



Summary of Agromet Advisory Services for different States of the country

Issued by

Agricultural Meteorology Division, India Meteorological
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(For the period 24th to 28th 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 remained mainly dry. Cold to severe cold wave conditions are prevailing in the State with temperatures below freezing levels in some pockets.
- Isolated rain/thundershowers are likely over the State from tomorrow onwards. Cold wave to severe cold wave conditions are likely over some parts of the state during next 1-2 days and abate thereafter.

Warning : Ground frost conditions are likely over some parts of the State during next two nights.

Advisories

- As there was no significant rain in the State during last week and rain/thundershowers are likely at isolated places over the State from tomorrow onwards, apply light and frequent irrigation to sugarcane, *rabi* oilseeds, pulses, wheat and Horticultural crops to protect from cold/frost injury.
- 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.
- 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.
- Sowing of short duration sunflower hybrids may be undertaken, taking advantage of realized rain.

Haryana

- Weather remained mainly dry. Cold to severe cold wave conditions are prevailing in the State with temperatures below freezing levels in some pockets.
- Isolated rain/thundershowers are likely over the State from tomorrow onwards. Cold wave to severe cold wave conditions are likely over some parts of the state during next 1-2 days and abate thereafter.

Warning : Ground frost conditions are likely over some parts of the State during next two nights

Advisories

- As there was no significant rain in the State during last week and rain/thundershowers are likely at isolated places over the State from tomorrow onwards, apply light and frequent irrigation to sugarcane, *rabi* oilseeds, pulses, wheat and Horticultural crops to protect from cold/frost injury.
- 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.
- 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. Cold wave conditions prevailed in some parts of north Rajasthan in the State.
- Mainly dry weather is likely over the State. Cold wave to severe cold wave conditions are likely over some parts of north Rajasthan during next 1-2 days and abate thereafter.

Warning: Ground frost conditions are likely over some parts of north Rajasthan during next two nights.

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/frost 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

- Cold wave condition prevailed over some parts of the State and weather was mainly dry in all the divisions of the State on 21st and 22nd January. Cold wave condition still prevailed in some parts of west Uttar Pradesh and light to moderate rain occurred at isolated places in east Uttar Pradesh and weather was mainly dry in west Uttar Pradesh on 23rd January.
- Isolated rain/thundershowers are likely over East Uttar Pradesh. Mainly dry weather over the rest part of the State. Cold wave to severe cold wave conditions are likely over isolated pockets of West Uttar Pradesh during next 1-2 days and abate thereafter.

Warning : Ground frost conditions are likely over some parts of west UP during next two nights.

Advisories

- As there was no significant rainfall in the State during last week and rain/thundershowers are likely at isolated places over West Uttar Pradesh and mainly dry weather is likely over East Uttar Pradesh for the next three days, apply irrigation to wheat, vegetable, pulses, rai, and mustard. Apply light and frequent irrigation in west U.P. to save the crops from ground frost.
- Prepare the field and undertake transplanting of onion.
- Spray the solution of Dimethoate 1.5 ml/litre of water to control stemborer in turmeric.
- Harvest the matured toria, sugarcane, winter vegetables and potato.

Himachal Pradesh

- The weather was mainly dry in the State.
- Isolated rain/snowfall is likely over the State.

Advisories

- As there was sufficient rainfall in Kinnaur and Kulu districts during last week and isolated rain/snowfall is likely over the state for the next three days, postpone irrigation to vegetables and toria and wheat, barley, gram and rapeseed and mustard crops. Apply light irrigation in the remaining districts.
- 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.
- Continue sowing of spinach, raddish and carrot in low and mid hills.
- Continue sowing of Autumn varieties of potato.

Uttarakhand

- Very light to light rain was recorded at a few places on 18th & 19th January during the week. Moderate snowfall was also reported by media at a few places and hails storm at isolated places also reported. Mainly dry weather prevailed during rest of the period.
- Isolated rain/snowfall is likely over the State.

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 there was no significant rainfall during last few weeks and rain/snow fall is likely to occur at isolated places over the State, apply 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 in orchards to keep the field weed free.
- Undertake harvesting of matured crops of sugarcane, pea and toria.

Jammu & Kashmir

- Isolated rain/snowfall is likely over J & K.

Advisories

- Due to decrease in minimum temperature, farmers are advised to arrange for smoking in the field to prevent the crops from cold injury.
- Apply irrigation to vegetables, pulses, wheat and oilseed crops as there was no significant rainfall during last week and rain/snow fall is likely at isolated places over the State.
- 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.
- Monitor potato for late blight and rouge out the affected plants and destroy to prevent further spread.
- Apply first dose of urea in wheat (20-25 days crop) in Jammu division.
- Continue harvesting matured toria in Jammu division.

Delhi

- Mainly dry weather is likely to prevail over the State

Advisories

- As there was no rainfall in the State during last few weeks and mainly dry weather is likely to prevail 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.
- Transplant onion seedlings. Prepare land for transplanting of brinjal and tomato.
- Monitor mustard for chepa disease and undertake plant protection measures in case of appearance.
- To control Wild Oats and *Phalaris minor* in early sown wheat crop Apply Isoprotoran 75% W.P. @ 1 kg/ha and 2, 4-D. Amine 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

- Weather continued to be dry over the State.
- 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.
- Complete harvesting of *mundakan* rice and pepper on bright sunny days.
- Continue nursery sowing, intercultural operations and application of fertilizers.
- Nursery raising and land preparation may be continued 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

- Mainly dry weather prevailed over the State on 22nd January, and dry weather on 21st and 23rd January.
- Mainly dry weather is likely over the State.

Advisories

- As there was no rainfall in the state during last few weeks 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 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 in the standing crops to keep the field weed free.

Karnataka

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

Advisories

- As there was no significant rainfall over the state during last few weeks 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.
- Isolated rain/thundershowers are likely over Coastal Andhra Pradesh. Mainly dry weather is likely over the rest region.

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 to moderate rain occurred at isolated places on 21st & 22nd January and mainly dry weather prevailed on 23rd January over the State.
- Rain/thundershowers are likely at a few places over the State.

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, 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

- Rain occurred at many places from 21st to 23rd January.
- Rain/thundershowers are likely at a few places over the State.

Advisories

- As there was rainfall in the State during last week and rain/thundershowers at a few places are likely over the State, apply light 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 on a non rainy day.
- Undertake weeding and hoeing in wheat, mustard and *rabi* maize on a non rainy day to keep the field weed free.

Bihar

- Rainfall occurred at many places on 23rd January and weather was dry on rest of the days.
- Isolated rain/thundershowers are likely over the State.

Advisories

- As there was no significant rainfall in most of the districts during last few weeks and only isolated rain/thundershowers are likely over the State for the next three days, apply irrigation to vegetables, 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

- Isolated rain/thundershowers are likely over the State.

Advisories

- Apply irrigation to vegetables, wheat and gram as there was no significant rainfall during last few weeks and isolated rain/thundershowers are 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

- 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.
- Monitor orange for trunk borer and remove the affected portion and pluck the holes made by the insect with mud.
- Start harvesting vegetable crops depending upon market demand.

West Bengal

- Moderate rain occurred at isolated places on 21st January. Weather remained mainly dry on 22nd January over Gangetic West Bengal, very light rain occurred at isolated places over the districts of West Bengal on 23rd January. Weather was mainly dry during the period from 21st to 22nd January over Sub-Himalayan West Bengal.
- Isolated rain/thundershowers are likely over Sub-Himalayan West Bengal. Isolated rain/thundershowers are likely at a few places over Gangetic West Bengal.

Advisories

- As there was no significant rainfall in the State during last week and rain/thundershowers are likely at isolated places over Sub-Himalayan West Bengal and at a few places 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.
- Undertake intercultural operations, application of fertilisers and spraying on a non rainy day in Gangetic West Bengal.

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

Gujarat

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

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.
- 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.
- Isolated rain/thundershowers are likely over the State.

Advisories

- As there was no rainfall during last week in the State and only isolated rain/thundershowers are likely 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 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.
- As cold wave conditions are likely to prevail for the next 1-2 days, farmers are advised to arrange for smoking in the field to prevent the crops from cold injury.
- 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.

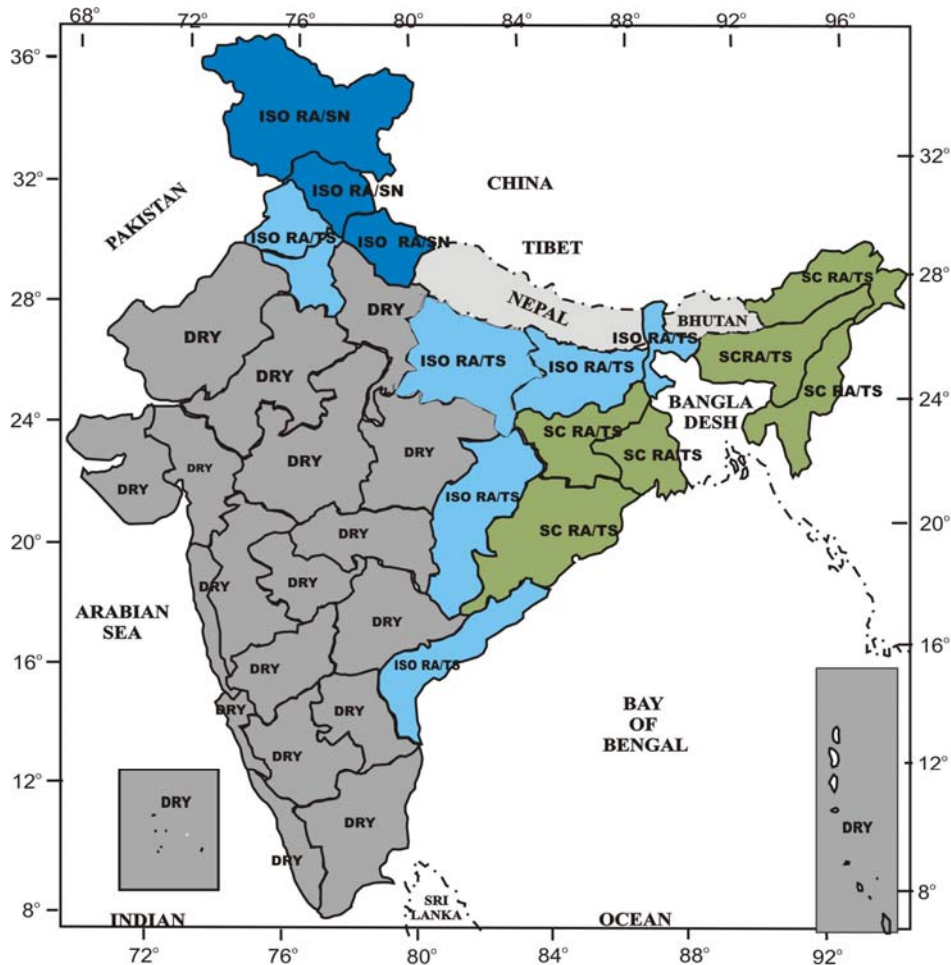
Orissa

- Weather has been dry over the State.
- Rain/thundershowers are likely at a few places over the State during next 24 hours and increase thereafter.

Advisories

- As there was no rainfall over the State during last few weeks and rain/thundershowers are likely at a few places over the state during next 24 hours and increase thereafter, apply light irrigation to vegetables, sugarcane *rabi* oilseed and pulse crops.
- Complete nursery sowing of *Dalua* rice. Use varieties like Khandagiri, Parijat, and Lalat etc. Continue 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 27th January, 2008



ISO - Isolated, TS - Thunder shower/storm, SN - Snow,
 RA - Rain, DRY - No rain, SC - Scattered, MOD-Moderate,
 T SQ - Thunder Squall, HA- Hail. DS - Dust Storm,
 FW - Fairly Widespread
 * - With heavy Rain warning, # fog condition

Salient weather features for the week ending 23/01/08

METEOROLOGICAL ANALYSIS

- A western disturbance lay over north Pakistan and adjoining Jammu & Kashmir on 17th, over Jammu & Kashmir and neighbourhood during 18 to 20th and moved away eastwards thereafter.
- An upper air cyclonic circulation in lower tropospheric levels lay over West Uttar Pradesh and neighbourhood on 19th & 20th and became less marked thereafter.
- Another upper air cyclonic circulation in lower tropospheric levels lay over Sub-Himalayan West Bengal & Sikkim and neighbourhood on 20th & 21st, over Assam & neighbourhood on 22nd and over East Assam and adjoining Arunachal Pradesh on 23rd.
- Another western disturbance as an upper air system lay over north Pakistan and neighbourhood on 22nd and over Jammu & Kashmir and neighbourhood on 23rd .
- An upper air cyclonic circulation extending upto 0.9 km asl lay over West Uttar Pradesh and neighbourhood on 23rd.

RAINFALL / SNOWFALL

Under the influence of the above systems:

- Scattered to fairly widespread rain/snowfall occurred over Jammu & Kashmir during 17th to 20th. Isolated to scattered rain/snowfall also occurred over Himachal Pradesh during the same period and over Uttarakhand on 19th & 20th.
- Isolated rain/thundershowers occurred over Punjab during 17th to 19th and over north Rajasthan on 17th & 18th.
- Isolated to scattered rain/thundershowers occurred over Uttar Pradesh on 19th, over Sub-Himalayan West Bengal & Sikkim on 19th & 20th and over Arunachal Pradesh, Assam & Meghalaya during 19th to 22nd. Isolated rain/thundershowers also occurred over Nagaland, Manipur, Mizoram & Tripura on 21st.
- Isolated rain/thundershowers occurred over Andaman & Nicobar Islands on 23rd.
- Mainly dry weather prevailed over remaining parts of the country during the week.

MINIMUM TEMPERATURE

- The minimum temperatures were above normal by 2-8°C over northwest India, Rajasthan and Uttar Pradesh during first two days of the week. Due to fall in temperatures thereafter, they became below normal by 2-7°C during remaining days of the week. Cold wave conditions prevailed over many parts of northwest India and north Rajasthan during 20th to 23rd and over some parts of Uttar Pradesh during 21st- 23rd.
- They were below normal by 2-6°C over many parts of peninsular India till 21st and became nearly normal thereafter. The cold wave conditions developed at some places in Rayalaseema and South Interior Karnataka for one or two days.
- The minimum temperatures were above normal by 2-5°C over West Madhya Pradesh and Gujarat during first two days. Due to fall in temperatures thereafter, they became below normal by 2-4°C during remaining days of the week.
- They were above normal by 2-6°C over Bihar, Jharkhand, East Madhya Pradesh, north Chhattisgarh, north Orissa, West Bengal and Northeastern States on many days of the week.
- They were normal over remaining parts of the country during the week.

FOG

Fog conditions in morning hours developed over some parts of northwest India and north Rajasthan on 18th & 19th and some parts of East India on 19th & 20th.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 23RD JANUARY, 2008)

Rainfall was excess/normal in 5; deficient/scanty in 21 and no rain in 10 out of 36 meteorological subdivisions. (Actual: 15.4 mm, Normal: 13.8 mm and Departure: 12%).

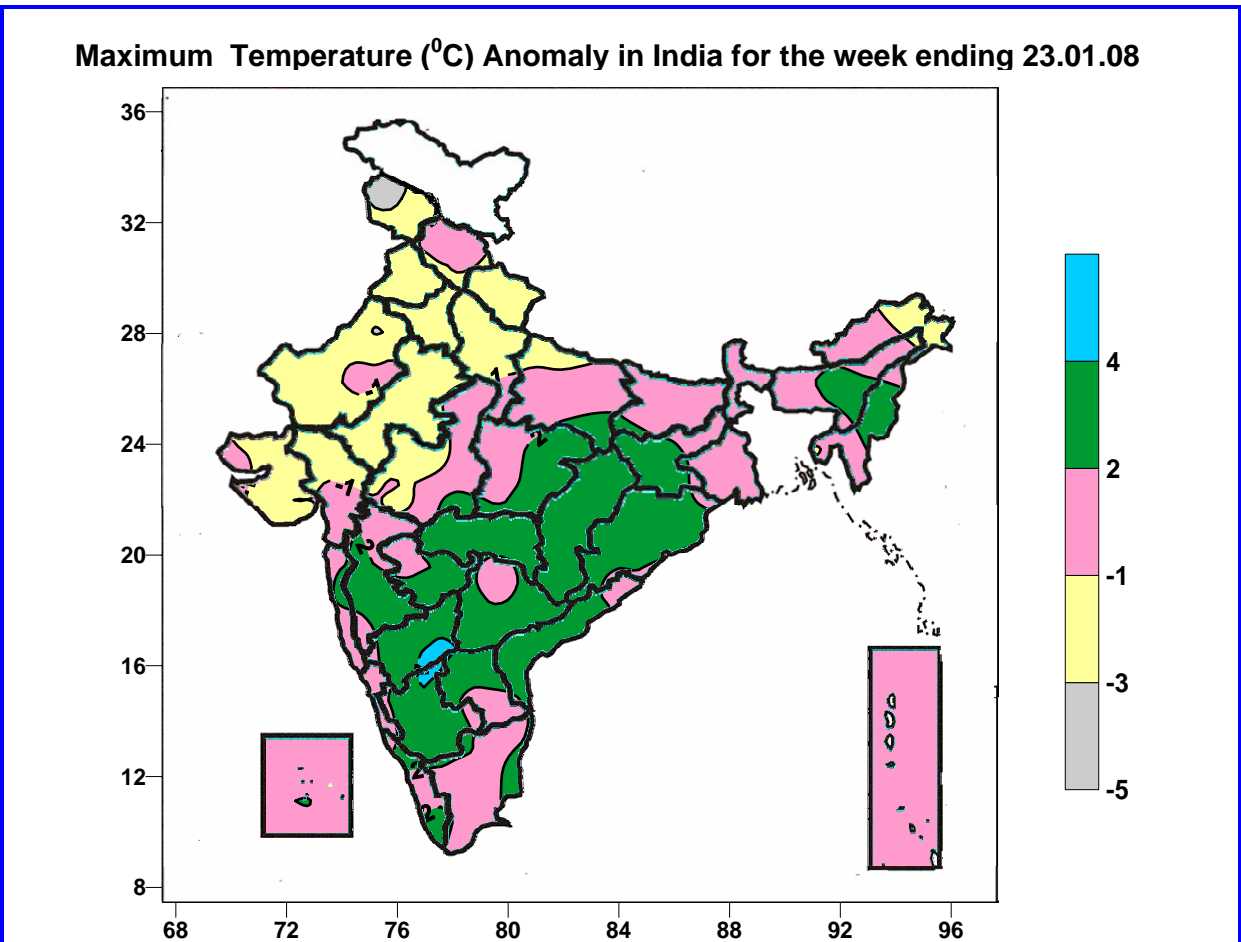
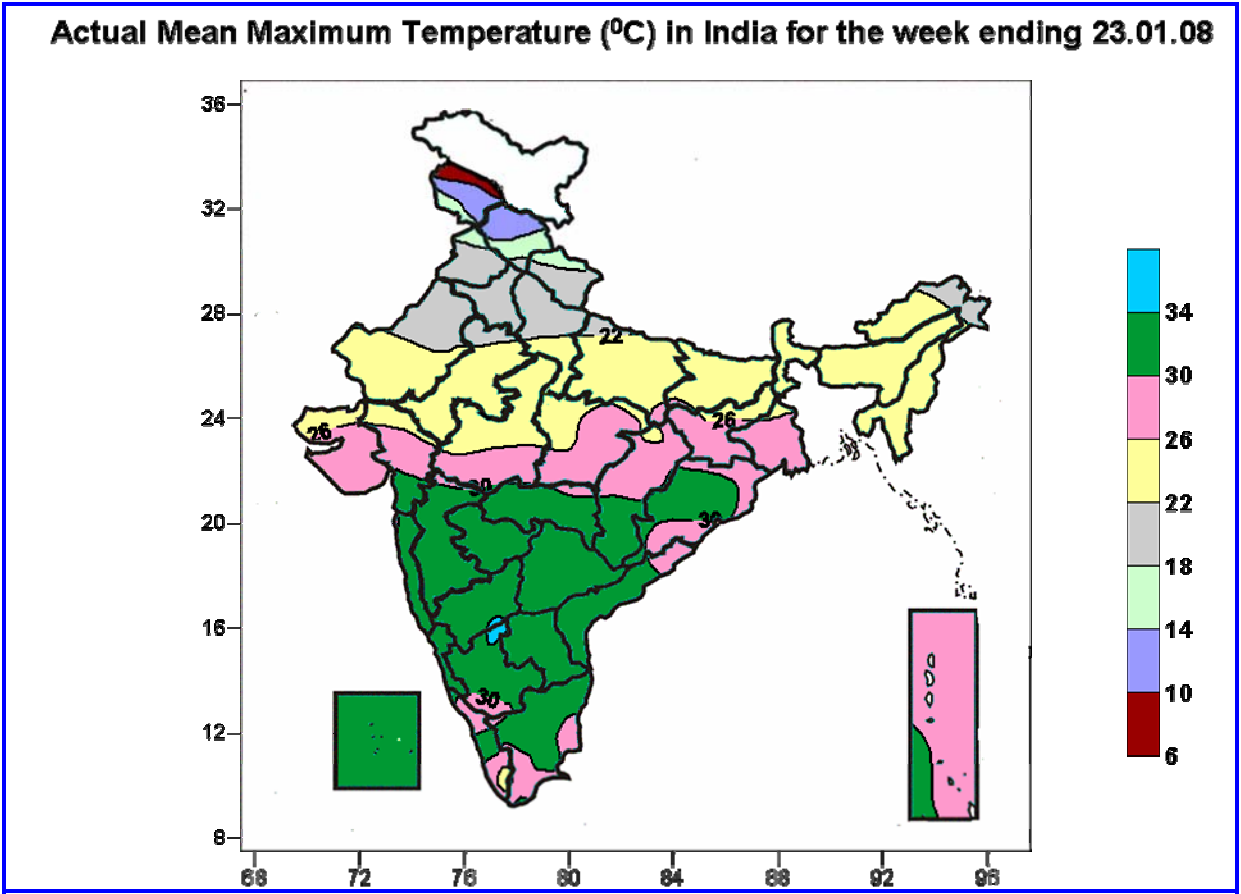
CUMULATIVE SEASONAL RAINFALL (1ST JANUARY TO 23RD JANUARY, 2007)

Rainfall was excess/normal in 6; deficient/scanty in 12 and no rain in 18 out of 36 meteorological subdivisions (Actual: 5.9 mm, Normal: 4.2 mm and Departure: 41 %).

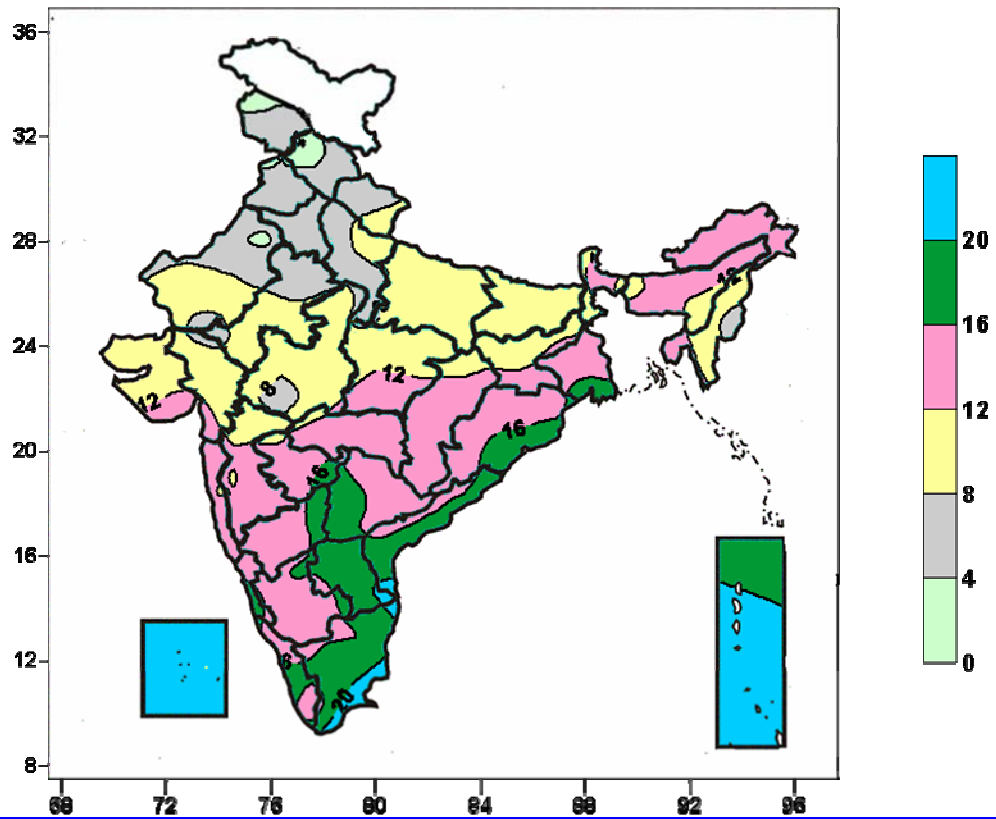
OUTLOOK FOR THE WEEK ENDING ON 30TH JANUARY, 2008.

- Scattered precipitation is likely over Northeast India during first half of the week and isolated thereafter.
- Isolated to scattered rain/thundershowers are likely over east India during first half of the week.
- Isolated rain/snowfall is likely over western Himalayan region during first half of the week.
- The prevailing cold wave conditions over some parts of northwest India, north Rajasthan and Uttar Pradesh are likely to abate after 2 days.

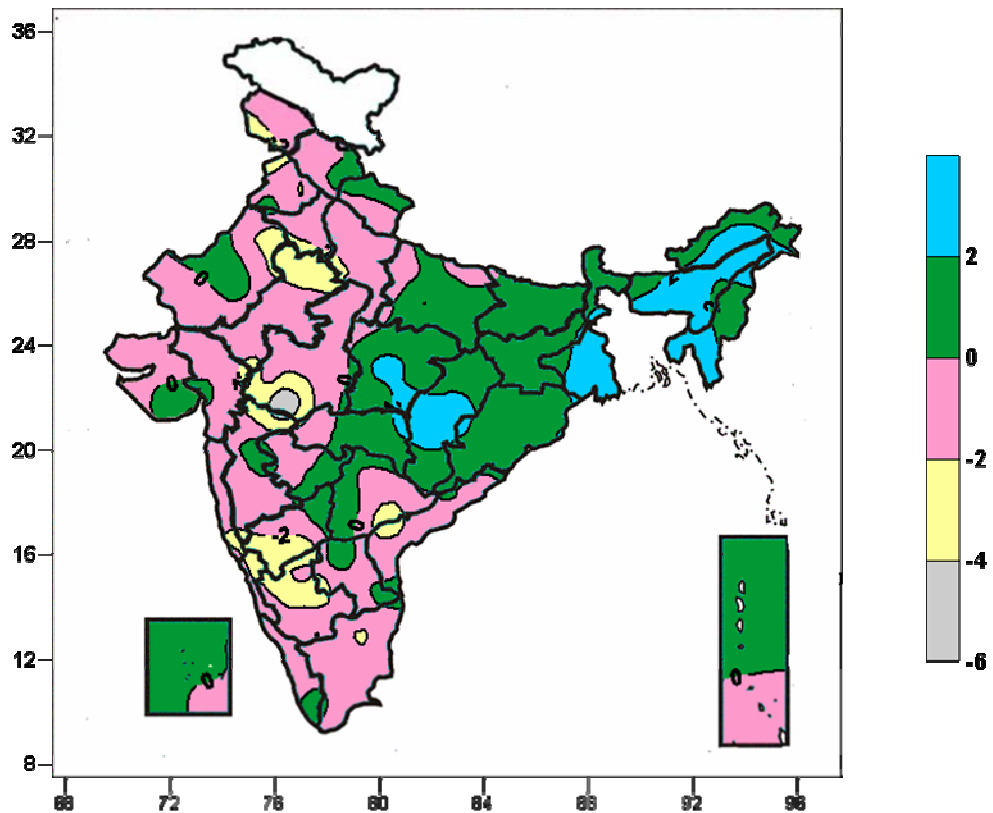
Contour maps for the week ending 23rd January, 2008



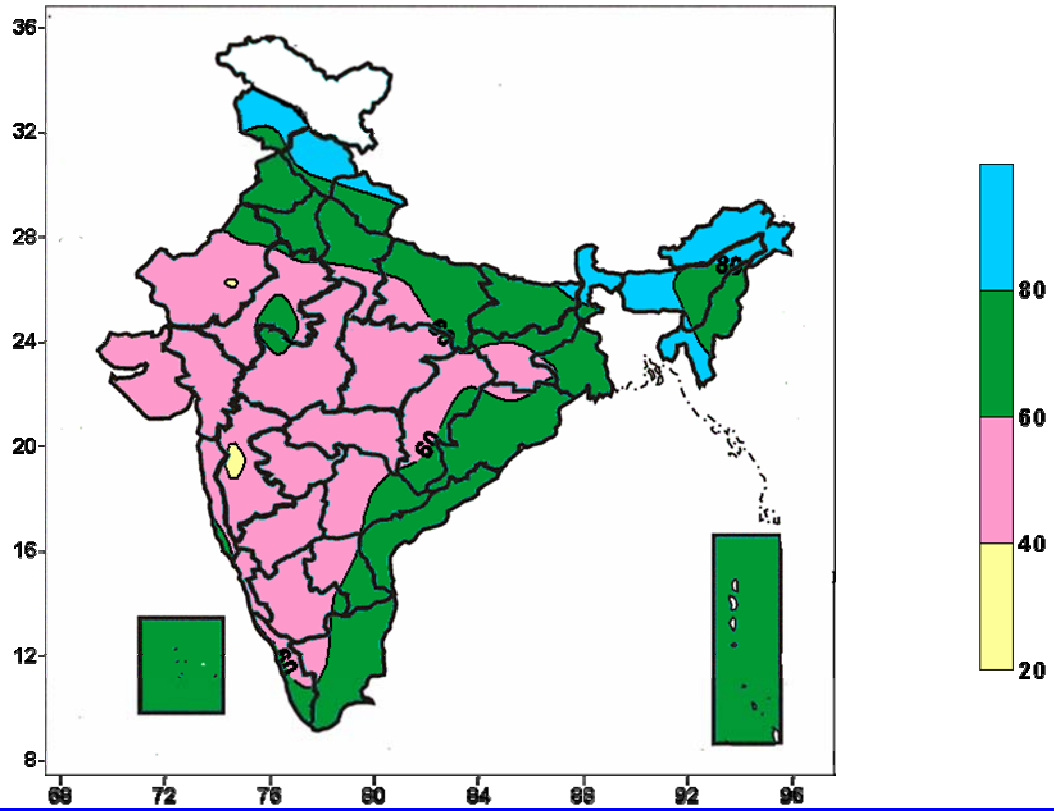
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 23.01.08



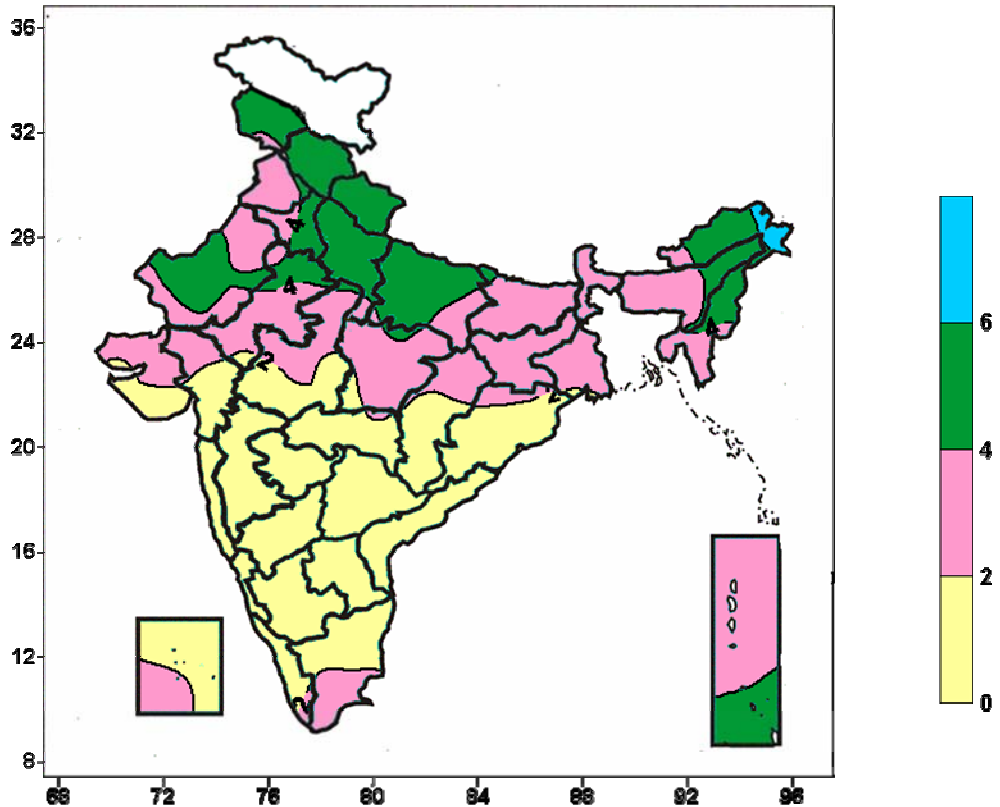
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 23.01.08



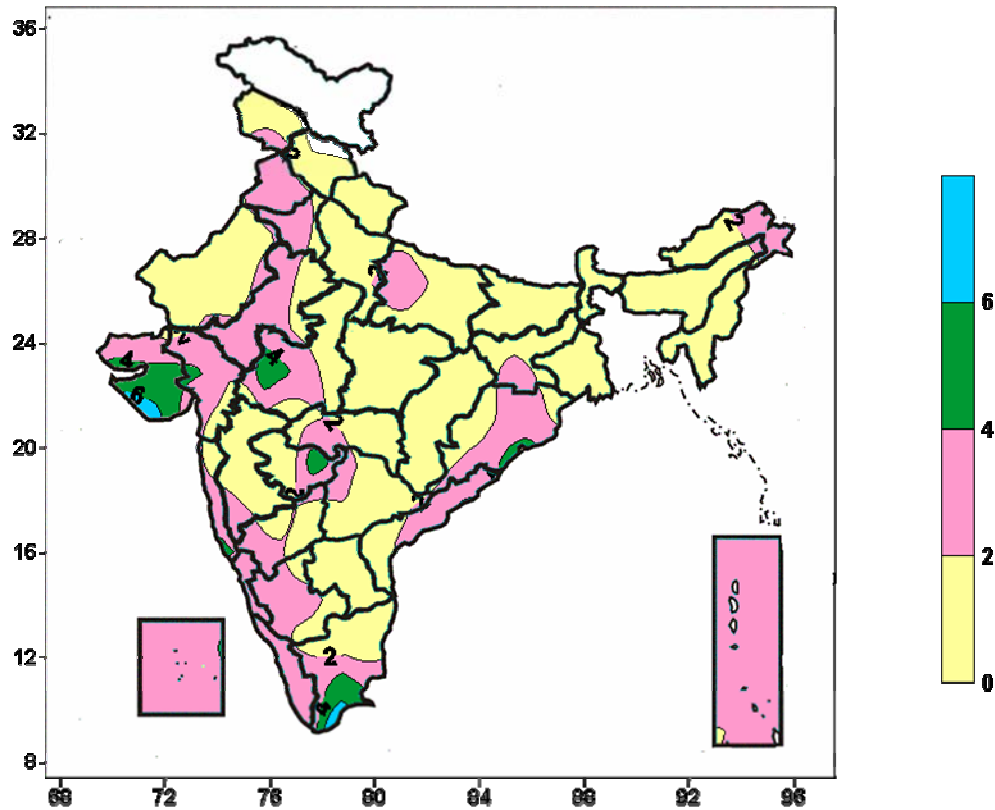
Relative Humidity (%) over India for the week ending 23.01.08



Cloud amount (okta) over India for the week ending 23.01.08



Wind speed (knots) over India for the week ending 23.01.08



Desert Locust Forecasting



Rainfall (mm)							
Station Name	17.01.08	18.01.08	19.01.08	20.01.08	21.01.08	22.01.08	23.01.08
Amritsar	00.0	14.4	00.0	00.0	00.0	00.0	00.0
Barmer	00.0	00.0	00.0	00.0	00.0	00.0	00.0
Sriganganagar	00.0	00.2	00.0	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	00.0	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	00.0	00.0	00.0	00.0

Temperature (degree Celcius)							
Station Name	17.01.08	18.01.08	19.01.08	20.01.08	21.01.08	22.01.08	23.01.08
Amritsar	11.5	14.0	09.0	08.5	08.0	07.5	07.5
Barmer	22.0	17.5	15.0	15.0	13.5	14.0	-
Sriganganagar	15.0	13.5	10.5	10.5	09.0	08.5	-
Jaisalmer	22.0	14.0	13.5	13.0	13.0	13.5	-
Kota	22.0	22.0	16.5	14.5	12.5	12.0	-
Deesa	20.0	18.5	14.0	16.0	15.5	16.0	15.0
Churu	-	-	-	-	-	-	-

Station Name	Wind													
	17.01.08		18.01.08		19.01.08		20.01.08		21.01.08		22.01.08		23.01.08	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	W	06	-	-	-	-	-	-	NNW	07	NW	03	WNW	02
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganga nagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kota	SE	02	WSW	24	-	-	-	-	NE	05	SSW	06	-	-
Deesa	SSW	16	W	22	-	-	-	-	W	05	SW	05	WNW	09
Churu	W	10	WSW	15	-	-	-	-	NNW	12	NNW	11	NNW	13

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	Vegetative	Vegetative
Rabi oilseeds	Toria			
Flowering	Fruiting			

Himachal Pradesh

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Potato	Barley	Toria	Wheat
Vegetative/ head formation Ladies finger -- Flowering/Fruiting	Sowing	Vegetative	Vegetative	Vegetative
Gram		Rapeseed and mustard		
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	Flowering	Picking	Vegetative
Autumn sugarcane	Wheat	Irrigated toria	Rabi oilseeds	
Vegetative	Vegetative	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	Vegetative	Vegetative
Mustard, rapeseed, pea lentil etc.	Potato	Wheat		
flowering / pod formation	Vegetative / tuber formation	Tillering		

Arunachal Pradesh

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

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 / Harvesting	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	Tillering			

Chattisgarh

Sugarcane	Rapeseed, mustard	Toria	Tomato, Brinjal, Chilli	Wheat
Vegetative (autumn – Early vegetative)	Branching	vegetative / flowering	Vegetative / flowering	Tillering
Rabi crops	Early sown rabi crops	Potato	Early sown potato	
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 / flowering		

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	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
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
