



Summary of Agromet Advisory Services for different States of the country

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Agromet Advisory for Problematic Areas

Andhra Pradesh

Weather Forecast

- Rain/thundershowers are likely at a few places north Coastal Andhra Pradesh and Telangana during next 24 hours and at many places thereafter.
- Isolated rain/thundershowers are likely over the rest region.

Advisories

- In view of sufficient amount of rainfall received during last week and also with possibility of good amount of rainfall for the next five days, farmers in high altitude areas of East Godavari, Adilabad, Khammam and Visakappattinam districts are advised to undertake transplanting of rice and sowing of maize (Aswini and Varun), ragi (Godavari and Ratnagiri) and minor millets. Due to delay in transplanting, adopt closer planting and application of additional 5 kg N/ha to reduce yield loss.
- Farmers in Ananthapur and Kurnool districts are advised to continue sowing of groundnut (K 6, ICGV 9114 and Narayani). Start sowing of red gram (LRG 30, 38 and 41) and vegetable crops like tomato, chillies, bhindi, brinjal and leafy vegetables with realized rainfall during last week.
- Farmers in West Godavari, Krishna, Guntur and Prakasam districts are advised to undertake sowing of rice nursery (BPT 5204) and transplanting of seedlings and sowing of red gram (LRG 38 and 41) and chillies (LCA 334 and 353) with realized rainfall during last week and also with possibility of good amount of rainfall for the next five days. Due to continuous dry spell, weed growth is more in pulse crops sown during June. Undertake weeding.
- Due to receipt of sufficient amount of rainfall during last week and also with possibility of good amount of rainfall for the next five days, farmers in Medak, Warrangal, Karimnagar and Nizamabad and in plains of Adilabad and Khammam are advised to undertake sowing of groundnut if sowing of cotton could not be undertaken earlier. Due to continuous dry spell upto second week of July, rice nursery meant for transplanting in 25000 ha was destroyed due to aged seedlings. Farmers are now advised to undertake sowing of rice nursery with short duration variety of JGL 1798
- Farmers in Srikakulam, Vijayanagaram and Visakappattinam districts are advised to undertake sowing of rice nursery (RGL 2537 and Swarna Mashoori), groundnut (JL 24), green gram (MGG 295 and LGG 450 and 460) and red gram (LRG 30 and 41) with realized rainfall during last week and also with possibility of good amount of rainfall for the next five days.
- Farmers in Chiththoor are advised to undertake sowing of groundnut upto July end with realized rainfall during last week and also with possibility of good amount of rainfall for the next five days and sowing of castor, red gram, horse gram and tomato in August.
- As rain/thundershowers are likely at a few places over Coastal Andhra Pradesh and Telangana for the next 24 hours and at many places thereafter, postpone irrigation to sugarcane. Apply irrigation to the crop in Rayalaseema as rain/thunder showers are likely at a isolated places for the next three days.
- Weather conditions are congenial for mild attack of jassids and fruit borer in bhindi in and around Hyderabad. Monitor the crop for the pests and spray Dimethoate @ 2 ml and Quinalphos @ 2 ml/litre of water, respectively to control the pests.

Kerala

Weather Forecast

- Rain/thundershowers are likely at many places over the state.

Advisories

- Rain/thundershowers are likely to occur at many places for the next three days. Farmers are advised to postpone irrigation to the crops.
- Application of fertilizers and pesticides and intercultural operations may be undertaken after spells of rain.
- Due to continuous dry spell upto second week of July, rice transplanting could not be undertaken in and around Wayanad and Idukki. Farmers are advised to undertake transplanting of rice in view of sufficient amount of rainfall received during last week and also with possibility of good amount of rainfall for the next five days. Due to delay in transplanting, adopt closer planting and application of additional 5 kg N/ha to reduce yield loss.
- In Malappuram, Kozhikode, Kannur and Kasaragod, scanty rainfall was received during last week. As there is a possibility of good amount of rainfall for the next five days, farmers are advised to undertake intercultural operations and application of fertilizers in rice after receipt of rains.
- Farmers in Palakkad, Thrissur, Ernakulam and parts of Malappuram are advised to undertake sowing of bitter melon, Dolichos bean (DL 6 and Revathy), Amaranthus (CO 6) and cowpea with realized rainfall during last week and also with possibility of good amount of rainfall for the next five days. Intermittent rains received during these days are also useful in tapping rubber milk for 15-20 days as compared to 5-10 days during heavy rainfall periods.
- In view of sufficient amount of rainfall received during last week and also with possibility of good amount of rainfall for the next five days, farmers in Thiruvananthapuram, Kollam and Pathanamthitta are advised to complete transplanting of rice. Due to delay in transplanting with aged seedlings, adopt closer planting and application of additional 5 kg N/ha to reduce yield loss. Late transplanting may also lead to the attack of gall midge. Monitor the crop for the pest and undertake plant protection measures to control the pest.
- Attack of mahali disease is reported in arecanut in Thrissur. Apply 1% Bordeaux mixture after spells of rain to control the disease.

Karnataka

Weather Forecast

- Rain/thundershowers are likely at many places over Coastal Karnataka, and isolated rain / thundershowers are likely over the rest of the state.

Advisories

- Farmers in Dharwad, Haveri, Belgaum and Gadag districts who could not undertake sowing of maize, cotton and chillies due to insufficient rainfall are advised to undertake sowing of cowpea, black gram, sunflower, millets like ragi and minor millets like foxtail millet and varagu with realized rainfall during last week and also with possibility of good amount of rainfall for the next five days.
- Farmers in Bidar and Hubli region are advised to undertake sowing of red gram (Maruti), bajra and spreading groundnut till the end of July with realized rainfall during last week and also with possibility of good amount of rainfall for the next five days and niger (No 71) or sunflower upto second week of August as late kharif crops.

- In view of sufficient amount of rainfall received during last week, farmers in Gulbarga and Raichur districts are advised to start sowing of cotton (Bt cotton), red gram (GS 1, Maruti and Asha) and bajra (WCC 75 and ICTP) upto second week of August and sunflower during second week of August.
- Due to continuous dry spell upto second week of July, rice transplanting could not be undertaken in Udupi and Dakshin Kannada. In view of sufficient amount of rainfall received during last week, farmers are advised to undertake transplanting the aged seedlings of rice with machine transplanter. If nursery is not raised, undertake direct drum seeding of rice. Dry spell and dry weather also favoured the attack of case worm in rice. Undertake plant protection measures to control the pest. Also undertake planting of cashew and banana with the realized rainfall and also with possibility of good amount of rainfall for the next five days.
- There was sufficient amount of rainfall in Mysore and Tumkur districts during last week and also possibility of good amount of rainfall for the next five days. Farmers are advised to undertake sowing of ragi (Indaf 8, MR 1, 6 L 5, HR 911 and CPU 28) upto July end and sunflower (KBSH 41 and 44) and short duration pulses like green gram, black gram, cowpea and horse gram upto next month. With the receipt of water from KRS, undertake nursery sowing of rice with short and medium duration varieties like Dhanu (KMP 101), BR 2655, ET 8116, MTU 1101, IR 20 and Rasi upto July end.
- Farmers in Chitradurga are advised to undertake sowing of groundnut, castor, red gram, maize, sunflower, ragi and rice with realized rainfall during last week. Also apply fertilizers and manures to orchard crops (pomegranate, sapota and mosambi) as there is sufficient moisture in the field
- Postpone irrigation to sugarcane in coastal Karnataka as rain/thundershowers are likely at many places and apply irrigation over South Interior Karnataka and North Interior Karnataka as rain/thundershowers are likely at isolated places for the next three days.
- Weather conditions are congenial for the attack of leaf spot and downy mildew in vegetable crops in Mysore and Mandya. Monitor the crops for the diseases and undertake plant protection measures.

Maharashtra

Weather Forecast

- Rain / thundershowers are likely at many places over Konkan & Goa and at a few places over rest of the State.

Advisories

- Konkan has received sufficient rain during last few days as well as during the season and is also likely to receive good rain during next five days. Farmers are advised for transplanting of rice in Konkan.
- Districts of East Vidarbha received sufficient rain during last week and are also likely to receive rain during next five days. Conditions are favourable for transplanting operations of rice in most parts of East Vidarbha (Gondia, Bhandara, Gadchiroli and Chandrapur districts). For sowing of soybean in Eastern Vidarbha TAMS-38, JS-335 & PK-472 varieties may be selected.
- Districts of West Vidarbha except Akola, Amravati and Buldana received rain during last week and are likely to receive rain during next five days. Farmers are advised to grow early maturing varieties of red gram like ICPL-87 in medium soil with 40-45 kg seeds / ha at 30 X 10 cm distance or AKT-8811 with 20-30 kg seeds per hectare at a distance of 30 X 10 cm. For medium to black soil select a variety from BDN-2, BSMMR-736. Use 12-15 kg seeds /ha. Sowing may be done at 60 X 20 cm or 75 X 30 cm distance. For black soil select a variety from ICPL-87119(Asha), C-11. Use 12-15 kg seeds / ha. Sowing may be done at 60 X 30 cm distance.
- Farmers of Akola, Amravati and Buldana districts of West Vidarbha are advised to prepare land with limited rain during last week and expected rain during next five days and wait for sufficient rain for sowing of kharif crops mainly short duration red gram.

- Sowing is also delayed in all the districts of Marathwada (worst affected subdivision in the country) due to continuous dry spell. Aurangabad, Beed, Jalna, Latur and Osmanabad districts are expected to receive 4 to 6 cm and Parbhani and Nanded districts are expected to receive 6.5 to 8.5 cm rain during next five days. Farmers of this region are advised to prepare land with limited rain during last week and expected rain during next five days and wait for sufficient rain for sowing of short duration kharif crops (hybrid bajra, sunflower and inter crops like tur + soybean, bajra + tur, castor + tur and castor + sesame)
- Sowing is also delayed in Madhya Maharashtra except Kolhapur and Satara districts which received sufficient rain to carry out sowing / transplanting operation. Even though Kolhapur and Satara received deficient rain during last couple of weeks but these districts are expected to receive 9 to 11 cm rain during next five days which will be sufficient for normal agricultural activities.
- Utilising rain during earlier weeks and expected 4 to 5 cm rain during next five days sowing may also be continued in Nandurbar and Nashik districts. For sowing select the varieties like PA 402, American PH 348, Phule 492 or 388, JLH 168, JLA 794, Ganga, Parbhani Sona for kharif Cotton, Phule Pragati (JL-24), SB-11, TAG-2, Phule Unap (JL-2 (1) & Phule Vyas for Kharif groundnut, BDN-1, BDN-2 and ICPL-87119 for tur, EC-68414, SS-56 & Bhanu for sunflower, DS-228, MACS-124, JS-335 for soybean, CSH-9, CSH-14, SPV-462, SPV-475 and SPV-946 for kharif sorghum, Shradha, Saburi, MH-179, WCC-75, ICTP-8203 and ICMV-211 for bajra, S-8, M-2 and BM-4 for green gram and T-9 and TPU-4 for black gram.
- Sowing is also delayed in remaining districts of Madhya Maharashtra i.e. Ahmednagar, Dhule, Pune, Jalgaon, Sangli and Solapur due to continuous deficient rain. However, these districts may receive 3 to 5 cm of rain during next five days. Farmers of this region are advised to prepare land with expected rain during next five days and wait for sufficient rain for sowing of short duration kharif crops (cotton, soybean, sunflower, tur, horse gram and castor and inter crops like sunflower + tur, tur + cluster bean etc.).

Gujarat

Weather Forecast

- Rain/thundershowers are likely at a few places over Gujarat region and at isolated places over Saurashtra and Kutch.

Advisories

- Even though the districts of South Gujarat region received no significant rain during last week, these districts are likely to receive rain during next five days. Farmers are advised to continue preparation of land and sowing of kharif crops in the districts of this region.
- As the districts of Saurashtra and Kutch and North Gujarat Region received no significant rain during last week and are likely to receive only 2.5 to 5 cm rain during next 5 days, farmers are advised to prepare land with expected rain during next five days but wait for sufficient rain for further sowing of kharif crops.
- For sowing of crops, farmers are advised to select varieties from GG-2 (erect) and GG-20 (semi spread) for kharif groundnut, HC-4, 6, 8 and 10 for Hybrid varieties of cotton, Guj PP-1, 100, 101 for pigeon pea, certified varieties like GHB- 315, 316, 577, 558 and MH-169 and MH-179 (seed rate 3.75 to 4.75 kg / ha) for kharif bajra. Also undertake sowing of maize and pulses. Early maturing cultivars like Sukhvel-20, GR-3, 4, 6, 7 and late maturing cultivars like GR-101, 102, 103, 104, Narmada and Masuri may be selected for transplanting of kharif rice.
- Also apply irrigation to save already sown crops in North Gujarat Region and Saurashtra and Kutch due to lack of rain during last week and less possibility of occurrence of sufficient rain during next five days.

Agromet Advisory for Normal Areas

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

Punjab

- Isolated rain/thundershowers are likely over the state.

Advisories

- Complete transplanting of rice varieties like Basmati 370 and Basmati 386 and cowpea 263 using 8-10 kg seeds per acre and radish varieties Punjab Ageti & Pusa Chetki in western zone and continue transplanting in the remaining areas of the State by utilizing the realized rainfall.
- Complete sowing of soybean (SL-525, SL-295, PK-416), groundnut (M-37), maize (JH-3459) and blackgram (Mash-48, Mash-338, Mash-11) in Ludhiana, Hoshiarpur, Nawanshahr & Kandi area.
- As there was no significant in most of the districts of the State during last week and rain/thundershowers are likely at isolated places over the State during next three days, farmers are advised to apply irrigation to the standing crops like sugarcane, vegetables and early sown cotton, groundnut and maize.
- Postpone irrigation in Hoshiarpur district as there was excess rainfall during last week and also arrange for adequate drainage facilities in the fields of early sown maize and cotton fields as these crops are susceptible to waterlogging.

Haryana

Weather Forecast

- Rain/thundershowers are likely at a few places over Haryana

Advisories

- Farmers are advised to complete transplanting of rice.
- Farmers in western zone are advised to sow bajra, guar and pulse crops in rainfed areas with certified seeds for bajra (HHB 60, HHB 67, HHB 67 improved, HHB 117, HHB 146, HC 10 & HC 20); guar (HG 75, HG 365 & HG 563); groundnut (MH 2, MH 4, M 45, M13), maize(HM1, HM2, HM4, HM5 & QPM1) and moong (Asha & Muskan).
- Undertake direct sowing of radish varieties i.e. Pusa Chetki and Punjab Ageti.
- As there was no significant rainfall in most of the districts except Faridabad, Hissar, Jhajjar, Karnal, Panipat, Rewari, Sonapat and Yamunanagar districts during last week and rain / thundershowers are likely only at a few places over the State during next three days, apply irrigation to sugarcane, early sown cotton, maize, guar and bajra crops. Postpone irrigation in the above mentioned districts and also provide adequate drainage facilities to avoid water logging in early sown cotton and maize fields.
- Monitor the sugarcane crop for shoot borer in western zone & if exceeds economic threshold level, apply 13 kg furodon 3G or 8 kg phorate per acre with remaining dose of urea along the furrows on a non rainy day.

Rajasthan

Weather Forecast

- Isolated rain/thundershowers are likely over the state.

Advisories

- Undertake intercultural operations in already sown *kharif* crops in and around Karauli and Dholpur.
- Weather conditions are favourable for mild incidences of white grub in groundnut. Monitor the crop for the pest. To control the pest, spray Endosulfan @ 2.5 litres/ha on a non rainy day in Dausa and Jaipur.
- Undertake intercultural operations and application of fertilizers in already sown bajra (fodder), cowpea and red gram in Barmer, Churu, Jalore, Jodhpur and Pali districts and in bajra, sorghum (grain and fodder), til and cluster beans in Sawai Madhepur, Karauli, Dholpur and Bharathpur districts.
- Undertake thinning in groundnut, red gram and cotton to maintain optimum population in Sawai Madhopur, Karauli, Dholpur and Bharathpur districts.
- Due to cloudy conditions, leaf spot disease may occur in groundnut in Dausa and Jaipur districts. Monitor the crop for the disease and spray Mancozeb @ 2 g/litre of water. Also monitor cluster beans for bacterial blight and spray Agromycin @ 0.3 g/litre of water.
- Vaccinate the cattle to save from infections/diseases like Black Quarter and FMD etc in Alwar, Sawai Madhopur, Karauli, Dholpur and Bharathpur districts

Uttar Pradesh

Weather Forecast

- Rain/thundershowers are likely at many places over West Uttar Pradesh during next 48 hours and decrease thereafter. Rain/thundershowers are likely at many places over East Uttar Pradesh till tomorrow and decrease thereafter.

Advisories

- Farmers are advised to drainout the excess water from rice field and nursery beds as excess or heavy rainfall occurred in Bahraich, Ballia, Balrampur, Basti, Faizabad, Farukkabad, Gorakpur, Hardoi, Kheri, Lucknow, Maharajganj, Santravidasnagar, Siddarthnagar, Sitapur, Unnao and Sultanpur in East U.P and Bairelly and Shajahanpur districts in West U.P. during last week. Sowing/transplanting may be continued after current spells of rain as heavy rain is expected.
- As rain/thundershowers are likely at many places over the State for the next 48 hours and decrease thereafter along with isolated heavy to very heavy rainfall in next 24 hours, postpone irrigation to sugarcane and early sown *kharif* crops. Provide adequate drainage facilities to avoid waterlogging in standing crop fields.
- Continue field preparation after current spells of rain and sowing of tur, bajra, urd, moong, maize and til.
- Weeding, hoeing, intercultural operations and application of fertilizers/pesticides in early sown *kharif* pulses, maize, sugarcane and crops may be done after current spells of rain.

Himachal Pradesh

Weather Forecast

- Isolated rain / thundershowers are likely over the state.

Advisories

- As Bilaspur, Hamirpur, Kangra, Kullu, Mandi, Solan and Una districts received sufficient rain during last week, postpone irrigation to the standing crops. As the remaining districts received no significant rain during last week and rain is likely to occur only at isolated places for next three days, apply irrigation to the crops.
- Prepare land and undertake sowing / transplanting of rice.
- Continue preparation of land for sowing of maize by ploughing and mixing biological manures properly. Undertake sowing in lower valley with the help of recent rain.

- There is chance of attack of red beetle and fruit fly in cucurbits in Sub-mountain & Low hills Sub tropical zone. If infestation crosses economic threshold level, spray malathion 1 ml / litre +50 gram gur or sugar to control these insects.
- The weather is congenial for spread of fruit rot in tomato, chilli and Shimla mirch in Sub-mountain & Low hills Sub tropical zone. For control apply Dithane M-45 @ 2-3 g per litre of water in 10-15 days interval.
- Attack of cut worm is reported in bhindi in Sub-mountain & Low hills Sub tropical zone. Drench the fields with chlorpyrifos @ 1ml per litre of water.
- There is chance of attack of fruit borer and blight and leaf spot diseases in tomato in High Hill Temperate Wet Zone. To control the fruit borer in Tomato, spray 300 ml endosulphan @ 200 liters of water. To control the blight and leaf spot diseases in tomato, remove the yellowish leaves from the plant and spray 600 g Mancozeb or copper axicloride in 200 liters of water in the evening.
- There is chance of attack of San Joje Scale in apple. To control the San Joje Scale in apple spray 400 ml Chlorpyrifos per 200 liters of water only on the affected plants.
- Plucking of tea leaves can be continued at 8-10 days interval.
- Mealy bug is appearing in the tea plantation. For control spray Deltamethrin (Decis 2.8 EC) @ 1340 ml in 750 litres of water for one hectare. Spray immediately after plucking.
- It is optimum time for transplanting of summer annuals viz. Gladiolus, glardia, gomphrina, rudevekia, celosia, balsam cleome, kochia and zenia. Transplanting may be done in the evening.
- Weather is conducive for appearance of aphids in rose in Mild Hills Sub Humid Zone. For control, spray rogor @ 1 ml per litre of water. For the control of green beetle in roses, spray metasytox @ 1 ml per litre of water.
- Aphids are also appearing in gladiolus in High Hills Temperate wet zone. For control, spray metasytox @ 0.05%. For control of blue beetle in godetia spray metacid @0.1%.
- It is optimum time for plantation of evergreen plants like Mango, litchi, guava, citrus, loquat and amla in Sub-mountain & Low hills Sub tropical zone. Plant the saplings in 3x3x3 cubic feet pit. Add 40-50 kg FYM + 300g SSP + chlorpyrifos @ 10ml / 10 litres of water per pit before planting.
- The ensuing weather is conducive for the attack of leaf miner in new growth of citrus in Sub-mountain & Low hills Sub tropical zone. For its control, spray 10 ml Matasytox or Malathion @ 10 ml in 10 litres of water. The new growth appearing below bud union may be cut.
- There is chance of attack of flower and fruit borer in Pomegranate in Mild Hills Sub Humid zone and High Hills Temperate wet zone. For the control of flower and fruit borer in Pomegranate, spray 200 ml Ripcard (sypermathrine 10 EC) or 80 ml Challenger (sypermathrine 25 E.C) or 200 ml Monocrotophos @ 200 liters of water at the interval of 20 days.

Uttarakhand

Weather Forecast

- Rain/thundershowers are likely at many places over the state during next 48 hours and decrease thereafter.

Advisories

- Farmers are advised to continue sowing of groundnut, maize, amaranthus, finger millet, soybean and vegetables in Tehri, Haridwar, Dehradun, Pithorgarh, Nainital and Pauri districts after current spells of rain. Complete transplanting of rice in Uttam singh nagar and continue transplanting in the remaining districts.
- Farmers are advised to continue sowing of moong varieties like Pant Moong-2, Pant Moong-4, Narendra Moong-1 and complete sowing of soybean in Uttam Singh Nagar district.

- As rain/thundershowers are likely at many places over the State for the next 48 hours and decrease thereafter along with isolated heavy to very heavy rainfall in next 24 hours, postpone irrigation to sugarcane, vegetable crops and orchard trees. Also provide adequate drainage facilities to avoid waterlogging in the standing crops.
- Undertake intercultural operations in early transplanted rice, orchards and sugarcane after current spells of rain to keep the field weed free.

Jammu & Kashmir

Weather Forecast

- Isolated rain/thundershowers are likely over the state.

Advisories

- As rain/thundershowers is likely only at isolated places over Jammu & Kashmir during next three days, apply irrigation to the standing crops.
- Undertake intercultural operations, application of fertilizers and pesticides to the standing crops
- Undertake sowing of kale, knoll-khol, cabbage and cauliflower and harvesting of cole crops like radish, carrot and also onion and garlic in Kashmir division.
- Complete planting of fodder maize and MP Chari slips in Kashmir division.
- Complete transplanting of rice with late sown varieties and basmati (Basmati 370 and Saanwal) in Jammu division without further delay. Undertake transplanting of cauliflower. Collect and destroy yellow vein mosaic infected bhindi plants.

Delhi

Weather Forecast

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

Advisories

- As rain/thundershowers is likely only at isolated places over Jammu & Kashmir during next three days, apply irrigation to the standing crops.
- Undertake intercultural operations, application of fertilizers and pesticides to the standing crops
- Undertake sowing of kale, knoll-khol, cabbage and cauliflower and harvesting of cole crops like radish, carrot and also onion and garlic in Kashmir division.
- Complete planting of fodder maize and MP Chari slips in Kashmir division.
- Complete transplanting of rice with late sown varieties and basmati (Basmati 370 and Saanwal) in Jammu division without further delay. Undertake transplanting of cauliflower. Collect and destroy yellow vein mosaic infected bhindi plants.

Under the prevailing weather conditions there are chances of small-scale breeding along the **Indo-Pakistan** border.
As part of the early warning system, regular surveys are recommended.

Southern Region (Tamilnadu)

Tamilnadu

Weather Forecast

- Isolated rain/thundershowers are likely over the State.

Advisories

- Apply irrigation to groundnut, sugarcane and pulse crops as there was no significant rainfall during last week except in Nilgiri, Salem, Thanjavur, Trichy and Krishnagiri and rain/thundershowers likely at isolated places over the State. Postpone irrigation in the above districts as there was excess rainfall during last week.
- Continue transplanting 24 days old seedlings of *kuruvai* rice in the main field in Thanjavur, Trichy, Karur, Nagappattinam and Perambalur districts.
- Undertake land preparation and sowing of groundnut, pulses and maize in Northwestern zone (in and around Namakkal). Select short duration varieties for groundnut like VRI-6, 7, TMV-13, CO-7 and Vamban-5. Monitor turmeric for leaf spot due to more humidity and spray Mancozeb @ 2.5 g/litre of water.
- The *Trypanosoma* infection may flare-up in cattle during this period in Chennai, Cuddalore, Kanchipuram, Thiruvarur, Thiruvannamalai, Vellore and Villupuram districts. As the disease is transmitted by vectors (flies) it is advisable to avoid stagnation of water near the cattle shed and maintain sanitation.
- Monitor sorghum for stem borer in Thirunelveli, Tuticorin and Virudhunagar districts. Spray Carbaryl 4% granules to control the pests.
- Undertake land preparation and sowing of bhindi in and around Dindigul.

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

Assam

Weather Forecast

- Rain/thundershowers are likely at many places over the State during next 48 hrs and decrease thereafter.

Advisories

- As rain / thundershowers are likely at many places for next 48 hours with isolated heavy to very heavy rainfall during next 24 hours over the State, postpone irrigation and intercultural operation to the crops. Provide adequate drainage facilities to avoid water logging.
- Maintain 3 – 5 cm of water in regular *ahu* rice field.
- Provide mechanical support to the sugarcane crops to prevent lodging.
- Infestation of hispa and stem borer and diseases like sheath blight and blast is reported in regular *ahu* rice from a few localities. There is also chance of more occurrence of these insects and diseases due to favourable weather condition. For control of pests like Hispa, stem borer etc., Monocrotophos or Phophomidion @ 5ml per litre of water may be sprayed and for sheath blast & blast diseases use Bavistan @ 1gm/litre of water to control the disease.
- There is more chance of attack of fruit fly, fruit borer and powdery mildew in vegetables as the weather condition is favourable. For control of fruit fly and fruit borer in summer vegetables, Malathion 50 EC @ 2.5 ml per litre of water should be applied. Also for control of disease such as powdery mildew apply bavistan @ 2.5 ml / litre of water or Diathine Z-78 or Captaf @ 2 g / litre of water.
- Undertake sowing and application of pesticides after current spells of rain.

- Prepare land and undertake transplanting of *Sali* rice. Recommended paddy varieties are Ranjit, Mahsuri, Bahadur, Kushal etc. Before uprooting the seedlings from the nursery, apply Carbofuran @ 3.0 g/m² area in the seedbed to protect the seedlings from stem borer, gall midge, leaf folder etc in the main field.
- Prepare land and sow cauliflower, tomato, cucumber, capsicum etc. as early season crop after current spells of rain. The early varieties of cauliflower like Pusa Keteki, Pusa Deepali, Early Kuwary, Early Chinese Prince, Jowahar Moti etc. can be sown within 15th July to 15th August.
- Prepare the well-drained sandy loam soils for sowing of sesamum. Select recommended varieties of sesamum for this zone like Madhabi, Gauri, Binayak, Punjab Til No-1 etc.

Arunachal Pradesh

Weather Forecast

- Rain/thundershowers are likely at many places over the state.

Advisories

- As rain / thundershowers are likely at many places with isolated heavy to very heavy rainfall during next 48 hours over the State, postpone irrigation to the millet and maize crops. Provide adequate drainage facilities to avoid waterlogging.
- Undertake intercultural operations, application of fertilizers and pesticides in ginger, wet seeded rice, *jhum* rice and millets after current spells of rain.

Bihar

Weather Forecast

- Rain/thundershowers are likely at many places over the State till tomorrow and decrease thereafter.

Advisories

- Farmers are advised to drainout excess water in already sown *kharif* rice nursery beds and continue transplanting after current spells of rain.
- Sowing of *kharif* vegetables like brinjal, onion and chilies may be sown in nursery bed after current spells of rain.
- As rain/thundershowers are likely at many places over the State till tomorrow and decrease thereafter with isolated heavy to very heavy rainfall during next 24 hours, postpone irrigation to early sown maize, sugarcane and vegetables. Provide adequate drainage facilities to avoid waterlogging due to heavy rainfall.
- There is mild chance of attack of red spider mite in vegetables. If attack crosses economic threshold level, for controlling the red spider mite spray the crop with sulfex @ 3kg/ha or share @ 3 kg/ha in 700 litre of water after current spells of rain.
- There is mild chance of attack of mealy bug and anthracnose in fruits. If attack crosses economic threshold level, spray the crop with Endosulfan @ 1.5 ml + Chlorthalonil @ 2g + Planofix @ 1 ml per litre of water after current spells of rain.
- Monitor the sugarcane crop for shoot borer incidence. If attack crosses economic threshold level, apply pesticides after current spells of rain.
- Undertake intercultural operations, spraying, application of fertilisers after current spells of rain.

Jharkhand

Weather Forecast

- Rain/thundershowers are likely at many places over the State till tomorrow and decrease thereafter.

Advisories

- Farmers are advised to prepare main field and undertake transplanting of *khariif* rice in low lands of all the zones.
- Continue land preparation and sowing of *khariif* maize and arhar in all the districts except Sarikhela, East and West Singhbhum districts.
- Transplanting of tomato may be continued with upland varieties like Pusa rubi, Pusa early, selection-12 etc. in Dumka and adjoining districts.
- As rain/thundershowers are likely at many places over the State during next 3 days, postpone irrigation to early sown maize, arhar, urd and vegetables.
- Undertake intercultural operations, spraying and application of fertilisers after current spells of rain in early sown maize, arhar, urd and vegetables after current spells of rain.

Sikkim

Weather Forecast

- Rain/thundershowers are likely at many places over the State till tomorrow and decrease thereafter.

Advisories

- As rain/thundershower are likely at many places over the State for next three days, postpone irrigation to orange, large cardamom, ginger and vegetable crops. Arrange for drainage facilities to avoid water stagnation due to excess water.
- Monitor orange for trunk borer and undertake plant protection measures after spells of rain to control the pest. Also undertake deshooting and debugging.
- Gap filling / replanting may be continued in newly planted large cardamom in mid and low hills up to August. Planting materials may be selected from high yielding sucker nurseries free from pest / disease infestation or diseases free high yielding elite garden. Chirke and foorkey infected plants may be destroyed by uprooting / burial at regular intervals in the pits. Regular inspections may be carried out to observe caterpillar/ shoot borer/shoot fly incidence if any and may be hand picked and destroyed mechanically. 1% Bordeaux mixture or copper oxychlorid @ 3gm/ltr of water may be sprayed to the cardamom plants after spells of rain to protect from fungal diseases.
- Continue transplanting of rice in Medium and High hills by utilizing the monsoon showers.
- Undertake earthing up and application of compost in seed potato in high hills after spells of rain.
- Monitor ginger for bacterial wilt in Medium and High hills and collect and destroy the affected plants completely to prevent further spread of the disease.

West Bengal

Weather Forecast

- Rain/thundershowers are likely at many places over Sub-Himalayan West Bengal till tomorrow and decrease thereafter. Rain/thundershowers are likely at a few places over Gangetic West Bengal.

Advisories

- As most of the districts of West Bengal received sufficient rain during last week and rain is also likely to occur for next three days, postpone irrigation and intercultural operation to the crops. Arrange for draining out excess water from the fields in Sub-Himalayan West Bengal as isolated heavy to very heavy rainfall is likely for next 24 hours.
- Maintain 3 – 5 cm water in the *aus* rice field.
- Undertake application of fertilizer, plant protection measures and sowing of crops after current spells of rain in Sub-Himalayan West Bengal and on a non-rainy day in Gangetic West Bengal.
- In late sown direct seeded *aus* rice, apply last dose of top dressing (@ 3 to 4 kg Urea per Bigha).
- In the present weather situation, there is a chance of infestation of bacterial leaf blight in *aus* rice in New alluvial zone and stem borer in Red Lateritic zone. To prevent bacterial leaf blight, apply Streptocycline (@1 gm per 10 litres of water). Repeat the spraying after 10 days. For controlling stem borer, survey the field and if 5% or more dead hearts are seen apply 3% Carbofuran (Furadon) granules @ 1.5 – 2 kg per bigha or Phorate (Thimet) 10G @ 1 kg per bigha.
- Due to cloudy weather and high humidity, attack of fruit rot due to fungus may be prevalent in pointed gourd. Remove the infected fruits from the land. Spray blitox (4 gm per lt) or blue-copper oxide.
- Land preparation and sowing of broadcasted *aman* rice may be undertaken. Select H.Y.V like Tilak, Kachhary, Patnai-23, Raghusal etc. Recommended varieties for those lands where water logging cannot take more than 6-8” are Pankaj, C.N-540, C.R- 1009, C.R-1010, C.R-1011, Sarnodhan. Complete nursery bed preparation for transplanted *aman* rice as early as possible. One kattah land is required for transplanting one bigha.
- Wherever rice nurseries are ready, undertake land preparation and transplanting of *aman* rice. Transplant 2 – 3 seedlings of 20 – 25 days in line at a distance of 20 cm from line to line and 15 cm from plant to plant.
- Undertake sowing of groundnut, pigeon pea and soybean after current spells of rain. Select varieties from B-7, UPS-A-120 etc. for pigeon pea and J.S.-2; Soyamax etc. for soybean.
- Prepare nurseries for early cauliflower. Treat the seeds before sowing. Cover the bed with polythene and ensure proper drainage. Select improved varieties of cauliflower like Kanwari, Jowhar, Moti, Early Patna etc.
- Undertake cultivation of tomato. Select improved varieties of tomato like Pusa Rubi, Pusa Early, S-2, Roma Super etc.

Central Region (Chhattisgarh, Maharashtra, MP & Orissa)

Chhattisgarh

Weather Forecast

- Isolated rain / thundershowers are likely over Chhattisgarh during next 24 hours and increase there after.

Advisories

- Provide mechanical support to sugarcane to avoid lodging.
- Farmers are advised to plough and prepare the fields weed free and undertake sowing / transplanting of rice. Under the present weather conditions undertake transplanting of 20 – 25 days old seedlings of rice. The spacing between plant and row should be 20 x 15 cm. For medium duration varieties two plants per hill and for hybrids one plant per hill should be transplanted.
- There is mild chance of attack of blast disease in rice nurseries. For protection of nursery from blast disease, spray Hinosan @ 0.2% or Civic @ 0.6% on a non-rainy day.
- Prepare nursery for chilli, tomato and brinjal and also early varieties of cabbage and cauliflower.

- Undertake sowing of okra as soon as possible. To save the crop from Yellow vein mosaic resistant varieties such as Pusa Vaibhav, Akra Anamika and Pusa Savani should be chosen. Also undertake sowing of cowpea and beans.
- Farmers are advised to prepare the fields and complete the sowing of soybean. Recommended varieties for this region are JS-335, Indira Soya 9, JS 80-21, JS 93-05.
- Prepare land and undertake sowing of groundnut and black gram in transmaharashtra belt of Chhattisgarh. Farmers are advised for sowing of maize, pigeon pea, green gram, urad and groundnut in the up land areas.
- Farmers are advised to undertake intercropping of pigeon pea with soybean. For better results, after every four rows of soybean, 2 rows of pigeon pea should be sown by maintaining 30 cm row to row distance.
- Incidence of hairy caterpillar and stem borer is reported in maize in Baster Plateau Zone. As there is more chance of attack of these insects, apply carbofuran 3G @ 5-6 kg / acre on a non-rainy day if infestation crosses economic threshold level.

Madhya Pradesh

Weather Forecast

- Rain/thundershowers are likely at many places over East Madhya Pradesh and at a few places over West Madhya Pradesh during next 48 hours and increase thereafter

Advisories

- Postpone irrigation in East Madhya Pradesh as rain/thundershowers are likely to occur at many places for the next three days. As there was no significant rainfall during last week and rain/thundershowers are at a few places over West Madhya Pradesh for the next three days, apply irrigation to sugarcane.
- Undertake intercultural operations, application of fertilizers and pesticides after spells of rain in East Madhya Pradesh and on a non rainy day in West Madhya Pradesh.
- Undertake land preparation and transplanting of rice in and around Jabalpur.
- Farmers in Ujjain, Ratlam, Shajapur, Rajgarh, Neemuch, Mandsaur, Indore and Dewas are advised to complete land preparation and sowing of maize, soybean, jowar and transplanting of vegetables like brinjal, tomato, cauliflower, chillies and onion and sowing of bottle gourd and bitter gourd in the main field by utilizing the monsoon showers. In early sown crops, undertake intercultural operations after spells of rain in East Madhya Pradesh and on a non rainy day in West Madhya Pradesh.
- Monitor cucurbitaceous crops for red pumpkin beetle and spray Methyl Parathion @ 2 ml/litre of water to control the pest. Spray the chemical after spells of rain in East Madhya Pradesh and on a non rainy day in West Madhya Pradesh.
- Due to rainy conditions, vaccinate the cattle to save from infections/diseases like Anthrax, Galgotu, Black Quarter and FMD etc. As high humidity prevails, keep the sheds aerated and dry in Ujjain, Ratlam, Shajapur, Rajgarh, Neemuch, Mandsaur, Indore, Jabalpur and Dewas.

Orissa

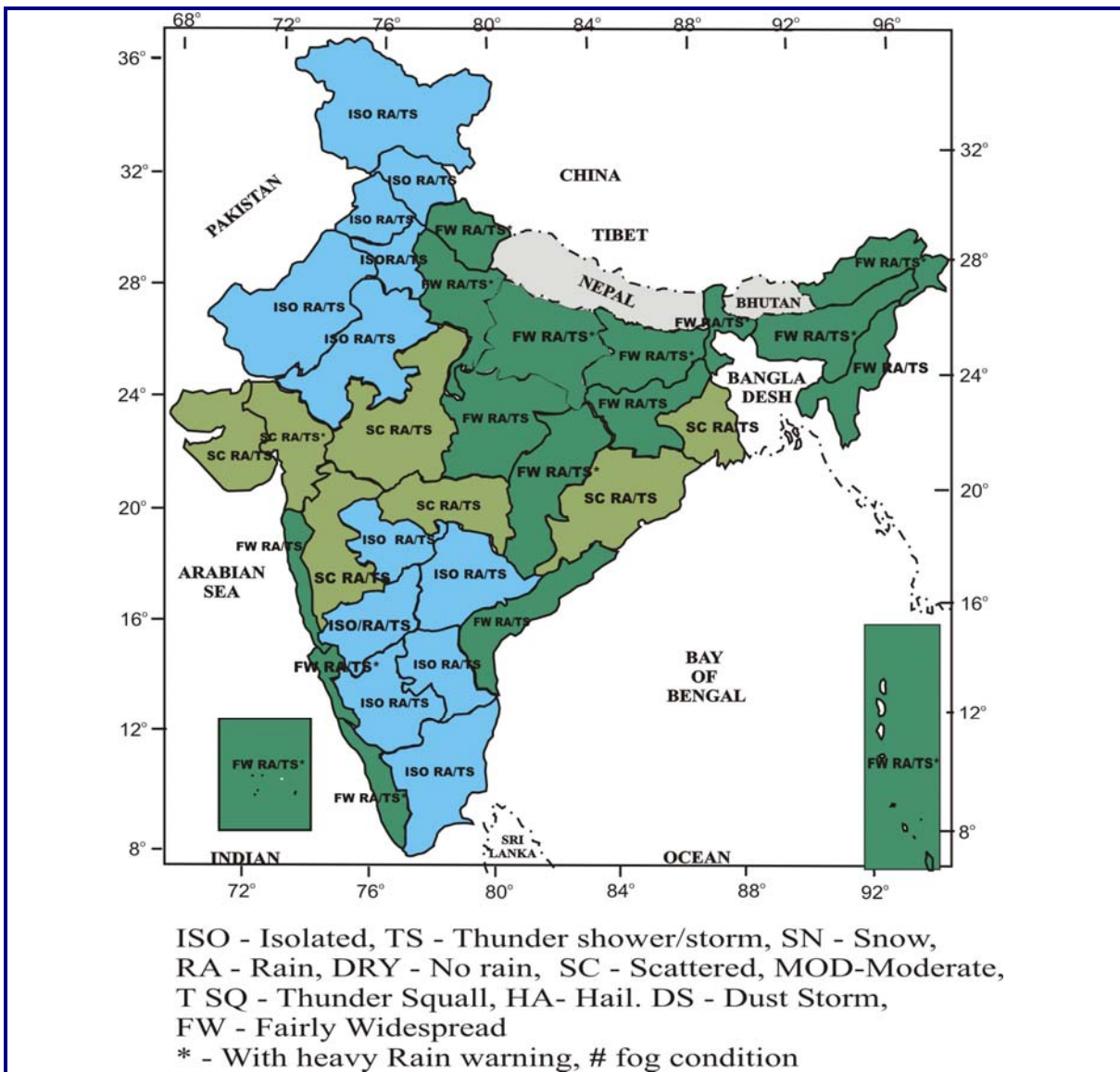
Weather Forecast

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

Advisories

- Farmers are advised to undertake transplanting of rice and also complete sowing of groundnut, cotton, sesame, maize and greengram and blackgram in uplands of East and South-Eastern coastal plain zone.
- Farmers are advised to undertake sowing of rice in the uplands of western Orissa, with extra early varieties like Kalinga-3 and Heera. If not available go for early duration varieties like Khandagiri, Pathara and Parijat.
- Rice seedlings in nursery bed are affected by blight in Keonjhar and adjacent districts and if required, spray the crop with 1 g Plantomycin + 2 g Copper oxy Chloride per litre of water on a non rainy day.

Forecast Valid upto 27th July, 2008



Salient weather features for the week ending 23/07/08

MAIN EVENTS OF THE WEEK

- The monsoon trough at mean sea level (msl) continued to remain close to the foothills of the Himalayas leading to fairly widespread rainfall with isolated heavy to very heavy falls along the foothills and adjoining northeastern states and Gangetic plains. Southeast peninsula also recorded good rainfall activity during the week.
- There was subdued rainfall activity over the remaining parts of the country.

METEOROLOGICAL ANALYSIS

- The axis of the monsoon trough at mean sea level (amsl) remained close to the foothills of the Himalayas during the week.
- An off-shore trough at mean sea level ran from Karnataka coast to Kerala coast. However, the mean sea level pressure gradient along the west coast continued to be weak.
- Last week's upper air trough from Sub-Himalayan West Bengal & Sikkim to north Bay of Bengal persisted on 17th and extended upto 2.1 Km above mean sea level. It was seen as a cyclonic circulation over West Bengal and adjoining Bangladesh extending upto mid-tropospheric level and tilting southwestward with height on 18th. It lay over Gangetic West Bengal and adjoining Jharkhand on 19th. It lay over East Uttar Pradesh and neighbourhood but extended upto 4.5 Km amsl on 20th and upto lower tropospheric levels during 21st to 23rd.
- Last week's trough in lower tropospheric levels from central Pakistan to northeast Arabian Sea with embedded circulation over central and southeast Pakistan persisted during the week.
- A cyclonic circulation lay over Jammu & Kashmir and neighbourhood on 17th in lower levels and moved away eastwards on 18th.
- Another cyclonic circulation lay over Haryana and neighbourhood in lower levels on 20th & 21st, over Uttarakhand and neighbourhood on 22nd & 23rd.

RAINFALL

- Widespread/ fairly widespread rain/thundershower occurred over Arunachal Pradesh, Assam & Meghalaya, West Bengal & Sikkim, Bihar, East Uttar Pradesh and Uttarakhand during many days of the week. The southwest Monsoon was active/vigorous for many days over Bihar & East Uttar Pradesh and for a few days over the remaining sub-divisions. Scattered to fairly widespread rainfall also occurred over Nagaland, Manipur, Mizoram & Tripura during the week.
- Fairly widespread rainfall occurred over Konkan & Goa, Kerala, Lakshadweep and Andaman & Nicobar Islands during many days of the week.
- Fairly widespread rainfall occurred over Vidarbha during second half of the week.
- Isolated to scattered rain/thundershower occurred over remaining parts of the country during many days of the week.

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 23RD JULY, 2008)

Rainfall was excess/normal in 13 and deficient/scanty in 23 out of 36 meteorological sub-divisions (Actual: 45.0 mm, Normal: 67.6 mm and Departure: -33%).

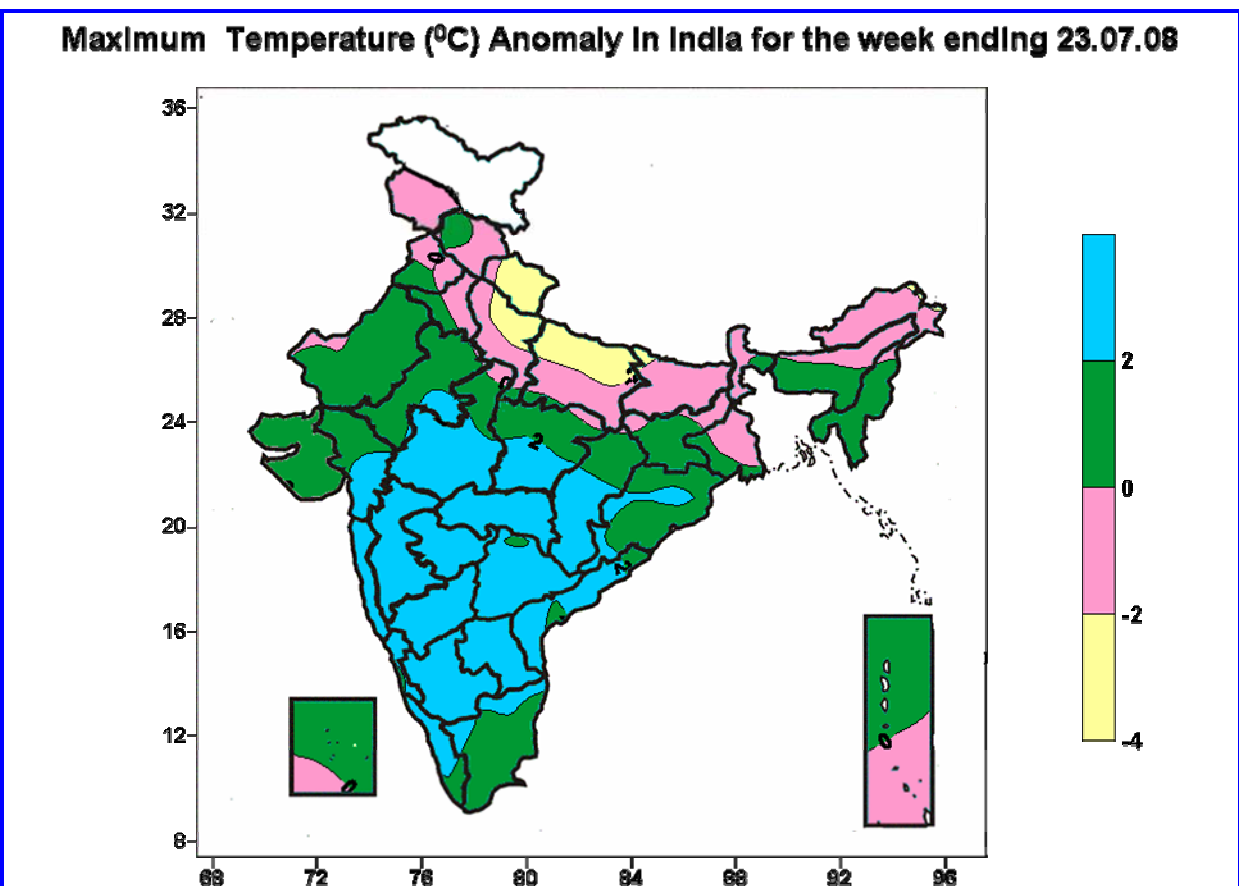
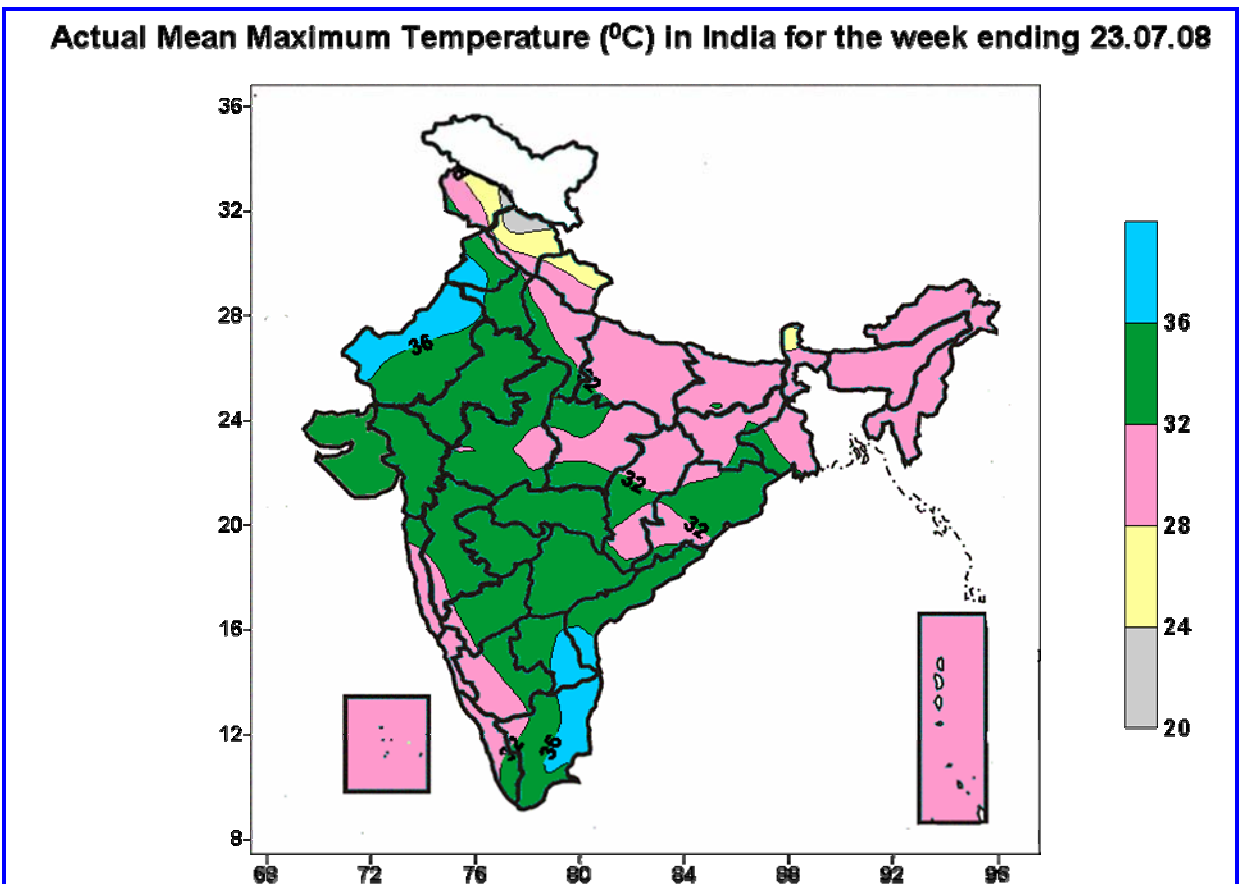
CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 23RD JULY, 2008)

Rainfall was excess/normal in 21 and deficient/scanty in 15 out of 36 meteorological sub-divisions. (Actual: 370.0 mm, Normal: 378.1 mm and Departure: -2%).

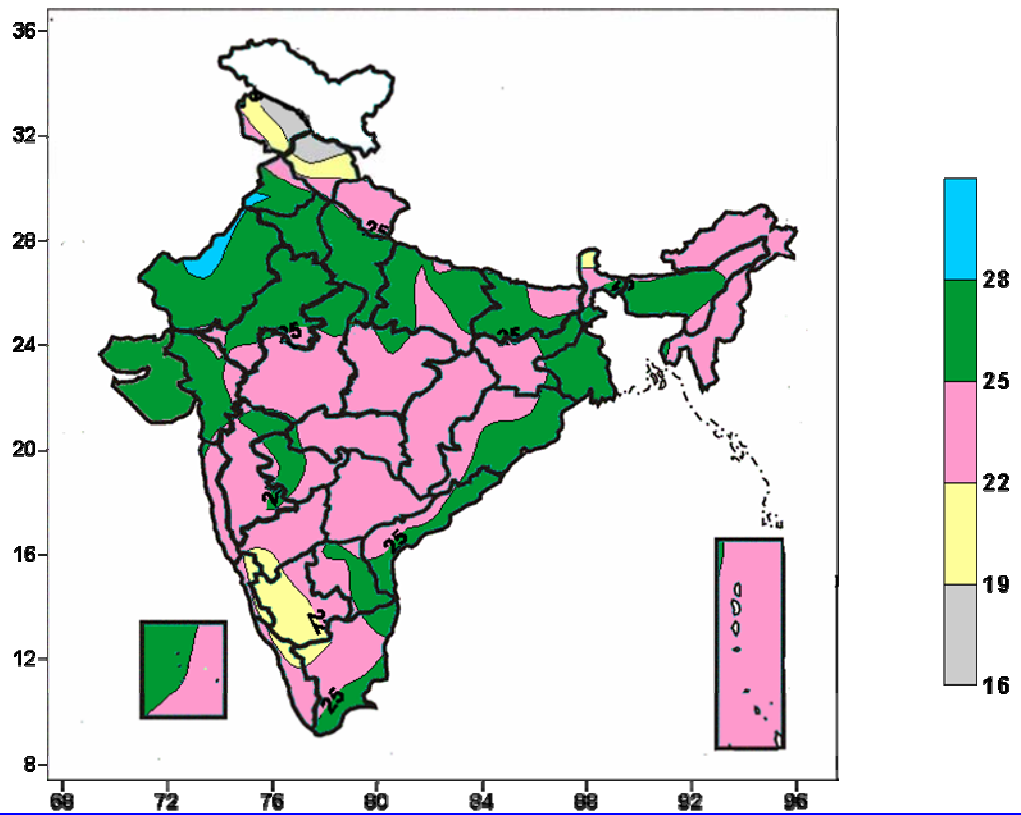
Outlook For The Week Ending On 30th July 2008

- Gradual southward shifting of monsoon trough likely. Consequently, a low pressure area is likely to form over westcentral and adjoining northwest Bay of Bengal around 27th.
- Under this scenario, the rainfall activity is likely to decrease gradually along the foothills, adjoining northern plains and northeastern states.
- The rainfall activity is likely to increase over the south and adjoining central India, specially north Andhra Pradesh, Maharashtra and Gujarat.

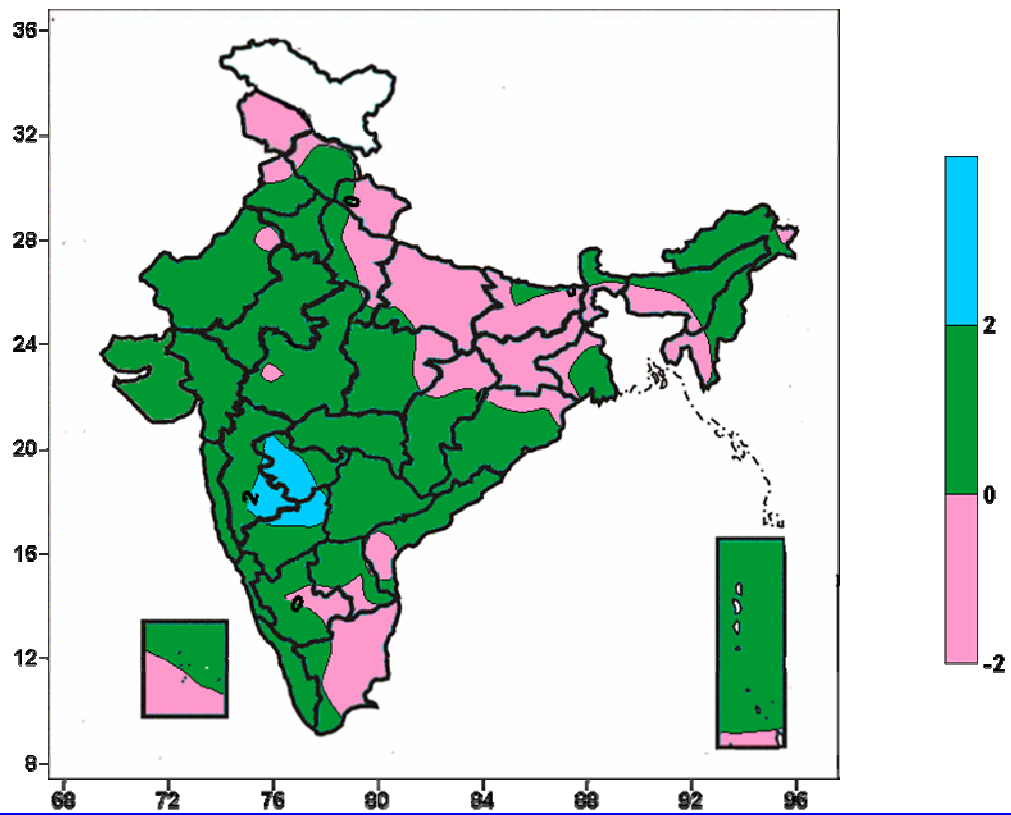
Contour maps for the week ending 23rd July, 2008



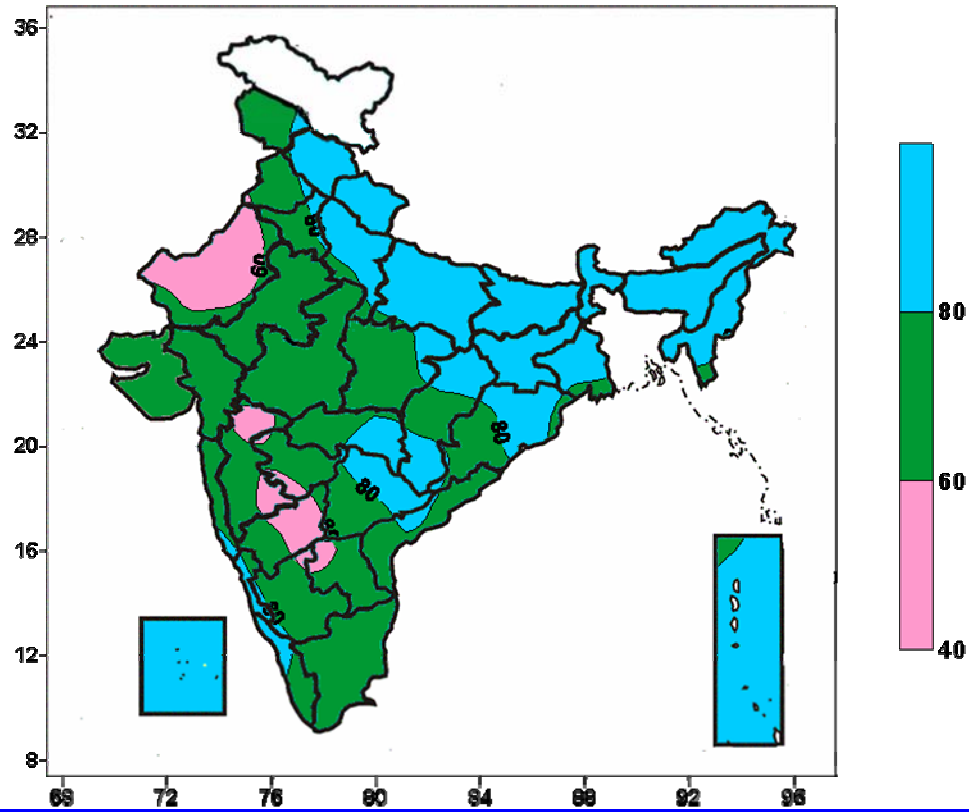
Actual Mean Minimum Temperature (°C) in India for the week ending 23.07.08



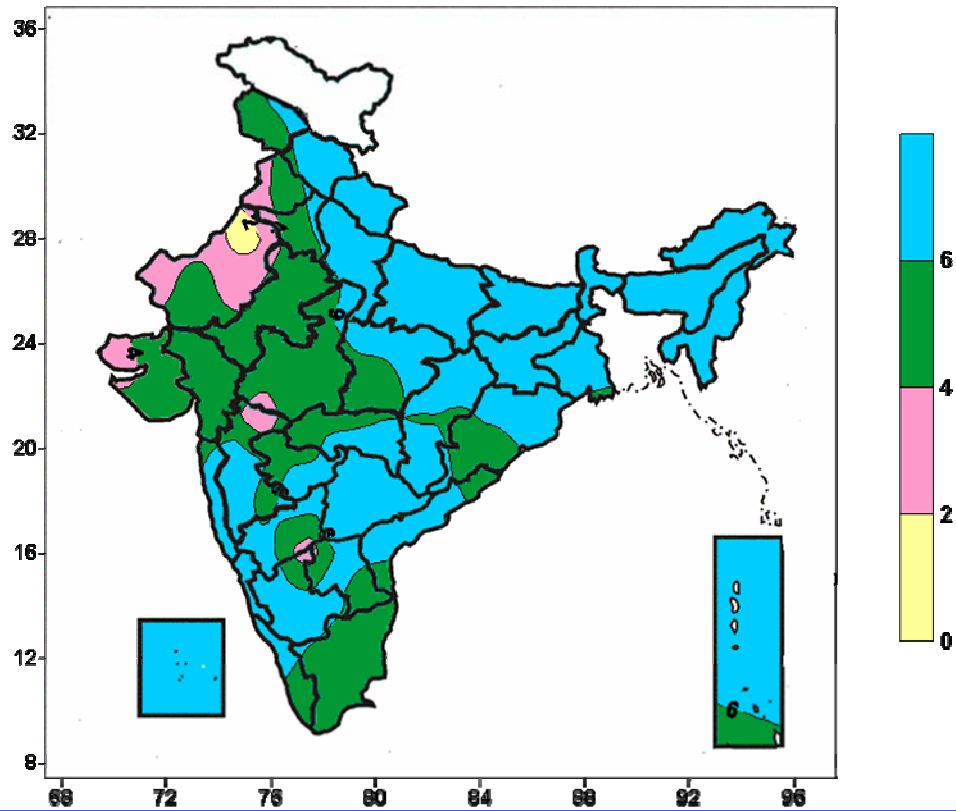
Minimum Temperature (°C) Anomaly in India for the week ending 23.07.08



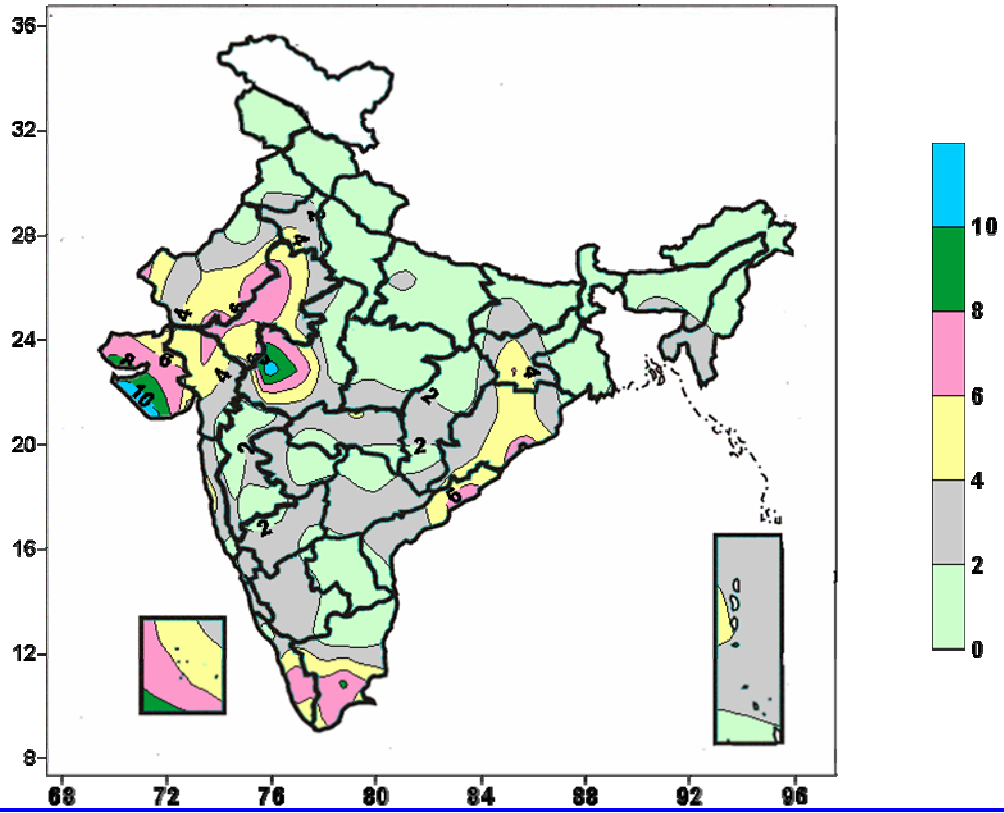
Relative Humidity (%) over India for the week ending 23.07.08



Cloud amount (okta) over India for the week ending 23.07.08



Wind speed (knots) over India for the week ending 23.07.08



CROP – STATE – STAGE

New Delhi

Vegetables	Arhar	Rice	Maize	Fodder Sorghum/Bajra
Vegetative / flowering / fruiting/ harvesting	Land preparation/ sowing	Land preparation and transplanting	Land preparation and sowing	Land preparation and sowing
Haryana				
Autumn sugarcane	Horticultural crops	Sunflower	Summer Pulses	Cotton
Vegetative	Vegetative	Vegetative/flowering	Vegetative	Land preparation /Sowing Early sown - vegetative
Rice	Maize/Bajra			
Transplanting	Land preparation /Sowing Early sown - vegetative			

Himachal Pradesh

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Potato	Rice	Apple	Maize
Vegetative / flowering / fruiting / harvesting	Vegetative	Sowing/transplanting	Fruit development	Land preparation for sowing
Tea				
Plucking				

Jammu & Kashmir

Vegetable crops	Rice	Pulses		
Vegetative	Vegetative	Vegetative		

Punjab

Autumn sugarcane	Horticultural crops	Summer pulses	Sunflower	Paddy
Vegetative	Vegetative	Vegetative	Vegetative/flowering	Transplanting
Cotton/Maize	Early sown Cotton / Maize			
Sowing	Early vegetative			

Rajasthan

Cotton	Summer Vegetable crops	Groundnut		
Seedling/early vegetative	Vegetative	Seedling/early vegetative		

Uttar Pradesh

Summer Sugarcane	Vegetables	Summer pulses	Sunflower	Mango
Vegetative	Fruiting / harvesting	Vegetative	Vegetative	Fruit setting
Oilseeds	Kharif rice	Kharif pulses/Maize		
Vegetative	Land preparation and transplanting	Land preparation and sowing		

Uttarakhand

Mango/Litchi	Sugarcane	Kharif crops(Rice, maize, groundnut and vegetables)	Apple	
Fruiting/picking	Vegetative	Land preparation and sowing	Vegetative	

Assam

Regular Ahu rice	Maize	Horticultural plants	Sugarcane	Summer vegetables
panicle initiation/flowering/grain formation	Cob maturity/harvesting	Planting	Vegetative	Vegetative / flowering /fruiting/harvesting
Early Ahu rice	Jute	Arhar	Sali Rice	
Grain formation/grain maturity	Olitorious –Vegetative Capsularis-Maturity/harvesting	Vegetative	Land preparation/transplanting	

Arunachal Pradesh

Wet seeded rice	Early sown Wet seeded rice	Jhum Rice	Ginger	Millet

Early vegetative	Land preparation /transplanting	Vegetative	Rhizome formation	Vegetative
Summer Vegetables	Maize			
Harvesting	Cob formation			



Bihar				
Vegetables & fruit crops	Potato	Kharif rice	Sugarcane	Maize
Vegetative/flowering/fruitle	Tuber formation	Land preparation and transplanting	Vegetative/flowering/maturity	Early vegetative

Jharkhand				
Kharif Paddy	Litchi / Mango	Vegetables (Tomato, Brinjal, Bhendi)		
Transplanting	Planting	Harvesting		

Sikkim				
Orange	Vegetables	Large Cardamom	Ginger	
Fruiting/Harvesting	Seedling/early vegetative	Capsule Development / maturity	Vegetative	

West Bengal				
Sugarcane	Jute	Sesamum	Groundnut	Coconut
Vegetative	Vegetative	Pod formation/seed formation/early maturity	Seed formation/early maturity	Planting
Vegetables	Aus Rice	Aman rice	Groundnut, Pigeonpea and Soybean	Early sown Groundnut, Pigeonpea and Soybean
Land preparation and sowing/nursery	Tillering /panicle initiation / flowering	Land preparation and sowing/nursery sowing/transplanting	Land preparation/ Sowing	Germination/early vegetative

Chhatisgarh				
Sugarcane	Sesame	Kharif Rice	Vegetables	Soybean
Autumn sugarcane – Vegetative	Pod formation / seed formation/ early maturity	Sowing/transplanting	Flowering / fruiting / harvesting	Land preparation and sowing
Already sown Soybean	Other Kharif crops	Already sown Kharif crops		
Germination/early vegetative	Land preparation for sowing	Germination/early vegetative		

Gujarat				
Sugarcane	Other Kharif crops	Already sown Other Kharif crops	Kharif groundnut	Already sown Kharif groundnut
Vegetative	Land preparation / sowing	Germination/early vegetative	Land preparation / sowing	Germination/early vegetative
Kharif cotton	Already sown Kharif cotton	Kharif rice		
Land preparation / sowing	Germination/early vegetative	Land preparation /transplanting		

Maharashtra				
Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marthwada and Vidarbha)	Fruit crops	Kharif Cotton	Potato (Madhya Maharashtra, Marathwada & Vidarbha)
Elongation / cane development	Active growth / elongation	Planting	Land preparation/sowing Early sown-germination	Vegetative
Irrigated cotton	Kharif Rice	Kharif Groundnut	Other Kharif crops	
Early vegetative/vegetative growth	Seedling / transplanting in Konkan, East Vidarbha and S. Madhya Maharashtra	Sowing Already sown-Germination	Sowing/germination	

Madhya Pradesh				
Sugarcane	Summer Sugarcane			
Grand growth	Vegetative/grand growth			

Orissa				
Vegetable crops	Kharif Rice	Sugarcane	Moong	Maize
Flowering / fruiting / harvesting	Sowing/transplanting	Vegetative	Vegetative	Sowing

Jute	Pulses	Cotton		
Field preparation/sowing	Vegetative	Vegetative		

Andhra Pradesh

Chillies	Sugarcane			
Vegetative	Grand growth			

Karnataka

Annual sugarcane	Early kharif Crops			
Tillering	Vegetative			

Kerala

Virippu- rice	Rubber	Coconut	Banana	Pepper
Tillering	Planting	Land preparation for new planting	Planting	Land preparation for new planting

Tamil Nadu

Rice (<i>Kuruvai</i>)	Sugarcane (Early, Mid season)	Early sown Sorghum	Cotton	Special season sugarcane
Nursery sowing	Cane development / maturity	Vegetative	Boll maturity/picking	Grand growth
