



Summary of Agromet Advisory Services for different States of the country

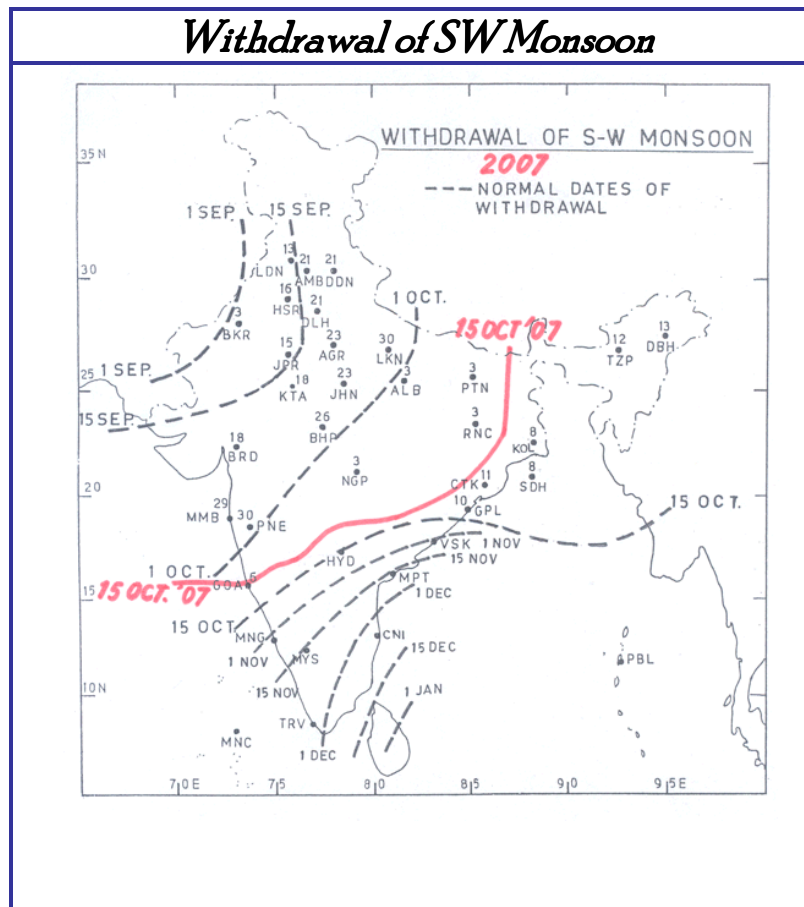
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(For the period 18th to 22nd October, 2007)

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



Agromet Advisory

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

- Rain occurred at many places in the State on 16th October and at a few places on 15th & 17th October.
- Rain/thundershowers are likely at a few places over the State.

Advisories

- As there was no significant rainfall over the State during last week except in Ernakulam, Kollam and Pathanamthitta districts and rain/thundershowers are likely at a few places over the State for the next three days, apply irrigation to plantation crops viz., coconut, arecanut, rubber and banana. Postpone irrigation in the above districts as there was excess rainfall during last week. Postpone irrigation in above mentioned districts.
- Continue intercultural operations, application of fertilizers and pesticides in plantation crops on a non rainy day.
- Attack of coried bug, leaf rot and stem bleeding is reported in coconut. Spray carbaryl @ 4 gm per litre of water to control coried bug. As a prophylactic measure spray crowns and leaves with 1% Bordeaux

mixture or 0.5% copper oxychloride formulation or 0.4% Mancozeb. In the leaf rot affected plants, remove the rotten parts from the spear and the 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. To control stem bleeding, chisel out completely the affected tissues and paint the wound with Tridemorph @ 5%. Apply coal tar after 1-2 days. Root feed with Tridemorph 5 % to prevent further spread of lesions. Plant protection measures may be undertaken on a non rainy day.

- Attack of *Phytophthora* foot rot is reported in pepper. Spray and drench with Copper oxy chloride @ 0.2% on a non rainy day to control the disease.
- Attack of pink disease is reported in rubber. Clean the affected portion and apply Boardeaux paste @ 1% on a non rainy day.
- In early transplanted *mundakan* rice, attack of leaf folder, BPH, jassids and stem borer is reported. Spray Fenthion 50 EC @ 1 litre/ha on a non rainy day to control the pests.
- Undertake direct sowing of *mundakan* rice, if nursery is not raised before. Apply 250 kg lime/ha before sowing.

Tamilnadu

- Rainfall occurred at a few places over South Tamilnadu, at one or two places over North Tamilnadu on 17th October, at one or two places over the State on 15th and 16th October.
- Rain / thundershowers are likely at a few places over the State.

Advisories

- As there was no significant rainfall in the State during last week except in Theni district and rain/thunder showers are likely at a few places over the State for the next three days, apply irrigation to sugarcane and early sown maize, groundnut, black gram, green gram and pulses. Postpone irrigation in Theni district as there was excess rainfall during last week.
- Monitor maize for stem borer and aphids and if the pests population crosses ETL, release spray Carbaryl 50% WP @ 400 g/acre on a non rainy day to control the pest.
- Continue sowing of rainfed groundnut, black gram, green gram and red gram. Use 112 kg pods/ha for groundnut and 20 kg/ha for pulse crops.
- Continue planting of special season sugarcane. Undertake sett treatment with *Azotobacter* before planting. Continue harvesting late sugarcane.
- Continue sowing rainfed millet crops like jowar, bajra and samai. Undertake seed treatment with *Azospirillum* before sowing.
- Continue picking matured cotton bolls on bright sunny days. Picking may be done at early morning hours to maintain quality of kapas.

Karnataka

- On 15th & 16th October monsoon was weak over the State. On 17th October, monsoon was weak over Coastal Karnataka and North Interior Karnataka. On 15th October, dry weather prevailed over the State. On 16th October, rainfall occurred at isolated places over Coastal Karnataka and South Interior Karnataka. Dry weather prevailed over North Interior Karnataka. On 17th October, rainfall occurred at isolated places over South Interior Karnataka. Mainly dry weather prevailed over Coastal Karnataka and dry weather prevailed over North Interior Karnataka.
- Isolated rain / thundershowers is likely to occur at Coastal Karnataka and South Interior Karnataka and mainly dry weather is likely to prevail over North Interior Karnataka.

Advisories

- As rain/thundershowers is likely to occur at isolated places over Coastal Karnataka and South Interior Karnataka and mainly dry weather is likely to prevail over North Interior Karnataka, apply irrigation to summer sugarcane, *rabi* jowar, maize, cotton and sunflower.
- Monitor sugarcane for white woolly aphids and release predators *viz.*, *Dipha* sp. adopt wider spacing, inter-cropping with soyabean and pulses of short duration to control the pest.
- Continue harvesting matured crops of maize and jowar and picking cotton.

- Continue land preparation and sowing of *rabi* crops like maize, jowar, sunflower and cotton. Undertake seed treatment with *Azospirillum* before sowing maize and jowar.
- Undertake intercultural operations in early sown *rabi* crops to keep the field weed free.

Andhra Pradesh

- Southwest monsoon withdrew from some parts of Telangana on 15th October. Isolated rain occurred over Coastal Andhra Pradesh on 12th, 13th, 15th & 17th October; and over Rayalaseema on 13th & 14th October. Mainly dry weather prevailed over rest of the State during the week.
- Rain / thundershowers are likely to occur at a few places over coastal Andhra Pradesh and mainly dry weather is likely to prevail over the rest region of the State.

Advisories

- As rain/thundershowers is likely to occur at a few places over Coastal Andhra Pradesh and dry weather is likely to prevail for the next three days, apply irrigation to groundnut, rice and cotton.
- Monitor rice for brown plant hopper, stem borer, leaf folder and sheath blight. To control BPH, spray Ethofenprox @ 1.5 ml or Acephate @ 1.5 g or Thiamethoxam @ 0.2 g per litre of water at the base of the plant. To control stem borer apply Cataphydrochloride @ 2 gm per litre of water. To control leaf folder, spray Acephate @ 1.5 gm per litre of water. To control sheath blight, spray Hexaconazole or Validamycin @ 2 ml or Propiconazole @ 1 ml per litre of water, twice at 15 days interval. Spraying of chemicals may be undertaken on a non rainy day in Coastal Andhra Pradesh.
- Monitor cotton for sucking pests, black arm, boll rot and tobacco streak virus and if the damage crosses ETL, spray Monocrotophos @ 1.6ml or Acephate @ 1.5g or Imidacloprid @ 0.4 ml per litre of water to control sucking pests (thrips). To control incidence of Black arm spray Copper-Oxy-chloride @ 30g + Streptocyclin @ 1g in 10 litres of water, 2 to 3 times at 15 days interval. To control incidence of boll rot, spray Copper-Oxy-chloride @ 30g + paushamycin or plantamycin @ 1g in 10 litres of water, 3 to 4 times at 15 days interval. To control incidence of Tobacco Streak virus, spray Acephate @ 1.5g or Imidacloprid @ 0.3 ml or Thiamethoxam @ 0.3 g or Acetamaprid @ 0.2g or Monocrotophos @ 1.6ml per litre of water, twice at 1.6 ml per litre of water, twice at weekly interval to control thrips (Vector), alternating the chemicals. Spraying of chemicals may be undertaken on a non rainy day in Coastal Andhra Pradesh.
- Undertake intercultural operations in *kharif* crops to keep the field weed free. Intercultural operations may be undertaken on a non rainy day in Coastal Andhra Pradesh.
- Complete harvesting maize, green gram and black gram on bright sunny days.

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

Assam

- Light to moderate rain occurred at many places on 16th & 17th October and at isolated places on 15th October with isolated rather heavy to heavy falls on 16th October and with isolated rather heavy falls on 17th October. Generally cloudy sky during the period.
- Rain/thundershowers are likely at many places over the State during next 24 hrs. and decrease thereafter.

Advisories

- As rain/thundershowers are likely at many places over the State during next 24 hrs. and decrease thereafter, postpone irrigation to arhar, black gram and green gram.
- Maintain 3 – 5 cm water in *Sali* rice field.

- Continue harvesting matured crop of sugarcane after current spell of rain. Red rod infested sugarcane may be harvested early and the field should be newly planted. Ratooning of infested plant should be discarded.
- Incidence of hispa and stem borer was noticed in *Sali* rice in few localities. Monitor the infestation of hispa and stem borer. If one adult is noticed per hill, insecticides like Chloropyrifos 20 E.C. @ 2 ml per litre of water or Monocrotophos 40 EC @ 1.5 ml per litre of water is to be applied after current spells of rain. For management of yellow stem borer *Trichogramma Japonicum* @ 50,000 per hectare in six releases are to be used.
- In black gram and green gram, monitor the crops for aphids, jassids and flea beetle attack. Undertake spraying of Malathion 50 EC @ 2 ml/litre of water, if required. As soon as leaf spots disease appears Blitox or Fytolan @ 1.5 gm per litre of water should be sprayed at an interval of 7-10 days. Alternatively, Bavistin @ 1gm per litre of water should be sprayed at an interval of 12-15 days. Spray chemicals after current spells of rain.
- Prepare land for early variety of winter vegetables such as spinach, reddish & coriander etc. and seeds of hybrid varieties of tomato, brinjal, capsicum, cauliflower and cabbage etc. may be collected from reputed sources and should be sown in the seed bed for raising seedling for planting in the main fields. Damaged seedbed should be resown after preparation of land properly.

Arunachal Pradesh

- Sky remained cloudy to partly cloudy over the State during the period. Rain/ thundershowers occurred at most places on 17th October at many places on 16th October and at a few places on 15th October.
- Rain / thundershowers are likely at many places over the State during next 24 hrs. and decrease thereafter.

Advisories

- As rain/thundershowers are likely at many places over the State during next 24 hrs. and decrease thereafter, postpone irrigation to finger millet.
- Maintain 3-5 cm of water in wet seeded rice field.
- Undertake surveillance of rodent attack in *jhum* rice and millet.
- Continue sowing of wheat and mustard.
- No stagnation of water in the mustard field.
- Farmers are advised to sow potato seed @ 8-15 Quintol/ha depending upon the tuber size. 4 to 5 time ploughing should be done to have good tilth. Soil should be treated with Furadon 3G granules. Fertilizer NPK may be applied at the rate of 120 kg, 100 kg, 70 kg respectively after current spells of rain. 11 to 30 Mt. FYM/ha. may be applied.
- Continue sowing of *rabi* vegetables like cauliflower, chinese cabbage, carrot, knol-khol, lettuce, methi, palak, peas, raddish, tomato, turnip etc.

Bihar

- Moderate to heavy rainfall occurred at one or two places on 15th to 17th October and rest of the days weather was mainly dry.
- Rain / thundershowers are likely at a few places over the State during next 24 hrs. and decrease thereafter.

Advisories

- As there was no significant rainfall in the State during last week except in Darbhanga, Madubhani and Muzaffarpur districts and rain / thundershowers is likely to occur at a few places over Bihar for the next 24 hours, apply irrigation to the standing crops. Postpone irrigation in the above districts as there was excess rainfall during last week.
- Continue sowing of raddish, early cauliflower, chillies, fodder maize, mung, urd and arhar, castor & tomato.

- Continue land preparation and planting of potato. Select among Kufri Ashoka or Kufri Chandramukhi or Rajendra, Aloo-3.
- Monitor rice for sheath blight and leaf folder. To control sheath blight of rice, spray of 1litre of Hexaconazole mixed in 700 litre of water, twice at the interval of 15 days. Spray Imidacloprid 200 S.I @ 100 ml/ha or Monocrotophos 36 EC @ 1litre /ha

Jharkhand

- Rain/thundershowers are likely at a few places over the State during next 24 hrs. and decrease thereafter.

Advisories

- Apply irrigation to early sown vegetables as there was no significant rainfall during last week and rain/thundershowers are likely at a few places over Jharkhand during next 24 hrs. and decrease thereafter.
- Monitor rice for gundhi bug. If damage exceeds ETL, spray 25 kg. Chlorpyrifos dust per hectare on a non rainy day.
- Continue harvesting of upland crops like maize, groundnut, urd and moong. After harvest, undertake sowing of *rabi* crops like gram, sarson, rai, toria, pea, masoor and linseed.
- Continue land preparation and sowing of cabbage, cauliflower, chilli, potato, tomato, etc, Select among Altimous, Kufri Chandramukhi, Kufri Ashok, Kufri Badshah to plant potato in the main field.

Sikkim

- Sky remained generally cloudy during the period. Moderate rain occurred at many places on 16th & 17th October very light to light rain occurred at a few places from 11th to 13th October & 15th October. Weather was mainly dry on rest of the days during the period over East Sikkim. Rain fall was deficient over East Sikkim during the period.
- Rain / thundershowers are likely at a few places over Sikkim during next 24 hrs. and decrease thereafter.

Advisories

- As there was no significant rainfall during last week and rain/thundershowers are likely to occur at a few places over the State for the next three days, apply irrigation to orange and ginger crops.
- Maintain water level of 3-4 cm in the rice field.
- Continue harvesting of large cardamom and orange.
- Monitor ginger for rhizome rot and bacterial wilt and rouge out the affected plants and destroy completely to prevent further damage.
- Monitor orange for fruit flies. Prepare baits made of Sevin and keep once in every 10-15 days till harvesting.
- Continue land preparation and nursery sowing of *rabi* vegetable crops like cabbage, cauliflower, carrot and beet root.
- Start land preparation and sowing of mustard in the field using residual moisture. Use certified seeds for sowing.

West Bengal

- Rainfall occurred at a few places on 15th and 16th October over Gangetic West Bengal. It was mainly dry on 17th October. Rainfall occurred at isolated places on 15th October, at many places on 16th and 17th October over Sub Himalayan West Bengal with heavy rain at isolated places on 17th October.
- Rain / thundershowers are likely at a few places over the State during next 24 hrs. and decrease thereafter.

Advisories

- As there was sufficient rain during last week in Birbhum, Burdwan and Darjeeling districts of the State, postpone irrigation to sugarcane, groundnut and arhar in these districts. As there was no significant rain during last week in remaining districts and rain is likely to occur only at a few places over the State during next 24 hours, apply irrigation to the crops.
- Maintain 3 – 5 cm water in the field of *aman* rice.
- There is mild chance of attack of sheath blight, sheath rot and blast disease in *aman* rice. If 6 hills out of 20 hills are affected by sheath blight or 5% panicles are affected by sheath rot, apply Propiconazole 25% @ 1 ml or Hexaconazole 5% @ 1.5 ml or Carbendazim 50% @ 1 g / litre of water to control the diseases. If 25% hills are affected by blast disease, apply Tricyclozol 75% @ 0.5 ml or Carbendazim 50% @ 1 ml or Adiphenphos 50% @ 1 ml / litre water to control the disease.

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

Gujarat

- Weather was mainly dry over the State.
- Mainly dry weather is likely to prevail over the State.

Advisories

- As there was no significant rain during last week over the State and mainly dry weather is likely to prevail over the State for next three days, apply irrigation to sugarcane, *kharif* cotton and castor.
- In some places cotton crop is infested with mealy bug. Monitor the crop for mealy bug and if damage exceeds ETL, to control the pest spray Methyl dimeton 25 EC @ 10 ml or Phosphamidon 85 EC @ 5 ml or Dimethoate 30 EC @ 10 ml in 10 liters of water.
- Apply Carbofuran 3% @ 25 kg/ha or Cartap hydrochloride 4% @ 20 kg/ha for the control of stem borer in rice (grain formation stage) and Monocrotophos @ 12 ml or DDVP @ 5 ml or Trizophos @ 10 ml in 10 liters of water for control of sucking pests, if insect population crosses economic threshold level.
- Birds may damage maize crop at maturity stage. The matured cobs can be protected from attack of birds by tying the cobs with leaves of same plant. Shining coloured strips may also be used to scare the birds.
- Harvest the already matured crops of *kharif* groundnut, *kharif* bajra and *kharif* maize.
- Undertake sowing of mustard variety G-Mustard 1-2-3 & Varuna with basal fertilizer doze of 25kg. Nitrogen & 50 kg Phosphorous per hectare. Wherever deficiency of sulphur in soil apply 40kg sulphur as a basal doze.

Chhattisgarh

- Weather was mainly dry in all divisions of the State.
- Isolated rain/thundershowers are likely over south Chhattisgarh during next 24 hrs. and mainly dry weather thereafter. Mainly dry weather is likely over the rest region.

Advisories

- As there was no rainfall during last week in the State and isolated rain/thundershowers are likely over south Chhattisgarh during next 24 hrs. and mainly dry weather thereafter and mainly dry weather is likely over the rest region, apply irrigation to sugarcane, and vegetables.
- Maintain 3 – 5 cm water in *kharif* rice field.
- 4 – 5 plants of sugarcane may be tied together to prevent lodging from gusty wind.
- In late transplanted rice crops the incidence of roller / case worm is noticed particularly in low lying areas. For effective control of these insects spraying of Ekalux or Endosulphon or Chlorpyrifos @ 1500 ml or Monochrotophos @ 1000 ml per hectare in 400-500 liter of water is recommended.

- In areas where incidence of brown plant hopper and case worm / leaf roller is noticed in rice every year, spraying of Emidachlopride @ 100 ml per hectare or Chlorpyrifos @ 1.5 to 2.0 liter per hectare is recommended in place of granular insecticides.
- Monitor the rice crop for blast / sheeth rot. To protect the crop from blast spraying of Beam (fungicide) @ 6 gm per 10 liter of water or Hinosan @ 1 ml per liter of water and for Sheeth rot Phytoton / Blitox / Diathane M 45 or Bavastin @ 1.5 gm per liter is advised.
- Sowing of Ramtil and Kulthi may be done utilizing residual moisture in the soil.

Maharashtra

- Mainly dry weather prevailed all over the State.
- Mainly dry weather is likely to prevail all over the State.

Advisories

- As there was no significant rain in most of the districts of the State during last two weeks & mainly dry weather is likely to prevail over the State, apply irrigation to the standing crops.
- Maintain 3 – 5 cm water in the rice field wherever the crops in grain formation stage.
- Mild incidence of white woolly aphids in Kolhapur division in sugarcane, sap sucking insects in Aurangabad and Latur, aphids & jassids in Amravati, Nagpur & boll worm in Nagpur division in *kharif* cotton and aphids, jassids, thrips in Nashik & boll worm in Aurangabad division in irrigated cotton and blast in Konkan, Kolhapur & Nagpur division in *kharif* rice is reported.
- Monitor sugarcane for White Woolly Aphids & if exceeds economic threshold level, for effective control spray 500 ml Endosulphan 35%+ Metasystox 1000 ml & 500 ml Sticker or 500 gm detergent powder / ha in 500 liters of water. For the biological control of White Woolly Aphids, release 25000 larvae of *Chrysoperla carnea* or *Dipha aphidivora* / ha as predator after 15 days from the above dose.
- For the control of Sap sucking insects and aphids, jassids & thrips in cotton, spray 5% Neem extract or release 10,000 to 15000 larvae of *Chrysoperla carnea* and if infestation exceeds economic threshold level, spray 30 % WSC Diamethoate 1000 ml or 25 % WSC Methyl dimeton 320 ml / ha in 500 liters water.
- For the control of boll worm in cotton implement integrated pests management method. Monitor the crop for same & if exceeds economic threshold level, spray 36 % WSC Monocrotophos 850 ml or 25 % WSC Quinolphos 1000 ml /ha in 500 liters water.
- Monitor *kharif* rice for Blast & if exceeds economic threshold level, spray Bavistin 500 gm / ha in 500 liters water.
- Water may be drained out from *kharif* rice field before the application of plant protection measures & may be applied again after 24 hours of application of plant protection measures.
- This is the proper time for sowing of *rabi* Jowar, gram and safflower and planting of potato and onion. Select varieties from from Selection-3 for low fertile soil, Maldandi, Mauli, Phule chitra, SPV-86 for Madhya Maharashtra, SPV-669, AKSV-13-R for Vidarbha & PKV-809, SPV-1411 for Marathwada for medium & black soil for *rabi* jowar and Girna for Khandesh, Sharda for Marathwada, Bhima, JLSF-414 for Madhya Maharashtra & AKS-207 for Vidarbha for safflower. For planting of potato select a variety from Kufri Sinduri, Kufri Lavkar & Kufri Jyoti. Select varieties from Vikas, Phule G-12, Vishwas , Vijay, Vishal & Virat for *rabi* gram.

Madhya Pradesh

- Dry weather prevailed over the State.
- Mainly dry weather is likely over the State

Advisories

- As dry weather prevailed during last week and likely to prevail over the State for the next three days, apply irrigation to sugarcane and cotton.

- Undertake intercultural operation in sugarcane to keep the field weed free.
- Start harvesting soyabean, jowar and rice on bright sunny days.

Orissa

- Rainfall occurred at isolated places over North Orissa on 15th October; over the State on 16th, 17th October. Heavy rain occurred at isolated places over south Coastal Orissa on 16th October.
- Rain / thundershowers are likely at a few places over the State during next 24 hrs. and decrease thereafter.

Advisories

- As there was no significant rainfall over the State during last week and rain/thundershowers are likely at a few places during next 24 hrs. and decrease thereafter over the State for the next three days, apply irrigation to the standing crops.
- Monitor rice for bacterial leaf blight, and sheath blight. To manage bacterial leaf blight spray Streptomycin @ 1gm/ 10 litre of water along with 20 gm of Copper Oxochloride and to manage sheath blight spray Validamycin @ 2 ml per litre of water or Hexaconazole @ 1ml/litre of water for the crop in grain formation stage.
- Monitor vegetables for leaf spot. To manage leaf spot in vegetable spray Mancozeb M-45 at the rate of 3 gram per litre of water.
- Undertake sowing of moong and urd. Select P.D.M.-54, PDM-11, TARM-1 varieties in moong, and T-9, PU-19, PU-30 in urd. Apply 8 Kg N, 16Kg P & 8 Kg K/ha as basal.

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

Punjab

- Rain / thundershowers occurred at isolated places on 16th and 17th October. Weather remained dry on 15th October.
- Mainly dry weather is likely over the State.

Advisories

- As mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane, cotton, groundnut and Horticultural crops.
- Continue sowing gram and lentil using improved varieties.
- Continue picking of cotton.
- Complete sowing of toria. Before sowing of toria apply pre sowing irrigation.
- Monitor the sugarcane crop for stem borer infestation & if exceeds economic threshold level, for effective control sprinkle Endosulfan 5 percent granules in the leaf whorls and axils.
- Preparation of field and sowing of wheat, carrot, raddish, and brinjal can be done.

Haryana

- Rain / thundershowers occurred at isolated places on 17th October. Weather remained dry during rest days of the period.
- Mainly dry weather is likely over the State.

Advisories

- As mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane, groundnut and Horticultural crops.
- Toria sowing should be completed with 21.5kg seed of TL-15 or TL-37 with 50 kg P₂O₅. Prefer Super phosphate for application. Before sowing of toria apply pre sowing irrigation.
- Continue picking of cotton.

- Monitor the sugarcane crop for stem borer infestation & if exceeds economic threshold level, for effective control sprinkle Endosulfan 5 percent granules in the leaf whorls and axils.
- Preparation of field and sowing of wheat, carrot, raddish, and brinjal can be done.

Rajasthan

- Weather remained dry in all the divisions of the State.
- Mainly dry weather is likely over the State.

Advisories

- As dry weather prevailed during last week and likely to prevail over the State for the next three days, apply irrigation to *Zaide* fodder.
- Complete harvesting of *kharif* crops viz., bajra, jowar, maize and guar.
- Continue picking of cotton. Picking of cotton may be undertaken in the early morning hours.
- Ploughing of fields may be done for moisture conservation if rain occur which is beneficial for sowing of Rabi crops viz, mustard, toria and gram.

Uttar Pradesh

- Rain occurred at isolated places in Gorakhpur, Faizabad divisions. Weather was mainly dry in remaining divisions of Uttar Pradesh on 15th October. Rain occurred at two places in Gorakhpur, Varanasi, Faizabad, Lucknow divisions and isolated places in remaining divisions of Uttar Pradesh on 16th October. Rain occurred at isolated places in Gorakhpur division and Weather was mainly dry in remaining divisions of Uttar Pradesh on 17th October.
- Weather will be mainly dry in all divisions of the State.

Advisories

- As there was no significant rainfall in most of the districts during last week except in Gorakhpur district and mainly dry weather is likely over U.P, apply irrigation to the crops. As there was sufficient rainfall in Gorakpur district, postpone irrigation to the crop.
- Continue transplanting of winter vegetable crops.
- Monitor mealy bug in sugarcane, spray the solution of 0.1% Malathion to control mealy bug insect and remove sugarcane with roots and burn them affected with red rod disease and gurdaspur shoot borer.
- Maintain 2.5- 3.0 cm water level in transplanted paddy where the crop is in grain formation stage.
- To overcome malformation disease in mango spray the solution of Naphthalene Acetic Acid, 200 ppm or 4ml planofix/9litre in water and mix fertilizer around the stem of mango tree after hoeing.
- Prepare the field and undertake sowing of garlic and pea.
- Start field preparation and sowing of rai and mustard, gram, pea, masoor and other pulse crops may be started

Himachal Pradesh

- Precipitation occurred at isolated places in the State.
- Isolated rain / thundershowers are likely over the State.

Advisories

- As there was no significant rainfall over the State during last week and isolated rain/thundershowers are likely over the State for the next three days, apply irrigation to vegetables crops.
- Drain out from the field 7-10 days before harvesting of rice. Start harvesting of crops on bright sunny days. Brownish colour and dry leaves indicate maturity.

- Also continue harvesting of potato and apple. Haulm cutting of potato is recommended to the area where crop is being grown for seed potato and occurrence of late blight disease is apprehended.
- There is mild chance of attack of leaf spot disease in cabbage and cauliflower. If attack crosses economic threshold level, spray Dithane M – 45 to control the disease.
- Prepare land for sowing of wheat. For securing optimum yield, sowing time for timely sown crops of wheat for different agro-climatic zones of the State are last week of October to 15th November in low hills and mid hills and 1st Oct-15th October in high hills. 90-100 kg seed / ha is required for timely sown crops.
- Prepare land for sowing of barley. Optimum sowing time of barley is from last week of October to first week of November. The crop should be sown by kera in lines 22 cm apart. 100 kg seeds per hectare are optimum for sowing. Additional 20 to 25 kg seed should be used under rainfed conditions.
- Prepare land for sowing of gram. The optimum time of sowing of gram is the middle of October. Gram should be sown by kera in lines 30 cm apart. Seed should be placed at a depth of 10 to 12.5 cm because the shallow sown crop is more liable to be damaged by wilt. 40 to 45 kg seed per hectare is required for pure crop of C-235 but in case of HPG-17 the seed rate of 80 kg / ha is recommended.

Uttarakhand

- Light to moderate rain was recorded at many places on 16th October and light rain was recorded at many places on 17th October. Mainly dry weather prevailed during rest of the days of the week. Sky remained mainly clear to partly cloudy during the week.
- Isolated rain / thundershowers are likely over the State.

Advisories

- As there was no significant rainfall in the State during last week and isolated rain/thundershowers are likely over the State for the next three days, apply irrigation to sugarcane and potato.
- Undertake intercultural operations, to keep the field weed free in potato, sugarcane and in orchards.
- Undertake thinning and weeding to conserve soil moisture in toria/pea.
- Undertake harvesting of mature crops of rice and ginger.

Jammu & Kashmir

- Weather remained mainly dry over J&K divisions.
- Mainly dry weather is likely over the State.

Advisories

- Apply irrigation to vegetable and fruit crops in Kashmir division and to fruit crops in Jammu division as dry weather prevailed during last week and likely to prevail for the next three days.
- Conserve moisture in rice and maize field. Start harvesting the matured grains on bright sunny days.
- Continue transplanting of cauliflower and knoll-khol with seed rate of 500g and 250 g respectively in Jammu division and sowing of onion in Kashmir division.
- Continue land preparation and sowing of wheat in Kashmir division. Adopt 100 kg/ha seeds for sowing. Apply 40kg N, 60kg P₂O₅ and 40kg K₂O as basal.
- Prepare land for sowing of gobi sarson crop (varieties: GSL-I, DGS-I) and gram (var: C-235, K-468, Gourav and PBG-I) crop in Jammu division in irrigated as well as rainfed areas.
- Continue harvesting matured fruit crops and maize in Jammu division and pea, lentil, chickpea etc. in Kashmir division.

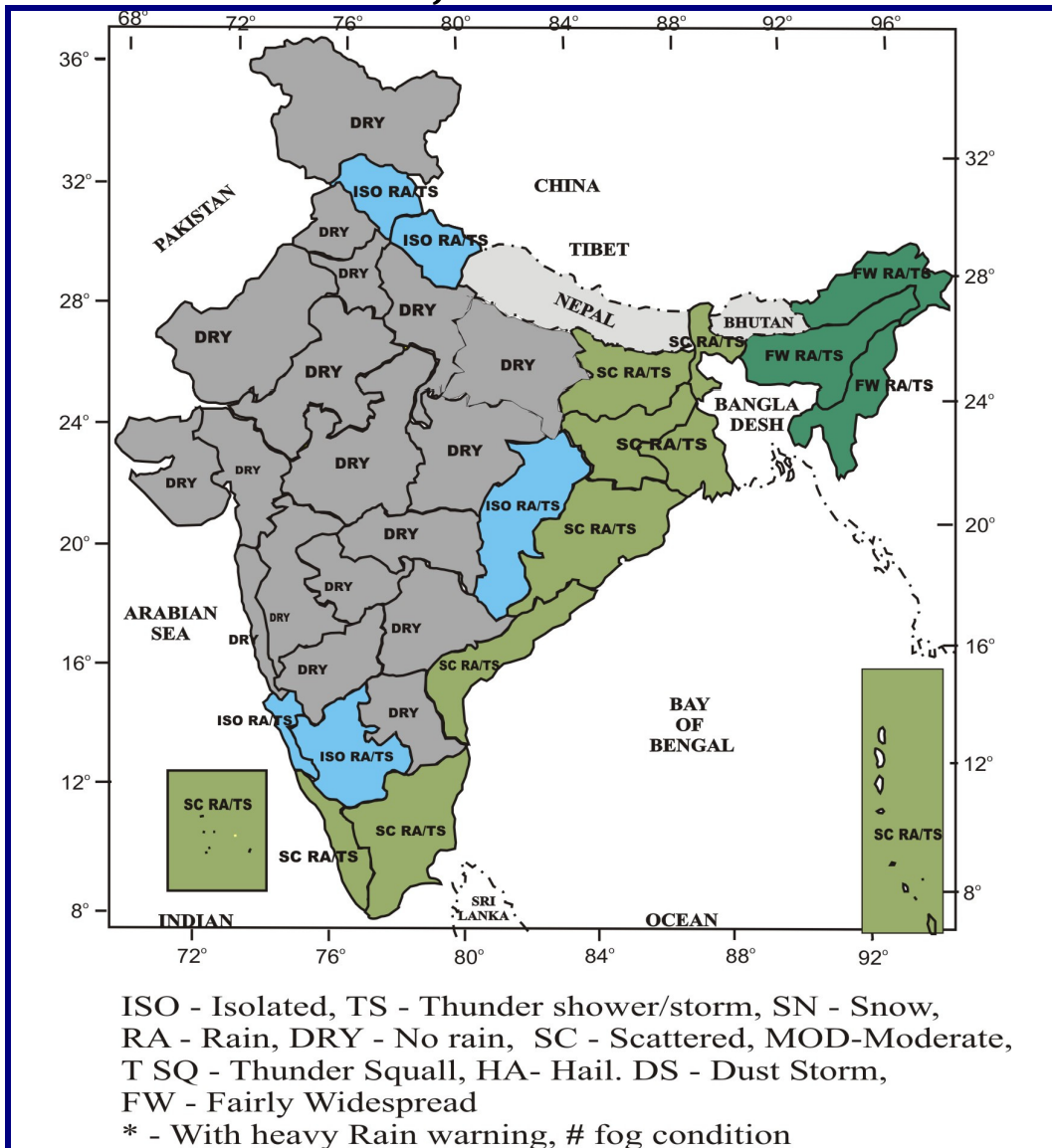
Delhi

- Weather remained mainly dry.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in the State during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to vegetable crops.
- Prepare land and undertake transplanting of 5 – 6 weeks old seedlings of vegetables.
- Continue nursery sowing of cabbage variety like Snowball upto 15th October and continue sowing varieties of raddish like Japani White and White Asikal, varieties of carrot like Pusa kashar and Pusa Desi and varieties of turnip variety like Pusa Kanchan. Treat the seeds with captan or thiram or dithane M-45 @ 2 g / kg of seeds.
- Undertake transplanting of 6 weeks old seedling of cauliflower, tomato and brinjal in the prepared fields.
- Sow early varieties of potato. Select among Kufri Badshah, Kufri Bahar and Kufri Chander Mukhi for sowing.
- Prepare field and undertake sowing of toria. Use varieties like Type1, Sangam, TL-15 and Ludhiana composite.
- Prepare field and undertake sowing of mustard. Use varieties like Pusa bold, Pusa Barani, T-59 (Varuna) and Pusa Kalyani etc.
- Monitor early sown mustard for painted bug and if the pest population exceeds ETL, spray Metasistax 25% E.C. or Dymethate 30% EC @ 270-1000 ml per hectare.
- Continue harvesting of already matured crops of arhar, maize and bajra on bright sunny days.
- Undertake sowing of barseem and select varieties among like Pusa Joint Tetraploid or maskavi. Treat the seeds with *Rhizobium* culture before sowing. Barley and Mustard seeds may be mixed with Barseem for good first cutting.

Forecast Map
Valid upto 21st October 07



Salient weather features for the week ending 17/10/07

METEOROLOGICAL ANALYSIS

- Southwest monsoon further withdrew from more parts of Bihar, Jharkhand, Chhattisgarh, Maharashtra and some parts of Gangetic West Bengal and Orissa on 12th October. It further withdrew from some more parts of Chhattisgarh, most parts of Maharashtra and some parts of Telangana and north Interior Karnataka on 15th October.
The withdrawal line passed through Forbesganj, Bankura, Angul, Jagdalpur, Ramagundam, Nizamabad, Gulbarga, Bijapur, Vengurla, Lat. 16.0°N/ Long. 70.0°E, Lat. 16.0°N/ Long. 65.0°E and Lat. 16.0°N/Long. 60.0°E on 15th October.
- Last week's upper air cyclonic circulation extending upto 3.1 km above mean sea level over Bangladesh & neighbourhood lay over Gangetic West Bengal & neighbourhood on 11th, over Gangetic West Bengal and adjoining Jharkhand extending upto 4.5 km a.s.l. on 12th, over Jharkhand and neighbourhood between 2.1 and 4.5 km a.s.l. on 13th and became less marked on 14th October.
- Last week's upper air cyclonic circulation extending upto 3.1 km a.s.l. over South-West Bay of Bengal off Tamil Nadu coast lay over Tamil Nadu & neighbourhood extending upto 0.9 km above mean sea level on 11th and became less marked on 12th.
- An upper air cyclonic circulation extending upto 1.5 km a.s.l. lay over North-West Bay of Bengal off north Orissa and West Bengal coasts on 13th & 14th. Under its influence, a low pressure area formed over north Bay of Bengal off Bangladesh-West Bengal coast on 15th. It lay over north Bay of Bengal & neighbourhood

on 16th morning and became less marked on the same day evening. However, the associated upper air cyclonic circulation extending upto 3.6 km a.s.l. lay over the same area on 16th and became less marked on 17th October.

- An upper air cyclonic circulation extending upto 2.1 km a.s.l. lay over northeastern states on 11th and moved away eastwards on 12th October.
- An upper air cyclonic circulation extending upto 4.5 km a.s.l. lay over west central Bay of Bengal on 14th, over southwest Bay of Bengal off Tamil Nadu coast on 15th and became less marked on 16th October.

RAINFALL

Under the influence of the above systems:

- Fairly widespread rainfall occurred on many days of the week over northeastern States and on a few days of the week over Andaman & Nicobar Islands.
- Scattered to fairly widespread rainfall occurred over Kerala and Tamil Nadu on many days of the week. Isolated rain/thundershowers occurred over remaining parts of peninsula on few days of the week.
- Scattered rainfall occurred over West Bengal & Sikkim on many days of the week. Isolated rainfall occurred over Orissa, Jharkhand, Bihar, East Uttar Pradesh on a few days of the week and over Western Himalayan region during second half of the week.
- Weather was mainly dry over the remaining parts of the country during the week

RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 17TH OCTOBER, 2007)

Rainfall was excess/normal in 5, deficient/scanty in 21 and no rain in 10 out of 36 meteorological subdivisions (Actual: 6.6 mm, Normal: 16.0 mm and Departure: -59 %).

CUMULATIVE SEASONAL RAINFALL (1ST OCTOBER TO 17TH OCTOBER, 2007)

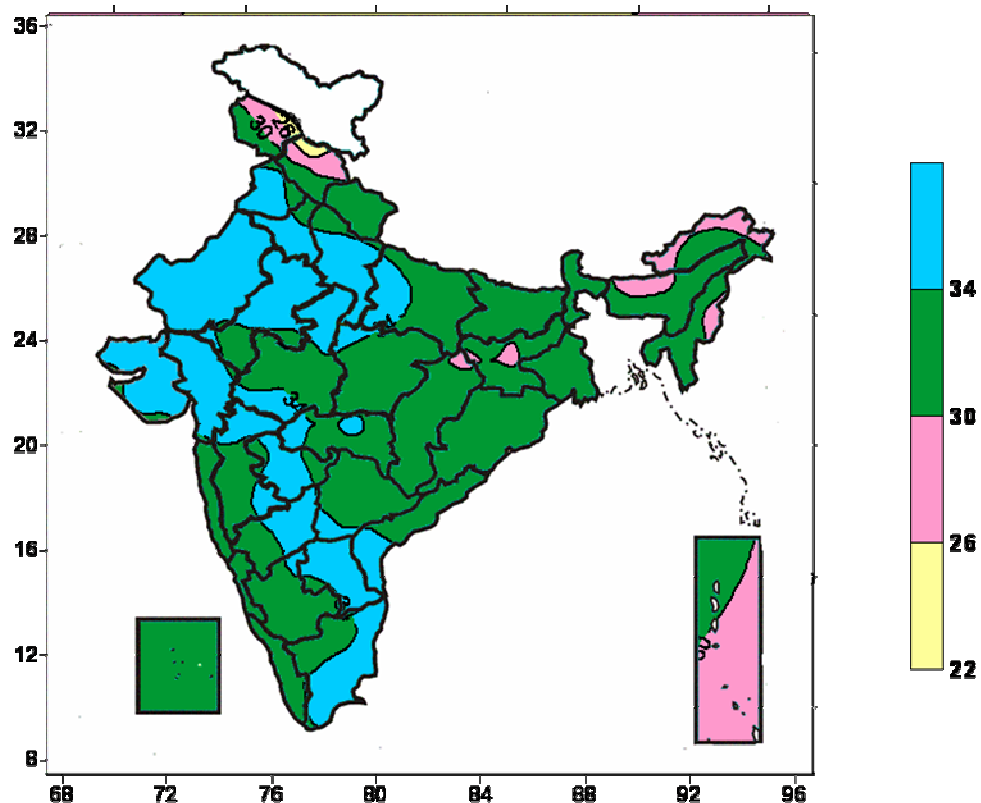
Rainfall was excess/normal in 3 and deficient/scanty in 28 and no rain in 5 out of 36 meteorological subdivisions. (Actual: 27.0 mm, Normal: 53.2 and Departure: -49%).

OUTLOOK FOR THE WEEK ENDING ON 24TH OCTOBER, 2007.

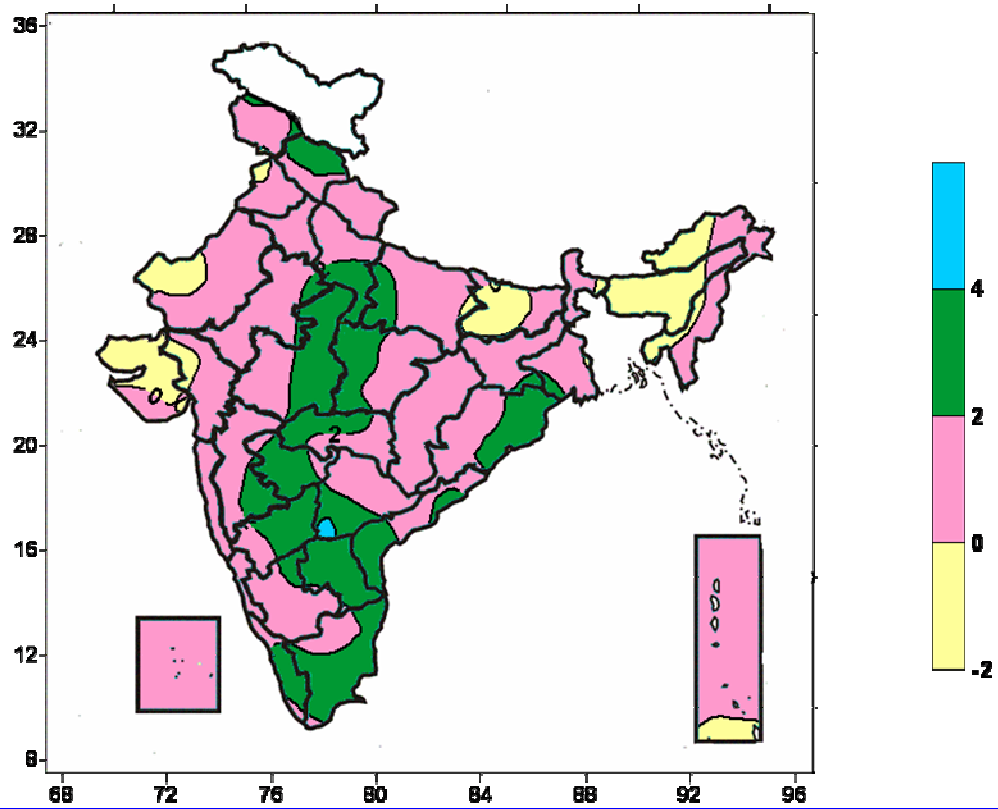
- Southwest monsoon is likely to withdraw from northeastern States and the remaining parts of East & Central India and Maharashtra during middle of the week.
- Northeast Monsoon rain is likely to commence over Tamil Nadu and adjoining states during second half of the week.

Contour maps for the week ending 17th October, 2007

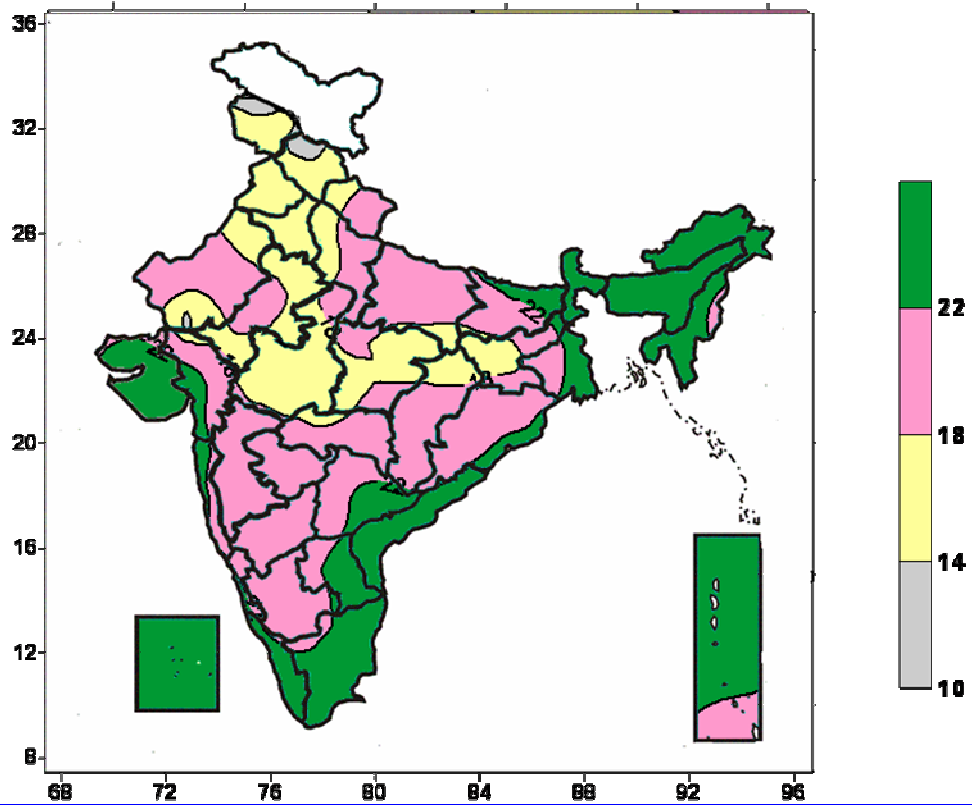
Actual Mean Maximum Temperature (°C) in India for the week ending 17.10.07



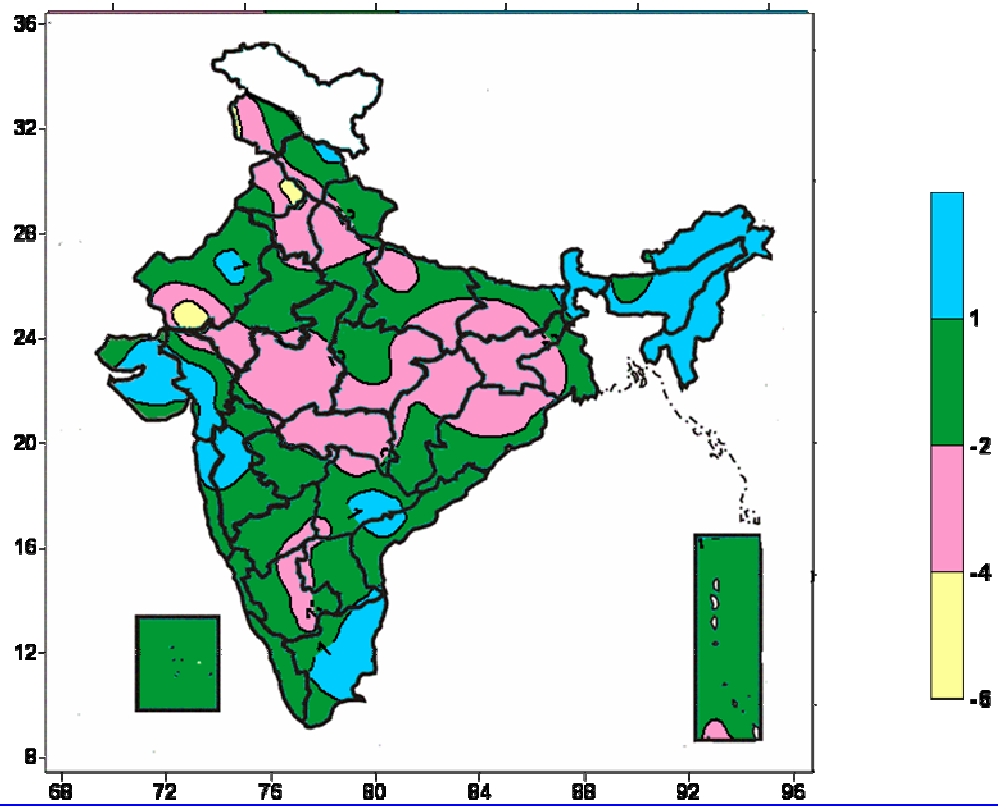
Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 17.10.07



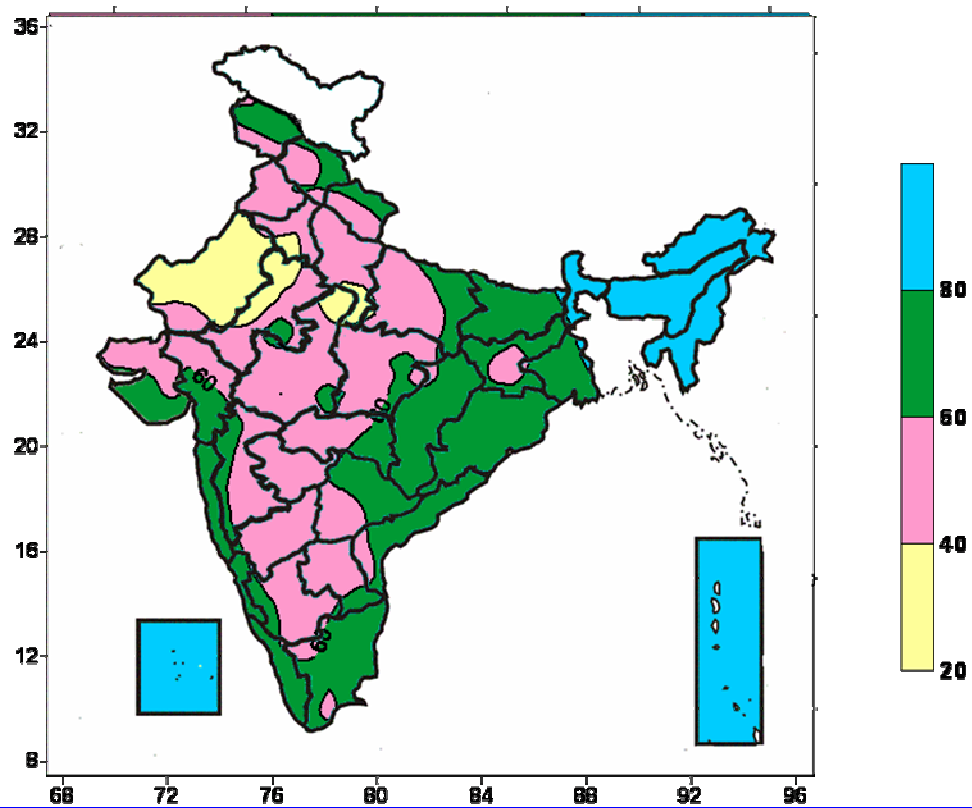
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) In India for the week ending 17.10.07



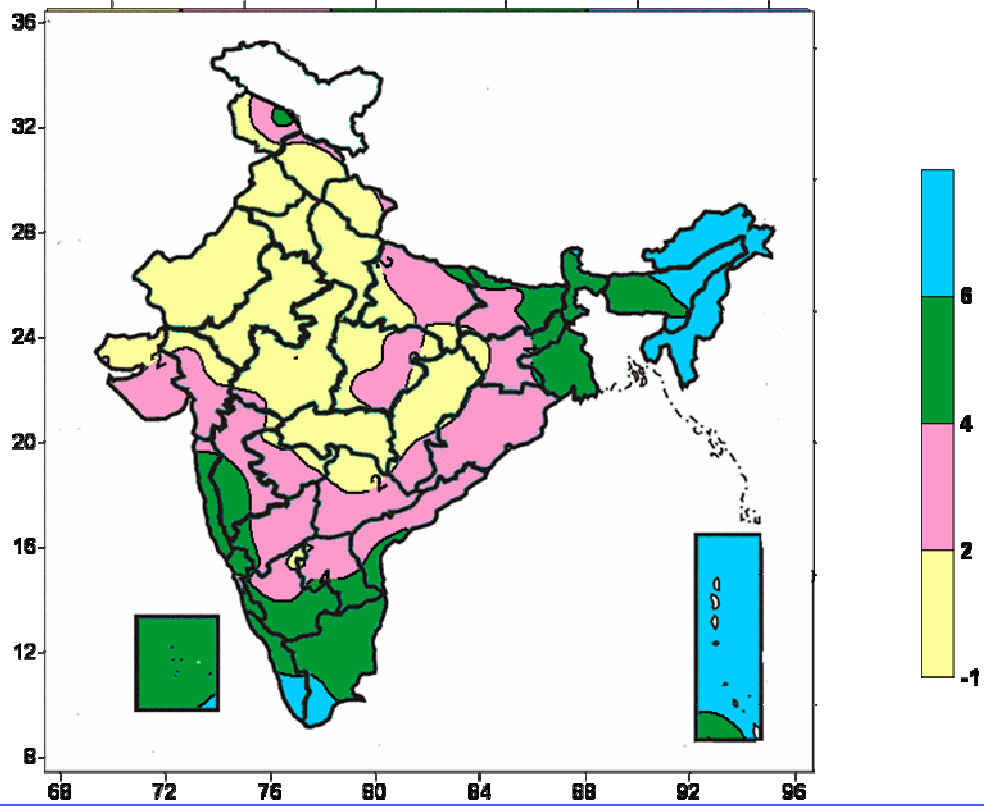
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 17.10.07



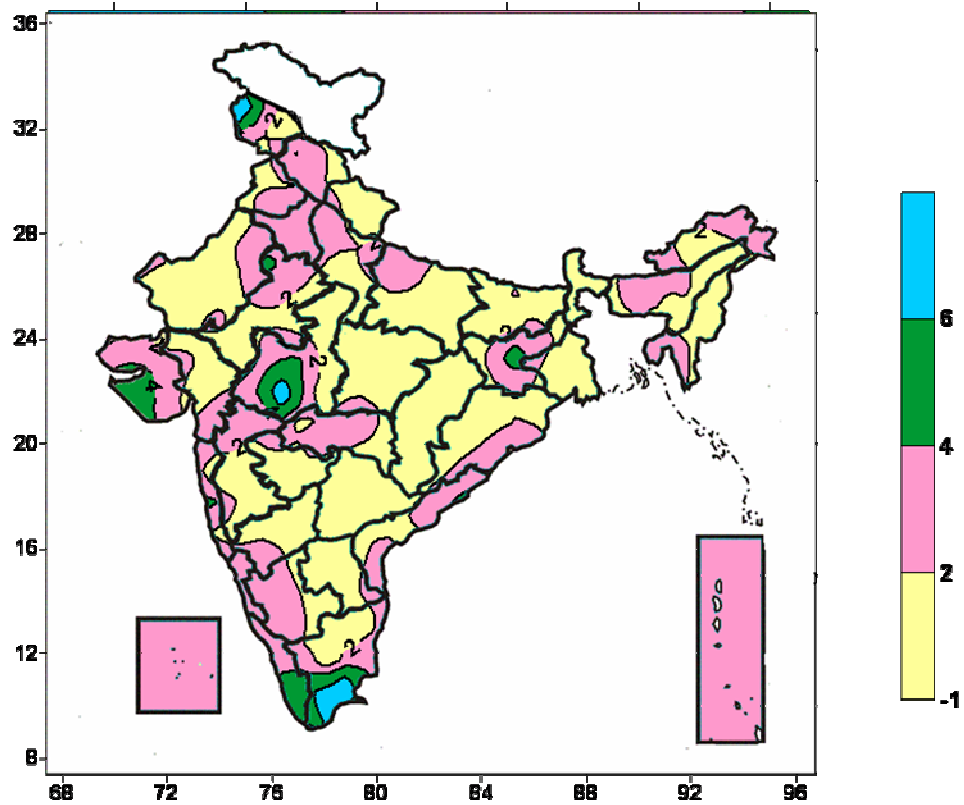
Relative Humidity (%) over India for the week ending 17.10.07



Cloud amount (okta) over India for the week ending 17.10.07



Wind speed (knots) over India for the week ending 17.10.07



Desert Locust Forecasting



Seasonal rains have ended in summer breeding areas along the **Indo-Pakistan** border. Under the prevailing weather conditions, there is no chance of locust infestation in Rajasthan and the adjoining areas during this week.

CROP – STATE – STAGE

Delhi

Vegetables	Early sown vegetables	Rice	Arhar	Maize
Transplanting	Vegetative	Maturity/ Harvesting	Harvesting	Harvesting
Bajra	Toria	Mustard	Berseem	
Harvesting	Sowing	Sowing	Sowing	

Haryana

Sugarcane	Horticultural crops	Rabi Pulses	Cotton	Paddy
Vegetative	Vegetative	Sowing	Picking	Grain maturity / harvesting
Kharif Groundnut	Cauliflower/ Raddish/ Chillies	Wheat		
Vegetative	Sowing	Sowing		

Himachal Pradesh

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Potato	Apple	Rice	Wheat / Barley / Gram
Vegetative/ head formation Ladies finger -- Flowering/Fruiting	Maturity / harvesting	Maturity/Harvesting	Grain maturity / harvesting	Land preparation & sowing

Jammu & Kashmir

Vegetable crops	Rice	Maize	Pulses / wheat / brown sarsun	Mustard, gobe sarson
Sowing / transplanting	Maturity - Jammu div.	Cob maturity	Land preparation in Kashmir div.	Land preparation in Jammu div.

Punjab

Sugarcane	Horticultural crop	Rabi pulses	Cotton	Paddy
Vegetative	Vegetative	Sowing	Picking	Harvesting
Kharif Groundnut	Wheat			
Vegetative	Sowing			

Rajasthan

Kharif crops(Bajra, Maize, Guar, Moong, Moth bean, Urd)	Zaide Fodder	Cotton	Rabi crops(Mustard, toria, gram)	
Harvesting	Vegetative	Picking	Sowing	

Uttar Pradesh

Sugarcane	Kharif Vegetables	Mango	Rice	Toria
Vegetative	Flowering / fruiting / maturity	Vegetative	Grain formation / maturity / harvesting	Early vegetative
Kharif oilseeds	Winter vegetables	Rabi pulses		
Maturity/ harvesting	Sowing	Field preparation & sowing		

Uttarakhand

Toria / pea	Ginger	Sugarcane	Potato	Kharif Rice
Seedling	Rhizome development / maturity	Grand growth	Tuber growth	Grain formation / maturity
FingerMillet/ Amranthus	Mango/Litchi			
Grain formation / maturity	Seedling			

Assam

Early winter vegetables	Sugarcane	Arhar	Sali rice	Black Gram & Green Gram
Land preparation & sowing	Harvesting	Vegetative	Flowering / grain formation	Vegetative
Horticultural crops(coconut, arecanut, mango & banana)				
planting				

Arunachal Pradesh

WRC Rice	Ginger	Millet	Jhum Paddy	Winter / Rabi crops
Flowering	Rhizome maturity	Grain formation/ maturity	Grain formation / maturity	Sowing
Rabi Vegetables	Wheat / Mustard	Potato		
Sowing / transplanting	Sowing	Planting		

Bihar

Vegetables & fruit crops	Maize	Arhar	Sugarcane	Kharif rice
Sowing	Harvesting	Vegetative	Vegetative	Flowering / Grain formation

Jharkhand

Kharif rice	Potato	Vegetables (Tomato, Brinjal, Bhendi)	Upland crops (Maize, arhar, groundnut, soybean, urad, rice and ragi)
Grain formation	Planting	Sowing Early sown – Early vegetative	Harvesting
Pea			
Sowing			

Sikkim

Orange	Vegetables	Large Cardamom	Ginger	Rice
Maturity/ harvesting	Nursery sowing / transplantation	Capsule maturity/ harvesting	Rhizome formation / development / early maturity	Flowering

West Bengal

Sugarcane	Groundnut	Arhar	Aman rice	
Cane development	Pod formation/ maturity	Vegetative	Flowering	

Chattisgarh

Sugarcane	Black gram, Green Gram	Soybean	Kharif Rice	Maize
Vegetative	Pod maturity / harvesting	Pod maturity	Panicle initiation / flowering	Maturity
Groundnut	Tomato, Brinjal, Chilli			
Pod maturity	Vegetative / flowering			

Gujarat

Sugarcane	Kharif Rice	Castor	Kharif Groundnut	Kharif Cotton
Cane development	Milking / dough / maturity	Vegetative / spike formation	Pod maturity / harvesting	Boll formation/ boll maturity
Kharif Maize	Kharif Bajra	Mustard		
Cob maturity / harvesting	Maturity / harvesting	Sowing		

Maharashtra

Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Maharashtra, Marathwada and Vidarbha)	Irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Rice (Konkan)	Kharif Rice (Madhya Maharashtra, Marathwada & Vidarbha)
Active growth / elongation	Active growth / elongation	Boll formation/ boll maturity	Grain formation / grain maturity	Flowering / grain formation
Kharif Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi potato	Kharif Groundnut (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi safflower
Grain formation / grain maturity	planting	Pod maturity / harvesting	Seed maturity / harvesting	Sowing.
Kharif Cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Soyabean (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi Jowar	Early sown jowar
Boll formation	Flowering / pod formation	Pod maturity / harvesting	Sowing	Germination
Rabi Safflower	Early sown safflower	Rabi onion / gram		
Sowing	Germination	planting		

Madhya Pradesh

Sugarcane	Kharif crops (maize, urd and jowar)	Kharif rice	Soyabean	Cotton
Grand growth	Grain maturity stage	Grain maturity	Harvesting stage	Boll formation

Orissa

Kharif vegetables	Kharif rice	Sugarcane	Arhar	
Vegetative / fruiting	Grain formation / maturity	Vegetative	Vegetative	

Andhra Pradesh

Kharif Rice	Kharif Maize	Kharif Cotton	Kharif Groundnut	Kharif Black gram, Green gram
Grain formation / development	End Harvesting	Flowering / boll formation	Pod formation	End Harvesting

Karnataka

Sugarcane (Ratoon crop)	Kharif Sunflower	Groundnut	Kharif maize & Jowar	Cotton
Grand growth	Grain development / maturity	Pod development / maturity	Grain development/ maturity / harvesting	Boll maturity / picking
Rabi Jowar/Maize/Cotton/Sunflower				
Field preparation and Sowing				

Kerala

Rubber	Mundakkan Rice	Pepper		
Tapping	Tillering	Berry development		

Tamil Nadu

Rice (Samba)	Sugarcane (Early, Mid and Late season)	Maize	Groundnut/Black gram/Green gram/Red gram	Cotton
Vegetative	Grand growth Late Sugarcane-Harvesting	Early flowering	Sowing	Picking
Jowar/Bajra/Samai	Special season sugarcane	Early sown jowar / bajra / samai	Early sown Groundnut/Black gram/Green gram/Red gram	
Sowing	Planting	Early vegetative	Early vegetative	
