg Urea/ha) in potato and do earthing up.
- Undertake weeding and hoeing in wheat, mustard and *rabi* maize to keep the field weed free.

Bihar

- Weather was mainly dry.
- Isolated rain/thundershowers are likely over the State after 24 hrs.

Advisories

- As there was no significant rainfall in most of the districts during last few weeks and only isolated rain/thundershowers are likely over Bihar after 24 hrs., apply irrigation to arhar, wheat, gram, fodder maize and sugarcane.
- Monitor potato for late blight disease, if the symptoms are noticed, spray Ridomil MZ @ 2 kg/ha as first spray.
- Monitor rai / sarsoon crop for aphid attack. To control aphids, spray Methyl demeton 25 EC or Quinlphos 25 EC @ 1 liter/ha.

Jharkhand

- Weather remained mainly dry. Minimum temperatures were below normal at a few places.
- Mainly dry weather is likely over the State.

Advisories

- Apply irrigation to vegetables, wheat and gram as there was no significant rainfall during last few weeks and mainly dry weather is likely over the State for the next three days.
- To protect potato crop from aphid, spray Mancozeb (2.5 gm/litre water) or Ridomil (1.5 gm/litre water).
- Hoeing and weeding, top dressing with 55kg Urea per hectare and irrigation may be done in wheat, if the crop has crossed the age of 25 days.

Sikkim

- Light to very light rain occurred on 13th, 14th and 16th January over East Sikkim, otherwise weather remained mainly dry on rest of the days.
- Isolated rain/thundershowers are likely over the State after 24 hrs.

Advisories

- As there was no significant rainfall during last few weeks and rain/thundershowers is likely to occur at isolated places over the State for the next three days, apply irrigation to *rabi*

vegetable crops like cabbage, cauliflower, carrot and beet root and early sown wheat and mustard.

- Undertake intercultural operations and application of fertilizers in mustard, wheat, *rabi* vegetable crops like cabbage, cauliflower, carrot and beet root. Keep mustard fields free from Satyanashi weed and wheat fields free from Hirankhuri weed.
- Monitor large cardamom for Chirkey and Foorkey and infected plants may be destroyed by uprooting/burial at regular intervals. Regular inspection may be carried out to observe caterpillar/ shoot borer incidence, if any and may be hand picked and destroyed mechanically.

West Bengal

- Weather was mainly dry during the period from 14th January to 16th January over Gangetic West Bengal and Sub-Himalayan West Bengal.
- Isolated rain/thundershowers are likely over Sub-Himalayan West Bengal after 24 hrs. and mainly dry weather is likely over Gangetic West Bengal.

Advisories

- As there was no rainfall in the State during last week and isolated rain/thundershowers are likely over Sub-Himalayan West Bengal after 24 hrs and mainly dry weather is likely over Gangetic West Bengal, apply irrigation to sugarcane, arhar and *rabi* crops like mustard, rapeseed, wheat, gram, lentil, potato, *rabi* arhar and sunflower.
- Apply half of remaining dose of N at 21 – 25 days after sowing of wheat.
- Keep vigil against late blight disease of potato. Uproot and burn the affected plants. Apply water soluble Mancozeb @ 2.5 g / litre of water in the remaining healthy plants.
- Keep vigil against red rot disease of sugarcane. Uproot and burn the diseased plants to prevent further spread of the disease.
- This is the time for transplanting of boro rice. Prepare land and transplant 2 – 3 plants per hill in rice field. Apply N @ 50 kg, P₂O₅ @ 50 kg and K₂O @ 50 kg per ha at the time of land preparation. Maintain 2 – 3 cm water in the rice field after 2 -3 days of transplanting.
- Brown rust disease may appear in wheat. Spray Carboxyl or Oxycarboxyl @ 1gm / litre of water at 7-10 days intervals for 2-3 times if brown coloured rust is observed on the surface of the leaves.
- Generally, Zinc deficiency symptom may appear in some districts of South Bengal & most of the dist. of North Bengal under standing wheat Crop. So apply Zinc Sulphate @ 25Kg / ha after every 3 years interval. Also to check Boron deficiency, spray Borax / Sohaga @ 5gm / litre of water in the standing crops.

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

Gujarat

- Mainly dry weather is likely over the State. Fall in minimum temperatures over Saurashtra & Kutch after 24 hours.

Advisories

- As there was no rain during last few weeks over the State and mainly dry weather is likely to prevail over the State for next three days, apply irrigation to *kharif* cotton, castor, mustard and wheat. Apply light and frequent irrigations in Saurashtra & Kutch to prevent the crops from cold injury due to fall in temperature.
- Stop irrigation 10 – 15 days before harvesting of sugarcane. Start harvesting the crop when brix reading of sugarcane will be 19 or more.
- Monitor for pest and diseases in cotton. If damage exceeds economic threshold level, for control of sucking pests like aphids, jassids, thrips & *Heliothis* in boll formation stage, release Chrysoperla eggs or first instar larvae at the rate of 10000/ha twice at the interval of 15 days. For monitoring and management the boll worms and *Heliothis* hang 5 pheromone trap in /ha. Change the lures at an interval of 15 days. Destroy trapped moths every day. For control of boll worms release parasite Tricogramma 1.5 lakhs/ha 5 to 6 times as per requirement

depending upon infestation in the field. For control of whitefly spray Neem oil 4 liter /ha as per requirement. For control of top shoot borer spray Endosulphan 35 % EC% @ 2 liter/ha or Quinalphos 25% EC @ 2 liter/ha.

Chhattisgarh

- Weather was mainly dry in all divisions of the State.
- Mainly dry weather is likely over the State.

Advisories

- As there was no rainfall during last week in the State and mainly dry weather is likely over the State for next three days, apply irrigation to sugarcane, toria, vegetables, rapeseed and mustard and early sown wheat, potato and other rabi crops.
- Prepare land for sowing of wheat. Treat the seeds with thirum @ 3 g or bavistin @ 2 g / kg of seeds. Select varieties from Kanchan, Sujata, Amar, GW-273 and Bilasa for sowing.
- Prepare land for planting of potato. Select varieties from kufri badsha, Kufri Jyoti, Kufri Bahar etc. Before planting treat the seeds by dipping them for 30 minutes in solution of thyrum @ 3 g or bavistin @ 2 g / litre of water.
- Aphids are observed in mustard, safflower and vegetable crops, hence, it is advised to monitor the crops and if necessary spray Endosulphon or Matasystox @ 2.0 ml/liter of water.

Maharashtra

- Mainly dry weather prevailed over the State.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rain in the State during last week and mainly dry weather is likely to occur over the State, apply irrigation to sugarcane (Pre-seasonal), sugarcane (suru), kharif tur, rabi jowar, safflower, potato, gram, onion, wheat and maize.
- Apply 50 kg Nitrogen/ha to black soil, 40 kg/ha to medium & 25 kg Nitrogen/ha to low fertile soil after 25 to 30 days from sowing of *rabi* jowar.
- Second dose of 50 kg Nitrogen / ha may be applied to potato as top dressing after weeding.
- Second dose of 50 kg Nitrogen / ha may be applied after 30 days from planting of onion & irrigation may be given immediately.
- Apply second dose of 60 kg Nitrogen / ha at 30 days after sowing of wheat.
- Mild incidence of white woolly aphids in Ahmednagar and Pune districts in Sugarcane (pre-seasonal) & sugarcane (*Suru*), pod borer in Nasik, Pune, Aurangabad division in *kharif tur*, shoot fly in Aurangabad division in *rabi* jowar and aphids in Latur & Kolhapur division in safflower is reported.
- Monitor the Sugarcane (pre-seasonal) & sugarcane (*Suru*) for White Woolly Aphids & if exceeds economic threshold level, for effective control spray 500 ml Endosulphan 35%+ Metasystox 1000 ml & 500 ml Sticker or 500 gm detergent powder / ha in 500 liters of water. For the biological control of White Woolly Aphids, release 25000 larvae of *Chrysoperla carnea* or *Dipha aphidivora* / ha as predator after 15 days from the above dose.
- Monitor the crop for pod borer in tur & if exceeds economic threshold level, first spray 5% neem extract or 20 – 25 ml fenvalerate in 100 litres of water.
- Monitor the crop for shoot fly in *rabi* jowar & if exceeds economic threshold level, spray 5% neem seed extract or 30% Dimethoate 10 ml + 10 ml sticker per 10 liter of water or Nuvacron 36WSC 300ml/ha in 500 litres of water or release 10000-15000 larvae of *Chrysoperla carnea*/ha.
- For the biological control of aphids in safflower, release 10000-15000 larvae of *Chrysoperla carnea* or apply 5% neem extract.

- For the protection of blossom and to control the infestation of downy mildew / hoppers in mango, apply mixture of 300 mesh sulphur and 1.5% quinolphos powder in the ratio of 1:1 or spray 50% carbaryl powder @ 20 g plus 80% water soluble sulphur @ 25 gm. 2-3 sprayings may be done at 15 days interval.

Madhya Pradesh

- Mainly dry weather is likely over the State.

Advisories

- As there was no rainfall during last few weeks in the State and mainly dry weather is likely over the State for next three days, apply irrigation to sugarcane, linseed, lentil, gram, Mustard and wheat.
- Undertake intercultural operation in sugarcane and other *rabi* crops to keep the field weed free.
- Undertake weeding in wheat. Spray 2, 4-D for broad leaved weeds and Isoproturan for monocot weeds. Broadcast urea @ 50 kg/ha as top dressing.
- Monitor gram for leaf eating caterpillar and if the pest population crosses ETL, spray Endosulphan @ 1.5 litre/ha.
- Monitor linseed, mustard and masoor for mahu insect and apply Methyl Parathion 2% dust @ 25 kg/ha.

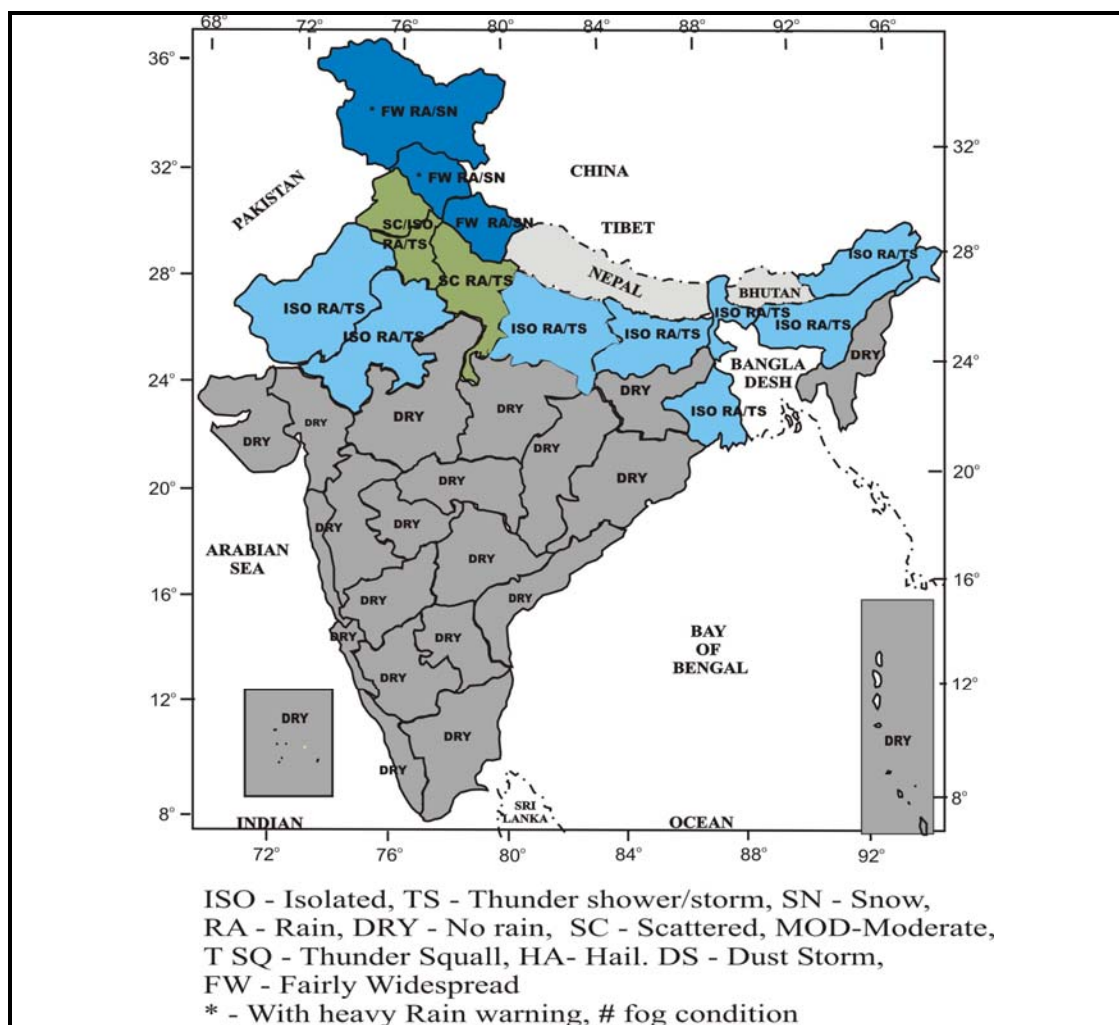
Orissa

- Weather has been dry over the State during the above period.
- Mainly dry weather is likely to prevail over the State.

Advisories

- As there was no rainfall over the State during last few weeks and mainly dry weather is likely to prevail over the State for the next three days, apply irrigation to vegetables, sugarcane *rabi* oilseed and pulse crops.
- Complete nursery sowing of *Dalua* rice. Use varieties like Khandagiri, Parijat, and Lalat etc. Start main field preparation and transplanting of *dalua* rice. Use 6kg N, 12kg P, and 12 kg K per acre at the time of transplanting in short duration paddy.
- To control leaf eating caterpillar in groundnut spray Endosulfan @ 2ml per ltr of water and to control tikka disease spray copper oxychloride @ 2.5 gm/litre of water.

Forecast Valid upto 20th January, 2008



Salient weather features for the week ending 16/01/08

The northeast monsoon rains ceased over Tamil Nadu, Kerala and adjoining parts of Andhra Pradesh and Karnataka on 10th January 2008.

METEOROLOGICAL ANALYSIS

- Last week's western disturbance as an upper air system over north Pakistan and adjoining Jammu & Kashmir persisted over the same area on 10th January, over Jammu & Kashmir and neighbourhood on 11th & 12th January and moved away eastwards thereafter.
- An upper air cyclonic circulation in lower tropospheric levels lay over West Uttar Pradesh and adjoining Uttarakhand on 10th January and moved away eastwards thereafter.
- Another feeble western disturbance as an upper air system lay over extreme north Pakistan and adjoining Jammu & Kashmir on 13th January, over Jammu & Kashmir and neighbourhood on 14th January and moved away eastwards thereafter.
- An upper air cyclonic circulation extending upto 1.5 Km above mean sea level lay over north Bihar and adjoining Sub-Himalayan West Bengal & Sikkim on 12th January, over west Assam and adjoining Sub-Himalayan West Bengal & Sikkim on 13th January, over east Assam and neighbourhood on 14th January and became less marked thereafter.

RAINFALL

Under the influence of the above systems:

- Fairly widespread/ widespread rain/snowfall occurred over Jammu & Kashmir on 10th & 11th with isolated heavy falls on 10th January. Fairly widespread rain/snowfall occurred over Himachal Pradesh on 10th January and activity was scattered on 11th January.

- Scattered precipitation occurred over Punjab, Haryana, Chandigarh, Delhi and Uttarakhand on 10th January. Isolated rain/thundershowers also occurred over North Rajasthan on 10th January.
- Isolated rain/thundershowers occurred over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Arunachal Pradesh during 12th to 14th January.
- Mainly dry weather prevailed over remaining parts of the country during the week.

MINIMUM TEMPERATURE

- The minimum temperatures were above normal by 2-6°C over northwest India and Rajasthan during first 2 days of the week. Due to fall in temperatures thereafter they were nearly normal or below normal by about 2°C during next 3 days. The minimum temperatures increased thereafter and were above normal by 2-5°C by the end of the week.
- They were above normal by 2-5°C over many parts of central India during first two days and were normal thereafter.
- They were above normal by 2-4°C over East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim during first half of the week and were normal during second half of the week.
- They were above normal by 2-4°C over many parts of northeast India and Gujarat on many days and over north Maharashtra during a few days of the week.
- They were below normal by 1-3°C over many parts of south peninsula during many days of the week.
- They were normal over remaining parts of the country during the week.

FOG

Fog condition in morning hours developed over some parts of Haryana on 10th & 11th January, North Rajasthan and Punjab on 11th January and over Sub-Himalayan West Bengal & Sikkim and northeastern states on 14th & 15th January. Fog condition in morning hours also developed over some parts of Gangetic plains, coastal Orissa and coastal Andhra Pradesh during second half of the week.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 16TH JANUARY, 2008)

Rainfall was excess/normal in 1; deficient/scanty in 8 and no rain in 27 out of 36 meteorological sub-divisions (Actual: 3.9 mm, Normal: 3.9 mm and Departure: 0 %).

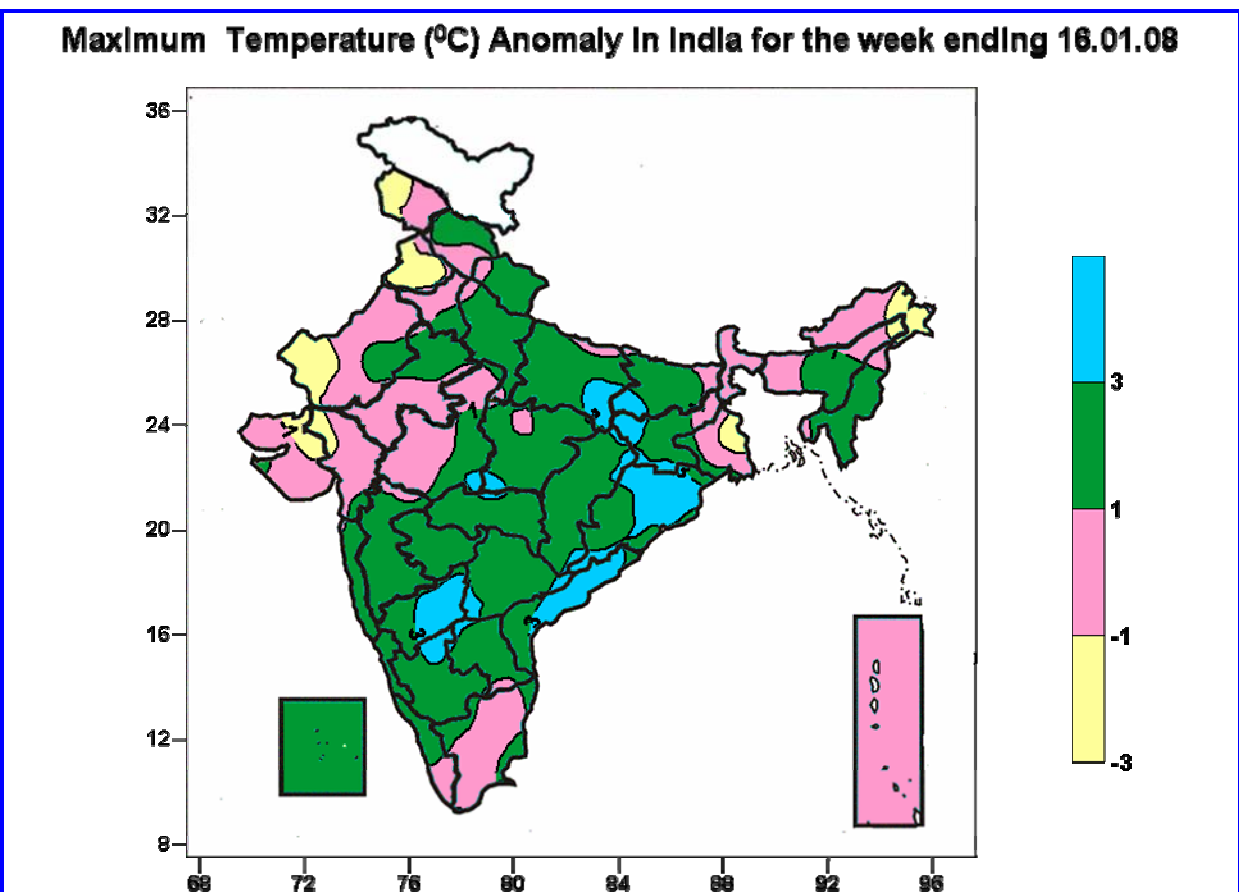
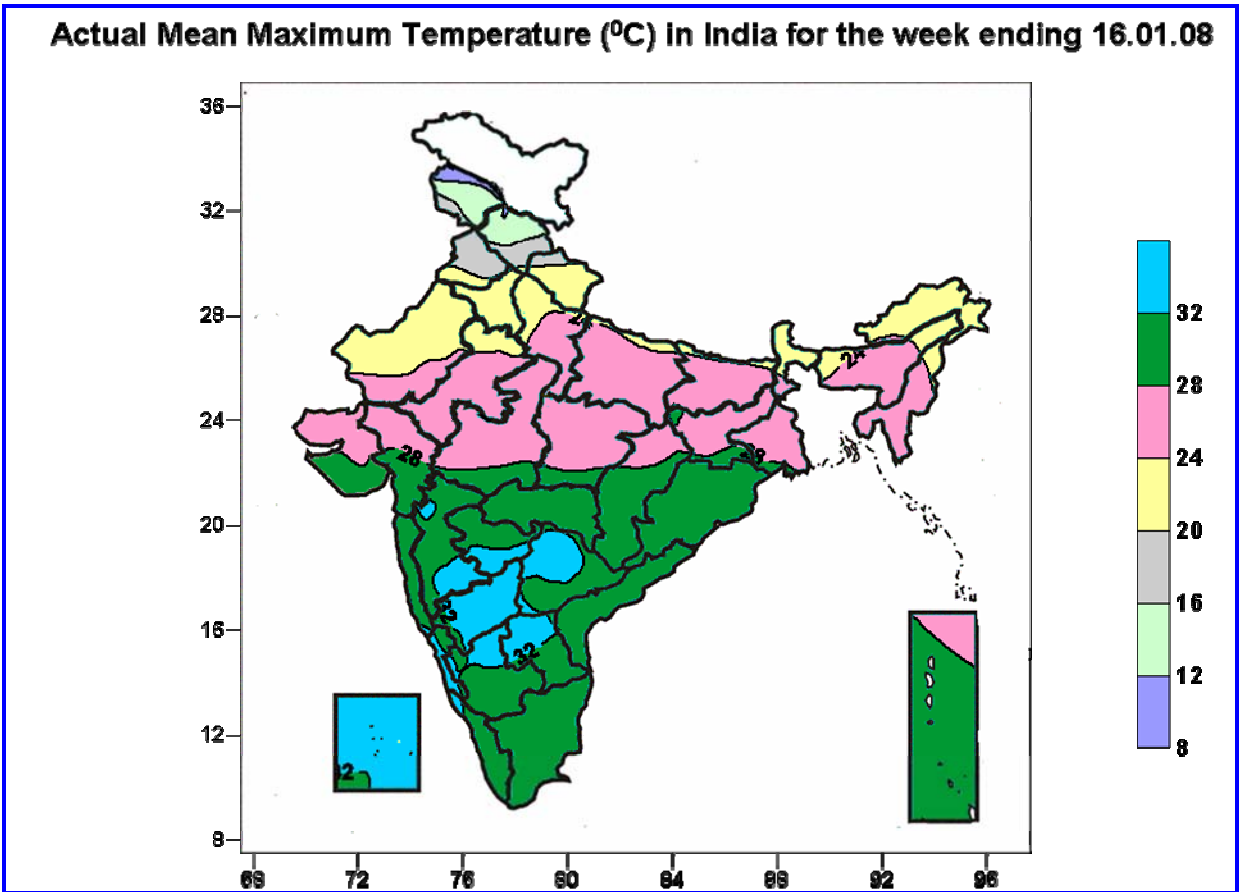
CUMULATIVE SEASONAL RAINFALL (1ST JANUARY TO 16TH JANUARY, 2007)

Rainfall was excess/normal in 4; deficient/scanty in 17 and no rain in 15 out of 36 meteorological sub-divisions. (Actual: 9.5 mm, Normal: 9.6 mm and Departure: -1%).

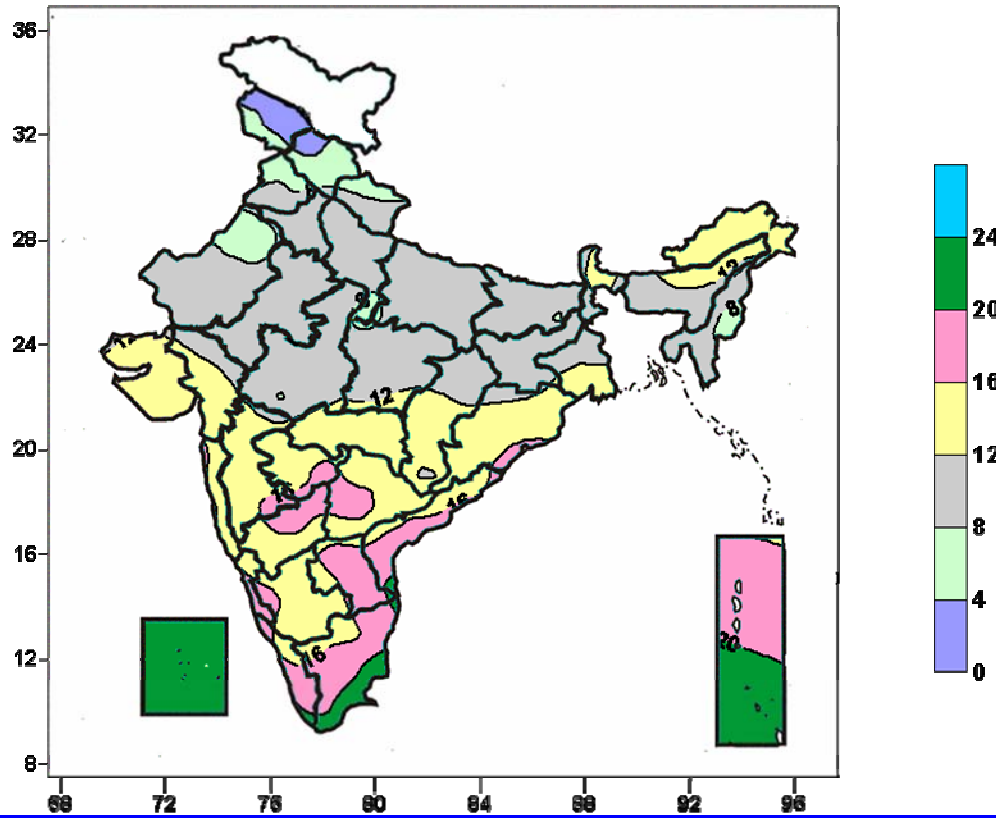
OUTLOOK FOR THE WEEK ENDING ON 23RD JANUARY, 2008.

- Under the influence of a western disturbance fairly widespread precipitation activity with isolated heavy falls is likely over western Himalayan region. Isolated to scattered rain/thundershowers are also likely over adjoining northern plains during first half of the week.
- Isolated to Scattered rain/thundershowers are likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya commencing from 18th for subsequent 2-3 days.
- Appreciable fall in night temperature over northwest India and Rajasthan from 19th January onwards for subsequent 2-3 days.

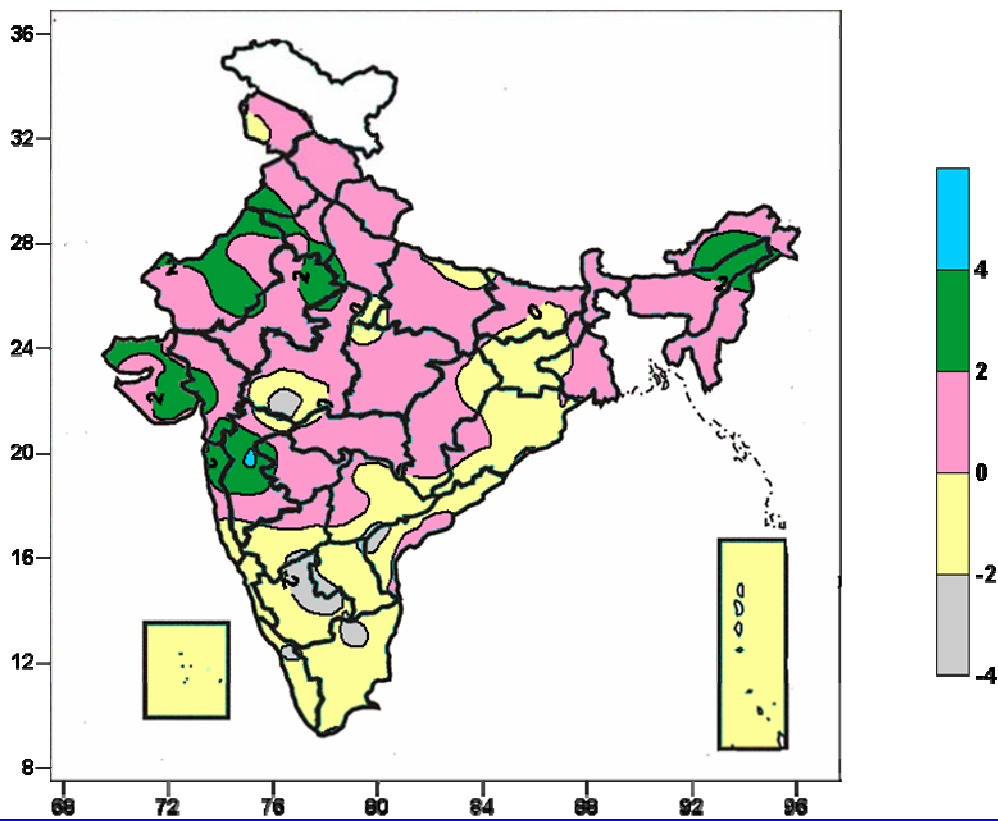
Contour maps for the week ending 16th January, 2008



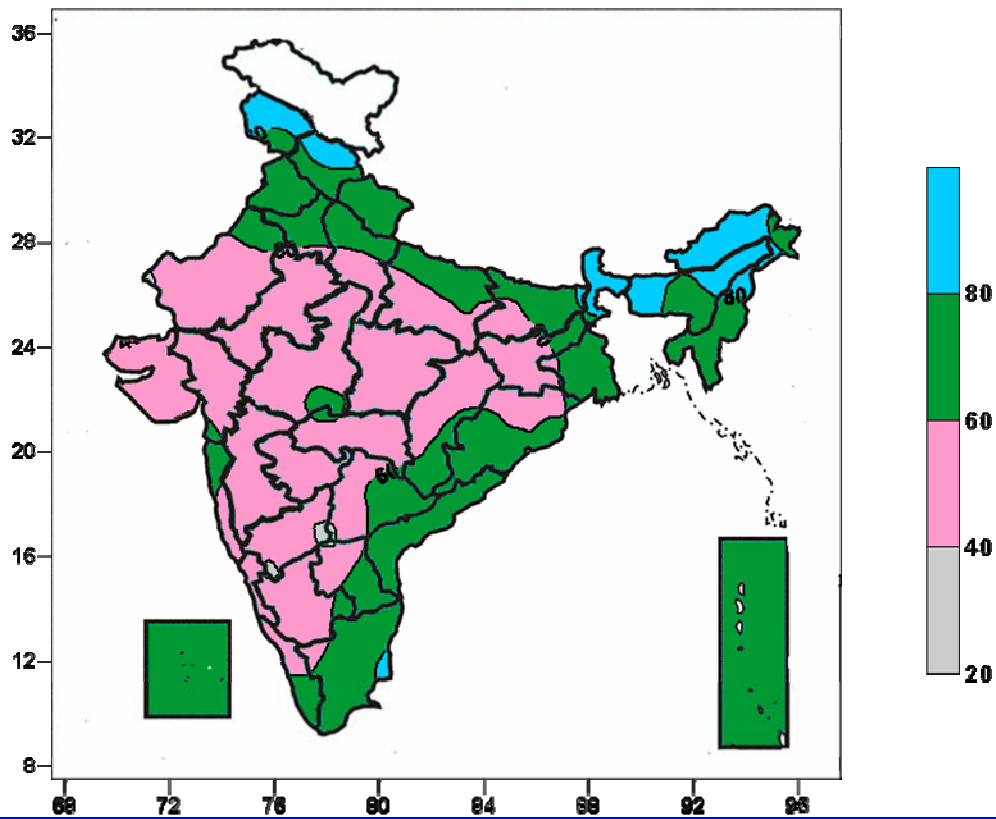
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 16.01.08



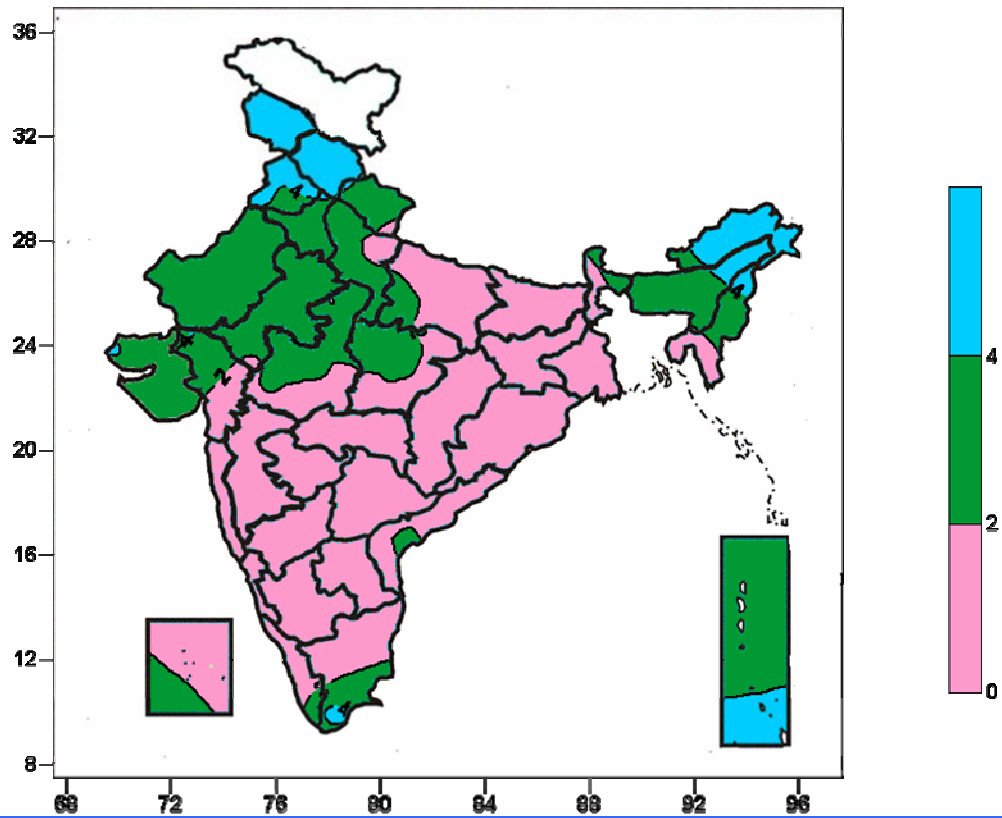
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 16.01.08



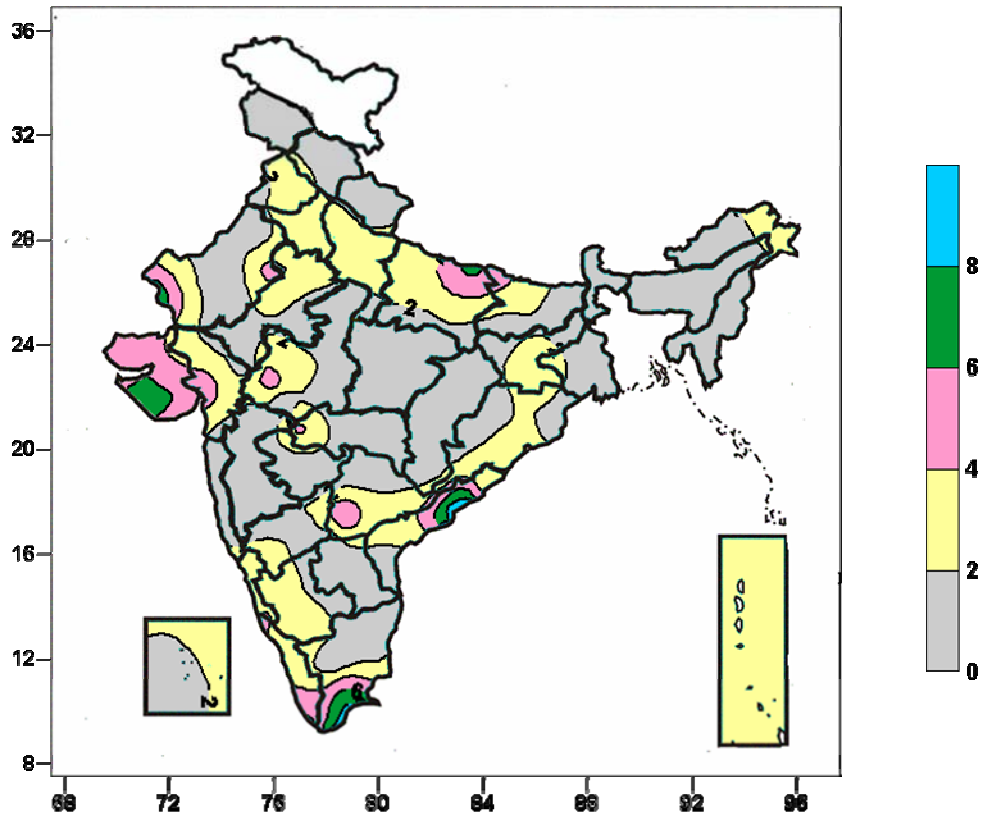
Relative Humidity (%) over India for the week ending 16.01.08



Cloud amount (okta) over India for the week ending 16.01.08



Wind speed (knots) over India for the week ending 16.01.08



Desert Locust Forecasting



Rainfall (mm)

Station Name	10.01.08	11.01.08	12.01.08	13.01.08	14.01.08	15.01.08	16.01.08
Amritsar	05.8	00.0	00.0	00.2	00.2	00.0	11.7
Barmer	00.0	00.0	00.0	00.0	00.0	00.0	00.0
Sriganganagar	00.0	00.0	00.0	00.4	00.0	00.2	09.4
Jaisalmer	00.0	00.0	00.0	00.0	00.0	00.0	05.5
Kota	00.0	00.0	00.0	00.0	00.0	00.0	00.0
Deesa	00.0	00.0	00.0	00.0	00.0	00.0	00.0
Churu	00.2	00.0	00.0	00.0	00.0	00.0	00.0

Temperature (degree Celcius)

Station Name	10.01.08	11.01.08	12.01.08	13.01.08	14.01.08	15.01.08	16.01.08
Amritsar	13.5	11.0	09.5	09.5	08.0	08.5	15.0
Barmer	-	-	-	15.5	17.0	18.5	23.5
Sriganganagar	13.5	-	-	13.0	14.0	15.5	19.5
Jaisalmer	15.0	13.5	-	14.0	16.5	18.0	22.5
Kota	20.0	18.0	-	15.5	16.5	17.5	22.0
Deesa	-	17.5	-	17.5	18.5	20.0	26.0
Churu	-	-	-	-	-	-	-

Wind														
Station Name	10.01.08		11.01.08		12.01.08		13.01.08		14.01.08		15.01.08		16.01.08	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	SE	07	SE	07	-	-	-	-	-	-	-	-	NNW	03
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	W	07
Sriganga nagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kota	SW	16	-	-	-	-	-	-	NNW	09	-	-	NW	13
Deesa	WSW	11	WNW	14	-	-	-	-	NNW	08	-	-	W	05
Churu	-	-	-	-	-	-	-	-	-	-	-	-	WNW	11

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	Mustard	Wheat	Early sown wheat	Berseem
Vegetative	Flowering / capsule formation	Sowing	crown root initiation / tillering	Vegetative
Gram	Barley			
Vegetative	Vegetative			

Haryana				
Sugarcane / Autumn sugarcane	Horticultural crops	Cotton	Wheat	Rabi Pulses
Vegetative	Vegetative	Picking	Germination / crown root initiation / vegetative	Vegetative
Rabi oilseeds	Toria			
Vegetative	Flowering / fruiting			

Himachal Pradesh

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Potato	Barley	Toria	Wheat
Vegetative/ head formation Ladies finger -- Flowering/Fruiting	Sowing	Early vegetative	Vegetative	Early vegetative / crown root initiation
Gram	Toria	Rapeseed and mustard		
Early vegetative	Vegetative	Early vegetative		

Jammu & Kashmir

Vegetable crops	Rice	Pulses	Brown Sarson, Mustard	Toria
vegetative	Harvesting- Jammu div.	vegetative	Flowering / capsule formation	Harvesting (Jammu div.)
Wheat	Barley, Oat			
tillering	Vegetative			

Punjab

Sugarcane	Horticultural crop	Rabi Oilseeds	Cotton	Rabi pulses
Vegetative	Vegetative	Vegetative	Picking	Vegetative
Autumn sugarcane	Wheat	Irrigated toria	Rabi oilseeds	
Vegetative	Vegetative	Flowering / fruiting	Vegetative	

Rajasthan

Wheat & barley	Gram	Early sown mustard, taramira	Potato	Early sown potato
Tillering	Flowering / pod formation	Pod formation	Planting	Early vegetative

Uttar Pradesh

Sugarcane	Vegetables	Rabi pulses	Rai , mustard	Toria
Cane maturity	Flowering / fruiting / maturity	Flowering	Flowering / pod formation	Pod maturity / harvesting

Mango	Wheat			
Vegetative	Early vegetative			

Uttarakhand

Mango/Litchi	Pea / Toria	Sugarcane	Potato	Wheat
Vegetative	Harvesting	Maturity	Tuber growth / maturity	Tillering

Assam

Sugarcane	Arhar	Horticultural plants	Boro rice	Winter vegetables
Harvesting	Pod formation / maturity	Planting	Transplanting	Early vegetative / vegetative
Mustard, rapeseed, pea lentil etc.	Potato	Wheat		
flowering / pod formation	Vegetative / tuber formation	Crown root initiation / tillering		

Arunachal Pradesh

WRC Rice	Ginger	Millet	Jhum Paddy	Potato
Late Harvesting	Harvesting	Harvesting	Harvesting	vegetative
Rabi Vegetables	Wheat / Mustard	Rabi maize	Pea	
Vegetative / harvesting	Vegetative	Flowering	Harvesting	

Bihar

Vegetables & fruit crops	Maize fodder	Arhar	Early sown Rabi pulses	Wheat
vegetative	vegetative	Vegetative	Vegetative / flowering	Vegetative
Sugarcane	Rabi oilseeds (rai, linseed)	Gram	Potato	
Vegetative	Flowering / pod formation	sowing	Vegetative / tuber formation	

Jharkhand

Pea, gram, potato	Litchi / Mango	Vegetables (Tomato, Brinjal, Bhendi)	Wheat
Vegetative Pea – pod formation	Vegetative (tree)	Vegetative	Vegetative

Sikkim

Orange	Vegetables (Cauliflower, Cabbage, Carot, Beat, tomato)	Large Cardamom	Wheat	Mustard
End Harvesting	Flowering / Fruiting	Vegetative	Tillering	Flowering / capsule formation

West Bengal

Sugarcane	Arhar	Mustard / Rapeseed / gram / lentil	Potato	Sunflower
Cane development	Pod development / maturity (Rabi arhar-vegetative)	Flowering	Vegetative / tuber formation	Vegetative
Boro rice	Wheat			
Transplanting	Crown root initiation / tillering			

Chattisgarh

Sugarcane	Rapeseed, mustard	Toria	Tomato, Brinjal, Chilli	Wheat
Vegetative (autumn – Early vegetative)	Branching	vegetative / flowering	Vegetative / flowering	Germination / crown root initiation
Rabi crops	Early sown rabi crops	Potato	Early sown potato	
Early vegetative / vegetative / flowering	Germination / early vegetative / vegetative	Land preparation & planting	Sprouting / early vegetative	

Gujarat

Sugarcane	Kharif Cotton	Castor	Mustard	Wheat
Cane maturity / harvesting	Boll formation/ boll maturity / picking	Spike formation / pod formation	Flowering / pod formation	Tillering / vegetative

Maharashtra

Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marathwada and Vidarbha)	Rabi safflower (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)
Elongation / cane development	Active growth / elongation	Flowering / head formation	Vegetative / ear head emergence	Pod formation / grain filling / grain maturity
Potato (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi onion (Madhya Maharashtra, Marathwada)	Maize (Konkan, Madhya Maharashtra, Marathwada & Vidarbha)	Gram (Madhya Maharashtra, Marathwada & Vidarbha)	Mango
Vegetative	Early vegetative	Vegetative	Branching / flowering / pod formation	Flowering
Wheat (North Konkan, Madhya Maharashtra, Marathwada & Vidarbha)				
early vegetative / crown root initiation / early tillering				

Madhya Pradesh

Sugarcane	Rabi crops (linseed, lentil, gram, mustard)	Wheat		
Grand growth	Pod / capsule formation Gram – flowering	vegetative		

Orissa

Kharif vegetables	Sugarcane	Dalua rice	Arhar	Mung and urd
Vegetative / fruiting	Maturity / harvesting	Nursery sowing	Maturity	Vegetative / flowering
Oilseeds				
Vegetative / flowering				

Andhra Pradesh

Rice	Kharif Cotton	Rabi red gram / chillies		
Raising nursery / Transplanting	Picking	Vegetative		

Karnataka

Sugarcane (Ratoon crop)	Annual sugarcane	Rabi Jowar/Maize	Rabi Sunflower, cotton	
Grand growth	Sprouting / early vegetative / tillering	Grain formation / development	Grain formation	

Kerala

Rubber	Mundakkan Rice	Pepper	Puncha rice	
New planting	Harvesting	Harvesting	Raising nursery / transplanting	

Tamil Nadu

Rice (Samba)	Sugarcane (Early, Mid season)	Special season sugarcane	Groundnut/Black gram/Green gram/Red gram	Early sown Groundnut/Black gram/Green gram/Red gram
Vegetative / tillering	Cane development / maturity	Grand growth	Vegetative	vegetative
Jowar/Bajra/Samai	Early sown jowar / bajra / samai	Cotton	Maize	Coriander
Vegetative	Vegetative	Picking	Grain development	Vegetative
