



Summary of Agromet Advisory Services for different States of the country

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(For the period 19th April to 23rd April, 2007)

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

Forecast for the South-West monsoon rainfall 2007

Based upon the newly-adopted statistical forecast system, IMD's long range forecast for the 2007 south-west monsoon season (June to September) is that the rainfall for the country as a whole is likely to be 95% of the long period average with a model error of $\pm 5\%$.

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

Punjab

Isolated rain /thundershower is likely over the State during next 24 hrs. and mainly dry weather thereafter.

Advisories

- As there was no significant rain during last week in most of the districts and isolated rain /thundershower is likely over the State during next 24 hrs. and mainly dry weather thereafter, apply light irrigation to *summer sunflower, sugarcane, and Horticultural crops*. Apply irrigation depending on the soil profile stored moisture in Gurdaspur, Ludhiana, Nawashahar and Ropar districts as there was excess rainfall during last week.
- Farmers are advised to take advantage of expected weather and continue harvesting of matured *wheat* crops. Harvested produce can be sun dried before taking them indoor/ safer places.
- Complete planting of early maturing varieties of *sugarcane* i.e COJ 64, COH 56 and COH 92 and mid season CO 7717, COH 99 and COS 8436.

Haryana

Isolated rain /thundershower is likely over the State during next 24 hrs. and mainly dry weather thereafter.

Advisories

- As there was no significant rain during last week in most of the districts and isolated rain /thundershower is likely over the State during next 24 hrs. and mainly dry weather thereafter, apply irrigation to *summer sunflower, sugarcane, and Horticultural crops*. Apply irrigation depending on the soil profile stored moisture in Ambala district as there was excess rainfall during last week.
- Farmers are advised to take advantage of expected weather and continue harvesting of matured wheat crops. Harvested produce can be sun dried before taking them indoor/ safer places.
- Complete planting of early maturing varieties of *sugarcane* i.e CO J-64, COH 56 and COH 92 and mid season CO 7717, COH 99 and COS 8436.

Rajasthan

Heat wave conditions prevailed over some parts of the State. Weather remained mainly dry in all the divisions of the State.

Isolated duststorm / thunderstorm likely over the State during next 24 hrs.

Advisories

- *Heat wave conditions* prevailed over some parts of the State during last week. As the crops are at harvesting stage, crop damage will be lesser.

- Apply light frequent irrigation in early sown **moong** crop in view of continued heat wave conditions.
- Complete harvesting matured crops of **cumin**, **wheat** and **barley** to avoid grain shattering due to high temperature.
- Continue sowing of **zaide moong** and **fodder** in irrigated areas. Select among K-851, MUM-2, and RMG-268 etc. for sowing moong. Undertake seed treatment with *Rhizobium* before sowing moong.

Uttar Pradesh

Heat wave conditions prevailed over some parts of Agra and Jhansi divisions on 16th April and Weather was mainly dry in all divisions of U.P. on 16th and 17th April. Light to moderate rain occurred at an isolated places in all divisions of East U.P. and weather was mainly dry in West U.P. on 18th April.

Mainly dry weather is likely over West U.P. Isolated rain/thundershowers are likely over East U.P.

Advisories

- As mainly dry condition prevailed most of the districts in the State during last three weeks and mainly dry weather is likely over West U.P. and isolated rain/thundershowers are likely over East U.P. for the next three days, apply irrigation to **summer maize**, **sunflower** and **vegetable crops**.
- To control **mosaic** disease in **lady finger**, spray the solution of Dimethoate 30EC @ 1.6ml/litre of water.
- Continue harvesting of matured crops of **onion** and **garlic**.
- The blossoms of **mango** (30-45 cm in length) are affected with malformation disease. Destroy it & to save the fruits spray Naphthalene Acetic Acid 15 ppm or 4ml Planofix / 9 lit. water.
- Continue the sowing of **maize**, and **sugarcane**. Field preparation and sowing of maize may be started.

Himachal Pradesh

Precipitation occurred at few places.

Isolated rain/thundershower is likely over the State during next 24 hours and mainly dry weather thereafter.

Advisories

- As there was excess rainfall in Bilaspur, Hamirpur, Kangra, Solan and Una and isolated rain /thundershower is likely over the State during next 24 hrs. and mainly dry weather thereafter, postpone irrigation in these districts. Apply irrigation to the crop in the remaining districts to bring the soil to its field capacity, apply irrigation to vegetables, wheat, barley, gram and onion.
- Continue land preparation and nursery sowing and transplanting of **cauliflower** and **cabbage** in low and mid hills.
- There is mild chance of attack of **powdery mildew** in **vegetables**. If attack crosses economic threshold level, spray carbendazim 0.5 % to control the disease.
- There is mild chance of attack of **pod borer** in **gram**. If attack crosses economic threshold level, spray Monocrotophos (Monocil 36 EC/SL) or Carbaryl 50 WP (Sevin) @ 875 ml or Endosulfan 35 EC (Thiodan/Hindon/Endocel) @ 1250 ml in 625 litres of water per ha. Spraying can be repeated at 15 days interval, if the pest still persists.
- There is mild chance of attack of **purple blotch** disease in **onion**. If attack crosses economic threshold level, spray Mancozeb 0.25 % to control the disease.

Uttarakhand

Light to moderate rain occurred at a few places on 16th and 18th April and very light rain was recorded at isolated places on 17th April, while mainly dry weather prevailed during rest of the week. Sky remained mainly clear to generally cloudy during the period.

Mainly dry weather is likely over the State.

Advisories

- Light to moderate rain occurred at a few places during last week. Mainly dry weather is likely over the State for next three days. Under the circumstances, apply light irrigation to **mango**, **potato** and **sugarcane** crops, **depending** upon soil stored profile moisture. As there was excess rainfall in Almora, Dehradun and Nainital, postpone irrigation in these districts.
- Start harvesting of matured crops of **wheat** on non rainy days.
- Undertake chemical control for **mango** and **litchi** as dry weather expected. Maintain cleanliness in the orchards.
- Undertake mulching to conserve soil moisture and to prevent weeds in **apple**.

Jammu & Kashmir

Weather remained mainly dry over J & K State.

Isolated rain / thundershowers is likely over the State during next 24 hours and mainly dry weather thereafter.

Advisories

- There was no rainfall during last week and rain/thundershowers is likely to occur at isolated places only during next 24 hours. Under the circumstances, apply irrigation to **wheat**, **brown sarson** and **vegetable** crops in Kashmir division.
- Start harvesting **wheat** at proper maturity stage. After the harvest of wheat, undertake sowing of **Dhaincha** in the fallow land.
- Continue transplanting **tomato**, **brinjal** and **chillies** from nursery to field area during this period. Continue land preparation and sowing of **bhendi** (variety: Pusa, Varsha Uphar, A-4, Parbhani kranti) and **raddish** (variety Pusa Chetki).
- Start land preparation and sowing **maize** in the main field and **rice** in the nursery in Kashmir division. Undertake seed treatment with *Azospirillum* before sowing.
- Start land preparation and planting of **Gladiolus**, **Dahia** and **Cana bola** in Jammu division. Undertake thinning of excess saplings in **peach**, **plum**, **grapes** and **papaya** in Kashmir division as more population leads to poor growth.

Delhi

Weather remained mainly dry.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall during last few weeks over the State and mainly dry weather is likely for next three days, apply irrigation to **vegetables**.
- Prepare land and perform sowing of **radish**. Use Pusa Chetki variety for sowing.
- Monitor **red pumpkin beetle** in **cucurbits** and if attack exceeds economic threshold level, spray carbaryl 50% WP @ 750 – 1000 gms / ha.
- Harvest the matured crops of **wheat**, **barley** and **gram** on bright sunny days. **Wheat** is ready for harvest when grain will produce cracking sound while pressed between teeth.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Rain / thundershowers occurred at isolated places in the State during the period.

Isolated rain/thundershowers are likely to occur over the State.

Advisories

- There was excess rainfall in most of the districts during last week except in Kannur, Idukki, Kasaragod and Palakkad. Under the circumstance, postpone irrigation to plantation crops viz., **coconut**, **arecanut**, **rubber** and **banana**. Apply irrigation in the above mentioned districts to bring the soil moisture to field capacity.
- Start land preparation and sowing of **virippu rice** in the nursery. Undertake seed treatment with *Azospirillum* before sowing.
- Attack of **powdery mildew** is reported in **rubber**. Spray Wettable sulphur @ 0.2% or Carbendazim @ 0.05% to control the disease.
- Attack of **spindle bug** is reported in **arecanut**. Spray Carbaryl @ 4 g / litre of water to control the pest.
- Undertake lime application in **rubber** and **arecanut** to protect the crops from scorching.
- Attack of **leaf rot** is reported in **coconut**. Spray crowns and leaves with 1% Bordeaux mixture or 0.5% Copper Oxy Chloride formulation or 0.4% Mancozeb on a non rainy day to control leaf rot. In the leaf rot affected plants, remove the rotten portions from spear and two adjacent leaves and pour 300 ml fungicidal solution at the base of the spear which can be prepared by mixing Hexaconazole 5 EC @ 2 ml or Mancozeb @ 3 gm in 300 ml of water on a non rainy day.
- 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% on a non rainy day. 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 a few places over the State on 16th and 18th April and at isolated places over the State on 17th April.

Isolated Rain/thundershowers are likely over the State.

Advisories

- There was excess rainfall during last week in Cuddalore, Dharmapuri, Kanyakumari, Krsihnagiri, Namakkal, Perambalur, Sivagangai, Thanjavur, Tirunelveli and Thiruvannamalai districts. Under this circumstance, postpone irrigation to **rice**, **millet**s, **sunflower**, **maize**, **sugarcane**, **pulses**, **cotton** and **groundnut**. Apply light irrigation to the crops in the remaining districts.
- Monitor **groundnut** for **aphids** and if the pests population crosses ETL, spray Dimecron 100EC or Metasystox 25 EC @ 1 ml/ litre of water to control the pest.
- Continue harvesting **rice** and **rice fallow pulses** on bright sunny days.
- Monitor **early sugarcane** for **shoot borer** and if the pest population crosses ETL, undertake spraying of Endosulfan 35 EC or Monocrotophos 40 EC @ 1.5 litres/ha.
- Continue planting **mid season sugarcane**. Adopt 30000 nos.of two budded setts for planting one acre. Undertake sett treatment with *Azospirillum* before planting.

Karnataka

On 16th April rainfall occurred at isolated places over the State. On 17th April rainfall occurred at many places over Coastal Karnataka and at isolated places over Interior Karnataka. On 18th April rainfall occurred at a few places over Interior Karnataka and at isolated places over Coastal Karnataka.

Isolated rain/thundershowers are likely to occur over the State.

Advisories

- Apply irrigation to summer **groundnut**, **sunflower**, **sugarcane** and **rice** as rain/ thundershowers is likely to occur at isolated places only over the State for the next three days.
- Monitor **groundnut** for **leaf miner** and if the pest population crosses ETL, spray Methyl Demeton @ 0.02% to control leaf miner.
- Undertake earthing up in **groundnut** and apply gypsum @ 200 kg/ha as the crop is now at pod formation stage.
- Monitor **rice** for **leaf roller**, **stem borer** and **thrips** and if the pest population crosses ETL, spray Methyl Parathion 50 EC @ 350 ml/ha to control stem borer. Spray Dimecron 100 EC @ 0.5 ml/litre of water to control thrips and leaf roller.

Andhra Pradesh

Isolated rain occurred over Coastal Andhra Pradesh on 12th to 14th, 16th & 18th April over Telangana and Rayalseema from 12th to 16th & 18th April. Weather was mainly over Coastal Andhra Pradesh on 15th & 17th and dry over the State on 17th April.

Isolated rain/thundershowers are likely to occur over the State.

Advisories

- Complete harvesting **groundnut** and **rice**.

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

Assam

Light to Moderate rain occurred at a few places on 17th April and weather was mainly dry on 16th and 18th April over the State.

Isolated rain/thundershowers are likely over the State during next 24 hrs. Scattered to fairly widespread rain/thundershower with isolated heavy falls are likely thereafter.

Advisories

- As scattered to fairly widespread rain/thundershower with isolated heavy falls are likely thereafter over the state, postpone irrigation to the crops.
- Maintain 3 – 5 cm water in field of **early ahu rice**.
- Mild incidence of **Brown Plant Hopper**, **yellow stem borer** and **blast** and **sheath blight** diseases in **boro rice** and **early ahu rice** is reported in a few localities.
- Monitor attack of **Brown Plant Hopper** and **blast** and **sheath blight** diseases in **boro rice**. If attack crosses economic threshold level, to control **Brown Plant Hopper** insecticides like Chloropyriphos 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 diseases is controlled. For control of **sheath blight** diseases Carbendazim (Bavistin) @ 0.5 gm per litre of water is to be applied.
- Apply plant protection measures after current spells of rain.
- Harvest matured crops of **wheat** on bright sunny days after current spells of rain. Wheat is ready for harvest when grain will produce cracking sound while pressed between teeth.
- Prepare land after current spells of rain and continue sowing of summer vegetables like **ladies finger**, **ridge gourd**, **cucumber** etc. and sowing of **jute** and **maize**.
- Plough land and ladder 5 -6 times to obtain a fine seed bed for sowing of **jute**. In termite and cricket infested field the soil is to be treated with Malathion 5% dust @ 30 kg per hectare. Use seeds of varieties JRC 212, 321, 7447 etc. for sowing.
- Well drained soil is suitable for Maize cultivation. Apply Compost @ 1 tonne along with Urea @ 18 kg, SSP @ 33 kg and MOP @ 9 kg per bigha at the time of land preparation for sowing of **maize**. Use seeds of

varieties Ganga-5, Hi- Starch, Campo – NLD, Naviot etc. for sowing.

- As scattered to fairly widespread rain/thundershower with isolated heavy falls are likely thereafter over the state, postpone intercultural operation to **jute** and **maize**. As **maize** crop is highly susceptible to water logging, make arrangement for surface drainage to remove excess water from the field.

Arunachal Pradesh

Sky remained partly cloudy over the State. Rain/ thundershowers occurred at few places on 17th April and weather remained dry on 16th and 18th April.

Isolated rain/thundershowers are likely over the region during next 24 hrs. Scattered to fairly widespread rain/thundershower with isolated heavy falls are likely thereafter.

Advisories

- As isolated rain/thundershowers are likely over the State during next 24 hrs. and scattered to fairly widespread rain/thundershower with isolated heavy falls are likely thereafter, postpone irrigation to **summer vegetables**, **millet**, **maize**, **jhum paddy** and **ginger**. Provide drainage facilities to avoid waterlogging.
- Complete harvesting of the matured wheat crops on bright sunny days before spells of rain.
- Land should be thoroughly prepared and final puddling should be done 4 – 5 days before transplanting of wet seeded (**WRC**) **rice**. Transplanting should be completed by last week of this month.

Bihar

Light to moderate rain occurred at few places during last week.

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

Warning: Thunder squall likely to occur at isolated places in the State during next 24hrs.

Advisories

- As there was no significant rainfall during last week over the State except Gaya district and rain/thundershowers are likely at a few places over the State during next 24 hours and isolated thereafter, apply irrigation to **vegetables**, **summer maize**, **green gram** and **sesamum**. Apply irrigation depending on the profile stored soil moisture in Gaya district as there was excess rainfall during last week.
- If **vegetable** crops are affected due to **red spider mite**, spray Sulphur dust @ 3.0 Kg/ha or Dycofol @ 1 lit/ ha.
- Maintain 3– 5 cm water in the **boro rice** field.
- In **mango**, continue to give regular irrigation in **mango** / **litchi** orchards and spray insecticides / fungicides with planifix if required.
- Harvest the **wheat** in morning hours. It will facilitate better harvesting and least grain shedding. Temperature has substantially increased and there is also the effect of westerly wind. Under the situations continue to thresh the grain and dry well before storage. Make arrangements to harvest the wheat to avoid the lodging of crops due to squall.

Jharkhand

Weather was mainly dry.

Isolated rain/thundershowers are likely over the State.

Warning: Thunder squall likely to occur at isolated places in the State during next 24hrs.

Advisories

- As there was no significant rainfall in most of the districts and isolated rain/thundershowers are likely over the

State for the next three days, apply light irrigation to summer vegetables.

- Make arrangements to harvest the **wheat** to avoid the lodging of crops due to squall.
- Continue harvesting the matured **rabi vegetable** crops and sowing of **summer** vegetables.
- Maintain 3 – 5 cm water in the **boro** rice field.
- Maintain 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. Light to moderate rain occurred at many places on 17th April. Very light rain occurred at a few places on 18th April over East Sikkim. Rainfall was scanty during the period.

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

Advisories

- Rain/ thundershowers is likely to occur at a few places along with isolated thunder squalls over the State for the next three days. Under the circumstances, postpone irrigation to **large cardamom, orange, early sown maize** and **ginger**.
- Make arrangements to prevent the crops from lodging due to squall.
- Complete harvesting **wheat** on bright sunny days.
- Monitor **large cardamom** for **leaf eating caterpillar, stem borer** and **shoot fly** and if the pest population crosses ETL, spray Endosulfan 35 EC @ 1 ml / litre of water on a non rainy day to control the pests. **Chirkey** and **Foorkey** affected plants may be destroyed by burning.
- Undertake earthing up to keep the field weed free and application of fertilizers in **kharif vegetables, large cardamom, orange, maize** and **ginger** on a non rainy day.
- Monitor **orange** for **leaf miner** and **trunk borer**. Spray neem based insecticides on a non rainy day to control leaf miner. Plug the holes with cotton swabbed with kerosene to control trunk borer.

West Bengal

During the said period light to moderate rain occurred at most places with rather heavy rain at isolated places in Sub Himalayan West Bengal on 17th April. But very light with moderate rain occurred at isolated places on 17th April very light rain at isolated places on 18th April over Gangetic West Bengal. Weather was mainly dry over rest of the period.

Rain/thundershowers are likely at a few places over Sub-Himalayan West Bengal. Isolated rain/thundershowers are likely over the rest of the State.

Warning: Thunder squall likely to occur at isolated places in the State during next 24hrs.

Advisories

- As there was rain in Birbhum and Howrah districts for consecutive last two weeks and rain / thundershowers are likely at isolated places for next three days, postpone irrigation in these two districts. Apply irrigation to the crops in remaining districts of the State to **sugarcane, sesamum, groundnut** and **green gram** crops to bring soil to field capacity.
- Continue harvesting of matured crops of **wheat** on bright sunny days. Wheat is ready for harvest when grain will produce cracking sound while pressed between teeth.
- There is mild chance of attack of **brown plant hopper** in **boro rice**. If 10 or more pests are seen in 10 hills of different places, apply dust Endosulfan 2%. After 7 – 10 days apply Imidacloprid @ 1 ml per 7.5 litres of water. 750 litres of water will be required for one hectare of land. Apply chemicals on a non-rainy day.
- No supplementary fertilizer dose of N is required if **sesame** is sown after harvesting of potato crop. Otherwise apply 12.5 kg N per ha on a non-rainy day at 25 – 30 days after sowing.

- Prepare land on a non-rainy day in SHW and continue planting of **sugarcane**. Select early maturing varieties (10 months) form C.O.J. 7218, C.O. 62197, C.O. 87263 and medium maturing varieties (10 – 12 months) form B.O.91, C.O. 62033, C.O. 7202, C.O. 7224, C.O. 1148, C.O. 87268, C.O.S. 776 etc. for planting of **sugarcane**. Set rate is 50 – 62.5 q / ha. Use top 1/3rd portion of the cane as a seed for best germination. Soak in water for 24 hours for better sprouting. Treat the seed in 100 gm Mithoxy Ethyl Mercuric chloride per 40 litres of water for 20 minutes and then dry in shade. Alternatively you can treat the seeds by Carbendazim 50% @ 1 gm / litre of water.
- Prepare land on a non-rainy day in SHW for sowing of **jute** in North Bengal. 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 carbendazim per kg of seeds before sowing.

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

Gujarat

Heat wave conditions prevailed in parts of North Gujarat region on 16th April. Hot day conditions prevailed in parts of North Gujarat region on 17th April & in Gujarat region on 18th April.

Mainly dry weather is likely over the State.

Advisories

- As there was no rain during last few weeks in the State and mainly dry weather will prevail along with gradual rise in day temperature which may cause higher evapotranspiration loss from the crops for next three days, apply irrigation to **new sugarcane crop, summer groundnut and summer bajra** to bring the soil moisture to field capacity.
- Maintain 3 – 5 cm water in the **rice** field. Apply 30 kg N / ha as a supplementary dose to the crop at tillering stage. Water may be drained out before fertilizer application & maintain water level after 2 days.
- Apply 75 kg N / ha as top dressing at 45 days after planting of new **sugarcane** crop. For saving of 25% Nitrogen fertilizer apply 2 kg Bio fertilizer Azetobactor mixed with 100 kg FYM / ha in furrows at an interval of 30 & 60 days from sowing.
- If **groundnut** appears yellowish spray mixture of 100 gm ferrous sulphate + 10 gm citric acid (lemon arc) dissolved in 10 liters of water and spray over the crop in 500 liters of water.
- Apply 60 kg N as a supplementary dose to **summer bajra**.

Chhattisgarh

Rainfall was recorded at one or two places in all divisions of the State.

Isolated rain / thundershowers are likely to occur over the State.

Advisories

- As there was no rain during last few weeks in almost all the districts of the State and isolated rain / thundershowers is likely to occur over the State for next three days, apply irrigation to the crops to bring soil to its field capacity, apply irrigation to **new sugarcane crop, vegetables, sunflower, summer groundnut, sesamum and green gram** crops.
- Maintain 3 – 5 cm water in **summer rice** field.
- Apply 75 kg N / ha as top dressing at 45 days after planting of **sugarcane**.
- Complete intercultural operation in **groundnut** at flowering stage (within 6 weeks of sowing).

Maharashtra

Light to moderate rain occurred at isolated places in Konkan, Madhya Maharashtra, Marathwada & Vidarbha.

Isolated rain/thundershowers are likely over the State.

Advisories

- As there was no significant rain during last few weeks in the State and isolated rain/thundershowers are likely over the State for next three days, apply irrigation to **sugarcane (Pre-seasonal), summer groundnut, summer sunflower, summer bajra, summer maize and sugarcane (Suru)**.
- Complete intercultural operation wherever **summer groundnut** crops are at flowering stage (within 6 weeks of sowing) to keep the field weed free.
- Maintain 3 – 5 cm water in **summer rice** field. Second dose of 40 kg Nitrogen / ha may be applied after 30 days from transplanting in Vidarbha & third dose of 40 kg Nitrogen / ha may be applied after 60 days from transplanting in Konkan. Use 1 kg Neem cake powder in 6 kg urea at the time of above application. Water may be drained out before fertilizer application & maintain water level after 2 days.
- To increase pollination at flowering stage, hand covered with woolen cloth may be moved 3 to 5 times on floral disc of **summer sunflower** smoothly early in the morning.
- Third dose of 25 kg Nitrogen / ha may be applied after 12 to 14 weeks from planting of **sugarcane (Suru)**. Use 1 kg Neem cake powder with 6 kg Urea at the time of application of Nitrogen.
- Mild incidence of **sap sucking insects** and **tikka disease** in **Latur** in summer groundnut is reported.
- Monitor **summer groundnut** for sap sucking insects and if exceeds economic threshold level, spray Chlorpyrifos or Rogor @ 15 ml in 10 liters of water. Use 500 liters of above solution for spraying one hectare of land.
- Monitor **summer groundnut** for **tikka disease** and if exceeds economic threshold level, spray Carbendazim (Bavistin) @ 5 gm or Tridemorf @ 7 ml in 10 liters water. Use 500 liters above solution for spraying one hectare of land.
- This is the time for sowing of **irrigated Cotton**. Select a variety from high yielding varieties like LRH-5166, JLH-168 & hybrid varieties like Fule-492, Fule-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 rich 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.

Madhya Pradesh

Rainfall occurred at isolated places in South East M.P. on 16th April, South West M.P. on 17th April, West and South East M.P. on 18th April. Mainly dry/ dry weather prevailed over rest of the State.

Isolated rain/thundershower is likely over West Madhya Pradesh during next 24 hours and mainly dry weather is likely thereafter. Isolated rain/thundershower is likely over the rest region of the State.

Advisories

- Continue land preparation and sowing/ planting of **summer moong** and **sugarcane**.
- Undertake seed treatment with **Rhizobium** before sowing **moong**. Do sett treatment with *Azospirillum* before planting sugarcane.
- Undertake earthing up in early sown crops to keep the field weed free.
- Apply light irrigation to early sown crops as rain/ thundershowers is likely to occur at isolated places only over the State for the next three days.

Orissa

Rainfall occurred at isolated places over the State during the period except on 17th April where weather was dry over the State.

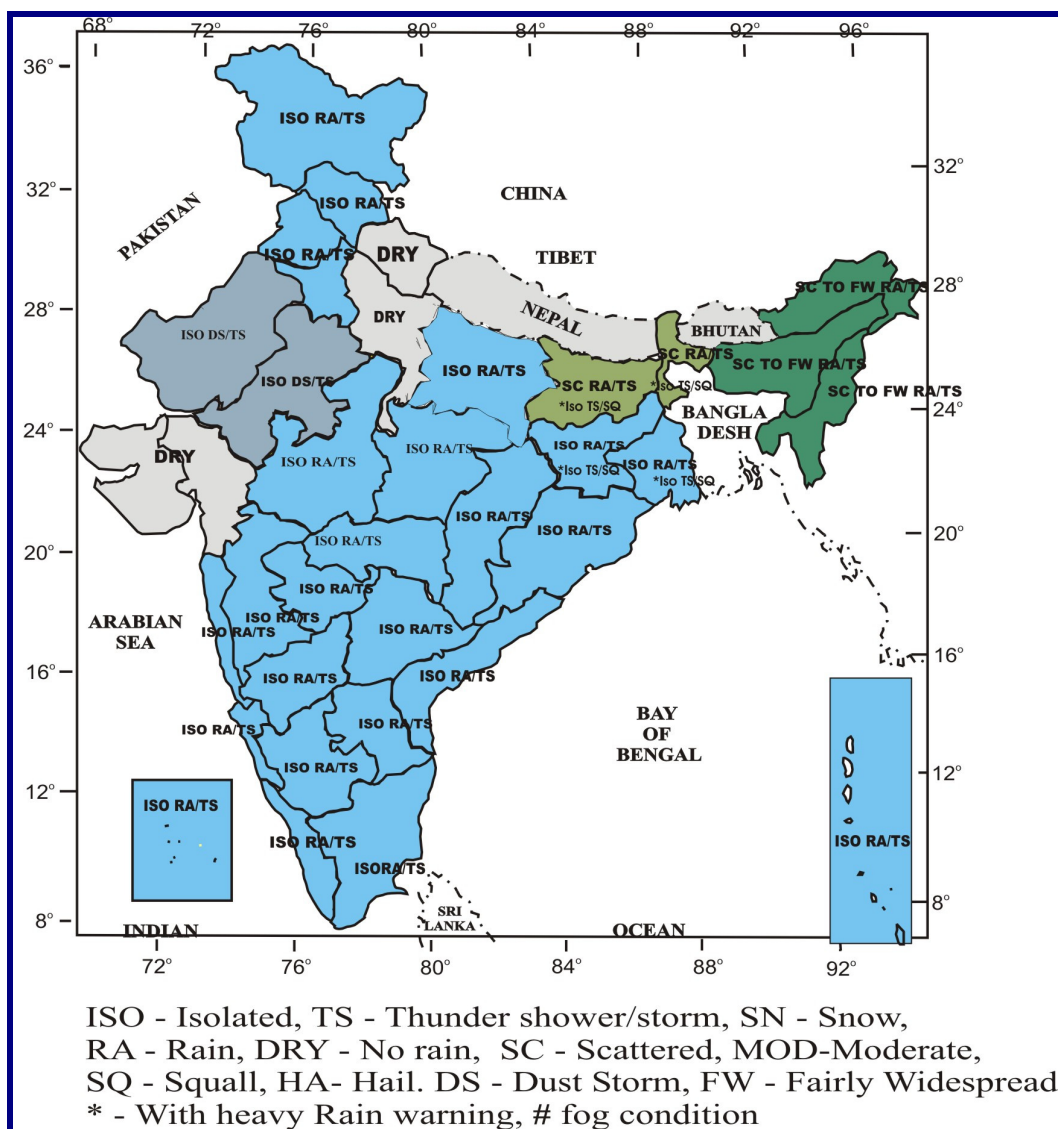
Isolated rain / thundershowers are likely over the State.

Advisories

- As there was excess rainfall in Sambalpur, Angul, Keonjar, Balasore, Khurda, Rayagoda and Gajapati and isolated rain/thundershowers are likely over the State for next three days, apply light irrigation to **vegetables**, **sugarcane** and **pulses** grown in these districts. Apply irrigation to the remaining districts to bring the soil to its field capacity.
- Complete sowing of **summer moong** with basal application of 8 kg N, 16 kg P₂O₅ and 8 kg K₂O / acre.
- The prevailing weather conditions may favour the infestation of *Spodoptera* in summer **pulse** crop. To manage the pest, spray Chloropyriphos @ 2 ml per litre of water. To control the **yellow vein mosaic** spray Methyl Demeton @ 2 ml per litre of water.
- Start harvesting of the earlier planted crop of **Dalua rice** if 85% of the grain in the ear head have matured.

Forecast Map

Valid upto 22nd April 07



Salient weather features for the week ending 18/04/07

METEOROLOGICAL ANALYSIS

- Last week's low pressure area over Gulf of Mannar and neighbourhood lay over Sri Lanka and adjoining southwest Bay of Bengal on 12th and over southwest Bay off Sri Lanka coast on 13th. It was seen as a well marked low pressure area over the same region on 14th. It lay as a low pressure area over southeast and adjoining southwest Bay of Bengal on 15th. It became less marked on 16th. However, the associated upper air cyclonic circulation lay over the same region extending upto 4.5 km a.s.l. on 16th & 17th and became less marked on 18th.
- The cyclonic circulation at lower levels over Bihar lay over Jharkhand and neighbourhood on 12th, over Gangetic West Bengal and neighbourhood on 13th & 14th, over Bangladesh & neighbourhood on 15th and over Nagaland, Manipur, Mizoram & Tripura on 16th. It moved eastwards on 17th.
- The cyclonic circulation over Arunachal Pradesh also moved away eastwards on 12th.
- A cyclonic circulation at lower levels lay over West Uttar Pradesh and neighbourhood on 13th & 14th; over West Madhya Pradesh and neighbourhood on 15th & 16th and over Chhattisgarh and adjoining Jharkhand on 17th. It became less marked on 18th.
- Another cyclonic circulation at lower levels lay over Haryana and neighbourhood on 17th and over West Uttar Pradesh and adjoining Madhya Pradesh on 18th.

RAINFALL

Under the influence of the above systems

- Isolated rain/thundershowers occurred over different sub-divisions in east & central India during a few days and over south India during many days of the week.
- Isolated to scattered rain/thundershowers occurred over northeastern states on 12th -13th and 17th -18th.
- Isolated rain/thundershowers occurred over Western Himalayan Region and adjoining northern plains during second half of the week.
- Mainly dry weather prevailed over the remaining parts of the country during the week.

MAXIMUM TEMPERATURES

- Heat wave conditions prevailed over many parts of Haryana, and some parts of Punjab and Jammu division of Jammu & Kashmir, during many days of the week. Heat wave conditions also prevailed over some parts of West Uttar Pradesh for a few days of the week. The maximum temperatures were above normal by 2-4°C over remaining parts of northwest India, Rajasthan and Gujarat during many days of the week. They were normal over remaining parts of West India.
- The maximum temperatures were below normal by 3-6° C for first two days of the week and were normal thereafter over East India.
- They were markedly below normal by 5-10°C on first two days and became normal towards the end of the week over Northeast India.
- They were above normal by about 2°C during the first half and normal during the second half of the week over south India.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 18TH APRIL, 2007)

Rainfall was excess/normal in 13, deficient/scanty in 19 and no rain in 4 out of 36 meteorological sub-divisions (Actual: 4.5 mm, Normal: 9.5 mm and Departure: -53%).

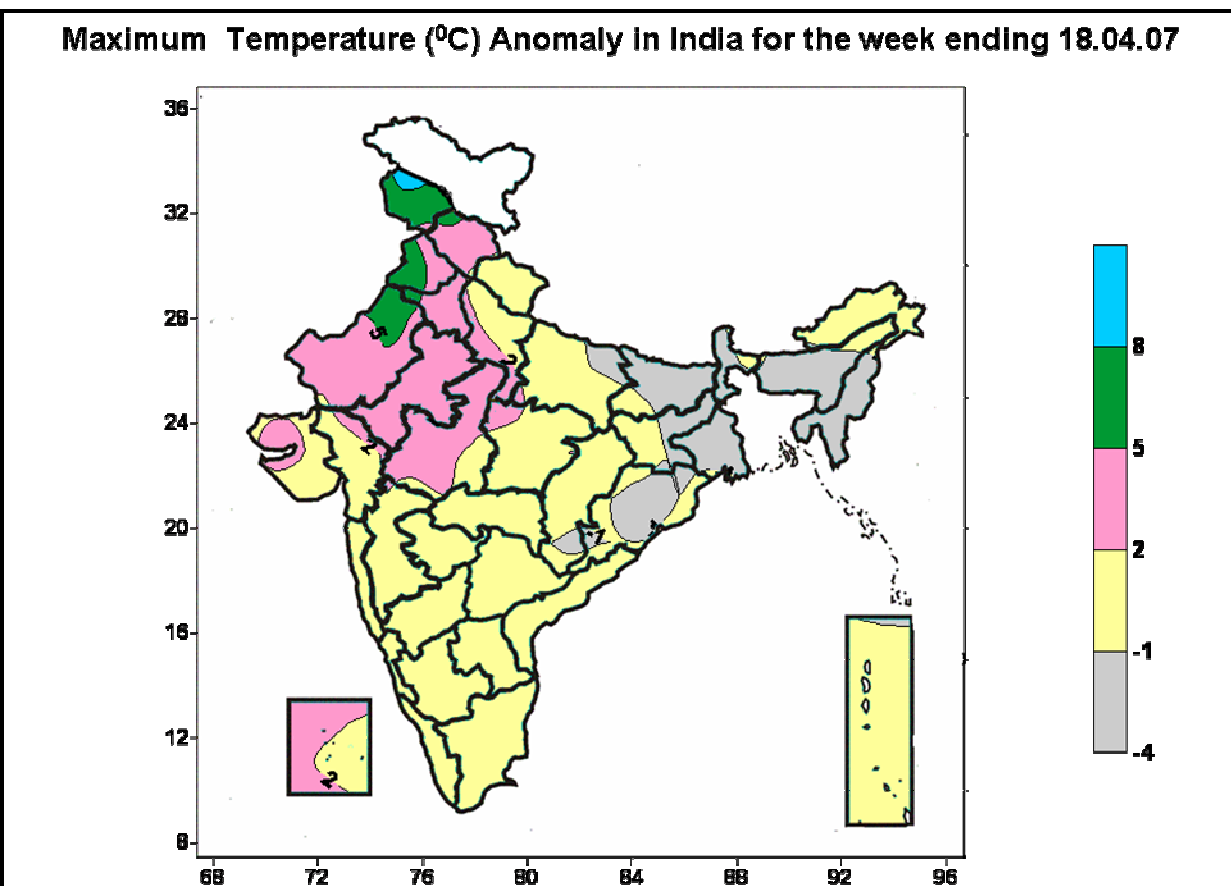
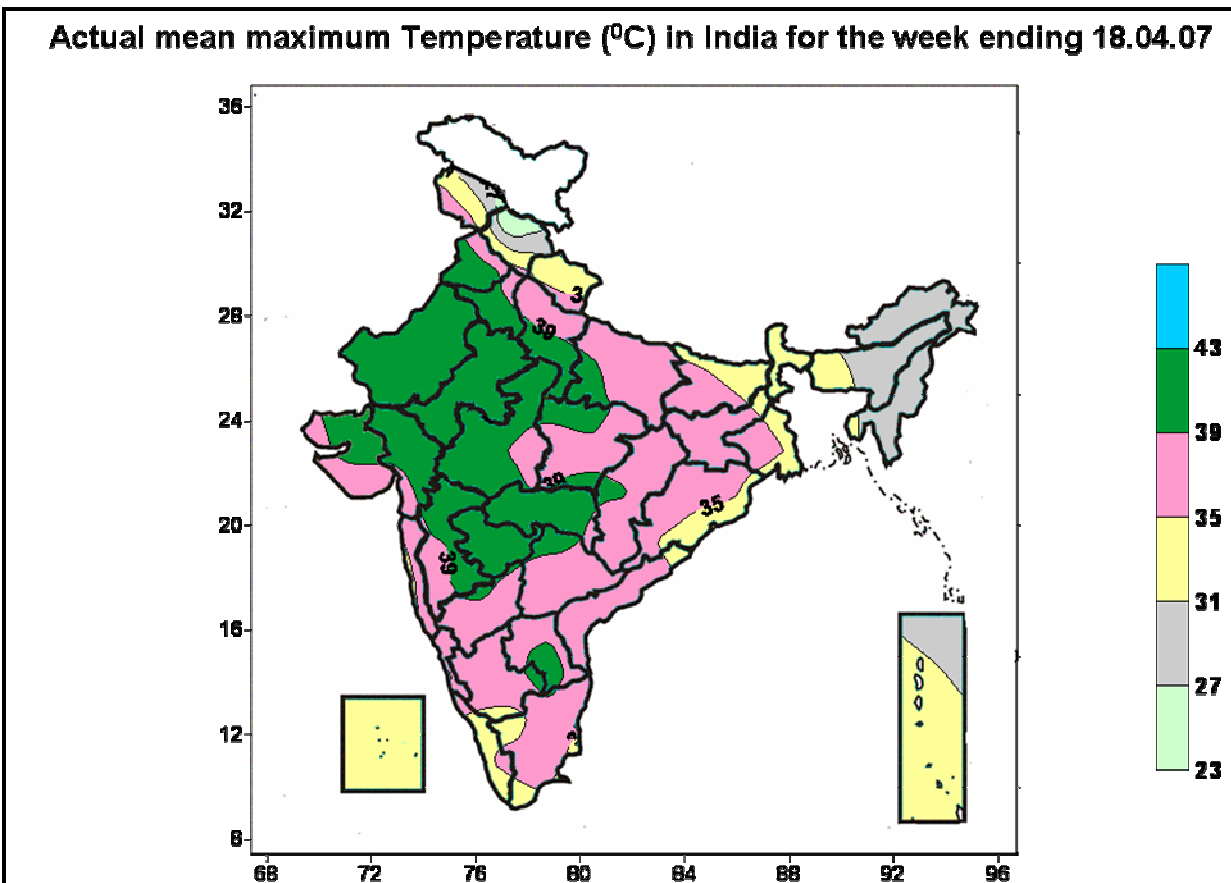
CUMULATIVE SEASONAL RAINFALL (1ST MARCH TO 18TH APRIL, 2007)

Rainfall was excess/normal in 15 and deficient/scanty in 21 and out of 36 meteorological sub-divisions. (Actual: 48.8 mm, Normal: 53.0mm and Departure: -8%).

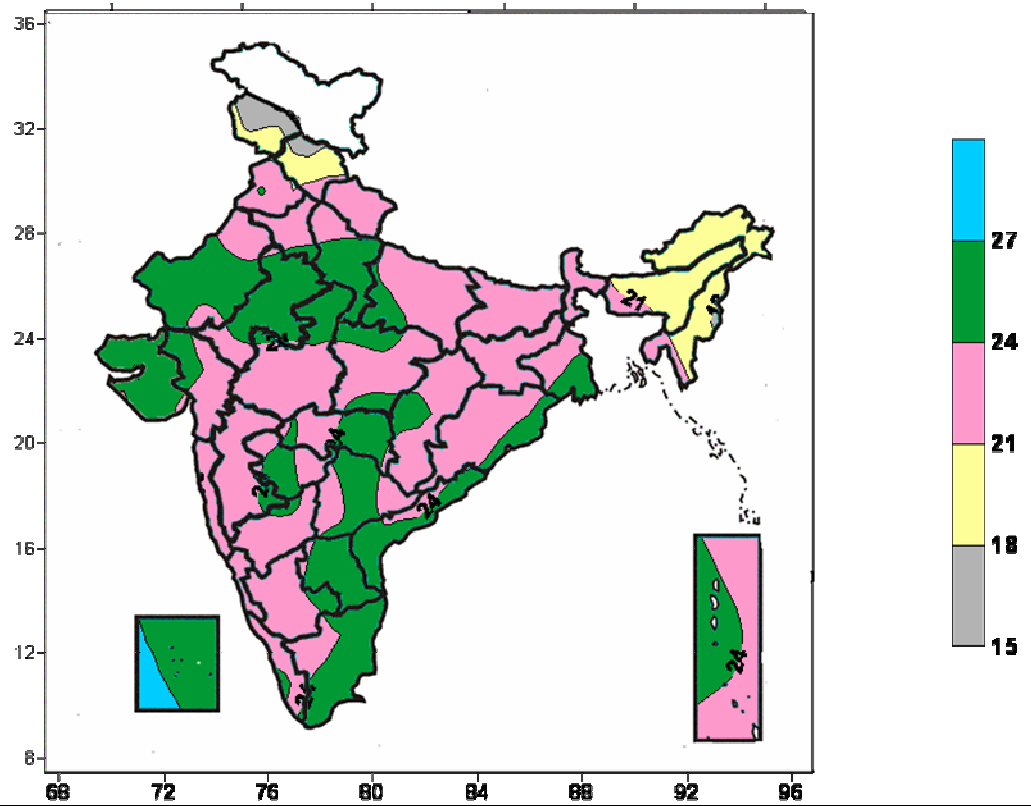
OUTLOOK FOR THE WEEK ENDING ON 25TH APRIL, 2007.

- Fairly widespread rain/thundershower with isolated heavy falls are likely over northeastern states from 20th April.
- Isolated to scattered rain/thundershowers are likely over east India and south Peninsula.
- Mainly dry weather is likely over west & northwest India.
- Gradual rise in day temperature over northwest & east India.

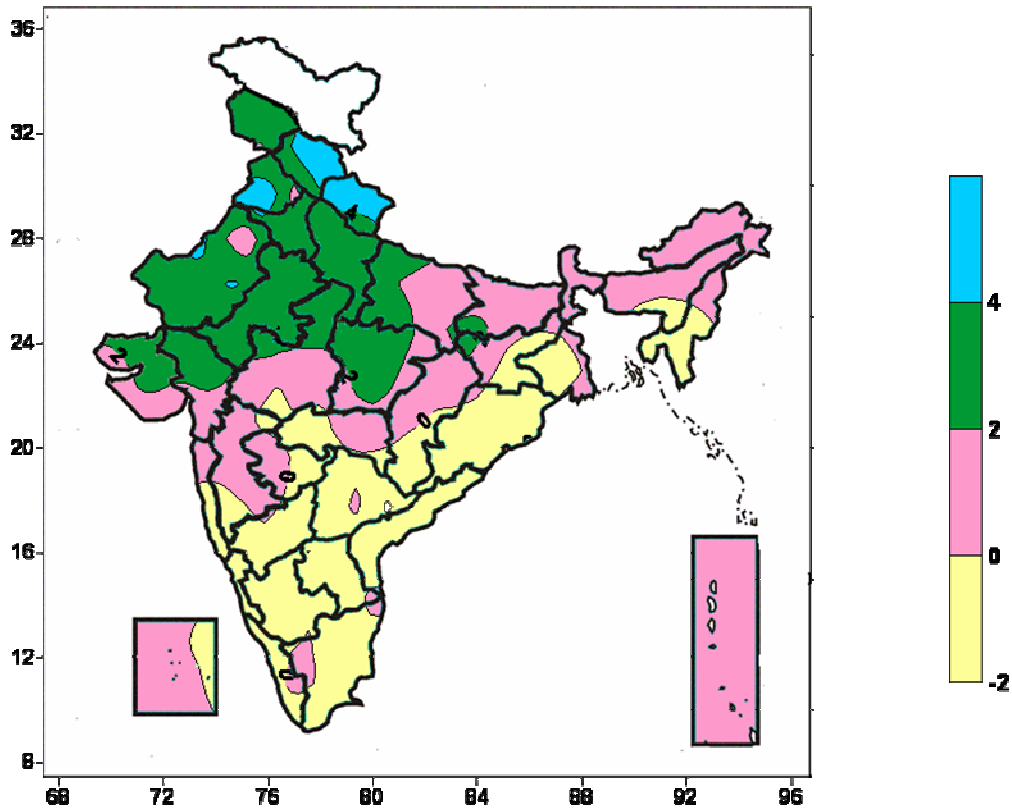
Contour maps for the week ending 18th April, 2007



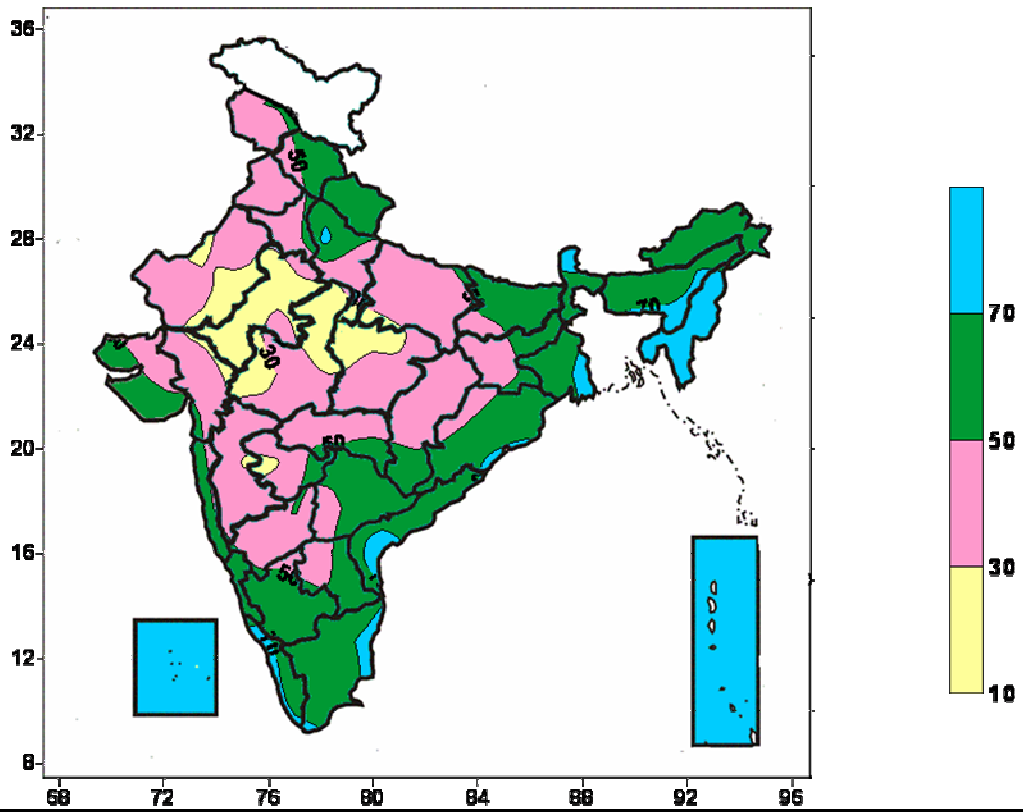
Actual mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 18.04.07



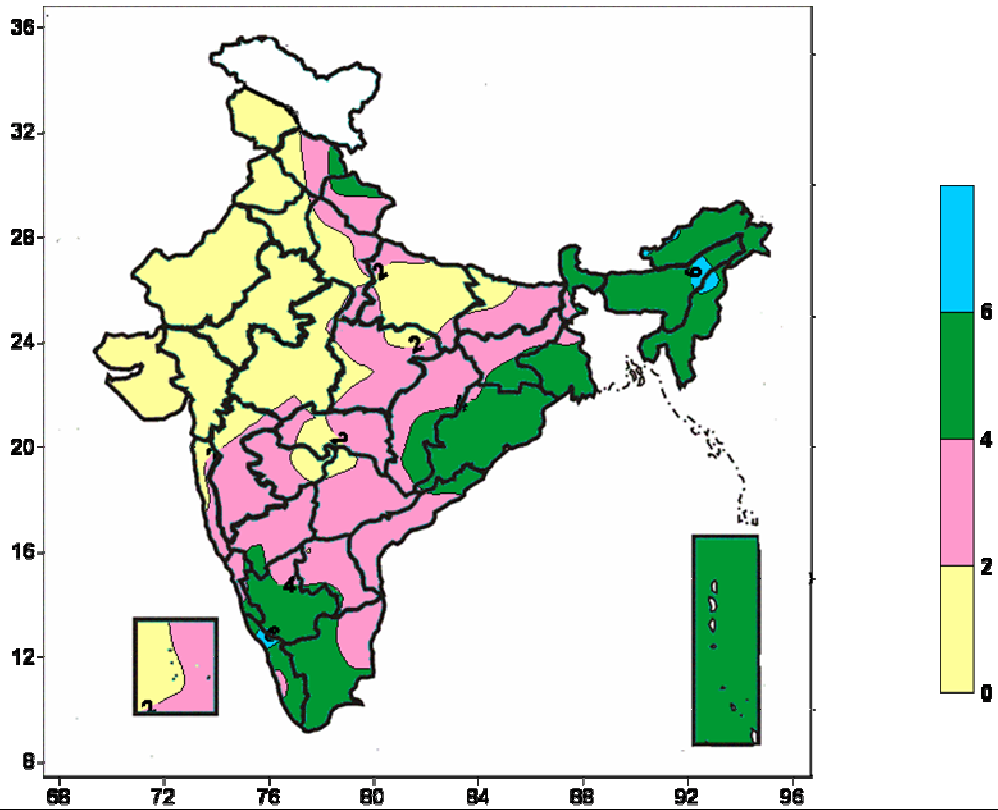
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 18.04.07



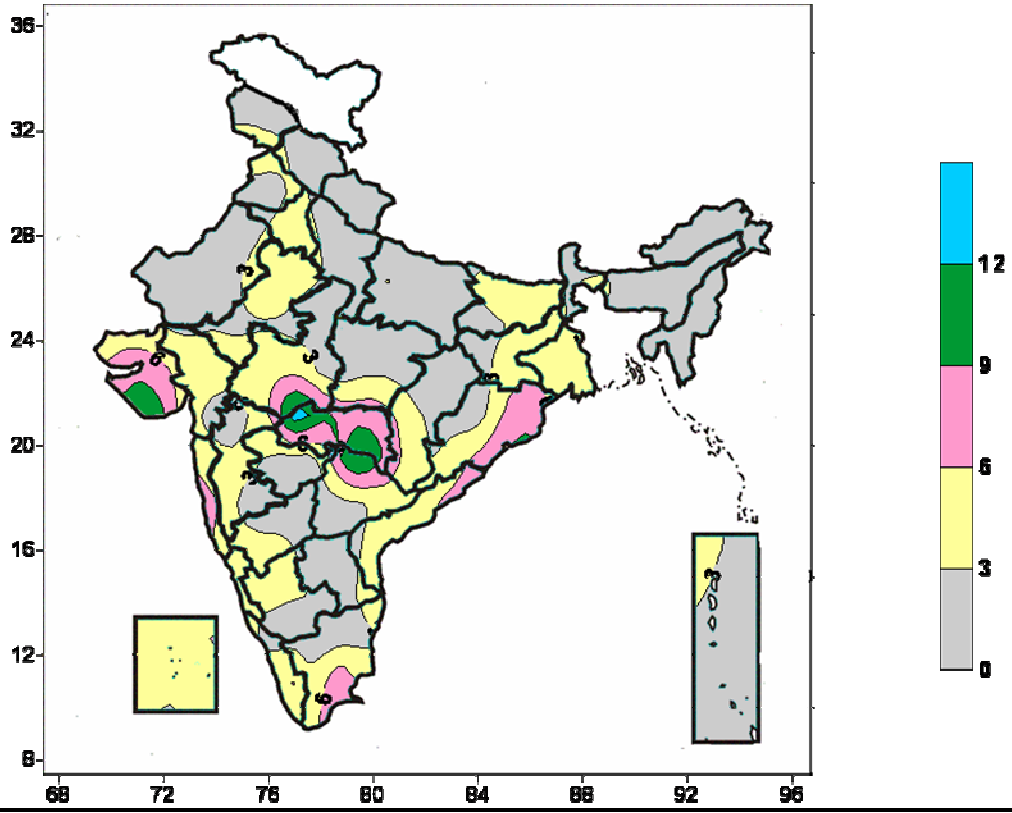
Relative humidity (%) over India for the week ending 18.04.07



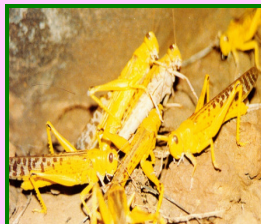
Cloud amount (okta) over India for the week ending 18.04.07



Wind speed (knots) over India for the week ending 18.04.07



Desert Locust Forecasting



Temperature (degree Celcius)							
Station Name	12.04.07	13.04.07	14.04.07	15.04.07	16.04.07	17.04.07	18.04.07
Amritsar	27.0	27.0	23.0	29.5	30.0	29.5	-
Barmer	-	31.5	31.5	33.0	35.5	35.5	-
Sriganganagar	-	-	31.5	32.0	33.0	35.0	-
Jaisalmer	31.0	31.0	31.5	33.5	35.0	34.0	-
Kota	34.5	33.5	34.0	34.0	34.5	35.0	-
Deesa	-	31.0	31.5	33.0	-	34.0	-
Churu	-	-	-	-	-	-	-

There was no rainfall

There is no chance of locust infestation in Rajasthan and the adjoining areas during this week.

CROP – STATE – STAGE

Delhi

Barley	Vegetables	Early sown summer vegetable crops	Wheat	Gram
Maturity / harvesting	Sowing	Vegetative	Maturity / harvesting	Harvesting

Haryana

Early sown Sugarcane	New Sugarcane	Gram /Lentil	Rabi oilseeds	Wheat
Vegetative	Sowing	Harvesting	Harvesting	Maturity / harvesting
	Horticultural crop			
	Vegetative			

Himachal Pradesh

Wheat	Gram	Summer vegetables (Cauliflower, Cabbage in low and mid hills)	Vegetables (Tomato, brinjal, ladies finger)	Barley
Harvesting (low hills) Maturing (mid hills)	Pod formation / pod development / pod maturity	Nursery sowing /Transplanting	Vegetative/flowering / fruiting / harvesting	Grain formation / grain maturity
Onion	Rape seeds and Mustard			
Bulb formation	Pod maturity/Harvesting			

Jammu & Kashmir

Vegetable crops	Brown Sarson	Wheat (in Kashmir division)	Pea/Lentil/ Mustard	Wheat (in Jammu)
Vegetative- in Kashmir Division	Seed formation in Kashmir Division	Booting	Harvesting	Grain maturity
Fruit crops	Summer mash and moong	Maize/ Rice		
Plantation	Vegetative (Jammu div.)	Sowing (Kashmir div.)		

Punjab

Sugarcane	Early sown Sugarcane	Gram/Lentil	Horticultural crop	Wheat
Sowing	Vegetative	Harvesting	Vegetative	Maturity / harvesting

	Summer Sunflower	Rabi oilseeds		
	Early vegetative	Harvesting		
Rajasthan				
Zaide Moong, Zaide Fodder, Cotton	Wheat	Cumin		Barley
Germination / seedling	End harvesting	End harvesting		End harvesting
Uttar Pradesh				
Wheat / Barley	Rabi Pulses	Sugarcane	Maize	Winter Vegetables
Maturity / harvesting	Harvesting / Urad, Moong & Lobia Seedling/Early vegetative	Sowing	Seedling/early vegetative	Maturity/ harvesting stage
Bajra	Summer Sunflower	Mango	Early sown Summer Vegetables	Summer Vegetables
Sowing	Seedling /early vegetative	Fruit setting	Seedling/ early vegetative	Sowing
Uttarakhand				
Potato	Mango/Litchi/ Apple	Wheat	Sugarcane	
Seedling / vegetative growth	Flowering / fruit setting	Pe- maturity / maturity	Vegetative	
Assam				
Summer vegetables	Early sown Summer vegetables	Ahu rice	Boro Rice	Maize
Sowing	Germination/ early vegetative / vegetative/Flowering	Early vegetative/Tillering	Dough / maturity	Land preparation/ Sowing
Early sown Maize	Wheat	Jute	Early sown Jute	
Germination/Early vegetative	Harvesting	Land preparation/ Sowing	Germination/Early vegetative	
Arunachal Pradesh				
Summer vegetables	Ginger	Wheat	Jhum Paddy	Maize
Vegetative	Vegetative	Harvesting	Vegetative	Vegetative
WRC Rice	Foxtail millet			
Land preparation / transplanting	Vegetative			
Bihar				
Summer Vegetables/ Fruit crops	Boro Summer Rice	Wheat	Green Gram / Black gram	Rabi Maize
Vegetative	Tillering / panicle initiation	Harvesting	Vegetative	Harvesting
Summer Maize	Sesamum			
Vegetative	Vegetative / flowering			
Jharkhand				
Boro rice	Summer vegetables	Wheat		
Tillering / panicle initiation	Early vegetative	Grain maturity / harvesting		
Sikkim				
Maize /Ginger	Mustard	Summer vegetables	Wheat	Large Cardomom
Vegetative	End Harvesting	Transplanting	End harvesting	Flowering
Orange	Early transplanted vegetables			
Fruiting	Early vegetative			
West Bengal				
Boro rice	Wheat	Sesamum	Groundnut	Green gram
Flowering / grain formation	Harvesting	Vegetative / flowering / pod formation	Flowering / peg / pod formation	Vegetative/ Flowering
New Crop Sugarcane	Early sown Sugarcane	Jute		
Planting	Early vegetative/ Vegetative	Land preparation / sowing		
Chattisgarh				
Summer Vegetables	Vegetables (Tomato, chilli, brinjal)	Green Gram	Sugarcane	Wheat
Vegetative	Fruiting / harvesting	Flowering/Pod formation	Early vegetative/vegetative	Harvesting

Sunflower	Groundnut	Summer sesamum	Summer rice	
Flowering /Head formation	Flowering / pegging	Vegetative / flowering/Capsule formation	Panicle initiation /Flowering	

Gujarat

Sugarcane	Rice	Summer Groundnut	Summer Bajra	
Vegetative	Tillering	Vegetative	Vegetative / ear head formation	

Maharashtra

Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Summer Maize (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marthwada and Vidarbha)	Summer Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)	Summer Bajra (Madhya Maharashtra, Marathwada & Vidarbha)
Early vegetative/active growth	Tasseling / silking / cob initiation	Sprouting/Early vegetative	Floral bud formation/Flowering (Head formation in Latur and Amravati)	Flag leaf initiation (flowering in Nasik)
Summer Groundnut (Madhya Maharashtra, Marathwada, Vidarbha & Konkan)	Summer Rice (Konkan, Vidarbha & Kolhapur dist.)	Irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)		
Flowering / pegging /Pod formation in Latur (Pegging / pod formation in Thane, Raigad & Ratnagiri & pod formation / pod maturity in Sindhudurga district)	Tillering – in Vidarbha. Tillering / flag leaf initiation in Kolhapur . Flag leaf initiation/Flowering in Thane, Raigad, & Ratnagiri dist. Panicle initiation/Flowering/Grain formation in Sindhudurg dist.	Sowing		

Madhya Pradesh

Summer moong and sugarcane	Early sown Summer moong and sugarcane			
Sowing / planting	Germination/sprouting			

Orissa

Vegetables	Dalua Rice	Mustard	Rabi Pulses	Summer pulses
Fruiting / Harvesting	Grain maturity / maturity	Pod maturity/Harvesting	Harvesting	Early vegetative
Summer Vegetables	Sugarcane	Rabi Groundnut	Summer Groundnut	
Early vegetative	Vegetative	Pod maturity/Harvesting	Sowing	

Andhra Pradesh

Rabi Groundnut	Rabi rice			
Harvesting	Harvesting			

Karnataka

Sugarcane (Ratoon crop)	Sunflower	Summer groundnut	Summer rice	
Vegetative	Grain filling	Pod formation	Panicle initiation	

Kerala

Rubber	Puncha rice			
Tapping	Grain development / maturity			

Tamil Nadu

Rice (Navarai)	Early planted Sugarcane	Cotton	Rice fallow Pulses (Blach gram and Green gram)	Oilseeds (Groundnut)
Grain maturity / early harvesting	Vegetative	Vegetative	Harvesting	Vegetative

Sunflower	Summer gingelly/ Maize	Early sown Summer gingelly /Maize	Mid season Sugarcane	
Vegetative	Sowing	Early vegetative/ vegetative	Planting	
