

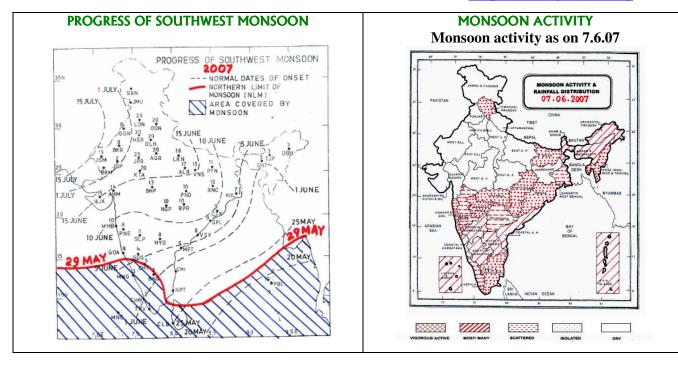
# Summary of Agromet Advisory Services for different States of the country Issued by

# Agricultural Meteorology Division, India Meteorological Department, Pune, India

## Thursday, 7<sup>th</sup> June, 2007

(For the period 7<sup>th</sup> to 11<sup>th</sup> June, 2007)

The extended version of the bulletin is also available at <a href="http://imdagrimet.org">http://imdagrimet.org</a>



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

#### Punjab

Weather remained mainly dry in the State during the period

Mainly dry weather is likely over the State. Rise in day temperatures over the State.

#### Advisories

- As there was no significant rainfall in the State during last week and mainly dry weather is likely over the State with possibility of development of heat wave in some pockets of the State for the next three days, apply light frequent irrigation to *summer* sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops.
- Weeding and intercultural operations may be continued in sugarcane and sunflower crops.
- Continue sowing of rice in nursery using recommended varieties. Short duration and less water consuming varieties like PUSA 1121 may be preferred.
- Continue sowing of *Kharif* groundnut and moong. Rainfed groundnut variety i.e. 548 may be preferred for sowing.

#### Haryana

Heat wave conditions prevailed in parts of the State on 4<sup>th</sup> June. Weather remained dry during the period.

Mainly dry weather is likely over the State. Rise in day temperatures likely over the State.

#### **Advisories**

• As there was no significant rainfall in the State during last week and mainly dry weather is likely over the

State with possibility of development of heat wave in some pockets of the State for the next three days, apply light frequent irrigation to *summer* sunflower, sugarcane, cotton, pulses, groundnut(early sown crop)and Horticultural crops.

- Complete the sowing of cotton as early as possible as late sowing may lead to increased attack of bollworm.
- Weeding and intercultural operations may be continued in sugarcane and sunflower crops.
- Continue raising of rice nursery. Choose varieties like Jaya, PR 106, HKR -120, Palman 579, and Pusa 370, Haryana Basmati -1 and HBC -19 which are recommended high yielding dwarf varieties.
- Sowing of *Kharif* groundnut and moong may be continued. Rainfed groundnut variety i.e. 548 may be sown on priority basis.

#### Rajasthan

Dust storm / thunderstorm with rain occurred with hailstorm at a few places in all the divisions of the State except Ajmer division where weather was mainly dry.

Isolated dust storm is likely over the State.

#### Advisories

- Dust storm/thunder storm occurred at a few places in all the divisions except in Ajmer division during last
  week and isolated dust storm is likely over the State for the next three days. Under the circumstances, apply
  irrigation to moong and cotton crops.
- 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 State on  $4^{th}$  June and Weather was mainly dry in all divisions of the State on  $4^{th}$ ,  $5^{th}$  and  $6^{th}$  June.

Mainly dry weather is likely over West U.P. Rise in day temperatures likely over West U.P. Isolated rain / thundershowers likely over East U.P.

#### Advisories

- Mainly dry weather condition prevailed in most of the districts over the State during last week and mainly dry
  weather is likely during next three days. Under the circumstances, apply irrigation to *summer* maize, sunflower (in
  grain formation stage), pulses, and vegetable crops.
- To control borer insect in sown sugarcane, spray the solution of Endosulphon 35 EC @ 1.25 litre/ha in water.
- To save fruits of mango against fruitfall spray Naphthalene Acetic Acid 15 ppm(4ml in 9 lit. water) and to control internal rotten disease spray 5-6 g Borax per litre of water.
- Field preparation and sowing of maize may be continued.

#### **Himachal Pradesh**

Precipitation occurred at isolated places in the State.

Mainly dry weather is likely over the region. Rise in day temperature over the State.

- As there was no significant rain during last week over the State and mainly dry weather is likely over the State for next three days, apply irrigation to the potato and onion.
- There is mild chance of attack of powdery mildew in vegetables. If attack crosses economic threshold level, spray carbendazime 0.5 % 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. The nursery should be sown four weeks before the time of transplanting. Tall and dwarf varieties should be sown between 24<sup>th</sup> May to 8<sup>th</sup> June and late sown Basmati varieties should be sown during first fortnight of June.
- Continue preparation of land for sowing of maize by ploughing and mixing biological manures properly.

#### Uttarakhand

Light rain was recorded at isolated places on 3<sup>rd</sup> June while weather remained mainly dry during rest of the period. Sky remained mainly clear to partly cloudy during the week.

Mainly dry weather is likely over the State. Rise in day temperature over the State.

#### Advisories

- There was no significant rainfall in the state during last week and mainly dry weather is likely over the State for the next three days. Under the circumstances, apply irrigation to mango, litchi, apple, potato and sugarcane. Spraying of plain water in the evening in late varieties of litchi may be undertaken in view of dry weather and high temperature.
- Maintain cleanliness in the orchards. Continue mulching to conserve soil moisture and to prevent weeds in apple and potato.
- Continue field preparation and nursery sowing of rice.

#### Jammu & Kashmir

Light rain /thundershowers occurred at few places on 4<sup>th</sup> June, at many places on 5<sup>th</sup> June and at isolated places on 6<sup>th</sup> June over J&K state.

Mainly dry weather is likely over the State. Rise in day temperature likely over the State.

#### **Advisories**

- There was no significant rainfall during last week and mainly dry weather is likely to prevail with increase in day temperature for the next three days. Under the circumstances, apply irrigation to vegetable and fruit crops in Kashmir division.
- Conserve moisture in wheat as the crop is now at maturity stage 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.
- Continue sowing of maize in Jammu division under irrigated condition. Select among GS-2, Vijay, Mansar, C-5 and C-8 with seed rate 20-30kg/ha in irrigated areas. Before sowing treat the seed with Thiram @ 0.3% Carbedazim @ 0.2%. Undertake weeding and hoeing in maize in Kashmir division to keep the field weed free.
- 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.

Mainly dry weather is likely over the state. Rise in day temperatures over the State.

#### **Advisories**

As there was no significant rain during last week and mainly dry weather is likely over the State for next three

days, apply irrigation to vegetables.

- Prepare land and perform sowing of arhar, maize and raddish with irrigation and nursery sowing of early varieties of cauliflower.
- 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.

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

#### Kerala

Southwest monsoon was weak over the State on  $4^{th}$  &  $6^{th}$  June. Rain occurred at a few places on  $6^{th}$  June and at isolated places on  $4^{th}$  June. Mainly dry weather prevailed on  $5^{th}$  June.

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

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

#### **Advisories**

- Farmers are advised to continue ploughing and undertake transplanting of rice as the monsoon has set in over the State.
- 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.
- Attack of gall midge is reported in *virippu* rice nursery. Spray Phosphomidan @ 0.25 ml/litre after spells of rain to control the pest.
- Continue land preparation and application of organic manures for transplanting *virippu* rice seedlings by utilizing the monsoon showers.
- 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 Chlorpyriphos @ 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 Eriophyid 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 pseudostem weevil is reported in banana. Spray Carbaryl @ 0.2% on leaf axils, rhizome around the soil and pseudostem after spells of rain to control the pest.
- Attack of quick wilt is reported in pepper. Spray 1% Bordeaux mixture after spells of rain to control the disease.

#### **Tamilnadu**

Rainfall occurred at a few places over the State on 6<sup>th</sup> June and at one or two places on 4<sup>th</sup> and 5<sup>th</sup> June.

Isolated rain / thundershowers are likely over the State.

#### **Advisories**

• There was no significant rainfall during last week except in Darmapuri and Nilgiris 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.

- Continue land preparation and sowing of *kuruvai* rice in nursery. Undertake seed treatment with *Azospirillum* before sowing.
- Undertake transplanting of *kuruvai* rice in the main field when the seedlings are at 24 days old.
- Spray NAA in cotton @ 40 ppm to enhance boll setting.
- Monitor maize for stem borer and aphids attack and if the pests population crosses ETL, undertake spraying of Carbaryl 50 WP @ 400 g/acre.
- Monitor *early* sugarcane for shoot borer and if the pest population crosses ETL, release egg parasite, *viz.*, *Trichogramma* @ 1 cc/acre. Repeat after 15 days.

#### Karnataka

On 4<sup>th</sup> June monsoon was weak over Coastal Karnataka. Rainfall occurred at a few places over South Interior Karnataka and at isolated places over Coastal Karnataka and North Interior Karnataka. On 5<sup>th</sup> June monsoon was weak over Coastal Karnataka. Rainfall occurred at isolated places over Interior Karnataka and mainly dry weather prevailed over Coastal Karnataka. On 6<sup>th</sup> June rainfall occurred at most places over South Interior Karnataka, at many places over Coastal Karnataka & North Interior Karnataka.

Rain/thundershowers are likely at many places over Coastal Karnataka & at a few places over the rest region of the State.

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

#### Advisories

- Farmers are advised to take up ploughing and undertake sowing or arrange for seeds and inputs as monsoon may set up within couple of days.
- Postpone irrigation to summer sugarcane in coastal Karnataka as rain/ thundershowers along with isolated heavy to very heavy rainfall is likely to occur at many places for the next three days. Apply irrigation in the remaining areas as there was no significant rainfall during last week.
- 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.
- Complete harvesting rice on bright sunny 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.
- Continue sowing *Kharif* jowar, maize, groundnut and sunflower. Undertake seed treatment with chemicals before sowing.

#### **Andhra Pradesh**

Rain occurred at a few places over Costal Andhra Pradesh on  $5^{th}$  June, over Rayalseema on  $6^{th}$  June. Isolated rain occurred elsewhere over the State during the week

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

- Farmers are advised to take up ploughing and arrange for seeds and inputs as the arrival of monsoon is expected within a short period.
- Continue land preparation and sowing of nursery for *Kharif* rice.
- Start main field preparation and arrange for transplanting of rice seedlings at proper age.

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

#### **Assam**

Light to moderate rain occurred at a few places on 4<sup>th</sup> & 6<sup>th</sup> June with rather heavy to heavy falls and at isolated places on 5<sup>th</sup> June over the State.

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, 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 Chloropyriphos 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 Chloropyriphos 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, semillopper, 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 many places on  $6^{th}$  June and at one or two places on  $4^{th}$  &  $5^{th}$  June.

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

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

- As rain/thundershowers are likely at many places over the State during next 48 hours and increase thereafter, with isolated heavy rainfall, postpone irrigation to summer vegetables, millet, maize, *jhum* paddy and ginger crops. Arrange for extensive drainage facilities in maize as the crop is susceptible to waterlogging.
- 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 5<sup>th</sup> and 6<sup>th</sup> June over the State.

Isolated rain/thundershowers are likely over the State.

#### **Advisories**

- As there was no significant rainfall in the State during last week and rain/thundershowers are likely at isolated over the State for the next three days, apply irrigation to vegetables, *summer* maize, green gram and black gram(in pod formation stage), sugarcane and sesamum.
- 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.
- Continue regular irrigation in mango orchards and monitor the crop for mealy bug or hopper & if exceeds economic threshold level, then spray with Carboryl @ 2g/litre of water.

#### **Jharkhand**

Weather remained mainly dry.

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

#### **Advisories**

- As there was no significant rainfall during last week and rain /thundershowers are likely at isolated places, apply irrigation to summer vegetables.
- Apply regular irrigation in mango & litchi. To prevent from powdery mildew of small fruits in Mango and Litchi, spray sulfex@ 2gm/litre of water. Provide mechanical support to the trees to protect against lodging due to thundersquall with high wind speed.
- Complete harvesting of matured rice crops to avoid lodging and grain shattering.
- Cabbage group vegetables are affected by *Spodopetra*. Spray Carbaryl dust (2gm in one litre of water) to control the pest.

#### **Sikkim**

Sky remained generally cloudy during the period. Nearly heavy rainfall occurred from 2<sup>nd</sup> to 4<sup>th</sup> June and light to moderate rainfall occurred during rest of the period. Rainfall was excess during the period.

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

#### **Advisories**

- Farmers are advised to undertake ploughing and arrange for inputs for transplanting of rice as the monsoon is likely to arrive within short period.
- Epidemic infestation of semilooper has been reported in maize. Spray Trisophor @ 1 ml/litre on a non rainy day to control the pest and to minimize the damage.
- Apply irrigation to large cardamom, orange, maize and ginger as rain/ thundershowers are likely at a few places only over the State for the next three days.
- Undertake main field preparation and transplanting of rice seedlings when the seedlings are at 20-30 days old.
- 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**

During the said period light to moderate rain at most places with rather heavy to heavy rain at isolated places on

4<sup>th</sup> June, very light to light rain at many places with moderate rain at isolated places on 5<sup>th</sup> June, light to moderate rain at many places with heavy rain at isolated places on 6<sup>th</sup> June occurred over Sub Himalayan West Bengal. But very light to light rain at isolated places on 4<sup>th</sup> June, very light to light with moderate rain at isolated places on 5<sup>th</sup> and 6<sup>th</sup> June occurred over Gangetic West Bengal.

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

#### Advisories

- As there was sufficient rain in Murshidabad, Coochbehar and Jalpaiguri districts during last week and rain / thundershowers are likely at a few places over the State, postpone irrigation in these districts. Apply irrigation to sugarcane, green gram and early sown jute in remaining districts of the state.
- Harvest the already matured crops of groundnut and sesamum on bright sunny days. Also start harvesting of already matured crops of green gram on bright sunny days.
- Apply 50 kg N / ha as top dressing on a non-rainy day at 80 90 days after planting of sugarcane and make ridges.
- Prepare land for sowing of jute. Plough the land thoroughly for 4 5 times followed by laddering. Apply compost manure @ 7.5 12.5 tonnes / ha. Apply N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O each @ 25 kg / ha also before last land preparation. Select improved variety from Shyamali, Sonali & Sobujsona etc. for *C. capsularis* and Chaitali, Basudev, Baisakhi, Nabin etc. for *C. olitorius* for sowing. Seed rate is 7.5 kg per ha for *C. capsularis* and 5 kg per ha for *C. olitorius*. Seeds may be treated with 1 gm carbendazime per kg of seeds before sowing. Sow the seeds at a row spacing of 8 10" to get good yield.
- 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 rain and start sowing of Groundnut. Select varieties from improved varities 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 rain and start sowing. Select varieties from high yielding varities 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.

#### 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.

- 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 rice, 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

Weather was mainly dry over the State.

Isolated rain / thunder showers are likely 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 in anticipation of onset of monsoon.
- As there was no significant rain during last few weeks in most of the districts of the State and isolated rain / thundershower is likely to occur over the state for next three days, apply irrigation to sugarcane, vegetables, green gram and maize crops.
- Apply 75 kg N / ha as top dressing at 45 days after planting of sugarcane.
- Continue harvesting of already matured crops of sunflower, groundnut, summer rice, sesame and green gram.

#### Maharashtra

Rain occurred at isolated places in Konkan, Marathwada, Vidarbha & Madhya Maharashtra.

Rain / thundershowers are likely to occur at a few places in Konkan & South Madhya Maharashtra and at isolated places over rest of the State.

- 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 in anticipation of onset of monsoon.
- As rain / thundershowers are likely at a few places for next three days and fairly widespread thereafter over south Madhya Maharashtra, postpone irrigation to the crops over these regions.
- As there was no significant rain during last few weeks over North Madhya Maharashtra, Marathwada and Vidarbha and rain / thundershowers are likely at isolated places for next three days, apply irrigation to sugarcane (Pre-seasonal), sugarcane (Suru) & early sown irrigated cotton.
- Complete harvesting of matured crop of groundnut and also harvesting of summer sunflower, summer bajra and summer maize on bright sunny days.
- Maintain 3-5 cm water in summer rice field in Vidarbha where crop is in grain formation stage.
- Drain out water from summer rice field 10 15 days before harvesting of matured crops. Harvest already matured crops in Konkan and Kolhapur.
- A dose of 136 kg Nitrogen, 85 kg Phosphorus & 85 kg Potash / ha may be applied after earthing up in Sugarcane (Preseasonal).
- Apply last dose of 100 kg Nitrogen & 55 kg Phosphorus / ha if sufficient water is available & undertake earthing up in Sugarcane (Suru).
- Mild incidence of White Woolly Aphid in Pune, Latur and Aurangabad division and white fly in Latur 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.
- Monitor crop for White fly in Sugarcane (Preseasonal) & if exceeds economic threshold level, spray Methyl dimeton @ 2000 ml or 36 % WSC Monocrotophos @ 1400 ml / ha in 500 liters water.
- This the time for preparation of nursery beds & sowing of *kharif* 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 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.

• Apply fertilizer and plant protection measures and undertake intercultural operation on a non-rainy day in south Madhya Maharashtra.

#### Madhya Pradesh

Rainfall occurred at isolated places in West M.P. on 5<sup>th</sup> and 6<sup>th</sup> June. Dry weather prevailed over rest of the State for remaining period.

Mainly dry weather is likely over the State.

#### Advisories

- Apply irrigation to sugarcane as there was no significant rainfall during last week and mainly dry weather is likely to prevail over the State for the next three days.
- Continue harvesting summer moong.
- Start 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.

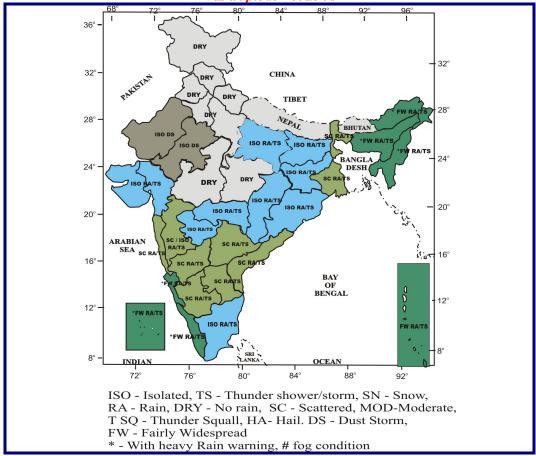
#### **Orissa**

Heat Wave condition prevailed over some parts of Interior Orissa on 6<sup>th</sup> June. Rain fall occurred at a few places over the State on 5<sup>th</sup> June, at isolated places over the State on 4<sup>th</sup> June. Weather has been mainly dry over the State on 6<sup>th</sup> June.

Isolated rain/thundershowers are likely over the State.

- Rainfall occurred at a few places over the State on 5<sup>th</sup> June, at isolated places over the State on 4<sup>th</sup> June and isolated rain/thundershowers are likely over the State for the next three days and heat wave condition likely to prevail over some parts of Interior Orissa during next 48 hours. Under the circumstances, apply light irrigation to vegetables, sugarcane, early sown summer groundnut and pulses crops.
- Continue land preparation and sowing of jute. Sow the jute seeds of variety JRO 524.

Forecast Map Valid upto 10<sup>th</sup> June 07



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

#### **METEOROLOGICAL ANALYSIS**

- An upper air cyclonic circulation lay over east-central Arabian Sea on 31st May. Under its influence, a low pressure area formed over east-cetral Arabian Sea on 1st June. It became well marked over the same area at 1430 hrs IST and concentrated into a depression around mid-night of the same day and lay centered at 0830 hrs IST of 2nd June near Lat. 15° N / Long. 67.5°E, about 700 km south-west of Mumbai. It moved westwards and intensified into a cyclonic storm (GONU) and lay centered at 1430 hrs IST near Lat. 15.0° N / Long. 67.0°E, about 800 km south-west of Mumbai. Further moving northwestwards, it intensified into a severe cyclonic storm at 0530 hrs IST of 3rd June and lay centered at 0830 hrs IST over east-central Arabian Sea near Lat. 15.5° N / Long. 66.5°E. Continuing its northwestward movement, it intensified into a very severe cyclonic storm around mid-night of 3rd and lay centered at 0830 hrs. IST of 4th June over east-central and adjoining west-central Arabian Sea near Lat. 18.5° N / Long. 65.0° E about 600 kms southwest of Dwarka. Then it moved west-northwestwards and intensified into a super cyclonic storm and lay centered at 2030 hrs. IST of 4th over northwest Arabian Sea and adjoining central and northeast Arabian Sea near Lat. 20.0° N / Long. 64.0° E. Moving further northwestwards it weakened into a very severe cyclonic storm in the early morning of 5th and lay centered at 0830 hrs. IST of 5th June over northwest Arabian Sea & adjoining central and northeast Arabian Sea near Lat. 21.0° N / Long. 62.0° E. Then the very severe cyclonic storm 'GONU" moved northwestward and crossed OMAN coast during morning hours of 6th. Later on, it emerged into Gulf of OMAN, weakened gradually and moved northwestwards. It crossed Makran coast between 0830 hrs. and 0930 hrs. IST of 7th as a cyclonic storm.
- An off shore trough extended from the above system to Southeast Arabian Sea during 31st May to 3rd June and moved away westwards thereafter.
- An upper air trough ran from Sub-Himalayan West Bengal & Sikkim to north Orissa, north Bay of Bengal at lower tropospheric levels at times embedded with cyclonic circulation over Sub-Himalayan West Bengal & Sikkim and neighbourhood during 31st May and 3rd June. It became less marked thereafter. However an upper air cyclonic circulation lay over Assam & neighbourhood during 4th and 6th June.
- A cyclonic circulation lay over west-central Bay of Bengal off south Orissa-north Andhra Pradesh coast extending upto 2.1 km a.s.l. on 5th June and became less marked on 6th June.

#### **RAINFALL**

Under the influence of the above systems

- Scattered to fairly widespread rainfall occurred over northeastern states and Sub-Himalayan West Bengal & Sikkim during many days of the week. Isolated to scattered rain/thundershower occurred over remaining parts of east India outside east Uttar Pradesh on a few days of the week.
- Isolated to scattered rain/thundershower occurred over western Himalayan region during many days of the week. Isolated duststorm/thunderstorm occurred over plains of northwest India and Rajasthan on a few
- Rain/thundershower occurred at many places on 5th and activity was isolated to scattered during remaining days of the week over Saurashtra & Kutch. Isolated to scattered rain/thundershower also occurred along west coast and adjoining subdivisions of west and south India on many days and over eastern parts of south India & Vidarbha on a few days.
- The weather was mainly dry over the remaining parts of the country.

#### **HEAT WAVE CONDITIONS**

Heat wave to severe heat wave conditions prevailed over parts of Bihar during 31st may to 3rd June, West Bengal During 31st May and 2nd June, Chhattisgarh & Jharkhand during 3rd & 4th June, East Uttar Pradesh on 3rd June, Orissa and Vidarbha on 4thJune, Rajasthan, Haryana and West Uttar Pradesh on 2nd June.

#### RAINFALL DURING THE WEEK (FOR THE WEEK ENDING ON 6<sup>TH</sup> JUNE, 2007)

Rainfall was excess/normal in 8, deficient/scanty in 26 and no rain in 2 out of 36 meteorological subdivisions (Actual: 13.8 mm, Normal: 22.6 mm and Departure: -39%)

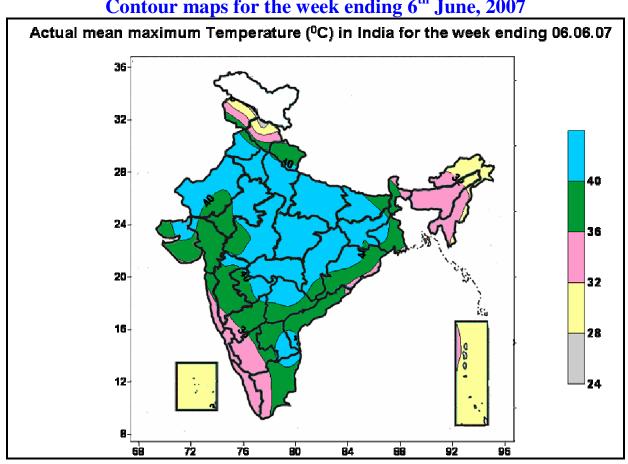
#### CUMULATIVE SEASONAL RAINFALL (1<sup>ST</sup> MARCH TO 31<sup>ST</sup> MAY, 2007)

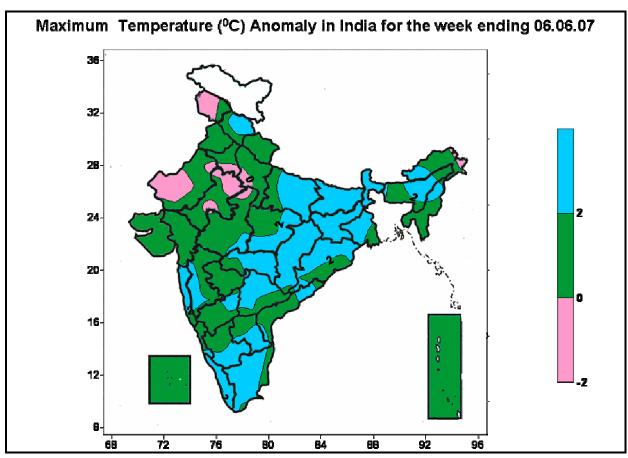
Rainfall was excess/normal in 16 and deficient/scanty in 20 out of 36 meteorological sub-divisions. (Actual: 112.8 mm, Normal: 133.6 mm and Departure: -16%).

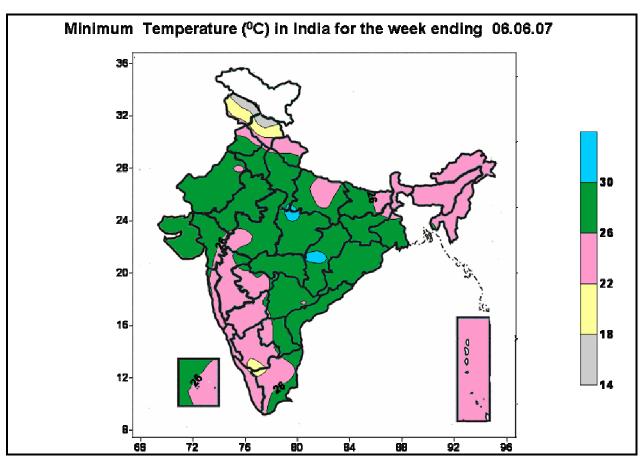
#### OUTLOOK FOR THE WEEK ENDING ON 13<sup>TH</sup> JUNE, 2007.

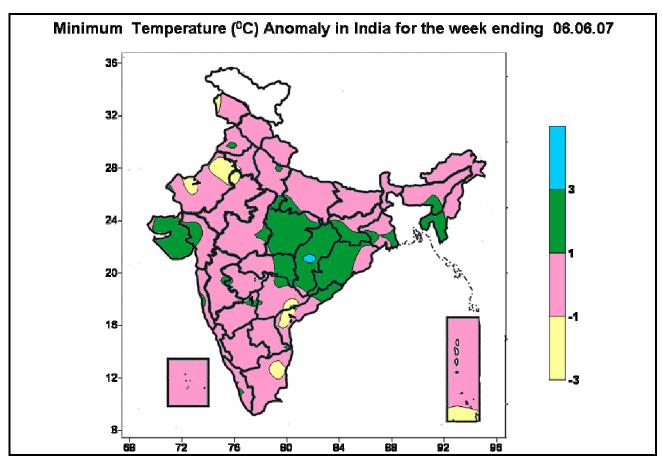
- Conditions are favourable for onset of monsoon over northeastern states during first half of the week.
- Increase in rainfall activity over south peninsula.
- Rise in day temperature over northwest India and adjoining central India.

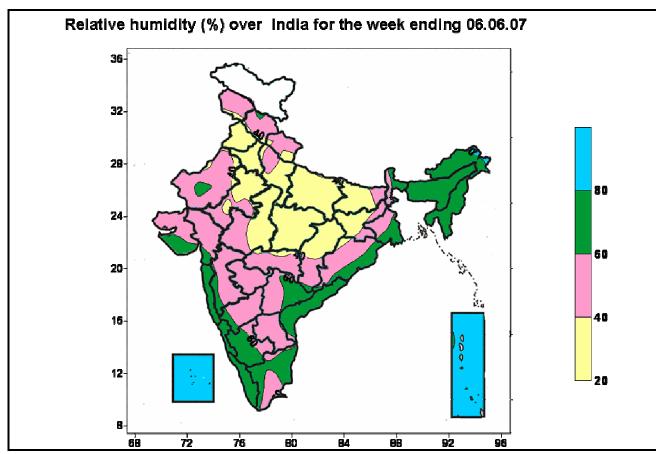
### Contour maps for the week ending 6<sup>th</sup> June, 2007

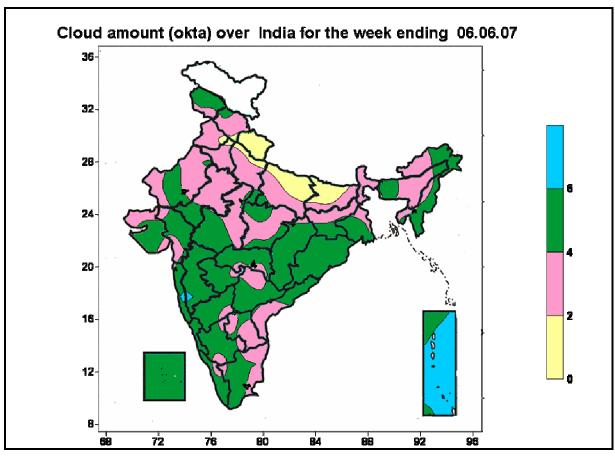


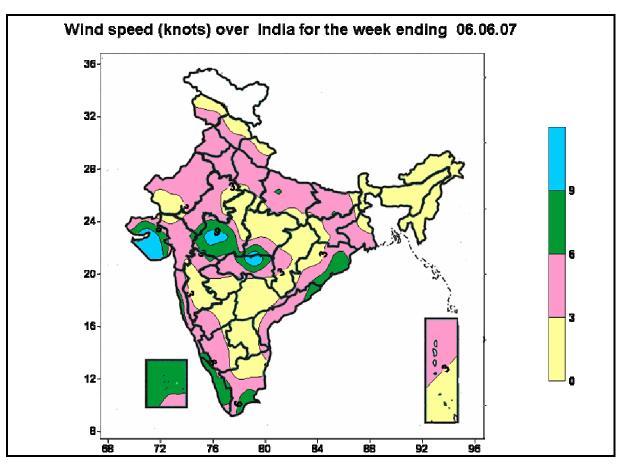












## **Desert Locust Forecasting**



Rainfall (mm)							
Station Name	31.05.07	01.06.07	02.06.07	03.05.07	04.05.07	05.05.07	06.06.07
Amritsar	-	-	-	-	-	-	-
Barmer	-	-	-	-	-	-	-
Sriganganagar	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	2.5	-
Kota	-	-	-	-	-	0.5	-
Deesa	-	-	-	-	3.5	6.1	-
Churu	-	-	-	-	-	2.2	-

Temperature (degree Celcius)							
Station Name	31.05.07	01.06.07	02.06.07	03.05.07	04.05.07	05.05.07	06.06.07
Amritsar	31.0	31.5	32.5	32.0	34.5	28.5	34.0
Barmer	34.0	36.5	37.0	36.5	36.5	31.0	34.0
Sriganganagar	34.5	34.0	35.0	36.0	36.0	34.5	36.0
Jaisalmer	34.0	36.0	36.5	36.0	34.5	33.0	34.5
Kota	34.5	37.0	38.0	38.0	35.5	32.0	36.5
Deesa	34.5	35.0	37.0	35.0	32.5	=	31.5
Churu	-	-	-	-	-	-	-

There is slight chance of locust infestation in Rajasthan and the adjoining areas during this week. All efforts should be made to monitor the developing and potentially dangerous situation closely and carefully.

#### **CROP - STATE - STAGE**

#### Delhi

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

#### Haryana

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

#### **Himachal Pradesh**

Summer vegetables (Cauliflower, Cabbage in low and mid hills)  Nursery sowing /Transplanting  Vegetables (Tomato, brinjal, ladies finger, Bhindi)  Vegetative / Flowering/ fruiting / harvesting		Onion	Potato	Maize  Land preparation and sowing	
		Bulb development / Maturity	Vegetative		
Apple	Rice				
Fruit development Nursery sowing					
		Jammu & Kashmir			
Vegetable crops		Wheat	Early sown Maize	Early sown Rice	
Fruiting/harvesting-in		Grain maturity -in Kashmir division	Early vegetative/Vegetativ	Transplanting	

**Kashmir division** 

Kashmir Div.

		Punjal	b		
Sugarcane	Sunflower	Horticultural crop		Cotton	Paddy
Vegetative	Flowering/seed formation	Vegetative		Seedling/early vegetative	Main field preparation
Kharif Groundnut	Early sown <i>Kharif</i> Groundnut	Kharif pulses			
Field preparation/Sowing	Early vegetative	Early ve	egetative		
FF8		Rajasth	an		I
Zaide Moong	Zaide Fodder		tton		
Pod formation	Vegetative		etative		
		Uttar Pra	desh		•
Sugarcane	Winter Vegetables (Onion & Garlic)	Summer '	Vegetables	Turmeric / ginger	Sunflower
Early vegetative	Maturity/ harvesting stage	Vege	etative	Sowing	Seed formation/ Maturity
Mango	Rabi Pulses (Urad, Moong, Lobia)	Ma	aize	Bajra	Rice
Fruit development / maturity	Grain formation / maturity	Early ve	egetative	Early vegetative	Preparation of Nursery
		Uttarakh			
Potato	Mango/Litchi/ Apple	Suga	rcane	Kharif Rice	
Vegetative growth	Fruit development/	Vege	etative	Germination /	
vegetative growth	maturity			seedling	
		Assam	1		
Early sown Summer vegetables	Early Ahu rice	Ju	ıte	Maize	Sugarcane
Vegetative/Flowering/Fr uiting/Harvesting	Tillering	Vegetative		Vegetative	Early vegetative/vegetative
Arhar	Regular Ahu Rice				vegetative/vegetativ
Land preparation and	Early				
Sowing	vegetative/Tillering				
G	a.	Arunachal P			36.
Summer vegetables	Ginger	Millet		Jhum Paddy	Maize
Harvesting	Rhizome formation	Vegetative		Vegetative	Cob formation
WRC Rice					
Vegetative		Bihar			
		Dinar	•	Green Gram /	
<b>Summer Vegetables</b>	Boro Summer Rice	Mango	& Litchi	Black gram	Summer Maize
Vegetative	Harvesting	Fru	iting	Pod formation / maturity	Vegetative/ Flowering
Kharif rice	Sesamum	Suga	rcane	Early sown	
mury nec	Sesamum	Ü		Sugarcane	
Nursery preparation	Pod formation		g / early	Seedling/Early	
• • •		Jharkha	tative	vegetative	
Boro rice	Summer veg				
Harvesting	Vegetati	ive			
3.4.		Sikkin			<u> </u>
Maize	Orange	Vege	tables	Large Cardomom	Ginger
Grain formation	Fruiting New planting in some places	Vegetative		Capsule formation	Vegetative
Rice	F				
Transplanting					
1 0		West Ber	ngal		•
Boro rice	Sesamum	Green		Groundnut	Arhar
	Pod maturity/harvesting	Pod formation / maturity/Harvesting		Harvesting	Land preparation / sowing
Harvesting	, J	maturity/F	iarvesting		sowing
Aus rice	Early sown Sugarcane	maturity/F		Early sown Jute	Kharif Groundnu
_		Ju		Early sown Jute Germination / early vegetative/vegetative	Kharif Groundnut land preparation / sowing

		Chattisgarh		
Sugarcane	Vegetables (Tomato, chilli, brinjal)	Summer Vegetable		Groundnut
Vegetative	Fruiting / harvesting	Vegetative / Flowerin Fruiting	g / Harvesting	Harvesting
Summer sesamum	Green Gram	Summer rice	Maize	
Capsule	Pod formation/	Grain maturity/harvest	ing Vegetative	
maturity/harvesting	maturity/Harveting	·	ing vegetative	
		Gujarat		1
Sugarcane	Rice	Summer Groundnu	summer Bajra	Kharif Rice
Vegetative	Harvesting	Harvesting	Harvesting	Preparation of rice nursery
Kharif Groundnut	Kharif Cotton	Kharif Bajra		·
Preparation of Land and	Preparation of Land and	Preparation of Land a	nd	
Sowing	Sowing	Sowing		
Sugarcane Preseasonal	Summer Groundnut	Maharashtra	Summer Sunflower	Summer Bajra
(Madhya Maharashtra, Marathwada & Vidarbha)	(Madhya Maharashtra, Marathwada, Vidarbha & Konkan)	Summer Rice (Konk Vidarbha & Kolhap dist.)	an, (Madhya ur Maharashtra, Marathwada & Vidarbha)	(Madhya Maharashtra, Marathwada & Vidarbha)
		Grain formation / grain maturity – in Vidarb		
Early vegetative / active growth	Pod maturity / Harvesting	Grain maturity/Harvesti in Kolhapur, Thane, Raigad, Ratnagiri dist.	ng Seed maturity/Harvesting	Grain maturity / harvesting
Summer Maize (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Mahrashtra, Marthwada and Vidarbha)	Irrigated cotton (Madhya Maharasht Marathwada & Vidarbha)	ra, Kharif Rice (Konkan)	
Cob maturity / harvesting	Early vegetative/active growth	Germination / Early vegetative	Preparation of nursery beds & Sowing of rice in nursery	
		Madhya Pradesh	· ·	
Summer moong	Sugarcane	Cotton		
Harvesting	Vegetative	Sowing		
		Orissa		
Summer Vegetables	Dalua Rice	Summer pulses	Sugarcane	Jute
Vegetative/Fruiting	Harvesting	Vegetative	Vegetative	Field preparation and Sowing
Kharif rice	Summer Groundnut	Early sown Summe Groundnut	er	
Sowing	Field preparation and Sowing	Early vegetative		
		Andhra Pradesh		
		Kharif rice		
		Land preparation		
		and nursery sowing		
		Karnataka		
Sugarcane (Ratoon		Kharif	Early sown <i>Kharif</i>	
crop)	Summer rice	Jowar/Maize/Grou ndnut/Sunflower	Jowar/Maize/Ground nut/Sunflower	
Grand growth	End Harvesting	Sowing	Germination / early vegetative	
DLL .		Kerala		
Rubber		Virippu rice		
Tapping		Transplanting		
Rice (Kuruvai)	Summer gingelly /Maize	Tamil Nadu Cotton	Sugarcane(Early, Mid and Late season)	
Nursery raising / transplanting	Seed/Grain formation / maturity	Boll development	Vegetative	
And printing		***	1	