

# Summary of Agromet Advisory Services for different States of the country Issued by

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

# Thursday, 7th February, 2008

(For the period 7<sup>th</sup> to 11<sup>th</sup> February, 2008)

The extended version of the bulletin is also available at <a href="http://imdagrimet.org">http://imdagrimet.org</a>

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

# **Punjab**

- Rainfall occurred at many places on 4<sup>th</sup> and 6<sup>th</sup> February. Weather remained mainly dry on 5<sup>th</sup> February. Light to moderate rain/ thundershower have occurred almost in all districts in past 24 hrs.
- Rain/thundershowers are likely at a few places over State during next 24 hours and mainly dry weather thereafter.
- Fall in minimum temperatures by 2-4°C over the region from 9<sup>th</sup> February onwards.

#### Advisories

- As there was no significant rainfall in the State during last week and scattered rain/thundershowers are likely over the State during next 24 hours and mainly dry weather thereafter, apply light and frequent irrigation to sugarcane, *rabi* oilseeds, pulses, wheat and Horticultural crops. This will also protect the crops 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.
- Continue sowing of short duration sunflower hybrids. Apply 15 kg Nitrogen/ha to early sown crop.
- Prepare field for sowing of spring sugarcane crop as delayed sowing may affect yield.

#### Harvana

- Rainfall occurred at many places on 4<sup>th</sup> February and at isolated places on 6<sup>th</sup> February. Weather remained mainly dry on 5<sup>th</sup> February. Light to moderate rain/thundershower have occurred almost in all districts in past 24 hrs.
- Rain/thundershowers are likely at a few places over North Haryana and isolated rain/thundershowers are likely over the rest region of the State during next 24 hours and mainly dry weather thereafter.
- Fall in minimum temperatures by 2-4 °C over the region from 9<sup>th</sup> February onwards.

- As there was no significant rainfall during last week and rain/thundershowers are likely at a few places over north Haryana at isolated places over south Haryana during next 24 hours and mainly dry weather thereafter, 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.

- Continue sowing of short duration sunflower hybrids. Apply 15 kg Nitrogen/ha to early sown crop.
- Prepare field for sowing of spring sugarcane crop as delayed sowing may affect yield.

#### Rajasthan

- Weather remained mainly dry in all divisions of the State with fog in north Rajasthan.
- Isolated rain/thundershowers are likely over north Rajasthan during next 24 hrs. and mainly dry weather thereafter. Mainly dry weather is likely over the rest of the State.
- Cold wave conditions are likely 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/frost due to fall in temperature.
- Monitor gram for pod borer and undertake plant protection measures if the pest population crosses ETL.

#### **Uttar Pradesh**

- Weather was mainly dry in all divisions of Uttar Pradesh.
- Isolated rain/thundershowers are likely over the West U.P during next 24 hours and mainly dry weather thereafter. Isolated rain/thundershowers are likely over the East U.P.
- Fall in minimum temperatures by 2-4 °C over the west Uttar Pradesh from 9<sup>th</sup> February onwards.

## **Advisories**

- As there was no rainfall in the State during last week and isolated rain/thundershowers are likely over west Uttar Pradesh during next 24 hours and mainly dry weather thereafter and isolated rain/thundershowers are likely over East Uttar Pradesh for the next three days, apply light and frequent irrigation to wheat, vegetable, pulses, rai, and mustard to save the crops from cold injury/ 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**

- Precipitation occurred at isolated places in the State.
- Snowfall is likely at most places over the State during next 24 hours and decrease significantly thereafter.
- Fall in minimum temperatures by 2-4°C over the state from 9<sup>th</sup> February onwards.

Warning: Isolated heavy snowfall is likely over the State.

- As snowfall is likely at most places over the State during next 24 hours, arrange for smoking to save the crops from ground frost and cold injury.
- Apply 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.
- Monitor oilseeds for aphids and if 50 aphids or 4 mm aphid infestation level per central shoot is noticed, spray 750 ml cypermethrin 10 EC or 750 ml methyl demeton 25 EC or 750 ml Dimethoate 30 EC or 1.5 litre Formothion 25 EC or 200-250 ml Phosphamidon in 750 L water / ha.
- Continue the pruning/trimming of the apple plants in the presence of experts. The cut-end of the branches more than pencil thickness should not be allowed to remain naked but have to be covered with Bordeaux paint or copper oxy chloride paint. The twigs/branches infected with

diseases like canker may be pruned at least two- three inches beyond the infected portion and burned it at the earliest. Prepare the beds properly. Apply recommended dose of FYM/Potash and super phosphate in the beds.

#### Uttarakhand

- Light rain occurred at a few places on 3<sup>rd</sup> February and at isolated places on 5<sup>th</sup> February, and very light rain occurred at a few places on 2<sup>nd</sup> February, while mainly dry weather prevailed during rest of the period. Sky remained mainly clear to Mainly cloudy during the period.
- Snowfall is likely at most places over the State during next 24 hours and decrease significantly thereafter.
- Fall in minimum temperatures by 2 to 4°C over the state from 9<sup>th</sup> February onwards.

#### **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 snowfall is likely at most places over the State during next 24 hours and decrease significantly thereafter, postpone irrigation to 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 sugarcane.
- Harvest the matured crops of potato.

## Jammu & Kashmir

- Moderate to rather heavy rain/Snow occurred at most places on 5<sup>th</sup> February and at many places on 4<sup>th</sup> and 6<sup>th</sup> February over J&K divisions.
- Snowfall is likely at most places over the State during next 24 hours and decrease significantly thereafter.
- Fall in minimum temperatures by 2-4 °C over the state from 9<sup>th</sup> February onwards.

Warning: Isolated heavy snowfall is likely over Jammu & Kashmir

# **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 there was no significant rainfall during last week and snowfall is likely at most places with isolated heavy snowfall over Jammu & Kashmir during next 24 hours and decrease significantly thereafter.
- 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.
- Transplanting of tomato may be done in Jammu division.
- Weather is congenial for the thrips in onion crop, if required spray the crop with Phosphamidon @ 0.03% or Carbaryl @ 0.01% on clear sky days.

#### Delhi

- Very light to light rain occurred at a few places on 6<sup>th</sup> February. Weather remained mainly dry on rest of the days.
- Isolated rain/thundershowers are likely over the State during next 24 hours and mainly dry weather thereafter.
- Fall in minimum temperatures by 2-4°C over the State from 9<sup>th</sup> February onwards.

## **Advisories**

- As there was no significant rainfall in the State during last few weeks and no significant rain is likely to occur over the State for the next three days, apply light and frequent irrigation to vegetables, mustard, gram, barley and wheat. This also saves the crop from cold injury.
- Upper leaves of potato crops may be trimmed before hoeing. Undertake sowing of pumpkin.
- Monitor mustard for chepa disease and if crosses economic threshold level, sprinkle Endosulphan 35% or metasystox 25 EC @ 1 ml / litre of water.
- There is mild chance of attack of purple bleach disease in onion. If infestation crosses economic threshold level, apply dithane M-45 or dithane Z-78 @ 2 kg / ha.

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

#### Kerala

- Rain occurred at isolated places in the State during this period.
- Rain/thundershowers are likely at a few places over the State during next 48 hrs. and isolated thereafter.

## **Advisories**

- As there was no significant rainfall during last week and rain/thundershowers are likely at a few places over Kerala during next 48 hrs. and isolated thereafter, apply irrigation to plantation crops viz., coconut, arecanut, rubber and banana.
- Attack of leaf caterpillar is reported in coconut. As a prophylactic measure affected leaves may be cut and burnt. To control this pest biologically, release larval and pupal parasitoids.
- 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 pepper.
- Continue nursery sowing, intercultural operations and application of fertilizers.
- 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. Water may be drained from field until the pest population decline in areas where water is available in plenty.
- Spraying, weeding, intercultural operations may be done on a non rainy day.

#### Tamilnadu

- Rainfall occurred at one or two places over the State on 4<sup>th</sup>, 5<sup>th</sup> February and mainly dry weather prevailed on 6<sup>th</sup> February.
- Rain/thundershowers are likely at a few places over the State during next 48 hrs. and isolated thereafter.

- As there was no significant rainfall in the state during last few weeks and rain/thundershowers are likely at a few places over Tamil Nadu during next 48 hrs. and isolated thereafter, 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 on a non rainy day to keep the field weed free.

#### Karnataka

- On 4<sup>th</sup>February, mainly dry weather prevailed over Interior Karnataka and dry weather prevailed over Coastal Karnataka. On 5<sup>th</sup> February, mainly dry weather prevailed over South Interior Karnataka and dry weather prevailed over Coastal Karnataka and North Interior Karnataka. On 6<sup>th</sup> February, mainly dry weather prevailed over North Interior Karnataka and dry weather prevailed over Coastal Karnataka and South Interior Karnataka.
- Isolated rain/thundershowers are likely over South Interior Karnataka. Mainly dry weather is likely over the rest region of the State.

#### **Advisories**

- As there was no significant rainfall over the state during last few weeks and isolated rain/thundershowers are likely over South Interior Karnataka and mainly dry weather in the rest of the regions 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.
- This is the proper time for sowing of summer rice in nursery. Prepare field and undertake nursery sowing of summer rice.
- Undertake sowing of maize, groundnut, and sunflower.

#### **Andhra Pradesh**

- Isolated rain occurred over Coastal Andhra Pradesh on 1<sup>st</sup>, 5<sup>th</sup> February and over Telangana on 4<sup>th</sup> & 5<sup>th</sup> February. Mainly dry weather prevailed over coastal Andhra Pradesh on 31<sup>st</sup> Jan & 2<sup>nd</sup>, 3 & 4<sup>th</sup> February over Telangana on 6<sup>th</sup> February & over Rayalaseema on 5<sup>th</sup> February, Generally dry weather prevailed over the state during the week.
- Isolated rain/thundershowers are likely over State from 8<sup>th</sup> February onwards.

- As there was no significant rainfall during last week and isolated rain/thundershowers over Andhra Pradesh from 8th onwards, apply irrigation to red gram, groundnut, black gram and chillies.
- 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 black gram for *Maruca* pod borer and if the pest population crosses ETL, spray Dichlorvas @ 1 ml + Lamda Cyhalothrin @ 2 ml or Dichlorvas 1 ml + Chlorpyriphos @ 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. As the prevailing conditions are congenial for the incidence of rust and late leaf spot in 70-80 days old crop and if noticed spray Mancozeb 2.0gm or Hexaconazole @ 2ml per litre of water.

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

#### Assam

- Dry weather prevailed over the State during the period.
- Isolated rain/thundershowers are likely over the State.

#### **Advisories**

- As only isolated rain / thundershower is likely to occur over the state for next three days, apply irrigation to arhar, winter vegetables, potato, other *rabi* crops and wheat.
- Maintain 3-5 cm of water in *boro* rice field at tillering stage.
- 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.
- For control of late blight of tomato and potato, spray dithane M-45 @ 2.5 g per litre of water / bavistin @ 1 g per litre of water should be sprayed.
- For control of leaf blight and leaf spot diseases of wheat, Dithane Z-78 @2.5 gm per litre of water may be sprayed.
- Monitor *boro* rice for blast disease. As soon as one or two spots on leaves are seen, Hinosan 50 EC @ 1 ml or Blitox 4 g per litre of water is to be sprayed and spraying is to be continued till the disease is controlled. For control of sheath blight disease apply Bavistin @1gm per litre of water.

#### **Arunachal Pradesh**

- Sky remained cloudy to partly cloudy during the period.
- Isolated rain/thundershowers are likely over the State during next 48 hours and at a few places thereafter.

## **Advisories**

- As there was no significant rainfall in the State during last week and rain/thundershowers at isolated places are likely over the State during next 48 hours and at a few places thereafter, apply irrigation to vegetables, wheat, *rabi* maize and mustard.
- Harvest the matured crops of pea, ginger, vegetables and potato.
- Undertake weeding and hoeing in wheat, mustard and *rabi* maize on a non rainy day to keep the field weed free.

#### Bihar

- Light rain occurred at an isolated places on 31<sup>st</sup> January & weather was mainly 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 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.
- Monitor the gram crop for pod borer, to control the pest spray Endosulphan @ 1.5 lit/ha.
- In wheat crop sown under the irrigated late / very late situation, if top dressing of nitrogen was not done then apply @ 40 kg/ha after weeding.

#### **Jharkhand**

- Minimum Temperature rose at a few places.
- Isolated rain/thundershowers are likely over the State during next 24 hours and at a few places thereafter.

#### **Advisories**

- Apply irrigation to vegetables, wheat, mustard and gram as there was no significant rainfall
  during last week and isolated rain/thundershowers are likely over Jharkhand during next 24
  hours and at a few places thereafter.
- Hoeing and weeding, top dressing with 55kg Urea per hectare and irrigation may be done in wheat.
- Prepare field and undertake sowing of summer rice in nursery.

## Sikkim

- Very light rain occurred on 1<sup>st</sup> to 3<sup>rd</sup> and 5<sup>th</sup> February, otherwise the weather was mainly dry during rest of the period over East Sikkim.
- Isolated rain/thundershowers are likely over the State.

#### **Advisories**

- As there was no significant rainfall during last few weeks and isoalted rain/thundershowers is likely 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.
- 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.
- Continue harvesting vegetable crops depending upon market demand.

# **West Bengal**

• Isolated rain/thundershowers are likely over Gangetic West Bengal during next 24 hours and at a few places thereafter. Isolated rain/thundershowers are likely over Sub Himalayan West Bengal.

- Apply remaining dose of N at 40 45 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 P<sub>2</sub>O<sub>5</sub> @ 50 kg and K<sub>2</sub>O @ 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 districts of North Bengal in wheat Crop. So apply Zinc Sulphate @ 25Kg / ha after every 3
  years interval. Also to check Boron deficiency, spray Borax / Sohaga @ 5 g / litre of water in
  the standing crops.
- Keep vigilance against occurrence of blast disease in *boro* rice. If this disease appears at least one leaf or 25% of the leaves of the plant, then spray water soluble Ediphenphos 50% @ 1 ml or Triamiphos 48% @ 1 ml or Carbendazyme 50% @ 1 gm or Tricyclogol 75% @ 0.5 ml per litre of water. 750 litre of water is required for spraying 1 hectare of land. Keep vigilance against attack of stem borer. Chemicals may be applied under attack of at least 1 larvae or matured pest per hill.
- Apply fertilizer and pesticides on a non rainy day in Gangetic West Bengal.

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

# Gujarat

- Severe cold wave conditions prevailed in parts of Kutch & cold wave conditions prevailed in parts of North Gujarat region & Saurashtra on 4<sup>th</sup> February. Severe cold wave conditions prevailed over Gujarat region & Saurashtra on 5<sup>th</sup> February.
- Mainly dry weather is likely over the State. Cold wave conditions are likely over the State.

## **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 light and frequent irrigation to *kharif* cotton, castor, mustard and wheat. Also arrange for smoking around the field. This will save the crops from cold injury.
- Stop irrigation 10 15 days before harvesting of sugarcane. Start harvesting the crop when brix reading of sugarcane will be 19 or more.
- Apply supplementary fertilizer @ 60 kg Nitrogen at 32 to 35 days after sowing of wheat at required moisture condition in soil.
- Monitor for pest and diseases in cotton. If population of sucking pests like aphids, jassids, thrips in *kharif* cotton crosses economic threshold level, spray methyl demeton 25% EC @ 10 ml or phosphamidon 85% EC @ 5 ml or dimethioate 30% @ 10 ml in 10 litre of water.
- Monitor mustard for pests like aphids, mustard saw fly, jassids etc. If insect population exceeds economic threshold level, to control aphids spray pesticides phosphamidon @ 4 ml or dimethoate @ 1 ml or monocrotophos @ 12.5 ml in 10 litres water as per requirement. Second spraying at 10 to 15 days after first spray if required or dust the methyl parathion 2% powder or Quinalphos 1.5 % 25 kg/ha.

#### Chhattisgarh

- Rainfall occurred at isolated place in Raipur, Bastar and Bilaspur divisions on 5<sup>th</sup> February and Raipur and Bilaspur divisions on 6<sup>th</sup> February.
- Isolated rain/thundershowers are likely over the State.

- As there was no significant rainfall during last week in most of the districts of the State and only isolated rain / thundershower is likely for next three days, apply irrigation to sugarcane, toria, vegetables, rapeseed and mustard and wheat, potato and other *rabi* crops.
- 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.
- Prepare land and complete transplanting of summer rice with assured irrigation facilities.

• Prepare land and start sowing of summer groundnut and sunflower with assured irrigation facilities. Before sowing, seeds should be treated with thiram @ 3 g or bavistin @ 2g / kg of seeds. Seeds of groundnut should also be treated with rhizobium culture @ 5 g / kg seeds.

#### Maharashtra

- Rainfall occurred at a few places in East Vidarbha on 4<sup>th</sup> & 6<sup>th</sup> February. Mainly dry weather prevailed over rest of the State.
- Isolated rain/thundershowers are likely over Vidarbha. Mainly dry weather is likely over rest region of the State.
- Cold wave conditions are likely over the State.

- To protect **grapes** from cold injury, apply light and frequent irrigation to the crops. Also arrange for smoking around the field. This also saves the crops from cold injury.
- As there was no significant rainfall in the State during last few weeks and no significant rain is likely to occur over the State for the next three days, apply light and frequent irrigation to sugarcane (Pre-seasonal), sugarcane (*suru*), *rabi* jowar, safflower, potato, gram, onion, wheat and maize. This also saves the crop from cold injury.
- Harvest already matured crops of *kharif* tur.
- Undertake weeding operation in potato to keep the crop weed free and also carry out earthing up. Second dose of 50 kg Nitrogen / ha may be applied 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 (preseasonal) & sugarcane (Suru), aphids in Pune division, aphids and stem borer in Nasik and Latur divisions & shoot fly in Aurangabad and Latur divisions in rabi jowar, aphids in Latur & Kolhapur division in safflower, pod borer in Nasik, Pune, Kolhapur, Latur, Amravati division in gram and aphids and jassids in Nasik and Pune division in wheat 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.
- For the control of aphids in *rabi* jowar, spray 5% neem seed extract or 30% Dimethoate 10 ml + 10 ml sticker per 10 liter of water or Nuvacron 36WSC 300 ml/ha in 500 litres of water or release 10000-15000 larvae of *Chrysoperla carnea* / ha. To control stem borer & aphids in Latur and Nasik and shoot fly in Aurangabad and Latur divisions, spray 5% neem seed extract or 35% Endosulphan 14 ml or 30% Dimethoate 10 ml + 10 ml sticker per 10 liter of water.
- For the biological control of aphids in safflower, release 10000-15000 larvae of Chrysoperla carnea or apply 5% neem extract.
- Monitor gram for pod borer & if exceeds economic threshold level, to control the pod borer 5 pheromone traps/ha may be kept in the field or spray 5% neem seed extract or spray 1000 ml Endosulphan 35 EC or 35 EC Quinolphos 1000 ml in 500 litre of water/ha.
- Spray 15 ml Endosulphan or Malathion in 10 litre of water to control the aphids and jassids in wheat.
- 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

- Rainfall occurred at isolated places in south east Madhya Pradesh on 6<sup>th</sup> February and dry weather prevailed over rest of the State for the remaining period.
- Isolated rain/thundershowers are likely East Madhya Pradesh. Mainly dry weather is likely over the rest of the state.

#### **Advisories**

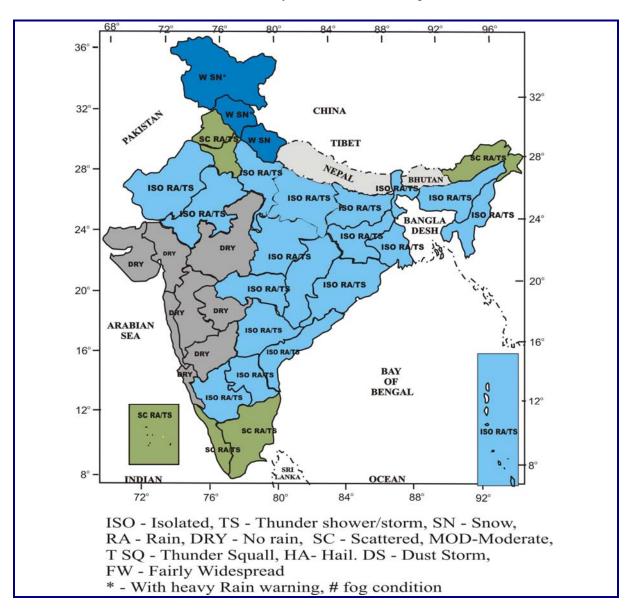
- As there was no significant rainfall during last few weeks in the State and isolated rain/thundershowers are likely over East Madhya Pradesh and mainly dry weather is likely over the rest region of the State, apply irrigation to sugarcane, gram, and wheat.
- Undertake intercultural operation in sugarcane 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.

#### Orissa

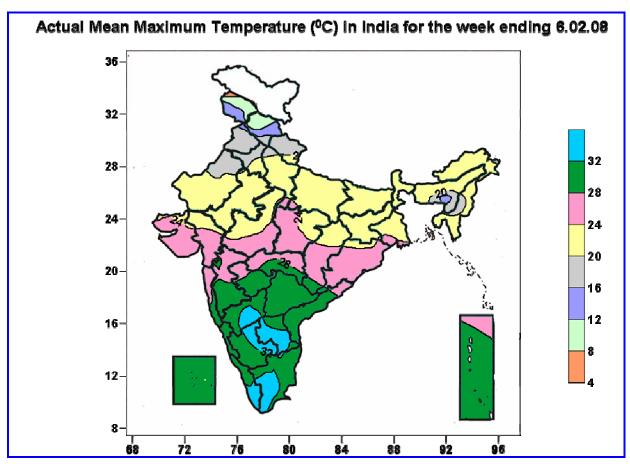
- Rainfall occurred at isolated places over the State during the above period.
- Isolated rain/thundershowers are likely over the State during next 24 hours.

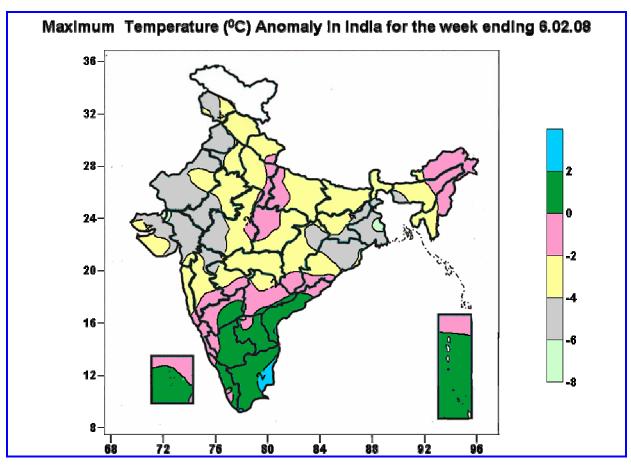
- As there was no significant rainfall in the State during last week and isolated rain/thundershowers are likely during next 24 hours and at a few places thereafter, apply irrigation to vegetables, *rabi* oilseed and pulse crops.
- Continue main field preparation and transplanting of *dalua* rice. Use 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.
- Harvest the matured crops of arhar.

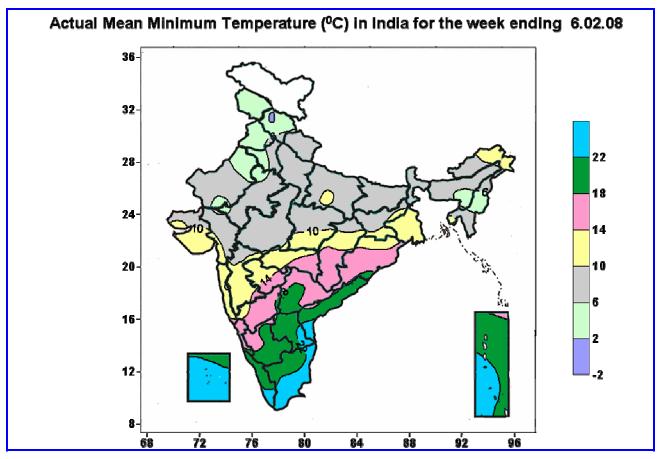
# Forecast Valid upto 10th February, 2008

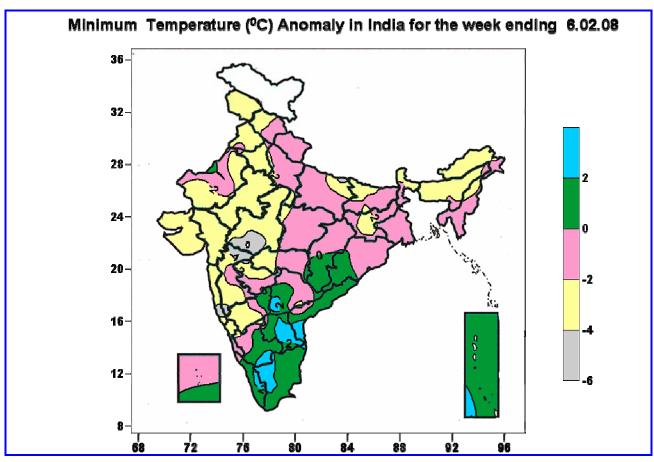


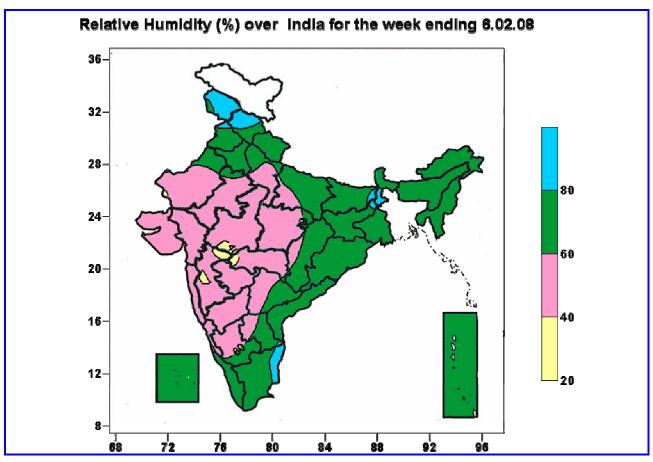
# Contour maps for the week ending 6<sup>th</sup> February, 2008

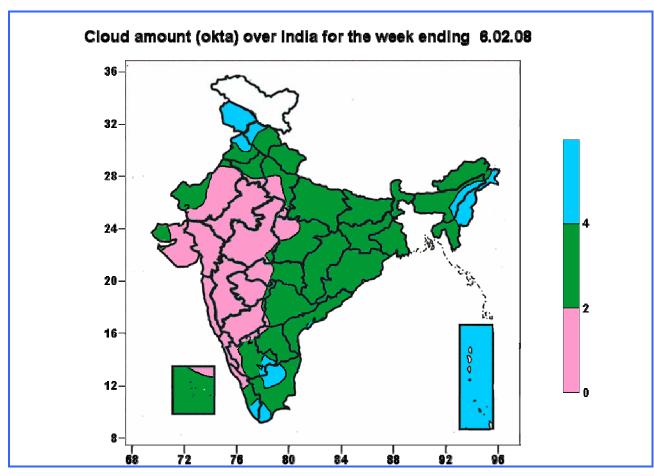


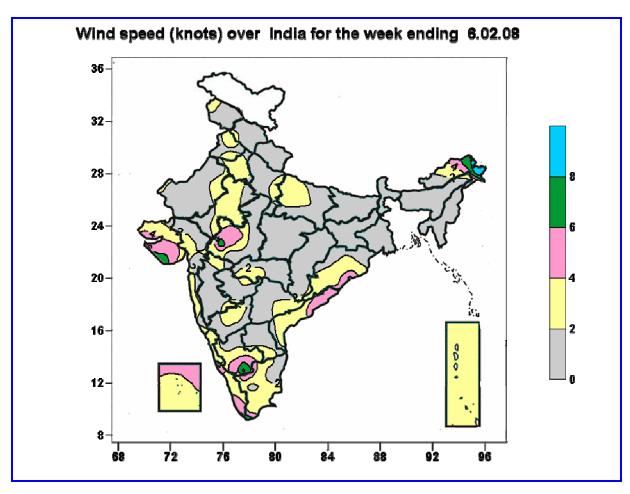














Rainfall (mm)								
Station Name	31.01.08	01.02.08	02.02.08	03.02.08	04.02.08	05.02.08	06.02.08	
Amritsar	0.00	0.00	0.00	07.6	000	0.00	0.00	
Barmer	0.00	0.00	0.00	-	-	-	0.00	
Sriganganagar	0.00	0.00	0.00	-	-	-	-	
Jaisalmer	0.00	0.00	0.00	01.5	0.00	0.00	0.00	
Kota	0.00	0.00	0.00	-	0.00	-	0.00	
Deesa	0.00	0.00	0.00	00.6	0.00	0.00	0.00	
Churu	0.00	0.00	0.00	00.1	0.00	0.00	0.00	

Temperature (degree Celcius)								
Station Name	31.01.08	01.02.08	02.02.08	03.02.08	04.02.08	05.02.08	06.02.08	
Amritsar	09.5	09.5	10.0	07.0	09.5	08.5	08.5	
Barmer	16.5	-	-	-	-	=	-	
Sriganganagar	-	-	-	-	-	09.5	-	
Jaisalmer	14.5	16.5	16.5	11.5	11.0	13.0	11.5	
Kota	14.5	14.5	-	-	16.5	15.0	16.0	
Deesa	-	16.0	-	14.5	14.0	14.0	14.5	
Churu	-	-	-	-	-	-	-	

	Wind													
	31.0	1.08	01.0	2.08	02.0	2.08	03.0	2.08	04.0	2.08	05.0	2.08	06.	02.08
Station Name	Speed	Dir.												
Amritsar	W	04	W	04	-	-	-	-	-	=	-	-	-	-
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganga nagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deesa	W	21	W	17	-	-	-	-	N	07	WNW	08	S	17
Churu	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	Flowering / capsule formation	Tillering	crown root initiation/ tillering	Vegetative			
Gram	Barley						
Vegetative / flowering	Vegetative						
Haryana							
Sugarcane / Autumn sugarcane	Horticultural crops	Sunflower	Wheat	Rabi Pulses			
Vegetative	Vegetative	Germination	Vegetative	Vegetative			
Rabi oilseeds	Toria						
Flowering	Fruiting						

# **Himachal Pradesh**

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Ladies finger	Barley	Gram	Wheat
Vegetative/ head formation	Fruiting	Vegetative	Vegetative	Tillering
Potato	Oilseeds (Torai, Rapeseed and mustard)			
Vegetative	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 / jointing	Vegetative			

# Punjab

Sugarcane	Horticultural crop	Rabi Oilseeds	Irrigated toria	Sunflower
Vegetative	Vegetative	Flowering	Fruiting	Early vegetative
Autumn sugarcane	Wheat	Rabi pulses	Rabi oilseeds	
Vegetative	Vegetative	Vegetative	Vegetative	

# Rajasthan

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

# **Uttar Pradesh**

Sugarcane	Vegetables	Rabi pulses	Rai, mustard	Toria
Cane maturity	Flowering / fruiting / maturity	Flowering / grain formation	Flowering / pod formation	Harvesting
Mango	Wheat			
Vegetative	Vegetative			

#### Uttarakhand Mango/Litchi Pea / Toria Wheat Sugarcane **Potato** Vegetative Harvesting Maturity maturity Tillering / flowering Assam Horticultural plants Wheat Arhar Boro rice Winter vegetables flowering / / fruiting / Tillering Pod formation / maturity Planting Tillering harvesting Mustard, rapeseed, **Potato** pea lentil etc. pod formation / early Tuber formation / early maturity maturity **Arunachal Pradesh** Wheat Ginger Rabi maize Pea Potato Harvesting Cob formation Harvesting Harvesting Vegetative Rabi Vegetables Mustard Vegetative / harvesting Flowering Bihar Vegetables & fruit Maize fodder Arhar Early sown Rabi pulses Wheat crops Vegetative Vegetative Vegetative / flowering vegetative vegetative Rabi oilseeds (rai, Sugarcane Gram Potato linseed) Vegetative Pod formation sowing Tuber formation Jharkhand Vegetables (Tomato, Brinjal, Wheat Pea, gram, potato Litchi / Mango Mustard Bhendi) Vegetative Active Vegetative (tree) Vegetative Active vegetative Pea – pod formation vegetative Summer rice Nursery sowing Sikkim Vegetables (Cauliflower, Cabbage, Large Cardamom Wheat Mustard Orange Carot, Beat, tomato) **End Harvesting** Harvesting Vegetative / Flowering / capsule Tillering flowering formation West Bengal Mustard / Sugarcane Arhar Rapeseed / gram Potato Sunflower / lentil Pod development / Cane development / Flowering / pod maturity (Rabi arhar-**Tuber formation** Vegetative early maturity formation vegetative / flowering) Early transplanted Boro Boro rice Wheat rice Transplanting Early vegetative Tillering Chattisgarh Sugarcane Rapeseed, mustard Toria Tomato, Brinjal, Chilli Wheat Cane development / Vegetative / flowering / cane maturity (Autumn flowering / pod formation Pod formation / Tillering / jointing sugarcane early maturity fruiting Vegetative) Sunflower. Rabi crops Early sown rabi crops Potato **Summer Rice** Groundnut pod formation / grain Germination / early **Tuber formation** Transplanting Sowing vegetative / vegetative filling Gujarat Sugarcane Kharif Cotton Castor Mustard Wheat Cane maturity / Boll formation/ boll Spike formation / Flowering / pod formation Tillering harvesting maturity / picking pod formation

Summer rice
Preparation of nursery

		Maharashtra			
Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Mahrashtra, Marthwada and Vidarbha)	Rabi safflower (Madhya Maharashtra, Marathwada & Vidarbha)	I	i Jowar (Madhya Maharashtra, Iarathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)
Elongation / cane development	Active growth / elongation	Flowering / head formation / grain filling	Vegetat	tive / flowering / grain filling	grain maturity / harvesting
Potato (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi onion (Madhya Maharashtra, Marathwada)	Maize (Konkan, Madhya Maharashtra, Marathwada & Vidarbha)	Maize (Konkan, Madhya Maharashtra, Marathwada &		Mango
Vegetative	vegetative	Vegetative		ring / pod formation / filling / grain maturity	Flowering
Wheat (North Konkan, Madhya Maharashtra, Marathwada & Vidarbha)	Rabi safflower		gram	inning / gram macunty	
Tillering / ear head initiation	Flowering / head formation / grain filling				
muuton	J Sium immg	Madhya Pradesh			
Sugarcane	Rabi crops (linseed, lentil, gram, mustard)	Wheat			
Grand growth	Pod / capsule formation / maturity	Flowering / grain formation			
		Orissa			
Kharif vegetables	Sugarcane	Dalua rice		Arhar	Mung and urd
Vegetative / fruiting	New planting	Nursery sowing		Maturity	Pod formation
Oilseeds					
Vegetative / flowering		Andhra Pradesh			
		Rabi red gram / B	look	<del></del>	
Rice	Early sown Rice	gram / Groundn			
Transplanting	Tillering	Vegetative			
ı U		Karnataka	J		
Sugarcane (Ratoon crop)	Annual sugarcane	Rabi Jowar/Mai	ize	Rabi Sunflower, cotton	Summer rice
Grand growth	Early vegetative / tillering	Grain developmer maturity	ont / Grain formation		Sowing
Early sown maize, groundnut, sunflower					
Germination / early vegetative					
	T	Kerala	1		
Rubber	Pepper	Puncha rice			
New planting	End harvesting	panicle initiatio	11		
Rice (Samba)	Sugarcane (Early, Mid season)	Tamil Nadu Special season sugarcane		Groundnut/Black gram/Green gram/Red gram	Coriander
Tillering / vegetative	Cane development / maturity	Grand growth		Vegetative	Vegetative
Jowar/Bajra/Samai	Cotton	Maize			
Vegetative	Picking	Grain developme			