



Summary of Agromet Advisory Services for different States of the country

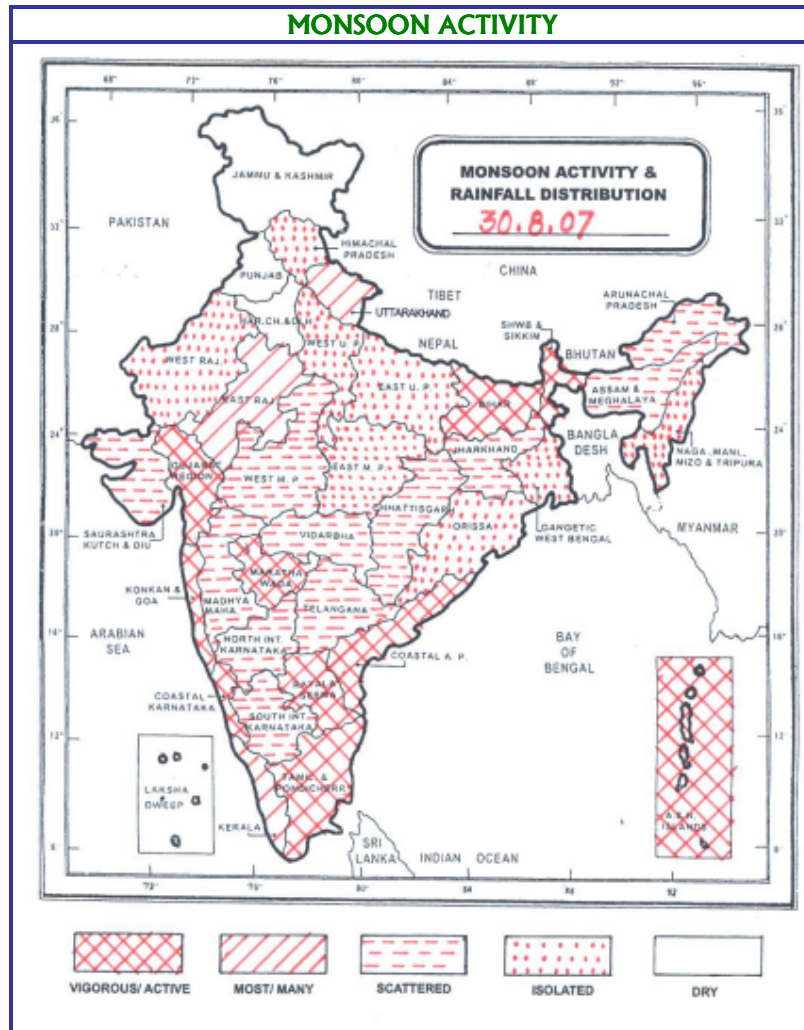
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(For the period 30th to 3rd September, 2007)

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



Agromet Advisory

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

- Southwest monsoon was vigorous over the State on 29th and weak on 23rd & 24th August. Rain occurred at most places on 26th & 29th August, at many places on 25th, 27th & 28th August and at a few places on 23rd & 24th August.
- Rain / thundershowers are likely at many places over the State.

Warning: Isolated heavy to very heavy rainfall is likely over the State during next 48 hours.

Advisories

- As rain/thundershowers is likely to occur at many places over the State with isolated heavy rainfall in next 48 hours, postpone irrigation to plantation crops viz., coconut, arecanut, rubber and banana. Provide drainage facilities to avoid waterlogging.

- Continue intercultural operations, application of fertilizers and pesticides in plantation crops after current spells of rain.
- Monitor *virippu* rice for rice bug and for blast & bacterial blight diseases. Spray Malathion 50 EC @ 2 ml/litre of water to control the pest and apply *Pseudomonas* @ 2.5 kg along with 50 kg cow dung to control the diseases after current spells of rain for the crops in grain formation stage. Harvesting of early sown crops may be continued on bright sunny days.
- Attack of bunchy top is reported in banana. Apply Phorate 10 G @ 25gm or Cabofuran 3 G @ 20gm per pit around the rhizome after current spells of rain.
- Attack of *Phytophthora* foot rot, quick wilt and pollu beetle is reported in pepper. Drench the vines over a radius of 45-50 cm with 0.2% copper oxy chloride. A foliar spray with 1% Bordeaux mixture also may be given to control the diseases. Spray Quinalphos @ 0.05% to control pollu beetle after current spells of rain.

Tamilnadu

- Rainfall occurred at a few places over the State on 27th and 29th August and at one or two places on 28th August.
- Rain/thundershowers are likely at a few places over the State.

Advisories

- Undertake transplanting of *samba* rice in the main field. Apply pre-emergence herbicide Butachlor @ 1 litre/ha on a non rainy day on 3rd day after planting.
- As there was excess rainfall in most of the districts and rain/thundershowers are likely at a few places over the State for the next three days, postpone irrigation to sugarcane and early sown maize.
- Undertake sowing of maize (*Adippattam* – July-Aug crop). Use 6 kgs of seeds/acre. Treat the seeds with *Azospirillum* and Phosphobacteria one pocket each for one acre seeds.
- Monitor sugarcane for stem borer and if the pests population crosses ETL, release *Trichogramma* egg parasite @ 5cc/acre to control the pest.
- Continue picking matured cotton bolls on bright sunny days. Picking may be done at early morning hours to maintain quality of kapas.
- Continue sowing of rainfed groundnut, black gram, green gram and red gram. Use 112 kg pods/ha for groundnut and 20 kg/ha for pulse crops.
- Continue planting of special season sugarcane. Undertake sett treatment with *Azotobacter* before planting. Continue harvesting late sugarcane.
- Continue sowing rainfed millet crops like jowar, bajra and samai. Undertake seed treatment with *Azospirillum* before sowing.

Karnataka

- On 27th & 29th August, rainfall occurred at most places over Coastal Karnataka and at a few places over Interior Karnataka. On 28th August, rainfall occurred at a few places over Coastal Karnataka and at isolated places over Interior Karnataka.
- Rain/thundershowers are likely at many places over the State.

Warning: Isolated heavy rainfall is likely over Coastal Karnataka during next 48 hours.

Advisories

- As rain/thundershowers are likely at many places over the State with isolated heavy rainfall Coastal Karnataka during next 48 hours, postpone irrigation to summer sugarcane, *Kharif* jowar, maize, cotton, groundnut and sunflower. Provide adequate drainage facilities to avoid waterlogging in coastal Karnataka.
- Continue intercultural operations, application of fertilizers and pesticides to *kharif* jowar, maize, cotton, groundnut and sunflower after current spells of rain.
- Monitor sugarcane for white woolly aphids in Mysore, Mandya and Hassan districts and release predators *viz.*, *Dipha* sp. to control the pest.

Andhra Pradesh

- South West monsoon was vigorous over Telangana on 25th August, over Rayalaseema from 24th to 26th & 29th August and active over coastal Andhra Pradesh and Telangana on 24th, 27th & 29th August; over Telangana on 24th & 29th August and over Rayalaseema on 27th August. Rain occurred at a few places over Coastal Andhra Pradesh on 25th & 26th August, over Telangana 26th and 27th August over Rayalaseema on 23rd August. Isolated rain occurred over the State during the week.
- Rain/thundershowers are likely at many places over the State.

Warning: Isolated heavy to very heavy rainfall is likely over Coastal Andhra Pradesh during next 24 hours.

Advisories

- Maintain standing water in rice field.
- Postpone irrigation to *kharif* crops viz., groundnut, cotton, maize, green gram and black gram as rain/thundershowers are likely at many places over the State for the next three days with isolated heavy to very heavy rainfall over Coastal Andhra Pradesh during next 48 hours. Provide adequate drainage facilities in Coastal Andhra Pradesh to avoid waterlogging as heavy rainfall is expected.
- To control *Hispa* attack in rice, spray 2.5 ml Chloropyriphos or 2.0 ml Quinolphos per 1 litre of water after current spells of rain. Monitor cotton for sucking pests and if the damage crosses ETL apply Imidacloprid & water in 1:20 ratio (5ml in 100ml of water) and brush on the stem at 20, 40 & 60 days after sowing. Apply chemicals after current spells of rain.
- Undertake earthing up in early sown *kharif* crops after current spells of rain.

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

Assam

- Light to moderate rain occurred at most places on 27th August, at many places on 29th August and at a few places on 28th August with isolated heavy to very heavy falls on 27th August, isolated rather heavy to heavy falls on 29th August and isolated rather heavy falls on 28th August over the State. Generally cloudy sky during the period.
- Rain / thundershowers are likely at many places over the State.

Warning: Isolated heavy to very heavy rainfall is likely over the State during next 48 hours.

Advisories

- *Sali* rice is damaged in few localities due to flood. After receding of flood water if the land cannot be transplanted due to shortage of *sali* rice seedling, sprouted seeds of variety –Luit, Kopili, Culture-1 or local short duration variety seed may be directly sown after current spells of rain.
- Prepare land for after current spells of rain and continue transplanting of *Sali* rice. Apply urea @ 6 kg, SSP @ 17 kg, Mop @ 4 kg per bigha. The uprooted seedlings are to be washed and then the root portion is dipped in 0.2% solution of Chloropyriphos (1 ml per litre of water) along with 1% of urea for three hrs as protective measure against stem borer, gall midge and hopper.
- As rain/ thundershowers are likely at many places over the State for the next three days, with isolated heavy to very heavy falls during next 48 hours, postpone irrigation to sugarcane and arhar. Provide adequate drainage facilities to avoid waterlogging due to heavy rainfall.
- Harvest already matured crop of jute and maize.
- Jute crop is to be harvested at small pod stage to get optimum yield and good quality fibre.

- Harvesting of maize should be done on bright sunny days as soon as husk cover turns brown in colour and the silks are completely dry. Birds may damage maize crop at maturity stage. The matured cobs can be protected from attack of birds by tying the cobs with leaves of same plant. Shining coloured strips may also be used to scare the birds.
- Old and dry leaves should be removed and sugarcane should be provided with mechanical support to prevent lodging.
- Incidence of hispa and stem borer was noticed in *Sali* rice in few localities. Monitor the infestation of hispa and stem borer. If one adult is noticed per hill, insecticides like Chloropyrifos 20 E.C. @ 2 ml per litre of water or Monocrotophos 40 EC @ 1.5 ml per litre of water is to be applied. Apply chemicals after current spells of rain. For management of yellow stem borer *Trichogramma Japonicum* @ 50,000 per hectare in six releases are to be used.
- Seeds of black gram varieties T-9, Pantu-19, Saonimah SB-12 and green gram varieties T-44, Pratap and AAU-39 should be sown in the field after current spell of rain where *Sali* rice could not be cultivated due to shortage of seedling damaged by flood water and also in uphill land till 15th September. Seeds should be inoculated with 150 gm of *Rhizobium* culture for 3 kg of seeds. Fertilizer @ 3 kg Urea, 30 kg SSP per bigha should be applied after current spells of rain for more yields.

Arunachal Pradesh

- Rain/ thundershowers are likely at many places over the State.
- Warning:** Isolated heavy to very heavy rainfall is likely over the State.

Advisories

- As rain/ thundershowers are likely at many places over the State for the next three days, with isolated heavy to very heavy falls during next 48 hours, postpone irrigation to millet, *jhum* paddy and ginger crops. Provide adequate drainage facilities to avoid waterlogging due to heavy rainfall.
- Continue weeding, spraying and intercultural operations after current spells of rain.
- Complete harvest the matured maize crop on bright sunny days.

Bihar

- Rain/thundershowers are likely at many places over the State.
- Warning:** Isolated heavy to very heavy rainfall is likely over the State.

Advisories

- Transplanting of photosensitive rice varieties and direct sowing of short duration rice (less than 115 days) can be undertaken in flood water receding areas after current spells of rain.
- As rain/thundershowers are likely at many places over the State for the next three days with isolated heavy to very heavy rainfall during next 48 hours, postpone irrigation to arhar and sugarcane. Provide adequate drainage facilities to avoid waterlogging due to heavy rainfall.

Jharkhand

- Rain occurred at Ranchi, Jamshedpur and Daltonganj on 28th August.
- Rain/thundershowers are likely at a few places over the State.

Advisories

- Postpone irrigation to vegetables, maize, arhar, groundnut, soybean and urad as rainfall is likely in next 4-5 days.
- To prevent from powdery mildew of small fruits in Mango and Litchi, spray sulfex@ 2gm/litre of water on a non rainy day.
- Monitor the crop for stem borer infestation and if exceeds economic threshold level, about 10 granules of carbofuron should be applied in earhead. After weeding, top dressing of urea @ 75 kg urea per hectare may be applied on a non rainy day and do earthing.

- Topdressing of urea @ 30 kg per hectare for early sown rice and @ 75 kg/ha for maize may be done on a non rainy day.

Sikkim

- Sky remained generally cloudy during the period. Moderate to nearly heavy rain occurred from 23rd to 25th August, very light rain on 29th August and no rain fall on 24th August. The rainfall was normal during the period over East Sikkim.
- Rain/thundershowers are likely at many places over the State.

Warning: Isolated heavy to very heavy falls is likely over the State during next 48 hours.

Advisories

- As rain / thundershowers are likely at many places over the State for the next three days with isolated heavy to very heavy rainfall is likely over the State, postpone irrigation to orange, vegetables, and ginger. Provide adequate drainage facilities as heavy rainfall is expected.
- Maintain 4-5 cm water level in the rice field.
- Continue harvesting matured vegetable crops as per market demand.
- Continue harvesting maize and large cardamom on bright sunny days.
- Monitor ginger for rhizome rot and bacterial wilt and rouge out the affected plants and destroy completely to prevent further damage.
- Monitor orange for leaf miner and trunk borer. Spray neem based pesticides to control leaf miner after current spells of rain. Plug trunk borer holes with cotton soaked with kerosene and later with mud to prevent trunk borer.

West Bengal

- During the said period rainfall occurred at a many places on 27th August, at most places with heavy at an isolated places on 28th August and at many places with heavy at an isolated places on 29th August over Sub Himalayan West Bengal. During the period rainfall occurred at a few places on 27th and 29th August and at many places on 28th August over Gangetic West Bengal.
- Rain/thundershowers are likely at many places over Sub-Himalayan West Bengal and at a few places over the rest region of the State.

Warning: Isolated heavy to very heavy rainfall is likely over Sub-Himalayan West Bengal during next 24 hours.

Advisories

- As rain/thundershowers are likely at many places over Sub-Himalayan West Bengal for the next three days with isolated heavy to very heavy falls during next 48 hours, postpone irrigation to sugarcane, groundnut and arhar. Provide adequate drainage facilities in Sub-Himalayan West Bengal due as heavy rainfall is expected. Postpone irrigation in Gangetic West Bengal as there was sufficient rainfall during last week.
- Maintain 3 – 5 cm water in the field of *aus* rice in grain formation stage. Harvest the matured crops on bright sunny days.
- Transplant 25 – 30 days old seedlings of *aman* rice in the main field. Apply 15 kg N, 30 kg P₂O₅ and 30 kg K₂O / ha to short duration varieties and 20 kg N, 40 kg P₂O₅ and 40 kg K₂O / ha to medium and long duration varieties. Select varieties from Hira, Aditya, Prasanya etc. for broadcasting and Rassi, Tulsi, Annada, Biraj, IR – 64, IR – 36, Ratna, Swarna, Nalini, Amulya etc. for transplanting. Apply fertilizers after current spells of rain in Sub-Himalayan West Bengal and on a non rainy day in Gangetic West Bengal.
- Maintain 2 – 3 cm of water in *aman* rice field 2 – 3 days after transplanting. Maintain 3 – 5 cm water in the field wherever crops are at tillering stage.
- Undertake intercultural operation on a non-rainy day in Gangetic West Bengal and after current spells of rain in Sub-Himalayan West Bengal to keep the field weed free.

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

Gujarat

- Rainfall occurred at a few places over South Gujarat region, Saurashtra, Diu, Daman, Dadra Nagar Haveli on 27th August. Monsoon was active over Gujarat region & rainfall occurred at many places over Saurashtra on 28th August. Monsoon was active over Gujarat State, Diu, Daman, Dadra Nagar Haveli on 29th August.
- Rain/thundershowers are likely at most places over Gujarat region and many places over Saurashtra & Kutch region.

Warning: Isolated heavy to very heavy rainfall is likely over Gujarat State during next 24 hours.

Advisories

- Prepare land by two ploughings after current spells of rain and continue sowing of castor. Apply 10 mt. FYM or 1 Mt. castor cake. Apply 40 kg N and 25 kg phosphorus / ha in furrows as basal dose. Select varieties from hybrid castor GAUCH-1, GCH-2, 4, 5, 6 for sowing.
- As rain/thundershowers are likely at most places over Gujarat region and many places over Saurashtra & Kutch region for the next three days with isolated heavy to very heavy rainfall during next 48 hours, postpone irrigation to sugarcane, *kharif* groundnut, *kharif* cotton, *kharif* bajra and *kharif* maize. Provide adequate drainage facilities to avoid waterlogging due to heavy rainfall.
- Maintain 3 – 5 cm water at tillering stage of *kharif* rice.
- If *kharif* groundnut appears yellowish, spray 100 grams hirkasi (Ferolus sulphate) + 10 grams lemon aeck dissolved in 10 liter of water / ha by making a solution in 500 liters of water to the crop after current spells of rain.
- In some places cotton crop infested with mealy bug. Monitor the crop and if damage exceeds ETL, to control the pest spray Methyl-O-dimeton 25 EC 10 ml or Phosphamidon 85 EC 5 ml or Dimethoate 30 EC 10 ml in 10 liter of water after current spells of rain.
- Weeding, intercultural operation and top dressing of Nitrogen may be done in *kharif* maize, cotton, bajra and groundnut crops after current spells of rain.

Chhattisgarh

- Rainfall occurred at a many places on 28th August and at a few places on 27th and 29th August in the State.
- Rain/thundershowers are likely to occur at a few places over State.

Advisories

- Maintain 2 – 3 cm water after 3 – 4 days after transplanting of *kharif* rice. Maintain 3 – 5 cm water at tillering stage. Undertake top dressing on a non rainy day.
- Postpone irrigation to sugarcane and maize and also to black gram, green gram, groundnut and soybean as rainfall is likely in next 4-5 days.
- When the sugarcane crop attains a height of 5 – 6 feet, 4 – 5 plants may be tied together to prevent lodging from gusty wind.
- Attack of stem borer in rice is reported. Monitor the crop for stem borer, if the damage exceeds ETL, spray Chlorpyrifos @ 1000 ml / hectare just after the appearance of first dead heart on a non rainy day.

Maharashtra

- Monsoon was active in Madhya Maharashtra, South Konkan, Marathwada on 27th August in Konkan on 28th August and in Vidarbha on 29th August. Rain occurred at most places in Konkan, at many places in Madhya Maharashtra, Marathwada & Vidarbha.

- Rain/thundershowers are likely at most places over Konkan & Goa, at many places over Madhya Maharashtra and at a few places over Marathwada and Vidarbha.

Warning: Heavy to very heavy rainfall is likely over Konkan & Goa, and Madhya Maharashtra during next 48 hours.

Advisories

- As rain/thundershowers are likely at most or many places over Konkan and Madhya Maharashtra with isolated heavy to very heavy rainfall during next 48 hours, postpone irrigation to the crops. Provide adequate drainage facilities to avoid water logging due to heavy rain.
- As there was no significant rain in Beed district in Marathwada and Gadchiroli district in Vidarbha during last week and rain/thundershowers are likely to occur at a few places during next three days, apply irrigation to the standing crops.
- Maintain 3 – 5 cm water in the rice field wherever crops are at tillering stage.
- Mild incidence of white woolly aphids in Kolhapur & Pune division in sugarcane (pre-seasonal) & (suru), sap sucking insects in Aurangabad and Latur, aphids & jassids in Amravati & Nagpur and aphids, jassids, thrips in Nashik division in irrigated cotton, blast, leaf roller, blue beetle and stem borer in Konkan & blast in Kolhapur & Pune division in *kharif* rice and hairy caterpillar in Aurangabad division in *kharif* sunflower, leaf caterpillar in Nashik, Aurangabad, Amravati division & leaf roller in Kolhapur, Nagpur division in Kharif soyabean is reported.
- Monitor sugarcane (pre-seasonal) 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 Sap sucking insects and aphids, jassids & thrips in irrigated cotton, spray 5 % Neem extract or release 10,000 to 15000 larvae of *Crysoperla carnea* and if infestation exceeds economic threshold level, spray 30 % WSC Diamethoate 1000 ml or 25 % WSC Methyl dimeton 320 ml / ha in 500 liters water.
- Monitor *kharif* rice for Blast & if exceeds economic threshold level, spray Bavistin 500 gm / ha in 500 liters water.
- Monitor *kharif* rice for Stem borer & if exceeds economic threshold level, apply 10G Foret (Granular) or 5 G Quinolphos powder @ 15 kg / ha or spray 50 % fenitrothion @ 800 ml / ha in 500 liters water.
- Water may be drained out from *kharif* rice field before the application of plant protection measures & may be applied again after 24 hours of application of plant protection measures.
- Monitor *kharif* sunflower for hairy caterpillar & if exceeds economic threshold level, spray 5 % Neem extract or Quinolphos 25 EC @ 1000 ml or Endosulphan 36 EC @ 1000 ml / ha in 500 liters water.
- Monitor soybean for Leaf eating caterpillar & if exceeds economic threshold level, spray 25 EC, Quinolphos 1000 ml or 36 EC, Monocrotophos 700 ml / ha in 500 liters water.
- Monitor soybean for Leaf roller & if exceeds economic threshold level, spray 5 % Neem extract or if infestation exceeds economic threshold level, spray Dimethoate 10 ml or 50 % Carbaril water soluble powder 40 gm or Monocrotophos 15 ml /ha in 500 liters water.
- Undertake intercultural operation and apply fertilizer and plant protection measures after current spells of rain in Konkan and Madhya Maharashtra and on a non rainy day in Marathwada & Vidarbha.

Madhya Pradesh

- Rainfall occurred at Many places over the State on 27th August and South west M.P. on 29th August and at a few places over rest of the State on remaining days.
- Rain/thundershowers are likely at many places over southwest Madhya Pradesh and at a few places over the rest region of the State.

Advisories

- Postpone irrigation in south west Madhya Pradesh and East Madhya Pradesh as rain/thundershowers are likely at many places in next 4-5 days. As there was no significant rainfall in remaining parts of the State during last week and rain / thundershowers likely to occur at a few places for the next three days, apply irrigation to sugarcane and other *kharif* crops viz., soybean, maize, urd and jowar.
- Undertake intercultural operation in sugarcane and *kharif* crops to keep the field weed free. Application of fertilizers may be undertaken after current spells of rain in south west M.P. and on a non rainy day in other parts of the State.

Orissa

- South West monsoon was normal over the State on 28th August. Rain fall occurred at most places over the State on 28th August and at a few places during the remaining days. Heavy falls also occurred at isolated places over the State on 28th August.
- Rain/thundershowers are likely at a few places over the State during next 24 hrs. and increase thereafter.

Advisories

- Postpone irrigation to the crops as rainfall is likely in next 4-5 days.
- Continue sowing / transplanting of vegetable crops.
- Monitor sugarcane for top shoot borer and if the damage exceeds ETL, undertake spraying of Monocrotophos or Triazophos or Prefonophos @ 400 ml/acre on a non rainy day.
- Monitor jute for leaf eating caterpillar and spray Endosuphan @ 2.5 ml/liter of water on a non rainy day, if the damage crosses ETL.

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

Punjab

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

Advisories

- As there was no significant rainfall in most of the districts and rain / thundershowers are likely at isolated places over the State for the next three days, apply irrigation to sugarcane, cotton, pulses, groundnut(early sown crop) and Horticultural crops. Postpone irrigation in Gurdaspur, and Amritsar districts as there was excess rainfall during last week.
- Maintain standing water in rice field.
- Attack of white fly, and spotted bollworm in cotton and leaf roller in rice has been observed. Farmers are advised to monitor the crop, if exceeds economic threshold level, to control white fly spray Trizophos/ E-Mite 400ml per acre.

Haryana

- Rainfall occurred at isolated places on 28th & 29th August. Weather remained mainly dry on rest days.
- Rain/thundershowers are likely at isolated places over the State.

Advisories

- As there was no significant rainfall in most of the districts and rain/thundershowers are likely at isolated places over the State for the next three days, apply irrigation to sugarcane, cotton, pulses, groundnut (early sown crop) and Horticultural crops.
- Incidence of thrips on cotton, white fly on moong, and *pyrilla*, shoot borer in sugarcane reported below ETL. Monitor the crop & if exceeds economic threshold level, for effective control of cotton thrips, spray 250ml Rogor 30EC per hectare, Metasystox 25EC 1ml/l of

water to control white fly in moong, and to control *pyrilla* in sugarcane spray 600 ml Endosulfan 50 EC in 600 liter of water/acre.

Rajasthan

- Light to moderate rain / thundershower occurred at many places in Jaipur, Ajmer, Kota and Udaipur divisions and at a few places in Jodhpur division with heavy rainfall at isolated places and weather remained mainly dry in Bikaner division of the State.
- Rain/thundershowers are likely at many places over East Rajasthan and at a few places over West Rajasthan.

Advisories

- As rain/thundershowers are likely at many places over East Rajasthan for the next three days, postpone irrigation to the crops.
- As there was no significant rainfall in most of the districts during last week in West Rajasthan and rain/thundershowers are likely at a few places for the next three days, apply irrigation to early sown *kharif* crops viz., bajra, jowar, maize, guar, moong, moth bean and urd.
- Undertake intercultural operations in *kharif* crops to keep the field weed free. Intercultural operations may be continued on a non rainy day in West Rajasthan and after current spells of rain in East Rajasthan.
- Monitor *desi* and *American* cotton for sucking pests. If the pests population crosses ETL, spray Endosulphan @ 1.25 liters/ha on a non rainy day in West Rajasthan and after current spells of rain in East Rajasthan to control the pests.

Uttar Pradesh

- Rain occurred at most places in Lucknow divisions and at many places in Faizabad, Bareilly divisions and at a few places in Allhabad, Gorakhpur, Kanpur divisions and at isolated places in Varanasi, Jhansi divisions and weather was mainly dry in Moradabad, Agra, Meerut divisions of U.P. on 27th August. Rain occurred at most places in Gorakhpur, Meerut divisions and at many places in Faizabad, Kanpur, Agra, Jhansi division and at few places in Lucknow division and at isolated places in Varanasi, Allhabad divisions and weather was mainly dry in Bareilly, Moradabad divisions of U.P. on 28th August. Rain occurred at most places in Lucknow, Bareilly, Moradabad divisions and at many places in Faizabad, Kanpur, divisions and at a few places in Allhabad, Gorakhpur, Varanasi divisions and Weather was mainly dry in Agra, Jhansi, Meerut divisions on 29th August.
- Rain/thundershowers are likely many places over East Uttar Pradesh and at a few places over the West Uttar Pradesh.

Advisories

- Continue sowing of toria.
- As rain/thundershowers are likely many places over East Uttar Pradesh for the next three days, postpone irrigation to the crops. Apply irrigation in west U.P as there was no significant rainfall during last week and rain/thundershowers are likely at a few places during next three days.
- Proper drainage arrangements for avoiding waterlogging in turmeric may be done.
- Monitor the top borer in sugarcane, if exceeds economic threshold level, dip the small branches of neem and peepal around the field to catch white grub and collect insects and to destroy, spray the solution of 0.5% Monocrotophos on a non rainy day in West U.P and after current spells of rain in East U.P.
- Maintain 2.5- 3.0 cm water level in transplanted paddy and undertake top dressing of urea on a non rainy day in West U.P and after current spells of rain in East U.P.

Himachal Pradesh

- Precipitation occurred at a few places in the State.
- Isolated rain / thundershowers are likely over the State.

Advisories

- Harvest already matured fruits of apple.
- As there was no significant rain during last week in most of the districts except Una and Bilaspur districts of the State and isolated rain/thundershowers are likely over the State for next three days, apply irrigation to bring soil moisture to field capacity in vegetables, potato and maize crops.
- Maintain 3 – 5 cm water in rice field wherever crops are at tillering stage.
- 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.
- There is mild chance of attack of late blight disease in potato. If attack crosses economic threshold level, spray blitox – 50 / copper oxychloride @ 300 g in 100 litres of water to control the disease.
- Monitor the crop for leaf hopper in rice crop. If damage exceeds economic threshold level, spray 1250 ml Chloropyriphos 20 EC (0.05%) per 500 L water/ha.

Uttarakhand

- Moderate rain was recorded at most places on 28th August, Light to moderate rain was recorded at many places on 29th August, Moderate rain was recorded at isolated places on 23rd, 25th & 26th August, light to moderate rain at a few places on 27th August, while light rain was recorded at isolated places on 24th August. Sky remained partly cloudy to generally cloudy during the week.
- Rain/thundershowers are likely at a few places over the State.

Warning: Isolated heavy to very heavy rainfall is likely over the State during next 48 hours.

Advisories

- As there was sufficient rainfall in most of the districts during last week and rain/thundershowers are likely at a few places over the State with isolated heavy to very heavy rainfall during next 48 hours, postpone irrigation to sugarcane, potato, and ginger. Provide adequate irrigation facilities to avoid waterlogging due to heavy rainfall.
- Undertake intercultural operations on a non rainy day, to keep the field weed free in potato, sugarcane, rice and in orchards.
- Monitor apple for thrips and mites, if the pest population crosses ETL and undertake plant protection measures on a non rainy day.

Jammu & Kashmir

- Light to moderate rain occurred at isolated places on 27th to 29th August over J & K divisions.
- Rain/thundershowers are likely at isolated places over the State.

Advisories

- As there was no significant rainfall in most of the districts during last week and isolated rain/thundershowers are likely over the State for the next three days, apply irrigation to maize, vegetable and fruit crops in Kashmir division and to maize in Jammu division.
- Maintain 5 cm standing water in rice field.
- Weather conditions are favourable for the attack of brown plant hopper and *Hispa* in rice in Jammu division. Spray Endosulfan @ 1.5 litre/ha to prevent the pests, if damage exceeds ETL.
- Monitor pulse crops for mosaic and rogue out the affected plants to prevent further damage.
- Continue sowing of cabbage, cauliflower, kale and knol-khol in nurseries and sowing of carrot for seed purpose.
- Undertake planting citrus, litchi, loquat, guava and papaya in orchards in Jammu division.

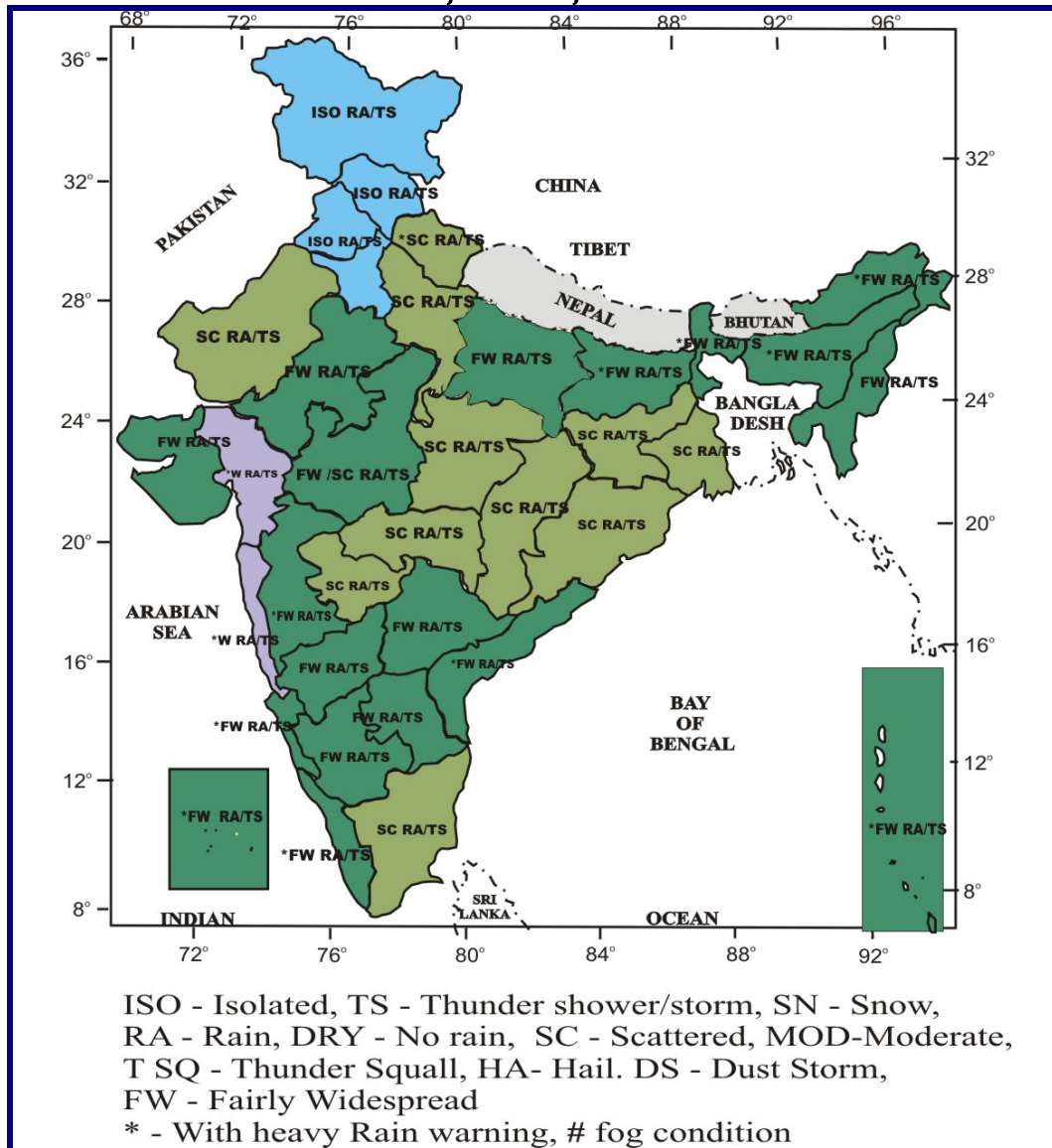
Delhi

- Very light rain occurred on the 28th August at a few places. Weather remained mainly dry on rest of the days.
- Isolated rain/thundershowers are likely over the State.

Advisories

- As there was no significant rainfall over the State during last three weeks and rain/thundershowers are likely at isolated places over the State for the next three days, apply irrigation to vegetables, arhar, maize and bajra.
- Maintain 3 – 5 cm water in the rice field at tillering stage. Top dressing urea may be undertaken.
- Prepare land and undertake transplanting of 5 – 6 weeks old seedlings of early cauliflower and cabbage on the main field.
- Undertake intercultural operation, application of fertilizer and plant protection measures to the crops.

Forecast Map
Valid upto 2nd September 07



Salient weather features for the week ending 29/08/07

METEOROLOGICAL ANALYSIS

- The western end of the monsoon trough gradually shifted northward and lay north of its normal position till 27th. It then gradually shifted southwards and lay south of its normal position on the last day of the week.

- The eastern end of the monsoon trough lay near its normal position during the week. However, a secondary trough extended from East Uttar Pradesh to North-East Assam during this period.
- A cyclonic circulation lay over West-Central Bay of Bengal off Andhra Pradesh coast between 3.1 km and 5.8 km above sea level on 23rd. It persisted over the same area extending upto mid-tropospheric level on 24th. It lay over south Telangana and adjoining areas of Coastal Andhra Pradesh and Rayalaseema on 25th, over North Interior Karnataka and neighbourhood on 26th; over South Madhya Maharashtra and neighbourhood on 27th; over north Madhya Maharashtra and neighbourhood on 28th and over southwest Madhya Pradesh and neighbourhood on 29th.
- An off shore trough extended from Konkan coast to Kerala coast during 23rd 24th August and from south Gujarat coast to Kerala coast thereafter.
- Last week's upper air cyclonic circulation over northwest Madhya Pradesh and adjoining East Rajasthan extending upto 4.5 km above sea level lay over West Rajasthan and neighbourhood at lower tropospheric level on 23rd August and moved away westwards on 24th.
- An upper air cyclonic circulation lay over Gangetic West Bengal extending between 1.5 and 5.8 km above sea level on 27th. It lay over Jharkhand and neighbourhood on 28th extending upto 5.8 km above sea level and over East Uttar Pradesh and neighbourhood extending upto 3.1 km above sea level on 29th.
- An upper air cyclonic circulation lay over North Pakistan and adjoining Jammu & Kashmir in the lower levels on 23rd and over Jammu & Kashmir and adjoining Himachal Pradesh on 24th & 25th. It moved away Eastwards on 26th. A fresh upper air cyclonic circulation in the lower levels lay over North Pakistan and adjoining Jammu & Kashmir on 26th and over Himachal Pradesh and adjoining areas on 27th. It moved away eastwards on 28th.
- Another upper air cyclonic circulation in lower levels lay over Central Uttar Pradesh on 25th; over Bihar and neighborhood on 26th, over Sub-Himalayan west Bengal and adjoining Assam & Bangladesh on 27th and over North-East Assam and neighbourhood on 28th. It moved away eastwards on 29th.

RAINFALL

Under the influence of the above systems:

- Widespread/fairly widespread rainfall occurred over northeastern States and Sub-Himalayan West Bengal & Sikkim during many days of the week. Fairly widespread rainfall also occurred over remaining subdivisions of east India during 28-29th.
- Fairly widespread rainfall occurred over Andaman & Nicobar Islands, Lakshadweep, Kerala, Coastal Karnataka and Konkan & Goa during many days of the week. Fairly widespread/scattered rainfall occurred over remaining parts of Peninsula, Chhattisgarh, Vidarbha, Marathwada and Madhya Maharashtra during many days of the week.
- Fairly widespread rainfall occurred over Gujarat Region and Madhya Pradesh during second half of the week.
- The rainfall was subdued over remaining parts of the country where isolated/scattered rainfall occurred during many days of the week.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 29TH AUGUST, 2007)

Rainfall was excess/normal in 25, deficient/scanty in 11 out of 36 meteorological sub-divisions (Actual: 49.3 mm, Normal: 51.8 mm and Departure: -5%).

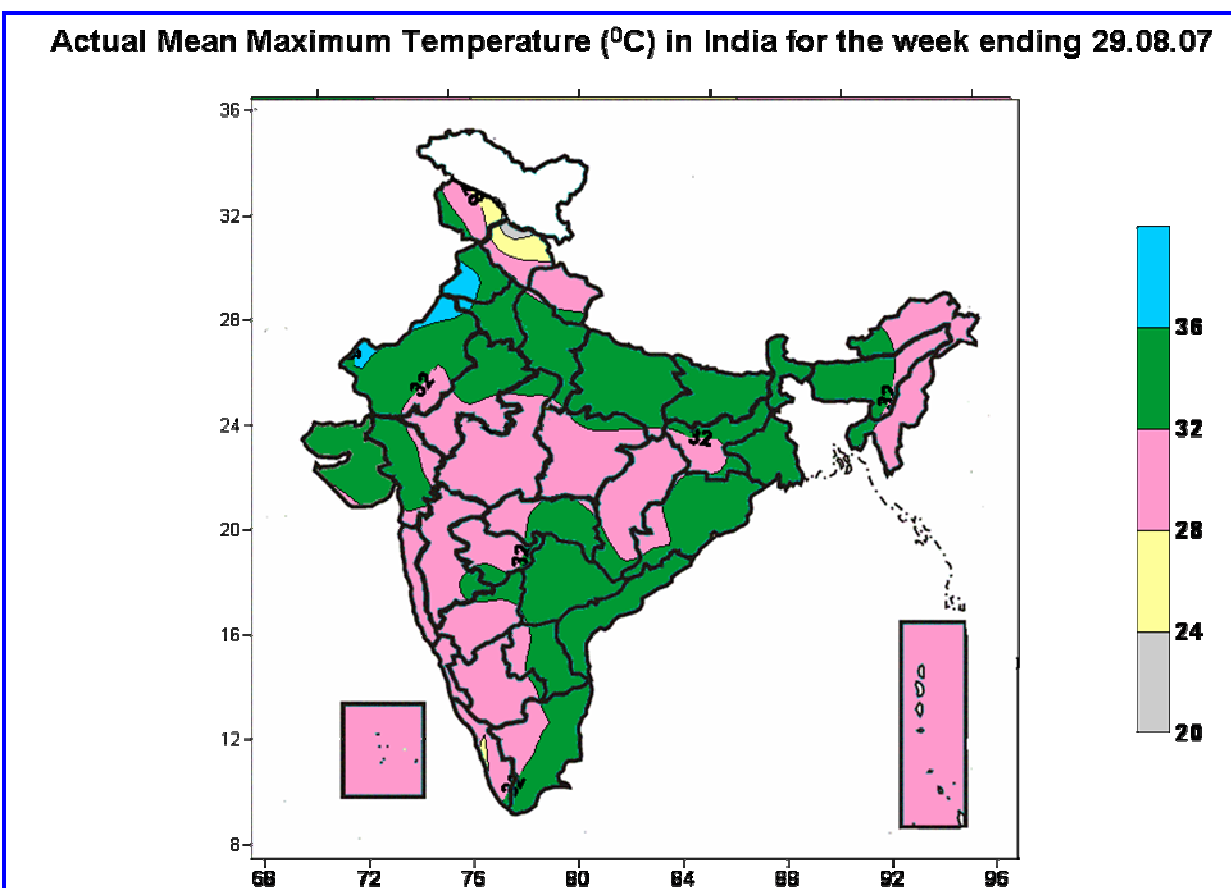
CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 29TH AUGUST, 2007)

Rainfall was excess/normal in 29 and deficient in 7 out of 36 meteorological sub-divisions. (Actual: 715.3 mm, Normal: 703.9 and Departure: +2%).

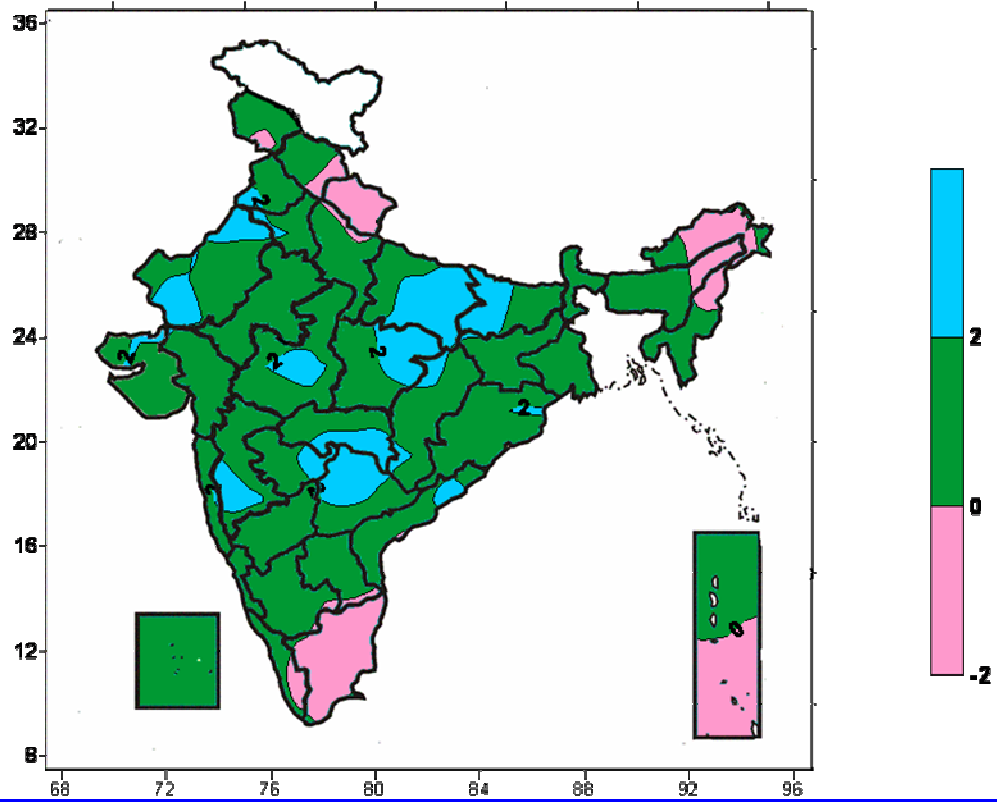
OUTLOOK FOR THE WEEK ENDING ON 5TH SEPTEMBER, 2007.

- A low pressure area is likely to form over West-Central & adjoining North-West Bay of Bengal around 2nd September. Under its influence, fairly widespread rainfall with isolated heavy to very heavy falls is likely over Andhra Pradesh and adjoining Orissa upto 3rd September and decrease thereafter. Subsequently, the fairly widespread rainfall with isolated heavy to very heavy falls is likely over Chhattisgarh and East Madhya Pradesh.
- Fairly widespread rainfall with isolated heavy to very heavy falls is likely along the West coast and northeastern states.
- Subdued rainfall activity is likely over North-West India.

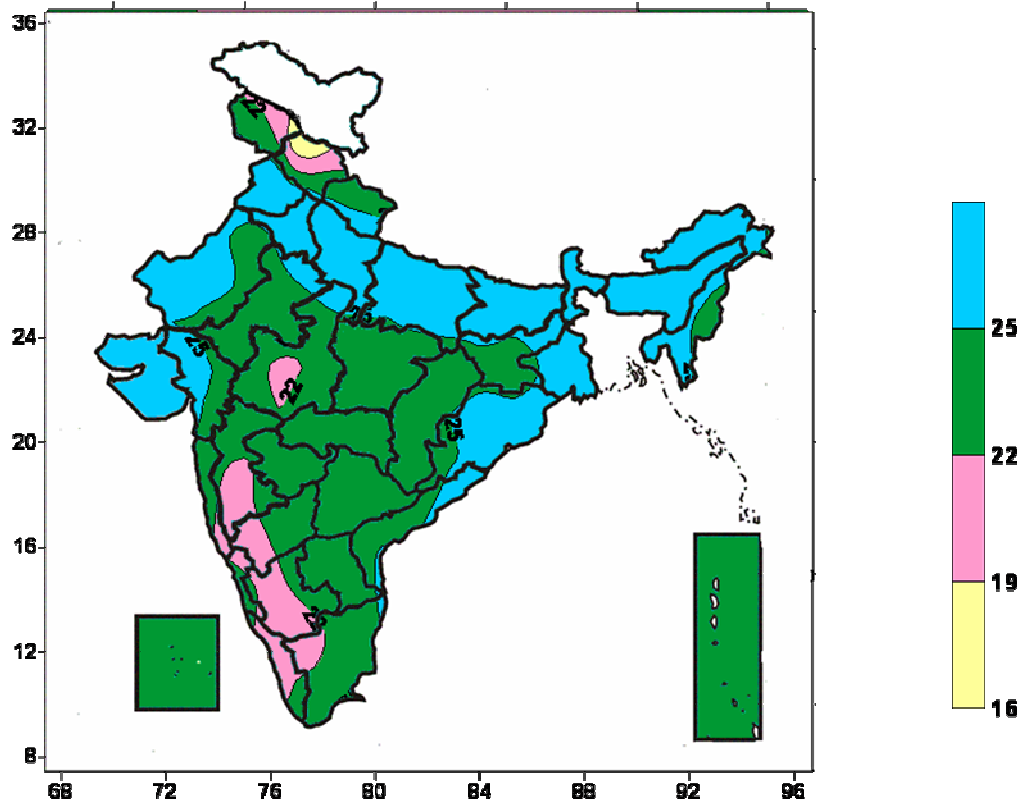
Contour maps for the week ending 29th August, 2007



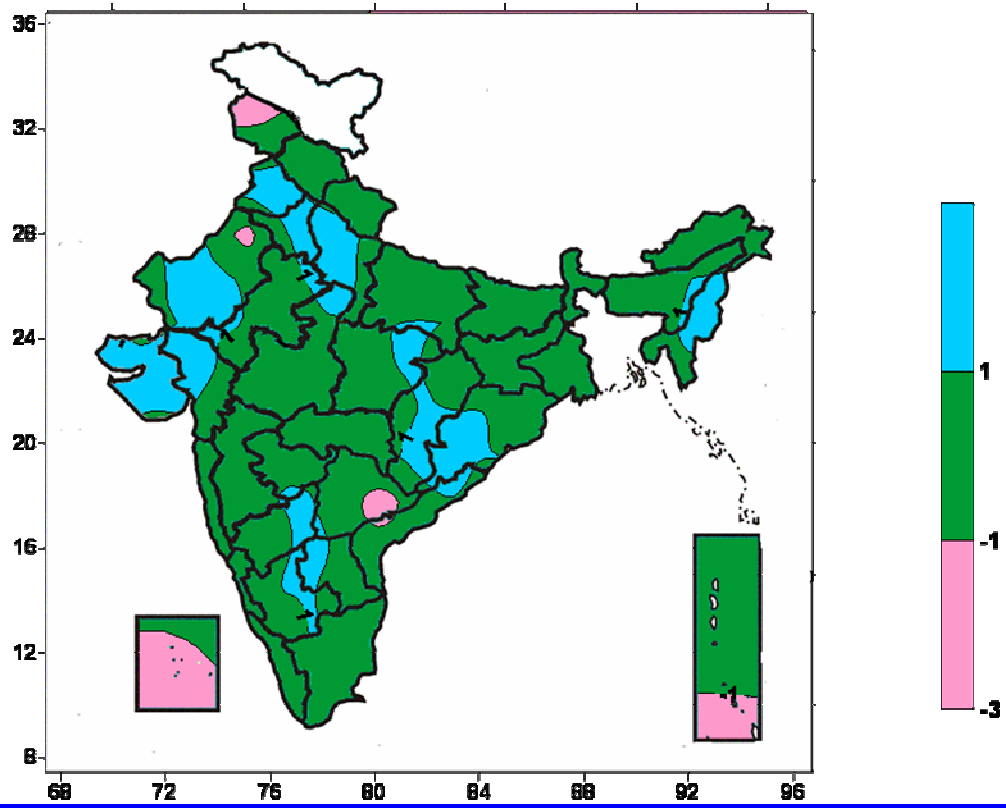
Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 29.08.07



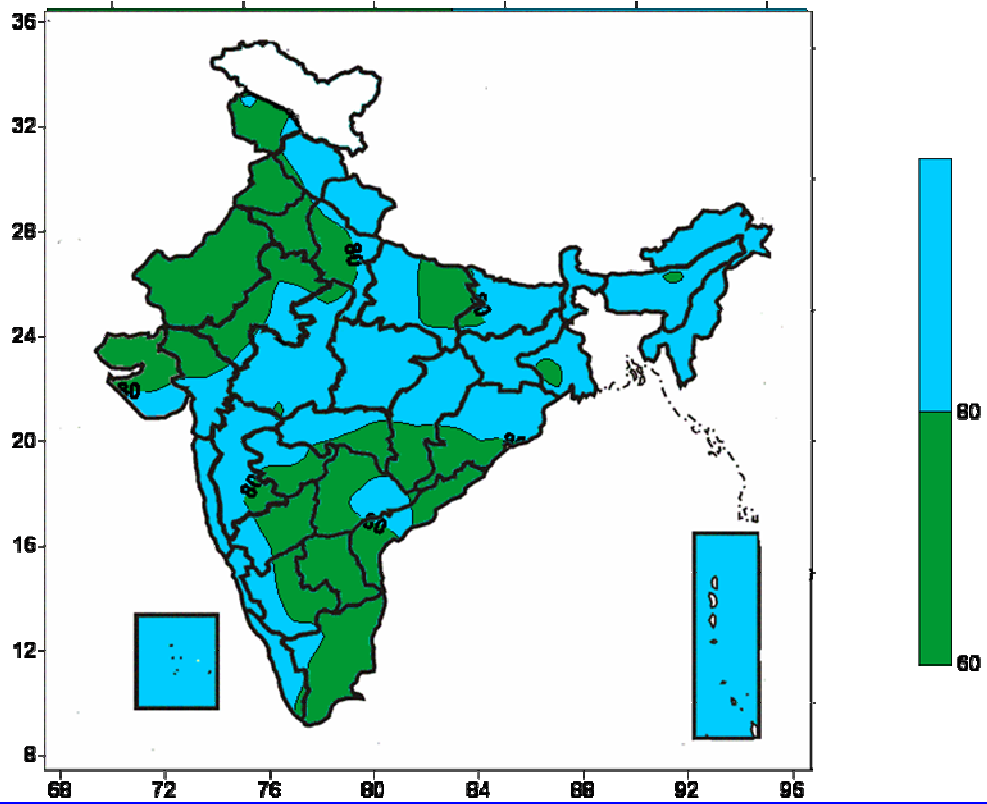
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 29.08.07



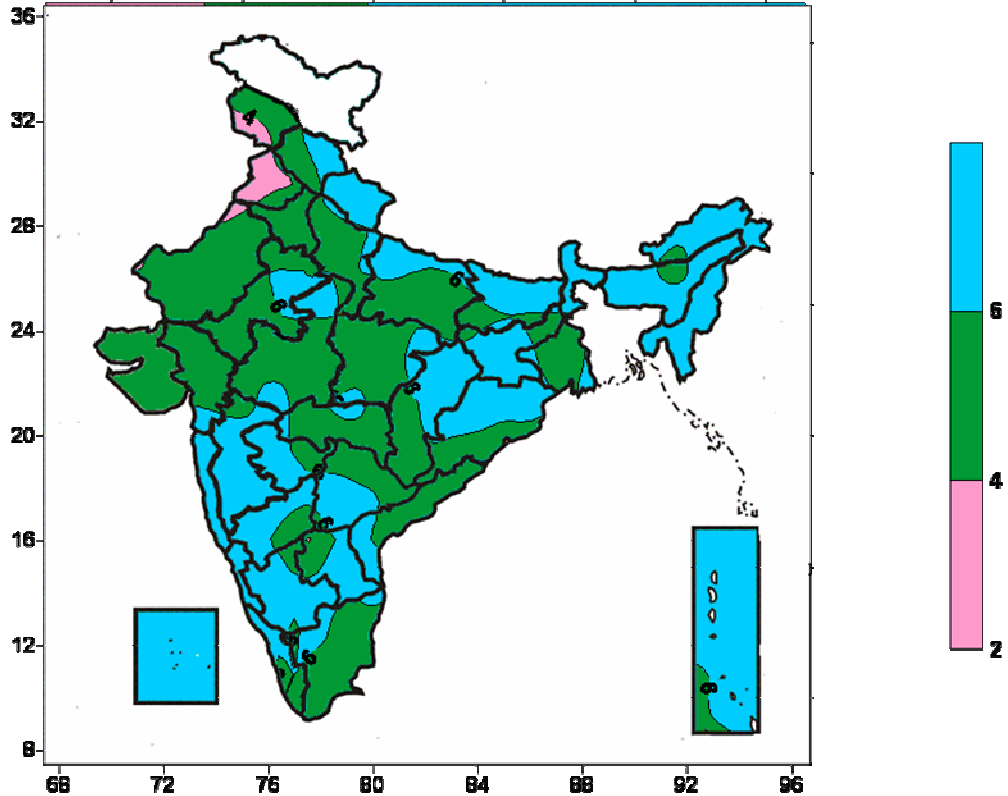
Minimum Temperature (°C) Anomaly in India for the week ending 29.08.07



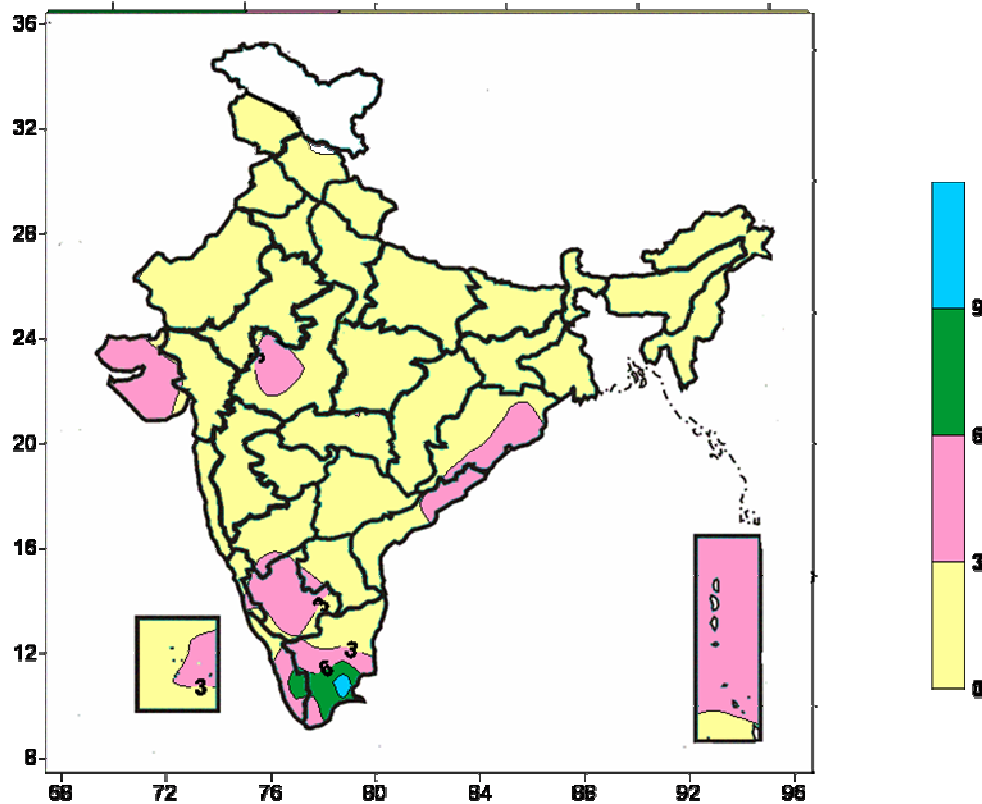
Relative Humidity (%) over India for the week ending 29.08.07



Cloud amount (okta) over India for the week ending 29.08.07



Wind speed (knots) over India for the week ending 29.08.07



Desert Locust Forecasting



Rainfall (mm)							
Station Name	23.08.07	24.08.07.	25.08.07	26.08.07	27.08.07	28.08.07	29.08.07
Amritsar	-	50	-	-	-	22.2	-
Barmer	28.0	1.2	-	-	-	-	0.6
Sriganganagar	1.0	0	-	-	-	-	0.7
Jaisalmer	5.9	65.8	-	-	-	-	-
Kota	15.1	0	-	-	3.0	19.0	-
Deesa	-	0.3	-	-	-	52.7	1.1
Churu	9.1	-	-	-	-	2.4	2.2

Temperature (degree Celcius)							
Station Name	23.08.07	24.08.07	25.08.07	26.08.07	27.08.07	28.08.07	29.08.07
Amritsar	30.5	29.5	-	30.0	30.0	-	30.5
Barmer	29.5	29.5	30.5	33.0	30.5	32.5	32.0
Sriganganagar	33.0	32.5	34.0	34.0	34.5	35.0	34.0
Jaisalmer	30.0	26.0	30.0	30.5	32.0	32.0	33.0
Kota	29.0	29.5	29.5	30.5	30.0	28.5	29.0
Deesa	27.5	28.5	29.0	30.5	31.5	30.0	29.0
Churu	-	-	-	-	-	-	-

Wind														
Station Name	23.08.07		24.08.07		25.08.07		26.08.07		27.08.07		28.08.07		29.08.07	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	05	SE	-	-	-	-	-	-	05	ESE	03	SE	05	ENE
Barmer	-	-	-	--	-	-	-	-	-	-	-	-	--	-
Sriganga nagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	03	NNW	-	-	-	-	-	-	12	SSW	17	S	03	SSW
Kota	-	-	-	-	-	-	-	-	--	-	--	-	08	NE
Deesa	-	-	-	----	-	-	-	-	-	-	-	-	-	-
Churu	10	S	-	-	-	-	-	-	20	NW	11	NNW	10	NNE

Small-scale breeding is in progress in desert areas of the **Indo-Pakistan** border. Under the prevailing weather conditions, there is chance of slight increase in the locust number. All efforts should be made to monitor the situation closely and carefully and take appropriate plant protection measures.

CROP – STATE – STAGE

Delhi

Vegetables	Early sown vegetables	Rice	Arhar	Maize
Transplanting	Vegetative	Tillering / vegetative	Flowering / Pod formation	Flowering
Bajra				
Flowering / ear head formation				
Haryana				
Sugarcane	Horticultural crops	Cauliflower, raddish, chillies	Cotton	Paddy
Vegetative	Vegetative	Sowing	Vegetative	Tillering / vegetative
Kharif Groundnut	Kharif Pulses			
Vegetative	Flowering			

Himachal Pradesh

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Potato	Apple	Rice	Maize
Vegetative Ladies finger -- Flowering/Fruiting	Tuber development	Maturing/Harvesting	Vegetative/ tillering	Vegetative

Jammu & Kashmir

Vegetable crops	Rice	Maize	Pulses	Kharif vegetables
Fruiting/harvesting--in Kashmir Div.	Vegetative/ active tillering – Jammu Div. Flowering stage - Kashmir Div.	Flowering / cob formation- Jammu Div. Cob formation- Kashmir div.	Vegetative	Vegetative

Punjab

Sugarcane	Horticultural crop	Cauliflower, raddish, chillies	Cotton	Paddy
Vegetative	Vegetative	Vegetative	Vegetative	Tillering / vegetative
Kharif Groundnut	Kharif pulses			
Vegetative	Flowering / pod formation			

Rajasthan

Kharif crops(Bajra, Maize, Guar, Moong, Moth bean, Urd)	Zaide Fodder	Cotton		
Vegetative / flowering	Vegetative	Vegetative		

Uttar Pradesh

Sugarcane	Kharif Vegetables	Mango	Rice	
Early vegetative	Early vegetative	Harvesting	Early vegetative	
Kharif oilseeds	Early sown Kharif oilseeds			
Sowing	Early vegetative			

Uttarakhand

Apple	Ginger	Sugarcane	Potato	Kharif Rice
Maturity	Rhizome formation	Tiller formation	Tuber growth	Vegetative
FingerMillet/ Amranthus	Mango/Litchi			
Vegetative	Seedling			

Assam

Vegetables	Jute	Maize	Sugarcane	Arhar
Harvesting	Harvesting	Harvesting	Vegetative	Vegetative
Sali rice	Black Gram & Green Gram			
Transplanting/Early tillering	Land preparation and Sowing			

Arunachal Pradesh

WRC Rice	Ginger	Millet	Jhum Paddy	Maize
Vegetative	Rhizome formation	Flowering	Vegetative	Late harvesting

Bihar

Vegetables & fruit crops	Maize	Arhar	Sugarcane	Kharif rice
Sowing	Maturity	Vegetative	Vegetative	Early vegetative

Jharkhand

Kharif rice	Ragi	Vegetables (Tomato, Brinjal, Bhendi)	Upland crops (Maize, arhar, groundnut, soybean, urad, rice and ragi)
Early vegetative	Transplanting	Sowing Early sown – Early vegetative	Vegetative

Sikkim

Maize	Orange	Vegetables	Large Cardamom	Ginger
Harvesting	Fruiting New planting in some places	Maturity/Harvesting	Capsule maturity/Early harvesting	Flowering
Rice				
Tillering / active tillering				

West Bengal

Sugarcane	Jute	Aus rice	Groundnut	Arhar
Vegetative	Vegetative	Maturity	Early vegetative/vegetative	Early vegetative/vegetative
Aman rice	Early transplanted Aman rice			
Land preparation sowing/Transplanting	Early vegetative/early tillering			

Chattisgarh

Sugarcane	Black gram, Green Gram & Groundnut	Soybean	Kharif Rice	Maize
Vegetative	Early vegetative/Vegetative	Early vegetative/Vegetative	Early vegetative/ tillering	Vegetative

Gujarat

Sugarcane	Kharif Rice	Castor	Kharif Groundnut	Kharif Cotton
Vegetative / cane formation	Tillering / vegetative	Land preparation and Sowing	Vegetative	Vegetative / flowering
Kharif Maize	Kharif Bajra			
Vegetative / flowering	Vegetative/flowering			

Maharashtra

Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marthwada and Vidarbha)	Irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Rice (Konkan)	Kharif Rice (Madhya Maharashtra, Marathwada & Vidarbha)
Active growth / elongation	Early vegetative/active growth	Vegetative growth/Flowering	Early vegetative/Tillering	Early tillering / Tillering
Kharif Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Bajra (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Groundnut (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Green Gram (Madhya Maharashtra, Marathwada & Vidarbha)
Vegetative	Flag leaf initiation / flowering	Vegetative / flowering	Vegetative growth / head formation	Vegetative/Flowering
Kharif Cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Soyabean (Madhya Maharashtra, Marathwada & Vidarbha)		
Vegetative	Early vegetative	Vegetative /Flowering		

Madhya Pradesh

Sugarcane	Kharif crops (maize, urd and jowar)	Kharif rice	Soyabean	Cotton
Vegetative	Vegetative	Active tillering / panicle initiation	Flowering	Active vegetative

Orissa

Kharif vegetables	Kharif rice	Sugarcane	Jute	Arhar
Transplanting	Vegetative / tillering	Vegetative	Vegetative	Vegetative

Andhra Pradesh

Kharif Rice	Kharif Maize	Kharif Cotton	Kharif Groundnut	Kharif Black gram, Green gram
Tillering	Flowering / grain formation	Flowering / grain formation	Flowering / grain formation	Flowering / grain formation

Karnataka

Sugarcane (Ratoon crop)	Kharif Cotton/Maize /Sunflower	Groundnut	Jowar	
Grand growth	Late Vegetative/Flowering	Peg formation	Milking	

Kerala

Rubber	Virippu rice	Early sown Virippu Rice		
Tapping	Ear head formation	Harvesting		

Tamil Nadu

Rice (Kuruvai/Samba)	Cotton	Sugarcane (Early, Mid and Late season)	Maize	Groundnut/Black gram/Green gram/Red gram
Samba- Transplanting Kuruvai - Tillering	Picking	Grand growth Late Sugarcane- Harvesting	Sowing	Sowing
Jowar/Bajra/Samai	Special season sugarcane	Early sown maize		
Sowing	Sowing	Early vegetative		
