



Summary of Agromet Advisory Services for different States of the country

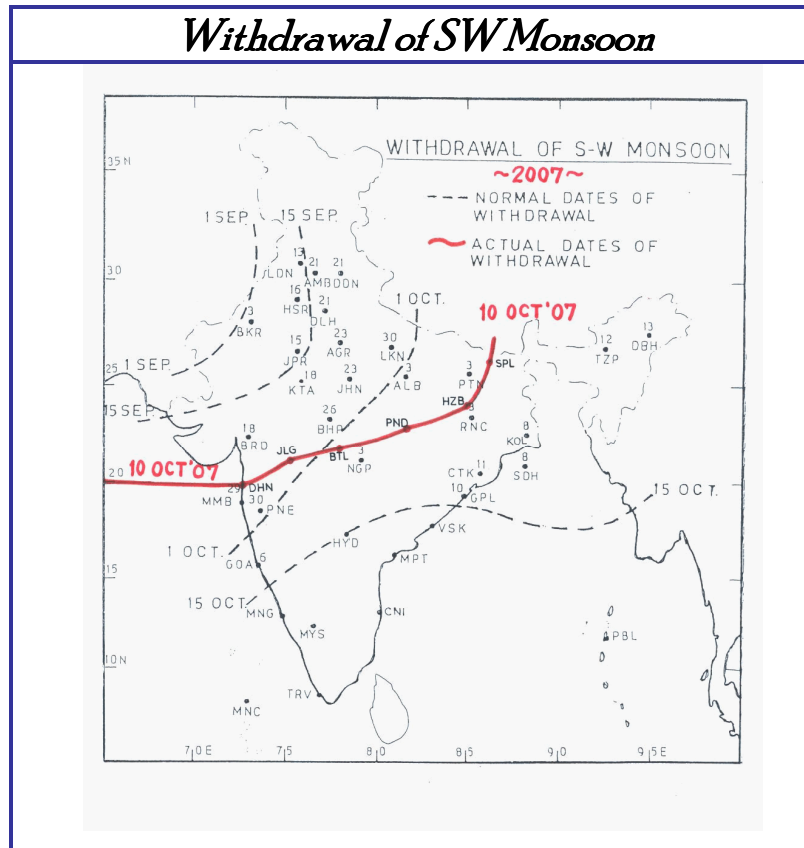
Issued by

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(For the period 11th to 15th 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

- Southwest monsoon was weak over the State during 8th to 10th October. Rain occurred at isolated places during this period.
- Rain/thundershowers are likely at a few places over the State.

Advisories

- As there was no significant rainfall over the State during last week and rain / thundershowers are likely at a few places over the State for the next three days, apply irrigation to plantation crops viz. coconut, areca nut, rubber and banana.
- 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 quick wilt and pollu beetle is reported in pepper. Spray and drench with Bordeaux mixture @ 1% to control quick wilt. Spray Quinalphos @ 0.05% to control pollu beetle. Plant protection measures may be undertaken on a non rainy day.
- Attack of pink disease is reported in rubber. Clean the affected portion and apply 1% boardeaux paste on a non-rainy day.
- Continue land preparation for transplanting of *mundakkan* rice. Lime application @ 350 kg per ha may be done during ploughing. Undertake transplanting and apply pre-emergence herbicide Butachlor @ 1 litre/ha 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.

Tamilnadu

- Rainfall occurred at one or two places over the State on 8th, 9th and 10th 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 Kanyakumari district and rain / thundershowers 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 the above district as there was no significant rainfall during last week.
- Monitor sugarcane for stem borer and if the pests population crosses ETL, release *Trichogramma* egg parasite @ 5cc / acre on a non rainy day to control the pest.
- Monitor maize for stem borer and aphids and if the pests population crosses ETL, 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 of matured cotton bolls on bright sunny days. Picking may be done at early morning hours to maintain quality of kapas.

Karnataka

- On 8th and 9th October, monsoon was weak over the State. Rainfall occurred at isolated places over the State. On 10th October, monsoon was weak over Interior Karnataka. Rainfall occurred at a few places over Coastal Karnataka. Mainly dry weather prevailed over North Interior Karnataka. Dry weather prevailed over South Interior Karnataka.
- Mainly dry weather is likely to prevail over the State.

Advisories

- As there was no significant rainfall over the State during last week and mainly dry weather is likely to prevail over the State for the next three days, apply irrigation to summer sugarcane, *rabi* jowar, maize, cotton and sunflower.
- Conserve moisture in the field where *kharif* crops are at maturity stage.
- 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.

- Start harvesting of matured crops of maize and jowar and picking of cotton.
- Start land preparation and sowing of *rabi* crops like maize, jowar, sunflower and cotton. Undertake seed treatment with *Azospirillum* before sowing maize and jowar.

Andhra Pradesh

- South West monsoon was vigorous over Coastal Andhra Pradesh on 5th October and active over Coastal Andhra Pradesh and Rayalaseema on 6th October. Rain occurred at a few places over Coastal Andhra Pradesh on 4th October and over Telangana on 5th & 7th October. Isolated rain occurred over Coastal Andhra Pradesh on 7th & 8th October, over Telangana on 4th October and over Rayalseema on 5th, 7th and 9th October. Mainly dry/dry weather prevailed elsewhere over the State during the week.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in the State during last week except in Visakapattinam and West Godavari districts in Coastal Andhra Pradesh and in Khammam district in Telangana and dry weather is likely to prevail for the next three days, apply irrigation to groundnut, rice and cotton. Postpone irrigation to the crops in the above districts as there was sufficient rainfall occurred during last week.
- Monitor rice for stem borer and leaf folder. 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.
- Monitor cotton for sucking pests and if the damage crosses ETL, spray Monocrotophos @ 1.6 ml or Acephate @ 1.5g or Imidacloprid @ 0.4 ml per litre of water to control sucking pests (thrips).
- Undertake intercultural operations in *kharif* crops to keep the field weed free.
- 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 most places on 10th October, at many places on 9th October and at a few places on 8th October and isolated heavy falls on 8th, 9th and 10th October. Cloudy sky on 9th October and generally cloudy sky on 8th and 10th October.
- Rain / thundershowers are likely at a few places over the State.

Advisories

- As there was sufficient rain during last week in Barpeta, Bongaigaon, Darrang, Dhubri, East Garo Hills, East Khasi Hills, Goalpara, Kamrup, Karbi Analog, Kokrajhar, Morigaon and Nalbari districts and rain / thundershowers are likely at a few places over the State for next three days, postpone irrigation to arhar, black gram and green gram in these districts. As there was no significant rain in remaining districts of the State during last week, apply irrigation to the crops.
- Maintain 3 – 5 cm water in *Sali* rice field.
- Continue harvesting matured crop of sugarcane. 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. 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.

- Apply chemicals on a non-rainy day.
- 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 partly cloudy to cloudy over the State during the period. Rain / thundershowers occurred at most places on 10th October and at many places on 9th October and at one or two places on 8th October.
- Rain / thundershowers are likely to occur at a few places over the State.

Advisories

- As there was no significant rain during last week in most of the districts and rain / thundershowers are likely to occur at a few places over the State for next three days, apply irrigation to millet wherever the crops are at grain formation stage.
- Maintain 3-5 cm of water in Wet seeded rice field.
- Undertake surveillance of rodent outbreak in *jhum* rice and millet.
- Continue land preparation for sowing of wheat and mustard.
- Prepare land for planting of potato. 4 to 5 ploughings are required to have good tilt. Soil should be treated with Furadon 3G. Apply 11 to 30 tonnes FYM and NPK fertilizers at the ratio of 120 kg, 100 kg and 70 kg / ha, respectively. Use seed rate of 8 – 15 q / ha depending upon the tuber size. Use Kufri Jyoti variety for planting.
- Continue land preparation and nursery sowing of *rabi* vegetables like cauliflower, chinese cabbage, carrot, knol-khol, lettuce, methi, palak, peas, radish, tomato, turnip etc.

Bihar

- Light to moderate rainfall occurred on 6th October and weather was mainly dry on rest days.
- Isolated rain / thundershowers are likely over East Bihar and mainly dry weather is likely over rest region of the State.

Advisories

- As there was no significant rainfall in the State during last week and isolated rain / thundershowers is likely over East Bihar and mainly dry weather is likely over rest region of the state, apply irrigation to the standing crops.
- Continue sowing of raddish, early cauliflower, chillies, potato, fodder maize, mung, urd and arhar, castor & tomato.
- To control sheath blight of rice, spray of 1 litre of Hexaconazole mixed in 700 litre of water, twice at an interval of 15 days.

Jharkhand

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

Advisories

- Apply irrigation to early sown vegetables as there was no significant rainfall during last week and mainly dry weather is likely to prevail for the next three days.
- Monitor rice for gundhi bug. If damage exceeds ETL, spray 25 kg Chloropyrifos dust per hectare.

- Continue harvesting of upland crops like maize, groundnut, urd and moong. After harvest, undertake sowing of *rabi* crops like gram, sarson, rai, toria, pea, lentil 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 9th October. Very light to light rain occurred at a few places on 4th & 10th October. Weather was mainly dry in East Sikkim during rest of the days. Rain fall was scanty over East Sikkim during the period.
- Isolated rain / thundershowers are likely over the State

Advisories

- As there was no significant rainfall during last week and rain/thundershowers are likely to occur at isolated places over the State for the next three days, apply irrigation to orange and ginger crops.
- Maintain water level of 3-5 cm in rice to enable maximum Tillering in low hill.
- 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.

West Bengal

- Isolated rain / thundershowers are likely over the State.

Advisories

- As there was sufficient rain during last week in Hooghly, Howrah, Murshidabad, 24 Pargana (N), Nadia, 24 Pargana (S), Coochbehar and Malda districts of the State, postpone irrigation to the crops in these districts. As there was no significant rain during last week in remaining districts and rain is likely to occur only at isolated places over the State during next 3 days, apply irrigation to sugarcane, groundnut and arhar.
- 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

- South west monsoon withdrawn from entire Gujarat state on 8th October.
- 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, *khari* cotton and castor.

- Maintain 5 – 6 cm water in rice field.
- 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 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 on bright sunny days.

Chhattisgarh

- South west monsoon has withdrawn for north Chhattisgarh on 10th October. Weather was mainly dry.
- Mainly dry weather is likely over the State.

Advisories

- As there was sufficient rain during last week in Bastar, Dantewara, Jashpurnagar and Kanker districts of the State, postpone irrigation to the crops in these districts. As there was no significant rain in remaining districts and mainly dry weather is likely to prevail over the State during next three days, apply irrigation to sugarcane, maize 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.
- Incidence of blast / sheeth rot is reported in rice for some parts. 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

- Rain occurred at a few places in South Konkan. Rain also occurred at a few places in North Konkan & at isolated places in South Madhya Maharashtra on 9th October. Mainly dry weather prevailed over rest of 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 & mainly dry weather is likely to prevail over Madhya Maharashtra, Marathwada and Vidarbha during next three days, apply irrigation to the standing crops.
- Maintain 3 – 5 cm water in the rice field.
- Mild incidence of white woolly aphids in Kolhapur division in sugarcane, sap sucking insects in Aurangabad and Latur, aphids & jassids in Amravati & Nagpur division in *kharif* cotton

and aphids, jassids, thrips in Nashik & boll worm in Aurangabad division in irrigated cotton and blast, leaf roller, blue beetle and stem borer in Konkan & blast in 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 *Crysoperla 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.
- Monitor *kharif* rice for Blast & if exceeds economic threshold level, spray Bavistin 500 gm / ha in 500 liters water.
- Monitor *kharif* rice for Stem borer & if exceeds economic threshold level, apply 10G Foret (Granular) or 5 G Quinolphos powder @ 15 kg / ha or spray 50 % fenitrothion @ 800 ml / ha in 500 liters water.
- Monitor *kharif* rice for leaf roller & if exceeds economic threshold level, spray 5 % Neem extract or 36 % WSC Monocrotophos or 50% WSC Fenitrothion 700 ml / ha in 500 liters water.
- Monitor *kharif* rice for blue beetle & if exceeds economic threshold level, spray 35 % Endosulphan 700 ml / 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 and safflower and planting of potato. 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.

Madhya Pradesh

- Monsoon has withdrawn from the remaining parts of the State on 10th October. Dry weather prevailed over of the State.
- Mainly dry weather is likely over the State

Advisories

- As there was no significant rainfall during last week except in Rewa district and mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane and cotton. Postpone irrigation in the above district as there was sufficient rainfall during last week.
- Undertake intercultural operation in sugarcane to keep the field weed free.
- Monitor rice for stem borer and if the damage crosses ETL, spray Methyl parathion @ 350 ml/ha.

Orissa

- Rainfall occurred at isolated places over the State on 8th October and weather was dry over the State during remaining days.
- Mainly dry weather is likely to prevail over the State.

Advisories

- Postpone irrigation in Balasore, Cuttack, Gajapati, Ganjam, Jagatsighpur, Jajpur, Kendrapara, and Khurda districts as there was sufficient rainfall during last week in these districts. As there

was no significant rainfall in remaining districts of the State during last week and mainly dry weather is likely to prevail over the State for the next three days, apply irrigation to the crops in these districts.

- Monitor rice for bacterial leaf blight and sheath blight. To manage bacterial leaf blight spray Streptocyclin @ 1gm/ 10 litre of water along with 20 gm of Copper Oxychloride 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 @ of 3 g 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

- Weather remained dry in the State during 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, cotton, groundnut and horticultural crops.
- Start sowing of gram and lentil using improved varieties.
- Continue picking of cotton and harvesting of pulses on bright sunny days.
- Complete sowing of toria.
- Monitor the sugarcane crop for stem borer infestation & if exceeds economic threshold level, for effective control sprinkle endosulfan 5% granules in the leaf whorls and axils.
- Prepare field and sow carrot, raddish, and brinjal.

Haryana

- Weather remained mainly dry in the State during 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.
- Incidence of *pyrilla*, top borer, black bug and shoot borer in sugarcane reported below ETL.
- Toria sowing should be completed with 21.5 kg 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 and harvesting of pulses on bright sunny days.
- Monitor the sugarcane crop for stem borer infestation & if exceeds economic threshold level, for effective control sprinkle endosulfan 5% granules in the leaf whorls and axils.
- Prepare field and sow carrot, raddish, and brinjal.

Rajasthan

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

Advisories

- As there was no significant rainfall in the State during last week and mainly dry weather is likely to prevail over the State for the next three days, apply irrigation to *Zaide* fodder and cotton.

- Continue harvesting of already matured *kharif* crops viz., bajra, jowar, maize, guar, moong, moth bean and urd.
- Monitor *desi* and *American* cotton for leaf eating caterpillar. If the pests population crosses ETL, spray endosulphan @ 1.25 litres / ha to control the pests.

Uttar Pradesh

- The southwest monsoon has further withdrawn from the entire State. Weather was mainly dry in all divisions of the State from 8th to 10th 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 and mainly dry weather is likely over the State, apply irrigation to the crops.
- Continue transplanting of winter vegetable crops.
- Monitor the 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 3- 5 cm water level in transplanted rice where the crop is in grain formation stage.
- To control Anthracnose disease in mango, spray the solution of copper oxychloride 3 g/lit in water and to control gummosis in mango tree mix Copper Sulphate 250 g, Zinc Sulphate 250 g, Borax 125 g and Slake lime 100 g in the soil and light watering as per requirement may be done.
- Prepare the field for sowing of garlic and pea.

Himachal Pradesh

- Precipitation occurred at isolated places in the State.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall over the State during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to vegetables crops.
- Drain out from the field 10 – 15 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 rain was recorded at isolated places on 10th October, very light rain was recorded at a few places on 5th & 6th October, while weather remained dry on rest of the days of the week. Sky remained mainly clear to partly cloudy during the period.
- Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in most of the districts during last week mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane, potato, and ginger.
- Undertake intercultural operations, to keep the field weed free in potato, sugarcane, rice and in orchards.
- Continue field preparation and sowing of toria/pea.
- Monitor rice for stem borer and if the pests population crosses ETL, spray Methyl parathion @ 350 ml/ha to control the pest.
- Monitor ginger for rhizome rot and collect and destroy the affected plants completely to prevent further damage.

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 field. Drain out water from the field 10 – 15 days before harvesting.
- Continue transplanting of cauliflower and knoll-khol with seed rate of 500 g, 500 g and 250 g respectively in Jammu division and sowing of onion in Kashmir division.
- Continue land preparation and sowing of pea, lentil, chickpea etc. in Kashmir division.
- Prepare land for sowing of brown sarson in Kashmir division. Select land which possesses drainage facilities. Irrigate the land before ploughing, wherever the fields are not in proper moisture condition. Adopt seed rate of 8 kg / ha. Apply 30 kg N, 30 kg P₂O₅ and 20 kg K₂O per ha as basal dose at the time of last ploughing.
- Start land preparation and sowing of wheat in Kashmir division. Adopt 100 kg/ha seeds for sowing. Apply 40 kg N, 60 kg P₂O₅, 40 kg 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.
- Start harvesting of matured fruit crops and maize in Jammu division.

Delhi

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

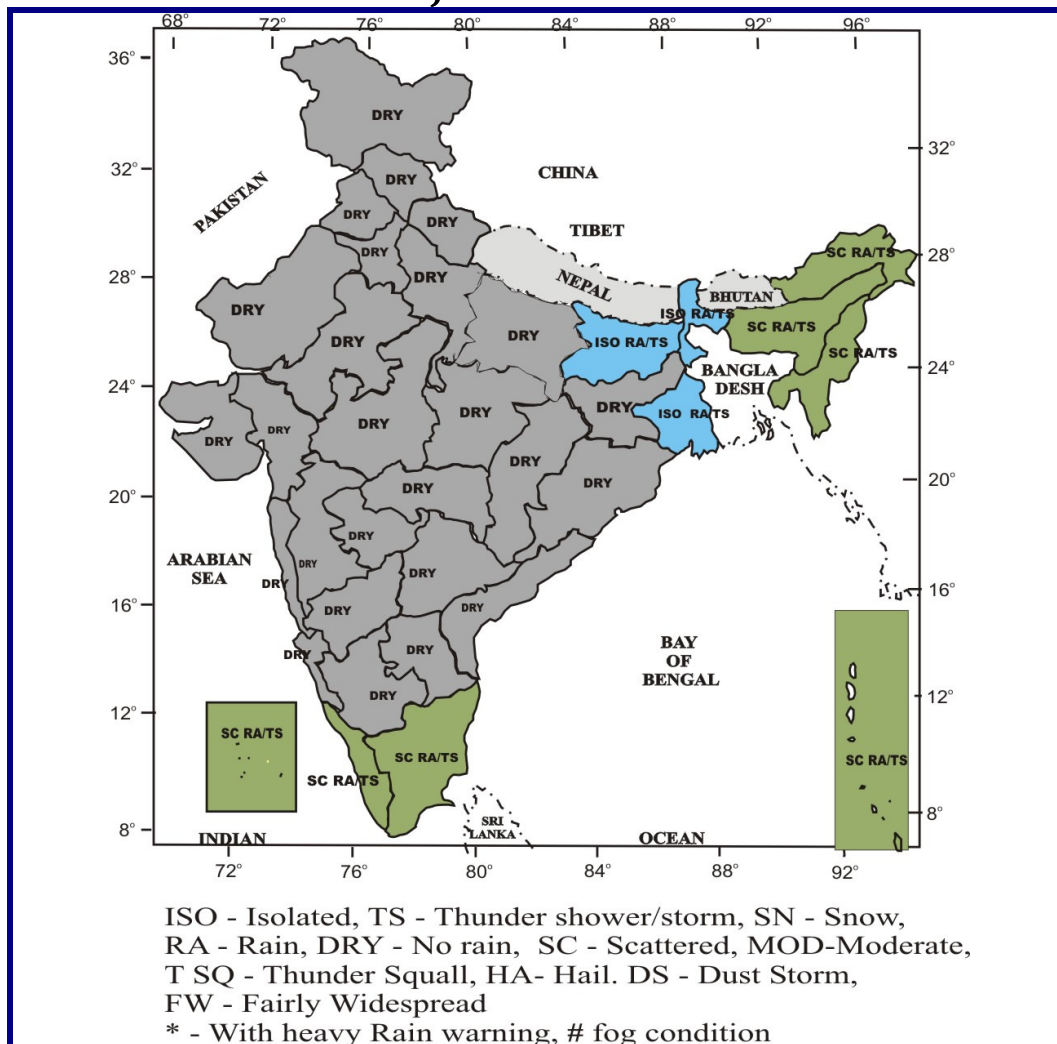
Advisories

- 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 vegetables.
- Maintain 3 – 5 cm water in the rice field.
- 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, carrot like Pusa kashar and

Pusa Desi and turnip variety like Pusa Kanchan. Treat the seeds with captan or thiram or dithane M-45 @ 2 g / kg of seeds.

- 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 rice for bacterial leaf blight and if exceeds economic threshold level, apply streptocycline @ 15 g / ha.
- Continue harvesting of already matured crops of arhar, maize and bajra on bright sunny days. Harvesting of maize should be done as soon as husk cover turns brown in colour and the silks are completely dry.
- If ergot disease is seen on ear heads of bajra, collect and destroy completely to prevent further spread and damage.
- 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.

Forecast Map *Valid upto 14th October 07*



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

METEOROLOGICAL ANALYSIS

- Southwest monsoon further withdrew from remaining parts of West Uttar Pradesh & Gujarat , some more parts of East Uttar Pradesh & Madhya Pradesh, northern parts of Maharashtra and entire north Arabian Sea on 8th October. It further withdrew from entire East Uttar Pradesh, some parts of Bihar , Jharkhand, north Chhattisgarh and most parts of Madhya Pradesh on 10th October. The withdrawal line passed through Supaul, Hazaribagh, Pendra, Betul, Jalgaon, Dahanu, Lat. 20.0°N/ Long. 70.0°E, Lat. 20.0°N/ Long. 65.0°E and Lat. 20.0°N/ Long. 60.0°E on 10th October.
- Last week's upper air cyclonic circulation extending upto mid-tropospheric level over West-Central Bay of Bengal off Coastal Andhra Pradesh persisted over the same region on 4th October. Under its influence, a low pressure area formed over West-Central Bay of Bengal off north Coastal Andhra Pradesh on 5th. It persisted over the same area on 6th and became less marked on 7th. However, the associated upper air cyclonic circulation lay over the same region extending upto 3.1 km above mean sea level on 7th and became less marked on 8th.
- Another low pressure area formed over North-East Bay of Bengal and neighbourhood on 7th morning and became well marked in the same evening .The well marked low pressure area lay over Bangladesh and adjoining north Bay of Bengal on 8th. It lay as a low pressure area over Bangladesh & neighbourhood on 9th and became less marked on 10th. However, the associated upper air cyclonic circulation extending upto 3.1 km above mean sea level lay over Bangladesh & neighbourhood on 10th.
- Last week's upper air cyclonic circulation over northeastern states persisted over the same area in the lower levels on 4th and moved away eastwards on 5th October.
- An upper air cyclonic circulation lay over north Pakistan and adjoining Jammu & Kashmir in the lower levels on 4th and over Jammu & Kashmir and neighbourhood on 5th & 6th and moved away eastwards on 7th October.
- Another upper air cyclonic circulation extending upto mid-tropospheric levels lay over north Pakistan and neighbourhood on 8th and 9th and moved away eastwards on 10th October.
- An upper air cyclonic circulation lay over southwest Bay of Bengal off Tamil Nadu coast extending upto 3.1 km a.s.l. on 10th October.

RAINFALL

Under the influence of the above systems:

- Fairly widespread rainfall occurred over Coastal Andhra Pradesh and Coastal Orissa during first half of the week. Isolated heavy to very heavy rainfall occurred over Coastal Andhra Pradesh during this period. Scattered rainfall occurred over remaining parts of Andhra Pradesh & Orissa and over Chhattisgarh during this period.
- Fairly widespread rainfall occurred over northeastern states and West Bengal & Sikkim during 2nd half of the week. Isolated heavy to very heavy rainfall occurred over northeastern States during this period.
- Isolated rainfall occurred over the remaining parts of peninsula & south Konkan during many days and over south Madhya Maharashtra & Vidarbha during a few days of the week.
- Isolated rain/thundershowers occurred over Bihar, Jharkhand, East Uttar Pradesh, East Madhya Pradesh and Western Himalayan region on one or two days 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 10TH OCTOBER, 2007)

Rainfall was excess/normal in 8, deficient/scanty in 18 and no rain in 10 out of 36 meteorological sub-divisions (Actual: 14.0 mm, Normal: 24.8 mm and Departure: -43 %).

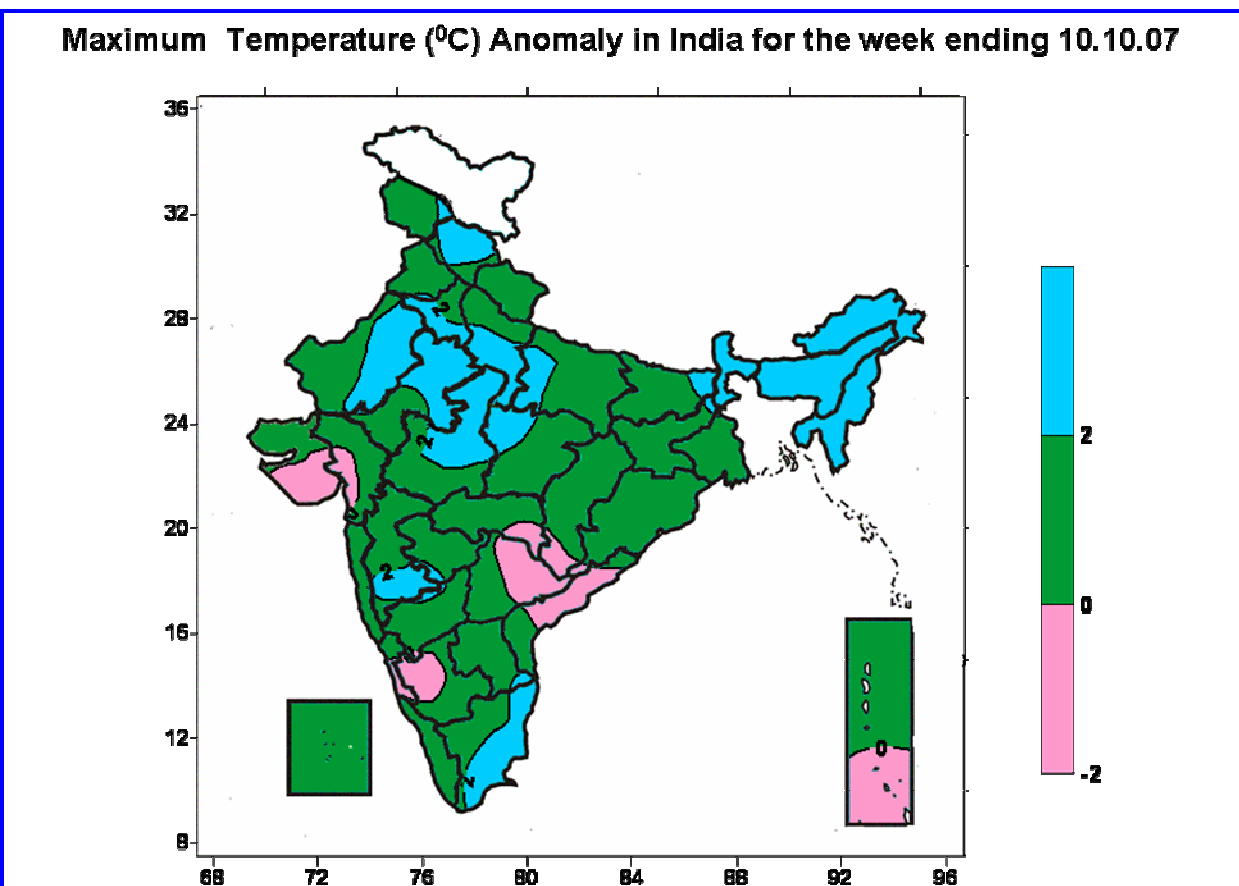
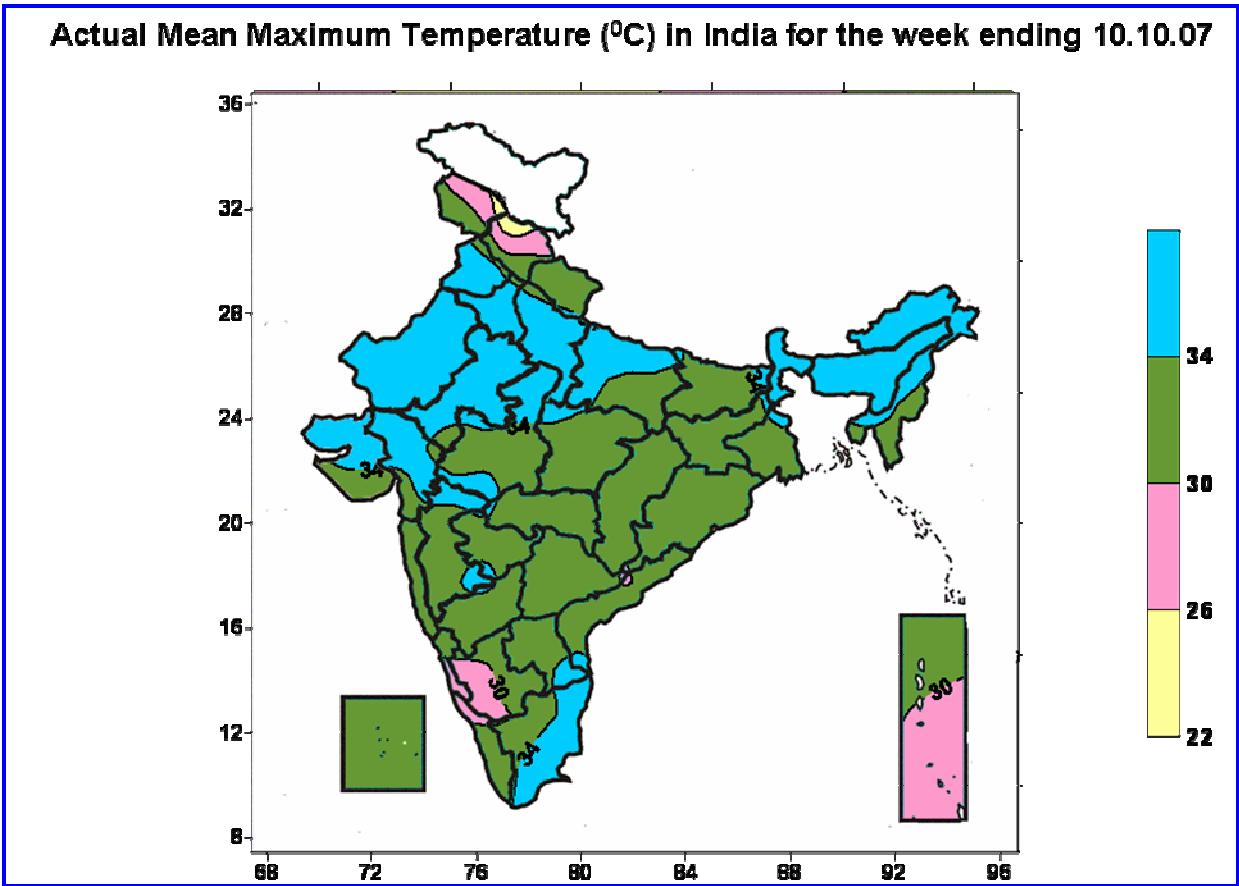
CUMULATIVE SEASONAL RAINFALL (1ST OCTOBER TO 10TH OCTOBER, 2007)

Rainfall was excess/normal in 7 and deficient/scanty in 19 and no rain in 10 out of 36 meteorological sub-divisions. (Actual: 20.4 mm, Normal: 37.3 and Departure: -45%).

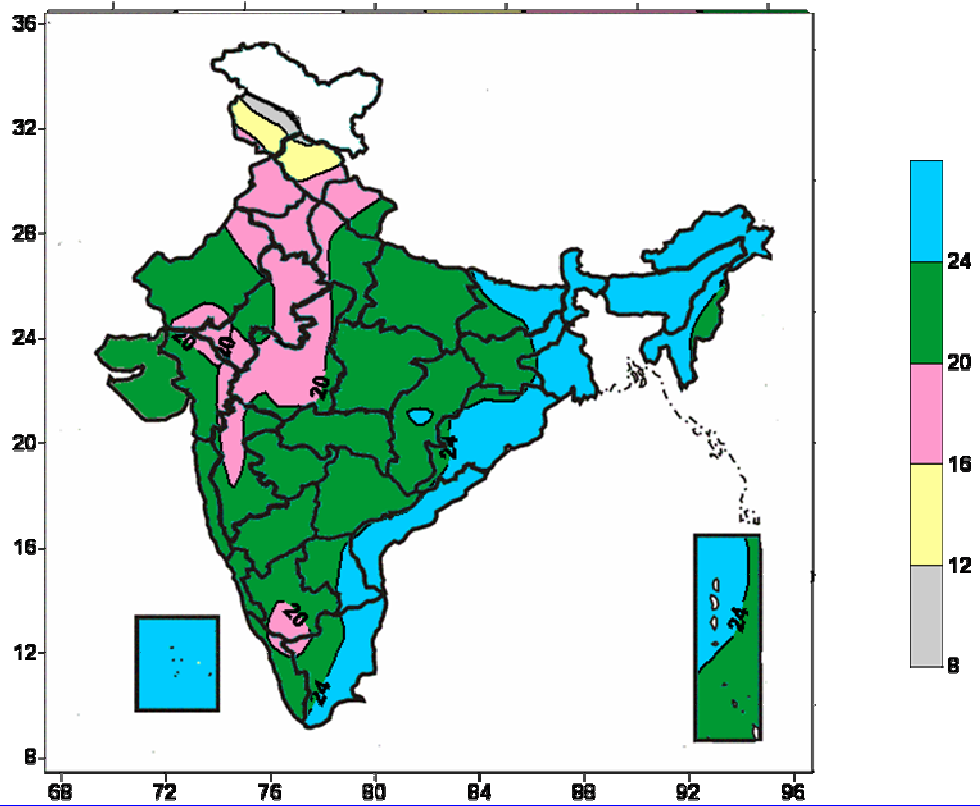
OUTLOOK FOR THE WEEK ENDING ON 17TH OCTOBER, 2007.

- Scattered rainfall activity is likely over extreme south Peninsula during the week.
- Scattered rainfall activity is likely over northeastern States during first half of the week and decrease thereafter.
- Further withdrawal of southwest monsoon is likely from some more parts of Eastern, Central and Western India.

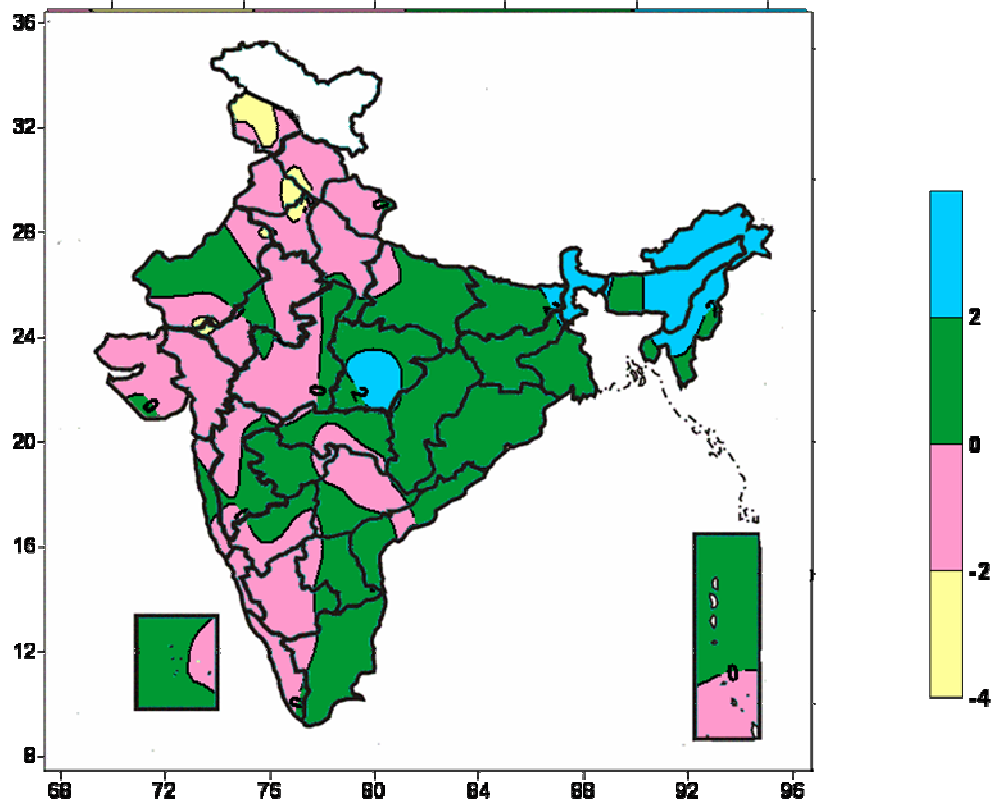
Contour maps for the week ending 10th October, 2007



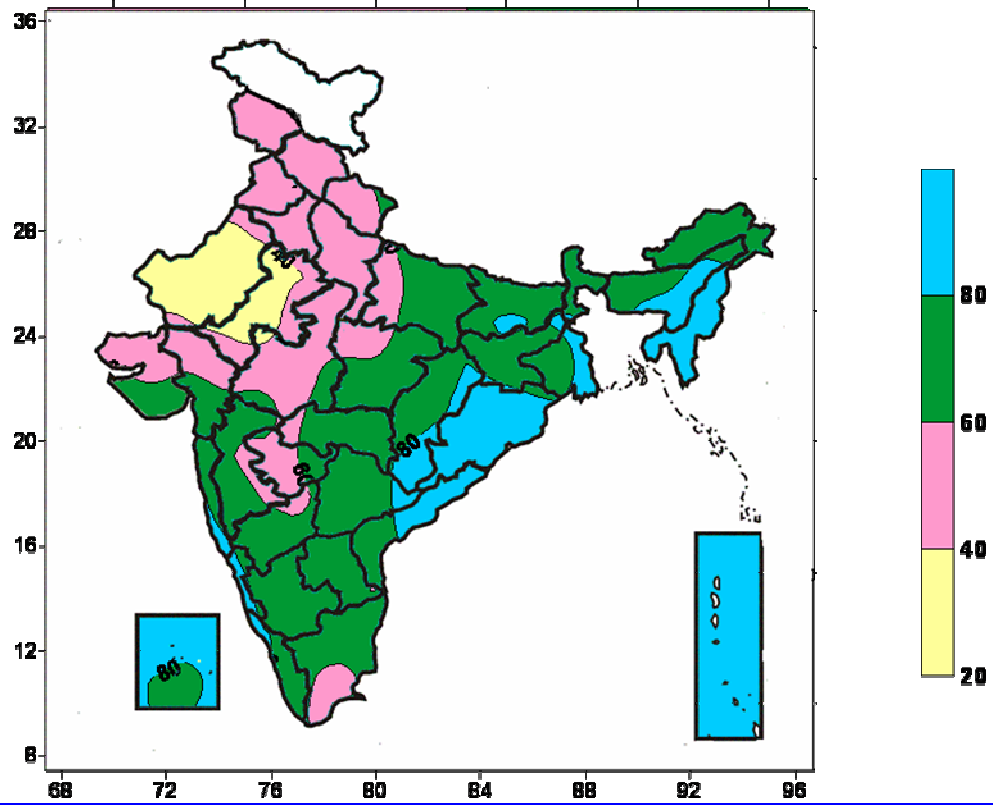
Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 10.10.07



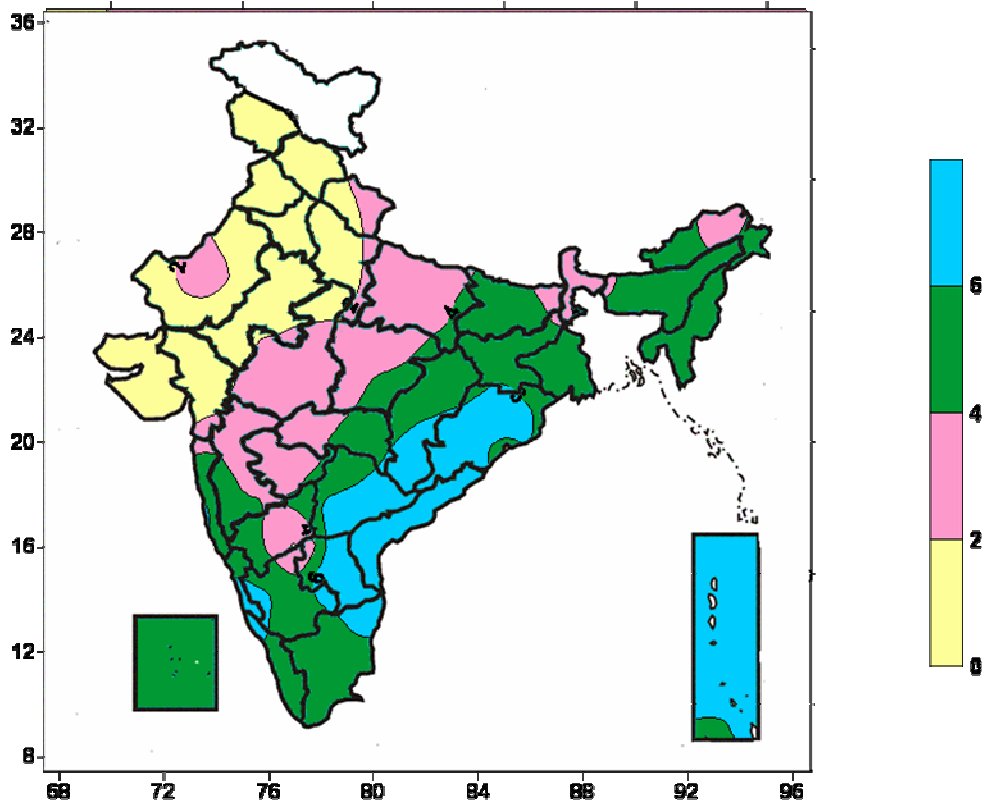
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 10.10.07



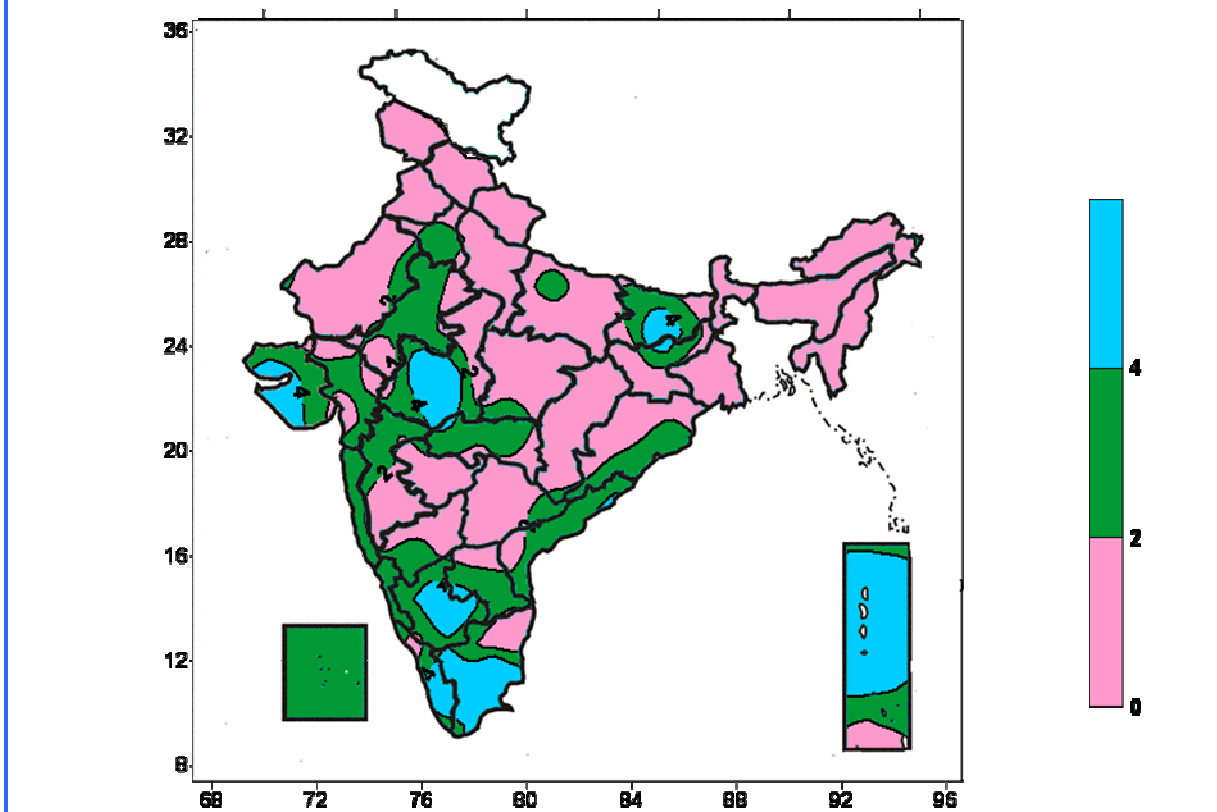
Relative Humidity (%) over India for the week ending 10.10.07



Cloud amount (okta) over India for the week ending 10.10.07



Wind speed (knots) over India for the week ending 10.10.07



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	Grain formation / early maturity	Seed maturity/ harvesting	Cob maturity / harvesting
Bajra	Toria	Mustard		
Grain maturity / harvesting	Sowing	Sowing		
Haryana				
Sugarcane	Horticultural crops	Rabi Pulses	Cotton	Paddy
Vegetative	Vegetative	Sowing	Picking	Grain maturity / harvesting
Kharif Groundnut	Cauliflower/ Raddish/ Chillies			
Vegetative	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
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	Grain maturity / harvesting
Kharif Groundnut	Cauliflower, raddish, chillies, carrot, brinjal			
Vegetative	Sowing			

Rajasthan

Kharif crops(Bajra, Maize, Guar, Moong, Moth bean, Urd)	Zaide Fodder	Cotton		
Harvesting	Vegetative	Flowering / boll formation		

Uttar Pradesh

Sugarcane	Kharif Vegetables	Mango	Rice	Toria
Vegetative	Flowering / fruiting	Vegetative	Grain formation / maturity	Early vegetative
Kharif oilseeds	Winter vegetables			
Seed formation / maturity	Sowing			

Uttarakhand

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

Assam

Early winter vegetables	Sugarcane	Arhar	Sali rice	Black Gram & Green Gram
Land preparation & sowing	Maturity / harvesting	Vegetative	Flowering / grain formation	Vegetative

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		
Land preparation for sowing	Land preparation for sowing	Land preparation for 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	Active tillering in low hills & flowering in high hills

West Bengal

Sugarcane	Groundnut	Arhar	Aman rice	
Cane development	Pod formation/ maturity	Vegetative	Panicle initiation / flowering	

Chattisgarh

Sugarcane	Black gram, Green Gram	Soybean	Kharif Rice	Maize
Vegetative	Pod maturity	Pod maturity	Booting / panicle initiation / flowering	Cob formation / early maturity
Groundnut	Tomato, Brinjal, Chilli			
Pod maturity	Vegetative / flowering			

Gujarat

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

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	Boll formation/ boll maturity	Flowering/ grain formation	Panicle initiation / flowering
Kharif Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi potato	Kharif Groundnut (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi safflower
Grain formation	planting	Pod maturity	Seed maturity	Sowing.
Kharif Cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Soyabean (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi Jowar	
Flowering / boll formation	Branching / flowering	Pod maturity / harvesting	Sowing	

Madhya Pradesh

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

Karnataka

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

Kerala

Rubber	Mundakkan Rice			
Tapping	Transplanting			

Tamil Nadu

Rice (<i>Samba</i>)	Sugarcane (Early, Mid and Late season)	Maize	Groundnut/Black gram/Green gram/Red gram	Cotton
Vegetative	Grand growth Late Sugarcane- Harvesting	Vegetative	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	
