



Summary of Agromet Advisory Services for different States of the country
Issued by
Agricultural Meteorology Division, India Meteorological
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Thursday, 16th November, 2006

(For the period 16th to 20th November, 2006)

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

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

Punjab

Weather remained mainly dry in the State during the period with some cloudiness in northern district. In view of approaching western disturbance in western Himalaya there is possibility of cloudiness/ light rain at isolated places in northeastern districts in next 2-3 days.

Mainly dry weather is likely over the State.

Advisories

- There was no rain in the State during last week and weather is likely to be mainly dry over the State for the next three days. Under the circumstances, apply required irrigation to **sugarcane, gram, lentil and wheat** to bring the soil moisture to its field capacity.
- Continue sowing of **wheat, lentil, gram and rabi oil seeds**. Use the certified seeds of recommended varieties i.e. WH-542, 147, 157, 711, C-306 (Barani Conditions) and PBW-343, WH-711, WH-423 Sonak PBW-373 (Irrigated conditions) for **wheat**. Select *desi* and *kabuli* varieties for gram.

Haryana

Weather was mainly dry in the State during the period.

Mainly dry weather is likely over the State.

Advisories

- There was no rain in the state during last week and weather is likely to be mainly dry over the State for the next three days. Under the circumstances, apply required irrigation to **sugarcane, gram, lentil and wheat** to bring the soil moisture to its field capacity.
- Continue sowing of **wheat, gram, lentil and rabi oil seeds**. Use the certified seeds of recommended varieties i.e. WH-542,147,157, 711, C-306 (Barani Conditions) and PBW-343, WH-711, WH-423 Sonak PBW-373 (Irrigated conditions) for **wheat**. Select *desi* and *kabuli* varieties for gram.
- Apply recommended dose of fertilizer at sowing time. Destroy the canes affected by **stem borer & gurdaspur borer** and to control **pyrilla** or white fly spray 600-800 ml malathion in 800 lit of water per acre.

Rajasthan

Weather remained dry in all divisions of the state.

Mainly dry weather is likely over the state.

Advisories

- Continue harvesting of matured crops of **cotton**.
- This is proper time for sowing of **barley, mustard, gram, cumin and wheat**. Continue land preparation and sowing. Undertake seed treatment before sowing.
- Apply pre sowing irrigation before sowing of **wheat**. Select among GW-173,190, PBW-343, HD-2329, Raj-1482, 3077, 3765 etc. for sowing.

Uttar Pradesh

Weather was mainly dry in all divisions of the State from 13th to 15th November.

Weather will be mainly dry over the State

Advisories

- 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. Under the circumstances, apply irrigation to bring the soil moisture to its field capacity in *rabi oilseed* and *winter vegetable* crops.
- Continue weeding and hoeing along with top dressing of nitrogen in winter *vegetables* and *rabi oilseeds*.
- Sowing of *rabi wheat*, *barley* and *fodder crops* may be completed.
- Complete sowing of *rabi pulses* and oilseed *mustard* and *rai*.
- Transplanting of winter vegetables *cauliflower*, *brinjal*, *chilli* and *tomato* may be continued.
- Harvesting of matured *rice*, *sugarcane*, *pulses*, *groundnut* and *kharif vegetables* may be continued.

Himachal Pradesh

The weather was dry during the week in the State.

Mainly dry weather is likely over the State.

Advisories

- As there was no rain during last two weeks, apply irrigation to *vegetable* crops.
- Continue land preparation and sowing of *Arcle peas* in the high hills, transplanting of *cauliflower* and *cabbage* and sowing of *wheat*, *gram*, *barley*, *radish*, *turnip* and *carrot*.
- Select varieties from VL 616, HS 277, PBW-343 for early sown, HPW-89, HS-240, HPW-147, HPW-184 for timely sown and HPW-42, HS-295 for late sown *wheat*, Himachal Chana – 1; C-235; HPG-17 for *gram* and Vimal (HBL-113) Dolma; Sonu (HBL-87); Gopi (HBL-316); Harit HBL-276) for *barley*.

Uttaranchal

Weather remained mainly dry during the period. Sky remained mainly clear to partly cloudy during the week.

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall during last week and mainly dry weather is likely over the State. Under the circumstances, apply irrigation to *mango*, *litchi*, *pea*, *toria*, *potato* and *sugarcane* crops to bring the soil moisture to its field capacity.
- Continue sowing of *wheat*.
- Continue harvesting of matured *rice* and *finger millet* crop.

Jammu & Kashmir

Moderate rain / snow occurred at many places with heavy falls at isolated places on 13th November. Weather remained mainly dry on 14th & 15th over J & K State.

Isolated rain / snow is likely over the State during next 24 hours and at a few places subsequently during next 48 hours.

Advisories

- Apply irrigation in Kashmir division to safeguard the crops from cold injury.
- Continue sowing of *carrot*, *beet root* and *turnip* for seed crop in Jammu division and sowing of crops like *Methi*, *Palak*, *Coriander*, *raddish* etc. in Kashmir division. Continue nursery sowing for *onion*.
- Continue sowing of *brown sarson* (Kashmir division), *gram* (Jammu division), *mustard*, *pea*, *lentil*, *toria* and *wheat* to utilize residual moisture. Before sowing, undertake ploughing followed by planking to

conserve moisture.

- Prevailing weather conditions in Jammu division may be favourable for the infestation of **flea beetle** in **toria** crop. Monitor the crop and if damage exceeds ETL, spray the crop with Carbaryl 50 WP @ 2gm / litre or Malathion @ 0.05% on a non rainy day.

Delhi

Weather remained dry.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall during last few weeks and mainly dry weather is likely over the State for next three days, apply irrigation to **early sown vegetable crops, mustard and toria** to bring the soil moisture to its field capacity.
- Prepare land and continue transplanting of 4 – 6 weeks old varieties of **cauliflower, cabbage and knolkhol** plants.
- Prepare land and perform sowing of Japanese White and Reshmi varieties of **raddish**, Pusa kanchan, Golden Ball and Pusa Chandrama varieties of **turnip** and Bonabilla variety of **peas** and nursery sowing of N53 and Pusa Red varieties of **onion**. Treat the seeds with Captan or Thairam or Dithane M- 45 @ 2 g / kg seeds.
- Prepare land and continue sowing of **wheat, gram and barley**.
- Select varieties from HD-2329, HD-2009, WL-74, HD-3428, CPAN and PBW-215 for **wheat**, P-209, Pusa-408, Gaurav C-235 and K-851(Kabuli chana) for **gram** and Jyoti, BG 25, D – 70 and Ratna for **barley** for sowing.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Rain / thundershowers occurred at a few places in Kerala during the period.

Rain/thunder showers are likely at many places over the State.

Heavy Rain Warning: Isolated heavy rainfall is likely during next 48 hours.

Advisories

- As rain / thunder showers are likely at many places over the State, postpone irrigation to the standing crops.
- Arrange for drainage facilities in case of heavy rainfall.
- Attack of **leaf folder, brown plant hopper, stem borer, gall midge, sheath blight and bacterial leaf blight** is reported in **mundakkan rice**. Spray 0.05% Monocrotophos or Quinalphos after current spells of rain to control insect pests and 2% *Pseudomonas flourescns* culture @ 1 kg/ha to control the disease.
- Attack of **leaf eating caterpillar, red palm weevil, leaf rot and bud rot** disease and **mite** is reported in **coconut**. Fill the leaf axils with 25 gm., sevidol 8 G and fine sand 200 gm to control **red palm weevil**. Spray 1% Bordeaux mixture on spindle leaves and crown to control **leaf and bud rot**. Spray Dichlorovos @ 1 ml per litre water or use Mercaptothion followed by release of pupal and larval parasites available from bio-control lab, 21 days after spraying to control **leaf eating caterpillars**. Spray garlic-neem emulsion to control **mites**. Spraying chemicals may be undertaken after current spells of rain.
- Attack of **pollu beetle and quick wilt** is reported in **pepper**. Spray Ekalux @ 2ml in one litre of water to control beetle. Spray and drench with 1% Bordeaux mixture to control **wilt**. Undertake these plant protection measures after current spells of rain.
- **Pink disease** is reported in **rubber**. Apply 1% Bordeaux paste after current spells of rain to control the disease.

- Attack of **bunchy top** and **pseudo stem weevil** is reported in **banana**. Eradicate bunchy top affected plants to reduce the spread of the disease. Apply Phorate @ 25 g/pit before planting new crop to prevent further spread of the disease. Fill the leaf axils with Chlorophyriphos @ 2.5 ml / litre of water after current spells of rain to control **pseudo stem weevil**.
- Weeding, intercultural operations, application of fertilizers and new planting may be continued after current spells of rain.

Tamilnadu

Northeast monsoon has been active over the State. Rainfall occurred at most places over Coastal Tamilnadu and at a few places over Interior Tamilnadu on 13th November, at many places over Coastal Tamilnadu and at one or two places over Interior Tamilnadu on 14th November at many places over Coastal Tamilnadu and at a few places over Interior Tamilnadu on 15th November.

Rain / thunder showers are likely at many places over the State.

Warning: Isolated heavy rainfall is likely during next 48 hours.

Advisories

- As rain / thunder showers are likely at many places with isolated heavy rainfall over the State, postpone irrigation to **early/mid sugarcane** and **millet**s.
- Due to heavy rainfall during last few weeks, arrange for drainage facilities to avoid crop damage. Apply urea for the revival of crops in flood affected areas after current spells of rain and after removal of excess water.
- Cloudy weather conditions are favourable for the outbreak of pests and diseases, particularly for **BPH** and **blast**. Monitor the crop and undertake plant protection measures after current spells of rain.
- Incidence of **internode borer** has been reported in **Sugarcane**. Monitor the crop continuously as the weather conditions are favourable for further spread. Release *Trichogramma chilonis* @ 5 cc/ha parasite after current spells of rain to control the pest. Repeat after 15 days.
- Continue nursery sowing/ transplanting of **samba rice**.
- Continue intercultural operations, application of fertilizers and pesticides after current spells of rain.
- Continue land preparation and sowing of **cotton**, **pulses** and **groundnut** and **sunflower** after current spells of rain.

Karnataka

Rainfall occurred at isolated places on 15th November and dry weather prevailed on the remaining days over the State.

Rain / thundershowers are likely at a few places over south Interior Karnataka and at isolated places over coastal & north Interior Karnataka.

Advisories

- Conserve moisture in the field wherever the crops are at maturity stage.
- Harvest the matured **kharif crops** on bright sunny days.
- Attack of **army worm** has been reported in **sugarcane** in **Bidar** and **Bagalkote** districts in north interior Karnataka subdivision. Avoid spraying as the crop is now at harvesting stage.
- Continue land preparation and sowing of **rabi jowar**, **sunflower**, **wheat** and **maize**.

Andhra Pradesh

Rain occurred at a few places over Coastal Andhra Pradesh on 9th & 10th November and isolated rain occurred over Coastal Andhra Pradesh on 11th November, from 13th to 15th November over Telangana and Rayalaseema from 9th to 11th November and also over Rayalaseema from 13th to 15th November. Dry weather prevailed over the State during the week.

Rain/thundershowers are likely at many places over south Coastal Andhra Pradesh; at a few places over north Coastal Andhra Pradesh, Rayalaseema and isolated over the rest region.

Warning: Isolated heavy rainfall is likely over South coastal Andhra Pradesh.

Advisories

- Conserve moisture in the field wherever the crops are at maturity stage.
- Arrange for drainage facilities in coastal Andhra Pradesh as heavy rainfall is likely to occur at isolated places.
- Incidences of **pod borer** have been reported in **red gram**. Spray Dichlorvas @ 2.5 ml/litre of water in **Telangana**. Spraying may be undertaken after spells of rain in south Coastal Andhra Pradesh and on a non rainy day in north Coastal Andhra Pradesh and Rayalaseema.
- Continue harvesting matured **maize, cotton and chillies** on bright sunny days.

Eastern Region (Assam, Bihar, Sikkim, West Bengal)

Assam

Excess rain occurred in Darrang, Dibrugarh, East Garo Hills, East Khasi Hills, Kamrup, Lakhimpur, Morigaon, Nalbari, Sonitpur and Tinsukia districts during last week.

Mainly dry weather is likely over the State.

Advisories

- As there was excess rain in **Darrang, Dibrugarh, East Garo Hills, East Khasi Hills, Kamrup, Lakhimpur, Morigaon, Nalbari, Sonitpur and Tinsukia** districts during last week, postpone irrigation in these districts.
- As there was no significant rainfall during last week in remaining districts and mainly dry weather is likely over the State for the next three days, apply irrigation to **black gram, green gram, rapeseed and mustard** to bring the soil moisture to field capacity.
- Maintain 5 – 7 cm water level in **Sali rice** field wherever crops are at early maturity stage. Drain out standing water 10-15 days before harvesting.
- Mild incidence of **Pod and apion borer** in **arhar, aphids, jassids, flea beetle and leaf spot** in **black gram and green gram** and **aphids and saw fly** in **mustard** is reported.
- Monitor **Pod and apion borer** in **arhar** and if crosses economic threshold level, spray Malathion 50 EC @ 1.5 ml per litre of water or Fenitrothion 50 E.C. @ 2ml per litre of water.
- Monitor **Aphids, Jassids, Flea beetles** in **black gram and green gram** and if crosses economic threshold level, spray Malathion 50 EC @ 2ml per litre of water. For **leaf spot**, as soon as diseases appear, spray Blitox or Fitolan @ 1.5 gram per litre of water at an interval of 7 to 10 days. Alternatively Bavistin @ 1 gram per litre of water should be applied at an interval of 12 to 15 days.
- Monitor **aphids and saw fly** in **mustard** and if crosses economic threshold level, spray Rogor or malathion @ 2ml per litre of water.
- Continue land preparation and sowing of **winter vegetables, rapeseed, mustard, potato, wheat, pea and lentil**.

West Bengal

During the said period weather was mainly dry through out the State.

Mainly dry weather is likely over the state.

Advisories

- As excess rain occurred in **Bankura, Birbhum, Burdwan, Murshidabad, Purulia, Coochbehar, Darjeeling, Jalpaiguri and Malda** districts of the State, postpone irrigation in these districts.
- As there was no significant rainfall in the remaining districts of the State during last week and mainly dry

weather is likely to prevail for next three days, apply irrigation to **sugarcane** to bring the soil moisture to its field capacity.

- Maintain 5 – 7 cm water in **aman rice** field wherever crops are at grain formation stage. Drain out water from the field 10 – 15 days before harvesting.
- Continue harvesting of matured crops of **aman rice** and **groundnut** on bright sunny days.
- Land should be prepared and sowing of **boro rice**, **gram**, **lentil**, **wheat**, **rapeseed** and **mustard** may be done.
- Select varieties from CR-126-42-1, Khitish, IE-2233, PNR 381, IR-36, Lalat, Annada, Aditya, Tulsi etc. for short duration and Shasyasri, Prakash, Kunti, Ajaya, Pratap, Suraksha etc. for medium duration **boro rice**, Mahamaya 1&2, Anuradha(39-2) etc. for **gram** and Sonalika, UP 262, HP 1209, 1633, K 8804, PW 11 etc. for **wheat**.

Bihar

Light to moderate rain had occurred at isolated places.

Mainly dry weather is likely over the State.

Advisories

- Mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation to bring the soil moisture to field capacity in **vegetables**.
- Continue transplanting of early **cauliflower**, **chillies**, **brinjal** from ready seedling and sow winter vegetables.
- Harvest the matured **rice** crop.
- Continue field preparation and sowing of **rabi maize**, **pulses**, **oilseeds**, **wheat** and **potato** with available residual moisture.

Jharkhand

Weather remained mainly dry.

Mainly dry weather is likely over the State.

Advisories

- Mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation to bring the soil moisture to field capacity in **vegetables**.
- Harvest the matured **rice** crop.
- Continue field preparation, sowing/transplanting of **onion**, **tomato**, **cabbage**, **cauliflower**, **brinjal**, **chilli**, **potato** and **pea**.
- Sowing of **rabi pulses**, **oilseeds**, **maize**, **potato** and **wheat** may be continued.

Sikkim

No rain occurred during the period.

Mainly dry weather likely over the State.

Advisories

- There was no significant rainfall during last week and dry weather is likely to prevail over the State for next three days. Under the circumstances, apply required irrigation to **vegetables** to bring the soil moisture to its field capacity.
- Continue harvesting of **large cardamom**, **orange** and **rice**.
- Continue sowing of **wheat**, **mustard** and transplanting of **rabi** vegetables.

Arunachal Pradesh

Weather was mainly dry over the State.

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall except in **Changlang, East Kameng, Lower Subansiri, Papumpara and West Stang** districts during last week and mainly dry weather is likely over the State for next three days. Under these conditions, apply irrigation to bring the soil moisture to field capacity to new crop of **ginger, early sown potato and winter vegetables**. Apply irrigation depending on soil profile stored moisture in the above mentioned districts.
- Field preparation and sowing of **potato, wheat and mustard** may be continued.
- First top dressing in early sown **potato** (33Kg Urea/ha.) followed by earthing up and spraying with 1.25 Kg. Dithane M-45 in 500 Lit. water may be done.

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

Gujarat

Weather remained dry during last week.

Weather will be mainly dry over the State.

Advisories

- As there was no significant rain in the State during last few weeks and mainly dry weather is likely over the State for next three days, apply irrigation to **sugarcane, pre-monsoon irrigated cotton, Kharif cotton, castor and mustard** to bring the soil moisture to field capacity.
- Continue harvesting of **kharif rice** and **kharif groundnut**.
- For monitoring & management of **boll worm & heliothis** of **cotton** hang 5 pheromone traps in one ha. Change the lures at an interval of 15 days. Destroy trapped moths every day. If boll worm population crosses economic threshold level, release parasite tricogramma @ 1.5 lakhs / ha 5 to 6 times as per requirement depending upon infestation found in field.
- If **white fly** population crosses economic threshold level in **cotton**, spray Neem oil @ 4 liter / ha.
- Prepare land and continue sowing of **wheat** crop. Select varieties from Lok-1, GW-496 (125-130 kg seeds / ha), GW-190 (100 kg seeds / ha), GW-503,273, 322 (125 kg seeds / ha), Raj-1555 (duram) (150 kg seeds / ha) for normal sowing and Lok-1, Gw-173 (150 kg seeds / ha) for late sowing of irrigated wheat and GW-1, A-206 (50 – 60 kg seeds / ha) for sowing of non-irrigated wheat. Apply basal fertilizer dose 60 kg Nitrogen, 60 kg phosphorus / ha for irrigated wheat and 20 kg Nitrogen for unirrigated wheat in furrow at the time of sowing.

Chhattisgarh

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in almost all the districts during last week and mainly dry weather is likely over the State for next three days, apply irrigation to **sugarcane and vegetables**.
- Maintain 5 – 7 cm water in **rice** field wherever crops are at grain formation stage. Drain out water from the field 10 – 15 days before harvesting.
- Continue preparation of land and sowing of **gram, linseed, safflower, mustard and toria**.
- Seeds of **gram** may be treated with 2 to 2.5 gm Thiram / Captan / kg seeds & 250 gm Rhizobium +PSB / 10 kg seeds before sowing.

Maharashtra

Mainly dry weather prevailed all over the state.

Mainly dry weather is likely over the state.

Advisories

- As there was no significant rain during last week in most of the districts and mainly dry weather is likely over the State for next three days, apply irrigation to **Sugarcane**, **kharif cotton**, **tur** and **Cotton (irrigated)** crops.
- Mild incidence of **White Woolly Aphids** in Aurangabad, Latur, Kohlapur and Pune and **Pyrilla**, **White fly** and **Mealy bug** in Nashik in sugarcane, **Rice hispa** & **Midge fly** in Nagpur division in **Kharif rice**, **Aphids** and **Jassids** in Aurangabad and **Boll worm** in Latur, Nashik and Amravati div. in irrigated cotton and **Aphids** and **Jassids** in Aurangabad and Vidarbha division in **kharif cotton** and **leaf roller** in Aurangabad and **pod borer** in Latur division in tur is reported.
- Monitor **White Woolly Aphids** in **sugarcane** and if crosses economic threshold level, release 2500 eggs or larvae of *Krisoperla Karnea* or *Konobatra Aphidivora* parasite on the leaves or spray Endosulphan @ 500 ml plus Metasistox 1000 ml and 500 ml sticker or 1 kg detergent powder mixed in 500 liter water / ha.
- Monitor infested plants by **Hispa** in **rice** & if exceeds economic threshold level, spray Copper oxychloride 50 % @ 1250 gm or Zyneb 75 % @ 1000 gm in 500 liter water.
- Monitor infested plants by **Midge fly** in **rice** & if exceeds economic threshold level, 10 % granular Phorate / ha may be mixed in the soil.
- Monitor **aphids** and **jassids** population in **cotton** and if crosses economic threshold level, spray methyl dimeton 25EC @ 320 ml or dimethoate 30EC @ 500 ml / ha in 500 liter water.
- Monitor **Boll worm** in **cotton** and if exceeds economic threshold level, spray 36 % Monocrotophos WSC or 35 % Endosulphan WSC @ 850 ml / ha in 500 liter water.
- Monitor **leaf roller** population in **tur** and if crosses economic threshold level, spray 1000 ml endosulphon / ha in 500 liter water.
- Monitor **pod borer** population in **tur** and if crosses economic threshold level, spray 5% Neem extract or 20 to 25 ml Fenvalerate / ha in 100 liter water.
- Continue field preparation and sowing of **wheat**, **gram** and planting of **sugarcane (Pre-seasonal)**, **potato** and **onion**.
- Select varieties like HD 2189, 2278, 2380, DWR 162, MACS 2496, Tryambak, Godawari for **irrigated wheat**, Vikas, Fule-G 12, Vishwas, Vijay & Vishal, Virat for **gram**, CO-740, CO-7219, CO-86032, CO-M-88121 for **sugarcane (Pre-seasonal)**, Kufari-Sinduri, Kufari-Lavkar, Kufari-Chandramukhi for **potato** and N-2-4-1, Pusa red, Arka nicketan (for *rabi* plantating), Fule suvarna (for export) & Agri white-1, Fule safed, N-257-9-1 varieties (for powder) for **onion**.

Madhya Pradesh

Weather was mainly dry.

Mainly dry weather is likely over the State.

Advisories

- Conserve moisture in **tur** as the crop is now at maturity stage.
- Continue land preparation and sowing of *rabi* crops like **wheat**, **gram**, **mustard**.
- Before sowing, undertake seed treatment with Carbendazim @ 1.5 grams and Thiram @ 1.5 grams or *Trichoderma viridi* @ 5grams for 1 kg of seed.

Orissa

Weather was mainly dry.

Mainly dry weather is likely over the State.

Advisories

- There was excess rainfall except in Bargarh, Bhadrak, Boudhgarh, Gajapati, Ganjam, Jagatsingpur, Jharsuguda, Kandhamal, Kendrapara, Koraput, Malkangiri, Nawapara, Sambalpur, Sonepur and

Salient weather features for the week ending 15/11/06

METEOROLOGICAL ANALYSIS

- The easterly waves affected the south peninsular region during the entire week. It also affected adjoining north peninsula and coastal Orissa during a few days of the week.
- The western disturbance as an upper air system affected Jammu & Kashmir during 9th to 13th.
- The upper air trough in westerlies at 500 hPa level roughly ran along 78°E upto 20°N on 9th. Moving slowly eastwards, it ran along 82°E upto 20°N on 13th along 84°E upto 20°E on 14th and became less marked on 15th.

RAINFALL

Under the influence of the above systems:

- Fairly widespread rainfall occurred over Tamil Nadu & Pondicherry, Kerala and south Coastal Andhra Pradesh on many days of the week. Fairly widespread rainfall also occurred over north Coastal Andhra Pradesh during 9th to 10th. Isolated heavy rainfall also occurred over Tamil Nadu on 9th & 12th and Coastal Andhra Pradesh on 9th & 15th. Isolated to scattered rainfall activity occurred over remaining parts of the peninsula during many days of the week.
- Fairly widespread/scattered rainfall activity occurred over coastal Orissa during 9–10th and it was isolated over remaining parts of east India during 10-11th.
- Scattered rainfall activity occurred over northeastern States during 10-12th and it was isolated on 9th and 13th.
- Scattered/isolated precipitation was realized over Jammu & Kashmir during many days of the week.
- The weather was mainly dry over remaining parts of the country during the week.

TEMPERATURES

- The night temperatures remained above normal over most parts of the country except peninsular India during the week. However, they were appreciably/markedly above normal over northwest India during many days of the week. They were above normal by 8-9° C over west Rajasthan on 8th November.
- The night temperatures were normal over most parts of the Peninsula during the week except that they were below normal by about 2°C over some places in the western parts of the peninsula during 11-13th.

RAINFALL DURING THE WEEK ENDING ON 15TH NOVEMBER, 2006

Rainfall was excess/normal in 15 and deficient/scanty in 12 and no rain in 9 out of 36 meteorological sub-divisions (Actual: 7.2 mm, Normal: 6.5 mm and Departure: +11%).

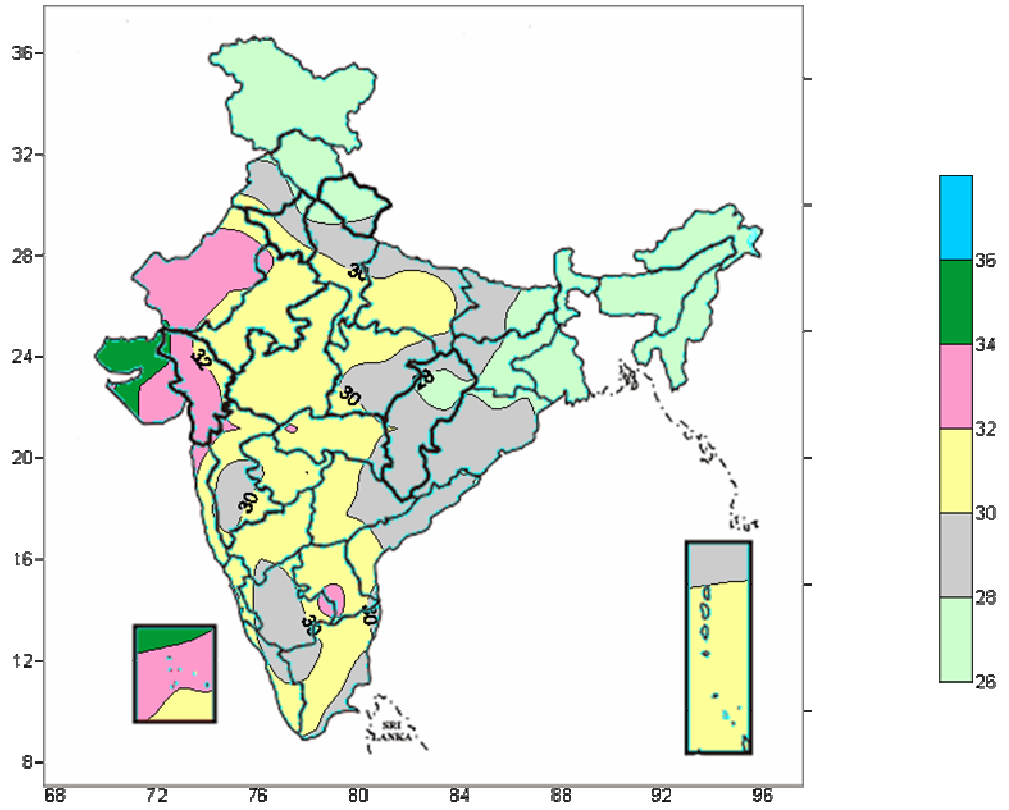
CUMULATIVE SEASONAL RAINFALL (1ST OCTOBER TO 15TH NOVEMBER, 2006)

Rainfall was excess/normal in 11 and deficient/scanty in 25 out of 36 meteorological sub-divisions. (Actual: 73.3 mm, Normal: 95.7 mm and Departure: -22%).

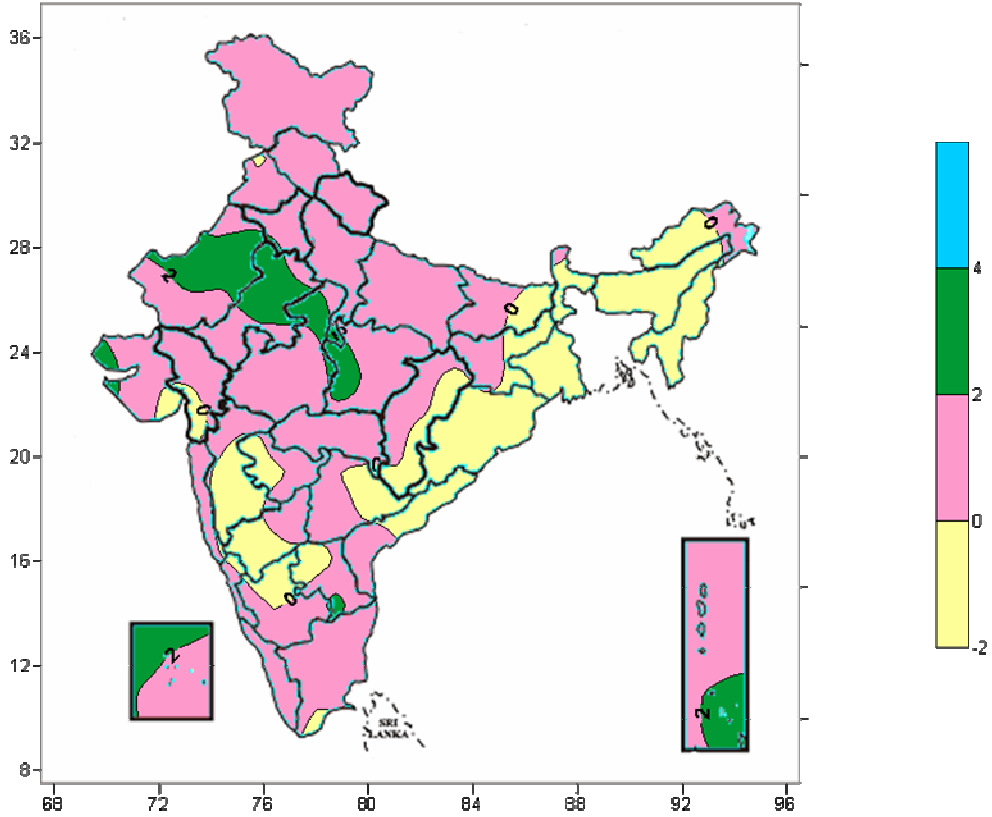
OUTLOOK FOR THE WEEK ENDING ON 22ND NOVEMBER, 2006.

- Fairly widespread/scattered rainfall activity is likely to continue over south peninsula during the week.
- Two western disturbances as an upper air system are likely to affect Jammu & Kashmir and adjoining areas during beginning and end of the week respectively.
- The night temperatures are likely to fall by 2-3°C over northwest and adjoining central India during the middle of the week.

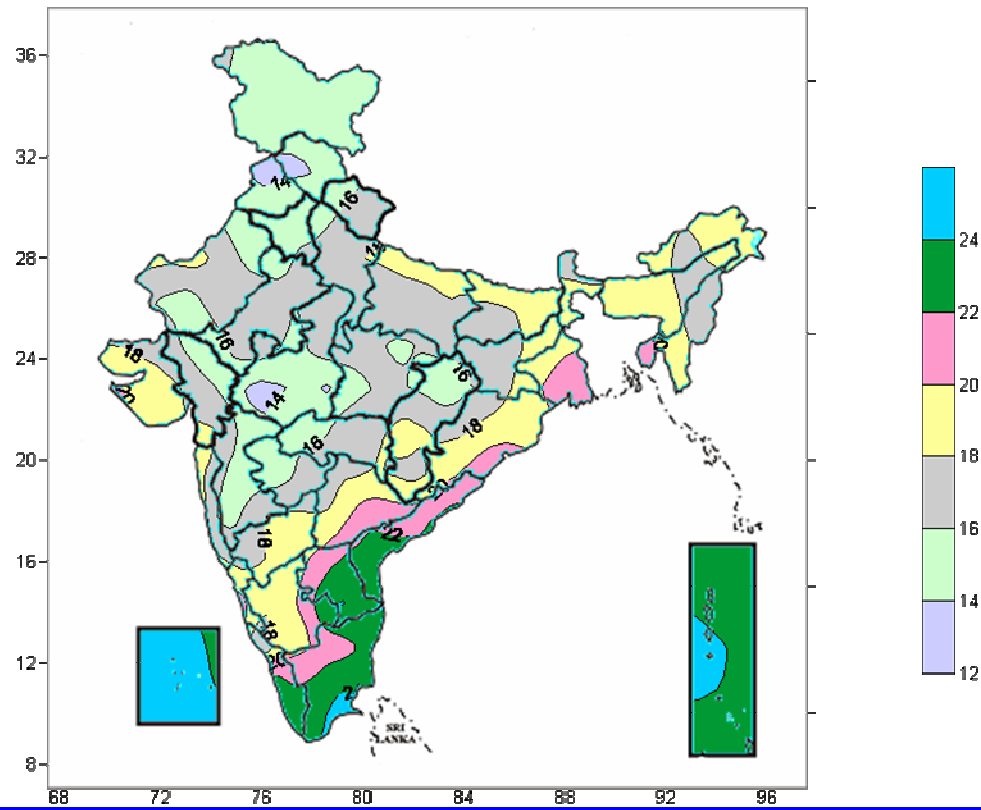
Actual mean maximum Temperature ($^{\circ}\text{C}$) in India for the week ending 15.11.06



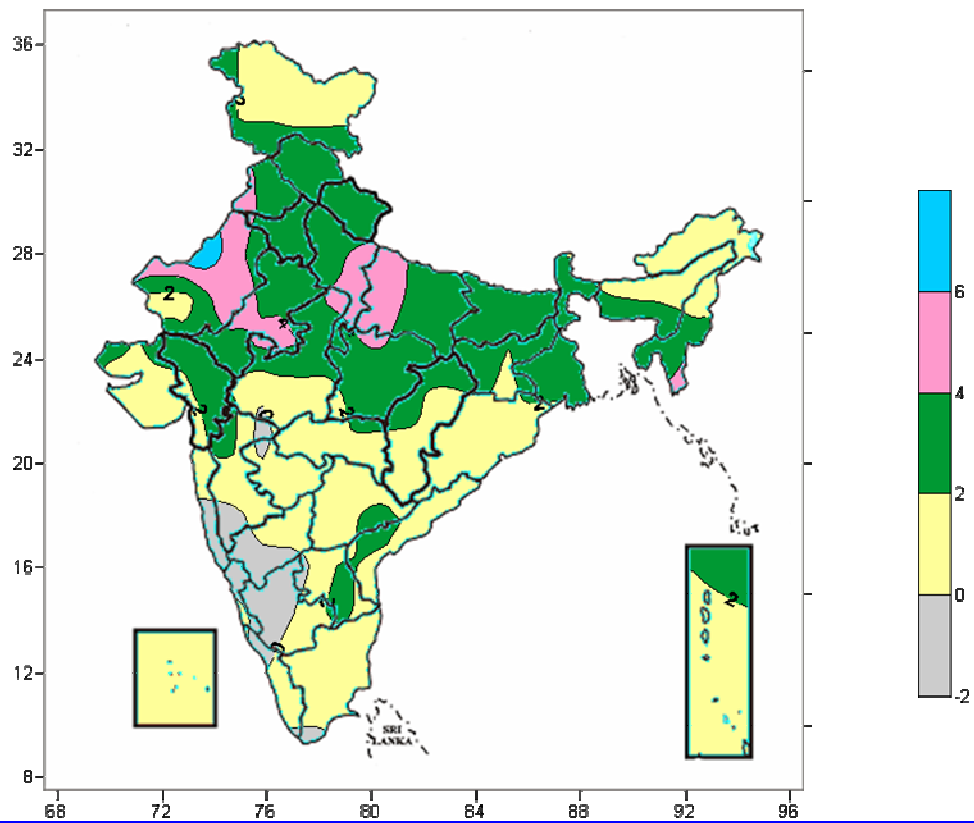
Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 15.11.06



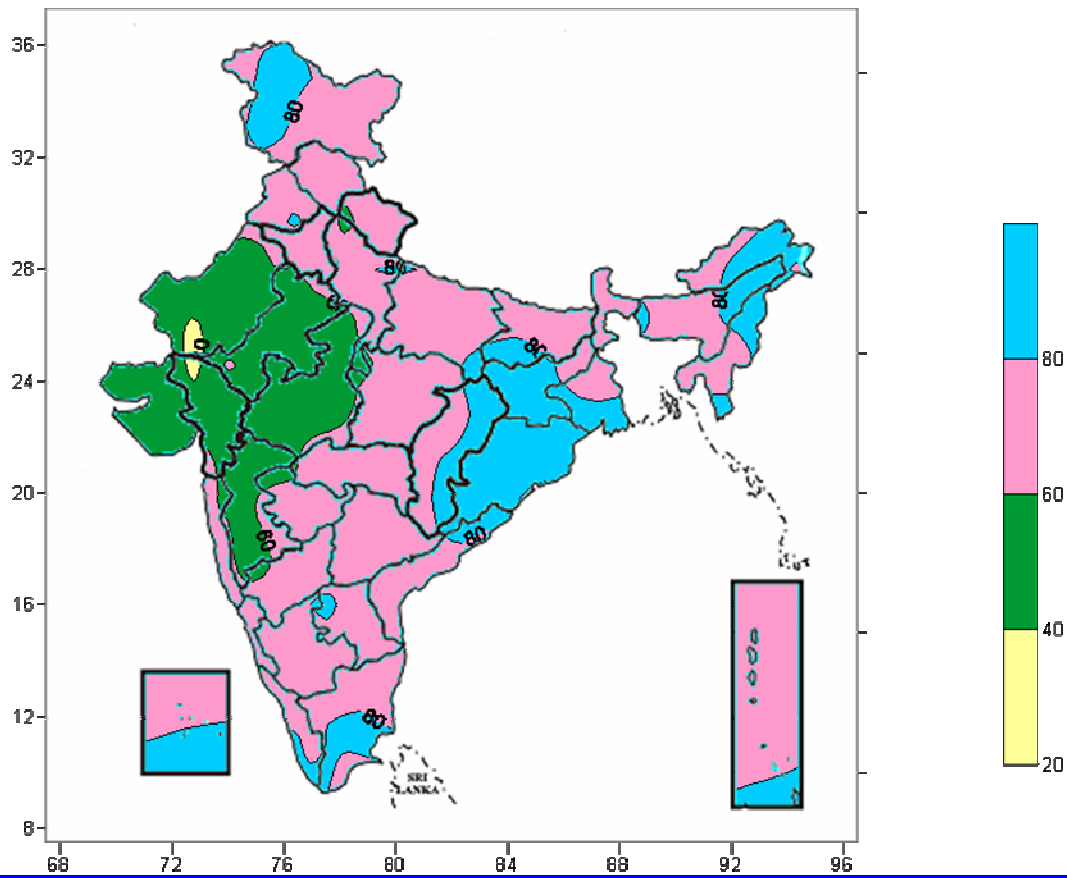
Actual mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 15.11.06



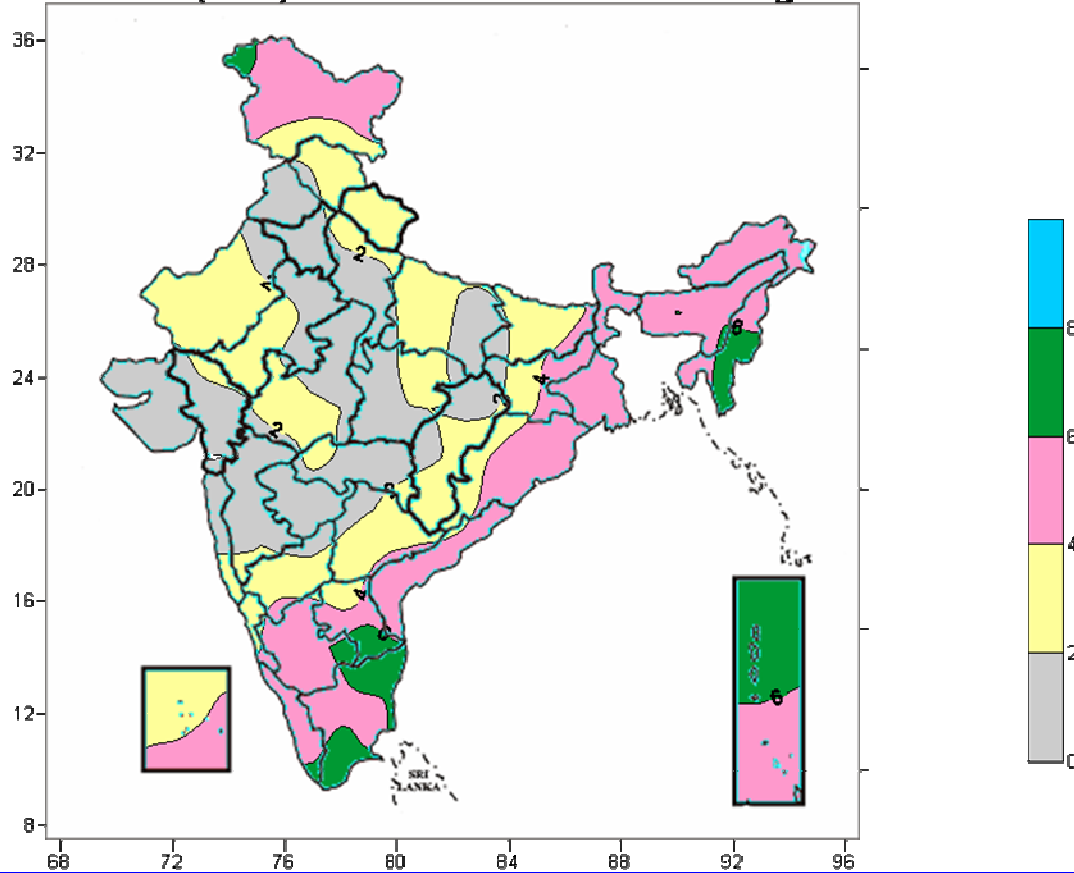
Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 15.11.06



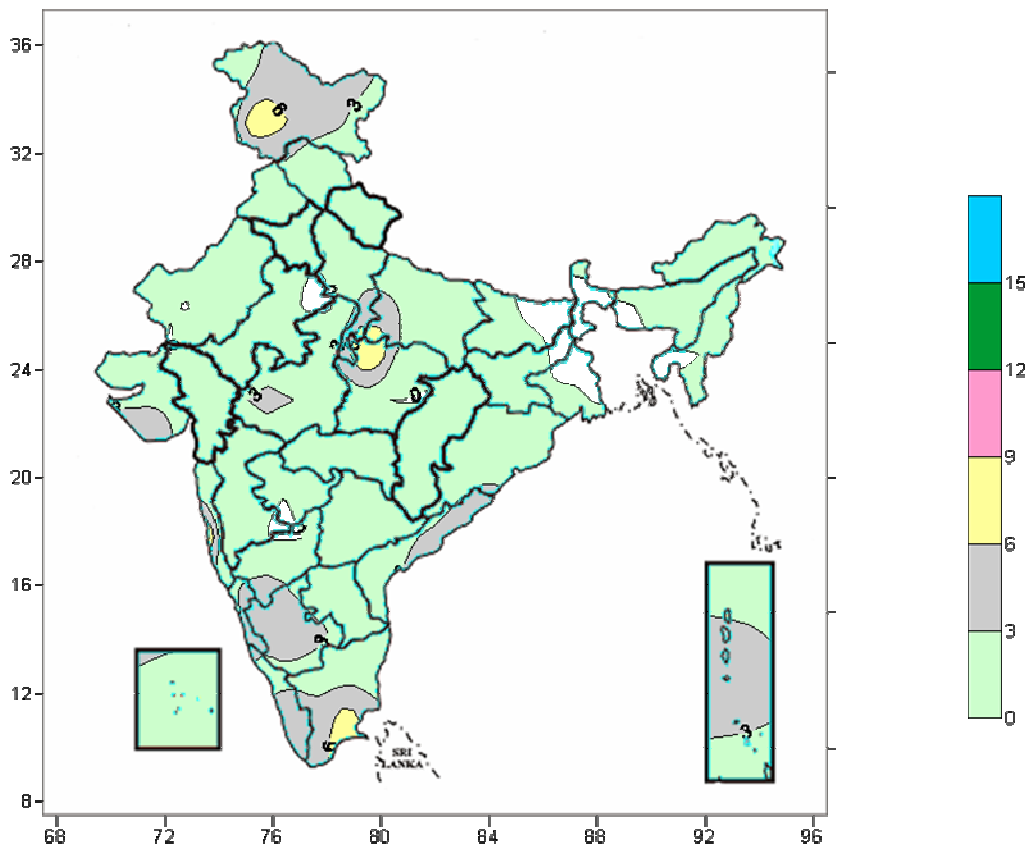
Relative humidity (%) over India for the week ending 15.11.06



Cloud amount (okta) over India for the week ending 15.11.06



Wind speed (knots) over India for the week ending 15.11.06



Desert Locust Forecasting



Rainfall (mm)							
Station Name	9.11.06	10.11.06	11.11.06	12.11.06	13.11.06	14.11.06	15.11.06
Amritsar	NIL						
Barmer							
Sriganganagar							
Jaisalmer							
Kota							
Deesa							
Churu							

Temperature (degree celcius)							
Station Name	9.11.06	10.11.06	11.11.06	12.11.06	13.11.06	14.11.06	15.11.06
Amritsar	21.5	22.0	21.5	22.5	21.0	20.5	-
Barmer	25.0	27.0	25.5	23.0	23.0	24.0	-
Sriganganagar	23.5	23.5	24.0	25.5	23.0	22.5	-
Jaisalmer	27.5	27.5	27.0	-	25.5	24.5	-
Kota	26.0	25.0	24.0	24.5	25.0	25.0	-
Deesa	27.0	26.0	-	27.0	25.5	-	-
Churu	-	-	-	-	-	-	-

Wind

Station Name	9.11.06		10.11.06		11.11.06		12.11.06		13.11.06		14.11.06		15.11.06	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	08	ENE	-	-	-	-	-	-	04	NNW	05	NW	12	NW
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	05	SE
Sriganga nagar	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	-	-	-	-	-	05	SSE	03	WNW
Kota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deesa	12	E	08	ENE	-	-	-	-	07	SE	-	-	08	SE
Churu	11	W	09	NW	-	-	-	-	09	W	10	NNW	-	-

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

CROP – STATE – STAGE

Delhi

Toria	Vegetables (Brinjal, Chilly, Cauliflower and cabbage, raddish, carrot, and turnip)	Early sown vegetable crops	Wheat	Gram
Vegetative	Sowing/Transplanting	Vegetative/ flowering/ fruiting/ harvesting	Sowing	Sowing
Barley	Mustard			
Sowing	Vegetative			

Haryana

Horticultural crop	Sugarcane	Gram /Lentil	Rabi oilseeds	Wheat
Sowing/plantation	Vegetative	Sowing/early vegetative	Sowing	Sowing/early vegetative

Himachal Pradesh

Wheat	Gram		Vegetables (Tomato, brinjal, ladies finger)	Barley
Land preparation/sowing	Land preparation/sowing		Vegetative/flowering / fruiting / harvesting	Land preparation/sowing
Early sown Wheat	Early sown Gram	Early sown Barley	Summer vegetables Radish, Turnip, Carrot	Summer vegetables (Cauliflower, Cabbage) /Arcele peas
Germination	Germination	Germination	Sowing	Preparation of nursery in low hills & Transplanting in high hills / Sowing

Jammu & Kashmir

Winter vegetable crops	Rice	Mustard	Gram/ Field Pea	Wheat
Sowing	Grain maturity/early harvesting	Sowing	Sowing	Sowing
Pea	Barley	Toria	Brown Sarson	Lentil
Sowing	Sowing	Sowing	Sowing	Sowing

Punjab

Sugarcane	Rabi oilseeds	Gram/Lentil	Horticultural crop	Wheat
Vegetative	Sowing	Sowing / early vegetative	Sowing/plantation	Sowing / early vegetative

Rajasthan

Cotton	Mustard	Wheat	Gram	Barley
Boll picking	Land preparation /	Land preparation/sowing	Land	Land

	sowing		preparation/sowing	preparation/sowing
		Cumin		
		Land preparation/sowing		

Uttar Pradesh

Kharif Pulses	Sugarcane	Kharif Vegetables	Winter Vegetables	Kharif Groundnut
Harvesting	Cane maturity / harvesting	Harvesting	Vegetative	Harvesting
Mango	Rabi pulses	Kharif rice	Wheat/Barley	Rabi crops
Active growth	Sowing	Harvesting	Sowing	Early vegetative

Uttaranchal

Rice	Mango/Litchi	Wheat	Sugarcane	Toria
Maturity/harvesting	Active growth	Germination	Grand growth	Early vegetative
	Millets (Ragi)	Pea	Potato	
	Harvesting	Early vegetative	Early vegetative	

Assam

	Sugarcane	Wheat	Vegetables	Balck gram and Green gram
	Cane maturity / harvesting	Land preparation/sowing	Land preparation / sowing	Pod formation
Sali rice	Arhar	Rape seed and Mustard	Early sown Rape seed and Mustard	Pea, Lentil and Potato
Maturity/harvesting	Maturity	Land preparation/sowing	Early vegetative	Land preparation/sowing

Arunachal Pradesh

Mustard	Ginger	Potato	Wheat	Winter vegetables
Land preparation / sowing	Vegetative	Land preparation / sowing	Land preparation / sowing	Vegetative
Early sown Potato				
Early vegetative				

Bihar

Fruits and Vegetables	Winter vegetables	Rice	Early sown Maize	Rabi Maize
Vegetative	Sowing / transplanting	Harvesting	Germination	Field preparation / sowing
Pulses and Oil seeds	Potato	Rabi Oil seeds (Toria, Sarson, Linseed)	Rabi Pulses (Lentil, Gram, Pea)	Maize
Seed maturity	Field preparation / sowing	Field preparation / sowing/*Early vegetative	Field preparation / sowing/*Early vegetative	Cob maturity/harvesting
Wheat	Rabi Maize	Early sown Maize	Early sown Pulses (Lentil, Gram, Pea)	Early sown (Toria, Sarson, Linseed)
Land preparation/sowing	Field preparation/Sowing	Seedling/early vegetative	Early vegetative	Early vegetative

Jharkhand

Rice	Rabi Maize	Wheat	Rabi Maize
Maturity/harvesting	Field preparation /sowing	Field preparation /sowing	Field preparation /sowing
Rabi vegetables (Tomato, Cabbage, Cauliflower, Brinjal, Chilli)	Early planted vegetables	Rabi pulses and oilseeds	Pea & Onion
Transplanting	Early vegetative / vegetative	Field preparation /sowing	Sowing
Potato			
Field preparation /sowing			

Sikkim

Orange	Rice	Rabi vegetables	Early sown Wheat	Wheat
Harvesting	Harvesting	Early vegetative/vegetative Transplanting – in some areas contd.	Early vegetative	Sowing

Mustard	Early sown Mustard			
Sowing	Early vegetative			

West Bengal

Boro rice	Sugarcane	Wheat	Aman rice	Rape seed and Mustard
Field preparation / sowing	Cane development	Field preparation / sowing	Grain formation/maturity/harvesting	Field preparation / sowing
Groundnut	Lentil	Gram		
Harvesting	Field preparation / sowing	Field preparation / sowing		

Chattisgarh

Gram	Vegetables (Tomato, chilli, brinjal)	Sugarcane	Kharif rice	Linseed, Safflower, Mustard, Toria
Field preparation/sowing	Vegetative	Cane development	Grain formation/maturity/harvesting	Field preparation/sowing

Gujarat

Mustard	Pre-monsoon irrigated Cotton	Kharif Groundnut	Wheat	Sugarcane
Vegetative	Boll formation / picking	Harvesting	Land preparation/sowing	Cane development/early maturity
Kharif Cotton	Castor	Kharif Rice		
Square / boll formation	Vegetative/flowering	Harvesting		

Maharashtra

Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Irrigated Cotton	Sugarcane (Seasonal) (Madhya Maharashtra, Marathwada and Vidarbha)	Rabi Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)
Grain maturity/harvesting	Flowering/pod formation	Boll formation /boll maturity/picking	Elongation/cane maturity/harvesting	Germination/early vegetative
Potato (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif rice (Konkan)	Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Field preparation/planting	Boll formation	Germination/early vegetative	(medium varieties) Grain maturity/harvesting (late varieties) Grain formation/grain maturity/harvesting	Grain formation/grain maturity (in Vidarbha) Grain formation /Grain maturity/harvesting (in Madhya Maharashtra, Marathwada)
Gram (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi maize (Madhya Maharashtra, Marathwada & Vidarbha)	Rabi Safflower (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Wheat (Madhya Maharashtra, Marathwada & Vidarbha)
Field preparation / sowing	Germination/early vegetative	Germination/early vegetative	Field preparation/planting	Germination
Early sown Gram (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Potato (Madhya Maharashtra, Marathwada & Vidarbha)	Wheat (Madhya Maharashtra, Marathwada & Vidarbha)	Onion (Madhya Maharashtra, Marathwada & Vidarbha)

Vidarbha)	Marathwada & Vidarbha)			
Germination	Sprouting	Sprouting	Field preparation / sowing/	Field preparation/planting
Madhya Pradesh				
Wheat	Mustard	Kharif crops	Masoor	Linseed
Germination	Germination	Pod maturity	Germination	Germination
Gram				
Germination				
Orissa				
Vegetables		Mustard	Rabi Groundnut	Sugarcane
Early vegetative		Sowing	Sowing	Vegetative / tillering
Kharif Rice		Pulses	Oilseeds	Early sown pulses
Maturity/harvesting		Sowing (Biri / Mung / Kulthi)	Sowing	Pod maturity
Andhra Pradesh				
Kharif rice	Kharif crops(Chillies/Tur)	Maize	Groundnut	Cotton
Grain maturity	Pod maturity/ Chillies-fruited/harvesting	Harvesting	Pod maturity	Boll maturity/picking
Karnataka				
Groundnut	Sugarcane (Ratoon crop & new crop)	Kharif crops (jowar, maize)	Kharif rice	Kharif cotton
Pod harvesting	Maturity/early harvesting	Harvesting	Grain development	Boll maturity/picking
Rabi jowar, wheat and maize				
Sowing				
Kerala				
Rubber		Pepper	Mundakan rice	
Tapping		Berry maturity/early harvesting	Late Tillering/panicle initiation	
Tamil Nadu				
Early sown Pulses (Black gram and green gram)	Millets	Cotton	Early & mid sugarcane	Early sown oilseeds
Vegetative	Sowing	Sowing	Maturity	Vegetative
Rice (Kuruvai)	Rice (Samba)	Pulses (Black gram and Green gram)	Oilseeds (Groundnut, Sunflower)	Early sown Millets
Maturity/harvesting	Nursery/transplanting	Sowing	Sowing	Seedling
Sunflower	Early sown			
Sowing	Vegetative			