



Summary of Agromet Advisory Services for different States of the country

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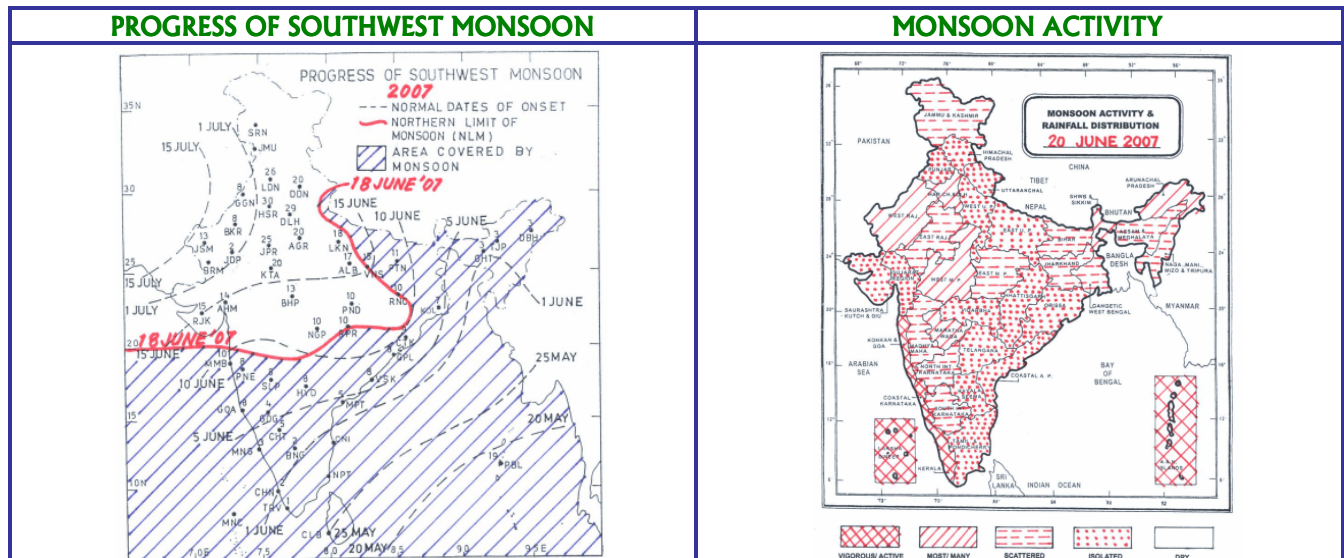
Thursday, 21st June, 2007

(For the period 21st to 25^h June, 2007)

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

Status of Monsoon

Southwest monsoon is likely to advance further into remaining parts of Orissa, Chhattisgarh & Maharashtra, entire Gujarat and parts of Madhya Pradesh and Rajasthan during next 4-5 days.



Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Southwest monsoon was active over the State from 18th to 20th June. Rain occurred at most places in the State during this period.

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

Warning: Isolated heavy to very heavy rainfall is likely over the State.

Advisories

- Farmers are advised to continue ploughing and undertake transplanting of rice as the monsoon is active over Kerala.
- Continue land preparation and transplanting *virippu* rice seedlings by utilizing the monsoon showers. In areas where crop loss is reported, direct sowing may be undertaken.
- Rain/thundershowers is likely to occur at most places over the state for the next three days. Under the circumstance, postpone irrigation to plantation crops viz., coconut, arecanut, rubber and banana.
- Arrange for drainage facilities to prevent water logging as isolated heavy to very heavy rainfall is likely in the next two days.
- Undertake intercultural operations, application of fertilizers and pesticides in plantation crops after current spells of rain.
- Monitor *virippu* rice for gall midge. Spray Chlorpyrifos @ 0.02% after spells of rain to control if the pestpopulation crosses ETL.
- 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. Spray 1% Bordeaux mixture to control bud rot. Spray 2% neem oil and garlic emulsion may be done in the crown and bunches to control

Eriophyid mite. Spraying of chemicals may be undertaken after spells of rain.

- Attack of quick wilt is reported in pepper. Spray 1% Bordeaux mixture after spells of rain to control the disease.
- Attack of pseudostem weevil is reported in banana. In endemic area, first remove the outer sheath of all infested and uninfested plants and spray Carbaryl @ 0.2% after spells of rain.

Tamilnadu

Rainfall occurred at one or two places over the State on 18th, 19th, and 20th June.

Rain/thundershowers are likely at most places over the State except over South Tamil Nadu where it is at many places.

Warning: Heavy to very heavy rainfall is likely at a few places over north coastal Tamil Nadu. In view of squally winds speed reaching 50-60 kmph, fishermen of north Tamil Nadu & Pondicherry coast are advised not to venture into the sea.

Advisories

- Undertake transplanting of *kuruvai* rice in the main field. Apply zinc sulphate @ 10 kg/acre before planting. Apply pre-emergence herbicide Butachlor @ 1 litre/ acre after current spells of rain.
- Rain/thundershowers are likely at most places over the State except over South Tamil Nadu where it is at many places for the next three days. Under the circumstances, postpone irrigation to sunflower, maize, sugarcane, cotton and groundnut. Provide adequate drainage facilities in north coastal Tamilnadu.
- Monitor cotton for boll worm and if the pests population crosses ETL, spray Endosulfan @ 2 litres/ ha or Monocrotophos @ 1 litre/ha after current spells of rain to control the pest.
- Continue harvesting maize and gingelly on bright sunny days.
- Start field preparation and sowing of maize and hybrid cumbu.

Karnataka

On 18th June, monsoon was weak over North Interior Karnataka. Rainfall occurred at most places over Coastal Karnataka and at isolated places over Interior Karnataka. On 19th June, monsoon was active over Coastal Karnataka. Rainfall occurred at isolated places over Interior Karnataka. On 20th June, monsoon was active over Coastal Karnataka. Rainfall occurred at a few places over Interior Karnataka.

Rain/thundershowers are likely at most places over Coastal Karnataka and at many places over Interior Karnataka.

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

Advisories

- Farmers are advised to continue ploughing and undertake sowing of *khraif* crops viz., jowar, maize, cotton, groundnut and sunflower by utilizing the monsoon showers.
- Continue sowing *khraif* jowar, maize, cotton, groundnut and sunflower by utilizing the monsoon showers. Undertake seed treatment with biofertilizers before sowing.
- Postpone irrigation to summer sugarcane as rain/ thundershowers is likely to occur at most places over Coastal Karnataka and at many places over Interior Karnataka for the next three days.
- Arrange for drainage facilities in Karnataka to prevent water logging as isolated heavy to very heavy rainfall is also likely for next two days.
- Monitor sugarcane for wooly aphids and army worm and if the pests population crosses ETL, release *Dipha* sp, adopt wider spacing, inter-cropping with soyabean and pulses of short duration as plant protection measures against wooly aphids in Mysore, Mandya and Hassan districts and army worm in Bidar and Bagalkote districts after current spells of rain.

Andhra Pradesh

Southwest monsoon has further advanced & covered remaining parts of Telangana thus covered the entire Andhra Pradesh on 18th June. Monsoon was vigorous over Coastal Andhra Pradesh on 19th and active over Rayalseema on 16th June. Rain occurred at a few places over Telangana and over Rayalseema on 14th June over coastal

Andhra Pradesh and Telangana on 15th June. Isolated rain occurred elsewhere over the State during the week.

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.

Advisories

- Farmers are advised to continue ploughing and undertake sowing of *kharif* crops by utilizing the monsoon showers. Arrange for drainage facilities to avoid water stagnation due to heavy to very heavy rainfall.
- Continue sowing of nursery for *kharif* rice. Continue main field preparation and arrange for transplanting of rice seedlings at proper age.
- Undertake land preparation and sowing of *kharif* crops viz., groundnut, cotton, maize, green gram and black gram by utilizing the monsoon showers. Undertake seed treatment with *Rhizobium* for groundnut, green gram and black gram and with *Azospirillum* for maize before sowing.
- As heavy to very rainfall is likely to occur at a few places over the State in the next two days, arrange for extensive drainage facilities in order to avoid stagnation of water. Avoid sowing operations in Coastal Andhra Pradesh next two days as there is a chance of heavy rainfall during this period.

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

Assam

Moderate rain occurred at many places on 18th June, light to moderate rain occurred at many places on 19th June and at a few places on 20th June with isolated heavy to very falls on 18th June and isolated rather heavy to very heavy falls on 19th June. Cloudy Sky on 18th June and generally cloudy sky 19th & 20th June.

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

Advisories

- This is the time for land preparation and sowing of arhar. Prepare land on a non-rainy day by 3-4 ploughing. Sow seeds of variety T-21 @ 2 Kg seeds per bigha (15 kg per hectare) maintaining the spacing of 75 cm between rows and 30 cm between plants. Fertilizer @ 5 kg urea, 35 kg SSP per bigha is to be applied.
- As most of the districts of the State received sufficient rain during last couple of weeks and rain / thundershowers are likely at a few places over the State for next three days, postpone irrigation to the crops.
- Maintain 3 – 5 cm water in field of early and regular *ahu* rice.
- Since maize crop is highly susceptible to water logging, provision for surface drainage should be made in the field.
- The sugarcane should be provided with mechanical support to prevent lodging.
- Mild incidence of Brown Plant Hopper, Yellow stem borer and blast and sheath blight diseases in early *ahu* rice and Hispa in regular *ahu* rice is reported in a few localities.
- Monitor attack of Brown Plant Hopper and blast and sheath blight diseases in early *ahu* rice. If attack crosses economic threshold level, to control Brown Plant Hopper insecticides like Chloropyrifos 20 E.C. @ 1.5 ml per litre of water or Phosphamidon @ 1ml per litre of water is to be applied. For control of Blast diseases as soon as 1 or 2 spots on leaf are seen Hinosan 50 E.C. @ 1ml per litre of water or Blitox @ 4gm per litre of water is to be applied and spraying is to be continued at an interval of 10-15 days till the disease is controlled. For control of sheath blight diseases Carbendazim (Bavistin) @ 0.5 gm per litre of water is to be applied.
- Monitor the infestation of Hispa in regular *ahu* rice and if population exceeds economic threshold level, apply Monochrotophos 40 EC @ 1.5 ml per litre of water or Chloropyrifos 20 EC @ 2 ml per litre of water when one adult per hill is noticed.
- Apply plant protection measures on a non-rainy day.
- There is mild chance of attack of hairy caterpillar, semilopper, yellow mite and stem weevil in jute. If insect population exceeds economic threshold level, apply fenitrothion 50 EC @ 1 ml in one litre of water or endosulphan 35 EC @ 2 ml per litre of water. Apply plant protection measures on a non-rainy day.
- There is mild chance of attack of stem borer in maize. If insect population exceeds economic threshold level, apply fenitrothion 50 EC @ 2 ml per litre of water on a non-rainy day.

Arunachal Pradesh

Sky remained cloudy over the State during the period. Light to Moderate rain /thundershowers occurred at most places on 18th and 19th June & at many places on 20th June.

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

Advisories

- As there was excess rainfall in most of the districts in the State and rain/thundershowers are likely at a few places over the State during next three days, postpone irrigation, intercultural operations and spraying to summer vegetables, millet, maize(in cob formation stage), *jhum* paddy and ginger crops. Provide adequate drainage facilities to drain out the excess water.
- Continue weeding, intercultural operations in *Jhum* paddy, millet and ginger on a non rainy day.

Bihar

Rainfall occurred at many places & heavy rain occurred at one or two places.

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

Advisories

- Prepare field and undertake nursery sowing of *kharif* rice with the realised monsoon rain. Select short duration varieties i.e. Pusa 2-21, Saket-4, Prabhat, IR 64 or scented paddy, Pusa basmati, R Subhasni, Kasturi.
- There was excess rainfall in Araria, Aurangabad, Bhagalpur, Bhojpur, Katihar, Khagadia, Madhubani, Monghyr, Muzzaffarpur, Patna, Purnea, Rohtas, Saharsa, Samastipur, Saran, Sitamarhi, Siwan, Vaishali and west Champaran districts during last week and rain/thundershowers are likely at a few places over the State for the next three days, postpone irrigation to vegetables, maize, sugarcane . Apply irrigation in a non rainy day in the remaining districts.
- Monitor the mango for mealy bug or hopper & if exceeds economic threshold level, then spray with Carboryl @ 2g/litre of water in a non rainy day.

Jharkhand

Rain or thundershower occurred at a few places.

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

Advisories

- Prepare field and undertake nursery sowing of *Kharif* rice with the realised monsoon rain. Improved varieties for low land (DON-1) are MTU 7029, BPT 5204, IET-5656, Tulsi etc, and that for medium land are IR-36, Kanak, Birsa Dhan 202, Swarna (Nati Mansuri) etc. can be sown.
- Start field preparation and sowing of upland crops viz. maize, arhar, groundnut, soybean, urad, and rice. Select improved varieties of rice for direct sowing like Vandana, Anjali, Barsa Dhan 109, Birsa Vikas Dhan 110, Birasa Dhan 108.
- There was excess rainfall in Palamu and Ranchi districts during last week and rain/thundershowers are likely at a few places over the State for the next three days, postpone irrigation to vegetables. Apply irrigation in a non rainy day in the remaining districts.
- To prevent from powdery mildew of small fruits in Mango and Litchi, spray sulfex@ 2gm/litre of water in a non rainy day.

Sikkim

Sky remained generally cloudy during the period. Light to moderate rainfall occurred over East Sikkim. Rainfall was deficient during the period.

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

Advisories

- Farmers are advised to undertake transplanting of rice by utilizing the monsoon showers.
- Epidemic infestation of semilooper has been reported in maize. Spray Trisophor @ 1 ml/litre on a non rainy

day to control the pest and to minimize the damage.

- Continue main field preparation and transplanting of rice seedlings when the seedlings are at 20-30 days old.
- Postpone irrigation to large cardamom, orange, maize and ginger as there was normal rainfall during last week in the state.
- Rouge out Chirkey and Foorkey affected large cardamom plants and destroy completely by burning. Collect leaf eating caterpillars and destroy to prevent further spread.
- Monitor ginger for rhizome rot and bacterial wilt and rouge out the affected plants and destroy completely to prevent further damage.

West Bengal

SW monsoon was active over Sub-Himalayan West Bengal on 18th and 19th June. During the said period rainfall occurred at most places with heavy rain at a few places and very heavy falls at an isolated places on 18th June, rainfall occurred in most places with very heavy to heavy at isolated places on 19th June, rainfall occurred at most places with heavy rain at an isolated places on 20th June over Sub- Himalayan West Bengal.

But rainfall occurred at many places with heavy rain at isolated places on 18th June, rainfall occurred at isolated places on 19th June and at a few places on 20th June over Gangetic West Bengal.

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

Advisories

- Prepare land with the advantage of recent monsoon rain and continue sowing of groundnut. Select varieties from improved varieties like JL-24, JL-11, A-K-12-24. Seedrate is 110-125 kg / ha. Apply 20-25 carts compost, 15 kg N, 30 kg P₂O₅ and 45 kg K₂O at the time of land preparation. Line to line distance is 12 inches and seed to seed distance is 6 inches.
- Arhar can be grown in high land where there is no water logging. Prepare land with the advantage of recent monsoon rain and continue sowing. Select varieties from high yielding varieties like B-7, UPS-A-120 etc. Seedrate is 20-25 kg / ha. Apply 20-25 carts compost, 20 kg N and 40 kg P₂O₅ at the time of land preparation. Maintain line to line distance of 30 inches for sowing.
- Undertake land preparation and fertilizer application for sowing of groundnut and arhar on a non-rainy day.
- Undertake preparation of land and transplanting of *aus* rice.
- Undertake preparation of land for nursery sowing of *aman* rice. One kattah land is required for transplanting of 1 bigha of land. Apply 3 kg Super phosphate, 1 kg urea and 800 g MOP in the nursery bed.
- Apply 15 kg urea per bigha as top dressing on a non-rainy day in 3 months old crops of sugarcane.
- Apply 2nd dose of 6 – 7 kg urea per bigha as top dressing on a non-rainy day in 5 – 6 weeks old crops of jute.
- As most of the districts received sufficient rain and rain / thundershowers are likely at a few places over the State for next three days, postpone irrigation to sugarcane and jute.

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

Gujarat

Rainfall occurred at isolated places over Gujarat region, Saurashtra, Diu, Daman, Dadra Nagar Haveli on 18th June. Rainfall occurred at isolated places over Gujarat state, Daman, Dadra Nagar Haveli on 19th June. Rainfall occurred at isolated places over Gujarat region, Diu, Daman, Dadra Nagar Haveli on 20th June.

Rain/thundershowers are likely at a few places over the State during next 48 hours and increase thereafter.

Advisories

- Farmers are advised to plan for *Kharif* season. High yielding seeds may be selected for sowing *kharif* crops. Purchase certified seeds from authorized shops. Keep the field well prepared and inputs ready for sowing of crops after 4-5 days as entire State will be covered by monsoon.
- Prepare land for sowing of *kharif* rice, *kharif* groundnut, *kharif* cotton and *kharif* bajra.
- Where water is available prepare the seed bed for raising rice nursery. For sowing soak the rice seeds in 3% salt solution i.e 300 g salt in 10 lit of water to remove damaged & available seeds. Then treat the seeds with

agrosan @ 100 g per 50 kg seeds to prevent seed borne diseases.

- Where ever water is available, sow the hybrid cotton earlier with irrigation to escape from latter pest attack particularly *Heliothis*.
- As there was no significant rain during last few weeks in most of the districts of the State and rain is likely to occur only at a few places for next three days, apply irrigation to sugarcane to bring soil moisture to field capacity.

Chhattisgarh

South–West Monsoon has advanced over Bastar division on 14th June, in Raipur division on 18th June. Rainfall occurred at many places on 18th and 19th June in all the divisions of the State.

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

Advisories

- Farmers are advised to continue sowing of *Kharif* crops in the State utilizing the recent monsoon rain. High yielding seeds may be selected for sowing *kharif* crops.
- Prepare nursery for *kharif* rice of suitable size & mix 40-50 buckets of compost manure & 2 kg Amonium sulphate or 1 kg Urea / Acre. Sowing may be done with the help of sufficient moisture in the field. For sowing use 25-45 kg seeds / ha depending upon Varieties & grain size. Before sowing seeds may be treated with 50 gm Captan & then 250 gm Azetobacter & PSB / 10 kg seeds.
- Continue harvesting of already matured crops of green gram on bright sunny days.
- As most of the districts of the State received sufficient rain during last week and rain / thundershowers are likely at a few places over the State for next 24 hours and increase thereafter, postpone irrigation to the crops.
- Apply 75 kg N / ha as top dressing on a non-rainy day to sugarcane. When the crop attains a height of 5 – 6 feet, 4 – 5 plants may be tied together to prevent lodging from gusty wind.

Maharashtra

Monsoon was active in South Konkan. Rain occurred at most places in Konkan & Vidarbha, at a few places over Madhya Maharashtra and at isolated places in Marathwada

Rain / thundershowers are likely at most places over Konkan & Goa and at many places over south Madhya Maharashtra. Rain / thundershowers are likely at a few places over north Madhya Maharashtra, Marathawada during next 48 hours and increase thereafter. Rain / thundershowers are likely at a few places over Vidarbha during next 24 hours and increase thereafter.

Advisories

- This the time for preparation of nursery beds & sowing of *karif* rice in nursery bed. Prepare nursery of suitable size & mix 40-50 buckets of compost manure & 2 kg Amonium sulphate or 1 kg Urea / acre. Sowing may be done with the help of sufficient moisture in the field. Select the variety from Karjat 1, 2, 3, 184, Ratnagiri 3, 73, 711, Sahyadri, Bhogabvati, Phule Radha, Phule Maval, Pusa etc. for Konkan and Indrayani, Pavna Ambemhor 157, Pusa Basmati, Karjat Hybrid, Sahaydri 2, Ratnagiri 24, 73, 711 for Madhya Maharashtra and Marathwada. For sowing use 25-45 kg seeds / ha depending upon varieties & grain size. For Vidarbha select variety from SKL 6, SYE 1 or 4, PKV, H MV for sowing and use the seeds 30-40 kg / ha. Before sowing seeds may be treated with 50 gm Captan & then 250 gm Azetobacter & PSB / 10 kg seeds.
- Undertake land preparation on a non-rainy day and sowing of *Kharif* Jowar, *Kharif* Bajra, *Kharif* Groundnut, *Kharif* Sunflower, *Kharif* Geen gram, *Kharif* Cotton, *Kharif* Tur and *Kharif* Soyabean in Madhya Maharashtra, Marathwada and Vidarbha.
- Select the hybrid variety from CSH- 14, 16, 17,18,23 & high yielding variety from SPV-462, 475 & 946, SSV-84 and Phule amruta for Madhya Maharashtra, SPH-388 & 468, SPH-1010-R for Vidarbha and PKV-801, 809 & SPV- 1411 for Marathwada for *kharif* jowar, the hybrid variety from Saburi, Sradha & Shanti and high yielding variety from WCC-75, ICTP-8203 for Madhya Maharashtra and Sampada & Pratibha for Marathwada for *kharif* bajra, the high yielding erect variety from SB 11, Phule Pragati, TAG-24, TG-26 & Phule Vyas, Semi spreading variety from TMV-10 & M-13, spreading variety Karad 4-11 for Madhya Maharashtra, TLG-45 for Marathwada & TAG-24 & Ak-159 for Vidarbha for *kharif* groundnut, EC 68414, Morden, SS 56, Phule bhanu, KBSH 11, APSH-11 for Madhya maharashtra, Surya, PKV SF 9 or 27 for

Vidarbha & hybrid SCH 35 for Marathwada for *kharif* sunflower, Vaibhav, Phule M-2, TAP -7, TARM 2 or 18, AKM 8802 or 8803 for *kharif* green gram, PA 402, American PH 348, Phule 492 or 388, JLH 168, JLA 794, Ganga, Parbhani Sona for *kharif* cotton, BDN-1 & 2, ICPL-87119, & 87, BSMR-853, & 876, AKT-8811 and Vipula for Madhya Maharashtra, T – Vishakha 1, TAT 10, Akola sankar 1 for Vidarbha and Vaishali & Amol for Marathwada for *kharif* tur and MACH-13, 58, 124, 450, JS-335, PK-1029 & Phule Kalyani for Madhya Maharashtra, PKV 1, TAMS 38 for Vidarbha and MAUS 47, 61, 61-2 & Samruddhi for Marathwada for *kharif* soybean.

- Mild incidence of White Woolly Aphids in Aurangabad division in Sugarcane (Preseasonal) is reported.
- Monitor the crop for white woolly aphids in Sugarcane (Preseasonal) & if exceeds economic threshold level, for effective control spray 500 ml endosulphan 35 % + 1000 ml metasystox & 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.
- Apply plant protection measures and undertake intercultural operation on a non-rainy day in north Madhya Maharashtra, Marathwada and Vidarbha and postpone the same in south Madhy

Madhya Pradesh

Rainfall has occurred at many places in South East M.P. on 18th and 19th June, North west M.P. on 20th June and at a few places over rest of the State for remaining period.

Rain/thundershowers are likely at a few places over the State during next 48 hours and increase thereafter.

Advisories

- Farmers are advised to take up ploughing and arrange for inputs for sowing of *khraif* crops as monsoon is likely to set up in the state within shorter period.
- There was excess rainfall during last week over the State except in Dindori, Jabalpur, Mandla, Narsinghpur, Panna, Rewa, Tikamgarh and Umaria in East Madhya Prades and in Badwani, Dewas, Harda, Morena and Ratlam in West Madhya Pradesh and rain/thundershowers is likely to occur at a few places over the State for the next three days. Under the circumstances, postpone irrigation to sugarcane. Apply irrigation to bring soil moisture into field capacity in the above mentioned districts.
- Continue land preparation and sowing of cotton.
- Monitor sugarcane for *Pyrilla* and scale insects and if the pests population crosses ETL, spray Malathion 50 EC or Endosulphan 35 EC @ 1.25 litres/ha on a non rainy day to control the pests.

Orissa

South west Monsoon advanced into most parts of the State on 18th June. Rain fall occurred at many places on 18th June, at a few places on 19th June and isolated places over the on 20th June.

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

Warning: Isolated heavy to very heavy rain is likely over coastal Orissa during next 48 hours.

Advisories

- Continue land preparation on a non rainy day and undertake sowing of jute. Sow the jute seeds of variety JRO 524.
- Continue land preparation on a non rainy day and undertake nursery sowing of *Kharif* rice with the realised monsoon rain.
- As rain/thundershowers are likely at many places over the State for the next three days, postpone irrigation, intercultural operations and spraying to vegetables, and sugarcane, crops. Provide adequate drainage facilities to avoid waterlogging in coastal Orissa.

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

Punjab

Light to moderate rainfall occurred at many places in the State on 18th June and at isolated places rest days.

Isolated rain/thundershowers is likely over the State.

Advisories

- Prepare mainfield for transplanting of *kharif* rice and continue transplanting of ready seedlings.
- Continue sowing of *kharif* groundnut. Rainfed groundnut variety i.e. 548 may be preferred for sowing.
- As there was excess rainfall in most of the districts in the State during last week and rain/thundershowers are likely at isolated places over the State for the next three days, postpone irrigation to *summer* sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops.
- Weeding and intercultural operations may be continued in sugarcane, vegetables and *kharif* pulse crops.
- Monitor the sugarcane crop for stem borer infestation & if exceeds economic threshold level, for effective control sprinkle Endosulfan 5 percent granules in the leaf whorls and axils.

Haryana

Light to moderate rainfall occurred at a few places in the State on 18th & 19th June and at isolated places on rest of the days.

Isolated rain/thundershowers are likely over the State.

Advisories

- As there was excess rainfall in most of the districts in the State during last week and rain/thundershowers are likely at isolated places over the State for the next three days, postpone irrigation to *summer* sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops.
- Weeding and intercultural operations may be continued in sugarcane, vegetables and *kharif* pulse crops.
- Prepare mainfield for transplanting of *kharif* rice and continue transplanting of ready seedlings.
- Continue sowing of *kharif* groundnut under irrigated condition. Rainfed groundnut variety i.e. 548 may be preferred for sowing.
- Incidence of thrips on cotton, white fly on moong, and 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. Spray Metasystox 25EC 1ml/l of water to control white fly in moong. Sprinkle Endosulfan 5 percent granules in the leaf whorls and axils for effective control of shoot borer in sugarcane.

Rajasthan

Duststorm / thunderstorm with rain occurred at a few places in Jaipur, Bikaner, Kota, Udaipur and Ajmer divisions and remained mainly dry in Jodhpur division in the State.

Rain/thundershowers are likely at a few places over East Rajasthan during next 48 hours and increase thereafter. Isolated rain/thundershowers are likely over West Rajasthan.

Advisories

- Farmers are advised to take up ploughing and arrange for inputs for sowing of *khraif* crops, viz., bajra, groundnut and maize as monsoon is likely to set up in Rajasthan within shorter period.
- There was no significant rainfall in the State during last week except in Rajsamand in East Rajasthan and in Hanumangrah and Sriganganagar districts in West Rajasthan and rain/ thundershowers are likely at a few places over East Rajasthan and at isolated places over West Rajasthan for the next two days. Under the circumstances, apply irrigation to cotton crop. Apply irrigation depending upon the soil profile stored moisture in the above mentioned districts.
- Complete harvesting *zaide* moong.
- Undertake earthing up in early sown *desi* and *American* cotton in irrigated areas to keep the field weed free. Earthing up may be done on a non rainy day in East Rajasthan.

Uttar Pradesh

Weather has been mainly dry in all divisions of U.P. on 18th June. Moderate rain occurred at isolated places at Lucknow, Jhansi division on 19th June. Moderate rain occurred at isolated places in Agra division on 20th June. Weather has been mainly dry in remaining divisions of U.P. on 19th and 20th June.

Isolated Rain/thundershowers are likely over West U.P. and Rain/thundershowers at a few places over East U.P.

Advisories

- Prepare field and undertake nursery sowing of *Kharif* rice with the advanced monsoon rain. Aswani, Saket-U, Govind, Narendra-118, Narendra-97 varieties may be selected.
- As there was excess rainfall in Allahabad, Azamgarh, Farrukhabad, Gorakhpur, Jaunpur, Kheri, Lucknow, Pratapgarh, Sitapur, Sultanpur, Baghpat, Bareilly, Bijnor, Jotirba Phule Nagar, Jhansi, Lalitpur, Meerut, Moradabad, Muzaffarnagar, Shaharanpur and Shajhanpur districts during last week and rain/thundershowers are likely at isolated places over West U.P. and at a few places over East U.P., postpone irrigation, to maize, and sugarcane crops.
- To control borer insect in early sown sugarcane, spray the solution of Endosulphon 35 EC @ 1.25 litre/ha in water in a non rainy day in East U.P and continue spraying in west U.P

Himachal Pradesh

Precipitation occurred at a few places in the State.

Isolated rain / thundershower is likely over the State.

Advisories

- Continue land preparation and nursery sowing and transplanting of cauliflower and cabbage in low and mid hills.
- Continue land preparation and nursery sowing of rice. Before sowing the nursery, 3.7 kg of seeds should be soaked in 25 litres of water having 2.5 g common salt. Discard the floated seeds and wash rest of the seeds properly, dry in shade and sow after treatment with Bavistin @ 2.5 g / kg of seeds. In seed bed of size 10 cm high of 8x1.25 m dimension apply 20-30 kg FYM, 65 g urea and 150 g super phosphate per bed and mix it thoroughly in the upper 5 cm layer of the bed. Sow 400 g good quality treated seeds in each bed, in rows, 10 cm apart. Four such beds are sufficient for one Bigha.
- As there was excess rain in Bilaspur, Hamirpur, Kangra, Mandi, Sirmour, Solan and Una districts of the State, postpone irrigation to the crops in these districts. As there was no significant rain during last week in remaining districts and isolated rain / thundershower is likely over the State for next three days, apply irrigation to potato and vegetables.
- There is mild chance of attack of powdery mildew in vegetables. If attack crosses economic threshold level, spray carbendazime 0.5% to control the disease.
- Continue preparation of land and sowing of maize by ploughing and mixing biological manures properly. The crops should be sown between 15th to 30th June in low hills.

Uttarakhand

Light to moderate rain was recorded at many places in the first half of the week and at a few places on 17th June and at isolated places on 18th June. Sky remained partly to overcast during the week.

Isolated rain/thundershowers are likely over the State.

Advisories

- Continue field preparation and transplanting of rice.
- As excess rainfall occurred at many places over the State Make arrangements for excess water drainage (in those areas where soil is saturated) in ginger.
- Undertake intercultural operations to keep the field weedfree in sugarcane and potato.
- Harvest the matured crops of Mango and Litchi. Maintain cleanliness in the orchards.

Jammu & Kashmir

Light to moderate rain / thundershowers occurred at few places on 18th June and at isolated places on 19th & 20th June over J&K state.

Isolated rain/thundershowers are likely over the State.

Advisories

- Continue land preparation and transplanting of rice in the main field in Kashmir division. Transplant healthy seedlings at 3-4 leaf stage, 3 seedlings /hill in 15x15 to 20x15 cm row to row and plant to plant spacing.
- Farmers can go for direct sowing of rice crop in Jammu division (Varieties: Jaya, RR-8585, PC -19, IRT-1410 and Ratna) with seed rate 75 kg /ha in those areas where there is no nursery planted.
- There was no significant rainfall during last week and rain/thunder showers is likely at isolated places over the State for the next three days. Under the circumstances, apply irrigation to vegetable and fruit crops in Kashmir division.
- Continue harvesting vegetables in Kashmir division.
- Monitor vegetable crops like tomato, brinjal and chillies for virus infestation in Jammu division and rogue out affected plants completely to prevent further spread.
- Attack of grass hopper is reported in maize in Jammu division. Spray Sevin @ 1 kg/ha to control grass hopper.
- Undertake mulching in orchards in order to conserve moisture in the field. This will also control weeds. White wash bottom portion of trees to prevent termite attack. Undertake new planting in orchards.

Delhi

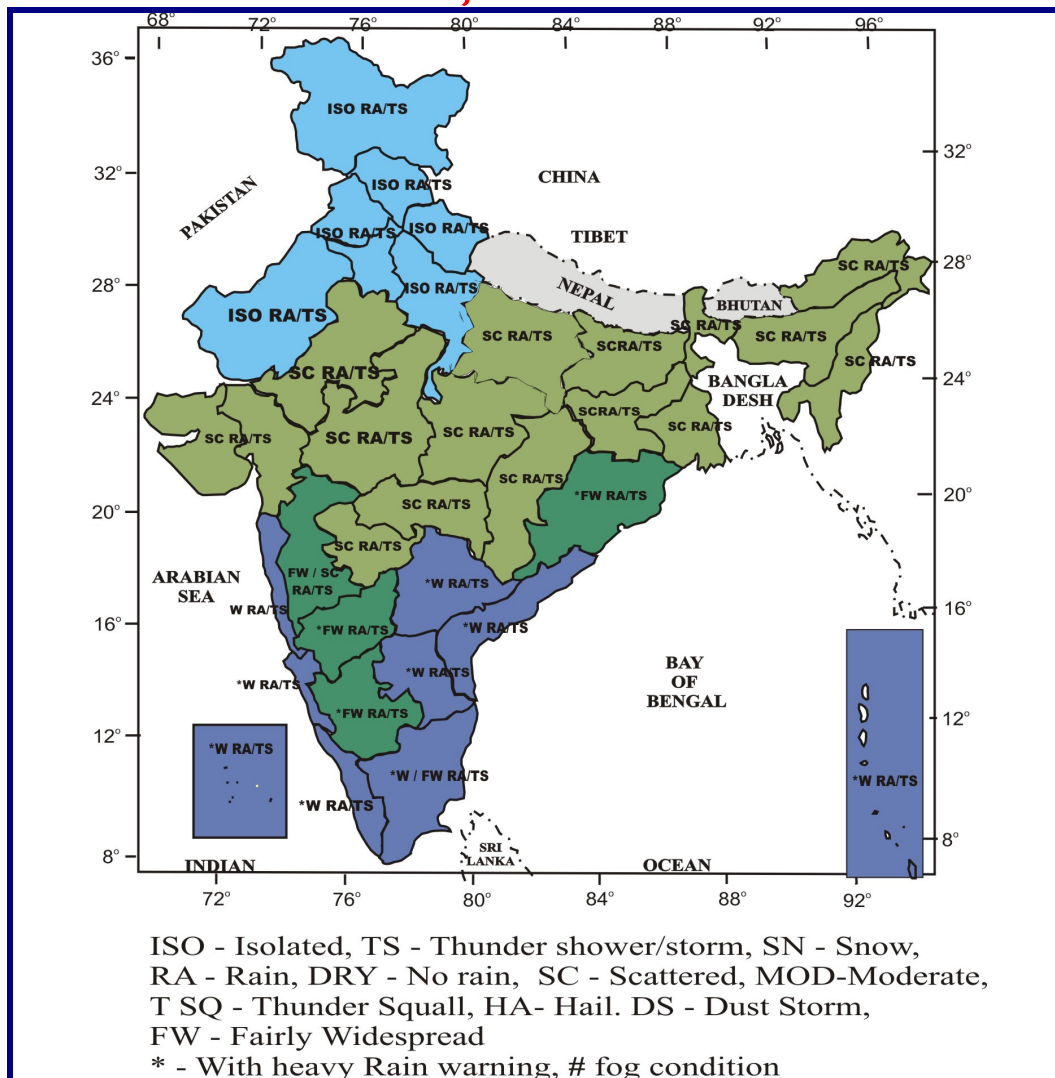
Moderate to heavy rain occurred on 18th and 19th June at most places. Very light rain occurred on 20th June at isolated places.

Isolated rain / thundershower are likely over the State.

Advisories

- As there was sufficient rain during last week, postpone irrigation to vegetables and also to early sown arhar and maize.
- Prepare land and perform sowing of arhar, bajra, maize, raddish, fodder crops like jowar, bajra and mixed maize and lobia and nursery sowing of *kharif* tomato, cauliflower and cabbage with irrigation facilities.
- Select varieties from Upas – 120 and Manak for sowing of arhar.
- Select varieties from Ganga-5, Ganga White, Vikram and Kissan for sowing of maize.
- Sow Pusa Chatki variety of raddish.
- Prepare land for nursery sowing of rice if not done till date. Seed bed should be prepared of size of 10 m length and 1.25 m in width at 30 cm gap between beds. In each seed bed 30 kg cow dung / compost, 80 gm urea, 80 gm SSP and 40 gm MoP are to be applied. Well germinated seeds are to be sown @ 650 to 1000 gm per bed. Select varieties from PR – 109, PR – 106, Jaya and HKR – 120 for sowing.

Forecast Map Valid upto 24th June 07



Salient weather features for the week ending 20/06/07

MONSOON WATCH

- Southwest monsoon further advanced into some more parts of Telangana, remaining parts of coastal Andhra Pradesh, northwest Bay of Bengal & Gangetic West Bengal, some parts of Chhattisgarh, Orissa, Jharkhand and East Uttar Pradesh and some more parts of Bihar on 14th June. It advanced into some more parts of Central Arabian sea, Konkan & Goa, some parts of Madhya Maharashtra & Marathawada, some more parts of Telangana, Jharkhand, Bihar & East Uttar Pradesh and some parts of Uttarakhand on 15th June. It advanced into remaining parts of central Arabian sea and Konkan & Goa, some more parts of Madhya Maharashtra and Marathawada, remaining parts of Telangana, some parts of Vidarbha and some more parts of Chhattisgarh, Orissa and Jharkhand on 18th June.
- Northern limit of monsoon passed through lat. 20.0 °N/ long. 60.0 E°, lat. 20.0 °N/ long. 70.0 E°, Dahanu, Parbhani, Brahmapuri, Raipur, Sambalpur, Keonjhar, Ranchi, Varanasi, Sultanpur, Bhaich and Mukteswar (Map Enclosed).

METEOROLOGICAL ANALYSIS

- An off-shore trough extended from Gujarat coast to Kerala coast during 14th to 19th June and from Konkan coast to Kerala coast on 20th June.
- A Low pressure area formed over East central Bay of Bengal on 19th June and became well marked on 20th.
- A cyclonic circulation lay over West Uttar Pradesh & neighbourhood extending upto 3.1 Km a.s.l. on 14th. It persisted over the same area extending upto 0.9 km a.s.l. on 15th & 16th and became less marked on 17th.
- A cyclonic circulation lay over Central Pakistan and neighbourhood at lower tropospheric levels on 14th & 15th. It lay over central Pakistan and adjoining Rajasthan on 16th , over Punjab & neighbourhood on 17th & 18th and over Jammu & Kashmir & neighbourhood on 19th. It moved away eastwards thereafter.
- Another Cyclonic circulation at lower levels lay over South Pakistan & neighbourhood on 18th & 19th and over central Pakistan and adjoining Rajasthan on 20th.
- A Cyclonic Circulation lay over Haryana & neighbourhood on 19th & 20th extending upto 0.9 km a.s.l.
- An upper air trough ran from Bihar to North Orissa at lower tropospheric Levels on 18th, it ran from west Assam to North Orissa across Bangladesh, West Bengal & Jharkhand on 19th and became less marked on 20th.

RAINFALL

Under the influence of the above systems

- Southwest Monsoon was active with fairly widespread / widespread Rainfall and isolated heavy to very falls over northeastern states during 14th to 17th. It was also active over Sub-Himalayan West Bengal & Sikkim during 17th to 19th . The southwest monsoon was active along the West Coast during 18th to 20th . Fairly wide spread / widespread rainfall with isolated heavy to very heavy falls occurred along the west coast during remaining days of the week.
- Ü Scattered to fairly widespread rainfall occurred over remaining parts of Peninsula, east India and Madhya Maharashtra during many day of the week.
- Ü Isolated to scattered rain/thundershower occurred over Northwest, Central and remaining parts of West India during many days of the week.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 20TH JUNE, 2007)

Rainfall was excess/normal in 29, deficient/scanty in 7 out of 36 meteorological sub-divisions (Actual: 51.0 mm, Normal: 38.3 mm and Departure: +33%).

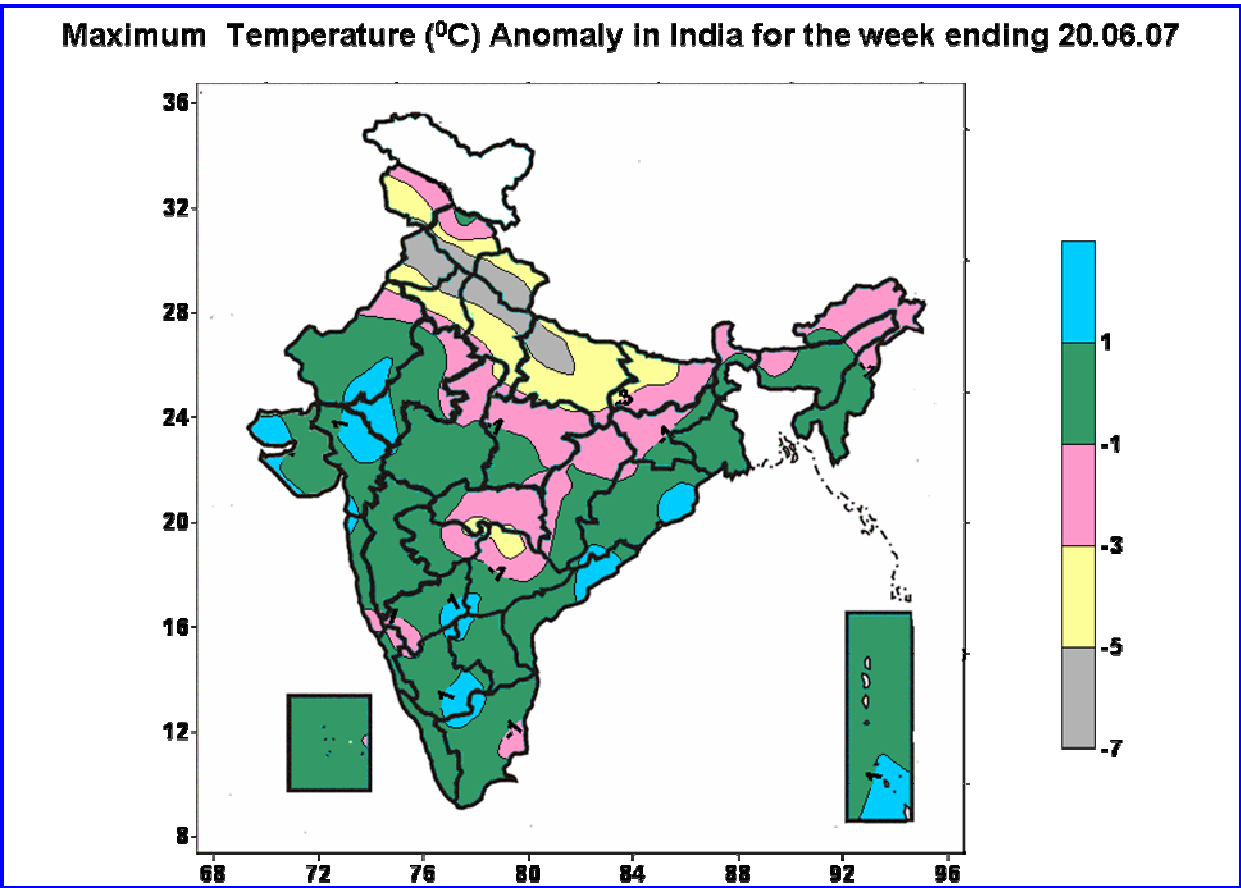
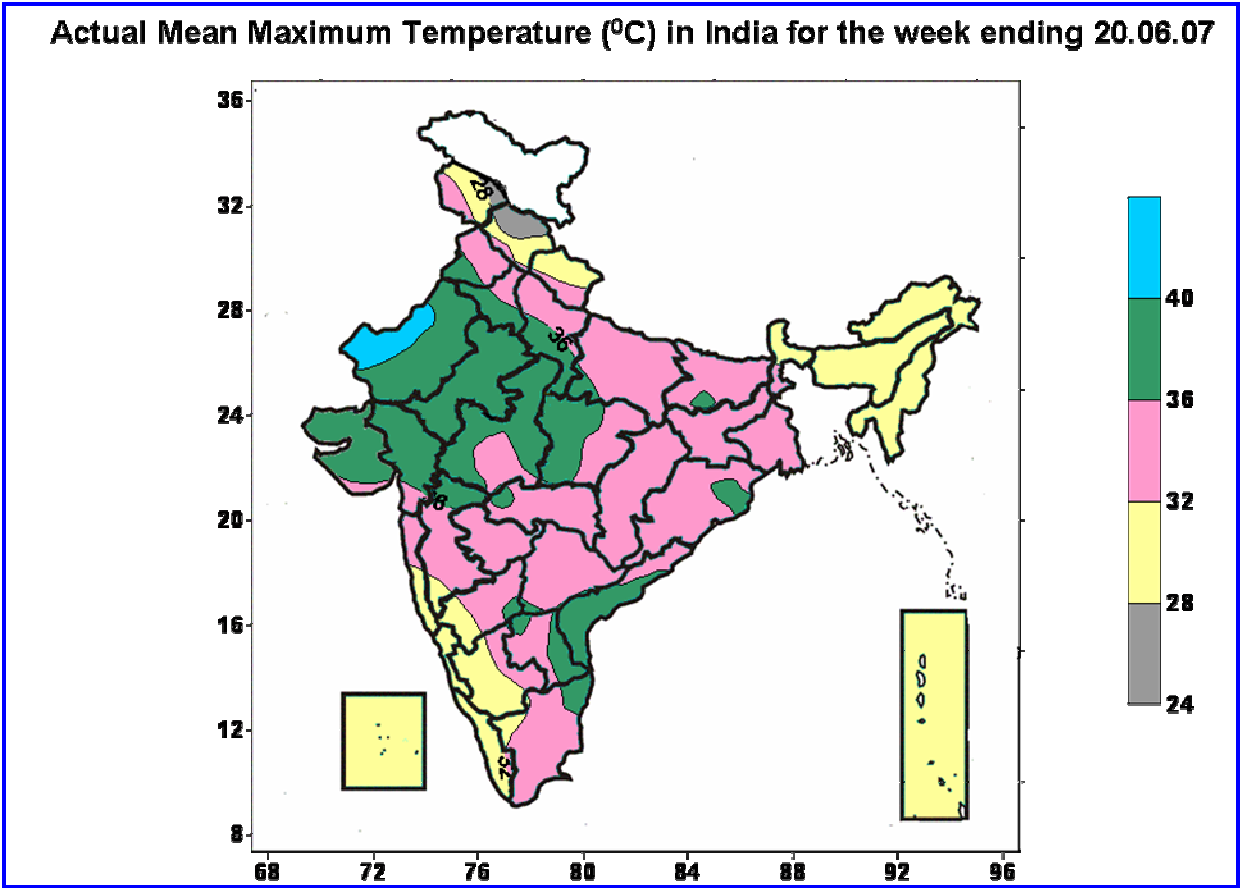
CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 20TH JUNE, 2007)

Rainfall was excess/normal in 31 and deficient/scanty in 5 out of 36 meteorological sub-divisions. (Actual: 87.8 mm, Normal: 89.3 mm and Departure: -2%).

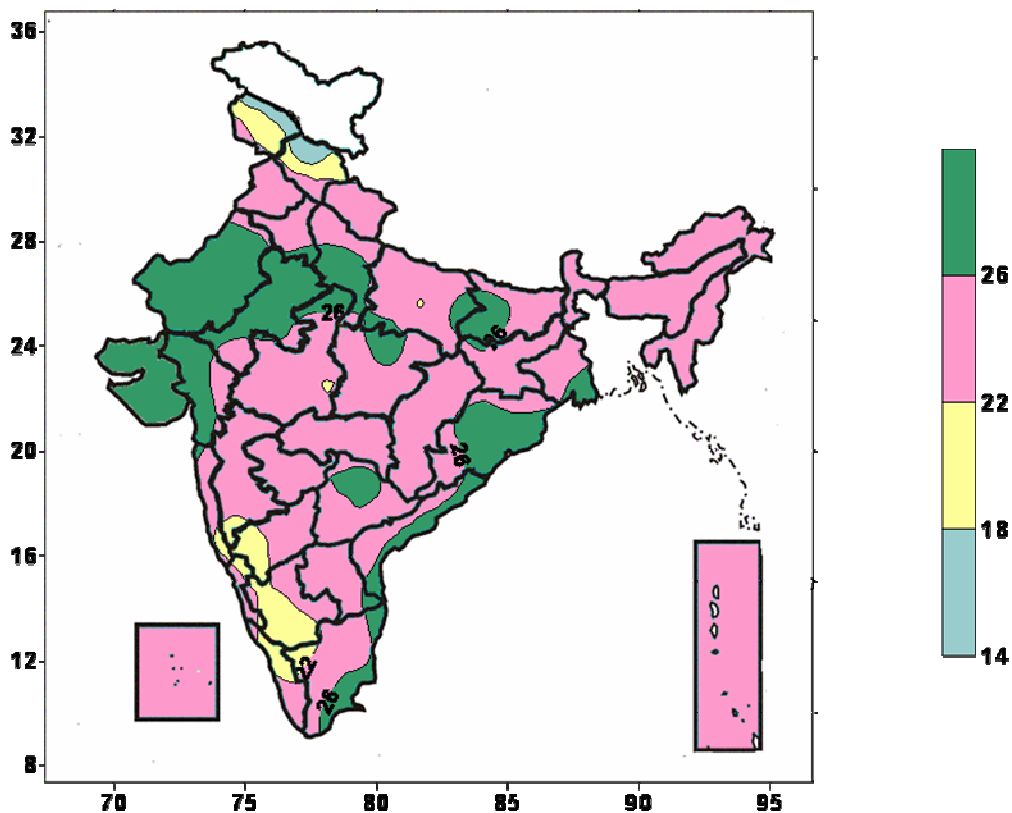
OUTLOOK FOR THE WEEK ENDING ON 27TH JUNE, 2007.

- The well marked low pressure area over east-central & adjoining west-central Bay of Bengal is likely to concentrate into a depression and move in a west-northwesterly direction across north Andhra Pradesh, Vidarbha, Madhya Maharashtra and Gujarat. Under its influence, Widespread rains with scattered heavy to very heavy falls are likely over Andhra Pradesh, south Orissa, south Chhattisgarh and Vidarbha during 21 to 23 June. Subsequently, with the likely west-northwestward movement of the system, the enhanced rainfall belt is likely to shift to rest Maharashtra, Goa, Karnataka, south Madhya Pradesh, Gujarat and southeast Rajasthan during 23 to 26 June. Isolated extremely heavy rains of more than 25 cm are also likely over Coastal Andhra Pradesh, Telangana and Vidarbha during 21 to 23 June and over Coastal Karnataka, rest Maharashtra including Mumbai, Goa and Gujarat during 23 to 26 June.
- In association with the above system, southwest monsoon is likely to advance further into remaining parts of Orissa, Chhattisgarh & Maharashtra, entire Gujarat and parts of Madhya Pradesh and Rajasthan during next 5 days.
- Widespread rainfall with scattered heavy to very heavy falls are likely to continue along the west coast.
- Decrease in rainfall activity over Orissa, Andhra Pradesh, Tamil Nadu during second half of the week.
- Decrease in rainfall activity over northeastern states.
- Another Low pressure area is likely to form over the north Bay of Bengal around 27th June , 2007.

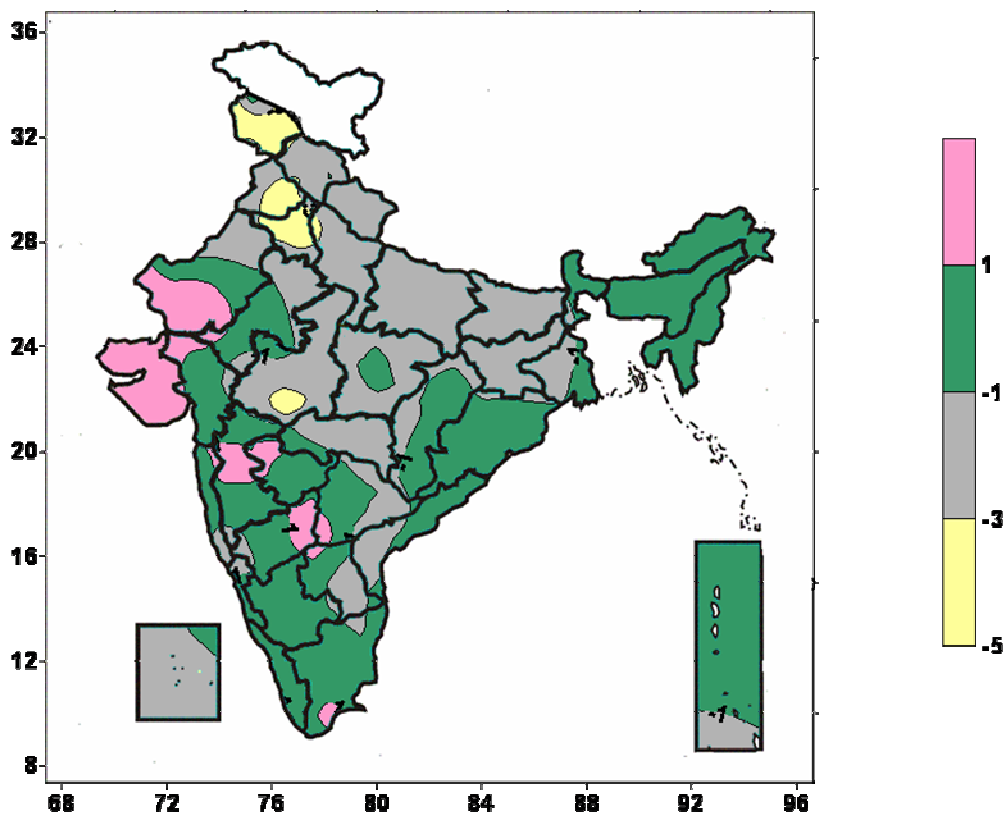
Contour maps for the week ending 20th June, 2007



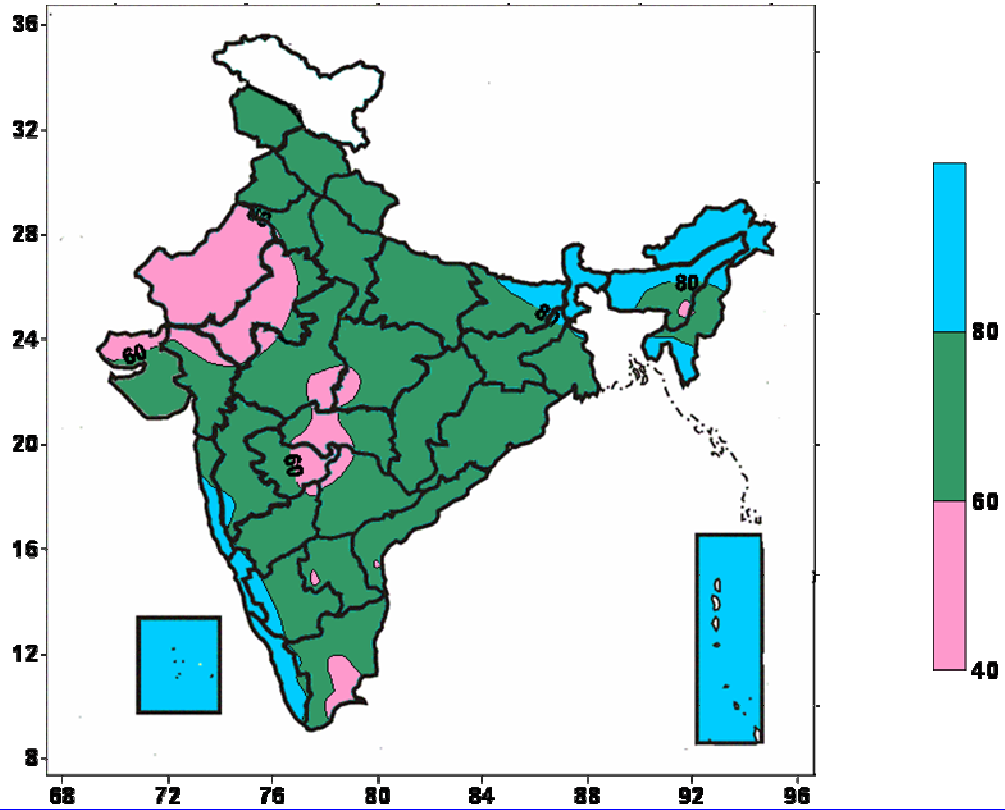
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 20.06.07



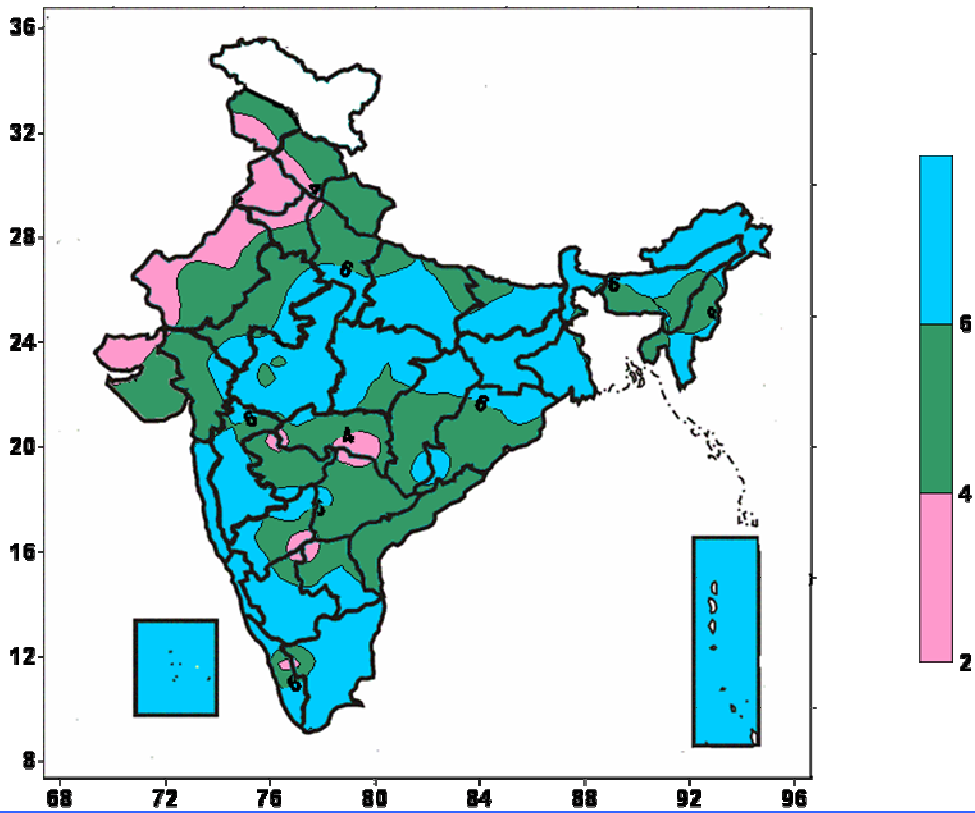
Minimum Temperature ($^{\circ}\text{C}$) Anomaly In India for the week ending 20.06.07



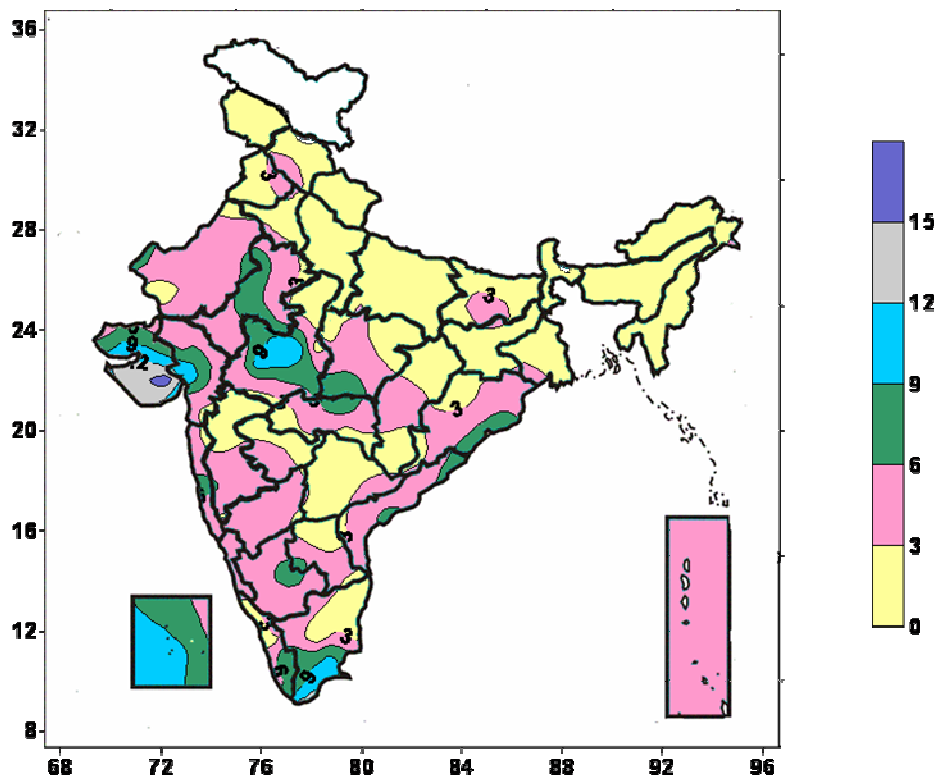
Relative Humidity (%) over India for the week ending 20.06.07



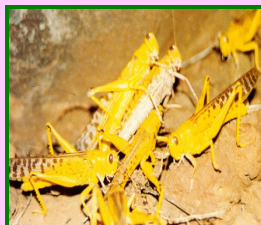
Cloud amount (okta) over India for the week ending 20.06.07



Wind speed (knots) over India for the week ending 20.06.07



Desert Locust Forecasting



Rainfall (mm)							
Station Name	14.06.07	15.06.07	16.06.07	17.06.07	18.06.07	19.06.07	20.06.07
Amritsar	-	51.5	5.0	3.0	2.8	-	-
Barmer	-	-	-	-	-	-	-
Sriganganagar	-	-	-	55.2	65.4	22.3	23.6
Jaisalmer	-	-	-	-	-	-	-
Kota	-	11.0	11.0	-	-	-	-
Deesa	-	-	-	-	-	-	-
Churu	-	-	-	5.7	1.0	-	27.6

Temperature (degree Celcius)							
Station Name	14.06.07	15.06.07	16.06.07	17.06.07	18.06.07	19.06.07	20.06.07
Amritsar	33.5	-	23.5	30.0	-	28.5	29.5
Barmer	35.0	34.5	34.5	35.0	34.0	35.0	36.0
Sriganganagar	39.0	39.0	31.5	30.5	25.5	27.0	27.0
Jaisalmer	33.5	34.5	-	35.5	36.0	35.0	36.0
Kota	38.0	33.5	32.0	34.0	34.5	34.0	34.0
Deesa	34.0	34.0	33.5	33.5	33.5	-	34.0
Churu	-	-	-	-	-	-	-

Egg-laying is in progress in the summer breeding areas in Rajasthan, **India** near the **Pakistani** border. There is chance of increase in the pest population in view of the increase rainfall activity particularly in the eastern Rajasthan. All efforts should be made to monitor the developing and potentially dangerous situation closely and carefully and take appropriate plant protection measures.

CROP – STATE – STAGE

Delhi

Vegetables	Early sown summer vegetable crops	Rice	Arhar	Early sown Arhar
Sowing	Vegetative / Flowering / Fruiting	Nursery preparation	Land preparation/Sowing	Germination / early vegetative
Maize	Early sown Maize	Fodder	Bajra	
Land preparation/Sowing	Germination / early vegetative	Land preparation/Sowing	Land preparation/Sowing	

Haryana

Early sown Sugarcane	Oilseeds	Horticultural crop	Cotton	Paddy
Vegetative	Flowering/seed formation	Vegetative	Seedling/early vegetative	Main field preparation/Transplanting
Kharif Groundnut	Early sown Kharif Groundnut	Kharif Pulses		
Field preparation and Sowing	Early vegetative	Early vegetative		

Himachal Pradesh

Summer vegetables (Cauliflower, Cabbage in low and mid hills)	Vegetables (Tomato, brinjal, ladies finger, Bhindi)	Onion	Potato	Maize
Nursery sowing /Transplanting	Vegetative / Flowering/ fruiting / harvesting	Bulb maturity/Harvesting	Vegetative	Land preparation and sowing
Apple	Rice			
Fruit development	Nursery sowing			

Jammu & Kashmir

Vegetable crops	Rice	Wheat	Maize	
Fruiting/harvesting–in Kashmir Div.	Transplanting in Kashmir div.	Harvesting -in Kashmir division	Vegetative	

Punjab

Sugarcane	Sunflower	Horticultural crop	Cotton	Paddy
Vegetative	Flowering/seed formation	Vegetative	Early vegetative	Main field preparation/Transplanting
Kharif Groundnut	Early sown Kharif Groundnut	Kharif pulses/Arhar		
Field preparation/Sowing	Early vegetative	Early vegetative/Sowing		

Rajasthan

Zaide Moong	Zaide Fodder	Cotton		
End Harvesting	Vegetative	Vegetative		

Uttar Pradesh

Sugarcane	Winter Vegetables (Onion & Garlic)	Summer Vegetables	Turmeric / ginger	Sunflower
Early vegetative	Maturity/ harvesting stage	Harvesting	Sowing	Maturity/Harvesting
Mango	Rabi Pulses (Urad, Moong, Lobia)	Maize	Bajra	Rice
Fruit development / maturity/Harvesting	Maturity/Harvesting	Vegetative	Vegetative	Preparation of Nursery/Sowing

Uttarakhand

Potato	Mango/Litchi/ Apple	Sugarcane	Kharif Rice	Ginger
Vegetative growth	Fruit development/ maturity	Vegetative	Germination / seedling	Vegetative
FingerMillet/ Amranthus	Early sown FingerMillet /Amranthus			
Sowing	Germination			

Assam

Early sown Summer vegetables	Early Ahu rice	Jute	Maize	Sugarcane
Vegetative/Flowering/Fruiting/Harvesting	Tillering	Vegetative	Vegetative	Vegetative

Arhar	Regular Ahu Rice			
Land preparation and Sowing	Vegetative/Tillering			

Arunachal Pradesh

Summer vegetables	Ginger	Millet	Jhum Paddy	Maize
Late Harvesting	Rhizome formation	Vegetative/Flowering	Vegetative	Cob formation/Maturity
WRC Rice				
Vegetative				

Bihar

Summer Vegetables	Maize	Mango & Litchi	Green Gram / Black gram	Sugarcane
Vegetative	Vegetative/Flowering	Fruit Development	Maturity	Early vegetative
Kharif rice	Sesamum			
Nursery preparation/Sowing	Harvesting			

Jharkhand

Khrif rice	Summer vegetables	Upland crops (Maize, arhar, groundnut, soybean, urad, rice)	
Nursery preparation/Sowing	Vegetative	Field preparation/Sowing	

Sikkim

Maize	Orange	Vegetables	Large Cardomom	Ginger
Grain formation	Fruiting New planting in some places	Vegetative	Capsule formation	Vegetative
Rice				
Transplanting				

West Bengal

Sugarcane	Green gram	Jute	Aus rice	Arhar
Early vegetative/ Vegetative	Pod maturity / Harvesting	Early vegetative / vegetative	Land preparation / Transplanting	Land preparation / sowing
Kharif Groundnut	Aman rice			
land preparation / sowing	Land preparation / nursery sowing			

Chattisgarh

Sugarcane	Vegetables (Tomato, chilli, brinjal)	Summer Vegetables	Kharif Rice	Green Gram
Vegetative	Fruiting / harvesting	Fruiting/Harvesting	Preparation of nursery beds / Sowing	Maturity/Harvesting
Maize				
Vegetative				

Gujarat

Sugarcane	Summer Groundnut	Kharif Bajra	Kharif Rice	Kharif Bajra
Vegetative	Harvesting	Preparation of Land and Sowing	Preparation of rice nursery	Preparation of Land and Sowing
Kharif Groundnut	Kharif Cotton			
Preparation of Land and Sowing	Preparation of Land and Sowing			

Maharashtra

Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marthwada and Vidarbha)	Irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)
Early vegetative / active growth	Early vegetative/active growth	Germination / Early vegetative	Preparation of land & sowing	Preparation of land & sowing
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)
Preparation of land & sowing	Preparation of land & sowing	Preparation of land & sowing	Preparation of land & sowing	Preparation of land & sowing

Kharif Rice (Konkan)	Kharif Rice (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Soyabean (Madhya Maharashtra, Marathwada & Vidarbha)		
Sowing /Germination	Preparation of nursery beds & Sowing –in Marathwada & Vidarbha Sowing/Germination – in South Madhya Mah.	Preparation of land & sowing- in Marathwada & East Vidarbha. sowing / germination -in south Madhya Maharashtra.		
Madhya Pradesh				
	Sugarcane	Cotton	Early sown Cotton	
	Vegetative	Sowing	Germination	
Orissa				
Summer Vegetables	Kharif rice	Sugarcane	Jute	
Vegetative/Fruiting	Sowing	Vegetative	Field preparation and Sowing	
Andhra Pradesh				
Kharif Rice	Kharif Maize	Kharif Cotton	Kharif Groundnut	Kharif Black gram, Green gram
Sowing of nursery	Land preparation /Sowing	Land preparation /Sowing	Land preparation /Sowing	Land preparation /Sowing
Karnataka				
Sugarcane (Ratoon crop)	Kharif Jowar/Maize/Groundnut/Sunflower	Early sown Kharif Jowar/Maize/Groundnut/Sunflower		
Grand growth	Sowing	Germination / early vegetative		
Kerala				
	Rubber	Virippu rice		
	Tapping	Transplanting		
Tamil Nadu				
Rice (Kuruvai)	Summer gingelly /Maize	Cotton	Sugarcane(Early, Mid and Late season)	
Transplanting	Seedling /Grain maturity / harvesting	Boll development	Vegetative	
