



Summary of Agromet Advisory Services for different States of the country
Issued by
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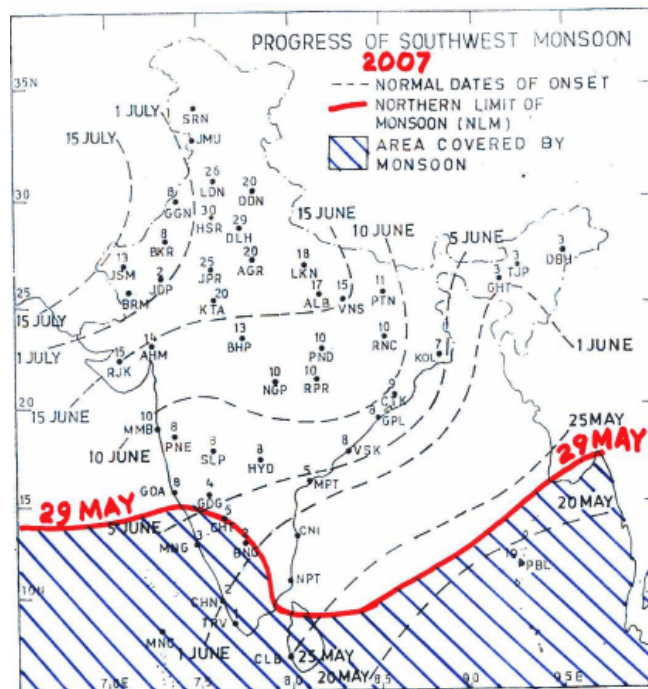
(For the period 31st May to 4th June, 2007)

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

PROGRESS OF SOUTHWEST MONSOON

Southwest monsoon has set in over Kerala on 28th May and further advanced on 29th May into some parts of central Arabian Sea, most parts of coastal Karnataka, some parts of South Interior Karnataka and some more parts of Tamil Nadu and south Bay of Bengal.

The northern limit of monsoon passes through Lat. 14° N / Long. 60° E, Lat. 14° N / Long. 70° E, Karwar, Chitradurg, Pamban, Lat. 10° N / Long. 85° E, Lat. 13°N / Long. 90° E, Lat. 15° N / Long. 92° E and Lat. 17° N / Long. 95° E.



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

Punjab

Weather remained mainly dry on 28th May in the state and dry during rest days of the period.

Mainly dry weather is likely over the State. Rise in day temperatures over the State.

Advisories

- As there was no significant rainfall in the State during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to **summer sunflower**, **sugarcane** and **Horticultural** crops.
- Complete the sowing of **cotton** as early as possible as late sowing may lead to increased attack of bollworm.
- Weeding and intercultural operations may be continued in **sugarcane** and **sunflower** crops.
- Continue sowing of **rice** in nursery using recommended varieties. Short duration and less water consuming

varieties like PUSA – 1121 may be preferred.

- Continue sowing of *kharif* groundnut and moong. Rainfed groundnut variety i.e. 548 may be preferred to sow.

Haryana

Rainfall has occurred at a few places on 28th May. Weather remained mainly dry on 30th May and dry during rest days of the period.

Mainly dry weather is likely over the State. Rise in day temperatures over the State.

Advisories

- As there was no significant rainfall in the State during last week and mainly dry weather is likely over the State, apply irrigation to *summer* sunflower, sugarcane and Horticultural crops.
- Complete the sowing of cotton as early as possible as late sowing may lead to increased attack of bollworm.
- Weeding and intercultural operations may be continued in sugarcane and sunflower crops.
- Continue raising of rice nursery. Choose varieties like Jaya, PR 106, HKR -120, Palman 579, and Pusa 370, Haryana Basmati -1 and HBC -19 which are recommended high yielding dwarf varieties of rice.
- Sowing of *kharif* groundnut and moong may be continued. Rainfed groundnut variety i.e. 548 may be sown on priority basis.

Rajasthan

Duststorm / thunderstorm with rain occurred with hailstorm at a few places in all the divisions of the State.

Mainly dry weather is likely over the State.

Advisories

- Dust storm / thunder storm occurred at a few places over the state during last week and mainly dry weather is likely to prevail for the next three days. Under the circumstances, apply frequent irrigation to moong and early sown cotton crop.
- Undertake summer ploughing in order to conserve moisture during summer showers and to control soil borne pests and diseases.
- Cutting of fodder may be continued.
- Undertake earthing up in early sown *desi* and *American* cotton in irrigated areas to keep the field weed free.

Uttar Pradesh

Rain occurred at isolated places in Gorakhpur division on 28th, light rain occurred at isolated places in Agra, Jhansi, Merrut, Moradabad division on 29th and weather was mainly dry in remaining divisions in Uttar Pradesh.

Mainly dry weather is likely over the State. Rise in day temperatures over West U.P.

Advisories

- Mainly dry weather condition prevailed in most of the districts over the State during last week and mainly dry weather is likely during next three days. Under the circumstances, apply irrigation to *summer* maize, sunflower (in grain formation stage), pulses and vegetable crops.
- To control borer insect in sugarcane, spray the solution of Endosulphon 35 EC @ 1.25 litre / ha in water.
- To save fruits of Mango against fruit fall spray Naphthalene Acetic Acid 15 ppm or 4 ml Planofix / 9 litres of water and to control internal rotten disease spray 5-6 g Borax per litre of water.
- Field preparation and sowing of maize may be continued.

Himachal Pradesh

Precipitation occurred at a few places in the state.

Isolated rain / thundershowers are likely over the State.

Advisories

- As there was no significant rain during last week over the State and rain / thundershowers are likely at isolated

places over the State for next three days, apply irrigation to the **potato** and **onion**.

- 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 land preparation and nursery sowing and transplanting of **cauliflower** and **cabbage** in low and mid hills.
- Start land preparation and nursery sowing of **rice**. Before growing 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. The nursery should be sown four weeks before the time of transplanting. Tall and dwarf varieties should be sown between 24th May to 8th June and Basmati varieties should be sown between 24th May to 4th June.
- Start preparation of land for sowing of **maize** by ploughing and mixing biological manures properly.

Uttarakhand

Light rain was recorded at a few places on 26th & 30th May and at most places on 27th May while weather remained mainly dry during rest of the period. Sky remained partly cloudy to overcast during the period.

Isolated rain / thundershowers are likely over the State.

Advisories

- Light rain was recorded at most places and there was excess rainfall in Nainital during last week and rain / thundershowers are likely at isolated places over the State for next three days. Under the circumstances, apply irrigation to **mango**, **litchi**, **apple**, **potato** and **sugarcane** crops depending on profile stored soil moisture.
- Complete harvesting of matured crops of **wheat** on bright sunny days.
- Maintain cleanliness in the **orchards**. Continue mulching to conserve soil moisture and to prevent weeds in **apple** and **potato**.
- Continue field preparation and nursery sowing of **rice**.

Jammu & Kashmir

Light to moderate rain / thundershowers occurred at isolated places on 28th, 29th and 30th May over J&K State.

Isolated rain / thundershowers are likely over Jammu & Kashmir State.

Advisories

- There was no significant rainfall during last week and rain / thundershower is likely to occur at isolated places for the next three days. Under the circumstances, apply irrigation to **wheat**, **vegetable** and **fruit crops** in Kashmir division.
- Continue sowing of **maize** in mid and high altitude areas. Select among GS-2, Vijay, Mansar, C-5 and C-8 for sowing. Undertake seed treatment with *Azospirillum* before sowing.
- Undertake land preparation and sowing of **rice** in the nursery in Jammu and Kashmir divisions. Undertake seed treatment with *Azospirillum* before sowing. Select among IET-1410, K-39, Ratna, PC-19, Jaya, PR-8585, Basmati-370 and Ranbir Basmati for Jammu region and K39, Chenab, Jhelura, China 1039 and Shalimar rice I for Kashmir region.
- 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

Very light to light rain occurred on 29th May at many places. Weather remained mainly dry on rest of the days.

Mainly dry weather is likely over the state. Rise in day temperatures over the state.

Advisories

- As there was no significant rain during last week and mainly dry weather is likely over the State for next three

days, apply irrigation to **vegetables**.

- Prepare land and perform sowing of **arhar** and **raddish** and nursery sowing of **early varieties of cauliflower**.
- Select varieties from Upas – 120 and Manak for sowing of **arhar**.
- Sow Pusa Chatki variety of **raddish**.
- Prepare land for nursery sowing of **rice**. 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.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Southwest monsoon was vigorous over the State on 28th and active on 29th and 30th May. Rain / thundershowers occurred at most places during this period.

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

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

Advisories

- Farmers are advised to take up ploughing and undertake sowing / transplanting of rice as the monsoon has started over the State.
- Rain/thundershower is likely to occur at many 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 expected during next three days.
- Attack of **stem borer** and **gall midge** is reported in **virippu rice** nursery. Spray Phosphamidan @ 0.25 ml / litre of water after current spells of rain to control the pests.
- Undertake land preparation and application of organic manures for transplanting of **virippu rice** seedlings.
- Attack of **mahali disease, root grub, spindle bug and mite** is reported in **arecanut**. Spray 1% Bordeaux mixture to control the mahali disease. Drench with Chlorpyrifos @ 0.04% in the soil around trunk to control root grub. Spray Carbaryl 50% WP @ 4 g / litre of water to control spindle bug. Spray Dimethoate @ 1.6 ml / liter of water to control mite. Spraying of chemicals may be undertaken after current spells of rain.
- Attack of **Rhinoceros beetle, red palm weevil, bud rot and Eriophyid mite** is reported in **coconut**. Fill leaf axil with 25 g 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 current spells of rain.
- Attack of **quick wilt** is reported in **pepper**. Spray 1% Bordeaux mixture after current 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 Quinalphos @ 0.05% or Chlorpyrifos @ 0.03% or Carbaryl @ 0.2% after current spells of rain. Spraying / drenching may be done on leaf axils, rhizome, surrounding soil and all the bore holes of pseudo stem made by larvae. Repeat the treatment after three weeks if infestation persists.

Tamilnadu

Rainfall occurred at one or two places over Tamilnadu on 28th, 29th and 30th May.

Isolated rain / thundershowers are likely over the State.

Advisories

- There was no significant rainfall during last week except in Coimbatore, Kanyakumari, Namakkal, Nilgiris, Perambalur, Sivagangai, Krishnagiri and Trichy districts and rain / thunder showers are likely to occur only at isolated places for the next three days. Under the circumstances, apply irrigation to **sunflower, maize, sugarcane, cotton and groundnut**. Apply irrigation depending upon soil profile stored moisture in the above

mentioned districts.

- Continue land preparation and sowing of *kuruvai* rice in nursery. Undertake seed treatment with *Azospirillum* before sowing.
- Start harvesting of sunflower and groundnut on bright sunny days.
- Monitor maize for stem borer and aphid attack and if the pest population crosses ETL, undertake spraying of Carbaryl 50 WP @ 400 g / acre.
- Monitor early sugarcane for shoot borer and if the pest population crosses ETL, release egg parasite, viz., *Trichogramma* @ 1 cc / acre. Repeat after 15 days.

Karnataka

On 28th May rainfall occurred at a few places over South Interior Karnataka and Coastal Karnataka and at isolated places over North Interior Karnataka. On 29th May Monsoon was active over Coastal Karnataka. Rainfall occurred at most places over South Interior Karnataka and Coastal Karnataka and at a few places over North Interior Karnataka. On 30th May rainfall occurred at a few places over the State.

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

Warning: Isolated heavy to very heavy rainfall is likely over Coastal Karnataka.

Advisories

- Farmers are advised to take up ploughing and arrange for seeds and inputs as the arrival of monsoon is expected within a short period.
- Postpone irrigation to summer sugarcane in coastal Karnataka as rain / thundershowers along with isolated heavy to very heavy rainfall is likely to occur at many places for the next three days. Also postpone irrigation in Bagalkote, Haveri and Raichur in North Interior Karnataka and Bangalore, Belgaum, Chickmagalur, Kolar, Mandya and Tumkur in South Interior Karnataka as there was excess rainfall during last week. Apply irrigation in the remaining districts as there was no significant rainfall during last week.
- Arrange for drainage facilities in Coastal Karnataka to prevent water logging due to isolated heavy to very heavy rainfall during next three days.
- Continue harvesting rice on bright sunny days.
- Monitor sugarcane for woolly aphids in Mysore, Mandya and Hassan districts and if the pest population crosses ETL, release *Dipha* sp, adopt wider spacing, inter-cropping with soyabean and pulses of short duration.
- Continue sowing of *kharij* jowar, maize, groundnut and sunflower. Undertake seed treatment with chemicals before sowing.

Andhra Pradesh

Rain occurred at a few places over Coastal Andhra Pradesh on 24th May, over Rayalseema on 27th & 29th May. Isolated rain occurred over Coastal Andhra Pradesh from 26th, 27th & 29th May over Telangana on 24th, 25th and 28th to 30th May, over Rayalseema on 24th, 26th & 28th May. Mainly dry / dry weather prevailed elsewhere over the State during the week. Heat wave conditions prevailed at isolated parts of Coastal Andhra Pradesh on 24th May.

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

Advisories

- Farmers are advised to take up ploughing and arrange for seeds and inputs in anticipation of onset of monsoon.
- Continue land preparation and sowing of nursery for *kharij* rice.

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

Assam

Light to moderate rain occurred at many places on 28th and at a few places on 29th & 30th May with isolated heavy

falls on 30th May over the state.

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

Advisories

- As there was sufficient rain in most of the districts of the State 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.
- 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, smilopper, 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. Moderate rain / thundershower occurred at many places on 30th May. Light rain / thundershower occurred at a few places on 29th May and at one or two places on 28th May.

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

Advisories

- As there was sufficient rain in most of the districts of the State and rain / thundershowers are likely at a few places over the State for next three days, postpone irrigation to **summer vegetables, millet, maize, *jhum* paddy** and **ginger** crops.
- Continue weeding, intercultural operations in **millet** and **ginger** on a non rainy day.

Bihar

Mainly dry weather was prevailed over the State.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in the State during last week and mainly dry weather is likely over the State for the next three days and heat wave likely to occur during next 48 hours, apply frequent irrigation to **vegetables, *summer* maize, green gram, sugarcane** and **sesamum**.
- Monitor the crop for **Red spider mite** and **powdery mildew** in **vegetable** crops & if exceeds economic threshold level, for effective control spray Sulphur dust @ 3.0 Kg / ha or Dycofol @ 1 lit / ha.
- Continue regular irrigation in **mango orchards** and monitor the crop for **mealy bug** or **hopper** & if exceeds economic threshold level, then spray with Carboryl @ 2 g / litre of water.

Jharkhand

Weather remained mainly dry.

Isolated rain / thundershowers are likely over the State.

Advisories

- As there was no significant rainfall during last week and heat wave conditions may prevail at isolated places in the State, apply frequent irrigation to summer vegetables.
- Apply regular irrigation in **mango & litchi**. To prevent from **powdery mildew** of small fruits in **Mango** and **Litchi**, spray sulfex @ 2gm/litre of water.

Sikkim

Sky remained generally cloudy during the period. Heavy rainfall occurred over Gangtok and moderate to nearly heavy rainfall occurred over many places on 26th May and light to moderate rain occurred at many places during rest of the period over East Sikkim except that there was no rainfall on 29th May. Rainfall was excess over Gangtok and normal at other places during the period.

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

Advisories

- 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.
- Apply irrigation to **large cardamom, orange, maize** and **ginger** as rain / thundershowers are likely at a few places over the State for the next three days.
- Monitor **ginger** for **rhizome rot** and **bacterial wilt** and rouge out the affected plants and destroy completely to prevent further damage.
- Monitor **orange** for **leaf miner** and **trunk borer**. Spray neem based insecticide on a non rainy day to control leaf miner. Plug trunk borer holes with cotton swabbed with kerosene and later with mud to prevent trunk borer.

West Bengal

During the said period light to moderate rain occurred at most places with rather heavy at isolated places on 28th, very light to light rain at isolated places on 29th, very light to moderate rain occurred at many places with heavy rain at isolated places on 27th in Sub Himalayan West Bengal.

But light to moderate rain occurred at many places on 28th, very light with rather heavy rain at isolated places on 29th and weather was mainly dry over Gangetic West Bengal on 30th May.

Rain / thundershowers are likely at a few places over Sub-Himalayan West Bengal and at isolated places over Gangetic West Bengal.

Advisories

- As there was no significant rainfall in most of the districts of the State during last week and rain / thundershowers are likely at a few places over Sub-Himalayan West Bengal and isolated places over Gangetic West Bengal, apply irrigation to **sugarcane, sesamum, green gram** and early sown **jute**.
- Complete harvesting of already matured crops of **boro rice** on bright sunny days. Harvest the already matured crops of **groundnut** and **sesamum** on bright sunny days.
- Apply 50 kg N / ha as top dressing on a non-rainy day at 80 – 90 days after planting of **sugarcane** and make ridges.
- Prepare land for sowing of **jute**. Plough the land thoroughly for 4 – 5 times followed by laddering. Apply compost manure @ 7.5 – 12.5 tonnes / ha. Apply N, P₂O₅ and K₂O each @ 25 kg / ha also before last land preparation. Select improved variety from Shyamali, Sonali & Sobujsona etc. for *C. capsularis* and Chaitali, Basudev, Baisakhi, Nabin etc. for *C. olitorius* for sowing. Seed rate is 7.5 kg per ha for *C. capsularis* and 5 kg per ha for *C. olitorius*. Seeds may be treated with 1 gm carbendazime per kg of seeds before sowing. Sow the seeds at a row spacing of 8 – 10" to get good yield.
- Undertake preparation of land for sowing of **aus rice**. Select varieties from HYVs like IET-826, CR- 126-42-1,

IR-36, IET-2233, IET-1444 (Rosi), Culture-1 etc. Seed rate is 75-100 kg / ha in case of broadcasting and 62-75 kg / ha in case of row sowing. Treat the seeds with Crabendazim 50% @ 1 gm / kg seeds.

- Prepare land with the advantage of recent rain and start 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 rain and start 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.

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

Gujarat

Rainfall occurred at isolated places over North Gujarat region on 30th May.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rain during last few weeks in the State and mainly dry weather will prevail for next three days, apply irrigation to **sugarcane** to bring soil moisture to field capacity.
- Drain out water from the **rice** field 10 – 15 days before harvesting. Continue harvesting of already matured crops on bright sunny days.
- Conserve moisture in the field of **summer bajra** as the crops are at grain maturity stage.
- Harvest already matured crops of **summer groundnut** and **summer bajra** on bright sunny days.

Chhattisgarh

Rainfall occurred at one or two places in all divisions of the State on 28th and 29th May.

Isolated rain / thunder showers are likely over the State.

Advisories

- As there was no significant rain during last few weeks in most of the districts of the State and isolated rain / thundershower is likely to occur over the state for next three days, apply irrigation to **sugarcane**, **vegetables**, **sesamum**, **green gram** and **maize** crops.
- Remove water from **summer rice** field 10 – 15 days before harvesting. Continue harvesting of already matured crops on bright sunny days
- Apply 75 kg N / ha as top dressing at 45 days after planting of **sugarcane**.
- Continue harvesting of already matured crops of **sunflower**, **groundnut**, **summer rice** and **sesame**.

Maharashtra

Rain occurred at a few places in South konkan & South Madhya Maharashtra, at isolated places in North Konkan & North Madhya Maharashtra. Rain also occurred at isolated places in Marathwada & Vidarbha on 29th May. Mainly dry weather prevailed over Marathwada & Vidarbha on 28th & 30th May.

Rain / thundershowers are likely at a few places over south Konkan & Goa and south Madhya Maharashtra and isolated over north Konkan and Vidarbha. Mainly dry weather is likely over the rest region.

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 in anticipation of onset of monsoon.
- As rain / thundershowers are likely at a few places for next three days and fairly widespread thereafter over south Madhya Maharashtra, postpone irrigation to the crops over these regions.
- As there was no significant rain during last few weeks over other regions of the State and rain /

thundershowers are likely at isolated places over north Konkan and Vidarbha and mainly dry weather is likely over rest of the State for next three days, apply irrigation to sugarcane (Pre-seasonal), sugarcane (Suru) & early sown irrigated cotton.

- Complete harvesting of matured crop of groundnut in Konkan, Pune, Latur and Amravati and also harvesting of summer sunflower, summer bajra and summer maize on bright sunny days.
- Maintain 3 – 5 cm water in summer rice field in Vidarbha.
- Drain out water from summer rice field 10 – 15 days before harvesting of matured crops. Harvest already matured crops in Konkan and Kolhapur.
- A dose of 136 kg Nitrogen, 85 kg Phosphorus & 85 kg Potash / ha may be applied after earthing up in Sugarcane (Preseasonal).
- Apply last dose of 100 kg Nitrogen & 55 kg Phosphorus / ha if sufficient water is available & undertake earthing up in Sugarcane (Suru).
- Mild incidence of White Woolly Aphid in Pune, Latur and Aurangabad division and white fly in Latur 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 Stikar or 500 gm detergent powder / ha in 500 liters of water. For the biological control of white woolly aphids, release 25000 larvae of *Krysoperla Carnea* or *Dipha Aphidivhora* / ha as predator after 15 days from the above dose.
- Monitor crop for White fly in Sugarcane (Preseasonal) & if exceeds economic threshold level, spray Methyl dimeton @ 2000 ml or 36 % WSC Monocrotophos @ 1400 ml / ha in 500 liters water.
- This is the time for sowing of irrigated Cotton. Select a variety from high yielding varieties like LRH-5166, JLH-168 & hybrid varieties like phule-492, phule-388, Sankar-6 & 10, PKV-4 & 5. Seeds may be treated with 250 gm Azotobacter / 10 kg seeds before sowing. Sowing may be done at 90 X 90 cm in medium, at 120 X 90 cm distance in black cotton soil for hybrid variety and at 90 X 90 cm for high yielding variety. 20 kg Nitrogen, 50 kg P₂O₅ & 50 kg K₂O / ha may be applied at the time of sowing.
- Apply fertilizer and plant protection measures and undertake intercultural operation on a non-rainy day in south Madhya Maharashtra.

Madhya Pradesh

Rainfall occurred at a few places in South East M.P. on 29th May and at isolated places in North East and West M.P. on 29th May and North West M.P. on 30th May. Light rain occurred at isolated places in South West M.P. on 30th May. Dry weather prevailed over rest of the State for remaining period.

Rain / thundershower is likely to occur at isolated places over East MP and mainly dry weather is likely over West MP.

Advisories

- Apply irrigation to sugarcane as there was no significant rainfall during last week and rain / thundershower is likely to occur only at isolated places over East MP for the next three days.
- Start harvesting summer moong at proper maturity stage.
- Monitor sugarcane for Chempu, *Pyrilla* and scale insects and if the pests population crosses ETL, spray Malathion 50 EC or Endosulphan 35 EC @ 1.25 litres / ha to control the pests.
- Undertake earthing up in sugarcane to keep the field weed free.

Orissa

Rain fall occurred at isolated places over the State during the period.

Isolated rain / thundershowers are likely over the State.

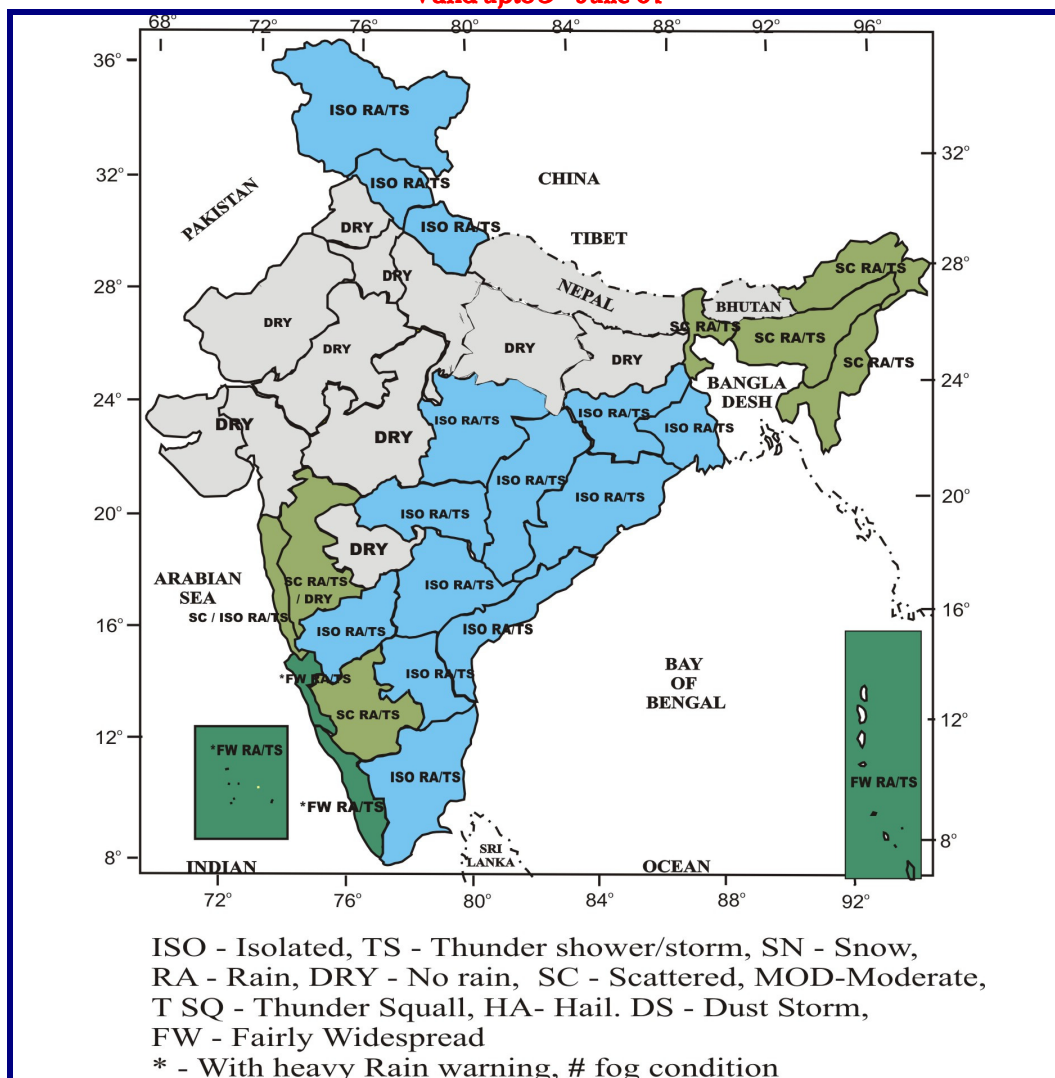
Advisories

- Rain fall occurred at isolated places over the State. There was excess rainfall in Malkangiri districts during last week and isolated rain / thundershowers are likely over the State for next 3 days. Under the

circumstances, apply irrigation to vegetables, sugarcane, early sown summer groundnut and pulse crops depending on profile stored soil moisture.

- Complete harvesting of *Dalua rice*.
- Continue land preparation and sowing of *jute*. Sow the jute seeds of variety JRO 524.

Forecast Map
Valid upto 3rd June 07



Salient weather features for the week ending 30/05/07

METEOROLOGICAL ANALYSIS

- An off shore trough in sea level ran from Karnataka coast to Kerala coast during 26th to 30th. An embedded cyclonic circulation at lower levels lay over Southeast Arabian Sea off Kerala Coast on 26th. It lay over south-east Arabian Sea and adjoining east-central Arabian Sea off Karnataka coast during 27-30th.
- Two western disturbances as upper air systems affected Western Himalayan region during the week. An induced cyclonic circulation lay over Punjab and neighbourhood on 25th, Himachal Pradesh and neighbourhood on 26th, Uttarakhand & neighbourhood on 27th & 28th and became less marked thereafter. Another cyclonic circulation lay over south Pakistan on 25th, south west Rajasthan and neighbourhood on 26th, Haryana & neighbourhood on 27th- 29th and became less marked on 30th.
- An upper air trough ran from Sub-Himalayan West Bengal & Sikkim to north Orissa/ north Bay of Bengal in lower tropospheric level embedded with cyclonic circulation over Sub-Himalayan West Bengal & Sikkim on 24th and 25th. It became less marked on 26th.
- A cyclonic circulation at 0.9 km asl lay over East Uttar Pradesh on 25th, Jharkhand & neighbourhood on 26th, Jharkhand and adjoining Bihar and West Bengal on 27th and over Sub-Himalayan West Bengal & Sikkim and adjoining Assam & Meghalaya during 28th – 30th.

RAINFALL

Under the influence of the above systems

- Fairly widespread/widespread rainfall with isolated heavy to very heavy falls occurred over Kerala and Lakshadweep during 27-30th and over Coastal Karnataka and Andaman & Nicobar Islands during 28-30th. Scattered rain/thundershowers occurred over these regions during remaining days of the week and over remaining parts of the south India throughout the week.
- Fairly widespread/ widespread rainfall occurred over northeast India and Sub-Himalayan West Bengal & Sikkim during many days of the week. Isolated heavy to very heavy falls also occurred over these regions during a few days. Isolated rain/thundershower occurred over remaining parts of east India during many days of the week.
- Isolated to scattered rain/thundershower occurred over western Himalayan region during many days of the week. Isolated duststorm/thundershowers occurred over plains of northwest India and Rajasthan during 26-30th May.
- Isolated to scattered rain/thundershower occurred over Konkan & Goa during many days of the week. Isolated rain/thundershower occurred over central India and remaining parts of west India during second half of the week.

MAXIMUM TEMPERATURES

- Maximum temperatures were above normal by 2-5 °C over East India during the week. They were also above normal by 2-5 °C during many days of the week over peninsular India excluding west coast.
- They were normal during first half and below normal by 2-4 °C during second half of the week over northeast & central India. They were normal on first two days and below normal by 2-5 °C thereafter over northwest India.
- They were normal over remaining parts of the country during the week.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 30TH MAY, 2007)

Rainfall was excess/normal in 11, deficient/scanty in 24 and no rain in 1 out of 36 meteorological sub-divisions (Actual: 13.1 mm, Normal: 16.3 mm and Departure: -20%)

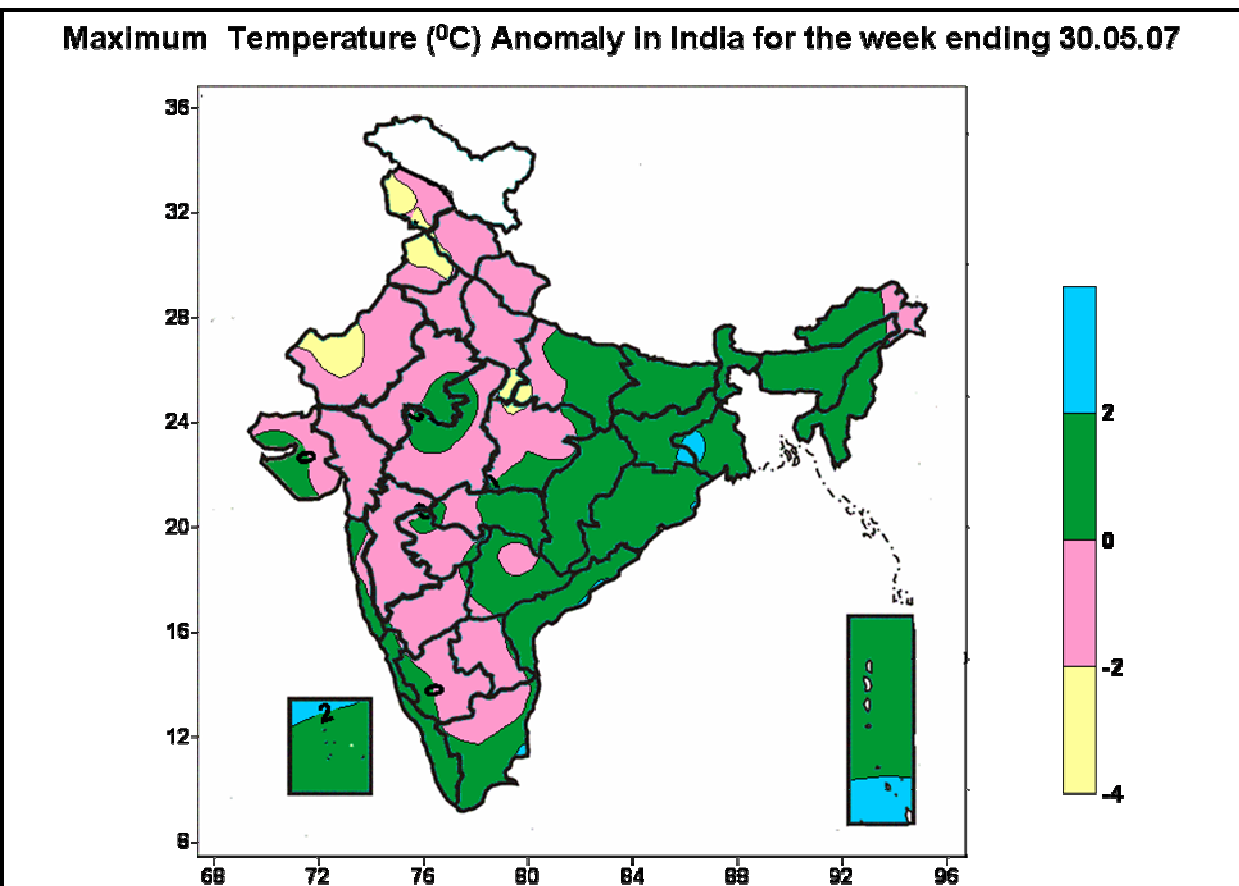
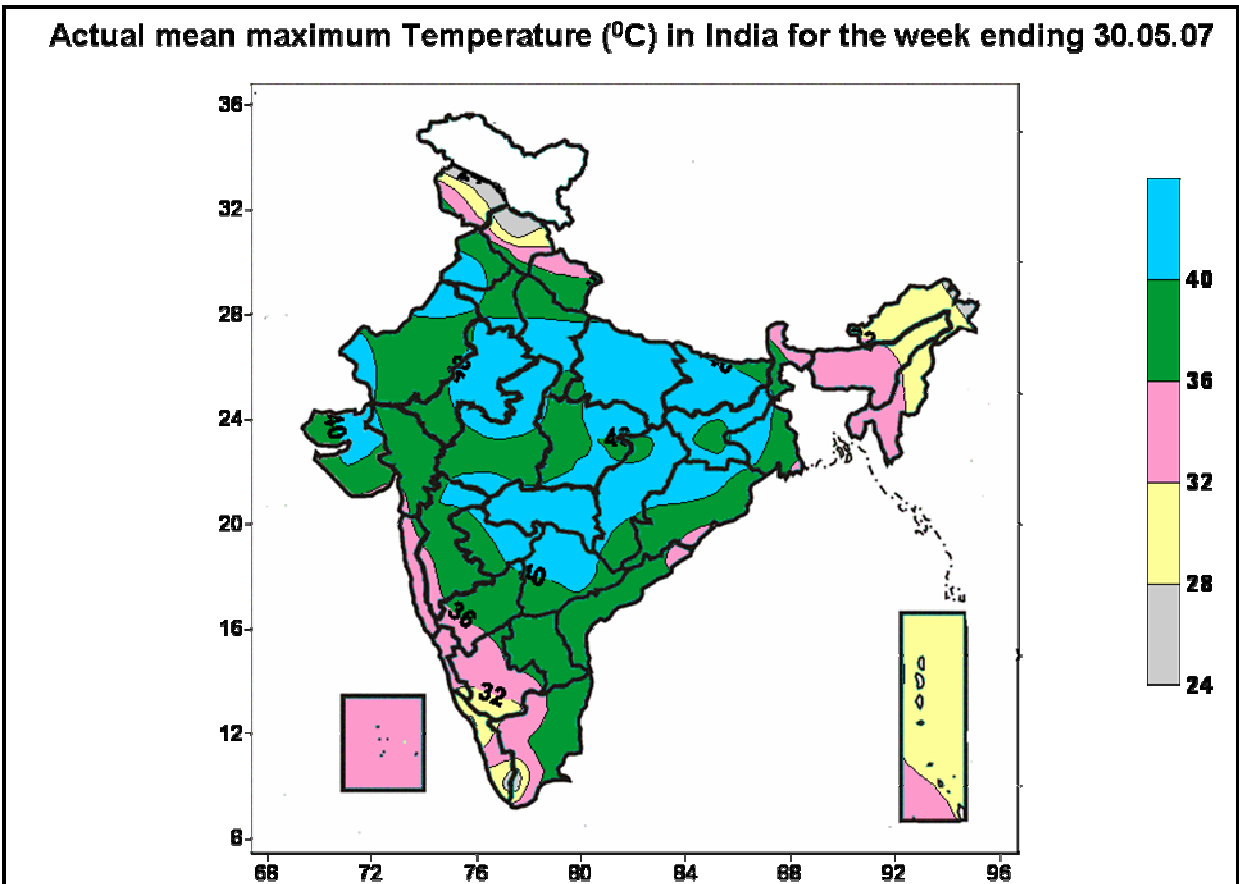
CUMULATIVE SEASONAL RAINFALL (1ST MARCH TO 30TH MAY, 2007)

Rainfall was excess/normal in 16 and deficient/scanty in 20 out of 36 meteorological sub-divisions. (Actual: 108.0 mm, Normal: 134.8 mm and Departure: -20%).

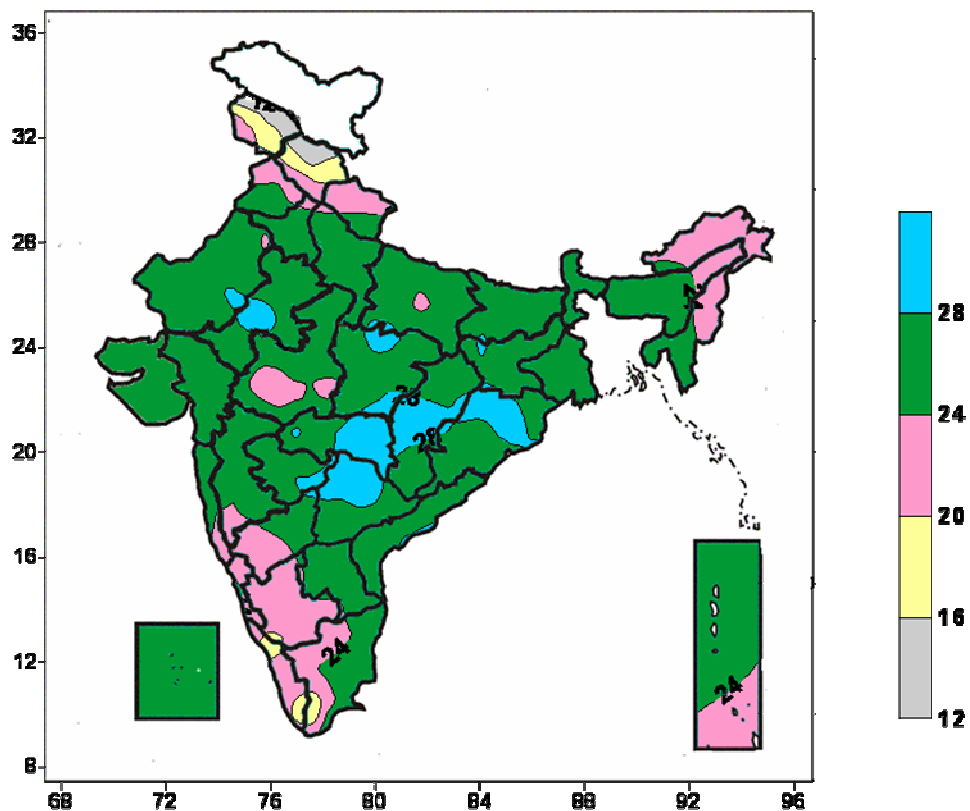
OUTLOOK FOR THE WEEK ENDING ON 6TH JUNE, 2007.

- Scattered/ fairly widespread rainfall along the west coast and northeast India.
- Rise in day temperature over northwest & east India

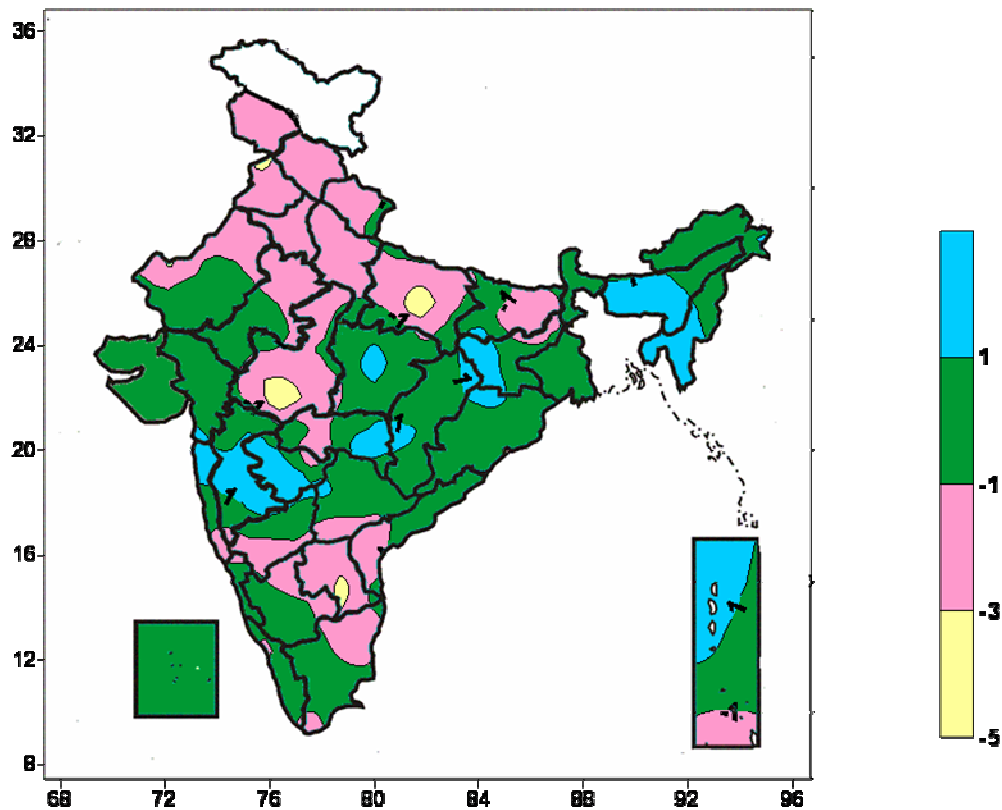
Contour maps for the week ending 30th May, 2007



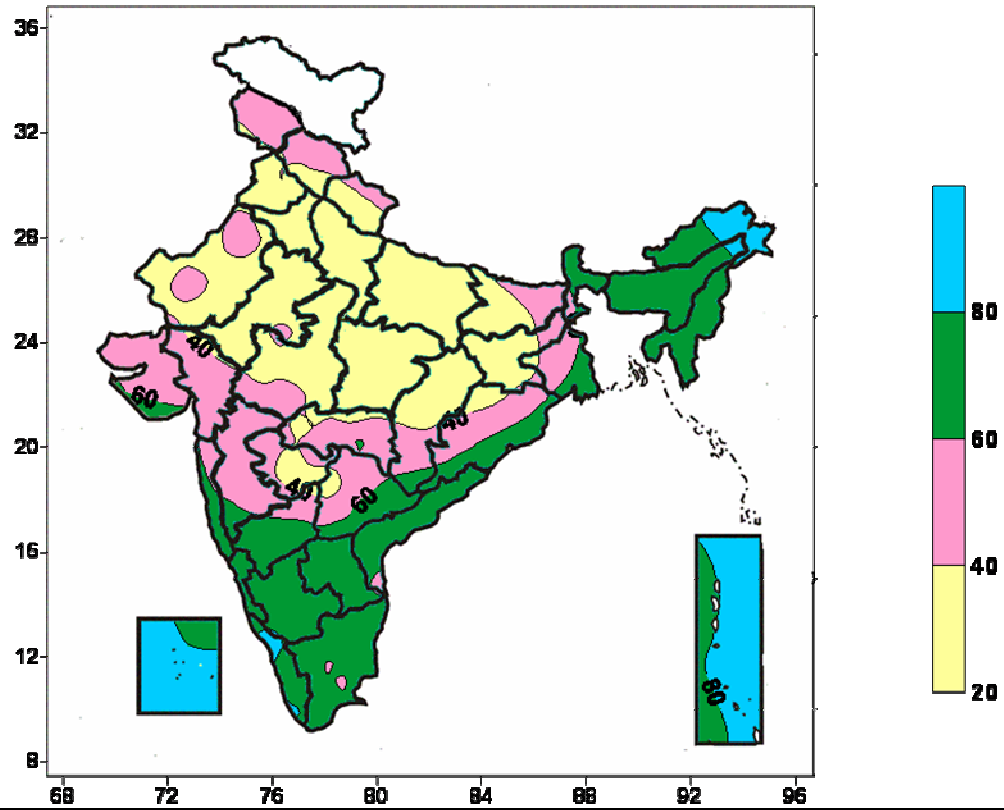
Actual mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 30.05.07



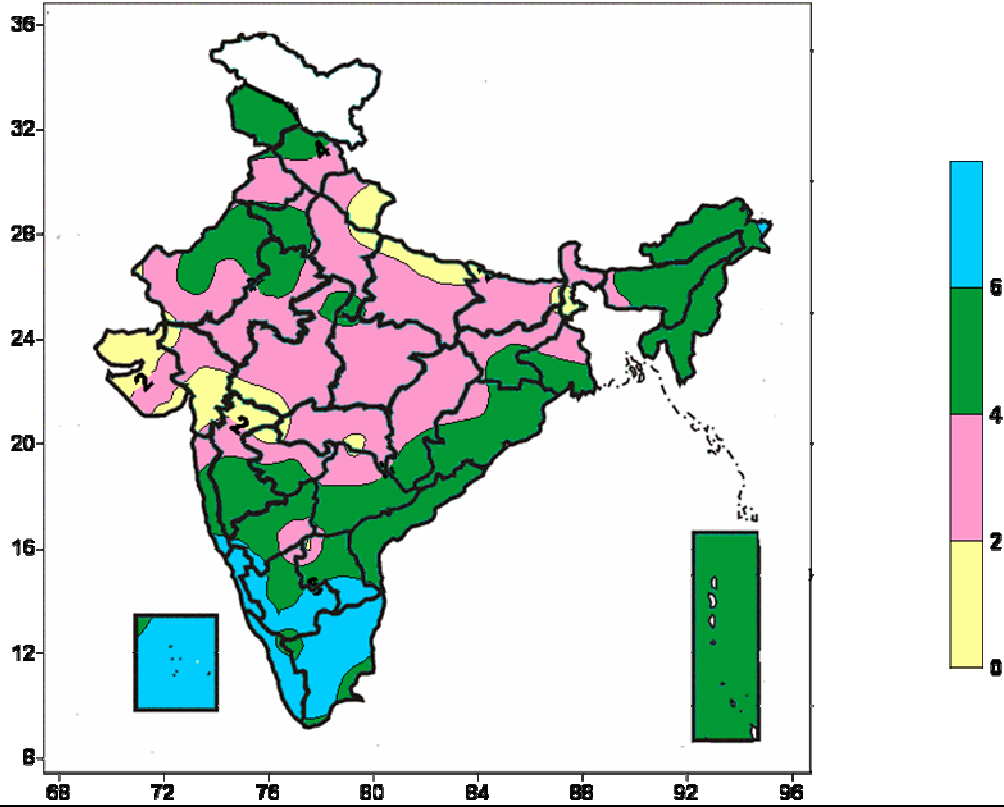
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 30.05.07



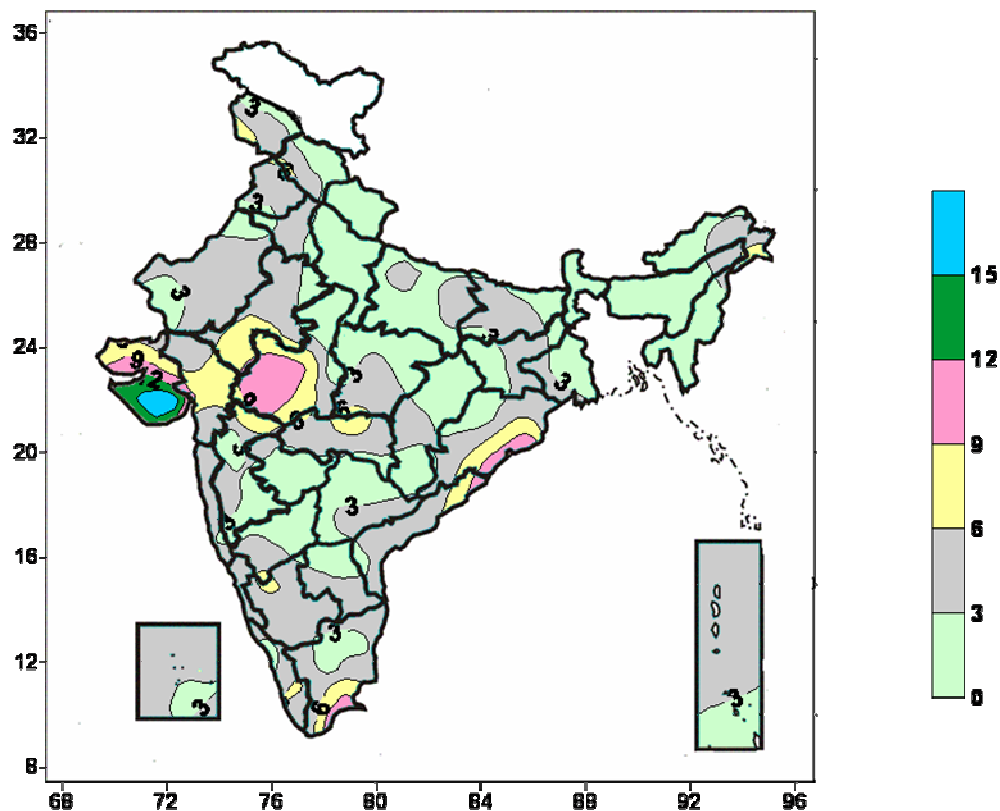
Relative humidity (%) over India for the week ending 30.05.07



Cloud amount (okta) over India for the week ending 30.05.07



Wind speed (knots) over India for the week ending 30.05.07



Desert Locust Forecasting



Rainfall (mm)

Station Name	24.05.07	25.05.07	26.05.07	27.05.07	28.05.07	29.05.07	30.05.07
Amritsar	-	-	2.6	-	0.2	-	-
Barmer	-	-	-	-	-	8.2	-
Sriganganagar	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	0.3	-
Kota	-	-	-	-	0.2	-	-
Deesa	-	-	-	-	-	-	-
Churu	-	-	-	1.0	0.6	-	0.3

Temperature (degree Celcius)

Station Name	24.05.07	25.05.07	26.05.07	27.05.07	28.05.07	29.05.07	30.05.07
Amritsar	31.0	31.5	30.5	27.5	30.0	28.0	29.5
Barmer	34.0	34.0	34.0	36.0	35.0	33.0	32.5
Sriganganagar	32.5	33.5	33.5	30.5	29.5	31.5	31.5
Jaisalmer	32.5	33.0	33.5	34.0	34.0	32.5	32.5
Kota	36.0	37.0	-	35.0	35.0	34.5	33.5
Deesa	33.0	33.0	33.0	33.5	33.0	32.5	32.5
Churu	-	-	-	-	-	-	-

There is slight chance of locust infestation in Rajasthan and the adjoining areas during this week. In **India**, ground teams treated gregarizing hoppers, fledglings and a mature swarm west of Jaisalmer near the **Pakistan** border. All efforts should be made to monitor the developing and potentially dangerous situation closely and carefully.

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

Haryana

Early sown Sugarcane	New Sugarcane	Oilseeds	Horticultural crop	
Vegetative	Sowing	Flowering/seed formation	Vegetative	
Cotton	Paddy	Kharif Groundnut	Kharif Pulses	
Germination/seedling	Land preparation/Sowing	Field preparation and Sowing	Field preparation and Sowing	

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 development / Maturity	Early vegetative / vegetative	Land preparation and sowing
Apple	Rice			
Fruit development	Nursery sowing			

Jammu & Kashmir

Vegetable crops	Brown Sarson	Wheat	Early sown Maize	Early sown Rice
Fruiting/harvesting–in Kashmir Div.	Seed formation – in Kashmir Division	Grain development -in Kashmir division	Early vegetative/Vegetative	Early vegetative/Vegetative

Punjab

Sugarcane	Sunflower	Horticultural crop	Cotton	Wheat
Vegetative	Flowering/seed formation	Vegetative	Germination/ seedling	End Harvesting
Kharif Groundnut	Kharif pulses	Paddy		
Field preparation/Sowing	Field preparation/Sowing	Nursery field preparation/Sowing		

Rajasthan

Zaide Moong	Zaide Fodder	Early sown Cotton	Cotton	
Pod formation	Vegetative	Germination / seedling/early vegetative	Sowing – in some areas	

Uttar Pradesh

Sugarcane	Winter Vegetables (Onion & Garlic)	Summer Vegetables	Sunflower	Mango
Early vegetative	Maturity/ harvesting stage	Vegetative	Seed formation/Maturity	Fruit setting
Rabi Pulses (Urad, Moong, Lobia)	Maize	Bajra	Rice	
Grain formation	Early vegetative	Early vegetative	Preparation of Nursery	

Uttarakhand

Potato	Mango/Litchi/ Apple	Wheat	Sugarcane	Kharif Rice
Vegetative growth	Fruit setting/Fruit development/maturity	Late harvesting	Vegetative	Field preparation/Nursery sowing

Assam

Early sown Summer vegetables	Early Ahu rice	Jute	Maize	Sugarcane
Vegetative/Flowering/Fruiting/Harvesting	Tillering	Early vegetative/Vegetative	Vegetative	Early vegetative/vegetative
	Regular Ahu Rice			
	Germination/Early vegetative			

Arunachal Pradesh

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

Bihar				
Summer Vegetables	Boro Summer Rice	Mango & Litchi	Green Gram / Black gram	Summer Maize
Vegetative	Grain Maturity/Harvesting	Fruiting	Pod formation	Vegetative/Flowering
Kharif rice	Sesamum	Sugarcane	Early sown Sugarcane	
Nursery preparation	Pod formation	Planting	Seedling/Early vegetative	

Jharkhand				
Boro rice	Summer vegetables			
Grain formation/Maturity	Vegetative			

Sikkim				
Maize	Orange	Vegetables	Large Cardomom	Ginger
Flowering	Fruiting New planting in some places	Vegetative	Capsule formation	Vegetative
Rice				
Nursery sowing				

West Bengal				
Sesamum	Green gram	Groundnut (Old)	Arhar	Aus rice
Pod formation / maturity/harvesting	Flowering / pod formation /early maturity	Harvesting	Land preparation / sowing	Land preparation / sowing
Sugarcane	Jute	Early sown Jute	Groundnut	
Early vegetative / Vegetative	Land preparation / sowing	Germination / early vegetative / vegetative	Land preparation / sowing	

Chattisgarh				
Sugarcane	Vegetables (Tomato, chilli, brinjal)	Summer Vegetables	Sunflower	Groundnut
Vegetative	Fruiting / harvesting	Vegetative / Flowering / Fruiting	Harvesting	Harvesting
Summer sesamum	Green Gram	Summer rice	Maize	
Capsule formation / early maturity/harvesting	Flowering / Pod formation/early maturity	Grain maturity/harvesting	Vegetative	

Gujarat				
Sugarcane	Rice	Summer Groundnut	Summer Bajra	
Vegetative	Grain maturity/Harvesting	Pod maturity/Harvesting	Grain maturity/Harvesting	

Maharashtra				
Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Summer Groundnut (Madhya Maharashtra, Marathwada, Vidarbha & Konkan)	Summer Rice (Konkan, Vidarbha & Kolhapur dist.)	Summer Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)	Summer Bajra (Madhya Maharashtra, Marathwada & Vidarbha)
Early vegetative / active growth	Pod formation/ pod maturity– in Kolhapur, Nashik, Nagpur & Aurangabad. Pod maturity / harvesting in Konkan, Pune, Latur & Amravati	Grain formation / grain maturity – in Vidarbha. Grain formation / grain maturity in Kolhapur, Thane, Raigad, Ratnagiri and Sindhudurg dist.	Seed maturity/Harvesting in Latur & Amravati Division	Grain maturity / harvesting
Summer Maize (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marathwada and Vidarbha)	Irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)	
Cob maturity / harvesting	Early vegetative	Sowing	Germination / Early vegetative	

Madhya Pradesh

Summer moong	Sugarcane			
Pod maturity/Harvesting	Vegetative			

Orissa

Summer Vegetables	Dalua Rice	Summer pulses	Sugarcane	Jute
Vegetative/Fruiting	Harvesting	Vegetative	Vegetative	Field preparation and Sowing
Kharif rice		Summer Groundnut	Early sown Summer Groundnut	
Sowing		Field preparation and Sowing	Early vegetative	

Andhra Pradesh

		Kharif rice		
		Land preparation and nursery sowing		

Karnataka

Sugarcane (Ratoon crop)	Summer rice	Kharif Jowar/Maize/Groundnut/Sunflower	Early sown Kharif Jowar/Maize/Groundnut/Sunflower	
Grand growth	Harvesting	Sowing	Germination / early vegetative	

Kerala

Rubber		Virippu rice		
Tapping		Raising nursery		

Tamil Nadu

Rice (Kuruvai)	Sunflower	Cotton	Sugarcane(Early and Mid season)	Oilseeds (Groundnut)
Nursery raising	Harvesting	Boll development	Vegetative	Harvesting
Summer gingelly /Maize				
Seed/Grain formation				
