

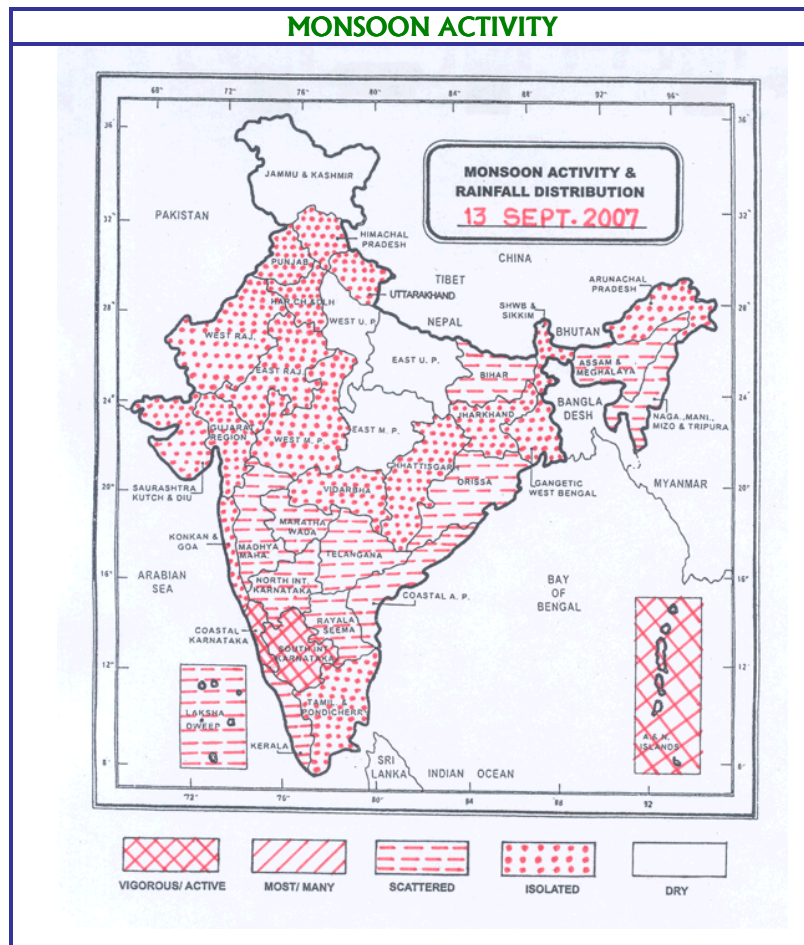


Summary of Agromet Advisory Services for different States of the country
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(For the period 13th to 17th September, 2007)

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



Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

- Southwest monsoon was active over the State on 10th & 12th September. Rain occurred at most places on 10th September, at many places on 12th September and at a few places on 11th September.
- Rain / thundershowers are likely at many places over the State.

Advisories

- As rain/thundershowers is likely to occur at many places over the State during next three days, postpone irrigation to plantation crops viz., coconut, arecanut, rubber and banana.
- Continue intercultural operations, application of fertilizers and pesticides in plantation crops after current spells of rain.
- 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.
- Land preparation of the main field may be continued for sowing of *mundakkan* rice. Organic manure @ 5 tones per ha. and entire dose of phosphatic fertilizer may be incorporated into the soil during initial ploughing. NPK 40:20:20 kg/ha (Urea 87 kg/ha, Phosphate 100 kg/ha & Potash 33 kg/ha) should be applied after current spells of rain. Lime application @ 350 kg per ha. may be done during ploughing.

Tamilnadu

- Rainfall occurred at a few places over the State on 10th September and at one or two places on 11th, 12th September.
- Rain/thundershowers are likely at many places over the State.

Advisories

- As rain/thundershowers are likely at many places over the State for the next three days, postpone irrigation to sugarcane and early sown maize, jowar, bajra and pulses.
- Continue 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 10th September monsoon was vigorous over Interior Karnataka. Rainfall occurred at many places over Coastal Karnataka. On 11th September; monsoon was weak over Coastal Karnataka & North Interior Karnataka. Rainfall occurred at a few places over South Interior Karnataka and at isolated places over Coastal Karnataka and North Interior Karnataka. On 12th September, monsoon was active over South Interior Karnataka and weak over Coastal Karnataka. Rainfall occurred at a few places over North Interior Karnataka and at isolated places over Coastal Karnataka.
- Rain/thundershowers are likely at a few places over the State

Advisories

- As there was sufficient rainfall in Dhaksin Kannada, Udipi, Uttar Kannada, Chickmagalur, Chitradurga, Davangere, Kodagu, Kolar, Shimoga and Tumkur districts during last week and rain/thundershowers are likely at a few places over the State for the next three days, postpone irrigation to summer sugarcane, *Kharif* jowar, maize, cotton, groundnut and sunflower. Apply irrigation in the remaining districts.
- Continue intercultural operations, application of fertilizers and pesticides to *kharif* jowar, maize, cotton, groundnut and sunflower on a non rainy day.
- 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 Rayalaseema on 6th September and active over Rayalaseema on 9th & 10th September. Rain occurred at a few places over Coastal Andhra Pradesh on 6th & 9th September and over Telangana on 10th September. Isolated rain occurred over Coastal Andhra Pradesh on 7th, 8th & 10th to 12th September, over Telangana on 7th & 9th & 11th September and over Rayalaseema on 6th, 8th & 12th September. Dry weather prevailed else where over the State during the week.
- Rain/thundershowers are likely at a few places over the State.

Advisories

- Maintain standing water in rice field.
- Postpone irrigation to *kharif* crops viz., groundnut, cotton, maize, green gram and black gram in East Godavari, Adilabad, Hyderabad, Karimnagar, Khammam, Nizamabad and Warangal as rain/thundershowers are likely at a few places over the State for the next three days. Apply irrigation in the remaining districts as there was no significant rainfall during last week.
- To control *Hispa* attack in rice, spray 2.5 ml Chloropyriphos or 2.0 ml Quinolphos per 1 litre of water. 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 on a non rainy day.
- Undertake earthing up in *kharif* crops on a non rainy day.
- To control stem necrosis in groundnut apply 2g Copper-oxy-chloride or Mancozeb per litre of water, wetting around the stem, on a non rainy day. To control tikka leaf spot in groundnut, spray Carbendazim @ 1g + Mancozeb @ 2.5 g or Hexaconazole @ 2ml per litre of water on a non rainy day.

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

Assam

- Moderate to rather heavy rain occurred at most places on 10th September, light to moderate rain at a few places on 11th & 12th September with isolated heavy to very heavy falls on 10th September, isolated rather heavy to heavy falls on 11th September and with isolated rather heavy falls on 12th September over the State.
- 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 hrs.

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. After receding of flood water second dose of urea @3kg per bigha should be top dressed in the field 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 sugarcane, arhar and early sown black gram and green gram. Provide adequate drainage facilities to avoid water logging due to heavy rainfall.
- Harvest already matured crop of maize.
- Harvesting of maize should be done on bright sunny days after current spells of rain 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 Chloropyriphos 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 during next 48 hours.

Advisories

- *Jhum* rice, wet seeded rice and ginger crops damaged due to heavy 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 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.

Bihar

- Light to moderate rain occurred at a few places on 6th, 7th September. Moderate to heavy rainfall occurred at most places on 8th September. Rest days light to moderate rainfall occurred at isolated places.
- Rain/thundershowers are likely at a few places over the State during next 24 hours and increase thereafter.

Advisories

- Postpone irrigation to arhar(early sown)and sugarcane as there was excess rainfall during last week in the State and rainfall is expected in next 4-5 days.
- Sowing of raddish, early cauliflower, chillies, & tomato may be continued.
- Start the sowing of early variety of potato like Kufi, Ashoka or Kufri Chandramukhi or Rajendra, Aloo-3.
- Continue sowing of mung, urd and arhar.
- Top dressing of nitrogen @ 20Kg/ha after weeding to rice can be done on a non rainy day.

Jharkhand

- Rain or thundershowers occurred at a few places.
- Rain/thundershowers are likely at a few places over the State during next 24 hours and increase thereafter.

Advisories

- Postpone irrigation to vegetables, maize, arhar, groundnut, soybean and urad as there was sufficient rain in most of the districts during last week and rain/thundershowers are likely at a few places over the State during next 24 hours and increase thereafter.

- Monitor the gundhi bug on rice. If damage exceeds ETL, spray 25kg. Chlorpyrifos dust per hectare on a non rainy day.
- Monitor maize 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 @ 75 kg/ha for maize may be done on a non rainy day.

Sikkim

- Sky remained generally cloudy during the period. Moderate to near heavy rain occurred at most places over East Sikkim during the week. Rainfall was excess 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.

Advisories

- As rain / thundershowers are likely at many places over the State for the next three days with isolated heavy to very heavy rainfall over the State during next 48 hours, postpone irrigation to orange, and ginger. Provide adequate drainage facilities as heavy rainfall is expected.
- During the tillering stage in rice, in the higher hills, water level of 3-4 cm should be maintained enable maximum tillering.
- 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

- S-W Monsoon was active on 10th and 12th September over Sub Himalayan West Bengal and active on 11th September over the State. During the said period heavy rainfall occurred over the State, rainfall occurred at most places on 10th September over Sub Himalayan West Bengal, heavy to very heavy rainfall occurred at an isolated places on 11th and 12th September with rain at most places on 6th September, few places on 7th and 9th September and most places on 8th September over Sub Himalayan West Bengal. During the said period rainfall occurred at a few places on 10th September, heavy at isolated places on 11th September with rain at many places and rain at isolated places on 12th September over Gangetic West Bengal.
- 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 are likely at many places over the State during next three days with isolated heavy to very heavy rainfall is likely over the State during next 48 hours, postpone irrigation to sugarcane, groundnut and arhar. Provide adequate drainage facilities as heavy rain is expected over the State.
- Maintain 3 – 5 cm water in the field of *aman* rice. Undertake top dressing of fertilizers after current spells of rain.
- Postpone intercultural operation, application of fertilizer and plant protection measures under prevailing weather condition.

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

Gujarat

- Rainfall occurred at isolated places over Gujarat region, Diu Daman, Dadra Nagar Haveli on 10th September. Rainfall occurred at isolated places over Gujarat region, Saurashtra, Daman, Dadra Nagar Haveli on 11th September. Rainfall occurred at isolated places over South Gujarat region, Daman, Dadra Nagar Haveli on 12th September.
- Rain/thundershowers are likely at isolated places over the State.

Advisories

- As there was no significant rainfall during last week in the State except in Baroda, Dangs, Diu and Daman, Narmada, Navsari, Surat, and Valsad districts and rain/thundershowers are likely at isolated places over the State during next three days, apply irrigation to sugarcane, *kharif* groundnut, *kharif* cotton, *kharif* bajra, castor and *kharif* maize. Postpone irrigation in the above mentioned districts as there was sufficient rainfall during last week.
- Maintain 5-6 cm water in *kharif* rice field.
- 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.
- In some places cotton crop infested with mealy bug. Monitor the crop and if damage exceeds ETL, to control the pest spray Methyl dimeton 25 EC @ 10 ml or Phosphamidon 85 EC @ 5 ml or Dimethoate 30 EC @ 10 ml in 10 liter of water.
- Weeding, intercultural operation and top dressing of Nitrogen may be done in *kharif* maize, cotton, bajra and groundnut crops.

Chhattisgarh

- Monsoon was active on 10th September. Rainfall occurred at a few places on 11th September, at one or two places on 12th September in the State.
- Rain/thundershowers are likely to occur at a few places over the State.

Advisories

- Maintain 3 – 5 cm water in *kharif* rice at tillering stage. Undertake top dressing of nitrogen on a non rainy day.
- Postpone irrigation to sugarcane and maize and also to black gram, green gram, groundnut and soybean as there was sufficient rainfall in most of the districts except Bastar, Kanker, Koriya, and Rajnandgaon districts and rain / thundershowers are likely to occur at a few places over State during next three days. Apply irrigation in the above mentioned districts.
- Also continue intercultural operation, application of fertilizer and plant protection measures to the standing crops on a non rainy day.
- 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

- Rain occurred at a few places in North Madhya Maharashtra, Marathwada & Vidarbha, at isolated places in Konkan & South Madhya Maharashtra.
- Rain/thundershowers are likely at a few places over Konkan & Goa, Madhya Maharashtra and Marathwada and isolated over Vidarbha.

Advisories

- As there was no significant rain in most of the districts except in Raigad, Ratnagiri, Buldhana, Washim and Nanded districts during last week and rain/thundershowers are likely at a few places over Konkan, Madhya Maharashtra and Marathwada and isolated over the rest region during next three days, apply irrigation to the standing crops. Postpone irrigation in the above mentioned districts as there was sufficient rainfall during last week.
- Maintain 3 – 5 cm water in the rice field wherever crops are at tillering stage.
- Second installment of 40 kg Nitrogen/ha may be applied through Ammonium sulphate in *kharif* rice, if Urea DAP briquette dose has not been given on a non rainy day.
- A dose of 400 to 500 kg Gypsum/ha may be applied during flowering stage in groundnut.
- To increase pollination at flowering stage, hand covered with woolen cloth may be moved 3 to 5 times on floral disc smoothly day after day early in the morning. Spray 2 gm Borax in one liter only on flowers at the time of opening of florets on a non rainy day in *kharif* sunflower.
- Mild incidence of white woolly aphids in Kolhapur & Pune division in sugarcane (pre-seasonal & suru, sap sucking insects in Aurangabad, Amravati and Latur, aphids & jassids in Amravati & Nagpur and aphids, jassids, thrips in Nashik division in irrigated cotton, blast, army worm, blue beetle and stem borer in Konkan & blast in Kolhapur & Nagpur division in *kharif* rice and leaf caterpillar in Nashik, Aurangabad, Pune, Nagpur 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 soybean for Leaf eating cater pillar & 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 on a non rainy day in Konkan, Madhya Maharashtra & Marathwada.

Madhya Pradesh

- Monsoon was active in South East Madhya Pradesh on 10th September. Rainfall occurred at a many places in South East Madhya Pradesh on 11th September and at isolated places over rest of the State for remaining period.
- Rain/thundershowers are likely at isolated place over the State.

Advisories

- Postpone irrigation in Balaghat, Chhindwara, Dindori, Damoh, Mandla, Rewa, Satna, Seoni, Shahdol, Betul, Datia, Harda, Bhopal, Hosangabad, Sehore, and Vidisa districts, as there was

sufficient rainfall during last week and rain/thundershowers are likely at isolated places for the next three days. As there was no significant rainfall in remaining parts of the State during last week, 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.
- To protect the soybean from blue beetle and girdler beetle, spray Endosulphon 35 EC 1000-1250 ml per hectare or Trizophos 40EC 800 ml per hectare or spray Endosulphon 4% or Quinolphos 1.5% dust @20-25 Kg per hectare.

Orissa

- Rainfall occurred at a few places over the State on 10th & 11th September and at isolated places on 12th September.
- Rain/thundershowers are likely at many places over north Orissa and at a few places over south Orissa.

Warning: Isolated heavy to very heavy rainfall is likely over north Orissa.

Advisories

- As rain/thundershowers are likely at many places over north Orissa for the next three days with isolated heavy rainfall during next 48 hrs., postpone irrigation to the crops. Provide adequate irrigation facilities to avoid waterlogging due to heavy rainfall. Also, Postpone irrigation in Angut, Bargarh, Bolangir, Deogarh, Jajpur, Jharsuguda, Kalahandi, Keonjhar, Khurdah, Koraput, Malkanagiri and Sambalpur districts as there was sufficient rainfall during last week. Apply irrigation in the remaining districts of south Orissa.
- Monitor sugarcane for top shoot borer and if the damage exceeds ETL, undertake spraying of Monocrotophos or Triazophos or Prefonophos @ 400 ml/acre after current spells of rain in north Orissa and on a non rainy day in south Orissa.
- To control swarming caterpillars in rice apply dust 10-12 kg Chloropyriphos 1.5% or 200 ml. DDVP or 400 ml. Triazophos per hectare after current spells of rain in north Orissa and on a non rainy day in south Orissa.
- To control fruit fly in vegetables, prepare poison bait by mixing 1ml Malathion & 10gms of Gur / litre of water and place in the field.
- Undertake sowing of moong and urd. Select P.D.M.-54, PDM-11, TARM-1 varieties in moong, and T-9, PU-19, PU-30 in urd. Apply 8 Kg N, 16Kg P & 8 Kg K/ha as basal. Apply fertilizers after current spells of rain in north Orissa and on a non rainy day in south Orissa.

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

Punjab

- Rainfall occurred at a few places on 11th September and at isolated places on 10th September. Weather remained mainly dry on 12th September.
- 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 rain / thundershowers are likely at isolated places over the State for the next three days, apply irrigation to sugarcane, cotton, pulses(in pod formation stage), groundnut and Horticultural crops.
- 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.

- Continue sowing of toria.

Haryana

- 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 during last week and rain/thundershowers are likely at isolated places over the State for the next three days, apply irrigation to sugarcane, cotton, pulses(in pod formation stage), groundnut 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.
- Continue sowing of toria.

Rajasthan

- Scattered light to moderate rain / thundershower with isolated heavy falls occurred in Jaipur, Udaipur, Ajmer, Jodhpur and Bikaner divisions and isolated places in Kota division of the State.
- 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 in west Rajasthan and rain/thundershowers are likely at isolated places for the next three days, apply irrigation to early sown *kharif* crops viz., bajra, jowar, maize, guar, moong, moth bean and urd.
- As there was no significant rainfall in during last week in East Rajasthan except in Alwar, Baran, Bharathpur, Dausa, Jaipur, and Jhunjhunu, Karuvali, Sawaii Madhopur and Sikar districts and rain/thundershowers are likely at isolated places for the next three days, apply irrigation to early sown *kharif* crops viz., bajra, jowar, maize, guar, moong, moth bean and urd. Postpone irrigation in the above mentioned districts as there was sufficient rainfall during last week.
- Undertake intercultural operations in *kharif* crops to keep the field weed free. Intercultural operations may be continued.
- Monitor *desi* and *American* cotton for sucking pests. If the pests population crosses ETL, spray Endosulphan @ 1.25 liters/ha.

Uttar Pradesh

- Rain occurred at a few places in Allahabad, Faizabad divisions and at isolated places in Varanasi, Gorakhpur, Kanpur divisions and weather was mainly dry in remaining divisions of the State on 10th September. Rain occurred at isolated places in Bareilly, Kanpur divisions and weather was mainly dry in remaining divisions of the State on 11th September. Rain occurred at isolated places in Bareilly, Gorakpur divisions and weather was mainly dry in remaining divisions of the State on 12th September.
- Isolated rain/thundershowers are likely over the State.

Advisories

- Continue sowing of toria.
- As there was no significant rainfall over the State during last week except Allahabad, Basti, Gorakpur, Jaunpur, Sant Ravidas nagar and Jhansi districts and rain/thundershowers are likely at isolated places over the State, apply irrigation to the crops. Postpone irrigation in the above mentioned districts as there was sufficient rainfall during last week.
- Proper drainage arrangements for avoiding waterlogging in turmeric may be done.

- Monitor the white grub in sugarcane, to control dip the small branches of neem and people around the field to catch white grub and collect insects and to destroy, spray the solution of 0.5% Monocrotophos.
- Maintain 2.5- 3.0 cm water level in transplanted paddy and undertake top dressing of urea.
- To control Anthracanare disease in mango garden, spray the solution of Copper Oxychloride 3gm/lit in water and to control gummosis in mango tree mix Copper Sulphate 250 gm, Zinc Sulphate 250 gm, Borax 125 gm and Slake lime 100 gm in the soil and light watering as per requirement may be done.

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 rainfall over the State during last week and rain/thundershowers are likely at isolated places over the State for the next three days, apply irrigation to vegetables, potato and maize crops.
- Maintain 3 – 5 cm water in rice field.
- 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 litres of water / ha.
- There is mild chance of attack of head smut in maize. Rouge out the infected plants from the field.

Uttarakhand

- Moderate rain was recorded at isolated places on 11th September. Very light rain was recorded at a few places on 7th September & at isolated places on 6th September while it remained mainly dry on rest of the days. Sky remained partly cloudy to generally cloudy during the week.
- Rain/thundershowers are likely at isolated places over the State.

Advisories

- As there was no significant rainfall over the State during last week except Champawat district and rain/thundershowers are likely at isolated places over the State for the next three days, apply irrigation to sugarcane, potato, and ginger Postpone irrigation in the above mentioned district as there was sufficient rainfall during last week.
- Undertake intercultural operations after current spells of rain, 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.
- Undertake field preparation and sowing of toria/pea.

Jammu & Kashmir

- Light to moderate rain/thundershowers occurred at many places on 11th September and at isolated places on 10th & 12th September over J & K divisions.
- Isolated rain/thundershowers are likely over the region.

Advisories

- As there was no significant rainfall in most of the districts during last week and rain/thundershowers are likely at isolated places 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.
- Monitor pulses for white fly and jassids attack in *kharif* pulses, if damage exceeds ETL, spray Malathion 50EC @ 0.05% in Jammu division.
- Continue sowing/transplanting of cabbage, cauliflower, kale and knol-khol.
- Monitor the citrus crop for outbreak of canker, spray the crop with Terramycin 1 gm in 10 litre of water or copper Oxychloride @ 0.3% or dimencron 1ml in 1 litre of water, if required.
- Monitor the crop for outbreak of rice *hispa* and stem borer attack in rice crop under such conditions, if required spray the crop with Carbofuran 3 G @ 20 kg /ha or Phorate 10G @ 10 kg /ha for stem borer and Quinolphos 25 E.C @ 11/ha or Endosulphan 35 E.C @ 1.5 lit/ha for rice hispa. Rouge out the false smut affected plants.

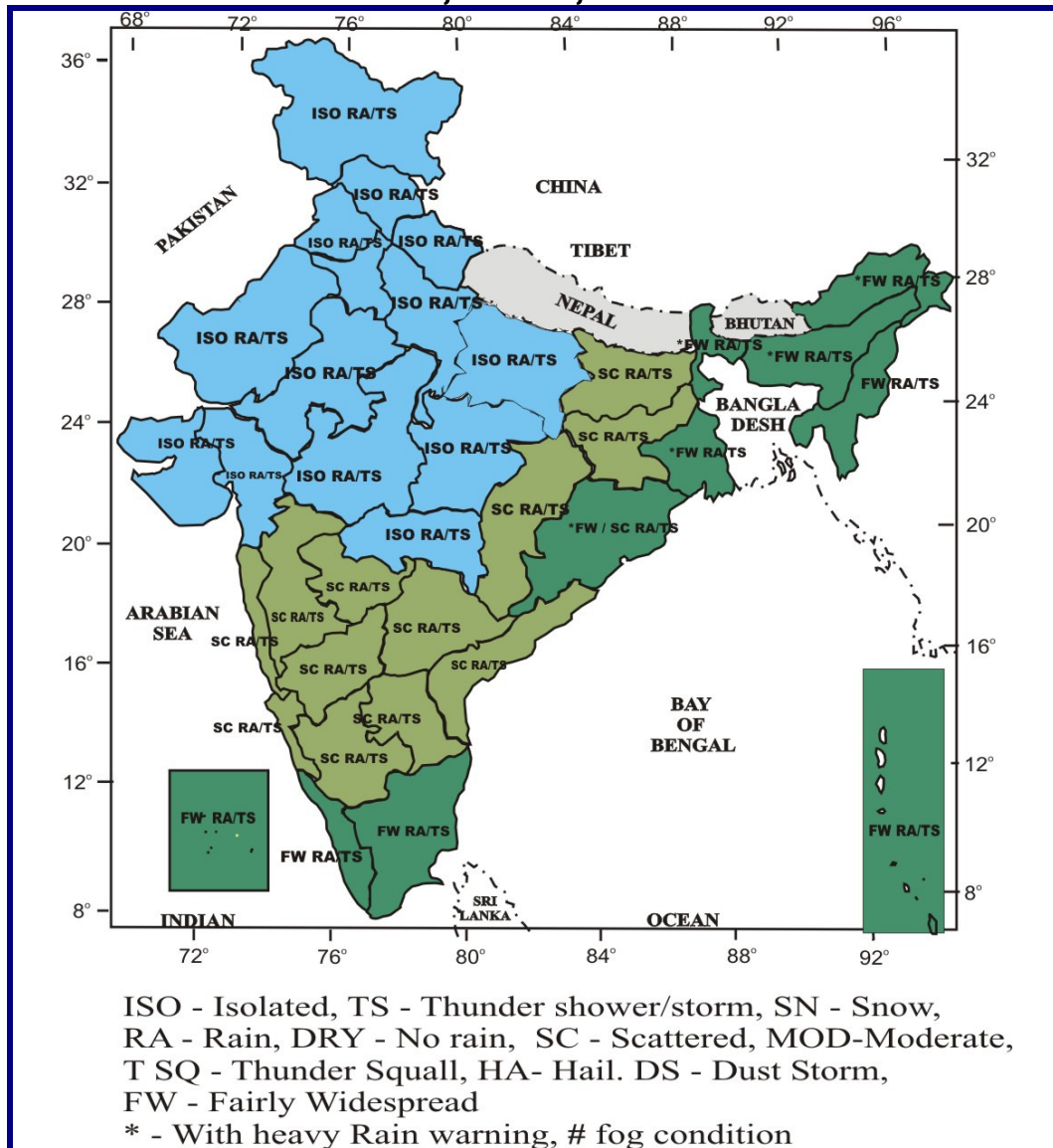
Delhi

- Light to Moderate rain occurred on 10th September at a few places. Very light to light rain occurred on 11th September 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 in the State during last week and rain/thundershowers are likely at isolated places over the State for the next three days, apply irrigation to vegetables, arhar, maize and bajra.
- Continue intercultural operation and application of plant protection measures.
- Maintain 3 – 5 cm water in the rice field at tillering stage. Apply 1/3rd dose of Nitrogen in 50 – 60 days old crop.
- Prepare land and undertake transplanting of 5 – 6 weeks old seedlings of early cauliflower and cabbage and also seedlings of brinjal and chilly in the main field.
- If ergot disease is seen on ear heads of bajra, then take them out and burn / bury them.
- Prepare field and undertake sowing of toria.

Forecast Map
Valid upto 16th September 07



Salient weather features for the week ending 12/09/07

METEOROLOGICAL ANALYSIS

- Last week's upper air cyclonic circulation over Gangetic West Bengal and neighbourhood extending upto mid-tropospheric level lay over Jharkhand and adjoining West Bengal & Bihar on 6th. It lay over Bihar and adjoining East Uttar Pradesh on 7th and became less marked on 8th.
- An off-shore trough extended from Maharashtra coast to Kerala coast during first half of the week.
- A trough in westerlies extending upto mid-tropospheric level ran from north Pakistan to north Arabian Sea during the week.
- An upper air cyclonic circulation extending upto 4.5 km a.s.l. lay over extreme south peninsula on 10th. It persisted over the same area extending upto 3.1 km a.s.l. on 11th and became less marked on 12th.
- A north-south trough extended from Sub-Himalayan West Bengal & Sikkim to north Bay of Bengal across Gangetic West Bengal in lower tropospheric levels on 11th & 12th.
- The axis of the monsoon trough lay near its normal position during 6-8th and ran close to foothills of Himalayas during 9th-12th.

RAINFALL

Under the influence of the above systems:

- Fairly widespread to widespread rainfall occurred over North-East India during the week.

- Fairly widespread to widespread rainfall occurred during 6-11th and Scattered rainfall on 12th over West Bengal & Sikkim, Orissa and Jharkhand. Isolated to scattered rainfall occurred over rest of East India outside East Uttar Pradesh where mainly dry weather prevailed on 11th & 12th.
- Fairly widespread rainfall occurred over Chhattisgarh & Vidarbha and isolated to scattered rainfall occurred over Madhya Pradesh during the week.
- Fairly widespread rainfall occurred on 6th & 7th and isolated to scattered rainfall on remaining days of the week over Konkan & Goa, and East Rajasthan. Isolated to scattered rainfall occurred over remaining parts of the West India during the week.
- Fairly widespread rainfall occurred during 6-9th and isolated to scattered rainfall on remaining days of the week over Coastal Karnataka, Kerala and Lakshadweep. Isolated to scattered rainfall occurred over Interior Karnataka, Tamil Nadu & Puducherry and Andaman & Nicobar Islands during the week.
- Fairly widespread rainfall occurred on 9th & 10th and mainly dry weather prevailed on remaining days of the week over Rayalaseema.
- Fairly widespread rainfall occurred on 10th and isolated rainfall on remaining days of the week over Telangana. Isolated rainfall occurred over Coastal Andhra Pradesh during the week.
- Scattered rainfall occurred on 6th, 10th & 11th and isolated rainfall on many days of the week over Punjab, Haryana and Himachal Pradesh. Isolated rainfall occurred during 9-11th and mainly dry weather prevailed on remaining days of the week over the rest regions of North West India.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 13TH SEPTEMBER, 2007)

Rainfall was excess/normal in 24, deficient/scanty in 12 out of 36 meteorological sub-divisions (Actual: 54.1 mm, Normal: 46.3 mm and Departure: + 17%).

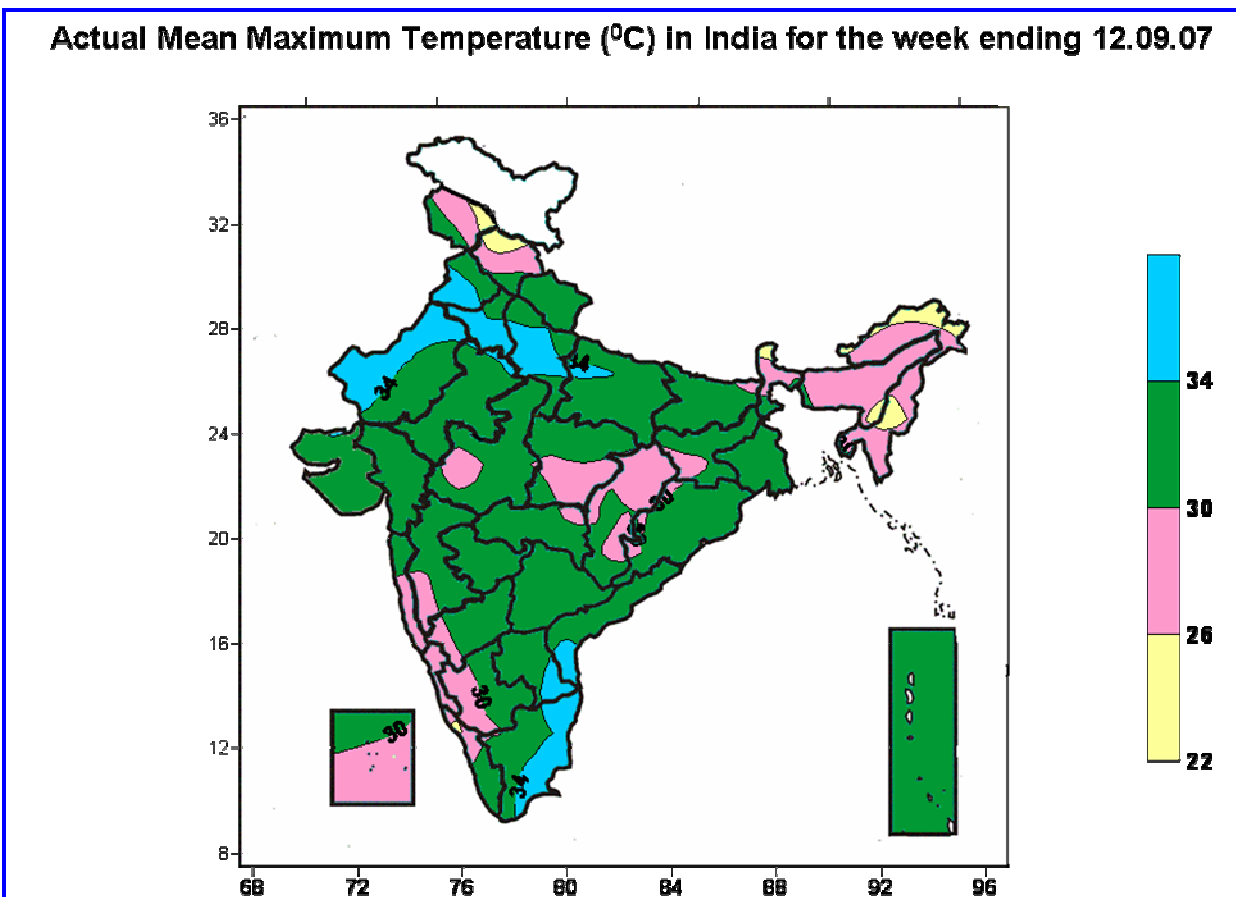
CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 13TH SEPTEMBER, 2007)

Rainfall was excess/normal in 30 and deficient in 6 out of 36 meteorological sub-divisions. (Actual: 822.1 mm, Normal: 798.5 and Departure: +3%).

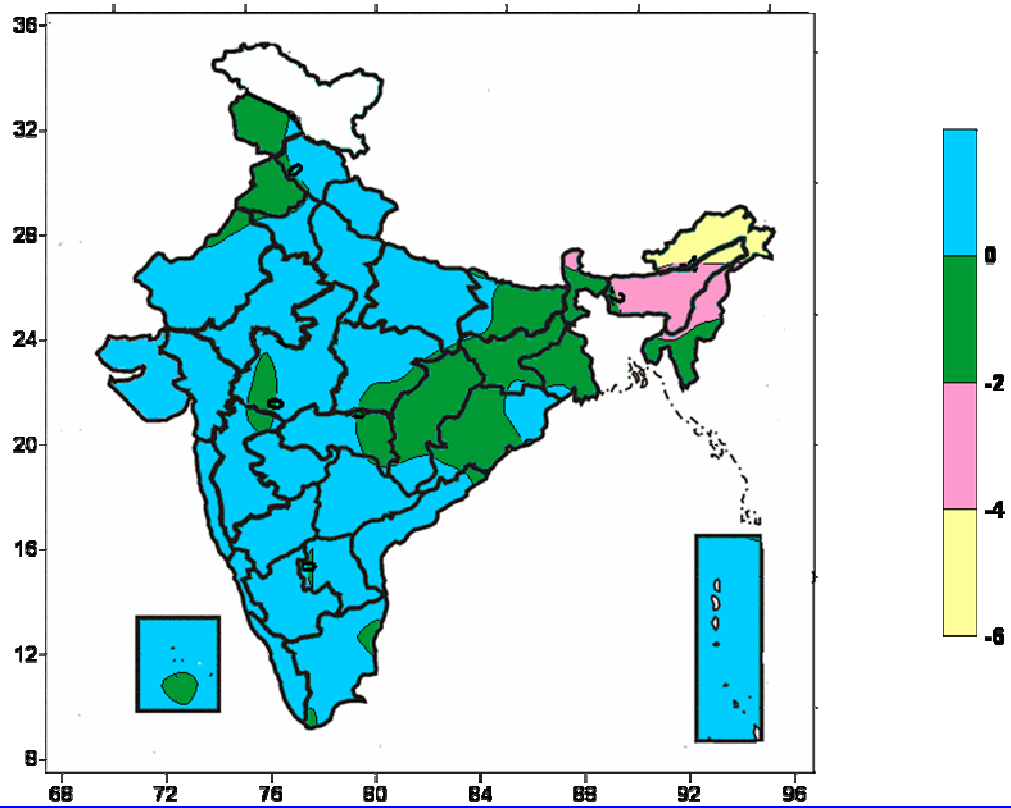
OUTLOOK FOR THE WEEK ENDING ON 19TH SEPTEMBER, 2007.

- Scattered to fairly widespread rainfall is likely over northeast, adjoining east India and extreme south peninsula.
- Numerical Weather Prediction models suggest that subdued rainfall activity is likely to continue over northwest, central and adjoining west India.

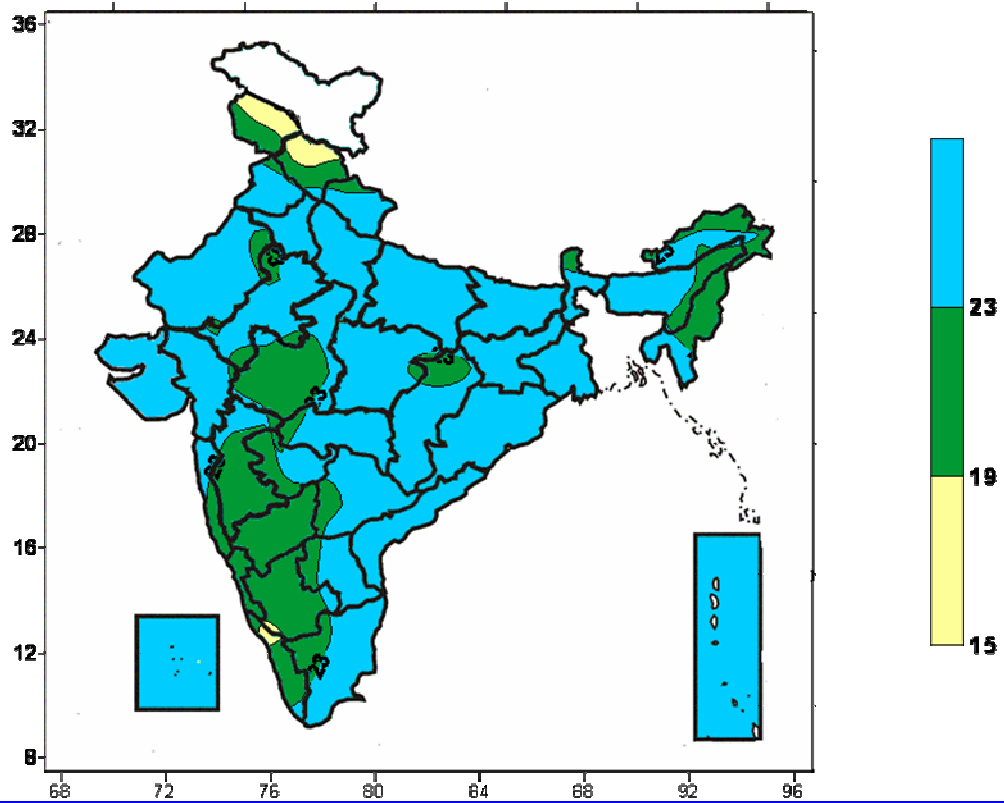
Contour maps for the week ending 12th September, 2007



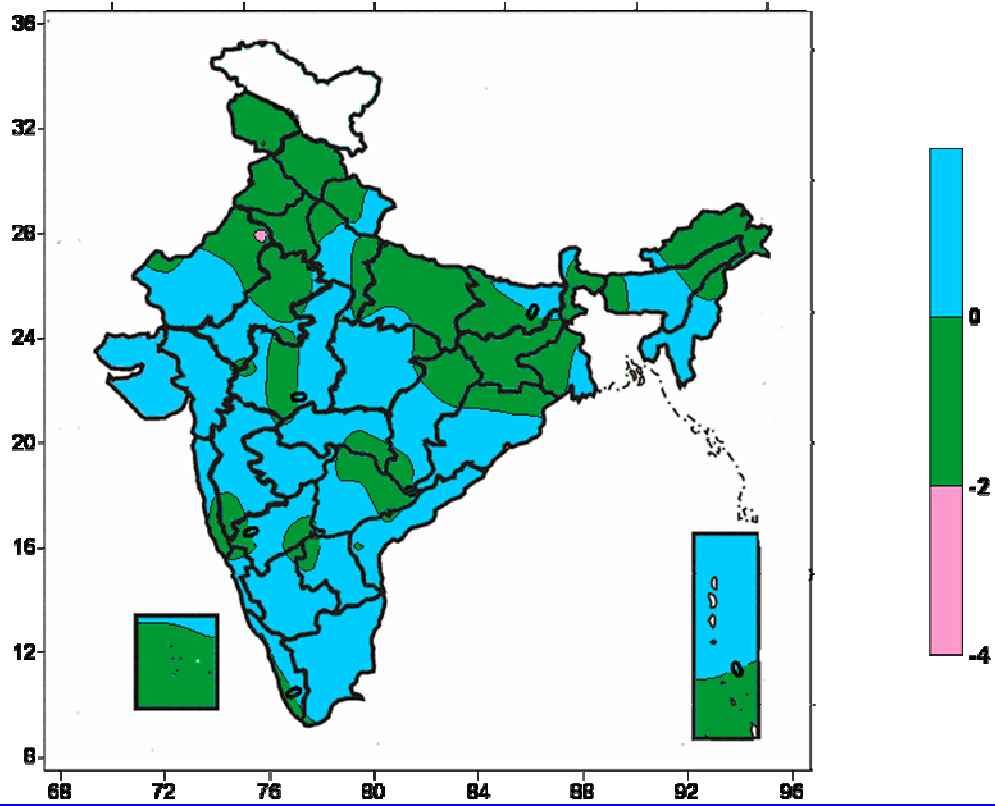
Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 12.09.07



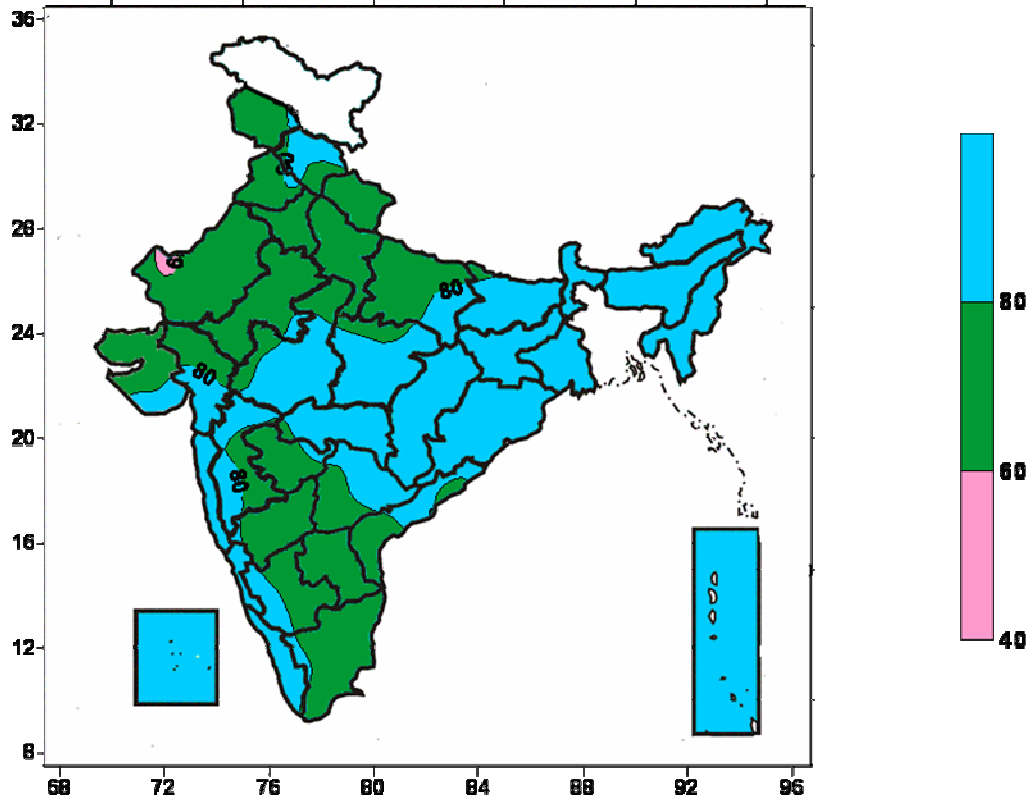
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 12.09.07



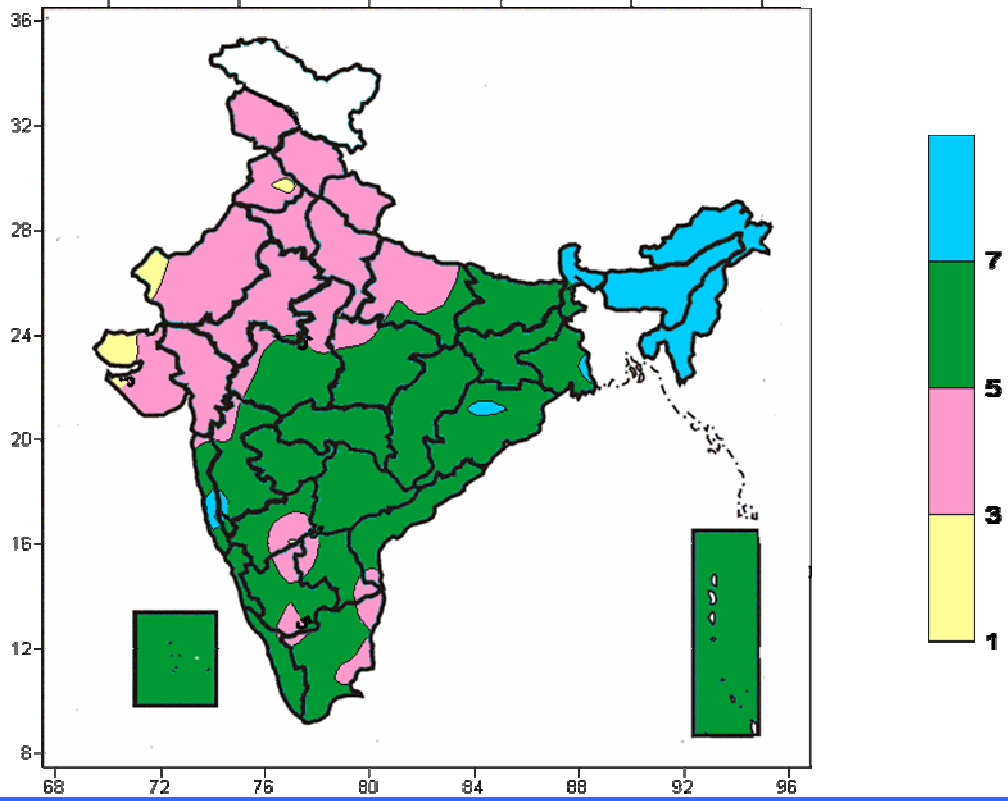
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 12.09.07



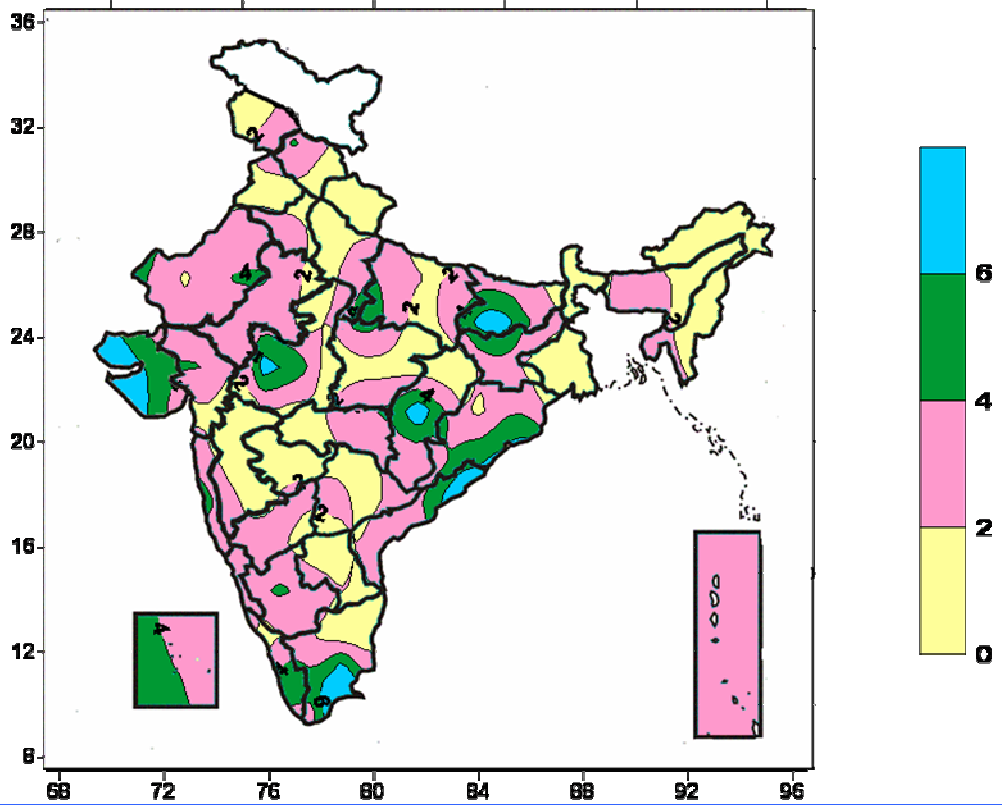
Relative Humidity (%) over India for the week ending 12.09.07



Cloud amount (okta) over India for the week ending 12.09.07



Wind speed (knots) over India for the week ending 12.09.07



Desert Locust Forecasting



RAINFALL							
-	6.9.07	7.9.07	8.9.07	9.9.07	10.9.07	11.9.07	12.09.07
Amritsar	32.6	1.0	0	0	0	4.0	0
Barmer	0	0	0	10.0	0	0	0
Sriganganagar	0	0	8.5	0	0	33.0	0
Jaisalmer	0	0	0	0	0	0	0
Kota	0	41.4	11.4	0	1.2	0	0
Deesa	10.0	2.0	0	0	0	0	0
Churu	0	0	23.2	0	0	4.7	0

Temperature (degree Celcius)							
Station Name	6.9.07	7.9.07	8.9.07	9.9.07	10.9.07	11.9.07	12.9.07
Amritsar	-	27.5	26.5	29.0	28.5	28.0	-
Barmer	31.5	30.5	31.0	30.5	30.5	31.0	30.5
Sriganganagar	35.0	-	26.5	30.0	31.5	30.0	29.0
Jaisalmer	31.5	30.0	29.5	29.5	30.5	30.5	30.0
kota	30.0	28.5	27.5	29.0	30.5	30.0	30.0
Deesa	30.0	29.0	28.5	28.5	29.0	29.0	29.0
Churu	-	-	-	-	-	-	-

Wind														
Station Name	6.9.07		7.9.07		8.9.07		9.9.07		10.9.07		11.9.07		12.9.07	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	-	-	-	-	-	-	-	-	06	WNW	-	-	05	WSW
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganga nagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	-	-	-	-	-	-	-	26	W
Kota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deesa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
chura	11	W	15	W	-	-	-	-	08	SW	-	-	10	WNW

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	Flowering / Pod formation	Tasseling / Silking
Bajra	Toria			
Flowering / grain formation	Sowing			
Haryana				
Sugarcane	Horticultural crops	Kharif Pulses	Cotton	Paddy
Vegetative	Vegetative	Pod formation / maturity	Vegetative / flowering	Tillering / vegetative
Kharif Groundnut				
Vegetative				

Himachal Pradesh

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Potato	Apple	Rice	Maize
Vegetative/ head formation Ladies finger -- Flowering/Fruiting	Tuber development / maturity	Maturing/Harvesting	Tillering / panicle initiation	Vegetative / tasseling / silking

Jammu & Kashmir

Vegetable crops	Rice	Maize	Pulses	Kharif vegetables
Fruiting/harvesting--in Kashmir Div.	Flowering / grain formation – Jammu Div. Grain formation - Kashmir Div.	Cob formation- Jammu Div. Cob formation / maturity - Kashmir div.	Flowering	Early vegetative

Punjab

Sugarcane	Horticultural crop	Kharif pulses	Cotton	Paddy
Vegetative	Vegetative	Pod formation / maturity	Flowering	Vegetative
Kharif Groundnut	Cauliflower, raddish, chillies			
Vegetative	Sowing			

Rajasthan

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

Uttar Pradesh

Sugarcane	Kharif Vegetables	Mango	Rice	Toria
Vegetative	Vegetative	Vegetative	Vegetative	sowing
Kharif oilseeds				
Vegetative / flowering				

Uttarakhand

Apple	Ginger	Sugarcane	Potato	Kharif Rice
Harvesting	Rhizome formation	Grand growth	Tuber growth	Vegetative / heading
FingerMillet/ Amranthus	Mango/Litchi	Toria / pea		
Vegetative	Seedling	Sowing		

Assam

Maize	Sugarcane	Arhar	Sali rice	Black Gram & Green Gram
Harvesting	Vegetative / cane formation	Vegetative	Tillering / vegetative	Land preparation and Sowing
Early sown Black Gram & Green Gram				
Early vegetative				

Arunachal Pradesh

WRC Rice	Ginger	Millet	Jhum Paddy	
Vegetative	Rhizome formation	Flowering / grain formation	Vegetative	

Bihar

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

Jharkhand

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

Sikkim

Maize	Orange	Vegetables	Large Cardamom	Ginger
Harvesting	Fruiting New planting in some places	Nursery sowing	Capsule maturity/Early harvesting	Flowering
Rice				
Active tillering				

West Bengal

Sugarcane	Jute	Aus rice	Groundnut	Arhar
Vegetative	Maturity / harvesting	Maturity	Flowering / pegging	Vegetative
Aman rice				
Tillering				

Chattisgarh

Sugarcane	Black gram, Green Gram & Groundnut	Soybean	Kharif Rice	Maize
Vegetative	Vegetative / flowering	Vegetative / flowering	Tillering	Vegetative

Gujarat

Sugarcane	Kharif Rice	Castor	Kharif Groundnut	Kharif Cotton
Cane development	Vegetative / panicle initiation	Early vegetative / vegetative	Flowering / peg formation	Flowering / boll formation
Kharif Maize	Kharif Bajra			
Cob formation	Flowering / ear head formation			

Maharashtra

Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marathwada and Vidarbha)	Irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Rice (Konkan)	Kharif Rice (Madhya Maharashtra, Marathwada & Vidarbha)
Active growth / elongation	Early vegetative/active growth	Flowering / boll formation	Tillering / flag leaf initiation	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 growth / flag leaf initiation	Flowering / grain formation	Flowering / pegging	Flowering / head formation	Pod formation / pod maturity
Kharif Cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Soybean (Madhya Maharashtra, Marathwada & Vidarbha)		
Vegetative growth	Vegetative growth / primary branching	Pod formation / pod maturity		

Madhya Pradesh

Sugarcane	Kharif crops (maize, urd and jowar)	Kharif rice	Soybean	Cotton
Vegetative	Vegetative	Panicle initiation	Pod formation	Active vegetative

Orissa

Kharif vegetables	Kharif rice	Sugarcane	Arhar	
Vegetative / fruiting	Active tillering / panicle initiation	Vegetative	Vegetative	

Andhra Pradesh

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

Karnataka

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

Kerala

Rubber	<i>Virippu rice</i>	Mundakkan Rice		
Tapping	Harvesting	Nursery sowing		

Tamil Nadu

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