



# Summary of Agromet Advisory Services for different States of the country

Issued by

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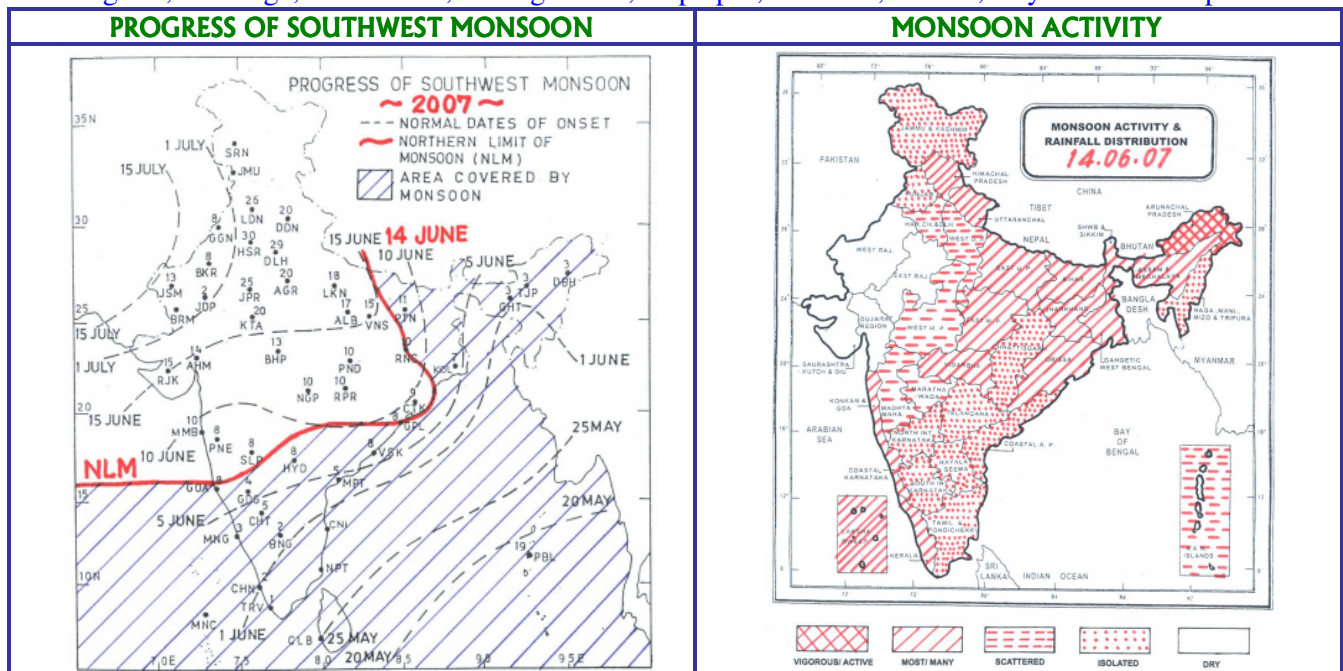
**Thursday, 14<sup>th</sup> June, 2007**

(For the period 14<sup>th</sup> to 18<sup>th</sup> June, 2007)

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

## Status of Monsoon

- Southwest monsoon has further advanced into some more parts of Telangana, remaining parts of Coastal Andhra Pradesh, northwest Bay of Bengal & Gangetic West Bengal, some parts of Chhattisgarh, Orissa, Jharkhand and East Uttar Pradesh and some more parts of Bihar.
- Northern limit of monsoon passes through lat. 16.0 °N / long. 60.0 E°, lat. 16.0 °N / long. 70.0 °E, Vengurla, Gulbarga, Nizamabad, Ramagundam, Gopalpur, Balasore, Ranchi, Gaya and Gorakhpur.



## Southern Region (AP, Tamilnadu, Karnataka and Kerala)

### Kerala

Southwest monsoon was active over the State on 13<sup>th</sup> June. Rain occurred at most places on 11<sup>th</sup>, 12<sup>th</sup> & 13<sup>th</sup> June. Rain/thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over the State.

### Advisories

- Farmers are advised to continue ploughing and undertake transplanting of rice as the monsoon is active over Kerala.
- Rain/thundershowers is likely to occur at many places over the State for the next three days. Under the circumstance, postpone irrigation to plantation crops viz., coconut, arecanut, rubber and banana.
- Arrange for drainage facilities to prevent water logging as isolated heavy to very heavy rainfall is likely in the next two days.
- Continue land preparation and application of organic manures for transplanting *virippu* rice seedlings by utilizing the monsoon showers.
- Undertake intercultural operations, application of fertilizers and pesticides in plantation crops after current

spells of rain.

- Attack of *mahali* disease, root grub, spindle bug and mite is reported in arecanut. Spray 1% Bordeaux mixture to control the mahali disease. Drench with Chlorpyrifos @ 0.04% in the soil around trunk to control root grub. Spray Carbaryl 50% WP @ 4 g/litre of water to control spindle bug. Spray Dimethoate @ 1.6 ml/liter of water to control mite. Spraying of chemicals may be undertaken after spells of rain.
- Attack of Rhinoceros beetle, red palm weevil, bud rot and mite is reported in coconut. Fill leaf axil with 25 gm Sevidol 8G and fine sand 200 g to control rhinoceros beetle and red palm weevil. Spray 1% Bordeaux mixture to control bud rot. Spray 2% neem oil and garlic emulsion may be done in the crown and bunches to control Eriophyid mite. Spraying of chemicals may be undertaken after spells of rain.
- Attack of quick wilt is reported in pepper. Spray 1% Bordeaux mixture after spells of rain to control the disease.
- Attack of gall midge is reported in virippu rice nursery. Spray Phosphamidon @ 0.25 ml/litre after spells of rain to control the pest.
- Attack of pseudostem weevil is reported in banana. In endemic area, first remove the outer sheath of all infested and uninfested plants and spray Carbaryl @ 0.2% after spells of rain.

### Tamilnadu

South west monsoon has covered entire Tamilnadu on 13<sup>th</sup> June. Rainfall occurred at a few places over the State on 12<sup>th</sup> June and at one or two places on 11<sup>th</sup> & 13<sup>th</sup> June.

Isolated rain / thundershowers are likely over the State.

### Advisories

- There was no significant rainfall during last week except in Dindigul, Krishnagiri, Nilgiris, Perambalur, Sivagangai, Thiruvannamalai, Trichy and Vellore districts and rain/thunder showers are likely to occur at isolated places only for the next three days. Under the circumstances, apply irrigation to sunflower, maize, sugarcane, cotton and groundnut. Apply irrigation depending upon soil profile stored moisture in the above mentioned districts.
- Undertake transplanting of kuruvai rice in the main field. Apply zinc sulphate @ 10 kg/acre before planting. Apply pre-emergence herbicide Butachlor @ 1 litre/ acre.
- Monitor cotton for boll worm and if the pests population crosses ETL, spray Endosulfan @ 2 litres/ ha or Monocrotophos @ 1 litre/ha to control the pest.
- Start harvesting maize and gingelly on bright sunny days.

### Karnataka

On 11<sup>th</sup> June, rainfall occurred at many places over Coastal Karnataka and at isolated places over Interior Karnataka. On 12<sup>th</sup> June, rainfall occurred at many places over Coastal Karnataka, at a few places over South Interior Karnataka and at isolated places over North Interior Karnataka. On 13<sup>th</sup> June, monsoon was active over Coastal Karnataka. Rainfall occurred at many places over North Interior Karnataka and at a few places over South Interior Karnataka.

Rain/thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over Coastal Karnataka during next 48 hours.

### Advisories

- Continue sowing kharif jowar, maize, cotton, groundnut and sunflower by utilizing the monsoon showers. Undertake seed treatment with biofertilizers before sowing.
- Postpone irrigation to summer sugarcane as rain/ thundershowers is likely to occur at many places over the state for the next three days.
- Arrange for drainage facilities in Coastal Karnataka to prevent water logging as isolated heavy to very heavy rainfall is likely in the next three days.
- Monitor sugarcane for wooly aphids in Mysore, Mandya and Hassan districts and if the pest population crosses ETL, release *Dipha* sp, adopt wider spacing, inter-cropping with soyabean and pulses of short duration.

## Andhra Pradesh

Southwest monsoon advanced over Rayalseema, most parts of Telangana & Coastal Andhra Pradesh on 13<sup>th</sup> June. Rain occurred at most places over Rayalseema & at many places over Coastal Andhra Pradesh on 7<sup>th</sup> June, at a few places over Telangana on 7<sup>th</sup>, 8<sup>th</sup>, 11<sup>th</sup> and 13<sup>th</sup> June, over Coastal Andhra Pradesh on 11<sup>th</sup> June over Rayalseema on 10<sup>th</sup> & 13<sup>th</sup> June & generally isolated rain occurred over the State during the week.

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

### Advisories

- Farmers are advised to take up ploughing and undertake sowing of *kharif* crops as the monsoon arrived over the state.
- Continue land preparation and sowing of nursery for *kharif* rice. Start main field preparation and arrange for transplanting of rice seedlings at proper age.
- Undertake land preparation and sowing of *kharif* crops viz., groundnut, cotton and maize by utilizing the monsoon showers. Undertake seed treatment with *Rhizobium* for groundnut and with *Azospirillum* for maize before sowing.

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

### Assam

Light to moderate rain occurred at most places on 11<sup>th</sup> June, at a few places on 12<sup>th</sup> June and at isolated places on 13<sup>th</sup> with rather heavy to heavy falls at a few places on 11<sup>th</sup> and at isolated places on 12<sup>th</sup> June.

Rain / thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over the State.

### Advisories

- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation, fertilizer application and intercultural operation to the crops.
- Maintain 3 – 5 cm water in field of early and regular *ahu* rice.
- Since maize crop is highly susceptible to water logging, provision for surface drainage should be made in the field.
- The sugarcane should be provided with mechanical support to prevent lodging.
- Mild incidence of Brown Plant Hopper, Yellow stem borer and blast and sheath blight diseases in early *ahu* rice and Hispa in regular *ahu* rice is reported in a few localities.
- Monitor attack of Brown Plant Hopper and blast and sheath blight diseases in early *ahu* rice. If attack crosses economic threshold level, to control Brown Plant Hopper insecticides like Chloropyrifos 20 E.C. @ 1.5 ml per litre of water or Phosphamidon @ 1ml per litre of water is to be applied. For control of Blast diseases as soon as 1 or 2 spots on leaf are seen Hinosan 50 E.C. @ 1ml per litre of water or Blitox @ 4gm per litre of water is to be applied and spraying is to be continued at an interval of 10-15 days till the disease is controlled. For control of sheath blight diseases Carbendazim (Bavistin) @ 0.5 gm per litre of water is to be applied.
- Monitor the infestation of Hispa in regular *ahu* rice and if population exceeds economic threshold level, apply Monochrotophos 40 EC @ 1.5 ml per litre of water or Chloropyrifos 20 EC @ 2 ml per litre of water when one adult per hill is noticed.
- Apply plant protection measures after current spells of rain.
- There is mild chance of attack of hairy caterpillar, smilopper, yellow mite and stem weevil in jute. If insect population exceeds economic threshold level, apply fenitrothion 50 EC @ 1 ml in one litre of water or endosulphan 35 EC @ 2 ml per litre of water. Apply plant protection measures after current spells of rain.
- There is mild chance of attack of stem borer in maize. If insect population exceeds economic threshold level, apply fenitrothion 50 EC @ 2 ml per litre of water after current spells of rain.
- This is the time for land preparation and sowing of arhar. Prepare land by 3-4 ploughing. Sow seeds of variety T-21 @ 2 Kg seeds per bigha (15 kg per hectare) maintaining the spacing of 75 cm between rows and 30 cm between plants. Fertilizer @ 5 kg urea, 35 kg SSP per bigha is to be applied. Preparation of land and application of fertilizer may be undertaken after current spells of rain.

## Arunachal Pradesh

Sky remained cloudy over the State. Light to moderate rain / thundershower occurred at most places on 11<sup>th</sup> June and at few places on 12<sup>th</sup> and 13<sup>th</sup> June

Rain/thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over the State during next 48 hours.

### Advisories

- As rain/thundershowers are likely at many places over the State with isolated heavy to very heavy rainfall during next 48 hrs., postpone irrigation, intercultural operations and spraying to summer vegetables, **millet**, **maize**, **jhum paddy** and **ginger** crops. Provide adequate drainage facilities to drain out the excess water.
- Continue weeding, intercultural operations in Jhum **paddy**, **millet** and **ginger** after current spells of rain.

## Bihar

Light to moderate rain occurred at one or two places on 9<sup>th</sup>, 10<sup>th</sup> & 11<sup>th</sup> June.

Rain/thundershowers are likely at many places over the State.

### Advisories

- As rain/thundershowers are likely at many places over the State for the next three days, postpone irrigation, intercultural operations and spraying to **vegetables**, **summer maize**, **sugarcane** and **sesamum**.
- Prepare field and undertake nursery sowing of **Kharif rice** with the advanced monsoon rain. Select the varieties from Saket 4, Pusa 221, Prabhat, Tweanta (Upland), Sita, Rajendra swata, Baidehi, (Mid land), Rajendra Maheswri-1, Shakuntla, Sudha (Low land), Scented rice: Rajendra kasturi, Rajendra subhasini, Pusa Basmati, Kamini & Sugandha.
- Monitor the crop for **Red spider mite** and **powdery mildew** in **vegetable** crops & if exceeds economic threshold level, for effective control spray Sulphur dust @ 3.0 Kg/ha or Dycofol @ 1 lit/ ha after current spells of rain.
- Monitor the **mango** for **mealy bug** or **hopper** & if exceeds economic threshold level, then spray with Carbaryl @ 2g/litre of water after current spells of rain.

## Jharkhand

Rain or thundershower occurred at a few places.

Rain/thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over the State for next 48 hrs.

### Advisories

- As rain/thundershowers are likely at many places over the State with isolated heavy to very heavy rainfall during next 48 hrs., postpone irrigation, intercultural operations and spraying to summer **vegetables**. Provide adequate drainage facilities to drain out the excess water.
- Prepare field and undertake nursery sowing of **Kharif rice** with the advanced monsoon rain. Improved varieties for low land (DON-1) are MTU 7029, BPT 5204, IET-5656, Tulsi etc, and that for medium land are IR-36, Kanak, Birsa Dhan 202, Swarna (Nati Mansuri) etc. can be sown.
- To prevent from **powdery mildew** of small fruits in **Mango** and **Litchi**, spray sulfex@ 2gm/litre of water after current spells of rain.
- **Cabbage** group **vegetables** are affected by *Spodopetra*. Spray Carbaryl dust (2gm in one litre of water) to control the pest after current spells of rain.

## Sikkim

Sky remained generally cloudy during the period. Moderate rainfall occurred over East Sikkim from 09<sup>th</sup> to 13<sup>th</sup> June and very light rainfall during rest of the period. Rainfall was deficient during the period.

Rain/thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over the State.

#### Advisories

- Farmers are advised to undertake transplanting of rice as there was significant rainfall in the State.
- Epidemic infestation of **semilooper** has been reported in **maize**. Spray Trisophor @ 1 ml/litre after spells of rain to control the pest and to minimize the damage.
- Undertake main field preparation and transplanting of **rice** seedlings when the seedlings are at 20-30 days old.
- Postpone irrigation to **large cardamom, orange, maize** and **ginger** as rain/ thundershowers are likely at many places over the state for the next three days.
- Rouge out **Chirkey** and **Foorkey** affected **large cardamom** plants and destroy completely by burning.
- Monitor **ginger** for **rhizome rot** and **bacterial wilt** and rouge out the affected plants and destroy completely to prevent further damage.

#### West Bengal

SW-Monsoon has advanced into the most parts of the State on 13<sup>th</sup> June. During the said period rainfall occurred at most places with heavy to very heavy at a few places on 11<sup>th</sup> June, rainfall occurred at a few places with heavy rain at isolated places on 12<sup>th</sup> June, rainfall occurred at many places with heavy rain at isolated places on 13<sup>th</sup> June over Sub Himalyan West Bengal. But very light to light rain occurred at isolated places on 11<sup>th</sup> & 12<sup>th</sup> June, very heavy rain at isolated places with light to moderate rain at many places and rather heavy to heavy rain at isolated places on 13<sup>th</sup> June over Gangetic West Bengal.

Rain / thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over the State during next 48 hours.

#### Advisories

- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation, intercultural operation and application of fertilizer and plant protection measures to **sugarcane, green gram** and **jute**.
- Undertake preparation of land for sowing of **aus rice**. Select varieties from HYVs like IET-826, CR- 126-42-1, IR-36, IET-2233, IET-1444 (Rosi), Culture-1 etc. Seed rate is 75-100 kg / ha in case of broadcasting and 62-75 kg / ha in case of row sowing. Treat the seeds with Crabendazim 50% @ 1 gm / kg seeds.
- Prepare land with the advantage of recent monsoon rain and start sowing of **groundnut**. Select varieties from improved varieties like JL-24, JL-11, A-K-12-24. Seedrate is 110-125 kg / ha. Apply 20-25 carts compost, 15 kg N, 30 kg P<sub>2</sub>O<sub>5</sub> and 45 kg K<sub>2</sub>O at the time of land preparation. Line to line distance is 12 inches and seed to seed distance is 6 inches.
- **Arhar** can be grown in high land where there is no water logging. Prepare land with the advantage of recent monsoon rain and start sowing. Select varieties from high yielding varieties like B-7, UPS-A-120 etc. Seedrate is 20-25 kg / ha. Apply 20-25 carts compost, 20 kg N and 40 kg P<sub>2</sub>O<sub>5</sub> at the time of land preparation. Maintain line to line distance of 30 inches for sowing.
- Undertake land preparation and fertilizer application for sowing of **groundnut** and **arhar** after current spells of rain.

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

##### Gujarat

Rainfall occurred at isolated places over South Gujarat region & Saurashtra on 4<sup>th</sup> June. Rainfall occurred at isolated places over Gujarat region & at a few places over Kutch on 5<sup>th</sup> June. Rainfall occurred at isolated places over Gujarat State, Diu, Daman, Dadara Nagar on 6<sup>th</sup> June.

Rain / thundershowers are likely at isolated places over the State.

#### Advisories

- Farmers are advised to plan for *Kharif* season. High yielding seeds may be selected for sowing *kharif* crops. Purchase certified seeds from authorized shops. Keep the field well prepared and inputs ready for sowing of

crops for monsoon season.

- As there was no significant rain during last few weeks in most of the districts of the State and rain is likely to occur only at isolated places for next three days, apply irrigation to **sugarcane** to bring soil moisture to field capacity.
- Complete harvesting matured crops of **summer groundnut** and **summer bajra** on bright sunny days.
- Prepare land for sowing of *kharif rice, kharif groundnut, kharif cotton* and *kharif bajra*.
- Where water is available prepare the seed bed for raising **rice** nursery. For sowing soak the rice seeds in 3% salt solution i.e 300 g salt in 10 lit of water to remove damaged & available seeds. Then treat the seeds with agrosan @ 100 g per 50 kg seeds to prevent seed borne diseases.

## Chhattisgarh

South –West Monsoon has advanced into Southern part of Bustar division of Chhattisgarh state. Rainfall occurred on 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> June at one or two places in all the divisions of the state.

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

### Advisories

- Farmers are advised to start sowing of *Kharif* crops in South Chhattisgarh utilizing the recent monsoon rain. High yielding seeds may be selected for sowing *kharif* crops. Purchase certified seeds from authorized shops. Also keep the field well prepared and inputs ready for sowing of crops in anticipation of onset of monsoon in North Chhattisgarh.
- Apply 75 kg N / ha as top dressing on a non-rainy day to **sugarcane**. When the crop attains a height of 5 – 6 feet, 4 – 5 plants may be tied together to prevent lodging from gusty wind.
- Continue harvesting of already matured crops of **green gram** on bright sunny days.
- Prepare nursery for *kharif rice* of suitable size & mix 40-50 buckets of compost manure & 2 kg Amonium sulphate or 1 kg Urea / Acre. Sowing may be done with the help of sufficient moisture in the field. For sowing use 25-45 kg seeds / ha depending upon Varieties & grain size. Before sowing seeds may be treated with 50 gm Captan & then 250 gm Azetobacter & PSB / 10 kg seeds.

## Maharashtra

Rain occurred at most places in South Konkan, at many places in North Konkan, at a few places in South Madhya Maharashtra. Rain also occurred at a few places in Vidarbha & at isolated places in Marathwada and North Madhya Maharashtra on 13<sup>th</sup> June.

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

### Advisories

- Complete harvesting of matured crop of **groundnut, summer sunflower, summer bajra** and **summer maize** in Nasik and Nagpur on bright sunny days.
- Drain out water from **summer rice** field 10 – 15 days before harvesting of matured crops. Harvest already matured crops in Vidarbha.
- Mild incidence of **White Woolly Aphids in Aurangabad** division in Sugarcane (Preseasonal) is reported.
- Monitor the crop for **white woolly aphids in Sugarcane (Preseasonal)** & if exceeds economic threshold level, for effective control spray 500 ml endosulphan 35 % + 1000 ml metasystox & 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.
- This the time for preparation of **nursery beds** & sowing of *karif rice* in nursery bed in **Konkan**. Prepare nursery of suitable size & mix 40-50 buckets of compost manure & 2 kg Amonium sulphate or 1 kg Urea / acre. Sowing may be done with the help of sufficient moisture in the field. Select the variety from Karjat 1, 2, 3, 184, Ratnagiri 3, 73, 711, Sahyadri, Bhogabvati, Phule Radha, Phule Maval, Pusa etc. for Konkan and Indrayani, Pavna Ambemhor157, Pusa, Basmati, Karjat Hybrid, Sahaydri 2, Ratnagiri 24, 73, 711 for

Kolhapur. For sowing use 25-45 kg seeds / ha depending upon varieties & grain size. Before sowing seeds may be treated with 50 gm Captan & then 250 gm Azetobacter & PSB / 10 kg seeds.

- Prepare land for sowing of *Kharif Jowar*, *Kharif Bajra*, *Kharif Groundnut*, *Kharif Sunflower*, *Kharif Geen gram*, *Kharif Cotton*, *Kharif Tur* and *Kharif Soyabean* in Madhya Maharashtra, Marathwada and Vidarbha.
- Select the hybrid variety from CSH- 14, 16, 17,18,23 & high yielding variety from SPV-462, 475 & 946, SSV-84 and Phule amruta for Madhya Maharashtra, SPH-388 & 468, SPH-1010-R for Vidarbha and PKV-801, 809 & SPV- 1411 for Marathwada for *kharif jowar*, the hybrid variety from Saburi, Sradha & Shanti and high yielding variety from WCC-75, ICTP-8203 for Madhya Maharashtra and Sampada & Pratibha for Marathwada for *kharif bajra*, the high yielding erect variety from SB 11, Phule Pragati, TAG-24, TG-26 & Phule Vyas, Semi spreading variety from TMV-10 & M-13, spreading variety Karad 4-11 for Madhya Maharashtra, TLG-45 for Marathwada & TAG-24 & Ak-159 for Vidarbha for *kharif groundnut*, EC 68414, Morden, SS 56, Phule bhanu, KBSH 11, APSH-11 for Madhya maharashtra, Surya, PKV SF 9 or 27 for Vidarbha & hybrid SCH 35 for Marathwada for *kharif sunflower*, Vaibhav, Phule M-2, TAP -7, TARM 2 or 18, AKM 8802 or 8803 for *kharif green gram*, PA 402, American PH 348, Phule 492 or 388, JLH 168, JLA 794, Ganga, Parbhani Sona for *kharif cotton*, BDN-1 & 2, ICPL-87119, & 87, BSMR-853, & 876, AKT-8811 and Vipula for Madhya Maharashtra, T – Vishakha 1, TAT 10, Akola sankar 1 for Vidarbha and Vaishali & Amol for Marathwada for *kharif tur* and MACH-13, 58, 124, 450, JS-335, PK-1029 & Phule Kalyani for Madhya Maharashtra, PKV 1, TAMS 38 for Vidarbha and MAUS 47, 61, 61-2 & Samruddhi for Marathwada for *kharif soybean*.
- Apply fertilizer and plant protection measures and undertake intercultural operation on a non-rainy day in south Madhya Maharashtra and Vidarbha.

## Madhya Pradesh

Rainfall has occurred at a few places in South East M.P. on 13<sup>th</sup> June, at isolated places in East M.P. on 11<sup>th</sup> June, North East M.P. on 12<sup>th</sup> June and North East and South West M.P. on 13<sup>th</sup> June. Dry weather prevailed over rest of the State for remaining period.

Rain/thundershowers are likely at a few places over East Madhya Pradesh and isolated duststorm / thunderstorm is likely over West Madhya Pradesh.

### Advisories

- Apply irrigation to *sugarcane* as there was no significant rainfall during last week and rain/thundershowers is likely to occur at a few places over East Madhya Pradesh only and isolated dust storm/thunder storm is likely over West Madhya Pradesh.
- Continue land preparation and sowing of *cotton*.
- Monitor *sugarcane* for *Pyrilla* and *scale* insects and if the pests population crosses ETL, spray Malathion 50 EC or Endosulphan 35 EC @ 1.25 litres/ha to control the pests. Spraying may be undertaken on a non rainy day in East Madhya Pradesh.

## Orissa

Rain fall occurred at isolated places over the State on 12<sup>th</sup> and 13<sup>th</sup> June; at a few places over the State on 11<sup>th</sup> June.

Rain/thundershowers are likely at many places over the State.

### Advisories

- Continue land preparation and sowing of jute. Sow the jute seeds of variety JRO 524
- Prepare field and undertake nursery sowing of Kharif rice with the advanced monsoon rain.
- As there was excess rainfall in Bargarh, Boudh, Sambalpur and Sonepur districts during last week and rain/thundershowers are likely at many places over the State for the next three days, postpone irrigation, intercultural operations and spraying to *vegetables*, *sugarcane*, *summer groundnut* and *pulses* crops.

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

### Punjab

Light to moderate rainfall occurred at isolated places on 12<sup>th</sup> and 13<sup>th</sup> June. Weather remained mainly dry on rest days. Heat wave conditions also prevailed over parts of Punjab on 11<sup>th</sup> and 12<sup>th</sup> June.

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

**Warning:** Isolated thunder squall is likely over the State.

#### Advisories

- Prepare main field for transplanting of *kharif rice* and start transplanting of ready seedlings under the present weather conditions.
- Continue sowing of *kharif groundnut*. Rainfed groundnut variety i.e. 548 may be preferred for sowing.
- As there was no significant rainfall in 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 *summer sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops*.
- Weeding and intercultural operations may be continued in *sugarcane, vegetables and kharif pulse* crops on a non-rainy day.
- The weather conditions are favourable for the infestation of *stem borer in sugarcane*. Monitor the crop for stem borer infestation & if exceeds economic threshold level, for effective control sprinkle Endosulfan 5 percent granules in the leaf whorls and axils on a non-rainy day.

### Haryana

Rainfall occurred at isolated places in the State on 12<sup>th</sup> June and at a few places on 13<sup>th</sup> June.

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

**Warning:** Isolated thunder squall is likely over the State.

#### Advisories

- As there was no significant rainfall in 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 *summer sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops*.
- Weeding and intercultural operations may be continued in *sugarcane, vegetables and kharif pulse* crops on a non-rainy day.
- Prepare main field for transplanting of *kharif rice* and start transplanting of ready seedlings under the present weather conditions.
- Continue sowing of *kharif groundnut*. Rainfed groundnut variety i.e. 548 may be preferred for sowing.
- Incidence of *thrips on cotton, white fly on moong and shoot borer in sugarcane* is reported below ETL. The weather conditions are favourable for the infestation of pest and diseases. Monitor the crop & if exceeds economic threshold level, for effective control of cotton thrips, spray 250ml Rogor 30EC per hectare. Spray Metasystox 25EC 1ml/l of water to control white fly in moong. Sprinkle Endosulfan 5 percent granules in the leaf whorls and axils for effective control of shoot borer in sugarcane. Undertake application of chemicals on a non-rainy day.

### Rajasthan

Weather remained dry in all the divisions of the State. Heat wave conditions prevailed at isolated places in north Rajasthan.

Isolated duststorm/thunder storm is likely over the State.

#### Advisories

- Heat wave conditions prevailed over isolated pockets of north Rajasthan and weather remained dry in the rest



region during last week and isolated dust storm/thunderstorm is likely over the state for the next three days. Under the circumstances, apply irrigation to **cotton** crop.

- Start harvesting of **zaide moong** on bright sunny days.
- Undertake earthing up in early sown **desi** and **American cotton** in irrigated areas to keep the field weed free.

## Uttar Pradesh

Heat wave conditions prevailed over some part of the South West U.P. and rain occurred at a few places in Gorakhpur, Varanasi, Faizabad divisions on 11<sup>th</sup> June. Heat wave conditions abated from South East U.P. & rain occurred at isolated places in Gorakhpur, Faizabad, Barielly & Jhansi divisions on 12<sup>th</sup> June. Light to moderate rain occurred at isolated places in Lucknow, Faizabad, Barielly divisions on 13<sup>th</sup> June and Weather was mainly dry in remaining divisions of the State on 11<sup>th</sup> to 13<sup>th</sup> June.

Rain/thundershowers are likely at many places over the State.

**Warning:** Isolated heavy to very heavy rainfall is likely over East U.P. Isolated thunder squall is likely over the State.

### Advisories

- As rain/thundershowers are likely at many places over the State postpone irrigation, intercultural operations and spraying to **summer maize, sugarcane and vegetable crops**. Provide adequate drainage facilities in East U.P as isolated heavy to very heavy rainfall is likely during next 48 hrs.
- Prepare field and undertake nursery sowing of **Kharif rice** with the advanced monsoon rain in East U.P. Aswani, Saket-U, Govind, Narendra-118, Narendra-97 varieties may be selected.
- To control **borer** insect in early sown **sugarcane**, spray the solution of Endosulphon 35 EC @ 1.25 litre/ha in water after current spells of rain.

## Himachal Pradesh

Precipitation occurred at many places in the State

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

### Advisories

- As there was excess rain in Hamirpur, Mandi, Sirmaur and Solan districts of the State and rain / thundershowers are likely at a few places over the State for next three days, postpone irrigation to the crops in these districts. As there was no significant rain during last week in remaining districts, apply irrigation to **potato and vegetables**.
- There is mild chance of attack of **powdery mildew** in **vegetables**. If attack crosses economic threshold level, spray carbendazime 0.5 % on a non-rainy day to control the disease.
- Continue land preparation and nursery sowing and transplanting of **cauliflower** and **cabbage** in low and mid hills.
- Continue land preparation and nursery sowing of **rice**. Before growing the nursery, 3.7 kg of seeds should be soaked in 25 litres of water having 2.5 g common salt. Discard the floated seeds and wash rest of the seeds properly, dry in shade and sow after treatment with Bavistin @ 2.5 g / kg of seeds. In seed bed of size 10 cm high of 8x1.25 m dimension apply 20-30 kg FYM, 65 g urea and 150 g super phosphate per bed and mix it thoroughly in the upper 5 cm layer of the bed. Sow 400 g good quality treated seeds in each bed, in rows, 10 cm apart. Four such beds are sufficient for one Bigha.
- Continue preparation of land and sowing of **maize** by ploughing and mixing biological manures properly. The crops should be sown between 20<sup>th</sup> May to 15<sup>th</sup> June in mid hills and 15<sup>th</sup> to 30<sup>th</sup> June in low hills.

## Uttarakhand

Heavy rain was recorded at isolated places on 12<sup>th</sup> June. Moderate rain occurred at isolated places on 11<sup>th</sup> June and 12<sup>th</sup> June, while light rain occurred at isolated places on 13<sup>th</sup> June, while, mainly dry weather prevailed during first half of the week. Sky remained mainly clear to generally cloudy during the week.

Rain/thundershowers are likely at many places over the State.

## Advisories

- As rain/thundershowers are likely at many places over the State postpone irrigation, intercultural operations and spraying to **mango, litchi, apple, potato and sugarcane**. Make arrangements for drainage excess water (in those areas where soil is saturated) in **potato and ginger** as rain is expected.
- Harvest the matured crops of **Mango and Litchi**. Maintain cleanliness in the orchards.
- Continue field preparation and nursery sowing of **rice**.

## Jammu & Kashmir

Weather remained mainly dry over J&K State.

Rain/thundershowers are likely at isolated places over the State.

## Advisories

- Dry weather prevailed during last week and rain/thundershower is likely at isolated places over the State for the next three days. Under the circumstances, apply irrigation to **vegetable and fruit crops** in Kashmir division.
- Continue harvesting of **wheat and vegetables** in Kashmir division.
- Continue land preparation and transplanting of **rice** in the main field in Kashmir division. Transplant healthy seedlings at 3-4 leaf stage, 3 seedlings /hill in 15x15 to 20x15 cm row to row and plant to plant spacing.
- Attack of **grass hopper** is reported in **maize** in Jammu division. Spray Sevin @ 1 kg/ha to control grass hopper.
- Undertake mulching in **orchards** in order to conserve moisture in the field. This will also control weeds. White wash bottom portion of trees to prevent **termite** attack. Undertake new planting in orchards.

## Delhi

Weather remained mainly dry.

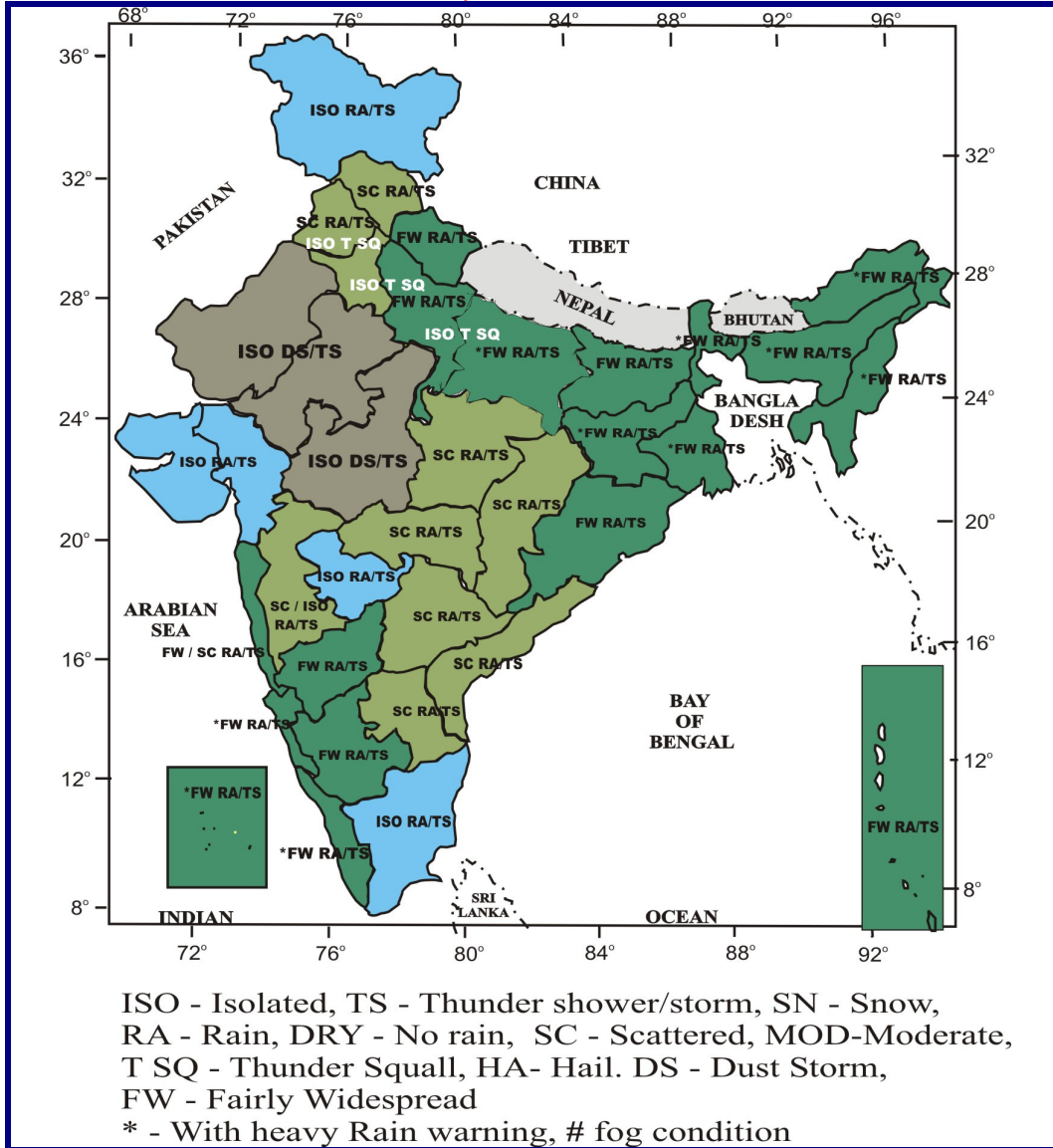
Rain / thundershowers are likely at a few places over the State.

**Warning:** Isolated thunder squall is likely over the State.

## Advisories

- As there was no significant rain during last two weeks and rain / thundershowers are likely at a few places over the State for next three days, apply irrigation to **vegetables** and also to early sown **arhar and maize** wherever crops are at vegetative stage.
- Prepare land and perform sowing of **arhar, maize, raddish, fodder crops like jowar, bajra and mixed maize and lobia** and nursery sowing of **cauliflower and cabbage** with irrigation facilities.
- Select varieties from Upas – 120 and Manak for sowing of **arhar**.
- Select varieties from Ganga-5, Ganga White, Vikram and Kissan for sowing of **maize**.
- Sow Pusa Chatki variety of **raddish**.
- Prepare land for nursery sowing of **rice**. Seed bed should be prepared of size of 10 m length and 1.25 m in width at 30 cm gap between beds. In each seed bed 30 kg cow dung / compost, 80 gm urea, 80 gm SSP and 40 gm MoP are to be applied. Well germinated seeds are to be sown @ 650 to 1000 gm per bed. Select varieties from PR – 109, PR – 106, Jaya and HKR – 120 for sowing.
- Apply irrigation and undertake weeding in already sown **rice** nurseries.

## Forecast Map Valid upto 17<sup>th</sup> June 07



### *Salient weather features for the week ending 13/06/07*

#### MONSOON WATCH

- Southwest monsoon has further advanced into remaining parts of Bay of Bengal, some more parts of Arabian Sea, entire northeastern states, most parts of West Bengal & Sikkim, some parts of Bihar, Jharkhand, some more parts Peninsular India during the week.
- Northern limit of monsoon passes through lat. 16.0 °N/ long. 60.0 E°, lat. 16.0 °N/ long. 70.0 E°, Vengurla, Gulbarga, Nizamabad, Vishakhapatnam, lat. 20.0 °N/ long. 87.0 E°, Digha, Bankura, Bhagalpur and Raxaul on 13th June.

#### METEOROLOGICAL ANALYSIS

- An off-shore trough extended from Karnataka coast to Kerala coast during many days of the week. An upper air cyclonic circulation lay over Jharkhand at lower level on 8<sup>th</sup> & 9<sup>th</sup> and became less marked on 10<sup>th</sup>.

- An upper air cyclonic circulation lay over West Uttar Pradesh with a trough extending upto Orissa at 0.9 km a.s.l. during 7 to 9<sup>th</sup>.
- An upper air trough extended from Haryana to Gangetic West Bengal during 10 to 12<sup>th</sup>.
- An upper air cyclonic circulation lay over Assam & Meghalaya during 7-9<sup>th</sup> and became less marked afterwards.
- An upper air cyclonic circulation lay over west central Bay of Bengal off Andhra Pradesh coast on 7<sup>th</sup> and became less marked on 8<sup>th</sup>.
- An upper air trough extended from Orissa to south Tamil Nadu through Andhra Pradesh between 1.5 & 2.1 km a.s.l. on 8<sup>th</sup> & 9<sup>th</sup> and moved westward and extended from Orissa to south Bay of Bengal between 1.5 to 3.1 km a.s.l. on 10<sup>th</sup> and became less marked on 11<sup>th</sup>.

## **RAINFALL**

Under the influence of the above systems

- Fairly widespread rainfall with isolated heavy to very heavy fall occurred over northeast India during the week.
- Scattered to fairly widespread rainfall occurred over West Bengal & Sikkim, Orissa, Jharkhand during the week and isolated rainfall occurred on few days of the week over remaining parts of East India.
- Isolated rainfall occurred over Jammu & Kashmir and Punjab on 7<sup>th</sup>, over Himachal Pradesh, Uttarakhand on few days of the week.
- Fairly widespread rainfall occurred over Kerala, Coastal Karnataka, south Konkan & Goa during the week and scattered to fairly widespread rainfall occurred over Interior Karnataka on few days of the week. Isolated rainfall occurred over remaining parts of south India, Vidarbha, Chhattisgarh, south Maharashtra, Marathwada on a few days of the week and over East Madhya Pradesh on 13<sup>th</sup>.
- The weather was mainly dry over remaining parts of country.

## **MAXIMUM TEMPERATURES**

- Heat wave to severe heat wave conditions prevailed over some parts of north Rajasthan and heat wave conditions prevailed over some parts of Haryana during the week. Heat wave conditions also prevailed over some parts of Punjab & central India during the period 7-10 June.
- The maximum temperatures were above normal by 2-7°C over northwest & West India during the week.
- They were near normal on 7<sup>th</sup> & 8<sup>th</sup> and below normal by 2-6 °C on remaining days of the week over East India.
- They were below normal by 2-6 °C during 8-11 June and normal on remaining days of the week over northeast India.
- They were above normal by 2-6 °C over central India during the week.
- The maximum temperatures were below normal by 2-7 °C on 7<sup>th</sup> and normal on 8<sup>th</sup> and were above normal by 2-5 °C remaining days of the week over south India.

## **RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 13<sup>TH</sup> JUNE, 2007)**

Rainfall was excess/normal in 14, deficient/scanty in 19 and no rain in 3 out of 36 meteorological sub-divisions (Actual: 27.0 mm, Normal: 30.8 mm and Departure: -12%).

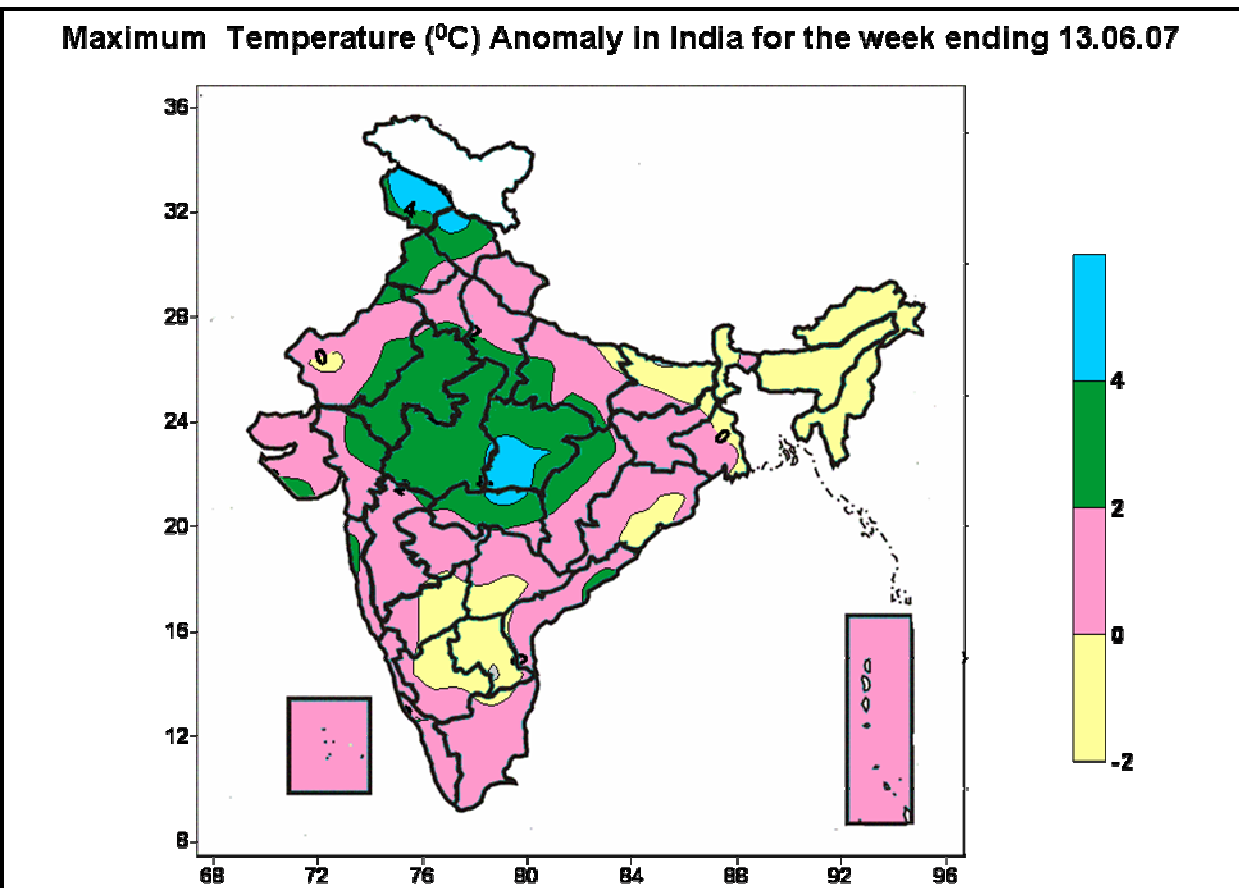
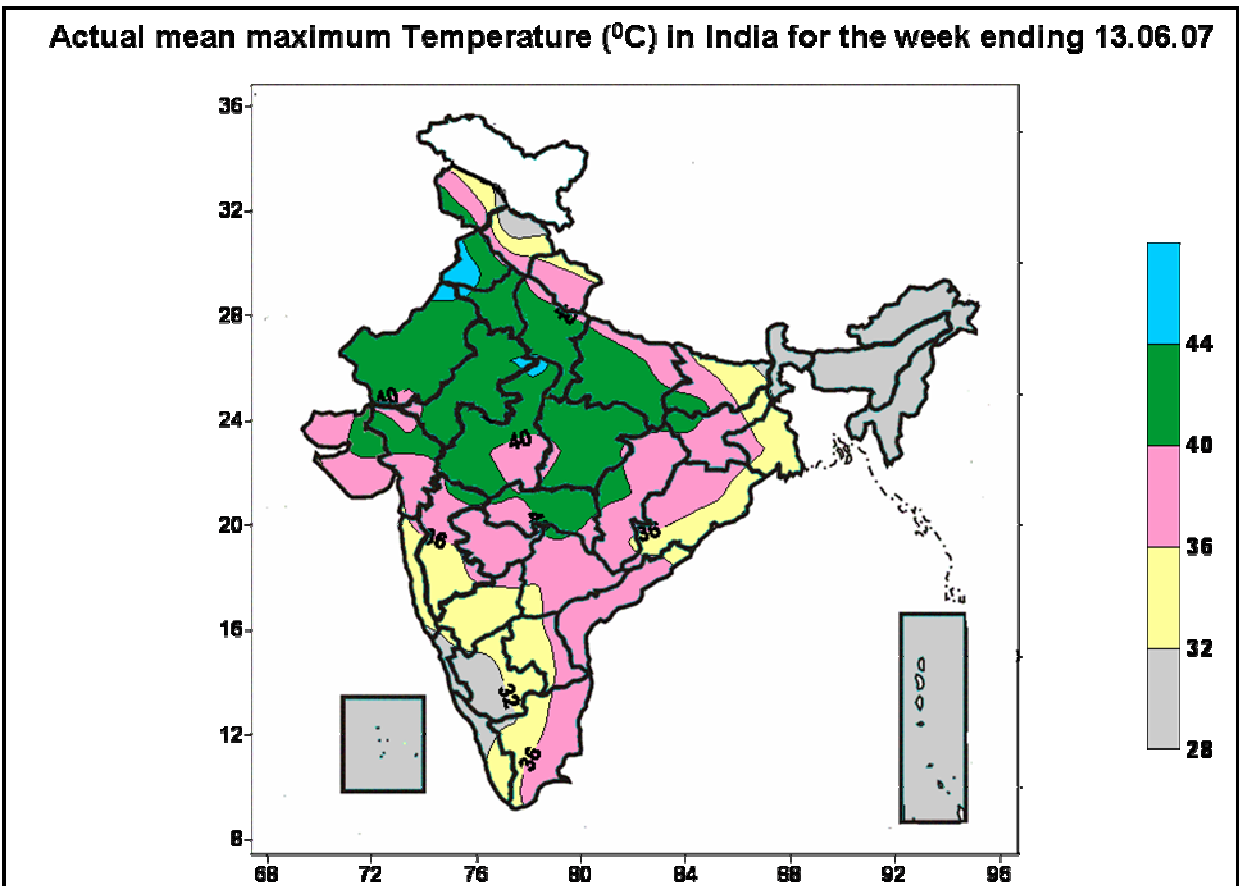
## **CUMULATIVE SEASONAL RAINFALL (1<sup>ST</sup> JUNE TO 13<sup>TH</sup> JUNE, 2007)**

Rainfall was excess/normal in 12 and deficient/scanty in 24 out of 36 meteorological sub-divisions. (Actual: 38.7 mm, Normal: 51.0 mm and Departure: -24%).

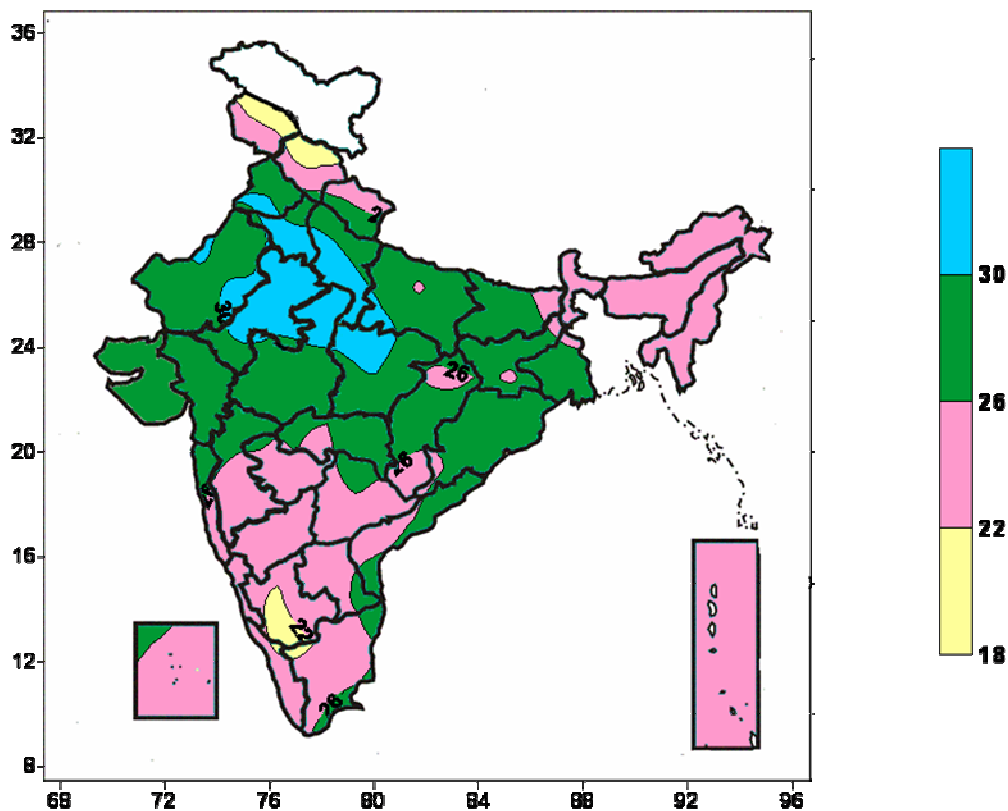
## **OUTLOOK FOR THE WEEK ENDING ON 20<sup>TH</sup> JUNE, 2007.**

- Southwest monsoon is likely to advance further into some more parts of Maharashtra, east India and some parts of Chhattisgarh, Uttarakhand and Himachal Pradesh.
- Fairly widespread rainfall is likely over west coast, Indo-Gangetic plains, northeastern states and Western Himalayan region.
- Numerical Weather Prediction model suggests formation of low pressure area over west-central and adjoining northwest Bay of Bengal towards the end of the week.

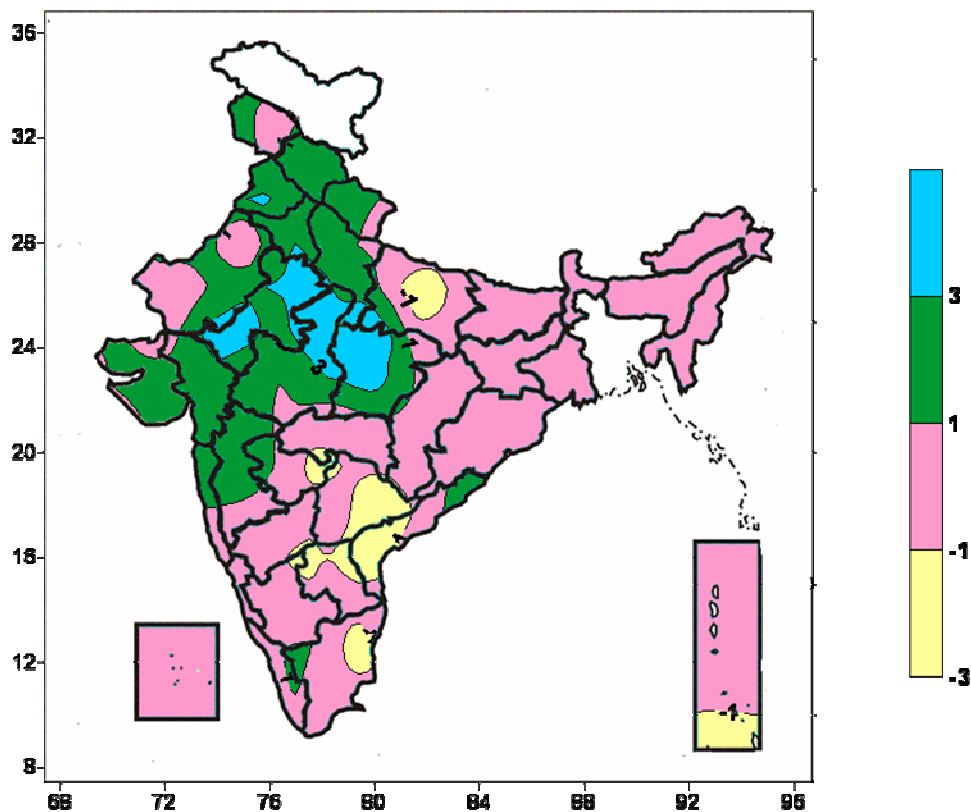
## Contour maps for the week ending 13<sup>th</sup> June, 2007



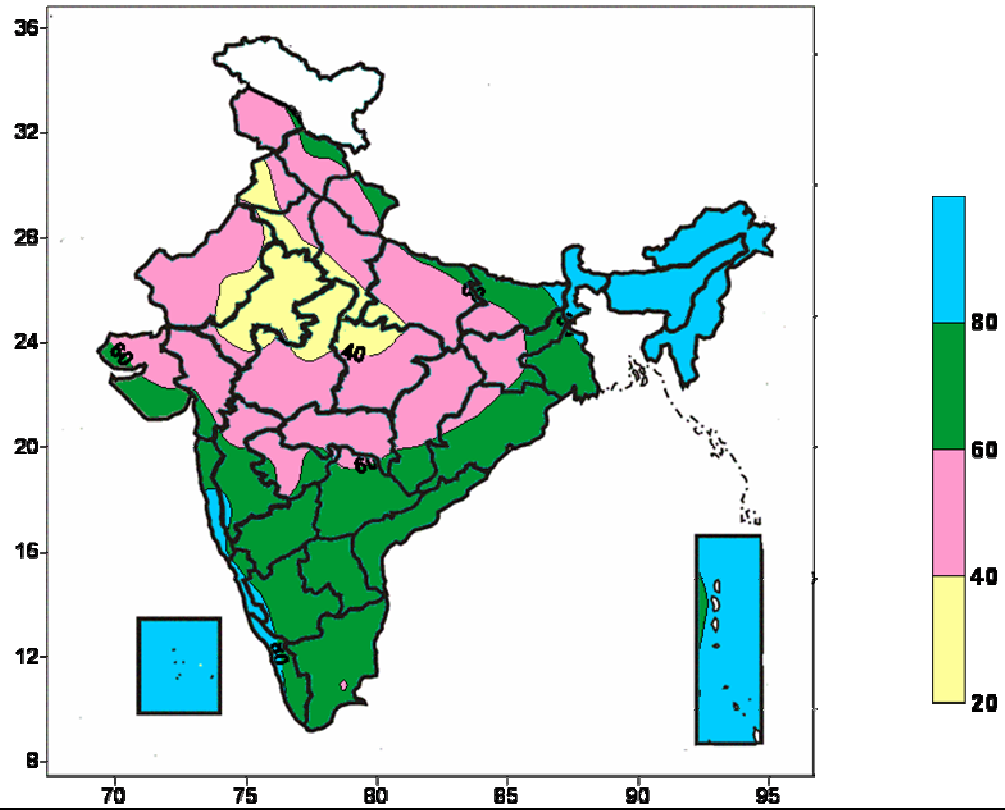
Minimum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 13.06.07



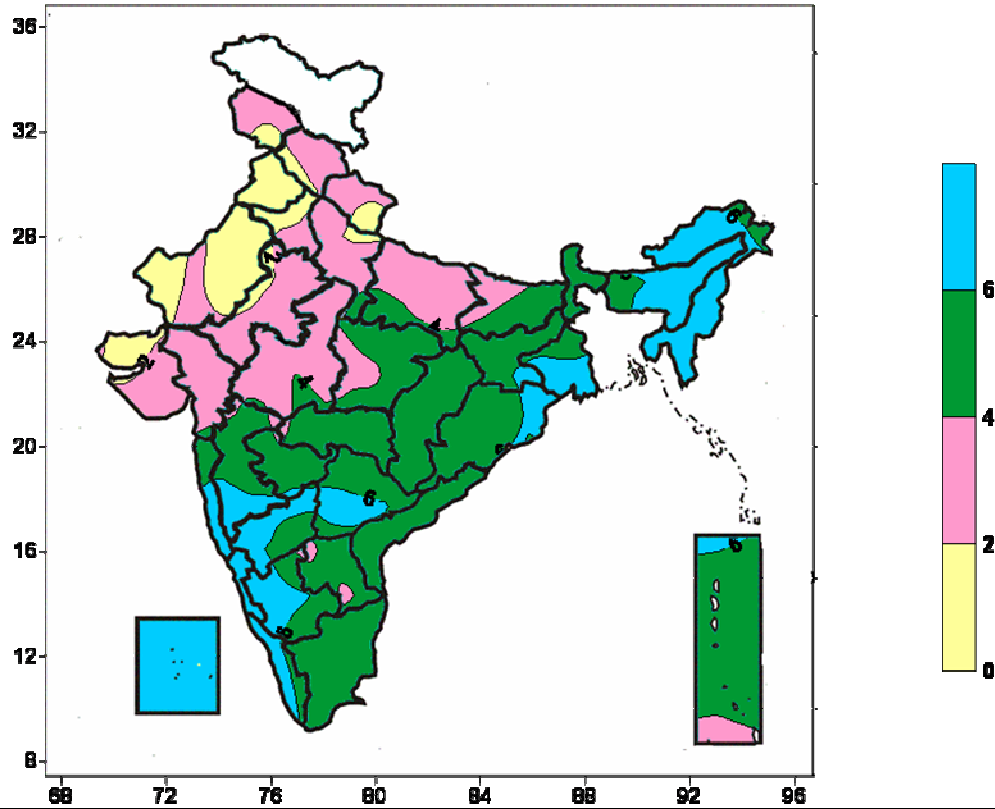
Minimum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 13.06.07



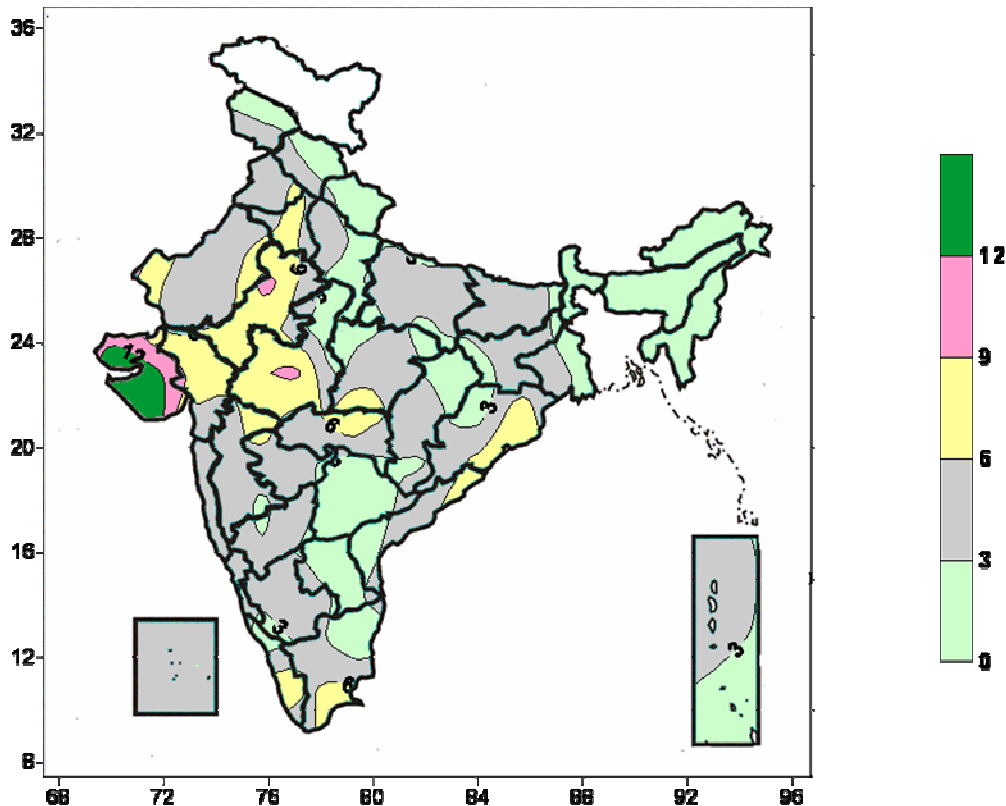
Relative humidity (%) over India for the week ending 13.06.07



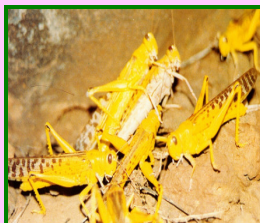
Cloud amount (okta) over India for the week ending 13.06.07



**Wind speed (knots) over India for the week ending 13.06.07**



## Desert Locust Forecasting



**Rainfall (mm)**

Station Name	07.06.07	08.06.07	09.06.07	10.06.07	11.06.07	12.06.07	13.06.07
<b>Amritsar</b>	-	-	-	-	-	-	4.0
<b>Barmer</b>	-	-	-	-	-	-	-
<b>Sriganganagar</b>	-	-	-	-	-	-	-
<b>Jaisalmer</b>	-	-	-	-	-	-	-
<b>Kota</b>	-	-	-	-	-	-	-
<b>Deesa</b>	-	-	-	-	-	-	-
<b>Churu</b>	-	-	-	-	-	-	-

**Temperature (degree Celcius)**

Station Name	07.06.07	08.06.07	09.06.07	10.06.07	11.06.07	12.06.07	13.06.07
<b>Amritsar</b>	-	34.5	36.5	37.0	37.5	-	32.5
<b>Barmer</b>	34.0	34.0	35.0	-	-	-	34.0
<b>Sriganganagar</b>	36.5	37.5	39.0	-	-	-	37.5
<b>Jaisalmer</b>	33.5	-	35.0	-	-	-	33.5
<b>Kota</b>	38.0	38.0	39.0	-	-	-	38.0
<b>Deesa</b>	32.5	33.0	33.5	-	34.0	34.0	34.0
<b>Churu</b>	-	-	-	-	-	-	-

There is no chance of locust infestation in Rajasthan and the adjoining areas during this week. However, farmers are advised to monitor the situation closely and carefully.



## CROP – STATE – STAGE

### Delhi

<b>Vegetables</b>	<b>Early sown summer vegetable crops</b>	<b>Rice</b>	<b>Arhar</b>	<b>Early sown Arhar</b>
Sowing	Vegetative / Flowering / Fruiting	Nursery preparation	Land preparation/Sowing	Germination / early vegetative
<b>Maize</b>	<b>Early sown Maize</b>	Fodder		
Land preparation/Sowing	Germination / early vegetative	Land preparation/Sowing		

### Haryana

<b>Early sown Sugarcane</b>	<b>Oilseeds</b>	<b>Horticultural crop</b>	<b>Cotton</b>	<b>Paddy</b>
Vegetative	Flowering/seed formation	Vegetative	Seedling/early vegetative	Main field preparation/Transplanting
<b>Kharif Groundnut</b>	<b>Early sown Kharif Groundnut</b>	<b>Kharif Pulses</b>		
Field preparation and Sowing	Early vegetative	Early vegetative		

### Himachal Pradesh

<b>Summer vegetables (Cauliflower, Cabbage in low and mid hills)</b>	<b>Vegetables (Tomato, brinjal, ladies finger, Bhindi)</b>	<b>Onion</b>	<b>Potato</b>	<b>Maize</b>
Nursery sowing /Transplanting	Vegetative / Flowering/ fruiting / harvesting	Bulb maturity/Harvesting	Vegetative	Land preparation and sowing
<b>Apple</b>	<b>Rice</b>			
Fruit development	Nursery sowing			

### Jammu & Kashmir

<b>Vegetable crops</b>	<b>Rice</b>	<b>Wheat</b>	<b>Maize</b>	
Fruiting/harvesting–in Kashmir Div.	Transplanting	Harvesting -in Kashmir division	Vegetative	

### Punjab

<b>Sugarcane</b>	<b>Sunflower</b>	<b>Horticultural crop</b>	<b>Cotton</b>	<b>Paddy</b>
Vegetative	Flowering/seed formation	Vegetative	Seedling/early vegetative	Main field preparation/Transplanting
<b>Kharif Groundnut</b>	<b>Early sown Kharif Groundnut</b>	<b>Kharif pulses</b>		
Field preparation/Sowing	Early vegetative	Early vegetative		

### Rajasthan

<b>Zaide Moong</b>	<b>Zaide Fodder</b>	<b>Cotton</b>		
Pod maturity/Harvesting	Vegetative	Vegetative		

### Uttar Pradesh

<b>Sugarcane</b>	<b>Winter Vegetables (Onion &amp; Garlic)</b>	<b>Summer Vegetables</b>	<b>Turmeric / ginger</b>	<b>Sunflower</b>
Early vegetative	Maturity/ harvesting stage	Vegetative/Harvesting	Sowing	Maturity/Harvesting
<b>Mango</b>	<b>Rabi Pulses (Urad, Moong, Lobia)</b>	<b>Maize</b>	<b>Bajra</b>	<b>Rice</b>
Fruit development / maturity/Harvesting	Maturity/Harvesting	Vegetative	Vegetative	Preparation of Nursery/Sowing

### Uttarakhand

<b>Potato</b>	<b>Mango/Litchi/ Apple</b>	<b>Sugarcane</b>	<b>Kharif Rice</b>	<b>Ginger</b>
Vegetative growth	Fruit development/ maturity	Vegetative	Germination / seedling	Vegetative
<b>Finger Millet/Amranthus</b>				
Germination				

### Assam

<b>Early sown Summer vegetables</b>	<b>Early Ahu rice</b>	<b>Jute</b>	<b>Maize</b>	<b>Sugarcane</b>
Vegetative/Flowering/Fruiting/Harvesting	Tillering	Vegetative	Vegetative	Vegetative

<b>Arhar</b>	<b>Regular Ahu Rice</b>			
Land preparation and Sowing	Vegetative/Tillering			

**Arunachal Pradesh**

<b>Summer vegetables</b>	<b>Ginger</b>	<b>Millet</b>	<b>Jhum Paddy</b>	<b>Maize</b>
Harvesting	Rhizome formation	Vegetative/Flowering	Vegetative	Cob formation/Maturity
<b>WRC Rice</b>				
Vegetative				

**Bihar**

<b>Summer Vegetables</b>	<b>Sugarcane</b>	<b>Mango &amp; Litchi</b>	<b>Green Gram / Black gram</b>	<b>Summer Maize</b>
Vegetative	Early vegetative	Fruit Development	Maturity	Vegetative/Flowering
<b>Kharif rice</b>	<b>Sesamum</b>			
Nursery preparation/Sowing	Pod formation/Maturity			

**Jharkhand**

<b>Kharif rice</b>	<b>Summer vegetables</b>	<b>Upland crops (Maize, arhar, groundnut, soybean, urad, rice)</b>	
Nursery preparation/Sowing	Vegetative	Field preparation/Sowing	

**Sikkim**

<b>Maize</b>	<b>Orange</b>	<b>Vegetables</b>	<b>Large Cardomom</b>	<b>Ginger</b>
Grain formation	Fruiting New planting in some places	Vegetative	Capsule formation	Vegetative
<b>Rice</b>				
Transplanting				

**West Bengal**

<b>Sugarcane</b>	<b>Green gram</b>	<b>Jute</b>	<b>Aus rice</b>	<b>Arhar / Kharif Groundnut</b>
Early vegetative/ Vegetative	Pod formation / maturity/Harvesting	Germination / early vegetative / vegetative	Land preparation / sowing	Land preparation / sowing

**Chattisgarh**

<b>Sugarcane</b>	<b>Vegetables (Tomato, chilli, brinjal)</b>	<b>Summer Vegetables</b>	<b>Khari Rice</b>	<b>Green Gram</b>
Vegetative	Fruiting / harvesting	Vegetative / Flowering / Fruiting/Harvesting	Preparation of nursery beds/Sowing	Pod formation/ maturity/Harvesting
			<b>Maize</b>	
			Vegetative	

**Gujarat**

<b>Sugarcane</b>	<b>Summer Groundnut</b>	<b>Summer Bajra</b>	<b>Kharif Rice</b>	<b>Kharif Bajra</b>
Vegetative	Harvesting	Harvesting	Preparation of rice nursery	Preparation of Land and Sowing
<b>Kharif Groundnut</b>	<b>Kharif Cotton</b>			
Preparation of Land and Sowing	Preparation of Land and Sowing			

**Maharashtra**

<b>Sugarcane Preseasonal (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Summer Groundnut (Madhya Maharashtra, Marathwada, Vidarbha &amp; Konkan)</b>	<b>Summer Rice (Konkan, Vidarbha &amp; Kolhapur dist.)</b>	<b>Summer Sunflower (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Summer Bajra (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>
Early vegetative / active growth	Pod maturity / Harvesting- in Nashik & Nagpur	Grain maturity/Harvesting – in Vidarbha.	Seed maturity/Harvesting- in Nashik & Nagpur	Grain maturity / harvesting- in Nashik & Nagpur
<b>Summer Maize (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Sugarcane (Suru) (Madhya Maharashtra, Marathwada and Vidarbha)</b>	<b>Irrigated cotton (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Rice (Konkan)</b>	<b>Kharif Rice (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>
Cob maturity / harvesting- in Nashik & Nagpur	Early vegetative/active growth	Germination / Early vegetative	Preparation of nursery beds & Sowing of rice in nursery bed in Konkan	Preparation of nursery beds & Sowing of rice in nursery bed in Kolhapur

<b>Kharif Jowar (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Bajra (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Groundnut (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Sunflower (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Green Gram (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>
Preparation of land & sowing	Preparation of land & sowing	Preparation of land & sowing	Preparation of land & sowing	Preparation of land & sowing
<b>Kharif Cotton (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Tur (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Soyabean (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>		
Preparation of land & sowing	Preparation of land & sowing	Preparation of land & sowing		

**Madhya Pradesh**

	<b>Sugarcane</b>	<b>Cotton</b>	<b>Early sown Cotton</b>	
	Vegetative	Sowing	Germination	

**Orissa**

<b>Summer Vegetables</b>	<b>Kharif rice</b>	<b>Summer pulses</b>	<b>Sugarcane</b>	<b>Jute</b>
Vegetative/Fruiting	Sowing	Vegetative	Vegetative	Field preparation and Sowing
<b>Early sown Summer Groundnut</b>				
Early vegetative				

**Andhra Pradesh**

<b>Kharif Rice</b>	<b>Kharif Maize</b>	<b>Kharif Cotton</b>	<b>Kharif Groundnut</b>	
Sowing	Sowing	Sowing	Sowing	

**Karnataka**

	<b>Sugarcane (Ratoon crop)</b>	<b>Kharif Jowar/Maize/Groundnut/Sunflower</b>	<b>Early sown Kharif Jowar/Maize/Groundnut/Sunflower</b>	
	Grand growth	Sowing	Germination / early vegetative	

**Kerala**

	<b>Rubber</b>	<b>Virippu rice</b>		
	Tapping	Transplanting		

**Tamil Nadu**

<b>Rice (Kuruvai)</b>	<b>Summer gingelly /Maize</b>	<b>Cotton</b>	<b>Sugarcane (Early, Mid and Late season)</b>	
Transplanting	Seedling/Grain maturity/Early harvesting	Boll development	Vegetative	

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