



Summary of Agromet Advisory Services for different States of the country

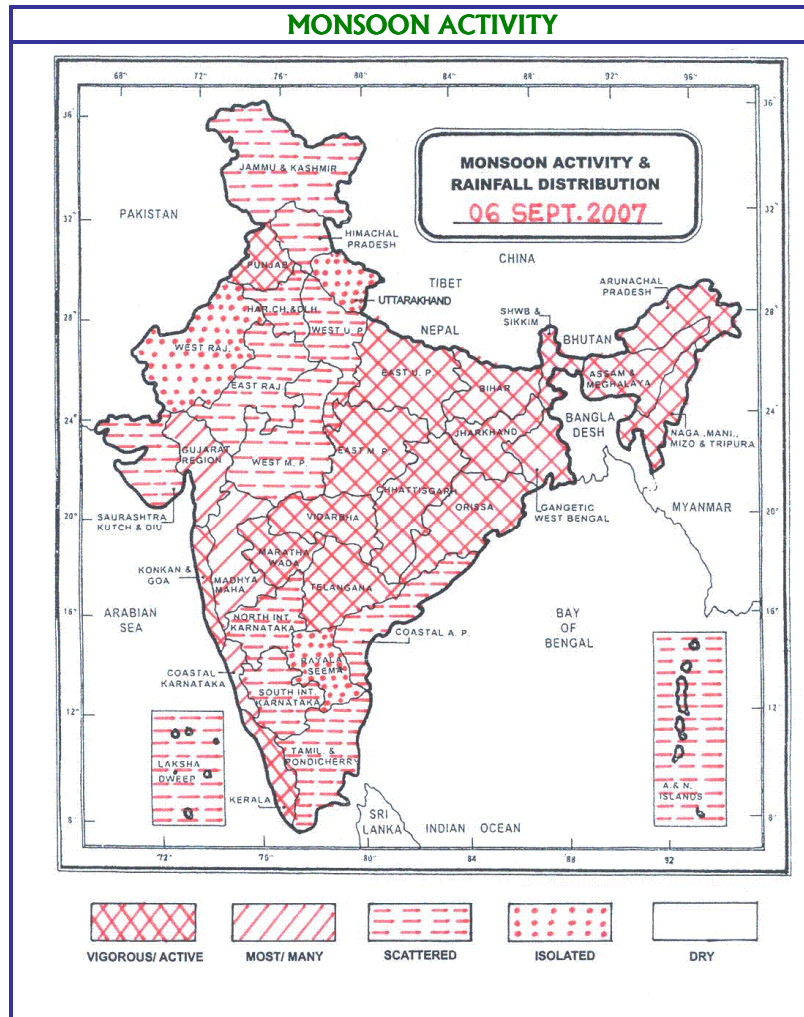
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(For the period 6th to 10th September, 2007)

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 3rd September and active on 30th & 31st August, 1st & 5th September. Rain occurred at most places on 30th & 31st August, 1st, 3rd & 5th September, at many places on 2nd September and at a few places on 4th September.
- Rain / thundershowers are likely at many places over the State.

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

Advisories

- As rain / thundershower 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, areca nut, rubber and banana. Provide drainage facilities to avoid water logging.

- 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.
- Attack of root grub and foot rot disease is reported in rubber . Apply Phorate @10 g/plant to control root grub.Spray 1% Bordeaux mixture to control the disease after current spells of rain.
- Attack of Rhinoceros beetle, red palm weevil, bud rot and mite is reported in coconut. Fill leaf axil with 25 gm Sevidol 8G and fine sand 200 g to control rhinoceros beetle and red palm weevil. Prophylactic spraying with 1% Bordeaux mixture on spindle leaves and crown of palms may be continued control bud rot after current spells of rain. Prophylactic spraying with 2% neem oil and garlic emulsion may be continued in the crown and bunches to control the mite. Care may be taken so that the pesticide may not be fallen on 2nd to 7th bunches from the top unpollinated inflorescence.

Tamilnadu

- Rainfall occurred at a few places over the State on 3rd September and at one or two places on 4th, 5th September.
- 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 no significant rainfall in most of the districts except Kanchipuram, Nilgiris, Thiruvallur, and Vellore and rain/thundershowers are likely at a few places over the State for the next three days, apply irrigation to sugarcane and early sown maize. Postpone irrigation in the above mentioned districts.
- Undertake sowing of maize (*Adippattam* – July-Aug crop). Use 6 kgs of seeds/acre. Treat the seeds with *Azospirillum* and Phssphobacteria one pocket each for one acre seeds.
- Monitor sugarcane for stem borer and is 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. Start harvesting late sugarcane.
- Continue sowing rainfed millet crops like jowar, bajra and samai. Undertake seed treatment with *Azospirillum* before sowing.

Karnataka

- On 3rd September, monsoon was vigorous over Coastal Karnataka and active over South Interior Karnataka. On 4th & 5th September, monsoon was active over Coastal Karnataka. Rainfall occurred at a few places over South Interior Karnataka and at isolated places over North Interior Karnataka.
- Rain/thundershowers are likely at many places over Coastal Karnataka and at a few places over rest region of 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 coastal Karnataka 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.
- As there was no significant rainfall in interior Karnataka in most of the districts except Gulbarga, Chikmagalur, Kodag and Shimoga districts, and rain/thundershowers are likely at a few places for the next three days apply irrigation to the crops. Postpone irrigation in the above mentioned districts.
- Continue intercultural operations, application of fertilizers and pesticides to *kharif* jowar, maize, cotton, groundnut and sunflower after current spells of rain in coastal Karnataka and on a non rainy day in Interior Karnataka.
- 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 31st August and active over Coastal Andhra Pradesh and Telangana on 30th, 31st August & 2nd September and over Rayalaseema on 30th August. Rain occurred at many places over Telangana on 3rd September and at a few places over Coastal Andhra Pradesh on 1st, 3rd & 5th September, over Telangana on 1st & 5th September and over Rayalaseema on 2nd & 3rd September. Isolated rain occurred over Coastal Andhra Pradesh and over Telangana on 4th September and over Rayalaseema on 1st & 5th September. Dry weather prevailed over Rayalaseema on 4th September.
- Rain/thundershowers are likely at many places over north Coastal Andhra Pradesh and at a few places over rest of the places.

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. Postpone irrigation in south coastal Andhra Pradesh, Telangana and Rayalaseema as there was sufficient 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 after current spells of rain in north coastal Andhra Pradesh and on a non rainy day in other regions of the State.
- Undertake earthing up in early sown *kharif* crops after current spells of rain in north coastal Andhra Pradesh and on a non rainy day in other regions of the State.
- To control stem necrosis in groundnut apply 2g Copper-oxy-chloride or Mancozeb per litre of water, wetting around the stem. Apply pesticides after current spells of rain in north coastal Andhra Pradesh and on a non rainy day in other regions of the State.

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

Assam

- Moderate to rather heavy rain occurred at most places on 4th September, light to moderate rain at most places on 5th September and at many places on 3rd September with isolated rather heavy to very heavy falls on 5th September and isolated rather heavy to heavy falls on 3rd & 4th

September over the State. Cloudy sky on 4th September and generally cloudy sky on 3rd & 5th September.

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

Warning: Heavy to very heavy rainfall is likely at a few places 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.
- As rain/ thundershowers are likely at most places over the State for the next three days, with heavy to very heavy falls at a few places 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 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

- Sky remained cloudy over the State during the period. Moderate rain /thundershowers occurred at most places during this period with heavy to very heavy spells at a few places.
- Rain/ thundershowers are likely at most places over the State.

Warning: Heavy to very heavy rainfall is likely at a few places 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 most places over the State for the next three days, with heavy to very heavy rainfall at a few places 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 to heavy rain occurred at most places on 30th, 31st August & 4th September and rain occurred at a few places during remaining days.
- Rain/thundershowers are likely at most places over the State.

Warning: Heavy to very heavy rainfall is likely at a few places over the State during next 48 hours.

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 most places over the State for the next three days with heavy to very heavy rainfall at a few places during next 48 hours, postpone irrigation to arhar and sugarcane. Provide adequate drainage facilities to avoid waterlogging due to heavy rainfall.
- Sowing of raddish, early cauliflower, chillies, & tomato may be continued after current spells of rain.

Jharkhand

- Rain occurred at Ranchi and Jamshedpur on 6th September.
- Rain/thundershowers are likely at many places over the State.

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

Advisories

- Postpone irrigation to vegetables, maize, arhar, groundnut, soybean and urad as rain/thundershowers are likely at many places over the State with isolated heavy rainfall is likely over the State during next 48 hours. Provide adequate drainage facilities to avoid waterlogging due to heavy rainfall.
- Monitor the gundhi bug on rice. If damage exceeds ETL, spray 25kg. Chlorpyrifos dust per hectare after current spells of rain.
- 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 after current spells of rain and do earthing.
- Topdressing of urea @ 75 kg/ha for maize may be done after current spells of rain.

Sikkim

- Sky remained generally cloudy during the period. Heavy rain occurred over East Sikkim on 30th August. Moderate to near heavy rain occurred on rest of the days except over Gangtok on 31st August where rainfall was very light. Rainfall was excess during the week over East Sikkim.
- Rain/thundershowers are likely at most places over the State.

Warning: Heavy to very heavy falls is likely at a few places over the State during next 48 hours.

Advisories

- As rain / thundershowers are likely at most places over the State for the next three days with heavy to very heavy rainfall is likely at a few over the State, postpone irrigation to orange, 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 rogue 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

- South West Monsoon was active on 3rd, 4th and 5th September over Sub-Himalayan West Bengal. During the said period rainfall occurred at most places with heavy rainfall at a few places on 3rd September, most places with heavy to very heavy rainfall at isolated places on 4th September and most places with heavy to very heavy rainfall at a few places on 5th over Sub-Himalayan West Bengal. During the period rainfall occurred at most places on 3rd September and at a few places on 4th and 5th September over Gangetic West Bengal.
- Rain/thundershowers are likely at most places over Sub-Himalayan West Bengal and at many places over the rest region of the State.

Warning: Heavy to very heavy rainfall is likely at a few places over Sub-Himalayan West Bengal and isolated heavy rainfall is likely over Gangetic West Bengal during next 48 hours.

Advisories

- As rain / thundershowers are likely at most places over Sub-Himalayan West Bengal and at many places over the rest region of the State during next three days, 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.
- 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 a few places on South Gujarat region, Daman, Dadra Nagar Haveli, Saurashtra, at isolated places over North Gujarat region. Rainfall occurred at a few places over Gujarat region, Saurashtra, Daman, Dadra Nagar Haveli, at isolated places over Kutch on 4th September. Rainfall occurred at isolated places over Gujarat state, Diu, Daman, Dadra Nagar Haveli on 5th September.
- Rain/thundershowers are likely at many places over Gujarat region and a few places over Saurashtra & Kutch region.

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 many places over Gujarat region during next three days and sufficient rain occurred over Saurashtra & Kutch region during last week, postpone irrigation to sugarcane, *kharif* groundnut, *kharif* cotton, *kharif* bajra and *kharif* maize.
- Maintain 3 – 5 cm water in *kharif* rice field.
- If *kharif* groundnut appears yellowish, spray 100 grams hirkasi (Ferolus sulphate) + 10 grams lemon aack 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.

- Apply chemicals after current spells of rain in Gujarat region and on a non-rainy day in Saurashtra and Kutch region.
- Weeding, intercultural operation and top dressing of Nitrogen may be done in *kharif* maize, cotton, bajra and groundnut crops after current spells of rain in Gujarat region and on a non-rainy day in Saurashtra and Kutch region.

Chhattisgarh

- Rainfall occurred at a few places on 3rd and 4th September and at many places on 5th September in the State.
- Rain/thundershowers are likely to occur at a many places over State during next 48 hours and decrease thereafter.

Advisories

- Maintain 3 – 5 cm water in *kharif* rice at tillering stage. Undertake top dressing of nitrogen after current spells of rain.
- Postpone irrigation to sugarcane and maize and also to black gram, green gram, groundnut and soybean as rain / thundershowers are likely to occur at a many places over State during next 48 hours.
- Also postpone intercultural operation, application of fertilizer and plant protection measures to the standing crops under prevailing weather condition.
- 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 after current spells of rain.

Maharashtra

- Monsoon was active in South Konkan on 4th September. Rain occurred at most places in Konkan, at a few places in Vidarbha, Madhya Maharashtra & Marathwada.
- Rain/thundershowers are likely to occur at many places over Konkan & Madhya Maharashtra and at a few places over Marathwada. Rain/ thundershowers are also likely to occur at many places over Vidarbha during next 48 hours & decrease thereafter.

Warning: Heavy rainfall is likely to occur at isolated places over Konkan during next 48 hours.

Advisories

- As rain/thundershowers are likely at many places over Madhya Maharashtra & Vidarbha, postpone irrigation to the crops.
- As there was no significant rain in Aurangabad, Jalna, Latur & Nanded districts of Marathwada during last week and rain/thundershowers are likely to occur only 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.
- 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.
- A dose of 400 to 500 kg Gypsum/ha may be applied during flowering stage in groundnut.
- 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 & Nagpur division in *kharif* rice and 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 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 after current spells of rain in Konkan, Madhya Maharashtra and Vidarbha and on a non rainy day in Marathwada.

Madhya Pradesh

- Rainfall occurred at a few places in South East and West M.P. on 3rd September, South East M.P. on 4th and 5th September and at isolated places over rest of the State on remaining period.
- Rain/thundershowers are likely at many places over East Madhya Pradesh during next 48 hours and decrease thereafter and at a few places over the rest region of the State.

Advisories

- Postpone irrigation in East Madhya Pradesh as rain/thundershowers are likely at many places for the next three 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 fertilizes may be undertaken after current spells of rain in East M.P. and on a non rainy day in other parts of the State.

Orissa

- South West monsoon was active over the State on 3rd September. Rain fall occurred at most places on 3rd September and at many places on 5th September and at a few places on 4th September over the State. Heavy falls also occurred at isolated places over North Orissa on 4th September and 5th September and at isolated places over South Orissa on 3rd September.
- Rain/thundershowers are likely at many places over the State.

Warning: Isolated heavy rainfall 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 rainfall during next 48 hrs., postpone irrigation to the crops.
- 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.
- 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.

- 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.

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

Punjab

- Rainfall occurred at isolated places during the period.
- 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, cotton, pulses, 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 after current spells of rain.
- Continue sowing of toria.

Haryana

- Rainfall occurred at isolated places during the period.
- 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, cotton, pulses, 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 after current spells of rain.
- Continue sowing of toria.

Rajasthan

- Light to moderate rain / thundershower occurred at a few places in Jaipur, Kota, Udaipur divisions and at isolated places in Jodhpur and Bikaner divisions of the State.
- Rain/thundershowers are likely at a few places over the State.

Advisories

- As there was no significant rainfall in most of the districts during last week in 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.
- 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.

Uttar Pradesh

- Rain occurred at isolated places in Allhabad, Faizabad, Varanasi, Kanpur, Agra, Jhansi divisions and weather was mainly dry in remaining divisions of U.P. on 3rd September. Rain occurred at many places in Bareilly, Moradabad divisions and at few places in Varanasi, Gorakhpur divisions and at isolated places in Allahabad, Lucknow, Kanpur, Agra, Jhansi divisions and weather was mainly dry in remaining divisions of U.P. on 4th September Rain occurred at many places in Bareilly, Varanasi, Kanpur Lucknow divisions and at few places in Faizabad, Moradabad division and at isolated places in remaining divisions of U.P. on 5th September.
- Rain/thundershowers are likely many places over the State.

Warning: Isolated heavy rainfall is likely over East Uttar Pradesh during next 48 hours.

Advisories

- Continue sowing of toria.
- As rain/thundershowers are likely many places over the State for the next three days, with isolated heavy rainfall in East U.P during next 48 hours, postpone irrigation to the crops. Provide adequate drainage facilities in East U.P to avoid waterlogging due to heavy rainfall.
- 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 after current spells of rain.
- Maintain 2.5- 3.0 cm water level in transplanted paddy and undertake top dressing of urea after current spells of rain.
- To control Anthracanare disease in mango garden, spray the solution of Copper Oxychloride 3gm/lit in water in clear weather 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.
- Rain / thundershowers are likely to occur at many places over the State.

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

Advisories

- Harvest already matured fruits of apple.
- As rain/thundershowers are likely at many places over the State for the next three days, postpone 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.
- Apply chemicals after current spells of rain.
- There is mild chance of attack of head smut in maize. Rouge out the infected plants from the field.

Uttarakhand

- Light to heavy rain was recorded at many places on 5th September, Moderate rain was recorded at a few places on 31st August & 1st September, and at isolated places on 4th September. Light to moderate rain was recorded at a few places on 30th August & 2nd September and at isolated places on 3rd September. Sky remained partly cloudy to generally cloudy during the week.
- Rain/thundershowers are likely at many places over the State.

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

Advisories

- As rain/thundershowers are likely at many places over the State with isolated 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 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 after current spells of rain.

Jammu & Kashmir

- Light to heavy rain/thundershowers occurred at isolated places on 4th and 5th September, while as weather remained mainly dry on 3rd September over J & K divisions.
- Rain/thundershowers are likely at many places over the State.

Warning: Isolated heavy rainfall 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 rainfall is likely over the State during next 48 hours, postpone 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% after current spells of rain in Jammu division.
- 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.

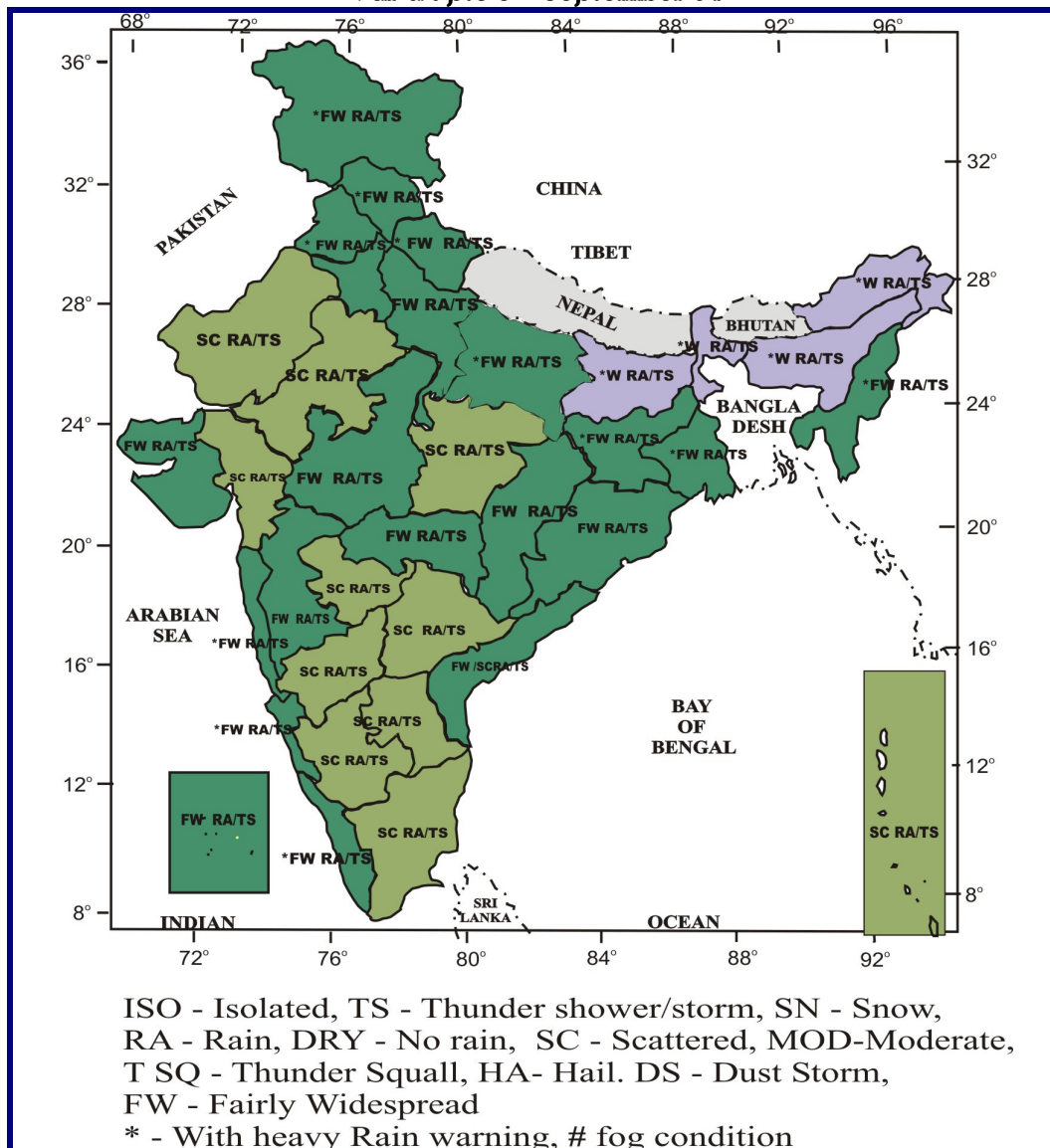
Delhi

- Moderate rain occurred on 3rd September at a few places, light rain occurred on 4th September at isolated places. Weather remained mainly dry on rest of the days.
- Rain/thundershowers are likely to occur 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 vegetables, arhar, maize and bajra.
- Also postpone intercultural operation and application of plant protection measures under prevailing weather condition.
- 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.

Forecast Map
Valid upto 9th September 07



Salient weather features for the week ending 05/09/07

METEOROLOGICAL ANALYSIS

- An upper air cyclonic circulation lay over West-Central Bay of Bengal off North Coastal Andhra Pradesh extending between 2.1 and 5.8 km above mean sea level on 31st August. Under its influence, a low pressure area formed over West-Central and adjoining North-West Bay of Bengal and North Coastal Andhra Pradesh on 1st September. It persisted over the same area on 2nd September and became less marked on 3rd September. However, an upper air cyclonic circulation extending upto mid-tropospheric level lay over Orissa and neighbourhood on 3rd September. It lay over Bihar and neighbourhood extending upto 3.1 km above mean sea level on 4th September and became less marked on 5th September.
- The axis of the monsoon trough lay to the south of its normal position during many days of the week. The eastern end lay more southward compared to the western end of the monsoon trough in association with the low pressure area over West-Central and adjoining North-West Bay of Bengal.
- An off shore trough extended from South Gujarat coast to Kerala coast during first half and from Konkan coast to Kerala coast during second half of the week.
- A cyclonic circulation lay over Sub-Himalayan West Bengal and adjoining Bihar in lower tropospheric levels on 1st September and moved eastwards across northeastern States during 2nd-5th September.
- Another upper air cyclonic circulation lay over Gangetic West Bengal and neighbourhood extending upto mid-tropospheric level on 5th September.

- Last week's cyclonic circulation over South-West Madhya Pradesh and neighbourhood extending upto mid-tropospheric level persisted over the same area on 30th August and became less marked on 31st August.
- Last week's upper air cyclonic circulation over East Uttar Pradesh and neighbourhood extending upto 3.1 km above mean sea level lay over North-East Rajasthan and neighbourhood extending upto 1.5 km above sea level on 30th August and over North-West Rajasthan and neighbourhood on 31st August. It became less marked thereafter.

RAINFALL

Under the influence of the above systems:

- Widespread/fairly widespread rainfall occurred over Andaman & Nicobar Islands, Lakshadweep, Kerala, Coastal Karnataka and Konkan & Goa during the week.
- Scattered to fairly widespread rainfall occurred on many days over Madhya Maharashtra, Marathwada and remaining parts of peninsular India outside Tamil Nadu where it was isolated on many days.
- Widespread/ fairly widespread rainfall occurred over northeastern States, Sub-Himalayan West Bengal & Sikkim during many days of the week.
- Scattered to fairly widespread rainfall occurred over Gujarat State and East Rajasthan during first half of the week and it was isolated to scattered thereafter.
- Scattered to fairly widespread rainfall occurred over Orissa, Chhattisgarh and Vidarbha during second half of the week.
- The rainfall was deficient over North-West India with isolated rainfall activity during the week. The rainfall was also less over remaining parts of East, Central and West India where isolated/scattered rainfall occurred during many days of the week.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 5TH SEPTEMBER, 2007)

Rainfall was excess/normal in 24, deficient/scanty in 12 out of 36 meteorological sub-divisions (Actual: 53.1 mm, Normal: 48.4 mm and Departure: + 10%).

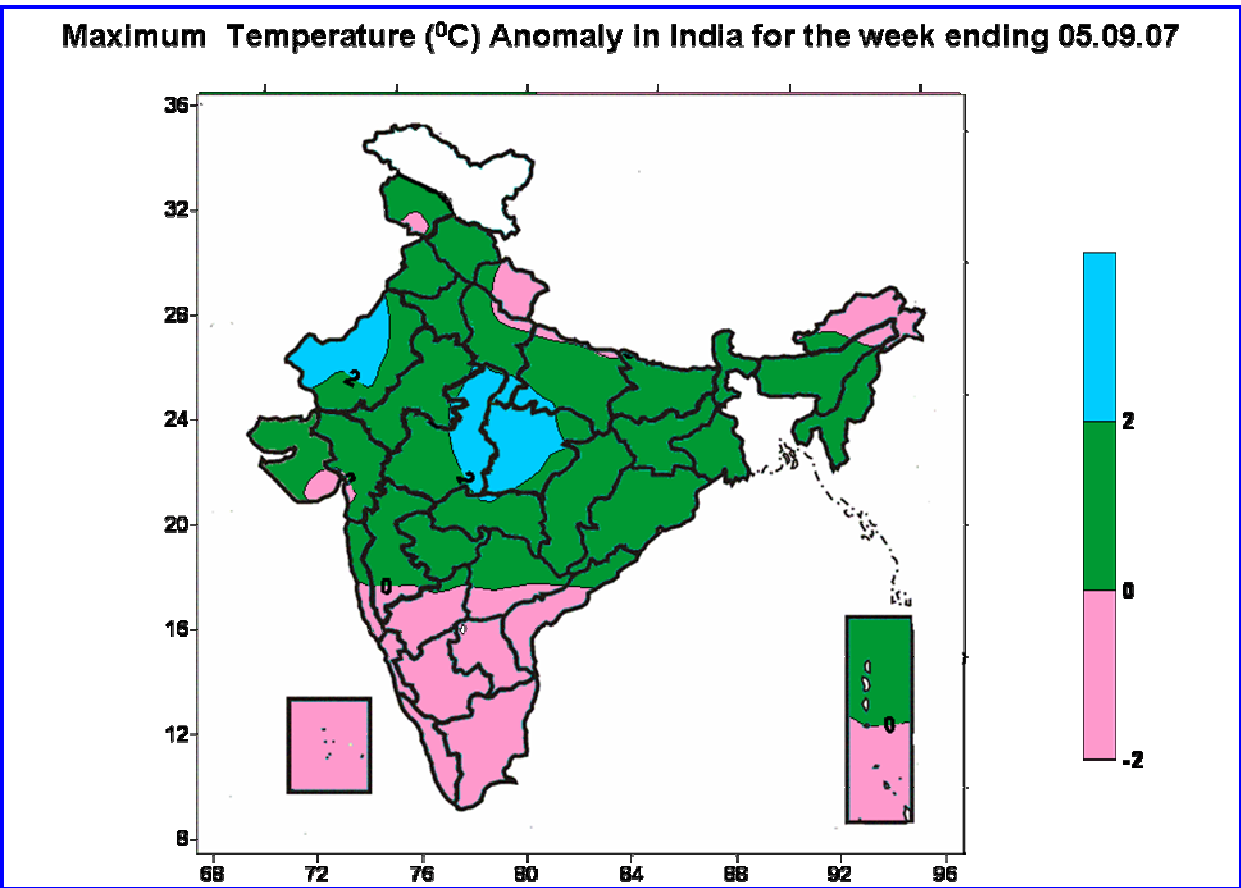
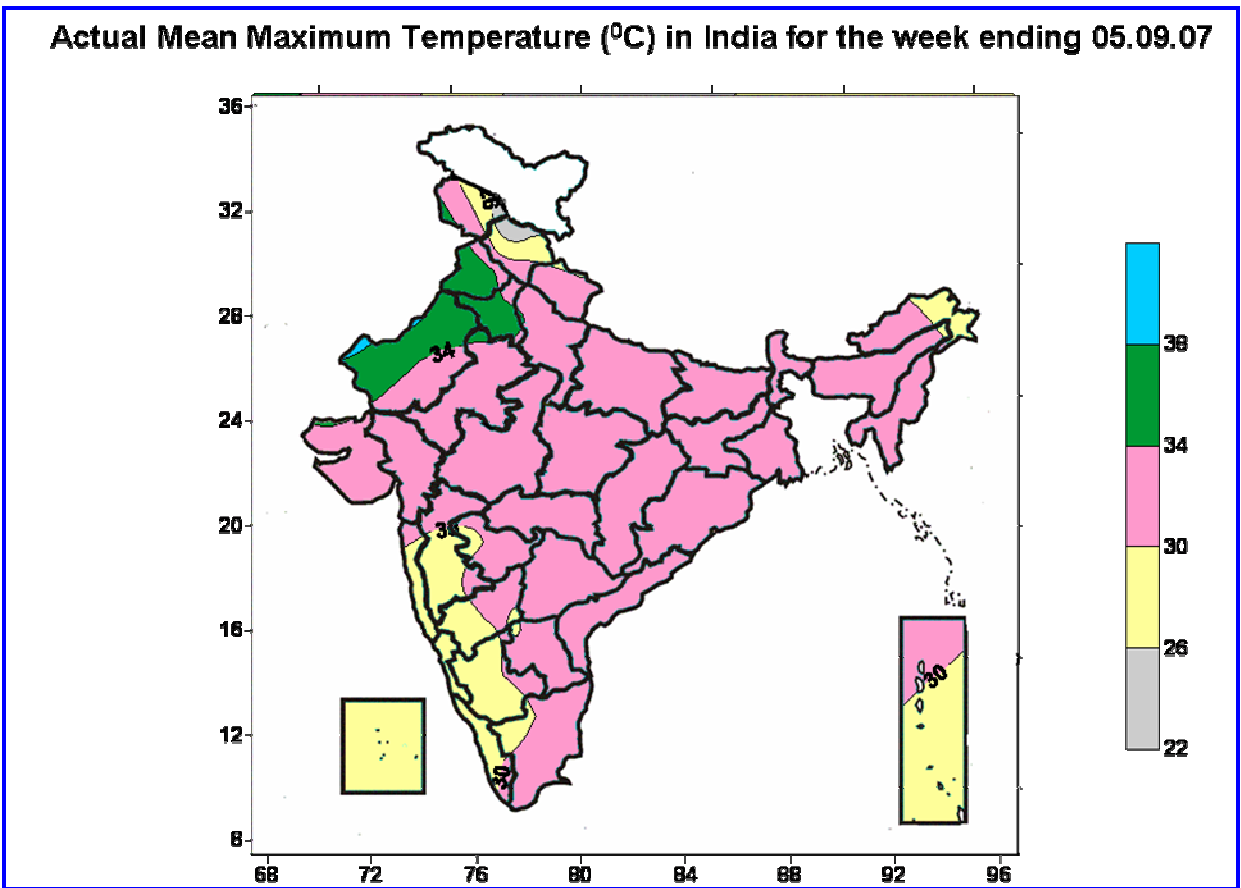
CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 5TH SEPTEMBER, 2007)

Rainfall was excess/normal in 31 and deficient in 5 out of 36 meteorological sub-divisions. (Actual: 769.9 mm, Normal: 752.2 and Departure: +2%).

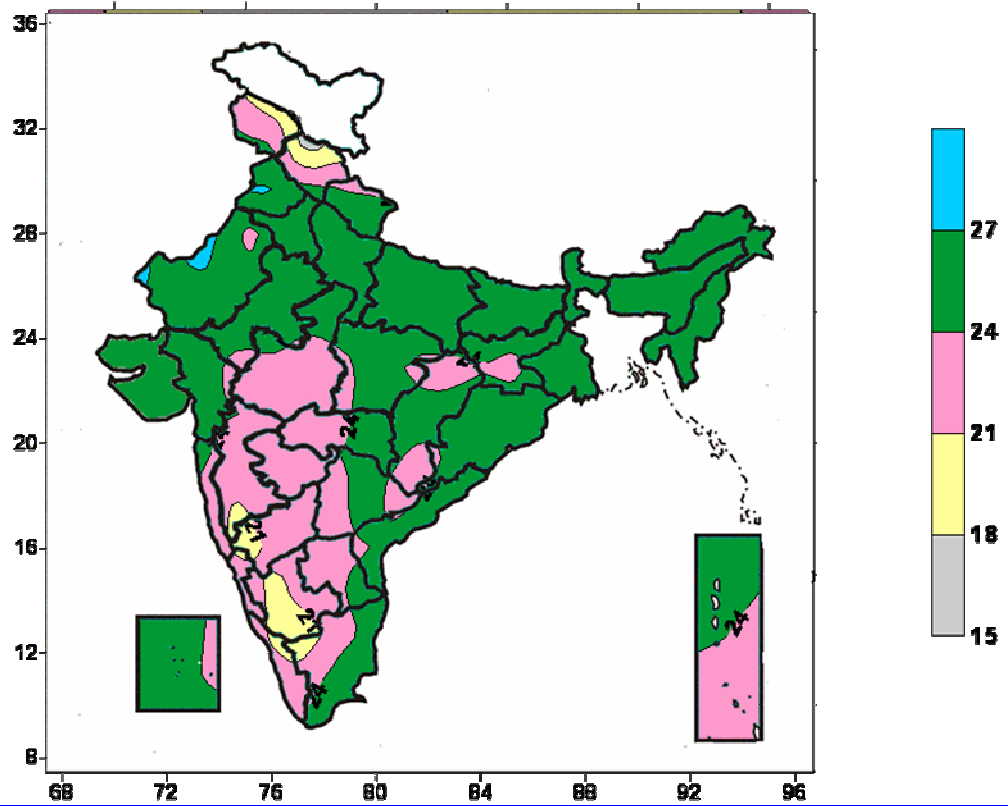
OUTLOOK FOR THE WEEK ENDING ON 12TH SEPTEMBER, 2007.

- Widespread rainfall with scattered heavy to very heavy falls is likely over Bihar, Sub-Himalayan West Bengal & Sikkim and northeastern States during the week.
- Fairly widespread rainfall with isolated heavy to very heavy falls is also likely over remaining parts of East India during first half of the week and decrease thereafter.
- Scattered to Fairly widespread rainfall activity is likely over northwest India.
- Decrease in rainfall activity over South peninsula where scattered rainfall is likely.

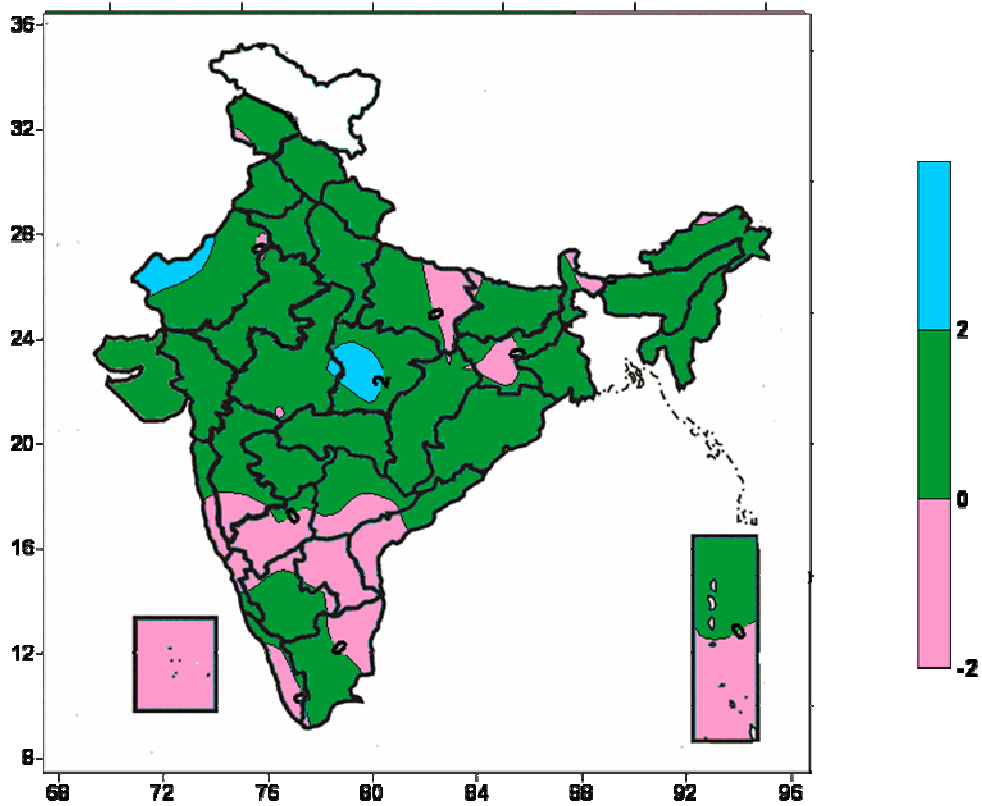
Contour maps for the week ending 5th September, 2007



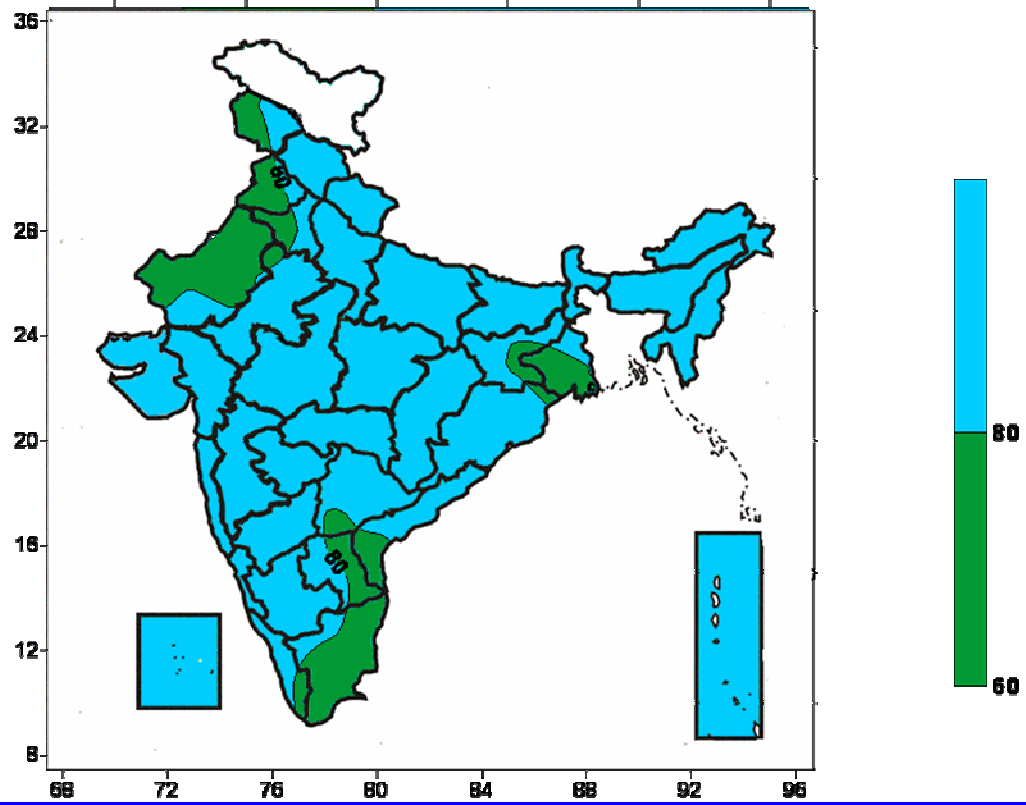
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 05.09.07



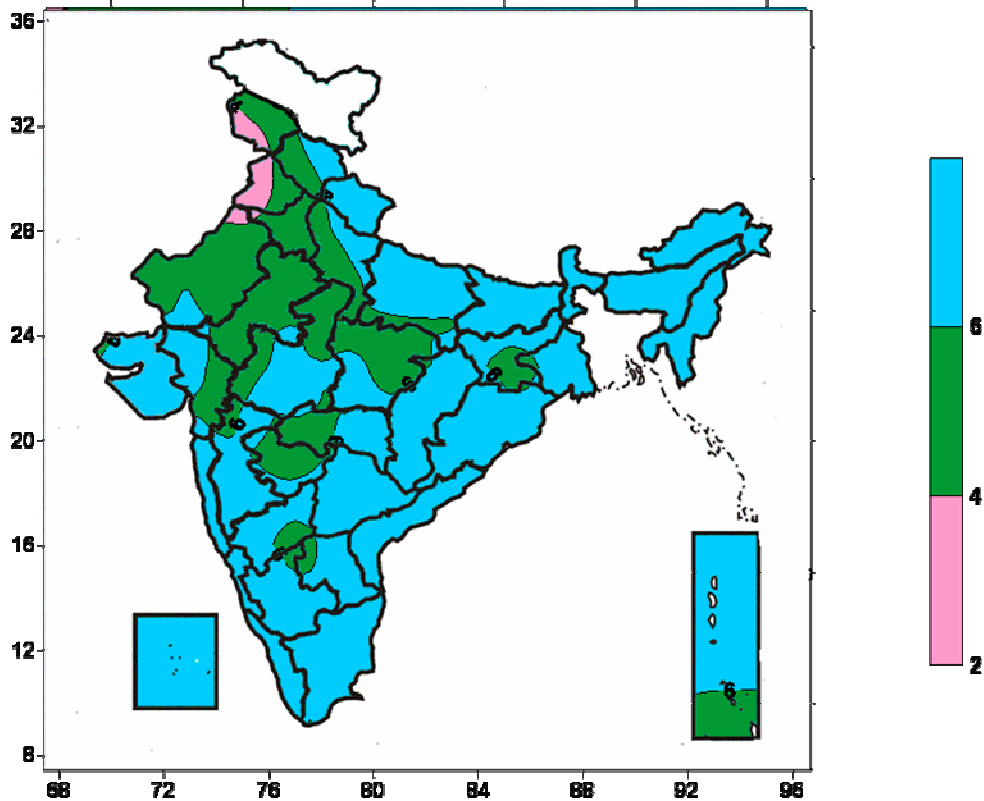
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 05.09.07



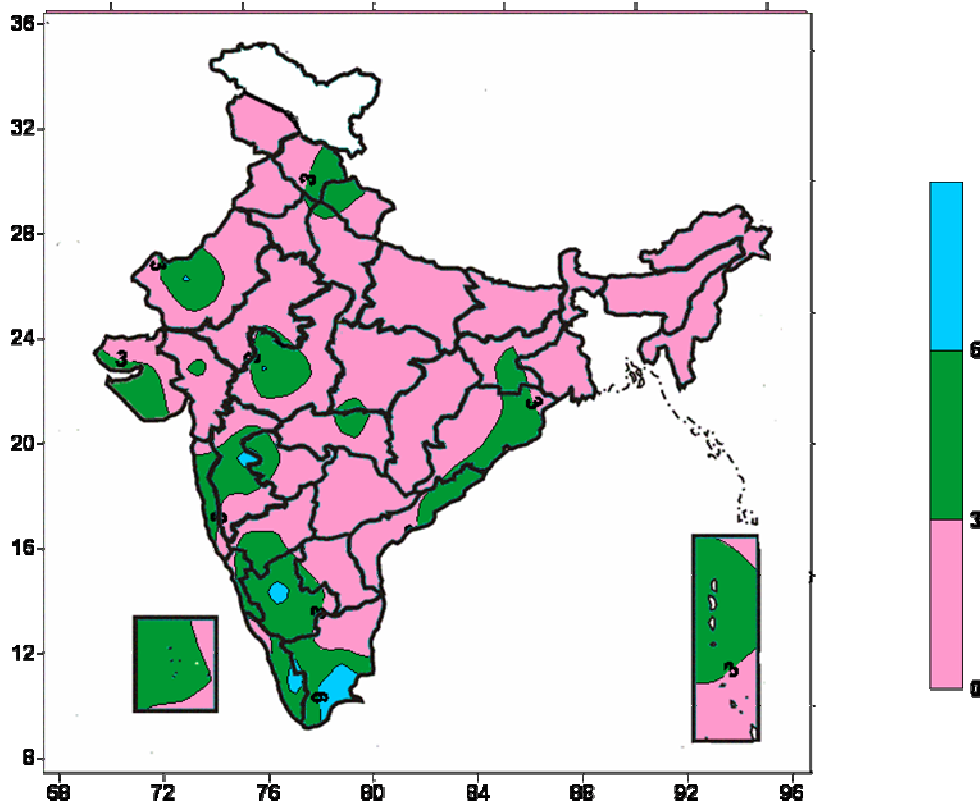
Relative Humidity (%) over India for the week ending 05.09.07



Cloud amount (okta) over India for the week ending 05.09.07



Wind speed (knots) over India for the week ending 05.09.07



Desert Locust Forecasting



Rainfall (mm)							
Station Name	30.08.07	31.08.07.	1.09.07	2.09.07	3.09.07	4.09.07	5.09.07
Amritsar	-	-	14.6	4.8	-	-	1.4
Barmer	-	5.6	-	13.2	-	-	-
Sriganganagar	1.0	-	-	-	-	-	-
Jaisalmer	-	-	-	2.0	0.1	-	-
Kota	-	3.2	5.4	50.9	-	-	-
Deesa	-	14.6	0.5	-	-	1.7	-
Churu	-	-	-	-	-	0.3	-

Temperature (degree Celcius)							
Station Name	30.08.07	31.08.07.	1.09.07	2.09.07	3.09.07	4.09.07	5.09.07
Amritsar	-	30.0	-	28.0	30.5	30.0	29.5
Barmer	33.0	32.0	31.5	31.0	-	33.0	32.0
Sriganganagar	33.0	33.5	33.0	33.0	33.5	34.0	35.5
Jaisalmer	33.0	33.5	34.0	33.0	33.0	33.0	32.5
Kota	29.5	30.5	30.5	27.5	29.5	31.0	31.0
Deesa	28.0	-28.5	29.0	29.0	30.0	29.0	29.0
Churu	-	-	-	-	-	-	-

Wind														
Station Name	30.08.07		31.08.07.		1.09.07		2.09.07		3.09.07		4.09.07		5.09.07	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	04	SE	06	S	-	-	-	-	06	NE	-	-	06	N
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganganagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	10	NE	02	N	-	-	-	-	05	ENE	-	-	28	SW
Kota	-	-	05	SSW	-	-	-	-	01	W	-	-	-	-
Deesa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Churu	-	-	06	WNW	-	-	-	-	02	W	-	-	18	NW

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				
Flowering / grain formation				

Haryana

Sugarcane	Horticultural crops	Kharif Pulses	Cotton	Paddy
Vegetative	Vegetative	Flowering/ pod formation	Vegetative	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.	Vegetative/ active tillering – Jammu Div. Flowering / grain formation - Kashmir Div.	Cob formation- Jammu Div. Cob formation / early maturity- Kashmir div.	Vegetative / flowering	Early vegetative

Punjab

Sugarcane	Horticultural crop	Kharif pulses	Cotton	Paddy
Vegetative	Vegetative	Pod formation	Vegetative	Vegetative
Kharif Groundnut				
Vegetative				

Rajasthan

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

Uttar Pradesh

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

Uttarakhand

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

Assam

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

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

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

Sikkim

Maize	Orange	Vegetables	Large Cardamom	Ginger
Harvesting	Fruiting New planting in some places	Nursery sowing	Capsule maturity/Early harvesting	Flowering
Rice				
Tillering / 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 ⁵	Tillering / panicle initiation	Land preparation and Sowing	Vegetative / flowering	Vegetative / flowering
Kharif Maize	Kharif Bajra			
Tasseling / silking	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	Flowering / grain formation	Flowering / pegging	Floral bud formation / flowering	Flowering / pod formation / pod maturity
Kharif Cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Soyabean (Madhya Maharashtra, Marathwada & Vidarbha)		
Vegetative	Vegetative growth / primary branching	Flowering / pod formation		

Madhya Pradesh

Sugarcane	Kharif crops (maize, urd and jowar)	Kharif rice	Soyabean	Cotton
Vegetative	Vegetative	Panicle initiation	Flowering / pod formation	Active vegetative

Orissa

Kharif vegetables	Kharif rice	Sugarcane	Jute	Arhar
Early vegetative / vegetative	Active tillering / panicle initiation	Vegetative	Vegetative / harvesting	Vegetative

Andhra Pradesh

Kharif Rice	Kharif Maize	Kharif Cotton	Kharif Groundnut	Kharif Black gram, Green gram
Tillering	Flowering / grain formation	Flowering / grain formation	pegging	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	Mundakkan Rice		
Tapping	Harvesting	Nursery sowing		

Tamil Nadu

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