



Summary of Agromet Advisory Services for different States of the country
Issued by
Agricultural Meteorology Division, India Meteorological
Department, Pune, India

Thursday, 23rd November, 2006

(For the period 23rd to 27th 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

Light to moderate rainfall has occurred at many places in State on 22nd November. Weather remained mainly dry on rest days.

Mainly dry weather is likely over the State. Fall in night temperatures by 3-4⁰C is likely over the State.

Advisories

- 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**.
- 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. Fall in night temperatures by 3-4⁰C is likely over the State.

Advisories

- 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**.
- Continue sowing of **wheat, gram, lentil and rabi oil seeds**. Use the certified seeds of recommended varieties PBW-343, 502, 542, PPW 291, 274 of **wheat**. Select *desi* and *kabuli* varieties for **gram**.

Rajasthan

6.7 mm recorded at Sri Ganganagar on 22nd November. Weather remained dry in rest divisions of the State.

Mainly dry weather is likely over the state. Fall in night temperatures by 3-4⁰C 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.
- Late sowing of **gram** may be continued with Pusa-208, RSG-44, C-235 etc.

Uttar Pradesh

Weather was mainly dry in all divisions of U.P. from 20th to 22nd November.

Mainly dry weather is likely over the State. Fall in night temperatures by 3-4⁰C is likely over East U.P.

Advisories

- There was no rainfall 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* oilseeds, pulses and winter vegetable crops.
- Sowing of *rabi* wheat, barley and fodder crops may be completed.
- Transplanting of winter vegetables cauliflower, brinjal, chilli and tomato may be continued.
- Harvesting of sugarcane, pulses, and *kharif* vegetables may be continued.

Himachal Pradesh

Rain occurred at a few places during the week.

Mainly dry weather is likely over the State. Fall in night temperatures by 3-4⁰C is likely over the State.

Advisories

- As there was no significant rain during last two weeks in Chamba and Lahaul and Spiti districts, apply irrigation to vegetable crops and early sown wheat, gram and barley wherever crops are at vegetative stage.
- As there was excess rain during last two weeks in remaining districts and mainly dry weather is likely over the State for next three days, postpone irrigation to the crops.
- Continue land preparation and sowing of Aricle peas in the high hills, transplanting of cauliflower and cabbage and sowing of wheat, gram, barley, radish, turnip and carrot.
- Select varieties from 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.
- As there is chance of occurrence of frost, farmers are advised to arrange for smoking around the field to save the crops from frost.

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. Fall in night temperatures by 3-4⁰C 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 pea, toria, potato and sugarcane crops to bring the soil moisture to its field capacity.
- Continue sowing of wheat.
- Continue harvesting of matured rice crop.

Jammu & Kashmir

Light to moderate rain / snow occurred at many places on 22nd November. Weather remained dry on 20th and 21st November over J & K state.

Mainly dry weather is likely over the state. Fall in night temperatures by 2-3⁰C is likely over the state.

Advisories

- Apply irrigation and arrange for smoke near the field in Kashmir division to safeguard the crops from cold/frost injury.

- Continue sowing of **methi, coriander** and **spinach** 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%.

Delhi

Weather remained dry.

Mainly dry weather is likely over the state. Fall in night temperatures by 3 -4⁰C 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, wheat, barley, gram** and also to **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 2004 and PBW-215 for **wheat**, Pusa 362, Pusa 372 and Pusa 1003 (*Kabuli*) etc. for **gram** and Jyoti, BG 25, D – 70 and Ratna for **barley** for sowing.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Northeast monsoon was vigorous over Kerala on 22nd and active on 21st November. Rain / thundershowers occurred at many places on 21st & 22nd and at a few places on 20th November.

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

Advisories

- There was excess rainfall in all the districts except **Wyanad** and rain/thundershowers are likely to occur at a few places for the next three days. Under the circumstances, apply irrigation to the **plantation crops** and **mundakan rice** depending upon soil profile stored moisture. Apply irrigation in **Wyanad** to bring the soil moisture to its field capacity as there was deficient rainfall during last week.
- 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 to control insect pests and 2% *Pseudomonas flourescens* culture @ 1 kg / ha to control the disease. Spraying chemicals may be undertaken on a non rainy day.
- 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 on a non rainy day.
- Weeding, intercultural operations, application of fertilizers and new planting may be continued on a non rainy day.

Tamilnadu

Rainfall occurred at many places over South Tamilnadu and at isolated places over North Tamilnadu on 22nd, many places over Tamilnadu on 20th and 21st November.

Rain / thunder showers are likely at a few places over south Tamilnadu & Pondicherry. Isolated rain/thundershower is likely over rest of the region of the state.

Advisories

- Due to excess rainfall during last few weeks, postpone irrigation to the crops.
- 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 on a non rainy day.
- Continue transplanting of *samba rice*.
- Continue intercultural operations, application of fertilizers and pesticides on a non rainy day.
- Continue land preparation and sowing of *cotton, pulses and groundnut and sunflower*.

Karnataka

Rainfall occurred at a few places on 21st and at isolated places on 20th & 22nd over Coastal Karnataka. Over North Interior Karnataka, rainfall occurred at isolated places on 20th and dry weather prevailed on the remaining days. Over South Interior Karnataka, rainfall occurred at isolated places on 20th & 21st and dry weather prevailed on 22nd November.

Rain / thundershowers are likely at a few places over Coastal Karnataka. Mainly dry weather over North interior Karnataka. Isolated rain / thundershower is likely over the rest region.

Advisories

- Conserve moisture in the field wherever the crops are at maturity stage. Apply irrigation to *rabi* crops like *jowar, wheat and maize*.
- Farmers are advised to undertake repairing of old bunds & cleaning of canals wherever it is required.
- Harvest the matured *kharif* crops like *rice, maize, jowar, groundnut, cotton and sugarcane* on bright sunny days.
- Continue land preparation and sowing of *rabi jowar, sunflower, wheat and maize*.

Andhra Pradesh

North East monsoon was vigorous over Rayalseema on 19th. Rain occurred at a few places over Rayalaseema on 16th & 18th and isolated rain occurred over Coastal Andhra Pradesh from 16th to 20th and over Rayalaseema on 17th & 20th November. Dry weather prevailed elsewhere over the state during the period.

Mainly dry weather is likely to prevail over the state.

Advisories

- Conserve moisture in the field wherever the crops are at maturity stage.
- Incidences of pod borer have been reported in *red gram*. Spray Dichlorvos @ 2.5 ml / litre of water.
- Continue harvesting of matured *maize, tur, cotton and chillies* on bright sunny days.

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

Assam

Light to moderate rain occurred at many places on 20th and at a few places on 21st November. Weather was mainly dry on 22nd November over the state.

Isolated rain / thundershower is likely over the state.

Advisories

- As isolated rain / thundershower is likely over the state for the next three days, apply irrigation to *black gram*,

green gram and early sown rapeseed and mustard, potato, wheat, pea and lentil.

- Drain out standing water 10-15 days before harvesting of *Sali* rice.
- 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, on 21st very light to light rain occurred at most places with rather heavy rain at an isolated places and on 22nd light to very light rain occurred at an isolated places over the districts of Sub Himalayan West Bengal. Weather was mainly dry else where.

Isolated rain / thundershower is likely over Sub-Himalyan West Bengal. Mainly dry weather is likely over rest of the State.

Advisories

- As excess rain occurred in Darjeeling and Jalpaiguri 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 isolated rain / thundershower is likely over Sub-Himalyan West Bengal and mainly dry weather is likely over rest of the State for next three days, apply irrigation to sugarcane, rapeseed and mustard to bring the soil moisture to its field capacity.
- Drain out water from the aman rice field 10 – 15 days before harvesting. Continue harvesting of already matured crops on bright sunny days.
- Land should be prepared and sowing of boro rice, gram, lentil and wheat may be done.
- Select varieties from CR-126-42-1, Kshitish, 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

Weather remained dry.

Mainly dry weather is likely over the State.

Advisories

- There was no rainfall during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation in vegetables to bring the soil moisture to field capacity.
- 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 wheat and potato with available residual moisture.
- Weeding/thinning and top dressing operation may be continued in rabi maize, pulses/oilseed and earlier sown vegetable crops.

Jharkhand

Weather remained mainly dry.

Mainly dry weather is likely over the State.

Advisories

- There was no rainfall during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation in **vegetables** to bring the soil moisture to field capacity.
- 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

Light to moderate rain occurred at many places on 20th and very light rain occurred at a few places on 21st and 22nd November over East Sikkim during the period. Rainfall was excess during the period.

Mainly dry weather is likely over the State

Advisories

- As there was excess rainfall during last week, apply irrigation to vegetables depending upon soil profile stored moisture.
- Continue harvesting of **orange and rice.**
- Continue sowing of **wheat, mustard** and transplanting of **rabi vegetables.**

Arunachal Pradesh

Isolated rain/thundershower is likely over the State.

Advisories

- As isolated rain / thundershower is likely over the State for the next three days, apply irrigation depending on the soil profile stored moisture to new crop of **ginger, early sown potato and winter vegetables.**
- Sowing of **potato, wheat and mustard** may be completed.
- Intercultural operation may be continued as and when required in early sown **mustard, ginger and winter vegetables.**
- First top dressing in early sown **potato** (33Kg Urea/ha.) followed by earthing up and spray with 1.25 Kg. Dithane M-45 in 500 Lit. water may be continued.

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.**
- For monitoring & management of **boll worm & heliothis** of **cotton** hang 5 pheromance 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 tricogamma @ 1.5 lakhs / ha 5 to 6 times as per requirement

depending upon infestation found in field.

- 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

Weather remained dry during the period.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in 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** and also to early sown **gram**, **linseed**, **safflower**, **mustard**, **toria** wherever crops are at vegetative stage.
- Drain out water from the **rice** field 10 – 15 days before harvesting. Continue harvesting of already matured crops on bright sunny days.
- 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

Light rain has occurred at isolated places in South Konkan. Mainly dry weather prevailed over rest of the State.

Rain / thundershowers are likely at a few places over south Konkan & Goa and isolated over north Konkan, south Madhya Maharashtra and Marathawada. Mainly dry weather is likely over Vidarbha.

Advisories

- As there was no significant rain during last week in most of the districts and rain / thundershowers are likely at isolated places over north Konkan, south Madhya Maharashtra and Marathawada and mainly dry weather is likely over Vidarbha for next three days, apply irrigation to **Sugarcane**, **kharif cotton**, **tur** and **Cotton (irrigated)** crops and also to early sown crops of **rabi jowar**, **safflower**, **wheat**, **gram**, **rabi maize**, **sunflower**, **sugarcane (Pre-seasonal)**, **potato** and **onion**.
- 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 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** and planting of **sugarcane (Pre-seasonal)**, **potato** and **onion**.
- Select varieties like HI 977, HD 2501 and NIAW 34 for **late sown wheat**, 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 nikan (for *rabi* plantating), Fule suvarna (for export) & Agri white-1, Fule safed, N-257-9-1 varieties (for powder) for **onion**.

Madhya Pradesh

Dry weather prevailed over the state

Mainly dry weather is likely over the State.

Advisories

- Conserve moisture in **tur** as the crop is now at maturity stage. Start harvesting the matured crop on bright sunny days.
- Continue land preparation and sowing of *rabi* crops like **wheat**, **gram** and **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 during the above period.

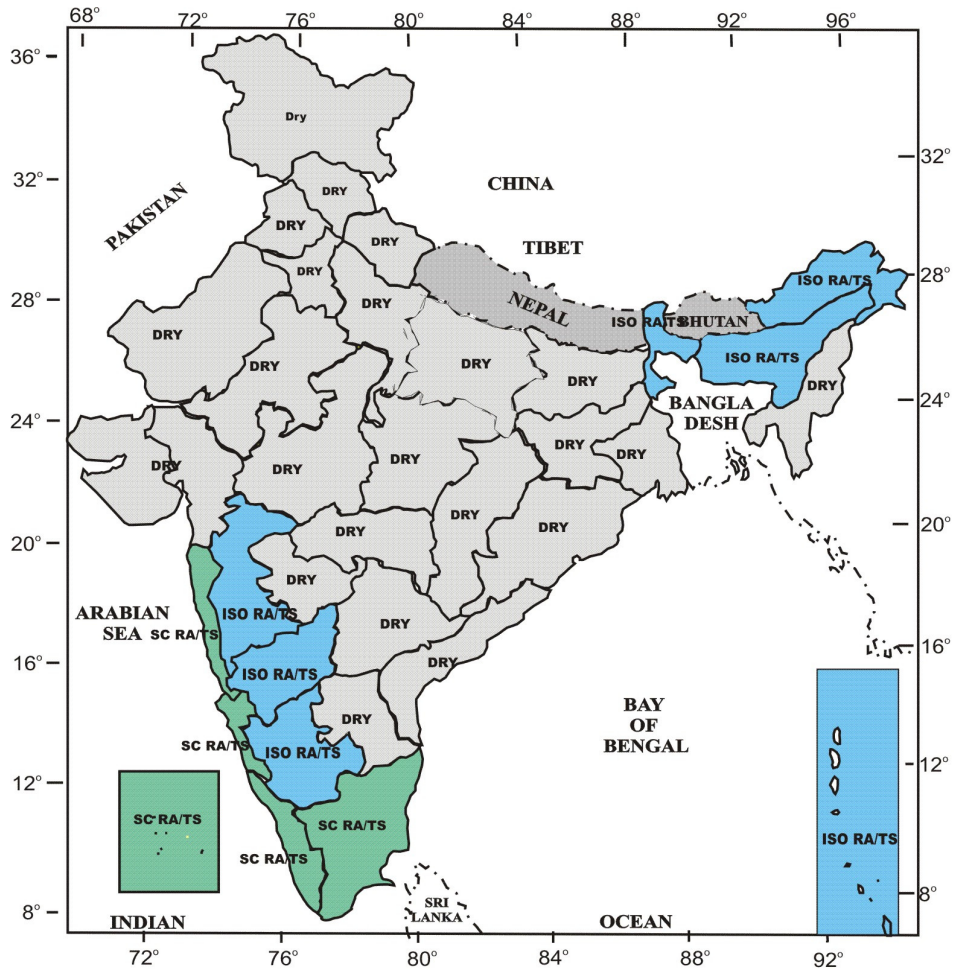
Mainly dry weather is likely over the State.

Advisories

- There was no rainfall during last week and mainly dry weather is likely over the State for next 3 days. Under the circumstances, apply required irrigation to the standing crops to bring the soil moisture to field capacity.
- Continue transplanting of **vegetables**.
- Field preparation and sowing of *rabi* **groundnut**, **mung**, **kulthi**, **field pea** and **mustard** may be done.
- Harvest the matured **rice** crop.

Forecast Map

Valid upto 27th November



ISO - Isolated, TS - Thunder shower/storm, SN - Snow,
RA - Rain, DRY - No rain, SC - Scattered, MOD-Moderate,
SQ - Squall, HA- Hail. DS - Dust Storm, FW - Fairly Widespread
* - With heavy Rain warning

Salient weather features for the week ending 22/11/06

METEOROLOGICAL ANALYSIS

- The easterly wave continued to move across south peninsular India during the week. A low pressure area formed over southeast and adjoining eastcentral Arabian Sea on 21st and it moved over to eastcentral and adjoining southeast Arabian Sea on 22nd.
- Two western disturbances as an upper air systems moved across western Himalayan region during 16th–19th and 22nd–23rd.

RAINFALL

Under the influence of the above systems:

- Scattered rain/snow occurred over Jammu & Kashmir during 16th to 19th and 21st & 22nd. Rain/snow also occurred at a few places over Himachal Pradesh during 18th & 19th. Isolated rain/thundershower occurred over Punjab during 18th & 19th.

- Rainfall occurred at a few places over Sub-Himalayan West Bengal and Sikkim, Assam, Meghalaya and Arunachal Pradesh on 20th and isolated on 21st.
- Rainfall occurred at many places over Tamil Nadu & Pondicherry, Lakshadweep, Kerala and south coastal Andhra Pradesh during many days of the week and at a few places over Andaman & Nicobar Islands, Rayalaseema and South Interior Karnataka. Isolated rainfall also occurred over Coastal Karnataka, Konkan & Goa, Madhya Maharashtra, north interior Karnataka and south Gujarat during last two days of the week.
- Mainly dry weather prevailed over remaining parts of the country during the week.

TEMPERATURES

- Night temperatures were 5-7°C above normal over north Rajasthan and adjoining northwest Madhya Pradesh on many days of the week. They were 3-4°C above normal over remaining parts of northwest India and Uttar Pradesh.
- They were 1-3°C above normal over remaining parts of the country except over some parts of Maharashtra, south Chhattisgarh and Orissa where they were below normal by 1-2°C on a few days of the week.

RAINFALL DURING THE WEEK ENDING ON 22ND NOVEMBER, 2006

Rainfall was excess/normal in 14 and deficient/scanty in 7 and no rain in 15 out of 36 meteorological sub-divisions (Actual: 9.3 mm, Normal: 6.2 mm and Departure: +49%).

CUMULATIVE SEASONAL RAINFALL (1ST OCTOBER TO 22ND NOVEMBER, 2006)

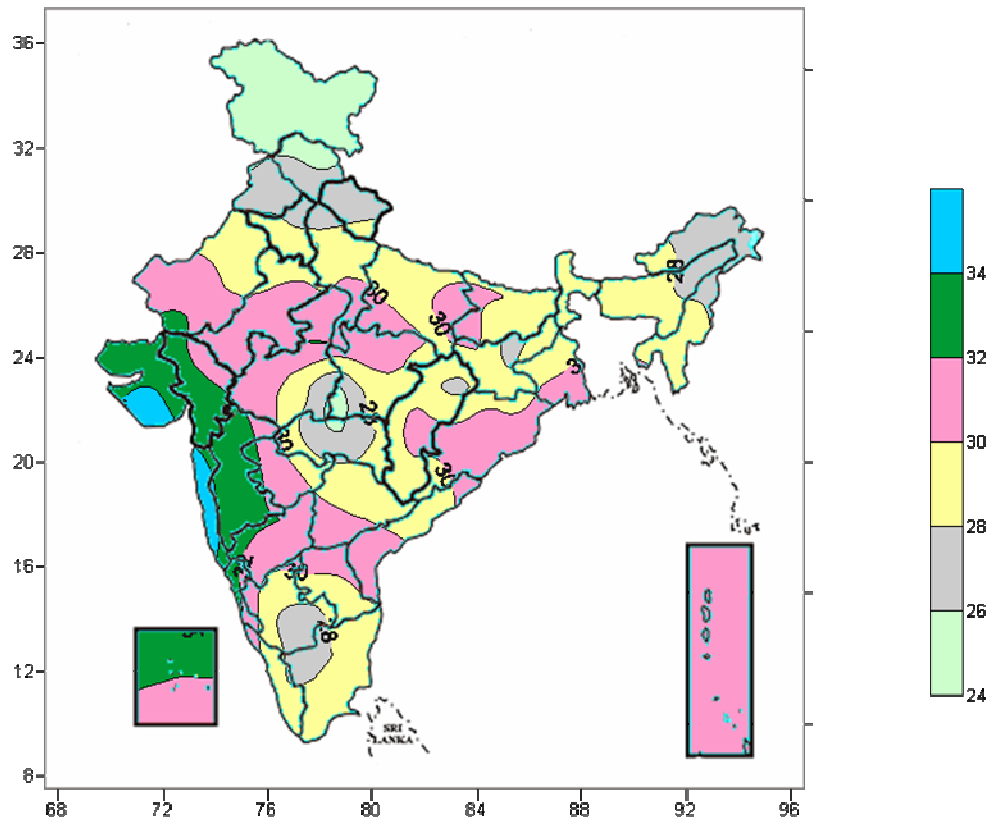
Rainfall was excess/normal in 11 and deficient/scanty in 25 out of 36 meteorological sub-divisions. (Actual: 73.3 mm, Normal: 95.7 mm and Departure: -22%).

Rainfall was excess/normal in 14 and deficient/scanty in 22 out of 36 meteorological sub-divisions. (Actual: 83.3 mm, Normal: 102.0 mm and Departure: -18%).

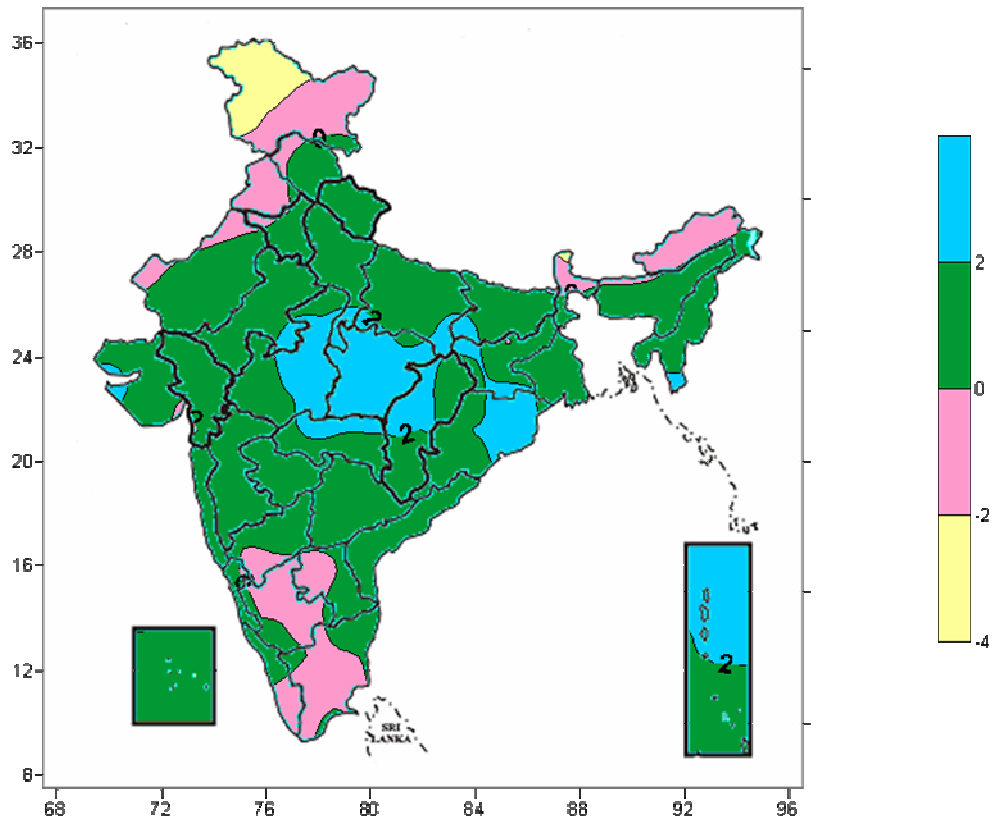
OUTLOOK FOR THE WEEK ENDING ON 29TH NOVEMBER, 2006.

- Under the influence of the western disturbance, scattered rain/snow is likely over Western Himalayan Region and light rain/thundershower over plains of northwest India in the beginning of the week.
- Scattered rainfall activity is likely to continue over extreme south peninsula during the week. Isolated rainfall/thundershower also likely over Konkan & Goa and south Madhya Maharashtra during first half of the week.
- Fall in night temperatures by 3-4 °C likely over north and adjoining central India during first half of the week. Fog/mist conditions also likely over some parts of plains of northwest India

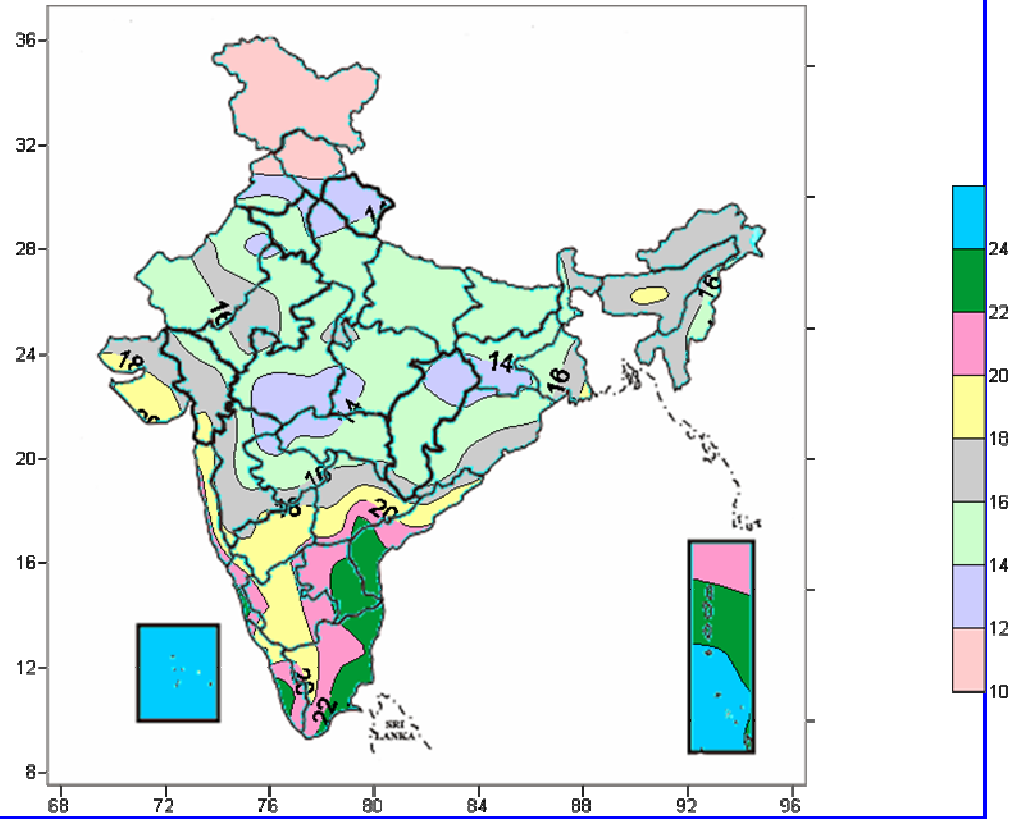
Actual mean maximum Temperature (°C) in India for the week ending 22.11.06



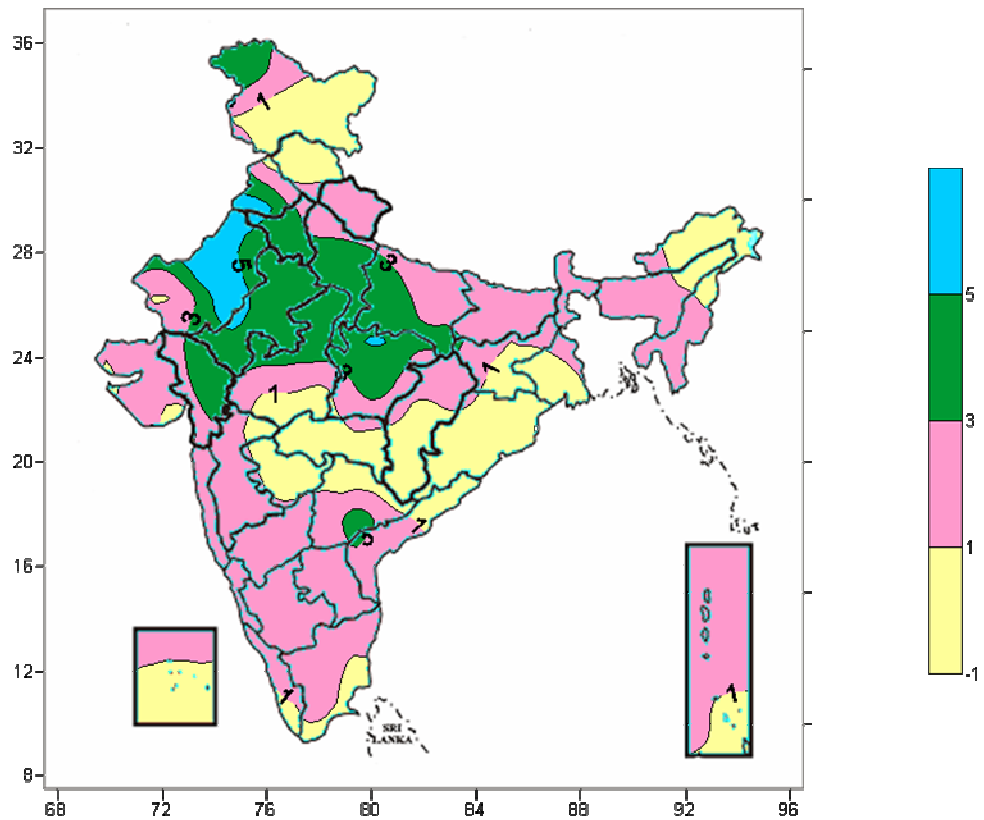
Maximum Temperature (°C) Anomaly In India for the week ending 22.11.06



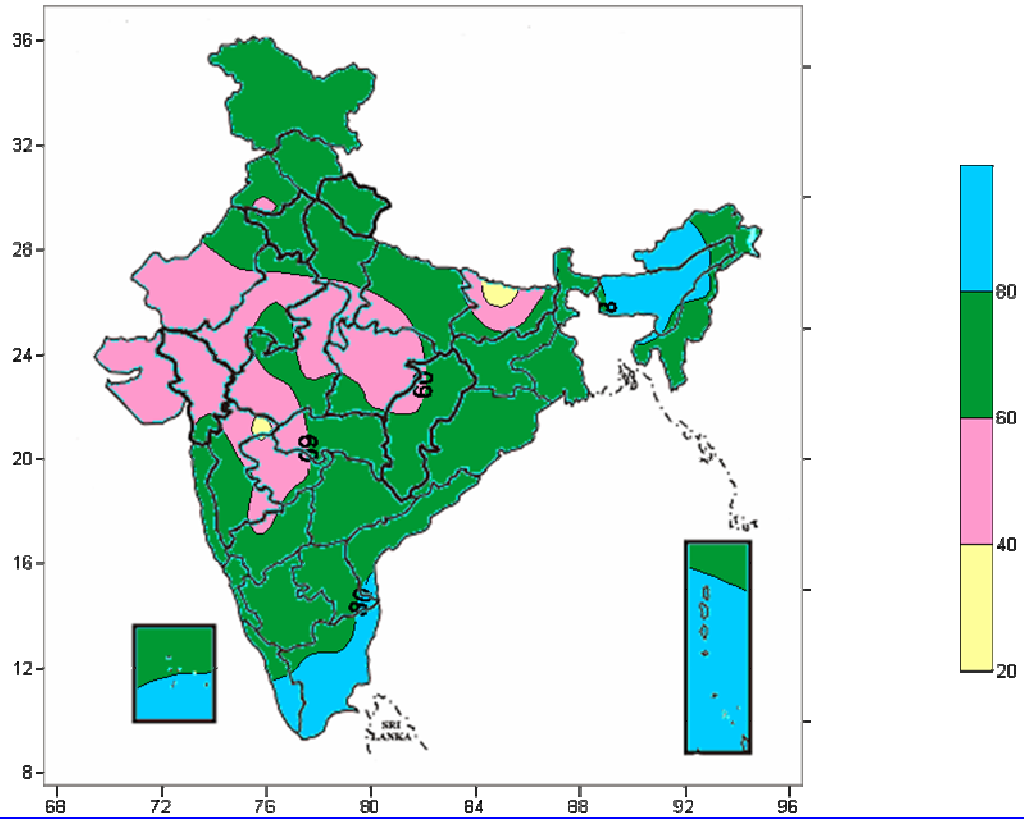
Actual mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 22.11.06



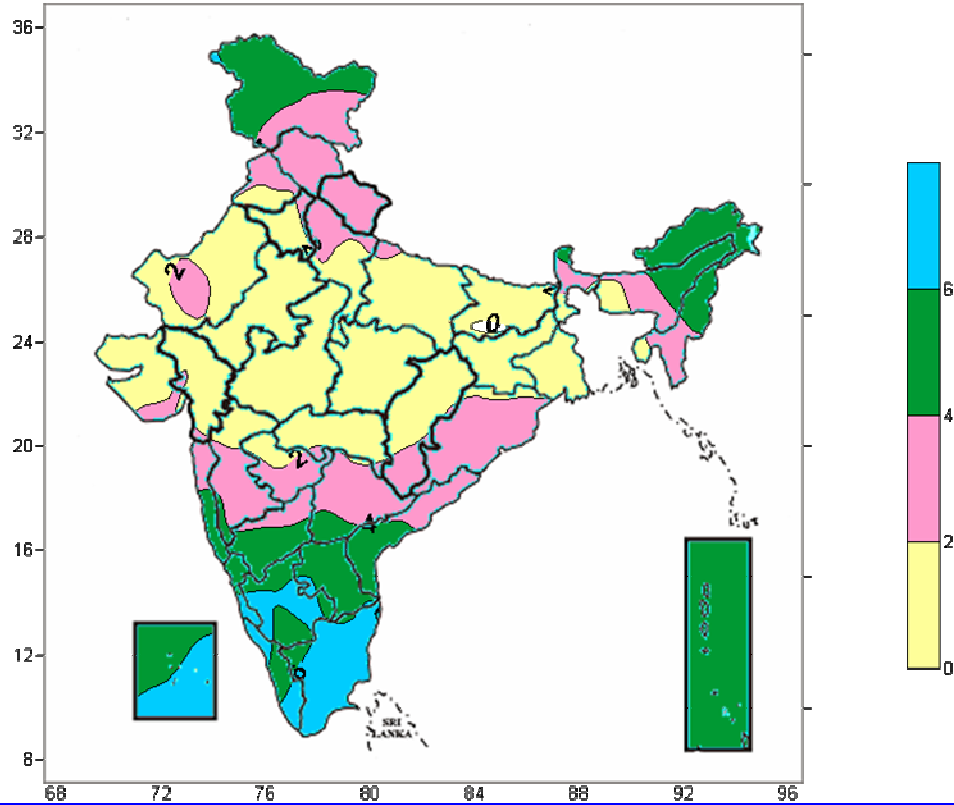
Minimum Temperature ($^{\circ}\text{C}$) Anomaly In India for the week ending 22.11.06



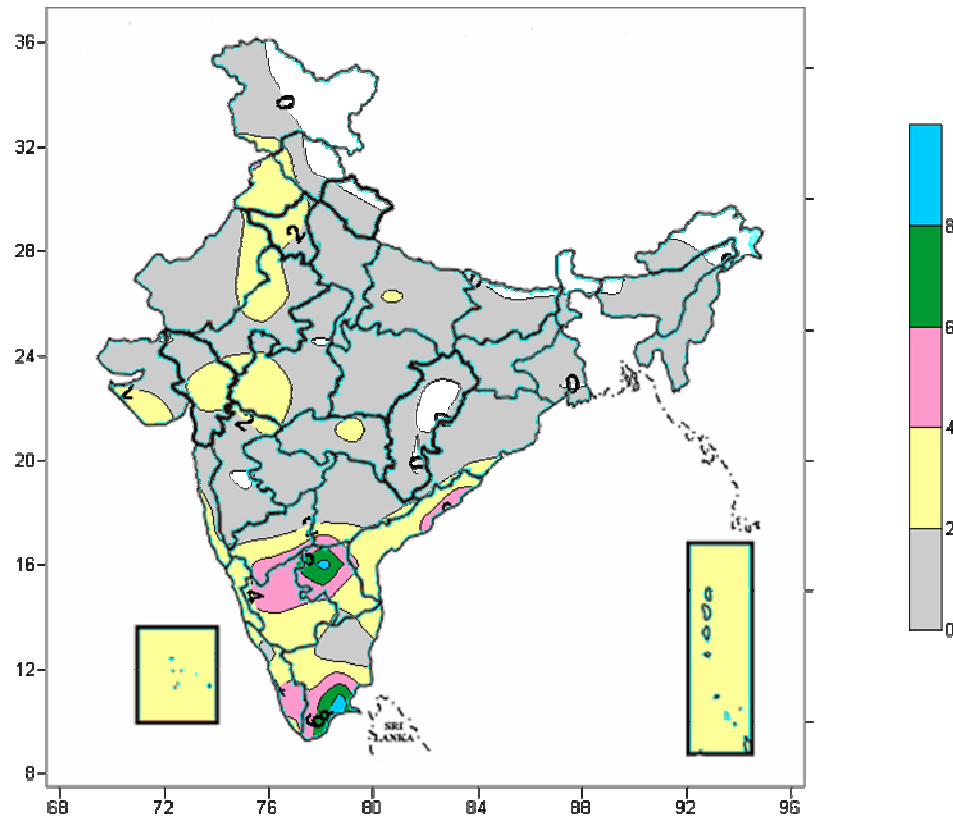
Relative humidity (%) over India for the week ending 22.11.06



Cloud amount (okta) over India for the week ending 22.11.06



Wind speed (knots) over India for the week ending 22.11.06



Desert Locust Forecasting



Rainfall (mm)							
Station Name	16.11.06	17.11.06	18.11.06	19.11.06	20.11.06	21.11.06	22.11.06
Amritsar	NIL						
Barmer							
Sriganganagar							
Jaisalmer							
Kota							
Deesa							
Churu							

Temperature (degree celcius)							
Station Name	16.11.06	17.11.06	18.11.06	19.11.06	20.11.06	21.11.06	22.11.06
Amritsar	18.0	-	-	18.0	17.0	17.0	19.5
Barmer	23.0	-	23.0	23.0	23.0	22.5	25.5
Sriganganagar	21.5	21.0	22.0	18.5	20.5	20.5	22.5
Jaisalmer	24.5	23.5	22.5	23.0	23.0	24.0	25.0
Kota	25.0	24.5	24.5	24.5	25.5	24.5	25.0
Deesa	26.0	26.0	25.5	26.0	25.5	25.5	25.0
Churu	-	-	-	-	-	-	-

Wind

Station Name	16.11.06		17.11.06		18.11.06		19.11.06		20.11.06		21.11.06		22.11.06	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	13	NW	-	-	-	-	-	-	-	-	-	-	-	-
Barmer	05	SE	05	S	-	-	-	-	07	WNW	08	W	11	W
Sriganga nagar	-	-	-	-	-	-	-	-	14	NW	09	WNW	-	-
Jaisalmer	05	SSE	09	SW	-	-	-	-	12	WNW	15	SW	19	SW
Kota	-	-	-	-	-	-	-	-	05	NW	08	W	07	W
Deesa	12	SE	07	SE	-	-	-	-	03	N	-	-	07	WSW
Churu	10	NE	09	SW	-	-	-	-	15	WNW	17	WNW	25	WSW

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	Early sown Barley	Early sown Wheat	Early sown Gram
Sowing	Vegetative	Germination / early vegetative	Germination / crown root initiation	Germination / early vegetative

Haryana

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

Himachal Pradesh

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

Jammu & Kashmir

Winter vegetable crops	Rice	Mustard	Gram/ Field Pea	Wheat
Sowing/Transplanting	Harvesting	Sowing	Sowing	Sowing
Pea & brown sarson	Barley	Toria	Gobi 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 & cumin	Gram	Barley
Boll picking	Land preparation / sowing	Land preparation/sowing	Land preparation/sowing	Land preparation/sowing

Uttar Pradesh

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

Uttaranchal				
Rice	Mango/Litchi	Wheat	Sugarcane	Toria
harvesting	Active growth	germination/crown root initiation	Grand growth	vegetative/flowering
Pea	Potato			
vegetative	vegetative/tuber initiation			

Assam				
Early sown Vegetables	Sugarcane	Wheat	Vegetables	Balck gram and Green gram
Vegetative	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	Wheat	Early sown Maize	Rabi Maize
Vegetative	Sowing / transplanting	sowing	Germination	Seedling/early vegetative
Pulses and Oil seeds	Potato	Rabi Oil seeds (Toria, Sarson, Linseed)	Rabi Pulses (Lentil, Gram, Pea)	Early sown Pulses (Lentil, Gram, Pea)
Seed maturity	Field preparation / sowing	Early vegetative	Early vegetative	Early vegetative

Jharkhand				
Rice	Rabi Maize	Wheat	Potato	
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		
Transplanting, Onion-Sowing	Early vegetative / vegetative	Field preparation /sowing		

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

West Bengal				
Boro rice	Sugarcane	Wheat	Aman rice	Rape seed and Mustard
Field preparation / sowing	Cane development	Field preparation / sowing	Grain maturity/harvesting	Germination/Early vegetative stage
Gram	Lentil			
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 maturity/harvesting	Field preparation/sowing
Early Sown Gram	Early Sown Linseed, Safflower, Mustard, Toria			
Early vegetative	Early vegetative			

Gujarat				
Mustard	Wheat	Pre-monsoon irrigated Cotton	Castor	Sugarcane
Vegetative	Land preparation/sowing	Boll formation / picking	Vegetative/flowering	Cane development/early maturity
Kharif Cotton	Kharif Rice			
Square / boll formation	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	cane maturity/harvesting	Germination/early vegetative
Potato (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Sugarcane Preseasonal and potato (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif rice (Konkan)	Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Field preparation/planting	Boll formation/ boll maturity	Sprouting/Early vegetative	(medium varieties) Grain maturity/harvesting (late varieties) Grain formation/grain maturity/harvesting	Grain formation/grain maturity (in Vidarbha) /Grain maturity/harvesting (in Madhya Maharashtra, Marathwada)
Gram, Rabi maize, Rabi Safflower, Rabi jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Wheat (Madhya Maharashtra, Marathwada & Vidarbha)	Onion & Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Gram (Madhya Maharashtra, Marathwada & Vidarbha)	Early sown Wheat (Madhya Maharashtra, Marathwada & Vidarbha)
Germination / early vegetative	Field preparation / sowing/	Field preparation/planting	Germination	Germination/seedling/ crown root initiation

Madhya Pradesh				
Wheat & gram	Mustard	Kharif crops(Tur/)	Masoor	Linseed
Germination	Germination	Pod maturity/Harvesting	Germination	Germination

Orissa				
Vegetables	Kharif Rice	Mustard, Rabi Groundnut & Oilseeds	Pulses	Early sown pulses
vegetative	Maturity/harvesting	Sowing	Sowing (Biri / Mung / Kulthi)	Pod maturity
Sugarcane				
Vegetative / tillering				

Andhra Pradesh				
Kharif rice	Kharif crops(Chillies/ Tur)	Maize	Groundnut	Cotton
Grain maturity/early harvesting	Tur-Pod maturity/ Harvesting, Chillies- end harvesting	End harvesting	Pod maturity	Boll maturity/picking

Karnataka				
Groundnut	Sugarcane (Ratoon crop & new crop)	Kharif crops (jowar, maize)	Kharif rice	Kharif cotton
Pod harvesting	Harvesting	End harvesting	Grain maturity/harvesting	Boll maturity/picking
Rabi jowar, wheat and maize	Early sown Rabi jowar, wheat and maize			
Sowing	seedling/early vegetative/vegetative			

Kerala				
Rubber	Mundakan rice	Pepper		
Tapping	Flowering	Harvesting		
Tamil Nadu				
Early sown Pulses (Black gram and green gram)	Millets	Cotton	Early & mid sugarcane	Early sown oilseeds
Vegetative	Sowing	Sowing	Maturity	Vegetative
Rice (<i>Kuruvai</i>)	Rice (<i>Samba</i>)	Pulses (Blach gram and Green gram)	Oilseeds (Groundnut, Sunflower)	Early sown Millets
Maturity/harvesting	Nursery/transplanting	Sowing	Sowing	Vegetative