



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

Issued by

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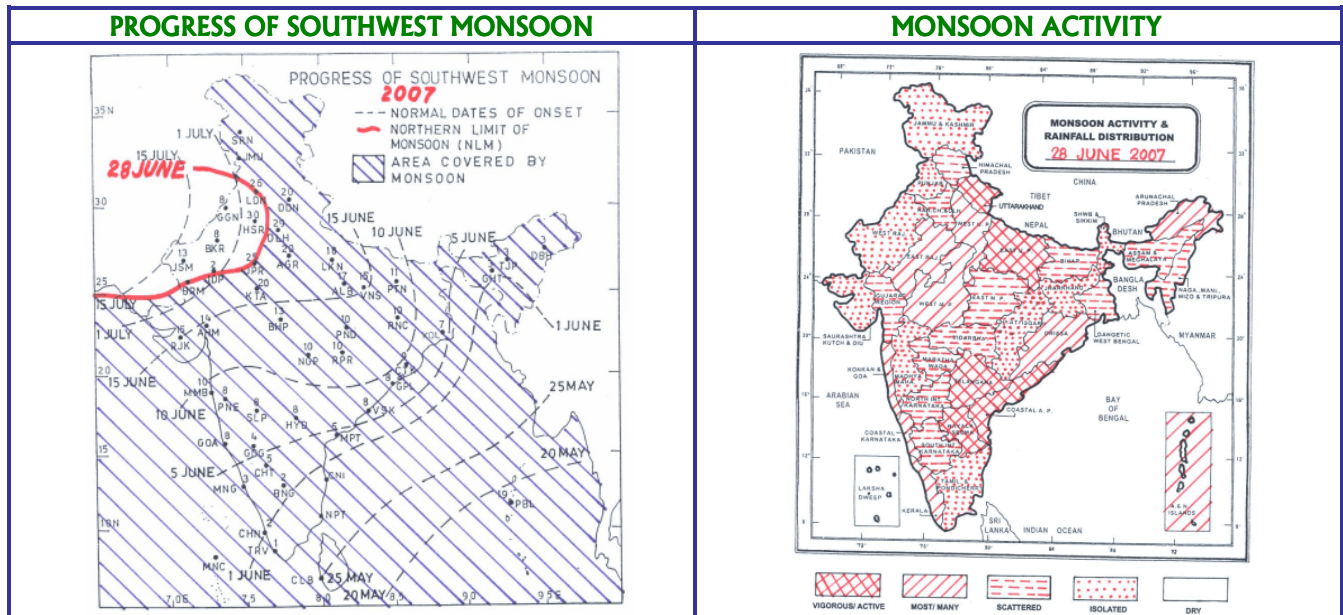
(For the period 28<sup>th</sup> June to 2<sup>nd</sup> July, 2007)

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

## Status of Monsoon

Southwest monsoon has further advanced into the remaining parts of Madhya Pradesh & Uttar Pradesh, most parts of East Rajasthan, some parts of west Rajasthan and some more parts of Haryana (including Delhi) and Punjab.

Northern limit of monsoon passes through Barmer, Jodhpur, Ajmer, Jaipur, Narnaul, Rohtak, Ludhiana and Amritsar.



## Agromet Advisory

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

#### Kerala

Southwest monsoon was weak over the State on 25<sup>th</sup> to 27<sup>th</sup> June. Rain occurred at most places on 25<sup>th</sup> June, at many places on 27<sup>th</sup> June and at a few places on 26<sup>th</sup> June during this period.

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

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

#### Advisories

- Continue land preparation and transplanting virippu rice seedlings after current spells of rain. In areas where crop loss is reported, direct sowing may be undertaken.
- 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.
- Crop loss due to heavy rain and flooding of rice fields at many places is reported. Arrange for drainage facilities to prevent water logging as heavy rainfall at a few places with very heavy rainfall at isolated places is

likely to occur in Kerala during the next two days.

- Undertake intercultural operations, application of fertilizers and pesticides in plantation crops after current spells of rain.
- Monitor virippu rice for gall midge. Spray Chlorpyrifos @ 0.02% after spells of rain to control if the pest population crosses ETL.
- 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 bunchy top disease is reported in banana. Apply 25 gm. phorate 10% G or 20 gm carbofuran 3 G per pit 20 days after planting around the rhizome.

### **Tamilnadu**

Rainfall occurred at one or two places over the State on 25<sup>th</sup>, 26<sup>th</sup> and 27<sup>th</sup> June.

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

#### **Advisories**

- 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 in a non rainy day.
- As there was sufficient rainfall in Kanyakumari, Nilgiris, Tirunelveli, and Thiruvallur districts and rain/thundershowers are likely at a few places over the State for the next three days, postpone irrigation to sugarcane and, cotton. Apply irrigation in the remaining districts.
- Monitor cotton for boll worm and if the pest population crosses ETL, spray Endosulfan @ 2 litres/ ha or Monocrotophos @ 1 litre/ha in a non rainy day.
- Continue harvesting maize and gingelly.
- Continue field preparation and sowing of maize and hybrid cumbu.

### **Karnataka**

Rainfall occurred at most places over Coastal Karnataka and at a few places over Interior Karnataka on 25<sup>th</sup> June. Rainfall occurred at most places over Coastal Karnataka and at isolated places over Interior Karnataka on 26<sup>th</sup> June. Rainfall occurred at most places over Coastal Karnataka, at many places over North Interior Karnataka and at a few places over South Interior Karnataka on 27<sup>th</sup> June.

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

#### **Advisories**

- Continue field preparation and sowing *kharif* jowar, ragi maize, cotton, groundnut and sunflower. Undertake seed treatment with biofertilizers before sowing.
- Postpone irrigation to summer sugarcane, *Kharif ragi*, jowar, maize, cotton, groundnut and sunflower. as rain/thundershowers is likely to occur at many places over the State for the next three days. Provide drainage facilities to avoid water logging due to excess rain during last week.
- Monitor sugarcane for woolly aphids and army worm and if the pest population crosses ETL, release *Dipha* sp, adopt wider spacing, inter-cropping with soyabean and pulses of short duration as plant protection measures against woolly aphids in Mysore, Mandya and Hassan districts and army worm in Bidar and Bagalkote districts.

### **Andhra Pradesh**

Southwest monsoon was vigorous over Coastal Andhra Pradesh and Rayalseema on 22<sup>nd</sup> & 23<sup>rd</sup> June, active over Coastal Andhra Pradesh on 24<sup>th</sup> & 27<sup>th</sup> June over Telangana on 22<sup>nd</sup> & 23<sup>rd</sup> June. Rain occurred at most places over Telangana on 24<sup>th</sup> June at many places over Coastal Andhra Pradesh on 26<sup>th</sup> June, over Telangana on 21<sup>st</sup> &

26<sup>th</sup> June, at few places over Coastal Andhra Pradesh on 21<sup>st</sup> & 25<sup>th</sup> June, Over Telangana on 25<sup>th</sup> & 26<sup>th</sup> June. Isolated rain occurred over Rayalseema on 21<sup>st</sup>, 24<sup>th</sup>, 25<sup>th</sup> & 26<sup>th</sup> June during the week.

Rain/thundershowers are likely at most places over Coastal Andhra Pradesh and Telangana and at many places over Rayalaseema.

**Warning:** Scattered heavy to very heavy rainfalls with isolated extremely heavy falls are likely over north Andhra Pradesh.

#### **Advisories**

- **Farmers are advised to postpone nursery sowing, main field preparation and transplanting of *kharif* rice in North Andhra Pradesh and continue field preparation and undertake sowing/transplanting of *kharif* crops by utilizing the monsoon showers in other parts of the state. Arrange for drainage facilities to avoid water stagnation in different parts of the State.**
- Postpone of nursery sowing, main field preparation and transplanting of *kharif* rice in North Andhra Pradesh and continue field preparation and undertake sowing/transplanting in other parts of the State. Transplant rice seedlings at proper age.
- Postpone sowing of *kharif* crops viz., groundnut, cotton, maize, green gram and black gram in North Andhra Pradesh and continue field preparation and undertake sowing in other parts of the State. Undertake seed treatment with *Rhizobium* for groundnut, green gram and black gram and with *Azospirillum* for maize before sowing.
- Arrange for extensive drainage facilities in order to avoid stagnation of water in the standing crops as heavy to very rainfall is likely to occur at a few places with isolated extremely heavy falls in north Andhra Pradesh in the next two days and excess rainfall during last week

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

##### **Assam**

Light to moderate rain occurred at many places on 25<sup>th</sup> June and at isolated places on 23<sup>rd</sup> & 24<sup>th</sup> June over the State. Generally cloudy sky during the period.

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

#### **Advisories**

- As there is sufficient moisture in the field, farmers are advised to prepare land and sow *Sali* rice (early varieties of *Sali* rice: Pankaj, Ranjit, Masuri etc.).
- As most of the districts of the State received sufficient rain during last few weeks and rain / thundershowers are likely at a few places over the State for next three days, postpone irrigation 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 Hispa in regular *ahu* rice is reported in a few localities.
- 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 Chloropyriphos 20 EC @ 2 ml per litre of water when one adult per hill is noticed. Apply plant protection measures on a non-rainy day.
- There is mild chance of attack of hairy caterpillar, semilopper, 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 on a non-rainy day.
- 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 on a non-rainy day.

##### **Arunachal Pradesh**

Sky remained mainly cloudy over the State during the period. Light to Moderate rain / thundershowers occurred at most places on 25<sup>th</sup> June, light rain / thundershowers occurred at a few places on 26<sup>th</sup> June and at one or two

places on 27<sup>th</sup> June.

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

### **Advisories**

- As most of the districts of the State received sufficient rain during last couple of weeks and rain / thundershowers are likely at a few places over the State for next three days, postpone irrigation to summer vegetables, millet, maize, jhum paddy and ginger crops.
- Continue weeding, spraying and intercultural operations, millet and ginger in a non rainy day.

### **Bihar**

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

### **Advisories**

- Continue nursery sowing of and transplanting oh *khariif* rice. Select short duration varieties i.e. Pusa 2-21, Saket-4, Prabhat, IR 64 or scented paddy, Pusa basmati, R Subhasni, Kasturi.
- 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 vegetables, maize, sugarcane.
- Monitor the mango for mealy bug or hopper & if exceeds economic threshold level, then spray with Carboryl @ 2g/litre of water in a non rainy day.

### **Jharkhand**

Rain or thundershower occurred at isolated places

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

### **Advisories**

- Continue field preparation and nuresery sowing of *Khariif* rice. 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.
- Continue field preparation and sowing of upland crops viz. maize, arhar, groundnut, soybean, urad, and rice. Select improved varieties of rice for direct sowing like Vandana, Anjali, Barsa Dhan 109, Birsa Vikas Dhan 110, Birasa Dhan 108.
- As rain/thundershowers are likely at a many places over the State for the next three days, postpone irrigation to vegetables.
- To prevent from powdery mildew of small fruits in Mango and Litchi, spray sulfex@ 2gm/litre of water after current spells of rain.

### **Sikkim**

Sky remained generally cloudy during the period. Moderate rainfall occurred at many places over East Sikkim on 22<sup>nd</sup>, 24<sup>th</sup> & 25<sup>th</sup> June, very light rain on 23<sup>rd</sup> & 26<sup>th</sup> June and heavy to very heavy rainfall on 27<sup>th</sup> June where as there was no rainfall on 21<sup>st</sup> June. Rainfall was excess during the period.

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

### **Advisories**

- Continue main field preparation and transplanting of rice seedlings when the seedlings are 20-30 days old.
- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation and intercultural operation to large cardamom, orange, vegetables, maize and ginger.
- Epidemic infestation of semilooper has been reported in maize. Spray Trisophor @ 1 ml/litre after current spells of rain to control the pest and to minimize the damage.
- Rouge out Chirkey and Foorkey affected large cardamom plants and destroy completely by burning. Collect leaf eating caterpillars and destroy to prevent further spread.
- Monitor ginger for rhizome rot and bacterial wilt and rouge out the affected plants and destroy completely to prevent further damage.

- Monitor orange for leaf miner and trunk borer. Plug trunk borer holes with cotton soaked with kerosene and later with mud to prevent trunk borer.

## West Bengal

Rain / thundershowers are likely at many places over Gangetic West Bengal and at a few places over rest of the State.

### Advisories

- Prepare land with the advantage of recent monsoon rain and continue 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 continue 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.
- Complete preparation of land and transplanting of *aus* rice. Maintain 3 – 5 cm water at tillering stage.
- Undertake preparation of land for nursery sowing of *aman* rice. One kattah land is required for transplanting of 1 bigha of land. Apply 3 kg Super phosphate, 1 kg urea and 800 g MOP in the nursery bed.
- Apply 15 kg urea per bigha as top dressing on a non-rainy day in 3 months old crops of sugarcane.
- Apply 2<sup>nd</sup> dose of 6 – 7 kg urea per bigha as top dressing on a non-rainy day in 5 – 6 weeks old crops of jute.
- Postpone intercultural operation and fertilizer application to the crops in Gangetic West Bengal.
- As most of the districts received sufficient rain during last week and rain / thundershowers are likely at many places over Gangetic West Bengal and at a few places over rest of the State, postpone irrigation to sugarcane and jute.

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

### Gujarat

South West monsoon further advanced and covered entire Gujarat state on 25<sup>th</sup> June. Monsoon was vigorous over Saurashtra, Diu, Kutch and active over Gujarat region, Daman, Dadra Nagar Haveli on 25<sup>th</sup> June. Monsoon was active over Gujarat State, Diu, Daman, Dadra Nagar Haveli on 26<sup>th</sup> June. Rainfall occurred at most places over Kutch and at a few places over rest of the region, Diu, Daman, Dadra Nagar Haveli on 27<sup>th</sup> June.

Rain / thundershowers are likely at a few places over the State during next 48 hours and increase thereafter.

### Advisories

- 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.
- Prepare land on a non-rainy day and start sowing of *kharif* groundnut. Prefer high yielding varieties like GAU-10, GG-20, GG-11, 12, 13 with basal fertilizer dose 12.5 kg N, 25 kg P<sub>2</sub>O<sub>5</sub> / ha at time of sowing in furrows. Treat the seeds with thiram or Dithane M-45 @ 3 to 4 g / kg seeds to prevent seed borne diseases and pests like white grub and termite.
- This is the time for land preparation and sowing of *kharif* cotton. Start sowing of different high yielding varieties like H-4, 6, 8, 10 and local varieties for south Gujarat like Guj-cotton -16, Guj-cot-23, Guj-cot 17 & Digvijay. For north Gujarat V-797, Guj-cot 13, 21 and entire state cotton local hybrid -7 & 9 may be used. Use delinted seeds and seed treated with any mercurized compound @ 2 to 3 g / kg seeds.
- Prepare land on a non-rainy day and start sowing of *kharif* bajra. Prefer resistant varieties against downey mildew & high yielding varieties of bajra like GHB-15, 235, 316, MH-169, GHB-27 with basal fertilizer dose 40 kg N, 40 kg / ha P<sub>2</sub>O<sub>5</sub> at the time of sowing in furrows.
- Prepare land on a non-rainy day and start sowing of *kharif* maize. Prefer high yielding varieties like Maize-1, 4, 6 and Ganga safed-2, Gujart maize-2, Ganga-11 and Pusa hybrid-1 for sowing.

- As there was sufficient rain during last week in most of the districts of the State and rain / thundershowers are likely at a few places over Gujarat during next 48 hours and increase thereafter, postpone irrigation to sugarcane and pre monsoon cotton.
- As heavy to very heavy rainfall is likely at a few places over the State after three days, farmers are advised to arrange for draining out excess water from the field to avoid stagnation of water.

### Chhattisgarh

Rainfall occurred at many places on 25<sup>th</sup>, 26<sup>th</sup> and 27<sup>th</sup> June in the State.

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

**Warning:** Scattered heavy to very heavy rainfalls with isolated extremely heavy falls are likely over the State.

#### Advisories

- As rain / thundershowers are likely at most places over the State along with scattered heavy to very heavy rainfalls with isolated extremely heavy falls for next three days, postpone land preparation and nursery sowing of *kharif* rice and sowing of black gram and soybean. Arrange for draining out of excess water from the field of already sown crops.
- Under the prevailing weather condition, postpone irrigation, intercultural operation and application of plant protection measures to sugarcane, maize and vegetables. Arrange for draining out of excess water from the field.

### Maharashtra

Monsoon was vigorous in North Madhya Maharashtra on 25<sup>th</sup> June & active in North Konkan on 25<sup>th</sup> June & in East Vidarbha on 27<sup>th</sup> June. Rain occurred at most places in Konkan, South Madhya Maharashtra & East Vidarbha, at many places in North Madhya Maharashtra & West Vidarbha and at a few places in Marathwada.

Rain/ thundershowers are likely to occur at many places over Konkan, Madhya Maharashtra & at a few places over Marathwada during next 48 hours & increase thereafter. Rain / thundershowers are likely to occur at most places over Vidarbha.

**Warning:** Isolated heavy rainfall is likely to occur in Konkan, Madhya Maharashtra & Vidarbha during next 48 hours.

#### Advisories

- As rain / thundershowers are likely to occur at many places over Konkan, Madhya Maharashtra & at a few places over Marathwada during next 48 hours & increase thereafter and rain / thundershowers are likely to occur at most places over Vidarbha for next three days, postpone sowing of *Kharif* Jowar, *Kharif* Bajra, *Kharif* Groundnut, *Kharif* Sunflower, *Kharif* Green gram, *Kharif* Cotton, *Kharif* Tur and *Kharif* Soyabean and nursery sowing of *karif* rice.
- As rain / thundershowers are likely to occur at many places over Konkan, Madhya Maharashtra & at a few places over Marathwada during next 48 hours & increase thereafter and rain / thundershowers are likely to occur at most places over Vidarbha for next three days, postpone irrigation and intercultural operation to sugarcane (pre-seasonal), sugarcane (*suru*) and irrigated cotton.
- Mild incidence of White Woolly Aphids in Pune and Aurangabad division in Sugarcane (Preseasonal) & Army worm in Sindhudurga district in *kharif* Rice is reported.
- Arrange for draining out of excess water from the field.
- 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.
- Monitor the crop for Army worm in nursery bed & if exceeds economic threshold level, spray 25 % Cypermethrin 120 ml or 36 % Monocrotophos 700 ml/ha in 500 liters water.
- Apply plant protection measures after current spells of rain.

## Madhya Pradesh

South West Monsoon has advanced in Indore, Ujjain, Hoshangabad divisions and some parts of Jabalpur division on 25<sup>th</sup> June.

Rain / thundershowers are likely at many places over the State during next 48 hours and increase thereafter.

### Advisories

- As rain / thundershowers are likely at many places over the state during next 48 hours and increase thereafter with the possibility of scattered heavy to very heavy falls and isolated extremely heavy falls, postpone sowing of *kharif* crops like soybean, cotton, maize, *urd* and jowar and nursery sowing of rice. Arrange for draining of excess water from the field of already sown crops to avoid water stagnation.
- Under prevailing weather condition, postpone irrigation, intercultural operation and application of plant protection measures to sugarcane. Arrange for draining of excess water from the field to avoid water stagnation.

## Orissa

South West Monsoon advanced into entire parts of the State on 25<sup>th</sup> June. Rain fall occurred at most places on 25<sup>th</sup> June, 26<sup>th</sup> June, at many places over the State on 27<sup>th</sup> June.

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

**Warning:** Scattered heavy to very heavy rainfalls with isolated extremely heavy falls are likely over the State.

### Advisories

- Continue land preparation and undertake sowing of *Kharif* rice after current spells of rain.
- Continue land preparation and undertake sowing of jute and arhar after current spells of rain. Select seeds of variety JRO 524.
- As rain/thundershowers are likely at most places over the State for the next three days, postpone irrigation, intercultural operations and spraying to vegetables, Jute and sugarcane, crops. Provide adequate drainage facilities to avoid waterlogging as scattered heavy to very heavy rainfalls with isolated extremely heavy falls are likely over the State.

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

### Punjab

Rainfall occurred at many places on 26<sup>th</sup> June, at a few places on 27<sup>th</sup> June. Weather remained dry on rest days.

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

### Advisories

- Prepare mainfield and continue transplanting of *kharif* rice.
- Continue field preparation and sowing of *kharif* groundnut and arhar. Rainfed groundnut variety i.e. 548 may be preferred for sowing.
- As rain/thundershowers are likely at many places over the State for the next three days, postpone irrigation to *summer* sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops.
- Weeding and intercultural operations may be continued after current spells of rain in sugarcane, vegetables and *kharif* pulse crops.
- Monitor the sugarcane crop for stem borer infestation & if exceeds economic threshold level, for effective control sprinkle Endosulfan 5 percent granules in the leaf whorls and axils after current spells of rain.

### Haryana

Rainfall occurred at many places on 26<sup>th</sup> June, at isolated places on 27<sup>th</sup> June. Weather remained dry on rest days in the State.

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 to *summer* sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops.
- Weeding and intercultural operations may be continued after current spells of rain in sugarcane, vegetables and *kharif* pulse crops.
- Prepare mainfield and transplant of *kharif* rice.
- Continue field preparation and 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 reported below ETL. Monitor the crop & if exceeds economic threshold level, for effective control of cotton thrips, spray 250ml Rogor 30EC per hectare, Metasystox 25EC 1ml/l of water to control white fly in moong.,and sprinkle Endosulfan 5 percent granules in the leaf whorls and axils for effective control of shoot borer in sugarcane after current spells of rain.

### Rajasthan

Rain / thundershowers occurred at many places in Jaipur, Udaipur and Jodhpur divisions; at a few places in Bikaner division and at isolated places in Ajmer and Kota divisions in the State.

Rain/thundershowers are likely at many places over East Rajasthan during next 48 hrs. and increase thereafter. Isolated rain/thundershowers are likely over West Rajasthan.

### Advisories

- **Farmers are advised to take up field preparation and sowing of *kharif* crops, viz., bajra, groundnut and maize, Guar, moong, moth bean, urd, with the realized monsoon rainfall.**
- As rain/thundershowers are likely at many places over East Rajasthan during next 48 hrs. and increase thereafter, postpone irrigation to cotton crop. Apply irrigation in west Rajasthan as there was no significant rainfall during last week and isolated rain/thundershowers are likely over West Rajasthan.
- Undertake earthing up in early sown *desi* and *American* cotton in irrigated areas to keep the field weed free. Earthing up may be done after current spells of rain in East Rajasthan and may be continued in west Rajasthan.

### Uttar Pradesh

Light to moderate rain occurred at isolated places in Jhansi and weather was mainly dry in remaining divisions of U.P. on 25<sup>th</sup> June Light to moderate rain with heavy falls at isolated places, at many places in all divisions of west U.P. and at isolated places in east U.P. on 26<sup>th</sup> June. Light to moderate rain occurred at few places in east U.P. and at isolated places in west U.P. on 27<sup>th</sup> June.

Rain / thundershowers are likely at many places over West U.P. and at a few places over East U.P.

### Advisories

- Continue field preparation and nursery sowing of *Kharif* rice. Prepare field and sowing in west U.P. Aswani, Saket-U, Govind, Narendra-118, Narendra-97 varieties may be selected.
- As there was no significant rainfall in East U.P during last week and rain/thundershowers are likely at a few places over East U.P, apply irrigation, to sugarcane crop in non rainy day. Postpone irrigation to the crops, as rain/thundershowers are likely at many places over West U.P.
- To control top borer insect in sugarcane, apply Furadon 3G granules@ 33kg/ha near the drains of sugarcane field in a non rainy day in East U.P and after current spells of rain.in west U.P

### Himachal Pradesh

Precipitation occurred at a few places in the State.

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



## Advisories

- Continue nursery sowing and transplanting of cauliflower and cabbage in low and mid hills.
- Continue nursery sowing of rice utilizing monsoon rain. Before sowing 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 sowing of maize by ploughing and mixing biological manures properly. Undertake sowing with the help of monsoon rain. The crops should be sown between 15<sup>th</sup> to 30<sup>th</sup> June in low hills.
- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation and intercultural operation to potato and vegetables.
- There is mild chance of attack of powdery mildew in vegetables. If attack crosses economic threshold level, spray carbendazim 0.5% to control the disease after current spells of rain.
- Postpone harvesting of onion and arcle peas under prevailing weather condition.

## Uttarakhand

Light to moderate rain was recorded at many places on 21<sup>st</sup> and 26<sup>th</sup> June and at a few places on 22<sup>nd</sup> and 25<sup>th</sup> June and very light rain occurred at a few places on 23<sup>rd</sup> and 24<sup>th</sup> June and at isolated places on 27<sup>th</sup> June. Sky remained partly to generally cloudy during the period.

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

## Advisories

- Continue field preparation and transplanting of rice.
- As rain/thundershowers are likely at many places over the State for the next three days, postpone irrigation to sugarcane, potato and ginger. Make arrangements for excess water drainage in ginger, potato, finger millet and *Amaranthus* fields.
- Undertake intercultural operations to keep the field weedfree in ginger, sugarcane and potato.
- Harvest the matured crops of Mango and Litchi. Maintain cleanliness in the orchards.

## Jammu & Kashmir

Rather heavy to heavy rain / thundershowers occurred at few places on 27<sup>th</sup> June. Light to moderate rain occurred at few places on 26<sup>th</sup> June and at isolated places on 25<sup>th</sup> June over J&K state.

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

## Advisories

- Continue land preparation and transplanting of rice in the main field Transplant healthy seedlings at 3-4 leaf stage, 3 seedlings /hill in 15x15 to 20x15 cm row to row and plant to plant spacing.
- As rain/thunder showers is likely at many places over the State for the next three days. Under the circumstances, postpone irrigation to vegetable and fruit crops in Kashmir division.
- Transplanting of seedlings of tomato, chilli, capsicum etc. has to be continued in Kashmir division.
- 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.
- Apply top dressing of fertilizers in maize after current spells of rain.

## Delhi

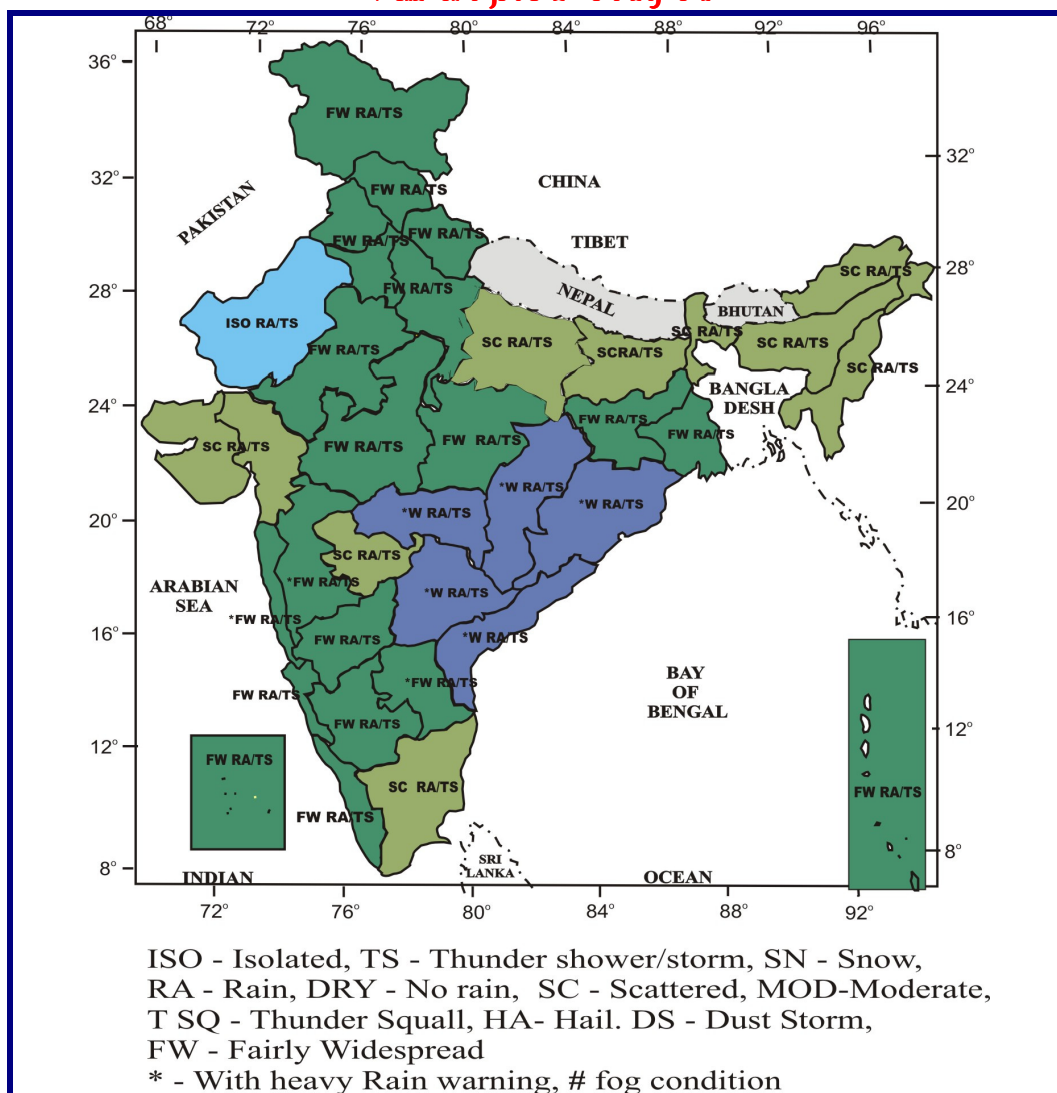
Very light rain occurred on 26<sup>th</sup> June at isolated places. Weather remained dry on rest of the days.

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

## Advisories

- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation to vegetables and also to early sown arhar and maize.
- Prepare land and perform sowing of arhar, bajra, maize, fodder crops like jowar, bajra and mixed maize and lobia and transplanting of cauliflower, cabbage, tomato, brinjal, chilly and rice utilizing the monsoon rain.
- Perform transplanting of 5 – 6 weeks old early cauliflower and cabbage plants and ready varieties of plants like Pusa Early Dwarf of tomato, Pusa Kranti of Brinjal and Pusa Jwala of chilly in the main field.
- 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.
- Prepare the main field by paddling method and transplant 25 – 30 days old rice seedlings in the field.

## Forecast Map Valid upto 1<sup>st</sup> July 07



# *Salient weather features for the week ending 27/06/07*

## **MONSOON WATCH**

- Southwest monsoon further advanced into the remaining parts of Arabian sea, most parts of Saurashtra & Kutch, some parts of Gujarat region, the remaining parts of Madhya Maharashtra & Marathawada, some more parts of Vidarbha, Orissa and Jharkhand on 24<sup>th</sup> June. It advanced into remaining parts of Gujarat, some parts of southeast Rajasthan and south Madhya Pradesh, some more parts of Chhattisgarh and remaining parts of Vidarbha, Orissa and Jharkhand on 25<sup>th</sup> June. It further advanced into some more parts of East Uttar Pradesh, remaining parts of Uttarakhand, entire Himachal Pradesh, Jammu & Kashmir and northern parts of West Uttar Pradesh, Haryana and Punjab on 26<sup>th</sup> June.
- Northern limit of monsoon passed through lat. 25.0 °N/ long. 60.0° E, lat. 25.0 °N/ long. 65.0° E, Deesa, Idar, Hoshangabad, Pendra, Ambikapur, Varanasi, Sultanpur, Lucknow, Bareilly, Ambala and Amritsar (Map Enclosed).

## **METEOROLOGICAL ANALYSIS**

- Last week's well marked low pressure area over east-central & adjoining west-central Bay of Bengal concentrated into a depression at 0830 hrs. IST on 21<sup>st</sup> over west-central Bay of Bengal near lat. 15.5 °N/ long. 86.0° E about 430 km east-southeast of Kakinada. It moved west-northwestwards and intensified into a deep depression around the same evening. Moving further west-northwestwards, it crossed Andhra Pradesh coast near Kakinada around 0430 hrs. IST of 22<sup>nd</sup> June. Continuing its west-northwestward movement, it weakened into a depression and lay centred over Marathawada close to Osmanabad in the morning of 23<sup>rd</sup> June. It further moved north-westwards and weakened into a well marked low pressure area and lay over northeast Arabian Sea and adjoining Saurashtra & Kutch on 24<sup>th</sup> morning. The system again concentrated into a depression and lay centred at 0830 hrs. IST on 25<sup>th</sup> June near lat. 23.5 °N/ long. 67.5° E about 150 km west-northwest of Naliya. Continuing its west-northwestward movement, it further intensified into a deep depression in the same evening near lat. 23.5°N/ long.66.5° E about 250 km west-northwest of Naliya. The system moved north-westwards and crossed Pakistan coast near long. 64.0° E between 0730 and 0830 hrs. IST of 26<sup>th</sup>.
- A cyclonic circulation lay over north Bay of Bengal on 25<sup>th</sup> extending upto mid-tropospheric levels. Under its influence a low pressure area formed over northwest Bay of Bengal off Orissa coast on 26<sup>th</sup> June. It lay as a well marked low pressure area over north and adjoining central Bay of Bengal on 27<sup>th</sup>.
- An off-shore trough extended from Gujarat coast to Kerala coast during 21<sup>st</sup> to 23<sup>rd</sup> June and from Gujarat to Karnataka coast from 24<sup>th</sup> to 27<sup>th</sup>.
- A Cyclonic Circulation lay over north Pakistan and adjoining Jammu & Kashmir extending upto 2.1 km a.s.l. from 22<sup>nd</sup> to 25<sup>th</sup> June.
- An upper air cyclonic circulation extending upto mid-tropospheric levels lay over northwest Rajasthan & neighbourhood on 21<sup>st</sup>; over East Rajasthan & neighbourhood on 22<sup>nd</sup> and became less marked on 23<sup>rd</sup>.
- A cyclonic circulation extending upto 1.5 km a.s.l lay over west Assam & neighbourhood on 22<sup>nd</sup> & 23<sup>rd</sup> June and over east Assam & Neighbourhood during 24<sup>th</sup> to 26<sup>th</sup>.

## **RAINFALL**

Under the influence of the above systems

- Southwest Monsoon was vigorous/active along the west coast during many day of the week. It was also vigorous/active over Andhra Pradesh during first half and over Interior Karnataka and Maharashtra during 2nd half of the week. Scattered heavy to very falls with isolated extremely heavy falls occurred over south Coastal Andhra Pradesh, Rayalaseema, Telangana, Kerala, Karnataka, Konkan & Goa and Madhya Maharashtra during the few days of the week.
- Southwest monsoon was also active over Orissa during the last two days of the week.
- Rain/thundershowers occurred at many places over Andaman & Nicobar Islands, Lakshadweep, Gangetic West Bengal & Orissa on many days; Chhattisgarh, east Madhya Pradesh, Vidarbha, Marathawada & Gujarat state on a few days of the week.
- Isolated to scattered rain/thundershower occurred over remaining parts of the country during many days of the week.

## **RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 27<sup>TH</sup> JUNE, 2007)**

Rainfall was excess/normal in 24, deficient/scanty in 12 out of 36 meteorological sub-divisions (Actual: 61.0 mm, Normal: 49.2 mm and Departure: +24%).

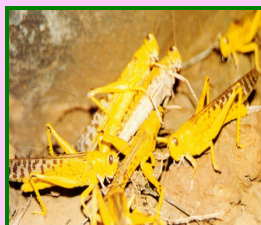
## **CUMULATIVE SEASONAL RAINFALL (1<sup>ST</sup> JUNE TO 27<sup>TH</sup> JUNE, 2007)**

Rainfall was excess/normal in 30 and deficient/scanty in 6 out of 36 meteorological sub-divisions. (Actual: 148.7 mm, Normal: 138.5 mm and Departure: +7%).

## **OUTLOOK FOR THE WEEK ENDING ON 4<sup>TH</sup> JULY, 2007.**

- The well marked low pressure area over north & adjoining central Bay of Bengal is likely to concentrate into a depression. Under its influence, widespread rainfall with scattered heavy to very heavy falls and isolated extremely heavy falls (> 25 cms.) are likely over Orissa, Chhattisgarh and north Andhra Pradesh during next 2-3 days. The enhanced rainfall activity is likely to extend into Vidarbha, Madhya Pradesh, Madhya Maharashtra, Konkan & Goa and Gujarat from 29<sup>th</sup> onwards.
- Decrease in rainfall activity over Orissa, Andhra Pradesh, Chhattisgarh during second half of the week.
- Conditions are favourable for further advance of southwest monsoon in some more parts of west, central and northwest India.

# Desert Locust Forecasting



Rainfall (mm)							
Station Name	21.06.07	22.06.07	23.06.07	24.06.07	25.06.07	26.06.07	27.06.07
Amritsar	-	-	-	1.6	6.7	-	-
Barmer	-	6.7	-	-	-	4.2	-
Sriganganagar	-	-	-	13.2	-	2.0	1.3
Jaisalmer	-	-	-	-	-	-	-
Kota	-	-	-	-	-	-	-
Deesa	-	-	-	-	1.2	10.8	6.6
Churu	12.5	-	-	-	-	3.0	-

Egg-laying was in progress in the summer breeding areas in Rajasthan. Under the prevailing favourable weather conditions i.e. heavy rains and favourable wind speed and direction in Gujarat and Rajasthan, there is chance of increase in the desert locust population in these States. All efforts should be made to monitor the developing and potentially dangerous situation closely and carefully and take appropriate plant protection measures at the right time.

## CROP – STATE – STAGE

### Delhi

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

### Haryana

Sugarcane	Oilseeds	Horticultural crop	Cotton	Paddy
Vegetative	Seed formation / maturity	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

Summer vegetables (Cauliflower, Cabbage in low and mid hills)	Vegetables (Tomato, brinjal, ladies finger, Bhindi)	Onion	Potato	Maize
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

Vegetable crops	Rice	Maize		
Fruiting/harvesting–in Kashmir Div.	Transplanting	Vegetative		

### Punjab

Sugarcane	Sunflower	Horticultural crop	Cotton	Paddy
Vegetative	Seed formation / maturity	Vegetative	Early vegetative	Field preparation / transplanting
<b>Kharif Groundnut</b>	<b>Early sown Kharif Groundnut</b>	<b>Kharif pulses</b>	<b>Arhar</b>	
Field preparation / Sowing	Early vegetative	Early vegetative	Sowing	

**Rajasthan**

<b>Kharif crops</b>	<b>Zaide Fodder</b>	<b>Cotton</b>		
Sowing	Vegetative	Vegetative		

**Uttar Pradesh**

<b>Sugarcane</b>	<b>Summer Vegetables</b>	<b>Turmeric / ginger, other kharif vegetables</b>	<b>Sunflower</b>	<b>Mango</b>
Early vegetative	Harvesting	Sowing	Maturity/Harvesting	Fruit development / maturity/Harvesting
<b>Rabi Pulses (Urad, Moong, Lobia)</b>	<b>Maize</b>	<b>Bajra</b>	<b>Kharif Rice</b>	
Maturity/Harvesting	Harvesting	Harvesting	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	Seedling in nursery	Vegetative
<b>Finger Millet/ Amranthus</b>				
Germination				

**Assam**

<b>Vegetables</b>	<b>Early Ahu rice</b>	<b>Jute</b>	<b>Maize</b>	<b>Sugarcane</b>
Vegetative/ Flowering / Fruiting / Harvesting	Flowering / grain formation	Vegetative	Vegetative / tasseling / silking	Vegetative
<b>Arhar</b>	<b>Regular Ahu Rice</b>	<b>Sali rice</b>		
Early vegetative / vegetative	Tillering	Land preparation / sowing		

**Arunachal Pradesh**

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

**Bihar**

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

**Jharkhand**

<b>Kharif rice</b>	<b>Summer vegetables (Tomato, Brinjal and Bhendi)</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>
Cob formation	Fruiting New planting in some places	Vegetative	Capsule formation	Vegetative
<b>Rice</b>	<b>Early transplanted Rice</b>			
Transplanting	Early tillering			

**West Bengal**

<b>Sugarcane</b>	<b>Green gram</b>	<b>Jute</b>	<b>Aus rice</b>	<b>Arhar</b>
Early vegetative/ Vegetative	Pod maturity / Harvesting	Early vegetative / vegetative	Land preparation / Transplanting	Land preparation / sowing
<b>Kharif Groundnut</b>	<b>Aman rice</b>			
land preparation / sowing	Land preparation / nursery sowing			

**Chattisgarh**

<b>Sugarcane</b>	<b>Vegetables (Tomato, chilli, brinjal)</b>	<b>Summer Vegetables</b>	<b>Kharif Rice</b>	<b>Maize</b>
Vegetative	Fruiting / harvesting	Fruiting/Harvesting	Preparation of nursery beds / Sowing	Vegetative

<b>Black gram</b>	<b>Soybean</b>			
Land preparation / sowing	Land preparation / sowing			

**Gujarat**

<b>Sugarcane</b>	<b>Kharif Maize</b>	<b>Kharif Bajra</b>	<b>Kharif Rice</b>	<b>Kharif Bajra</b>
Vegetative	Preparation of Land and Sowing	Preparation of Land and Sowing	Preparation of rice nursery	Preparation of Land and Sowing
<b>Kharif Groundnut</b>	<b>Kharif Cotton</b>			
Land preparation & sowing	Land preparation & sowing			

**Maharashtra**

<b>Sugarcane Preseasonal (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 Cotton (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Tur (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>
Early vegetative / active growth	Early vegetative/active growth	Germination / Early vegetative growth	Preparation of land & sowing	Preparation of land & sowing
<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>
Land preparation & sowing	Land preparation & sowing	Land preparation & sowing	Land preparation & sowing	Land preparation & sowing
<b>Kharif Rice (Konkan)</b>	<b>Kharif Rice (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>	<b>Kharif Soyabean (Madhya Maharashtra, Marathwada &amp; Vidarbha)</b>		
Sowing /Germination	Nursery bed preparation & Sowing in Marathwada & Vidarbha and Sowing / Germination in South Madhya Maharashtra.	Land preparation & sowing in Marathwada & East Vidarbha and sowing / germination in south Madhya Maharashtra.		

**Madhya Pradesh**

<b>Sugarcane</b>	<b>Cotton</b>	<b>Early sown Cotton</b>	<b>Kharif crops (Soybean, maize, urd and jowar)</b>	<b>Kharif rice</b>
Vegetative	Sowing	Germination	Sowing	Nursery sowing

**Orissa**

<b>Summer Vegetables</b>	<b>Kharif rice</b>	<b>Sugarcane</b>	<b>Jute</b>	<b>Arhar</b>
Vegetative/Fruiting	Sowing	Vegetative	Seedling	Sowing / Seedling / early vegetative

**Andhra Pradesh**

<b>Kharif Rice</b>	<b>Kharif Maize</b>	<b>Kharif Cotton</b>	<b>Kharif Groundnut</b>	<b>Kharif Black gram, Green gram</b>
Land preparation / Sowing Early sown crop at germination stage	Land preparation / Sowing Early sown crop at germination stage	Land preparation / Sowing Early sown crop at germination stage	Land preparation / Sowing Early sown crop at germination stage	Land preparation / Sowing Early sown crop at germination stage

**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	Harvesting	Boll development	Vegetative	