

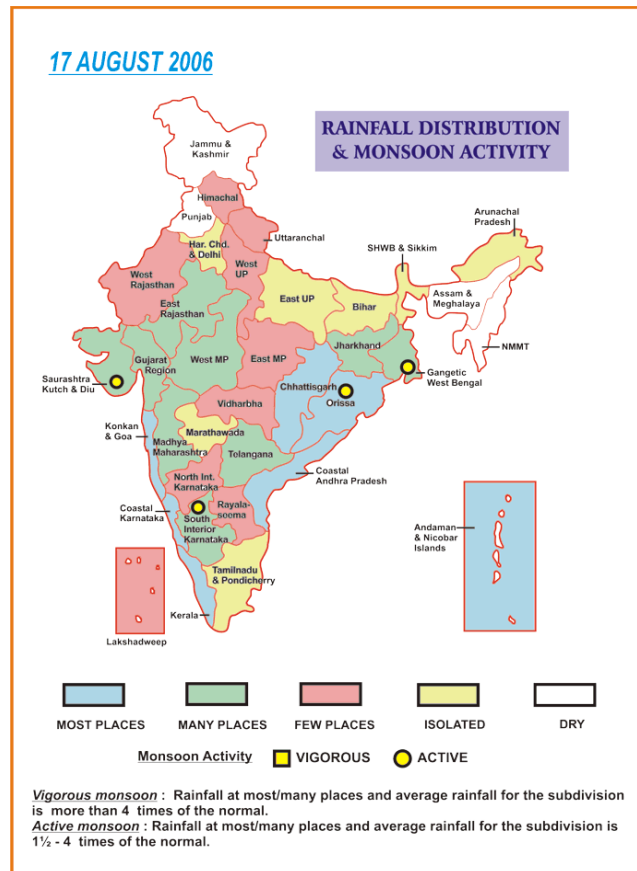


Summary of Agromet Advisory Services for different States of the country
Issued by
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Thursday, 17th August, 2006

(For the period 17th to 21th August, 2006)

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, Uttaranchal)

Punjab & Haryana

Monsoon was active on 15th August in Punjab. Rain / thundershowers occurred at many places on 15th August. Rain also occurred at a few places on 14th August in Punjab and on 15th August in Haryana. Rain occurred at isolated places during rest days of the period in Haryana and on 16th August in Punjab.

Isolated rain / thundershowers are likely over the States.

Advisories

- Due to continued dry spell due to weak monsoon conditions standing crops may suffer from moisture stress. In view of this, farmers are advised that all the available water resources may be utilised for saving already sown / transplanted *kharif* crops and further transplanting / sowing of rice / basmati rice and other crops may be stopped. Further, in order to check moisture stress due to prevailing dry spells, apply mulch or soil mulch.
- Apply irrigation to **sugarcane, cotton, maize, paddy** and *kharif* pulses in all the districts of the States as there was no rain during last week and rain / thundershowers are likely at isolated places over the

States.

- High humid cloudy conditions prevailed in the States may favour the incidences of sucking type of pests and diseases in standing *kharif* crops. Farmers are advised to take special plant protection measures in **cotton, paddy** and **sugarcane**.
- Prevailing conditions may favour further infestation of **bollworm** in **cotton**. Hence, a constant watch in the fields is must.
- Prevailing subdued monsoon conditions likely to continue and crops may be under scarcity of water and may lead to **iron deficiency** in **paddy**. To check the same apply copious irrigation as soon as chlorosis appears and give 2-3 spray of 1% Ferrous Sulphate solution at weekly interval.
- Maintain 3-5 cm water level in paddy field.

Rajasthan

Light to moderate rainfall occurred at many places in Ajmer, Udaipur and Kota divisions; at a few places in Jaipur and Jodhpur divisions and at isolated places in Bikaner division.

Rain / thundershowers likely at isolated places over the State. Rainfall activity is likely to increase over the State after 48 hours.

Advisories

- Due to increase in rainfall over the State after 48 hours, apply need based irrigation.
- In case of more rain, make arrangement for draining out excess water from the field.
- Undertake intercultural operation on non-rainy days.
- Continue sowing of *kharif* pulses (**moong, uradh, arhar** and **moth**) in West Rajasthan.
- Select varieties from MUM-2, K-851, RMG-268 for **moong** & T-9, Pant-U-19 for **urd**.
- Postpone sowing of *kharif* pulses (**moong, uradh, arhar** and **moth**) in East Rajasthan and make arrangement for draining out excess water from already sown fields under prevailing weather condition.
- As rainfall is expected after 48 hours, farmers are advised to utilize the rain for sowing of the crops.

Uttar Pradesh

Rain occurred at isolated places in **Meerut, Faizabad, Varanasi, Lucknow** divisions on 14th August; in **Varanasi, Jhansi, Kanpur, Agra, Allahabad** divisions on 15th August; in **Gorakhpur, Faizabad, Varanasi, Allahabad, Kanpur, Lucknow, Jhansi & Agra** divisions on 16th August. Rain occurred at many places in **Moradabad** division on 15th August. Weather was mainly dry in the remaining divisions of the State.

Rain / thundershowers are likely at many places in East UP and at isolated places in West UP.

Warning: Isolated heavy to very heavy rainfall is likely to occur at East UP.

Advisories

- Rain / thundershowers are likely at many places in East UP and at isolated places over West UP for the next three days. Under the circumstance, postpone irrigation to **summer sugarcane, vegetables** and **mango** crops in East UP. Apply required irrigation to the crops in West UP to bring the soil moisture to its field capacity.
- Weeding and hoeing, along with topdressing of nitrogen may be done in **maize, jowar, bajra, kharif pulses** and **oilseeds** in West UP and after current spells of rain in East UP.
- Weather conditions are favourable for the attack of *Pyrrilla* in **sugarcane**. Monitor the crop and collect and destroy egg masses from the lower surface of the leaves. Spray Malathion or Endosulfan @ 1.25 l / ha in West UP and after current spells of rain in East UP to control the pest.
- Continue transplanting of *kharif* rice.
- To control *khaira* disease in *kharif* rice, spray the solution of 5 kg Zinc Sulphate and 20 kg urea

dissolving in 800-1000 litres water per hectare in West UP and after current spells of rain in East UP.

- Continue application of Malathion 5% dust @ 20-25 kg / ha to save **jayad vegetables** from **red insects** in West UP and after current spells of rain in East UP.

Himachal Pradesh

Precipitation occurred at few places during this week in the state.

Isolated rain / thundershowers are likely over the State.

Advisories

- As there was no significant rain in all the districts of the State and rain / thundershowers are likely at isolated places over the State for next three days, apply irrigation to **maize, moong, potato** and **early sown vegetable** crops.
- Maintain 3 – 5 cm water in rice field.
- Red beetle and Fruit fly attack is reported in **curcurbits**. Spray malathion @ 1ml / litre or carbaryl @ 2g / litre of water to control red beetle. To control fruit fly spray malathion @ 1ml + 10 g gur per litre of water.
- Fruit and shoot borer attack is seen in **brinjal**. For control spray fenbalerate or cypermethrin @ 0.01%.
- Apply first dose of N fertilizer @ 25 – 30 Kg / ha at 25 – 30 days after transplanting and second dose @ 25 – 30 kg / ha at 40 – 45 days after transplanting as top dressing to **rice**.

Uttaranchal

Light to moderate rain was recorded at many places on 14th August, at a few places on 10th, 11th and 15th August, while light rain was recorded at isolated places on 13th & 16th August and mainly dry weather was recorded on 12th August. Sky remained mainly clear to overcast. Maximum temperatures were above normal by 2-4⁰C during the period.

Isolated rain / thundershowers are likely over the State.

Advisories

- Isolated rain/ thundershowers are likely over the State for next three days. **Chamoli** received deficient rain, **Nainital** and **Udham Sing Nagar** received **scanty rain** in last three weeks. Under the circumstances apply irrigation to **mango, apple, sugarcane** and **vegetable** crops in these districts.
- Continue transplanting / sowing of **rice** and **cauliflower**.

Jammu & Kashmir

Light rain / thundershowers occurred at isolated places on 14th August and at few places on 15th and 16th August with heavy falls at Udhampur (IAF) on 15th August over J & K State.

Rain / thundershowers are likely to occur at isolated places in J & K State.

Advisories

- Weather conditions are favourable for breeding and migration of **desert locust**. Undertake anti-locust operations immediately to prevent crop damage.
- Light to moderate rain occurred at a few places in J&K State during last week. Rain / thundershowers are likely to occur at isolated places in J & K state in the next three days. Under the circumstances, apply irrigation to **vegetables, pulses, rice** and **maize** to bring the soil moisture to its field capacity.
- Weather conditions are favourable for the occurrence of **yellow vein mosaic** in **bhindi** crop. Monitor the crop and rogue out the affected plants to prevent further spread of the disease.
- Monitor **pulse crops** for **hairy caterpillar** due to prevailing weather conditions. Spray Endosulfan @ 0.07% in case of attack.
- Continue sowing of **carrot, beet root** and **turnip** for seed crop by utilizing the monsoon showers.

- Planting of horticultural crops like mango, citrus, litchi, loquat, guava, papaya etc. may be continued by utilizing the monsoon showers.

Delhi

Light to moderate rain occurred on 14th and 15th August at many places. Weather remained mainly dry on 16th August.

Rain / thundershowers are likely at isolated places over the State.

Advisories

- As there was no significant rain during last few weeks and rain / thundershowers are likely at isolated places over the State for next three days, apply irrigation to early sown *kharif* vegetable crops, green gram, black gram, fodder crops, arhar, maize and bajra.
- Drain out water from the field and apply first split dose of N @ 25 – 30 kg / ha after 25 – 30 days of transplanting and second split dose of N @ 25 – 30 kg / ha after 40 - 45 days of transplanting of rice as top dressing. Maintain 3 – 5 cm water level in rice field after 2 – 3 days of fertilizer application.
- Prepare land and continue transplanting of 4 – 6 weeks old early varieties of cauliflower and cabbage plants. Also prepare nursery for medium varieties of cauliflower and cabbage.
- Prepare land and perform early sowing of Pusa Reshmi variety of Raddish.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Southwest monsoon was active over the State on 14th, 15th & 16th August. Rain occurred at most places during this period.

Rain / thundershowers are likely at many places over the State.

Advisories

- Attack of pests and diseases is reported in different crops in Kerala. Spraying of chemicals may be undertaken after current spells of rain to control them.
- Attack of rice bug is reported in rice. Spray Malathion @ 1 litre / ha or Methyl parathion @ 500 ml / ha to control rice bug.
- Attack of spindle bug, bud rot and fruit rot (Mahali) diseases is reported in arcanut. Spray the crowns with Carbaryl 50% WP @ 20 gm / 100 litres of water to control the bug. Continue spraying of bordeaux mixture 1% to control the diseases.
- Attack of Sigatoka leaf spot, bunchy top and pseudo stem weevil is reported in banana. Spray 1 % Bordeaux mixture to control leaf spot. Eradicate bunchy top affected plants to reduce the spread of the disease. Fill the leaf axils with chlorophyriphos @ 2.5 ml / litre of water to control pseudo stem weevil.
- Attack of Leaf gall and thrips is reported in pepper. Spray Monocrotophos or Dimethoate @ 0.05 % to control the pests.
- Attack of mahali disease, coried bug and red palm weevil is reported in coconut. Spray blitox @ 4 g / litre / palm to control mahali disease. Spray the young bunches with Carbaryl @ 2 gm / litre of water excluding leaves and older bunches. Spraying may be avoided to the receptive phase of the female flowers. Apply neem cake @ 5 kg / palm. Spraying of chemicals may be undertaken after current spells of rain to control coried bug. Use Pheromone trap after current spells of rainfall for controlling red palm weevil.
- Rainfall occurred at most places over the State during last week and rainfall is likely to occur at many places in the state for the next three days. Under the circumstance, postpone irrigation and application of fertilizers to plantation crops and pepper.

- Continue intercultural operations and fertilizer application in arecanut, pepper, rubber and banana after current spells of rain.

Tamilnadu

Rainfall occurred at isolated places over the State on 14th, 15th and 16th August.

Rain / thundershowers likely at isolated places over the State.

Advisories

- There was no significant rainfall in the State during last week except in Chennai, Kanchipuram, Kanyakumari, Namakkal and Thiruvallur districts and rain / thundershowers are likely to occur only at isolated places over the State for the next three days. Under the circumstances, apply irrigation to cotton, early / mid sugarcane and millets to bring the soil moisture to its field capacity. Apply irrigation depending upon soil profile stored moisture in the above mentioned districts.
- Harvesting of late season sugarcane may be continued.
- Attack of internode borer is reported in mid season sugarcane. Release egg parasites viz., *Trichogramma chilonis* @ 5 cc / ha to control the pest.
- Weather conditions are favourable for the attack of red hairy caterpillar in groundnut. Monitor the crop for the pest and collect and destroy egg masses to prevent further spread of the pest.
- Incidences of mite attack are reported in millets. Spray wettable sulphur to control mites.
- Stem borer egg masses and thrips have been reported in already sown nursery rice (Kar / Kurruvai). Collect and destroy egg masses as a preventive measure.

Karnataka

Monsoon was weak over North Interior Karnataka on 14th & 15th August. Rainfall occurred at most places on all the days over Coastal Karnataka. Over North Interior Karnataka, rainfall occurred at a few places on 16th August and at isolated places on 14th & 15th August. Over South Interior Karnataka, rainfall occurred at a few places on all the days.

Rain / thundershowers are likely at many places over Coastal Karnataka and at a few places over the Interior Karnataka.

Advisories

- Postpone irrigation and top dressing of Nitrogen in sugarcane, maize, jowar and groundnut in coastal Karnataka as rain / thundershowers are likely to occur at many places.
- Farmers are advised to continue sowing of kharif rice by utilizing the monsoon showers.
- Arrange for drainage facilities to avoid water stagnation in case of heavy rainfall in coastal Karnataka.
- Prevailing weather conditions are favourable for the incidences of aphids on cotton. Spray Phosphamidon @ 200 ml/ha or Dimethoate @ 600 ml/ha to control aphids / sucking pests in cotton. Spraying may be undertaken after current spells of rain in coastal Karnataka. Continue the same operation in the Interior Karnataka.

Andhra Pradesh

Southwest Monsoon was active over Coastal Andhra Pradesh on 11th August. Rain occurred at many places over Telangana on 11th August and at a few places over Coastal Andhra Pradesh on 10th and 12th August, over Rayalaseema on 12th August and over Telangana on 10th and 13th August. Isolated rain occurred elsewhere over the State during the week.

Rain / thundershowers are likely at a few places over the State except Rayalaseema where it is at isolated places.

Advisories

- As coastal A.P. received excess rain during last few weeks, postpone irrigation to the crops in this region. As rain / thundershowers likely to occur at a few places over Telangana and only at isolated places over Rayalaseema, apply irrigation to **maize, groundnut, cotton, chilly** and **tur** to bring the soil moisture to its field capacity.
- Undertake intercultural operations, application of fertilizers and pesticides over Coastal A.P. and Telangana on a non rainy day. Continue these operations in Rayalaseema.
- **Bud and stem necrosis** disease is reported in **groundnut**. Spray Dimethoate @ 400 ml/ha or Methyl Dimeton @ 360 ml/ha in Coastal AP and Telangana on a non rainy day to control the vector thereby reducing the spread of disease. Continue spraying in Rayalaseema to control the vector.
- Attack of **sucking pests** is reported in **cotton**. Spray Monocrotophos @ 1.6ml/lit of water on a non rainy day in Telangana and Coastal A.P to control the pests. Continue spraying in Rayalaseema.

Eastern Region (Assam, Bihar, Sikkim, West Bengal)

Assam

Light to moderate rain occurred at many places with isolated heavy falls on 14th, at isolated places on 15th and weather was mainly dry on 16th August over the State.

Rain / thundershowers are likely at a few places over the State.

Advisories

- As all the districts received no significant rainfall during last week and rain / thundershowers are likely at a few places over the State for next three days, apply irrigation to **sugarcane, vegetables** and **arhar** to avoid crop damage.
- Maintain 3 – 5 cm water level in **Sali rice** field wherever crops are at tillering stage.
- Infestation of stem borer is reported in **sugarcane** in a few localities. Apply Phosphomidon @ 1.5 ml per litre of water and 400 – 500 ml per bigha or Endosulfan @ 2 ml per litre of water and 1 – 1.5 litre per bigha on a non-rainy day two-three rounds fortnightly starting from the rush egg lying.
- Continue transplanting of **Sali rice**.
- **Due to less rainfall around 30% of Sali rice area is yet to be covered.** Where **Sali rice** could not be transplanted, in those areas **Luit** and **Kapili** varieties of rice seeds @ 8 kg per bigha can be sown directly upto 1st week of September. **Black Gram** and **Green Gram** may also be sown in those areas.
- Select **Black gram** varieties from T -9, Pant U-19 and Saonimah (SB-121) and **Green gram** varieties from T-44, Pratap and AAU-39.

West Bengal

During the said period South West Monsoon was weak over West Bengal on 14th. It was active over Gangetic West Bengal on 15th and weak over Sub Himalyan West Bengal on 16th August.

During this period rain occurred at a isolated places over the districts of Sub Himalyan West Bengal on 14th, at many places on 15th and at a few places on 16th August. Rain occurred at a few places over the districts of Gangetic West Bengal on 14th, and at most places on 15th and 16th August.

Rain / thundershowers are likely at most places over Gangetic West Bengal & at a few places over rest of the State.

Warning: Isolated heavy to very heavy falls likely over Gangetic West Bengal.

Advisories

- As there was no significant rain in the districts of Sub Himalyan West Bengal during last few weeks and rain / thundershowers are likely at a few places over this region, apply irrigation to **sugarcane, green gram, jute** and **groundnut**.

- As rain / thundershowers are likely at most places over Gangetic West Bengal with the possibility of isolated heavy to very heavy falls, postpone irrigation to the crops over this region.
- Drain out excess water from the field in Gangetic West Bengal and maintain 5 – 7 cm water in the *aus* rice field and *early transplanted aman* rice fields wherever crops are at tillering stage.
- Undertake intercultural operation in Sub Himalayan West Bengal on a non-rainy day to keep the field weed free.
- Postpone intercultural operation and application of fertilizer and plant protection measures to the crops in Gangetic West Bengal under prevailing weather condition.
- Continue land preparation and transplanting of *aman* rice in Sub Himalayan West Bengal. Maintain 2 – 3 cm of standing water after 2 – 3 days of transplanting. Postpone the same in Gangetic West Bengal under prevailing weather condition.

Bihar

Light to moderate rain occurred at many places over the State on 11th August. Light rain occurred at isolated places on rest of the days.

Rain / thundershowers may occur at a few places.

Advisories

- Bihar received scanty rainfall during last week in many districts. As rain / thundershowers are likely at a few places over the State for next three days, apply irrigation to *vegetables, maize, pulses, and oilseed* crops.
- Farmers are advised to stop further transplanting and take all care to save the already transplanted paddy.

Jharkhand

Rain occurred at many places.

Rain / thundershowers are likely at many places over the State.

Warning: Isolated heavy to very heavy falls also likely over the State.

Advisories

- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation to *vegetables, maize, and other* crops.
- Undertake drainage of excess water to avoid water logging in case of heavy rainfall.
- Also postpone intercultural operation, application of fertilizer and plant protection measures under prevailing weather condition.
- Weather conditions are favourable for the occurrence of *tikka leaf spot* disease in *groundnut*. In case of attack, spray the solution of Kavach (2gm/litre water) or Indophil M-45 @ 5 gm + Bavistin @ 1gm in 4 litre of water after current spells of rain.
- Weather conditions are favourable for the occurrence of *hairy caterpillar* in *Moong, Urad and Groundnut*. In case of attack, spray the solution of Dichlorophos (Nuvan) @ 5ml in 10 litre of water after current spells of rain. Sendovit or Tipole @ 5ml in 10 litre of solution should be added as sticker. In case of non availability of sendovit or tipole, soap solution may be added to solution. It makes the solution sticky.
- Drain out excess water and maintain 3-5cm of standing water in the field.
- Continue sowing *kulthi* and *niger/sarguja* (late crop) after current spells of rain.

Sikkim

Sky remained generally cloudy during the period. Moderate rain occurred at many places on 14th & 15th

August and light rain occurred at few places on 16th August over East Sikkim. Rainfall was deficient during the period.

Rain / thundershowers likely to occur at a few places over the State.

Advisories

- Rain / thundershowers are likely to occur at a few places over the State for the next three days. Under the circumstance, apply required irrigation to **orange, maize** and **large cardamom** crops to bring the soil moisture to its field capacity.
- Continue intercultural operations, application of fertilizers and pesticides in **orange, vegetables** and **ginger** on a non rainy day.
- Incidences of **chirkey** and **foorkey** diseases are reported in **large cardamom**. Rouge out the affected crops and destroy the crops by burning. Also monitor the crop for **caterpillar** infestation and collect and destroy manually to prevent further incidences.
- Monitor **orange** for **trunk borer** and plug the holes in case of damage.
- Weather conditions are favourable for the attack of **rhizome rot** in **Ginger**. Monitor the crop for the disease and destroy the affected plants. Also arrange for drainage facilities to prevent spread of disease. Monitor the crop for **bacterial wilt** and rouge out the affected plants and burn well outside the field to protect the other plants.

Arunachal Pradesh

Rain / thundershowers are likely at a few places over the State.

Advisories

- Complete harvesting of matured **summer vegetable** crops.
- Maintain required depth of standing water in **wet seeded rice** field.
- Continue sowing of new **ginger** crop in some parts of high altitude, middle area and foothills of the State.

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

Gujarat

Rainfall occurred at a few places over Gujarat region, Daman, Dadra Nagar Haveli. Monsoon was vigorous over Saurashtra, Kutch on 14th August. Rainfall occurred at a few places over Gujarat state, Daman, Dadra Nagar Haveli on 15th August. Monsoon was vigorous over Gujarat region, Daman, Dadra Nagar Haveli on 16th August.

Rain / thundershowers are likely at many places over the State.

Advisories

- As most of the districts of the State received excess rain during last few weeks and rain / thundershowers are likely at many places over the State, postpone irrigation to **sugarcane, Kharif groundnut, Kharif bajra, Kharif maize, pre-monsoon irrigated cotton** and **Kharif cotton** and make arrangement for draining out excess water from the field.
- Also postpone intercultural operation and application of fertilizer and plant protection measures to the crops.
- Drain out excess water, prepare land and continue transplanting of 3 – 4 weeks old **rice** seedlings in main field.
- Maintain 2 – 3 cm of standing water after 2 – 3 days of transplanting and 3 – 5 cm water in the field where **rice** crops are at tillering stage.
- Drain out excess water, prepare land on a non-rainy day and continue sowing of **castor**. Select hybrid castor GAUCH-1, GCH-2, 4, 5 etc. for sowing.

Chattisgarh

Rain occurred at most places in Bilaspur and Baster divisions on 14th August and at a few places on 15th and 16th August in Bilaspur, Raipur and Bastar divisions during the period.

Rain / thundershowers are likely at most places over Chhattisgarh.

Warning: Heavy to very heavy falls at a few places are likely over the state during next 24 hrs.

Advisories

- As rain / thundershowers are likely at most places over the State with the possibility of heavy to very heavy falls at a few places over the state during next 24 hrs., postpone irrigation to **Sugarcane, green gram, black gram, red gram, soybean and groundnut** and **early sown vegetables** and make arrangement for draining out excess water from the field.
- Drain out excess water and maintain 3 – 5 cm water in the **kharif rice** fields.
- Also postpone intercultural operation and application of fertilizer and plant protection measures to the crops.
- Also postpone sowing and transplanting of **kharif vegetables** under prevailing weather condition.

Maharashtra

Monsoon was vigorous in East Vidarbha on 14th and active in South Konkan on 15th August.

Rainfall occurred at most places over Konkan, Madhya Maharashtra & East Vidarbha, at a few places in West Vidarbha and at isolated places in Marathawada.

Rain / thundershowers are likely at many places over the State.

Warning: Isolated heavy to very heavy falls are likely over Vidarbha.

Advisories

- Mild incidence of **Stem borer in rice in Raigad, Army worm, Leaf roller, Blue beetle in rice in Sindhudurga, Army worm & Aphids in rice in Kolhapur, Aphids, Jassids and Stem borer in jowar in Kolhapur, Shoot fly in jowar in Amraoti, Leaf roller in groundnut in Kolhapur and Latur, Leaf eating caterpillar in soybean in Amraoti and Aphids and Jassids in kharif cotton in Aurangabad & Vidarbha** is reported.
- As rain / thundershowers are likely at many places over the State, postpone irrigation, intercultural operation and application of fertilizer and plant protection measures to **Sugarcane, Kharif rice, Jowar, Kharif groundnut, bajra, soybean, sunflower, kharif cotton, tur, moong and Cotton (irrigated)**.
- As most of the districts of Konkan and Goa and Madhya Maharashtra received excess rain during last few weeks and as there is possibility of isolated heavy to very heavy rain in Vidarbha, make arrangement for draining out excess water from the field over these regions.
- Drain out excess water and maintain 3 – 5 cm water in the **rice** field wherever crops are at tillering stage.

Madhya Pradesh

Monsoon has been vigorous in South M.P. on 14th August, active in West M.P. on 15th August. Rainfall occurred at many places in North West M.P. on 14th August, South East M.P. on 15th, South East and West M.P. on 16th August and at a few places in North East M.P. from 14th to 16th August.

Rain / thundershowers are likely at most places over East Madhya Pradesh & at a few places over West Madhya Pradesh.

Warning: Heavy to very heavy falls at a few places are likely over East Madhya Pradesh.

Advisories

- Thinning, weeding and hoeing of **cotton, maize, soybean, urad, jowar** may be done after current spells of rain in East Madhya Pradesh and on non-rainy days in West Madhya Pradesh.

- As rain / thundershowers are likely at most places over East Madhya Pradesh and excess / normal rainfall has occurred almost all the districts of West Madhya Pradesh, postpone irrigation to sugarcane, soybean and moong.
- To protect crops against **chaipa**, **pyrilla** or **scale** insects in sugarcane, spray oxydematon methyl or dimethoate @ 1 lit / ha after current spells of rain in East Madhya Pradesh and on non rainy days in West Madhya Pradesh.
- If **Semi looper** is in initial stage in **kharif soyabean**, spray 5% solution of Nimboli powder or spray 30 to 40 days old Butter milk every 10 days interval after current spells of rain in East Madhya Pradesh and on non rainy days in West Madhya Pradesh.
- Make arrangements to drain out excess water in standing crops.

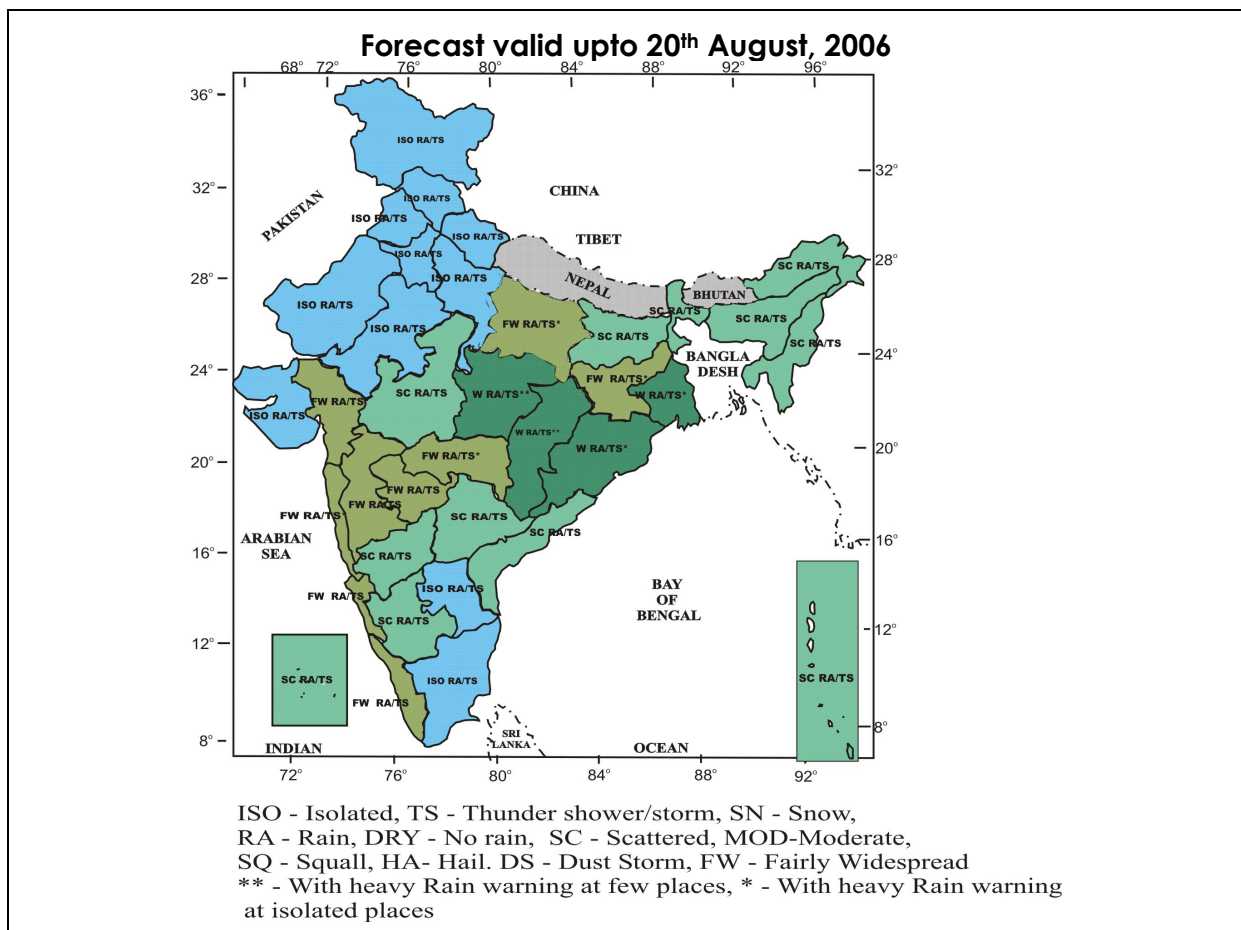
Orissa

Rain / thundershowers are likely at most places over the State.

Warning : Isolated heavy to very heavy falls likely over the State.

Advisories

- Rain or thunder showers are likely at most places over the State with heavy to very heavy rainfall at isolated places. Under the circumstances, postpone irrigation to **vegetables**, **sugarcane** and **jute** crops.
- Farmers are advised to continue land preparation and sowing/transplanting of **kharif** crops like **rice**, **vegetables** and **pulses** after current spells of rain.
- To control **semiloopers** in **jute**, spray Endosulphan @ 2 ml/litre of water after spells of rain.
- Weather conditions are favourable for the attack of **late blight** and **wilt** in **vegetables**. In case of attack, spray Mancozeb @ 3 g/litre of water after spells of rain.
- At five months stage of sugarcane crop perform propping by combining plants of two rows so that the crops do not lodge by wind.



Salient weather features for the week ending 16/08/06

METEOROLOGICAL ANALYSIS

- Last week's low pressure area over northwest Madhya Pradesh and neighbourhood lay over West Madhya Pradesh and neighbourhood on 10th. It lay as a well marked low pressure area over southwest Madhya Pradesh on 11th, over southeast Rajasthan and adjoining southwest Madhya Pradesh on 12th. It lay as a low pressure area over southwest Rajasthan and neighbourhood on 13th, over Kutch and neighbourhood on 14th and became less marked on 15th.
- A low pressure area formed over north Bay of Bengal off Orissa-West Bengal coast on 10th, became well marked on 11th and concentrated into a depression over northwest Bay of Bengal and lay centred at 0830 hours IST of 12th near lat. 21.0° N and long. 88.0° E, about 100 km east-southeast of Balasore. Moving in a west-northwesterly direction, it crossed north Orissa coast near Balasore on 12th night around 2030 hours IST. Moving further west-northwestwards, it weakened into a well marked low pressure area and lay over Chhattisgarh and neighbourhood at 0830 hours IST of 13th. The well marked low pressure area lay over East Madhya Pradesh and neighbourhood on 14th and over northwest Madhya Pradesh and adjoining East Rajasthan on 15th. It lay as a low pressure area over southwest Madhya Pradesh and adjoining southeast Rajasthan on 16th.
- A fresh low pressure area formed over north Bay of Bengal off Orissa-West Bengal coast on 15th. It concentrated into a depression over northwest Bay of Bengal and lay centred at 0830 hours IST of 16th near lat. 20.5° N and long. 88.0° E, about 150 km southeast of Balasore. Moving in a westerly direction, the system crossed north Orissa coast near Chandbali around 2000 hours IST of 16th. It lay centred at 1430 hours IST of 17th over north Chhattisgarh about 50 km southwest of Ambikapur.
- The axis of the monsoon trough at sea level lay either in its normal position or to the south of the normal position throughout the week.

RAINFALL

Under the influence of the above systems:

- Central parts of the country extending from Orissa & Gangetic West Bengal to Gujarat experienced good monsoon activity during the week.
- Widespread/fairly widespread rainfall with scattered/isolated heavy to very heavy falls occurred over Orissa during 12-16th with active/vigorous monsoon condition during 12th, 13th & 16th. Fairly widespread/widespread rainfall with isolated heavy falls occurred over Gangetic west Bengal during first two days of the week and monsoon was active on 1st day of the week.
- Widespread/fairly widespread rainfall with scattered heavy to very heavy falls occurred over Chhattisgarh & Vidarbha on 13th & 14th; over East Madhya Pradesh on 14th and over west Madhya Pradesh during many days of the week. The monsoon was active/vigorous over West Madhya Pradesh, East Madhya Pradesh and Chhattisgarh on most of these days.
- Widespread/fairly widespread rainfall with scattered heavy to very heavy falls occurred over East Rajasthan during most days. Fairly widespread rainfall with isolated heavy to very heavy falls occurred over West Rajasthan during 10-11th; over Gujarat region during 11-13th and on 16th; over Saurashtra & Kutch during 13-14th & 16th, over Marathwada on 11th and over Konkan & Goa and Madhya Maharashtra during all days. Active/vigorous monsoon conditions prevailed on one or two days over Konkan & Goa & Madhya Maharashtra, some days over Gujarat State and many days over East Rajasthan.
- Widespread/fairly widespread rainfall with isolated heavy to very heavy falls occurred over Kerala, Coastal Karnataka on many days and over South Interior Karnataka on a few days of the week. The monsoon was active on some days over Kerala and Coastal Karnataka and on a few days over South Interior Karnataka.
- The rainfall activity was subdued over northwest India, northeast India and Peninsular India excluding coastal Karnataka, South Interior Karnataka and Kerala.

RAINFALL DURING THE WEEK ENDING ON 16TH AUGUST, 2006

Rainfall was excess/normal in 16 and deficient/scanty in 20 out of 36 meteorological sub-divisions (Actual: 63.0 mm, Normal: 62.5 mm and Departure: 1%).

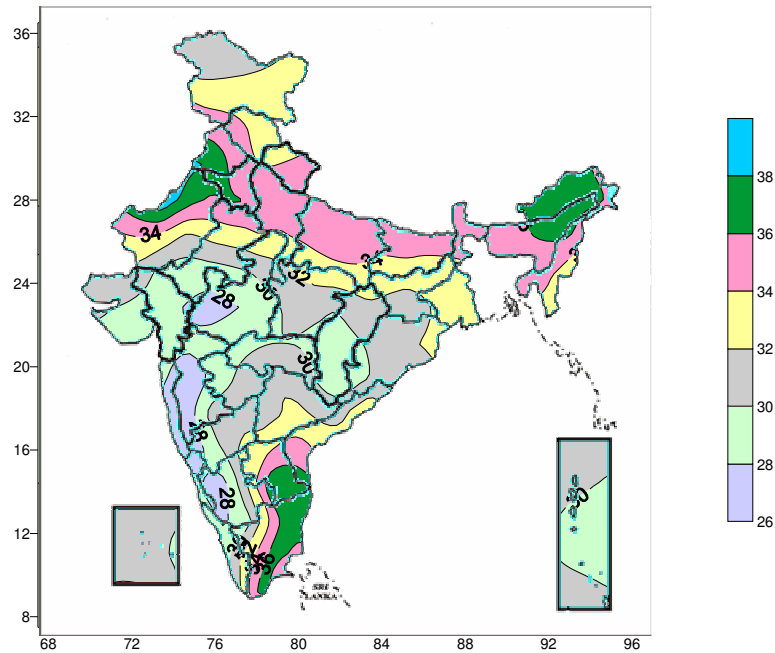
CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 16TH AUGUST, 2006)

Rainfall was excess/normal in 22 and deficient in 14 out of 36 meteorological sub-divisions. (Actual: 592.9 mm, Normal: 602.1 mm and Departure: -2%).

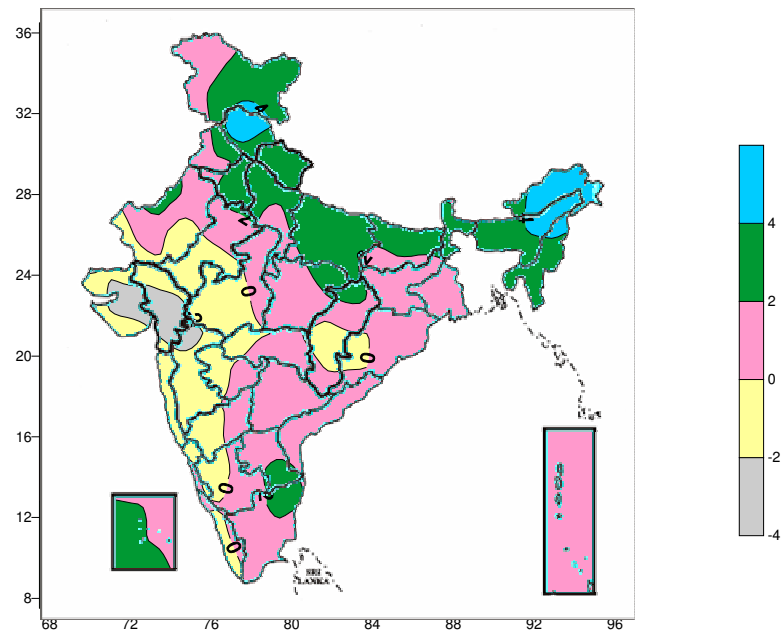
OUTLOOK FOR THE WEEK ENDING ON 16TH AUGUST, 2006.

- As the depression over north Chhattisgarh is likely to move in a northwesterly direction and may weaken gradually, widespread rainfall with scattered heavy to very heavy falls likely over Madhya Pradesh, West Uttar Pradesh, Gujarat and Rajasthan during first half of the week.
- The rainfall activity over northeast India may increase during the middle of the week.
- Decrease in the rainfall activity over Orissa, Chhattisgarh, East Madhya Pradesh and Gangetic West Bengal. With the likely formation of a low pressure area over north Bay of Bengal around 21st, the rainfall activity over Gangetic west Bengal and Orissa may increase towards the end of the week.

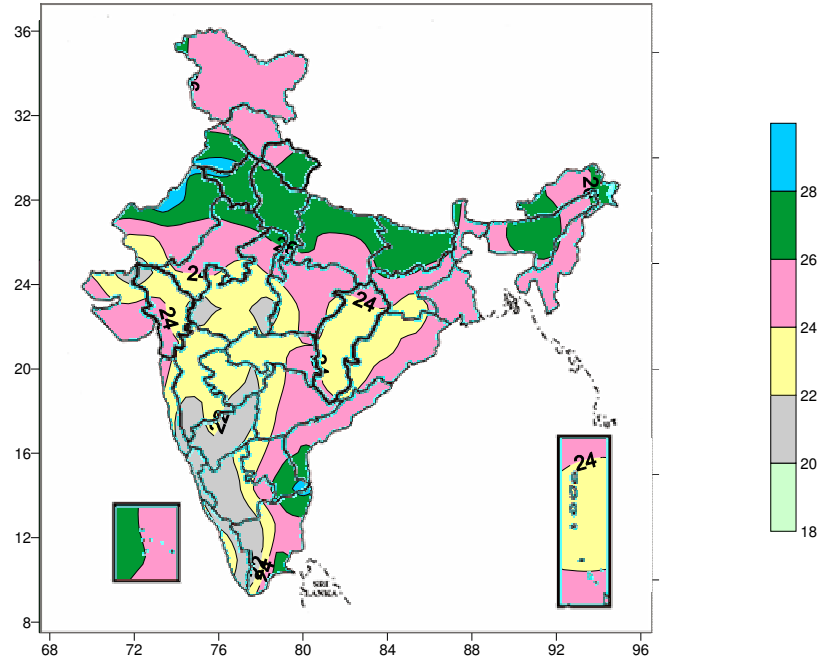
Actual mean maximum Temperature ($^{\circ}\text{C}$) in India for the week ending 16.08.06



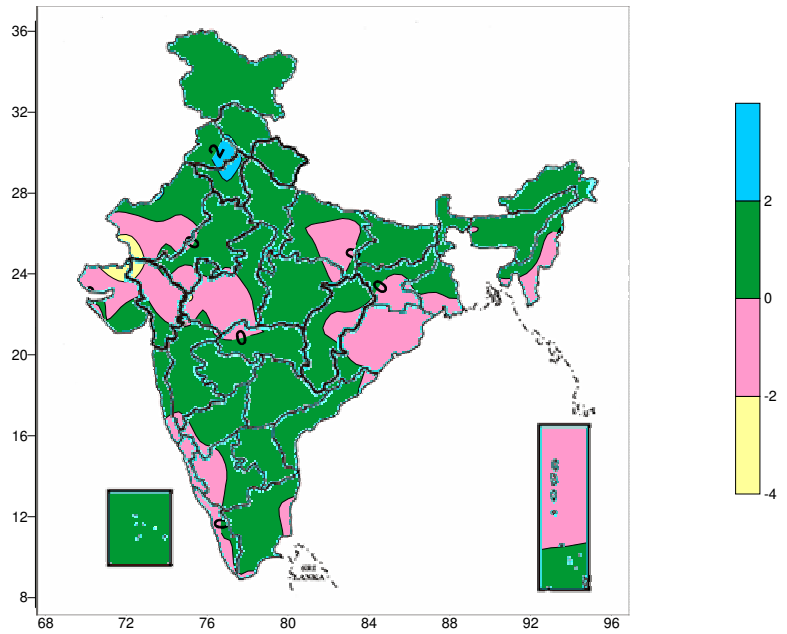
Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 16.08.06



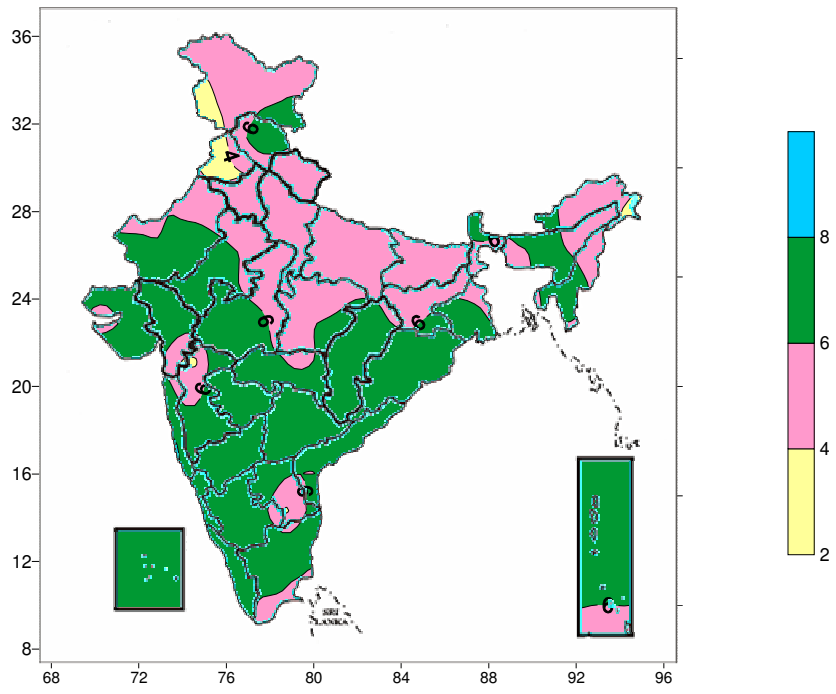
Actual mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 16.08.06



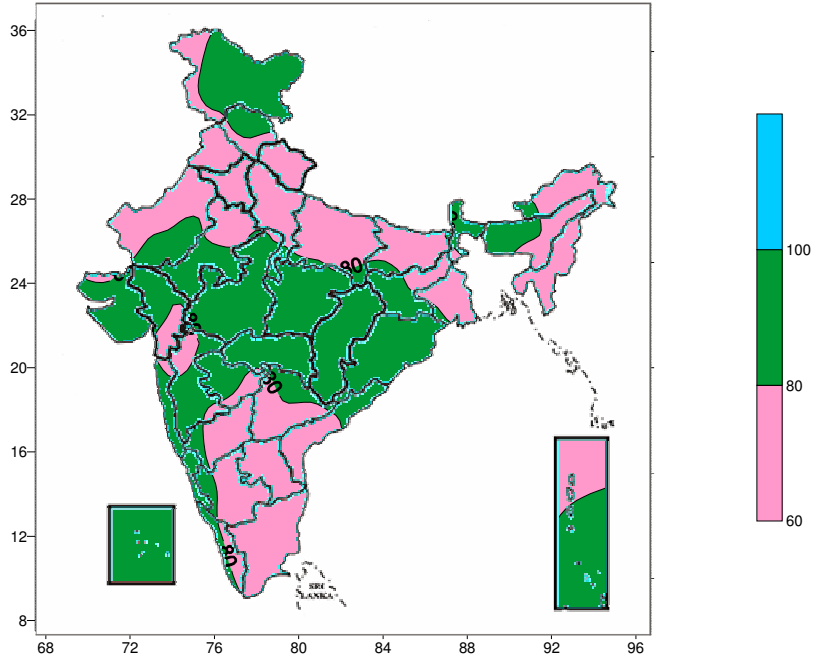
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 16.08.06



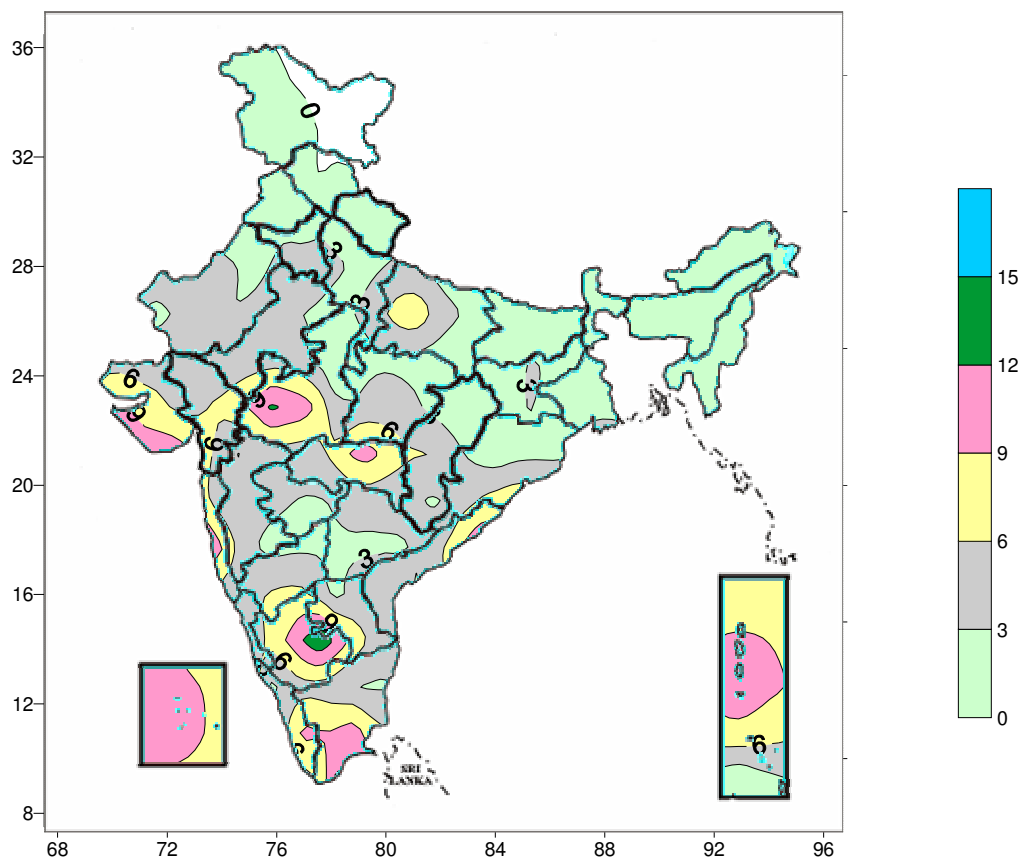
Cloud amount (okta) over India for the week ending 16.08.06



Relative humidity (%) over India for the week ending 16.08.06



Wind speed (knots) over India for the week ending 16.08.06



Desert Locust Forecasting



Station Name	Rainfall (mm)						
	10.8.06	11.8.06	12.8.06	13.8.06	14.8.06	15.8.06	16.8.06
Amritsar	-	3.0	-	-	-	47.2	0.3
Barmer	63.6	7.7	3.2	1.6	6.0	-	2.3
Sriganganagar	-	-	-	-	-	0.4	-
Jaisalmer	-	24.2	0.8	0.4	1.0	1.5	0.1
Kota	52.4	18.8	0.5	5.2	-	100.2	50.4
Deesa	8.1	0.1	17.3	0.5	0.3	1.6	83.3
Churu	-	-	-	-	-	19.1	0.1

Temperature (degree celcius)							
Station Name	10.8.06	11.8.06	12.8.06	13.8.06	14.8.06	15.8.06	16.8.06
Amritsar	30.0	34.0	30.0	30.5	31.5	-	-
Barmer	27.0	21.5	36.0	29.5	26.5	-	-
Sriganganagar	33.0	34.0	34.0	34.0	35.0	-	-
Jaisalmer	30.0	27.0	33.0	32.5	30.5	-	-
Kota	26.5	26.5	27.5	28.5	30.5	-	-
Deesa	24.5	25.5	27.0	26.5	26.0	-	-
Churu	-	-	-	-	-	-	-

Wind														
Station Name	10.8.06		11.8.06		12.8.06		13.8.06		14.8.06		15.8.06		16.8.06	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed
Amritsar	13	NE	05	SSE	05	S	10	SE	07	SSW	-	-	-	-
Barmer	-	-	-	-	10	NE	-	-	-	-	-	-	-	-
Sriganganagar	14	NE	15	NE	10	ENE	10	E	05	NNE	-	-	-	-
Jaisalmer	10	NNW-	-	-	20	NE	15	NE	15	E	-	-	-	-
Kota	-	-	-	-	10	SE	10	ESE	13	NE	-	-	-	-
Deesa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Churu	17	ENE	25	ENE	30	ESE	20	E	03	E	-	-	-	-

Due to prevailing weather conditions in the North & North Western belt, there are chances of migration of locust from the Indo-Pakistan border (especially **Kargil & Leh**). Farmers in J&K, H.P., Punjab, Haryana, Rajasthan, Gujarat, U.P. and **Uttaranchal** are advised to monitor the locust and carry out anti-locust operations i.e. spray pesticides on standing crops and vegetation to minimize the damage from any possible locust invasion.

CROP – STATE – STAGE

Delhi

Vegetable crops	Kharif vegetables	Arhar	Rice	Green gram, black gram
Vegetative/Flowering / fruiting / harvesting	Transplanting	Vegetative	Tillering	Pod formation
Bajra	Fodder (Mixed maize , Lobia)	Maize		
Early vegetative/vegetative/flowering	Vegetative	Vegetative/tasseling/silking		

Haryana

Horticultural crop	Sugarcane	Paddy	Maize	Cotton
Vegetative/fruiting	Vegetative	vegetative	Vegetative/early tasseling	Vegetative to square formation
Bajra	Kharif pulses / groundnut			
Early vegetative	Flowering/early pod formation			

Himachal Pradesh

Rice	Maize	Apple	Summer vegetables (Tomato, brinjal, ladies finger)	Fodder crops
Tillering	Vegetative/tasseling/silking/cob formation	Harvesting	Vegetative/flowering/fruiting / harvesting	Vegetative
Moong / Mash	Fruit plants	Potato		
Pod development	Fruiting/maturity	Vegetative / tuber formation/ maturity		

Jammu & Kashmir

Vegetables crops	Rice	Maize	Kharif crops	Horticultural crops
Vegetative	Tillering	Vegetative	Vegetative	Planting
Fodder crops (Maize, Bajra, MP Chari)				
Vegetative				

Punjab

Sugarcane	Paddy	Maize	Cotton	Kharif pulses
Vegetative	Vegetative	Vegetative/early tasseling	Vegetative to square formation	Early vegetative
Groundnut				
Flowering/early pod formation				

Rajasthan

Cotton	Groundnut	Bajra / Maize / Soyabean	Pulses	
Vegetative/Square formation/flowering	Vegetative	Vegetative	Sowing	

Uttar Pradesh

Ealy sown Pulses	Kharif Pulses (Urad & Moong)	Sugarcane	Kharif Vegetables (Ealy sown)	Summer vegetables
Early vegetative/vegetative	Early vegetative/vegetative	Vegetative	Early vegetative/vegetative	Harvesting
Mango	Kharif Maize, Jowar, Bajra	Kharif rice	Kharif vegetables	Kharif Oilseeds (Til, Soybean, Groundnut)
Harvesting	Early vegetative/vegetative	Early vegetative/vegetative	Transplanting	Ealy vegetative/vegetative
New Mango				
Active growth				

Uttaranchal

Rice & cauliflower	Mango	Lady's finger / French Bean	Sugarcane	Chilli & Tomato
Vegetative	Maturity	Fruiting	Tillering	Fruiting / maturity
Apple	Millets			
Maturity	Seedling			

Assam

Maize	Sugarcane	Jute	Summer vegetables	Balck gram and Green gram
Harvesting	Vegetative /cane maturity	Harvesting	Fruiting/Maturity / harvesting	Land preparation/sowing
Transplanted rice	Arhar	Sali rice	Regular ahu rice	
Vegetative/tillering	Vegetative	Transplanting	Harvesting	

Arunachal Pradesh

Wet seeded rice	Ginger	Millet	Summer vegetables	Jhum Paddy
Grain formation stage	Rhizome formation/maturity	Harvesting	Harvesting	Grain formation stage
New Ginger crop				
Sowing				

Bihar

Vegetables	Rice	Maize	Pulses and Oil seeds	
Vegetative	Transplanting/early vegetative	Vegetative	Vegetative	

Jharkhand

Rice	Upland crops (groundnut, arhar, urad)	Finger millet	Maize
Transplanting	Early vegetative/vegetative	Early vegetative/vegetative	Early vegetative/vegetative
Kharif vegetables (Tomato, Cabbage, Cauliflower,	Upland crops (Early sown crops)		

Brinjal, Chilli)			
Transplanting	Early vegetative/vegetative		

Sikkim				
Orange	Rice	Large Cardamom	Kharif vegetables	Potato
Fruiting/harvesting	Tillering	Seed development	Vegetative/fruiting/harvesting	End harvesting (in low & mid hills)
Maize	Ginger			
Cob maturity/early harvesting	Vegetative			

West Bengal				
Aus rice	Sugarcane	Jute	Green Gram	Aman rice
Grain formation	Vegetative	Vegetative /maturity/harvesting	Vegetative / Flowering/pod formation	Transplanting
Groundnut	Early transplanted rice			
Vegetative/flowering/pegging	Early vegetative/tillering			

Chattisgarh				
Chilly, Brinjal, Ladies finger, Beans, Bottle gourd	Kharif Vegetables	Sugarcane	Kharif rice	Soybean
(summer veg.- Vegetative / flowering / fruiting / harvesting)	Sowing / transplanting	Vegetative	Early vegetative/tillering	Germination/seedling /vegetative
Green gram / Black gram(early sown)	Blackgram / Greengram	Groundnut	Red Gram	Kharif vegetables
Vegetative / flowering / pod formation	Germination/vegetative/flowering/pod formation	Germination/seedling /vegetative	Germination/seedling/vegetative/flowering	sowing / transplanting
Early sown rice	Early sown(Redgram, Groundnut, Soybean)			
Early vegetative/tillering	Germination/seedling/vegetative			

Gujarat				
Kharif Maize	Premonsoon irrigated Cotton	Kharif groundnut	Early Sown Rice	Sugarcane
Vegetative	Vegetative/ Square formation	Vegetative	Early tillering/tillering	Vegetative / elongation
Kharif Cotton	Castor	Kharif bajra	Kharif Rice	
Vegetative	Sowing	Vegetative	Transplanting	

Maharashtra				
Kharif Groundnut	Tur	Irrigated Cotton	Sugarcane (Seasonal)	Bajra (Madhya Maharashtra, Marthwada and Vidarbha)
Early vegetative/vegetative/flowering	Germination/early vegetative	Vegetative	Early vegetative/vegetative	Early vegetative/vegetative
Jowar	Kharif sunflower	Soyabean	Kharif rice (Konkan)	Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Germination/early vegetative	Early vegetative/vegetative/floral bud formation	Early vegetative/vegetative	Early tillering/tillering	Seedling / transplanting/Early tiling
Moong	Kharif cotton			
Germination/early vegetative/vegetative	Germination/early vegetative/vegetative			

ve	ve			
Madhya Pradesh				
Sugarcane	Moong	Kharif crops (Maize, jowar, cotton, urad, tur)	Kharif Soyabean	Kharif rice
Vegetative	Vegetative / flowering	Vegetative	Vegetative	Tillering
Orissa				
Vegetables	Earlier sown vegetables	Early sown Groundnut	Groundnut	Sugarcane (pre- seasonal)
Vegetative	Flowering / fruiting / harvesting	Early vegetative/vegetati ve	Vegetative	Vegetative/tillering
Kharif rice	Pulses	Early sown Pulses		jute
Sowing / nursery sowing / transplanting	Vegetative	Early vegetative/vegetative		Vegetative
Andhra Pradesh				
Early sown kharif rice	Kharif rice	Kharif crops(Groundnut/Maize/Chillies /Cotton /Tur)		
Seedling/early vegetative	Transplanting	Vegetative		
Karnataka				
Groundnut	Sugarcane	Kharif crops (jowar, maize, cotton)	Kharif rice	Early sown rice
Vegetative	Vegetative -ratoon crop	Vegetative	Nursery sowing	Transpla nting
Kerala				
Rubber	Virippu Rice			
Tapping	Grain filling			
Tamil Nadu				
Rice (Navarai)	Millets	Summer irrigated cotton	Early & mid sugarcane	Late season sugarcane
End Harvesting	Vegetative	Boll development	Vegetative / Grand growth	Maturity / Harvestin g
Rice (Kuruvai)	Pulses	Groundnut		
Transplanting	Vegetative	Vegetative		