



Summary of Agromet Advisory Services for different States of the country
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(For the period 18th January to 22nd January, 2007)

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

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

Punjab

Cold wave conditions are prevailing in some parts of the State and likely to abate in next 48 hours.

Isolated rain / thundershowers are likely over the State. Night temperatures are likely to increase by 2-3⁰C during next 24 hours and fall there after over the plains. Fog is also likely at some places in the plains.

Advisories

- Make necessary arrangements to protect the *rabi* oilseed, gram, lentil, wheat and vegetable crops from cold injury. Apply light irrigation and arrange for smoke around the field to prevent cold injury. Wipe out water droplets on the leaves by pulling rope from two sides of the field.
- There was no significant rainfall in the State during last few weeks and rain / thundershower is likely to occur only at isolated places for the next three days. Under the circumstances, apply irrigation in sugarcane, *rabi* oilseeds, gram, lentil and wheat.
- Attack of late blight is reported in potato. In order to check further spread of the disease, spray Dithane M-45 @ 500 g / acre.
- Monitor *rabi* oilseeds for aphids attack and if the pests population crosses ETL, spray Dimecron @ 250 ml / ha or Methyl Demiton @ 850 ml / ha.
- Harvesting of early maturing varieties of toria may be completed and mid varieties may be continued.

Haryana

Cold wave conditions are prevailing in some parts of the State and likely to abate in next 48 hours.

Isolated rain / thundershowers are likely over north Haryana & mainly dry weather is likely over remaining region of Haryana. Night temperatures are likely to increase by 2-3⁰C during next 24 hours and fall there after over the plains. Fog is also likely at some places in the plains.

Advisories

- Make necessary arrangements to protect the *rabi* oilseed, gram, lentil, wheat and vegetable crops from cold injury. Apply light irrigation and arrange for smoke around the field to prevent cold injury. Wipe out water droplets on the leaves by pulling rope from the two sides of field.
- There was no rainfall during last few weeks and rain / thundershowers likely to occur only at isolated places in north Haryana for the next three days. Under the circumstances apply irrigation to sugarcane, gram, lentil and wheat.
- Attack of late blight is reported in potato. In order to check further spread of the disease, spray Dithane M-45 @ 500 g / acre.
- Continue sowing of sunflower.

- Attack of **white rust**, **blight diseases** and **painted bug** and **leaf miner** pests is reported in **mustard**. Monitor the crop for the pests and if the pest population crosses ETL, undertake plant protection measures. For controlling **leaf miner**, spray Dimecron @ 250 ml / ha or Methyl Demiton @ 850 ml / ha.

Rajasthan

Weather remained dry in all divisions of the State. Night temperatures were above normal by 1° to 2°C in **Ajmer** division and remained normal in **Kota**, **Jaipur**, **Jodhpur**, **Bikaner** and **Udaipur** divisions in the State.

Mainly dry weather is likely over the State. Rise in night temperature by 2-3°C over the state during next 24 hours and fall thereafter.

Advisories

- Apply irrigation and arrange for smoke near the field in north Rajasthan to safeguard the crops from cold injury.
- Wipe out water droplets on the leaves by pulling rope from the two sides of the field.
- Apply irrigation to **mustard**, **wheat**, **gram**, **cumin** and **barley** as there was no significant rainfall during last week and mainly dry weather is likely over the state.
- Monitor **mustard** for **aphid** attack and if the pest population crosses ETL, dust Methyl parathion 2% or spray Endosulfan 35 EC or 50 EC @ 1.25 lit / ha.
- Also monitor **gram** for **pod borer** and **cumin** for **aphid** attack and if the pest population crosses ETL, undertake plant protection measures.

Uttar Pradesh

Weather was mainly dry in all divisions of the State.

Mainly dry weather is likely over the State. Night temperature are likely to increase by 2-3°C during next 24 hours and fall thereafter over the plains in the State. Fog is also likely at some places in the plains of West U.P.

Advisories

- Make necessary arrangements to protect the standing crops from cold injury. Apply light irrigation and arrange for smoke around the field to prevent cold injury. Wipe out water droplets on the leaves by pulling rope from the two sides of field.
- There was no significant rainfall during last few weeks and mainly dry weather is likely over the State for the next three days. Under these circumstances, apply irrigation to bring the soil moisture to its field capacity in **rabi oilseed**, **pulses** and **winter vegetable** crops.
- Monitor **mustard** crop for **sawfly** and **mahu** and if the pests population crosses ETL, spray Endosulphan @ 1.25 litres / ha to control the pests.
- Monitor **mango** for **hopper** and if the pests population crosses ETL, spray Monocrotophos @ 1 ml / litres of water to control the pests.
- To control **bukani** diseases in **pea**, spray the solution of Wetttable sulphur @ 2 kg or Carathane 600-700 ml / ha.
- Harvesting of **sugarcane** and **toria** may be continued.

Himachal Pradesh

The weather was mainly dry during the period.

Snowfall is likely at a few places in the state during the next 48 hours.

Advisories

- As there was no significant rain during last few weeks over the State, apply irrigation to **vegetable** crops, **gram**, **rapeseed** and **mustard**, **wheat** and **barley**.
- Complete land preparation and nursery sowing and transplanting of **cauliflower** and **cabbage** in low and mid hills, sowing of **raddish**, **turnip** and **carrot**.
- Apply first split dose of N @ 25 – 30 kg / ha at crown root initiation stage (20 – 25 days after sowing) and second split dose of N @ 25 – 30 kg / ha at tillering stage (40 – 45 days after sowing) of **wheat**.
- There is mild chance of attack of **pod borer** in **gram**. If attack crosses economic threshold level, spray Monocrotophos (Monocil 36 EC/SL) or Carbaryl 50 WP (Sevin) @ 875 ml or Endosulfan 35 EC (Thiodan/Hindon/Endocel) @ 1250 ml in 625 litres of water per ha. Spraying can be repeated at 15 days interval, if the pest still persists.
- To control grassy weeds in **barley**, spray isoproturon @ 0.75 kg / ha and for broad leaved weeds, 2,4-D Sodium @ 0.75 kg / ha (Fernoxone or Bathua Powder) in 700-800 litres of water at 2-3 leaf stage of weeds per hectare.
- Undertake nursery preparation of **onion** with N – 53 variety
- As there is chance of occurrence of frost, farmers are advised to arrange for smoking around the field to save the crops from frost.
- Wipe out water droplets on the leaves by pulling rope from the two sides of field. This will prevent formation of ice crystals during night time.

Uttarakhand

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

Snowfall is likely at isolated places over the State during next 48 hours.

Advisories

- Apply irrigation to **mango**, **potato** and **wheat** crops as there was no rainfall during last few weeks in the State.
- Carryout intercultural operation, application of fertilizer and plant protection measures to **wheat** and **potato** crops.
- As there is chance of occurrence of frost, farmers are advised to arrange for smoking around the field to save the crops from frost.
- Apply light irrigation to prevent frost injury in **potato** and **wheat**.
- Wipe out water droplets on the leaves by pulling rope from the two sides of field. This will prevent formation of ice crystals during night time.
- Continue harvesting matured crops of **toria**, **sugarcane** and **pea**.

Jammu & Kashmir

Weather remained dry in J & K state.

Snowfall is likely at a few places over the State.

Advisories

- Apply irrigation and arrange for smoke near the field to safeguard the crops from cold / frost injury.
- Wipe out water droplets on the leaves by pulling rope from the two sides of field. This will prevent formation of ice crystals during night time.
- Apply irrigation to **mustard**, **wheat**, **peas** and **rabi** vegetables as there was no rainfall during last week.

- Rouge out late blight affected crops of potato in Jammu division to prevent further spread of the disease.
- Due to congenial weather, there are chances of termite attack in wheat. Apply Aldrin @ 5 litres / ha along with irrigation water in case of attack.
- This is proper time for transplanting of tomato, onion and knoll-kholl.

Delhi

Weather remained dry during the period.

Mainly dry weather is likely over the state. Night temperature is likely to increase by 2-3⁰C during next 24 hours and fall thereafter over the plains. Fog is also likely at some places in the plains.

Advisories

- As there was no significant rainfall during last few weeks and mainly dry weather is likely over the State for next three days, apply irrigation to early sown vegetable crops and also to barley, gram, mustard and wheat to bring the soil moisture to its field capacity.
- Apply first irrigation at crown root initiation stage (20 – 25 days after sowing), second irrigation at tillering stage (40 – 45 days after sowing) and third irrigation at 60 – 65 days after sowing of wheat.
- Prepare land and perform transplanting of onion seedlings.
- Apply first split dose of N @ 25 – 30 kg / ha at crown root initiation stage (20 – 25 days after sowing) and second split dose of N @ 25 – 30 kg / ha at tillering stage (40 – 45 days after sowing) of wheat.
- To control wild oats and *Phalaris minor* in wheat crops, use isoproturan 75% W.P. @ 1 Kg / ha and 2, 4-D AMIEN salt 58 EC @ 750-1000 ml / ha for controlling broad leaved weeds after 28-35 days of sowing.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Weather was dry over the State during the period.

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall in the state during last few weeks and mainly dry weather is likely over the State for the next three days. Under the circumstances, apply irrigation to plantation crops to bring the soil moisture to its field capacity.
- Stop irrigation 15 days prior to harvest of mundakan rice. Start harvesting the matured crop.
- Attack of pseudo stem weevil is reported in banana. In endemic areas, first remove the dry outer sheath of the pseudostem of the plant and spray Carbaryl @ 0.2%. Spraying / drenching may be done on all leaf axils, rhizome, surrounding soil and all the bore holes of pseudostem, made by larvae. Repeat the treatment after 3 weeks if infestation persists.
- Attack of red palm weevil insect is reported in coconut. Fill the leaf axils with 25 gm Sevidol 8G and fine sand 200 gm for controlling red palm weevil.

Tamilnadu

Mainly dry weather prevailed over Coastal Tamilnadu and dry weather over Interior Tamilnadu on 15th and dry weather over the State on 16th and 17th January.

Mainly dry weather is likely over the State.

Advisories

- Apply irrigation to the **rice, millets, sunflower, cotton and groundnut** as there was no rainfall for the last few weeks and dry weather is likely to prevail for the next three days.
- Start land preparation and sowing of **maize and rice fallow pulses**. Undertake planting of **early sugarcane**.
- Continue land preparation and sowing of nursery for **thaladi rice**.
- Monitor **groundnut** for **red hairy caterpillar** and **leaf miner** and if the pest population crosses ETL, spray Monocrotophos @ 625 ml / ha to control **red hairy caterpillar**. Dust 4% Carbaryl or spray Methyl demeton @ 0.02% to control **leaf miner**.

Karnataka

Dry weather prevailed over the State on all days.

Mainly dry weather is likely over the State.

Advisories

- Apply irrigation to **jowar, sunflower, wheat and maize** as there was no rainfall during last few weeks and dry weather is likely to prevail for the next three days.
- Undertake intercultural operations in **wheat and sugarcane** to keep the field weed free.
- Undertake transplanting of **summer rice** in the main field. Maintain thin film of water at the time of transplanting.

Andhra Pradesh

Dry weather prevailed over the State during the period.

Mainly dry weather is likely to prevail over the State.

Advisories

- There was no significant rainfall during last few weeks over the State and dry weather is likely to prevail over the State for the next three days. Under the circumstances, apply irrigation to **rabi** crops like **gram, maize, red gram and groundnut** to bring the soil moisture to its field capacity.
- Continue transplanting of **rabi rice**. Maintain thin film of water at the time of transplanting in the main field.
- Attack of **stem borer** is reported in **rice** nursery in West Godavari district. Spray Monocrotrphos @ 2ml / liter of water to control the pests.
- Attack of **Maruka stem borer** is reported in **red gram**. Spray Dichlorovos @ 1ml + Chlorypyriphos @ 2.5 ml / liter of water to control the pest.

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

Assam

Light rain occurred at isolated places on 15th & 16th and Weather was mainly dry on 17th January over the State.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rain during last few weeks and mainly dry weather is likely over the State for next three days, apply irrigation to **wheat, rapeseed and mustard, potato, pea, lentil** and early sown **vegetables**.
- Continue harvesting of **sugarcane and arhar**. Red rot infested **canes** should be harvested early and field should

be newly planted and rotooning should be discouraged.

- Apply second split dose of N @ 25 – 30 kg / ha at tillering stage (40 – 45 days after sowing) of **wheat**.
- Mild incidence of **red rot** in **sugarcane**, **pod** and **apion borer** in **arhar**, **aphids** and **saw fly** in **mustard** and **late blight** in **tomato** is reported in a few localities.
- Monitor aphids and saw fly in **mustard** and if crosses economic threshold level, spray Rogor or malathion @ 2ml per litre of water.
- Monitor late blight of **tomato** and if crosses economic threshold level, spray Indofil M-45, alternatively Indofil Z-78 @ 25 gm in 10 litres of water.
- There is mild chance of attack of **aphids** and **stem borer** and **leaf blight** and **leaf spot** diseases in **wheat**. Apply Dimecron 100 E.C. @ 0.5 ml per litre of water or Malathion 50 E.C. @ 2 ml per litre of water to control aphids and stem borer. For control of leaf blight and leaf spot diseases apply Diathane Z -78 @ 2.5 gm per litre of water.
- There is mild chance of attack **Hispa**, **Brown Plant Hopper** and **blast** and **sheath blight** diseases in **rice**. If crosses economic threshold level, to control Hispa and Brown Plant Hopper insecticides like Chloropyriphos 20E.C. @ 1.5 ml per litre of water or Phosphamidon @ 1ml per litre of water is to be applied. For control of Blast diseases as soon as 1 or 2 spots on leaf are seen Hinosan 50 E.C. @ 1ml per litre of water or Blitox @ 4gm per litre of water is to be applied and spraying is to be continued at an interval of 10-15 days till the diseases is controlled. For control of sheath blight diseases Carbendazim (Bavistin) @ 0.5 gm per litre of water is to be applied.
- Continue land preparation and sowing of **winter vegetables**.
- Maintain 3 – 5 cm water at tillering stage in the **rice** field.

Arunachal Pradesh

Dry weather prevailed over the state during the period.

Mainly dry weather is likely to prevail over the state.

Advisories

- There was no significant rainfall in the State during last few weeks and mainly dry weather is likely over the State for next three days. Under these conditions, apply irrigation to **winter vegetables**, **potato**, **mustard**, **wheat** and **ginger** crops.
- Intercultural operation may be continued in **mustard**, **ginger** and **winter vegetables**.
- Monitor **mustard** crop for aphid infestation. The crop should be protected from aphids by spraying of Metasystox (1ml per liter water) or neem based insecticide (2 ml / litre of water) if crosses economic threshold level.

Bihar

Weather remained dry.

Mainly dry weather is likely to prevail over the state. Rise in night temperature by 2-3⁰C over the state during next 48 hours and fall thereafter.

Advisories

- There was no rainfall during last few weeks and mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation to **vegetables**, **maize**, **pulses**, **oilseeds** and **wheat**.
- Apply split dose of N @ 25 – 30 kg / ha as top dressing at tillering stage (40 – 45 days after sowing) of **wheat**.
- There is mild chance of attack of **late blight** attack in **potato**. If **late blight** attack crosses economic threshold level, spray Mancozeb @ 2 kg / ha or Mancozeb mixed with Metalaxyl @ 2 kg / ha. 2-3 spraying may be

required at an interval of 15 days.

- There is mild chance of attack of **blight** in **pulses**. If **blight** attack crosses economic threshold level, spray Mancozeb mixed with Carbendazim which is available in market or saaf @ 2kg/ha.
- There is mild chance of attack of **aphids** in **rai** and **sarson**. If attack of **aphids** crosses economic threshold level, spray Imidachlorpid @ 100ml / ha or acephate @ 800 g / ha in evening hours.
- Prepare land and start sowing of summer vegetables like **bhindi**, **bottle gourd**, **sponge gourd** and transplanting of **boro rice**. Transplant 2 – 3 plants per hill in **rice** field.

Jharkhand

Weather remained mainly dry.

Mainly dry weather is likely over the state. Rise in night temperature by 2-3⁰C over the state during next 48 hours and fall thereafter.

Advisories

- There was no rainfall during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply irrigation to bring the soil moisture to field capacity in **vegetables**, **maize** and **potato**, **pulses**, **oilseed** and **wheat** crops.
- Continue field preparation and sowing of summer vegetables like **pumpkin**, **Kadima**, **Khira**, **watermelon**, and **kharbooj**.
- Apply split dose of N @ 25 – 30 kg / ha at tillering stage (40 – 45 days after sowing) of **wheat**.
- If early Blight appears in **potato** and crosses economic threshold level, it may be protected by spraying of Mancozeb (2.5 gm per liter of water) or Ridomil (1.5gm per litre).
- **Beans**, **pulses** and **oilseed crops** may be affected by aphids. If aphid population crosses economic threshold level, the crops are to be protected by application of neem based insecticide Nimarine or Venguard @ 5ml per litre water or Metasystox @ 1 ml / litre of water.
- There is mild chance of attack of pod borer in **arhar**. If crosses economic threshold level, spray Monocrotophos @ 1ml / litre of water.

Sikkim

Sky remained generally cloudy during the period. Very light rain occurred on 15th, 16th and 17th January over East Sikkim. Rainfall was deficient during the period.

Mainly dry weather is likely over the State.

Advisories

- There are chances of cold injury due to anticipated fall in night temperature. Undertake the following measures to overcome cold injury.
 - Apply irrigation and arrange for smoke near the field to safeguard the crops from cold injury.
 - Wipe out water droplets on the leaves by pulling rope from the two sides of field.
- Apply irrigation to **vegetables**, **mustard** and **wheat** as there was no significant rainfall during the last few weeks and dry weather is likely to prevail over the state for the next three days.
- Monitor **rabi vegetables** for pests like **leaf eating caterpillars** and if the pest population crosses ETL, undertake plant protection measures.
- Monitor **orange** for **trunk borer** and plug the holes made by the pest to prevent further damage. Remove parasitic weeds over grown up tree.

West Bengal

During the period on 17th very light rain occurred at a few places with rather heavy falls at an isolated places in Gangetic West Bengal. Weather remained dry elsewhere during the period.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in the State during last few weeks and mainly dry weather is likely over the State for next three days, apply irrigation to **sugarcane, rapeseed and mustard, gram and lentil, wheat and potato** crops.
- Apply second split dose of nitrogenous fertilizer (25 – 30 kg N / ha) at 40 – 45 days after sowing at tillering stage of **wheat**.
- To check Boron deficiency in **wheat** spray Borax @ 5 g / litre of water on the standing crop.
- Uproot or rogue out and burn the wrinkle leaf affected plants of **potato**. The disease is spread by white fly. Spray dimethoate @ 2 ml per litre of water to control white fly.
- Land should be prepared and transplanting of **boro rice** may be carried out. 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.
- To avoid cold injury in **rice** seed bed, immerse the field with water over night and drain out in the morning.
- There is mild chance of attack of brown spot disease in **rice** nurseries. If crosses economic threshold level, spray ediphenphos 50% @ 1 ml or triamiphos 48% @ 1 ml or carbendazim 50% @ 1 g to manage the disease. 750 litres of water is required for spraying 1 ha of land.

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

Gujarat

Weather remained dry during the period.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rain in the State during last few weeks and weather will be mainly dry over the State for next three days, apply irrigation to **pre-monsoon irrigated cotton, Kharif cotton, castor, mustard and wheat** to bring the soil moisture to field capacity.
- Continue harvesting of already matured crops of **sugarcane**. Harvest the crop when brix reading of sugarcane is 19 or more unit.
- Prepare the seed bed for raising **rice** nursery. Give seed treatment with Amisan or captan @ 3 gms per kg seeds to prevent fungal diseases. To control seed borne diseases soak the seeds 8 to 10 hours in mixture of 6 g streptocycline and 12 g mercury compound in 25 liter water. Dry the seeds and use for nursery.
- There is mild chance of attack of aphids, mustard saw fly and jassids in **mustard**. If aphid population exceeds economic threshold level, spray pesticides phosphamidon @ 4 ml or dimethoate @ 10 ml or monocrotophos @ 12.5 ml in 10 liter water as per requirement. Second spray 10 to 15 days after first spray if required or dust the methyl parathion 2% powder or quinalphos 1.5 % @ 25 kg / ha.
- Apply first split dose of N @ 25 – 30 kg / ha at crown root initiation stage (20 – 25 days after sowing) and second split dose of N @ 25 – 30 kg / ha at tillering stage (40 – 45 days after sowing) of **wheat**.

Chhattisgarh

Weather remained dry in the State during the period.

Mainly dry weather is likely over the State.

Advisories

- As there was no rainfall in all the districts during last few weeks and mainly dry weather is likely over the State for next three days, apply irrigation to **sugarcane, vegetables, gram, mustard, potato, linseed, safflower** and **wheat** and also to early sown **sunflower** wherever crops are at vegetative stage.
- Continue preparation of land and sowing of **sunflower** and planting of new crop of **sugarcane**.
- Select varieties from CO-62175, C.O.L.K.-8001 etc. for planting of **sugarcane**.
- Apply second split dose of N @ 25 – 30 kg / ha at tillering stage (40 – 45 days after sowing) of **wheat**.
- Undertake earthing up in **potato** crop.

Maharashtra

Dry weather prevailed all over the State.

Mainly dry weather is likely over the State.

Advisories

- As there was no rain during last few weeks in the State and mainly dry weather is likely over the State for next three days, apply irrigation to **rabi jowar, safflower, rabi maize, sunflower, potato, onion, gram, sugarcane (Pre-seasonal)** and **wheat**.
- Inter cultural operation may be done 2 to 3 times in **non-irrigated Jowar** to preserve moisture in the field.
- Second dose of 40 kg Nitrogen / ha may be applied to late sown **wheat** after weeding.
- Second dose of 136 kg Nitrogen / ha may be applied after 6 to 8 weeks from planting of **sugarcane (Pre-seasonal)**. Dose may be given with 1 kg Neem cake powder in 6 kg Urea.
- Second dose of 50 kg Nitrogen / ha may be applied to **potato** before irrigation.
- To increase pollination at flowering stage in **sunflower**, hand covered with woolen cloth may be moved 3 to 5 times on floral disc smoothly day after day early in the morning.
- Mild incidence of **White Woolly Aphids** in Aurangabad and Latur & **Pyrilla, White fly & mealy bug** in Nashik and **white fly** in Latur division in sugarcane, **Aphids and Jassids** in Nagpur and Aurangabad and also **Lalya** disease in Amravati, Aurangabad and Nagpur and **Boll worm** in Amravati division in cotton and **leaf roller** in Nagpur and Aurangabad, **pod borer** in Amravati division in tur, **Aphids and Leaf cater pillar** in Nashik division and **Sugary disease** in Kolhapur division in **rabi jowar**, **Aphids in Latur & Aphids & Jassids** in Amravati division in safflower, **Rust** in Kolhapur division in wheat, **Pod borer** in Pune, Latur, Kohlapur, Amravati and Nashik division in gram and **Hairy cater pillar** in Kohlapur division in sunflower is reported.
- Monitor infested plant by **Sugary disease, aphids in rabi jowar** & if exceeds economic threshold level, spray 5% Neem extract or Diamethoate 500 ml or Methyl Dimeton 400 ml or Monocrotophos 300 ml / ha in 500 liter water.
- Monitor Aphids in **Safflower** and if exceeds economic threshold level, spray 5 % Neem extract or spray 35 EC Endosulphon @ 700 ml or 25 EC Quinolphos @ 1000 ml/ha in 500 liter water . Second spraying may be done after 15 days.
- Monitor infested plant by Rust in **wheat** and if exceeds economic threshold level, spray 75 % Mancozeb 1500 gm + Urea 20 kg/ha in 500 liter water.
- Monitor Pod borer in **gram** and if exceeds economic threshold level, spray 5 % Neem extract or spray 35 EC Endosulphon @ 1000 ml or 25 EC Quinolphos @ 1000 ml / ha in 500 liters water.

- Monitor Hairy caterpillar in **Sunflower** and if exceeds economic threshold level, spray 5% Neem extract or spray 35% Endosulphon @ 1000 ml or 25 % Quinolphos @ 1000 ml / ha in 500 liters water or dust 10% Carbaril powder or 1.5% Quinolphos powder @ 25 kg / ha.
- There is mild chance of occurrence of **blast disease** in **onion**. For the control of Blast disease, spray Blitox or Indofil M-45 @ 1250 gm/ha in 500 liter water.
- Sowing of **summer groundnut** may be done during 15 January to 12 February. For sowing select a variety from SB-11, M-13, GT-26, TAG-24, TPG-41 & Koyna. First seeds may be treated with 2.5 gm Carbendazim / kg seed & then 250 gm Rizobium and 250 gm P.S.B. / 10 kg seeds. 100 -125 kg seeds / ha may be used for sowing. 25 kg Nitrogen & 50 kg Phosphorus / ha may be applied at the time of sowing.

Madhya Pradesh

Dry weather prevailed over the State.

Mainly dry weather is likely over the State.

Advisories

- Apply irrigation and arrange for smoke near the field to safeguard the crops from cold injury.
- Wipe out water droplets on the leaves by pulling rope from the two sides of field.
- There was no rainfall in all the districts during the last few weeks and mainly dry weather is likely to prevail for the next three days over the State. Under the circumstances, apply irrigation to early sown *rabi* crops like **wheat, gram** and **mustard** to bring the soil moisture to its field capacity.
- Undertake intercultural operations like weeding in **gram, mustard, wheat, masoor, linseed** etc., to keep the field weed free.
- Monitor **gram** for **leaf eating caterpillar**. If the pest population crosses ETL, spray Monocrotophos @ 750 ml / ha.
- Monitor **mustard, masoor** and **linseed** for **mahu** insect and apply Methyl Parathion 2% dust @ 20 kg / ha to control the pest.

Orissa

Weather was dry over the State on 15th January & 16th January and rainfall occurred at isolated places over the State on 17th January.

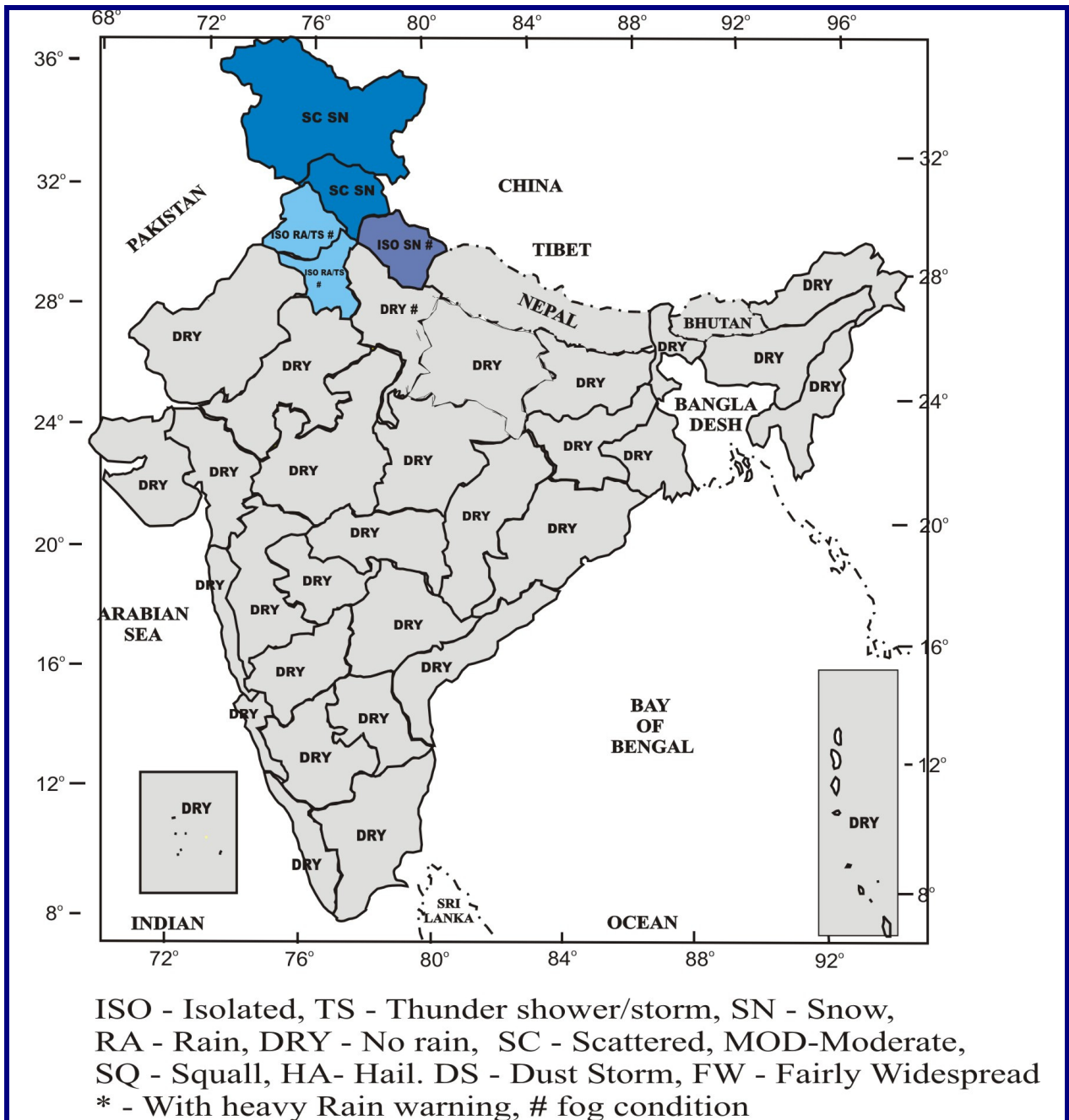
Mainly dry weather is likely over the State.

Advisories

- There was mainly dry weather except in **Balasore** and **Mayurbhanj** districts during last week and mainly dry weather is likely over the State for next 3 days. Under the circumstances, apply irrigation to **mustard, vegetables, groundnut** and **pulses** to bring the soil moisture to field capacity.
- Continue nursery preparation and sowing and transplanting of *dalua* rice.
- Monitor the **mustard** crop for **saw fly** and spray Endosulfan @ 2 ml. / litre of water to control the pest if it crosses economic threshold level (ETL).
- If **pod borer** population in **pulses (arhar)** crosses ETL, spray Endosulphan @ 2 ml per litre of water.
- If **aphid** population in **mung** crosses ETL, spray 50 ml Imidachlopid in 200 litres of water per acre.
- If **Powdery mildew** attack in **pulses** crosses ETL, spray sulfax @ 5 gm per litre in 200 litres per acre.
- Monitor **brinjal** for **Epilachna beetle** and if it crosses ETL, spray Carboryl @ 4 g/litre of water.

Forecast Map

Valid upto 21st January 07



Salient weather features for the week ending 17/01/07

METEOROLOGICAL ANALYSIS

- A weak easterly wave affected Nicobar Islands and coastal Tamil Nadu during the week.
- A cyclonic circulation at lower levels lay over Assam and neighbourhood during 11-13th January. It lay over Nagaland, Manipur, Mizoram & Tripura and neighbourhood during 14-16th January with a trough extending upto Sub-Himalayan West Bengal & Sikkim at lower levels.

- A cyclonic circulation at lower levels lay over Gangetic West Bengal & adjoining north Orissa and Jharkhand on 16th January evening. It lay over Gangetic West Bengal and neighbourhood with a trough extending towards south Orissa on 17th January.

RAINFALL

Under the influence of the above systems:

- Isolated rain/thundershowers occurred over Arunachal Pradesh and Assam during 12-14th January.
- Isolated rain/thundershowers occurred over Sub-Himalayan West Bengal & Sikkim during 15-17th and over Jharkhand, Orissa and Gangetic West Bengal on 17th January.
- Isolated rain/thundershowers occurred over Nicobar Islands on 16th January.
- Mainly dry weather prevailed over the remaining parts of the country during the week.

FOG

- Morning fog conditions prevailed at some places in Indo-Gangetic plains during 11-13th January. Isolated fog conditions prevailed during remaining days of the week.

MINIMUM TEMPERATURES

- Cold wave/severe cold wave conditions prevailed over some parts of Punjab, Haryana and north Rajasthan during the week. Cold wave conditions also prevailed over some parts of East Uttar Pradesh and Bihar during many days of the week. Minimum temperatures were below normal by 2-3°C over remaining parts of Indo-Gangetic plains during the week.
- The night temperatures were below normal by 2-3°C over remaining parts of Rajasthan during many days of the week. They were also below normal by 2-3°C over Gujarat during 14-15th January. They were normal over remaining parts of west India during the week.
- They were above normal over northeastern states by 2-3°C in the beginning of the week and became below normal by 2-3°C in the second half of the week due to gradual decrease in minimum temperature.
- They were below normal by 2-3°C over Madhya Pradesh and north Chhattisgarh during second half of the week and normal over remaining parts of central India during the week.
- They were below normal by 2-3°C at some places of the south peninsula during 14-16th January and were normal over the rest region during the week.

RAINFALL DURING THE WEEK ENDING ON 17TH JANUARY, 2007.

Rainfall was excess/normal in 2, deficient/scanty in 4 and no rain in 30 out of 36 meteorological sub-divisions (Actual: 0.4 mm, Normal: 3.9 mm and Departure: -89%).

CUMULATIVE SEASONAL RAINFALL (1ST JANUARY TO 17TH JANUARY, 2006)

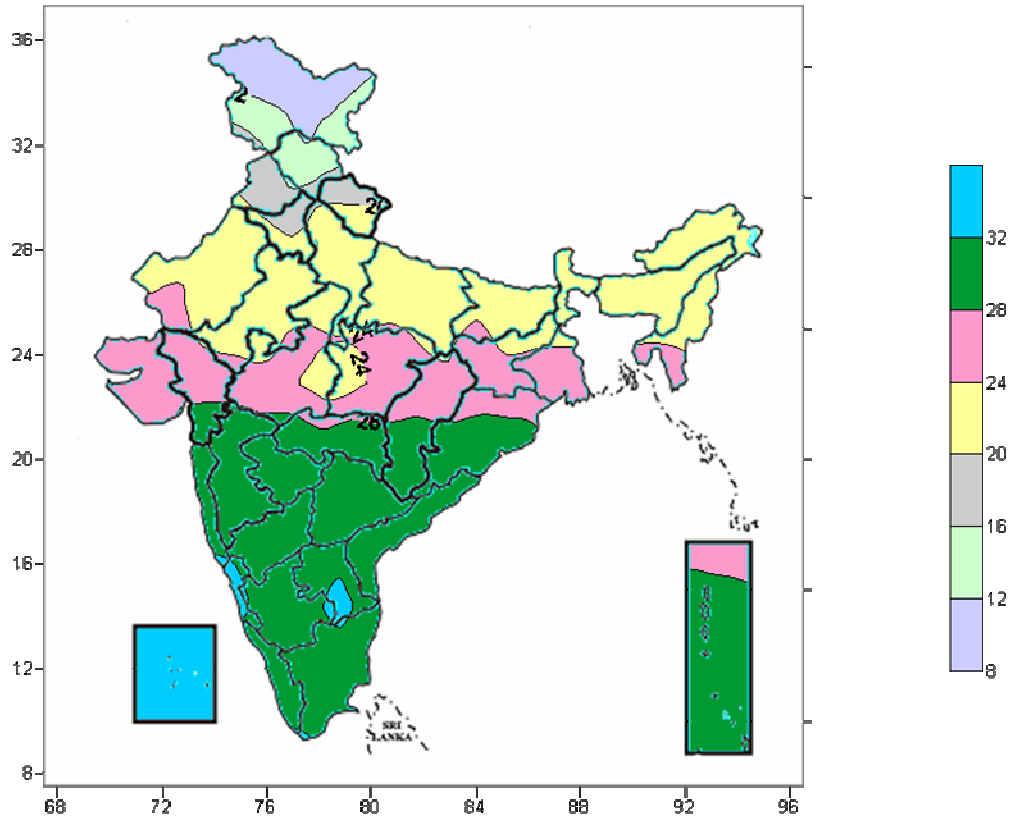
Rainfall was deficient/scanty in 7 and no rain in 29 out of 36 meteorological sub-divisions. (Actual: 0.5 mm, Normal: 10.1 mm and Departure: -95%).

OUTLOOK FOR THE WEEK ENDING ON 24TH JANUARY, 2007.

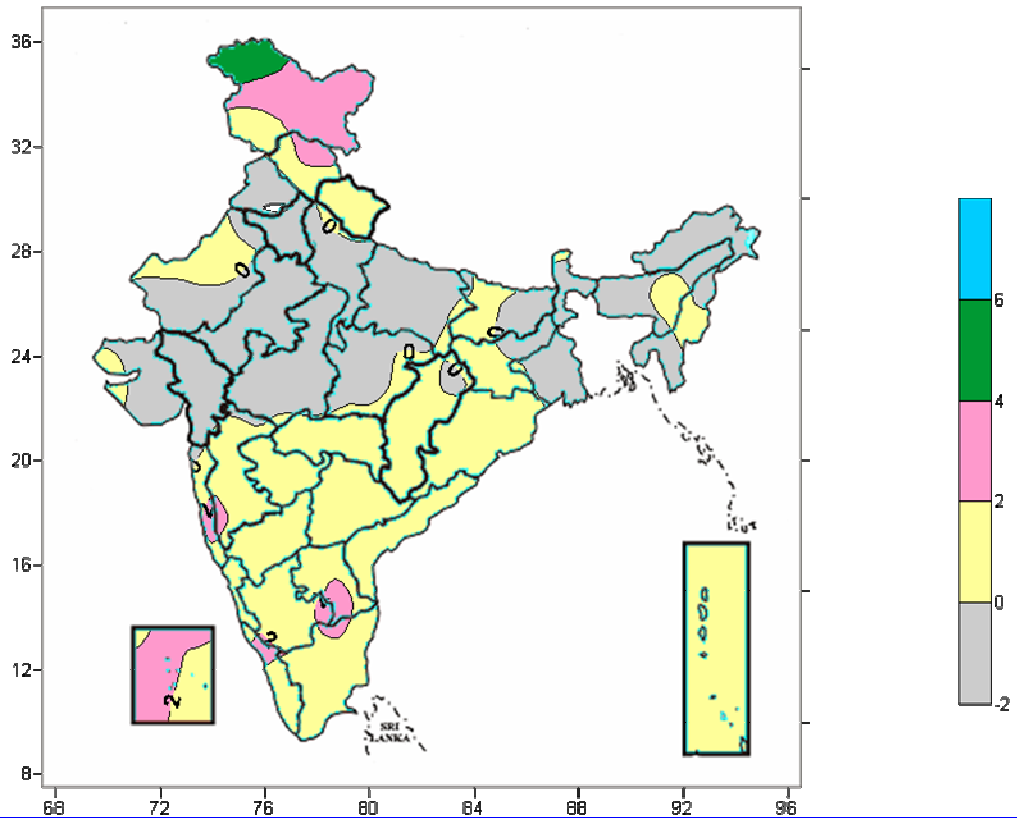
- Rise in night temperature over Indo-Gangetic plains during next 1-2 days and fall thereafter alongwith fog condition at some places.

Contour maps

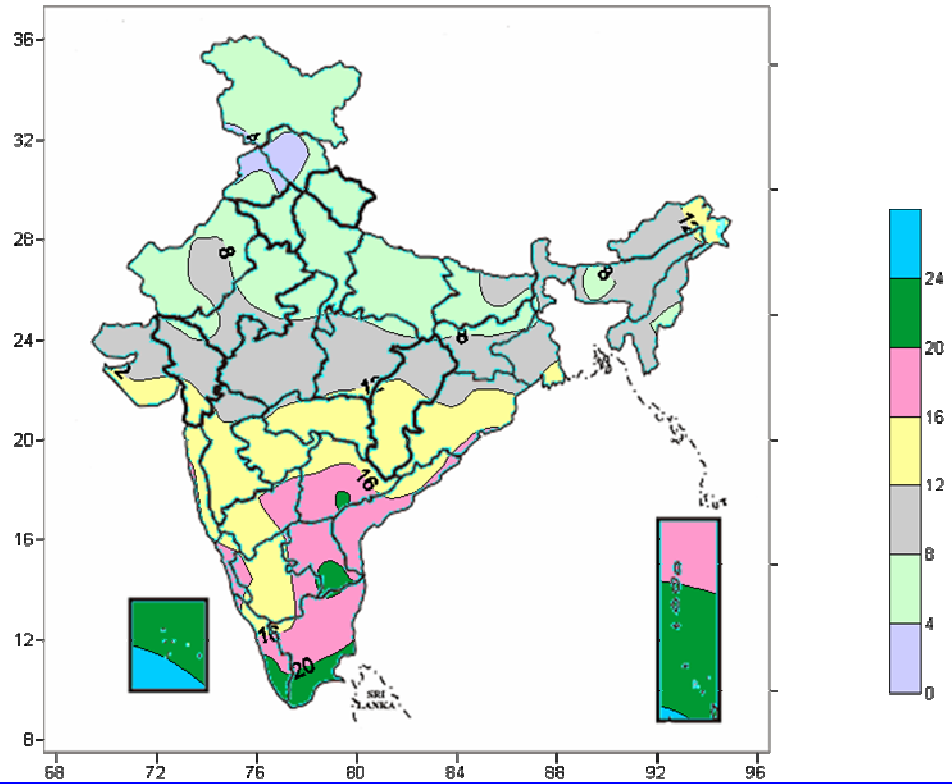
Actual mean maximum Temperature ($^{\circ}\text{C}$) in India for the week ending 17.01.07



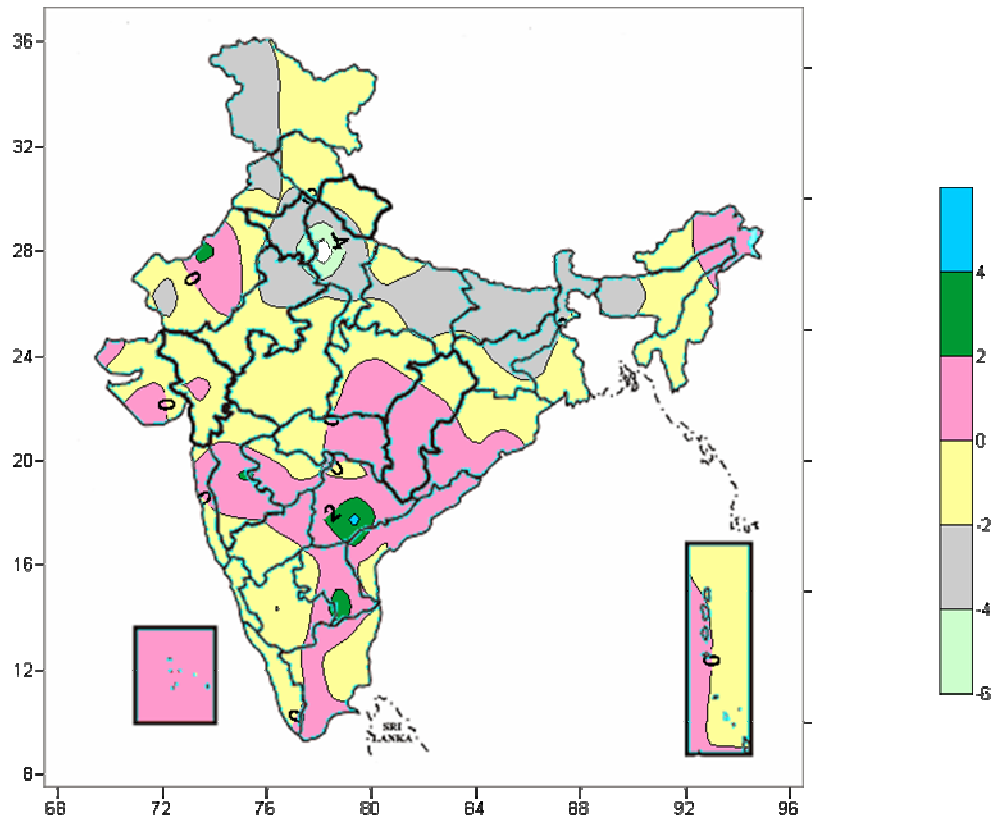
Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 17.01.07



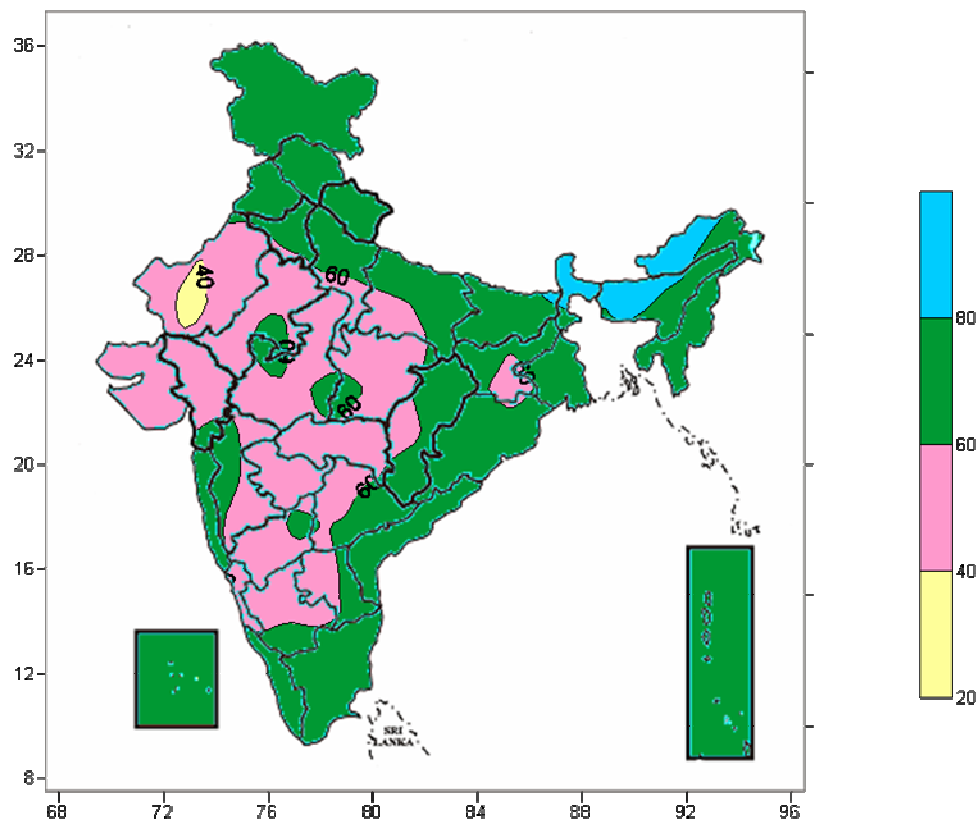
Actual mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 17.01.07



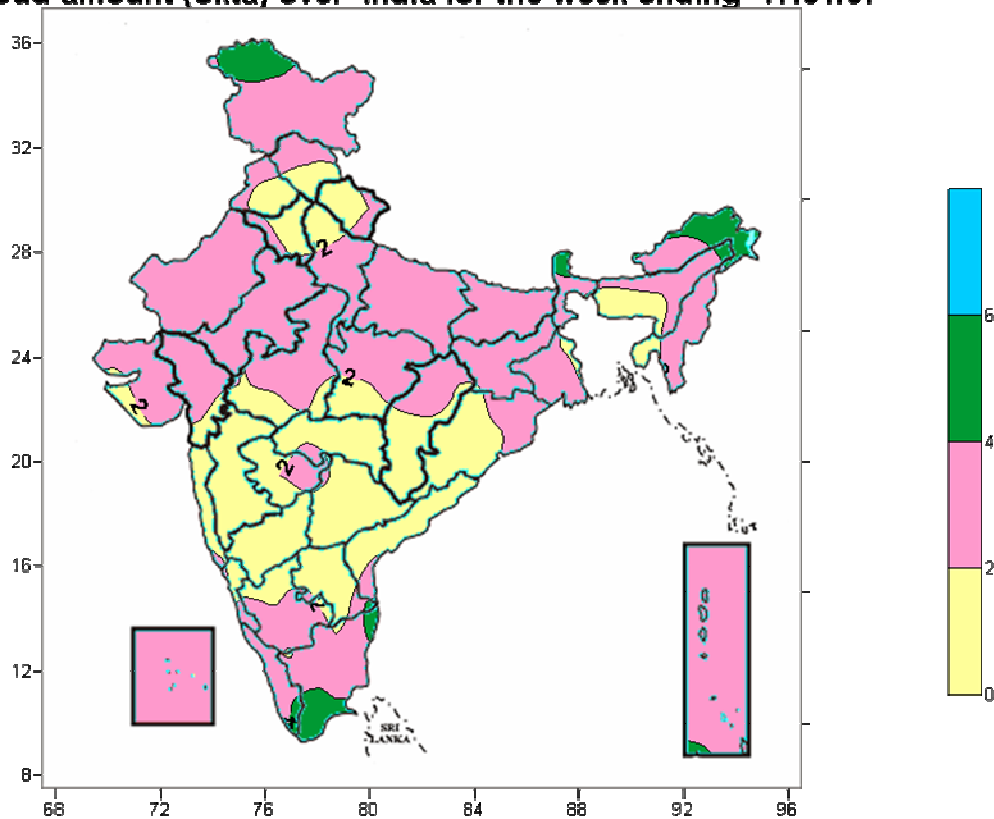
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 17.01.07



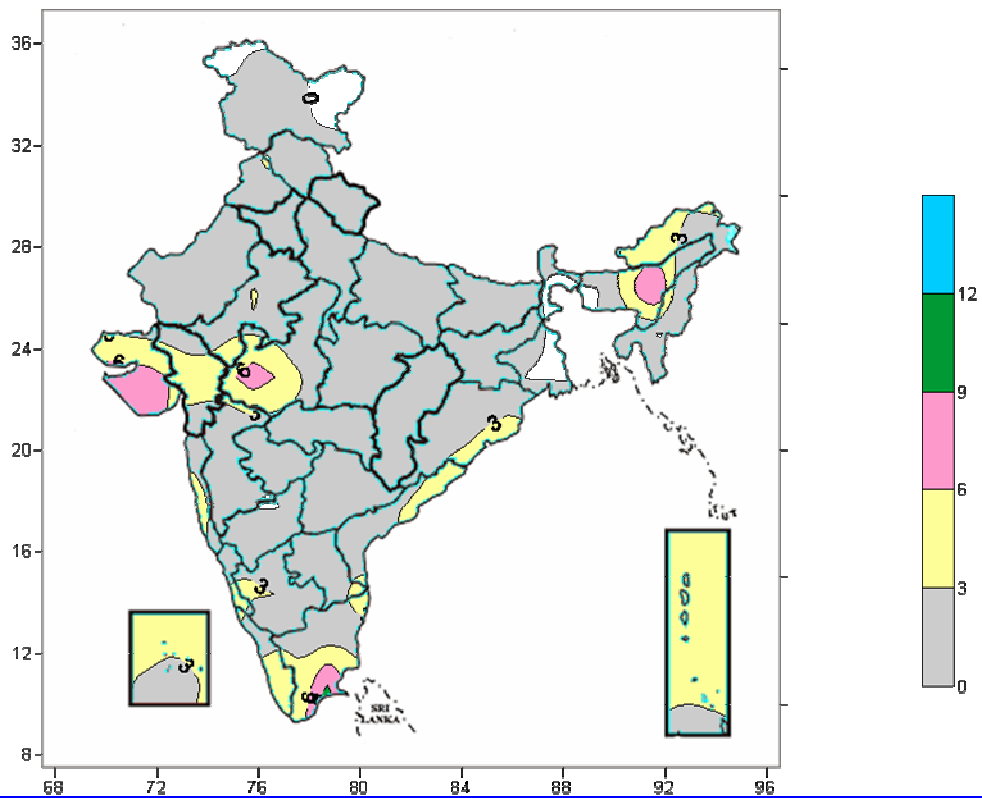
Relative humidity (%) over India for the week ending 17.01.07



Cloud amount (okta) over India for the week ending 17.01.07



Wind speed (knots) over India for the week ending 17.01.07



Desert Locust Forecasting



Rainfall (mm)							
Station Name	11.1.07	12.1.07	13.1.07	14.1.07	15.1.07	16.1.07	17.1.07
Amritsar	NIL						
Barmer							
Sriganganagar							
Jaisalmer							
Kota							
Deesa							
Churu							

Temperature (degree celcius)							
Station Name	11.1.07	12.1.07	13.1.07	14.1.07	15.1.07	16.1.07	17.1.07
Amritsar	8.5	9.0	9.5	9.0	8.0	9.0	9.5
Barmer	-	14.5	15.5	-	15.5	16.5	17.5
Sriganganagar	-	11.5	13.0	-	12.5	12.5	-
Jaisalmer	14.0	16.0	15.5	-	18.0	17.5	18.0
Kota	17.0	15.0	14.5	-	15.5	17.0	16.5
Deesa	18.0	18.5	17.5	-	18.0	19.0	-
Churu	-	-	-	-	-	-	-

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

CROP – STATE – STAGE

Delhi

Barley /Gram	Vegetables (Brinjal, Chilly, Cauliflower and cabbage, raddish, carrot,and turnip	Early sown vegetable crops	Wheat	Mustard
Vegetative	Sowing/ Transplanting	Vegetative/ flowering/ fruiting/ harvesting	Crown root initiation / tillering	Vegetative / flowering

Haryana

Horticultural crop	Sugarcane	Gram /Lentil	Rabi oilseeds	Wheat
Vegetative	Vegetative	Vegetative	Vegetative/Flowering	Tillering
Toria	Sunflower			
Harvesting	Sowing			

Himachal Pradesh

Wheat	Gram	Summer vegetables (Cauliflower, Cabbage in low and mid hills)	Vegetables (Tomato, brinjal, ladies finger)	Barley
Crown root initiation/Tillering	Vegetative	Nursery sowing /Transplanting	Vegetative/flowering / fruiting / harvesting	Vegetative
Onion	Rape seeds and Mustard		Radish, Turnip, Carrot	
Nursery preparation	Vegetative/ Flowering		Sowing	

Jammu & Kashmir

Vegetable crops	Toria / Brown Sarson	Mustard	Gram	Wheat
Vegetative	Seed development	Siliqua development	Pod development	Tillering
Vegetable crops (Tomato, Onion and knoll-kholl)	Pea / Lentil			
Transplanting	Pod development			

Punjab

Sugarcane	Rabi oilseeds	Gram/Lentil	Horticultural crop	Wheat
Vegetative	Vegetative/ Flowering	Vegetative/ Flowering	Vegetative	Tillering
Toria	Sunflower			
Harvesting	Sowing			

Rajasthan

Mustard	Wheat	Cumin	Gram	Barley
Pod formation	Tillering	Vegetative	Pod formation	Tillering

Uttar Pradesh

Wheat / Barley	Rabi pulses	Sugarcane	Mango	Winter Vegetables
Vegetative	Flowering /seed formation	Harvesting	Active growth / matured tree	Vegetative
Rabi Oilseeds(Rai and Mustard)	Toria			
Vegetative / flowering	Harvesting			

Uttarakhand

Pea	Mango/Litchi	Wheat	Sugarcane	Potato
Harvesting	Active growth	Tillering	Maturity / harvesting	Tuber growth

Assam

Early sown Vegetables	Sugarcane	Wheat	Vegetables	Potato
Vegetative/Flowering/Fruiting	Harvesting	Tillering	Land preparation / sowing	Earthingup/tuberozation
Pea and Lentil	Arhar	Rape seed and Mustard	Boro Rice	
Flowering / pod formation	Maturity/Harvesting	Flowering / pod formation	Early vegetative / tillering	

Arunachal Pradesh

Mustard	Ginger	Potato	Wheat	Winter vegetables
Vegetative/Flowering	Vegetative	Vegetative / earthing up / tuber formation	Tillering	Vegetative / flowering / fruiting / harvesting

Bihar

Summer Vegetables	Rabi vegetables	Wheat	Rabi Maize	Boro Rice
Sowing	Vegetative/Flowering/Fruiting	Tillering	Vegetative / Tasseling/Silking	Transplanting

Potato	Rabi Oil seeds (Toria, Sarson, Linseed)	Rabi Pulses (Lentil, Gram, Pea)		
Earthing up/Tuber formation	Flowering/Pod formation	Flowering/Pod formation		

Jharkhand

Rice	Rabi Maize	Wheat	Potato
Harvesting	Vegetative / tasseling / silking	Tillering	Earthing up / tuber formation
Rabi vegetables (Tomato, Cabbage, Cauliflower, Brinjal, Chilli)	Early planted vegetables	Rabi pulses and oilseeds (Gram, masoor, lentil, linseed, oat, mustard and kusum)	Rabi pulses and oilseeds (Arhar)
Vegetative / flowering / fruiting	Vegetative	Vegetative / flowering	Pod formation
Summer vegetables			
Sowing			

Sikkim

Orange	Mustard	Rabi vegetables	Wheat
---	Siliqua formation	Flowering/Fruiting	Tillering

West Bengal

Boro rice	Sugarcane	Wheat	Rapeseed and Mustard	Gram/ Lentil
Land preparation / Transpalntation	Cane development/Maturity	Tillering	Flowering /Pod formation	Flowering/ Pod formation
	Potato			
	Earthing up/tuber formation/Tuber growth			

Chattisgarh

Gram / Mustard	Vegetables (Tomato, chilli, brinjal)	Sugarcane	Wheat	Linseed, Safflower,
Vegetative / branching	Vegetative	Cane development/Maturity	Tillering	Vegetative /Branching
Sunflower	Early Sown Sunflower	Potato	New crops Sugarcane	
Field preparation / sowing	Germination / early vegetative / vegetative	Earthing up/tuber formation	Planting	

Gujarat

Mustard	Wheat	Pre-monsoon irrigated Cotton	Castor	Sugarcane
Flowering / pod formation	Early vegetative/Crown root initiation/Tillering	Boll formation / picking	Flowering / Pod formation	Maturity / Harvesting
Kharif Cotton		Summer Rice		
boll formation		Preparation of rice nursery		

Maharashtra

Sugarcane (Seasonal) (Madhya Maharashtra, Marthwada and Vidarbha)	Kharif cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Irrigated Cotton	Rabi Jowar (Madhya Maharashtra, Marathwada & Vidarbha)
cane maturity / harvesting	Boll maturity / picking	Pod maturity / harvesting	Boll maturity / picking	Flowering / grain formation
Safflower (Madhya Maharashtra, Marathwada & Vidarbha)	Wheat (Madhya Maharashtra, Marathwada & Vidarbha)	Gram (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi Maize (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)
Flowering / head formation	Tillering /Flowering	Flowering / pod formation	Tasseling / Silking/cob initiation	Flowering/Head formation
Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Potato (Madhya Maharashtra, Marathwada & Vidarbha)	Onion (Madhya Maharashtra, Marathwada & Vidarbha)	Summer Groundnut	Summer Rice (Konkan)
Sprouting / early vegetative	Earthing up / tuber formation/tuber growth	Bulb formation/bulb growth	Land preparation	Nursery preparation

Madhya Pradesh

Irrigated Wheat	Mustard	Gram	Masoor	Linseed
Flowering / Grain formation	Siliqua formation	Pod formation	Seed formation	Flowering
Wheat				
Grain formation				

Orissa

Vegetables	Dalua Rice	Mustard	Pulses	Early sown pulses
Flowering / Fruiting / Harvesting	Nursery preparation, sowing /Transplanting (in some parts)	Vegetative / Flowering	Vegetative / flowering (Mung / Kulthi)	Pod maturity
Sugarcane	Rabi Groundnut	New Sugarcane crop		
Maturity / harvesting	Flowering/Pod formation	Planting		

Andhra Pradesh

Rabi Groundnut	Rabi Maize	Gram	Rabi red gram	Rabi rice
Flowering	Vegetative	Pod formation (Prakasam)/Pod Development (Telangana, Rayalaseema)	Flowering	Transplanting

Karnataka

Sugarcane (Ratoon crop)	Rabi Wheat	Rabi jowar, Sunflower and maize	Summer groundnut and Sunflower	Summer rice
Vegetative	Grain development	Grain development/Grain maturity (Maize)	Early vegetative	Transplanting

Kerala

Rubber	Mundakan rice			
Tapping	Grain maturity			

Tamil Nadu

Rice (Navarai)	Millets	Cotton	Early & mid sugarcane	Oilseeds (Groundnut)
Tillering	Seed formation/ Development	Vegetative	Harvesting	Vegetative
Sunflower	Rice fallow pulses (Blach gram and Green gram)	Maize	Sugarcane (Early)	
Vegetative	Sowing	Sowing	Planting	
