



Summary of Agromet Advisory Services for different States of the country

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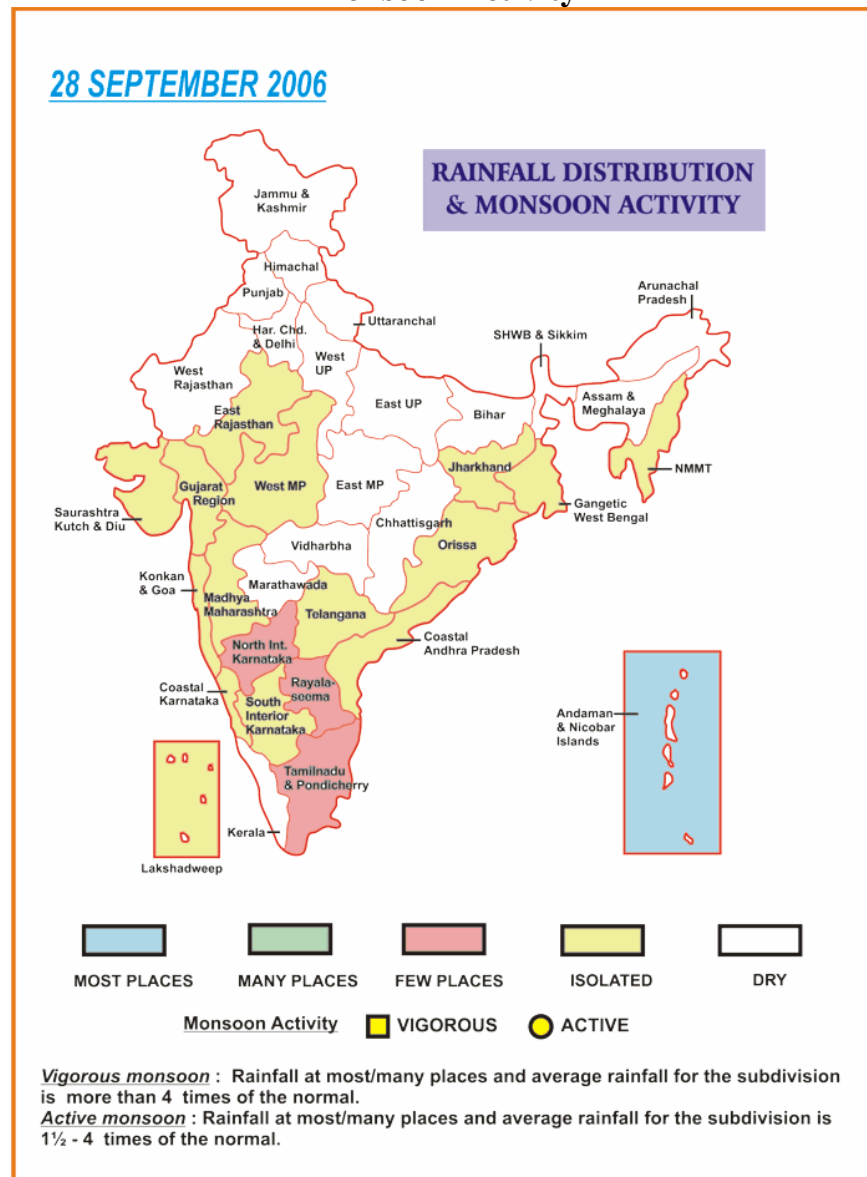
Agricultural Meteorology Division, India Meteorological
Department, Pune, India

Thursday, 28th September, 2006

(For the period 28th September to 2nd October, 2006)

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

Monsoon Activity



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

Punjab & Haryana

Punjab

Southwest monsoon has withdrawn from the entire State on 25th September. Weather remained mainly dry during the period.

Weather will remain mainly dry over the State.

Advisories

- There was no significant rainfall during last week and weather will be mainly dry in the State for the next three days. Under the circumstances, apply required irrigation to **sugarcane, maize, groundnut, kharif pulses and cotton** to bring the soil moisture to its field capacity.
- Incidences of **bacterial leaf blight** are reported in **rice** in some pockets. Prevailing weather conditions are favorable for the further spread of **bacterial leaf blight**. If it crosses economic threshold level, spray Vitavax @ 2 g/litre of water. Monitor the incidences of leaf folder, if the pest population crosses ETL, take adequate plant protection measures. Avoid nitrogen application to prevent further attack of the pests and diseases.
- In view of prevailed weather conditions in preceding days **cotton** crop is susceptible to the incidence of **bollworm** and other **leaf eating caterpillar**. Farmers are advised to apply integrated pest management with application of synthetic pyrethroid to check the same, if damage exceeds economic threshold level. Also undertake plant protection measures against spotted boll worm by spraying Quinalphos @ 1.5-2 litres/ha in 800 litres of water.
- Incidences of **shoot borer** and **Gurdaspur borer** are reported in **sugarcane**. Spray Nuvacran @ 1.5 litres/ha in 800 liters of water to control the pests, if the pests population exceeds ETL.
- Farmers are advised to monitor the **locust** and carry out antilocus operations i.e. spray of pesticides on standing crops and vegetation from any possible locust invasion.
- Undertake sowing of **berseem** along with **javi** and **sarson** by utilizing the residual moisture. Also conserve excess soil moisture to take up sowing of **rabi** crops.

Haryana

Southwest monsoon has withdrawn from most parts of the State including Chandigarh and Delhi on 25th September and has further withdrawn from remaining parts of the State on 27th September. Weather remained mainly dry during the period

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall during last week except in **Rohtak** and mainly dry weather is likely over the State for the next three days. Under the circumstances, apply required irrigation to **sugarcane, maize, groundnut, kharif pulses and cotton** to bring the soil moisture to its field capacity. Apply irrigation depending upon soil profile stored moisture in **Rohtak** as there was excess rainfall during last week.
- Incidences of **boll worm** are reported in **cotton**. Spray Monocrotophos @ 1.5 litre/ha in 800 litres of water to control the pests, if the pests population exceeds ETL.
- Monitor **rice** crop for **bacterial leaf blight** as the weather conditions are favourable for the disease to occur. Avoid application of nitrogen to prevent the incidence.
- Farmers are advised to monitor the **locust** and carry out **antilocus** operations i.e. spray of pesticides on standing crops and vegetation to monitor the damage from any possible locust invasion.
- Maintain 3-5 cm water level in **paddy** field.
- Undertake sowing of **berseem** by utilizing the residual moisture due to recent rainfall. Also conserve excess soil moisture to take up sowing of **rabi** crops.

Rajasthan

Southwest monsoon has been withdrawn from most parts of west Rajasthan & some parts of east Rajasthan. Light to moderate rainfall recorded at a few places in Udaipur division and at isolated places in Ajmer & Jodhpur divisions. Weather remained mainly dry in Jaipur, Kota & Bikaner divisions.

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall in the state except in **Dungarpur** in East Rajasthan and in **Barmer, Bikaner, Jalore, Jodhpur** and **Pali** in West Rajasthan, during last week and mainly dry weather is likely to prevail for the next three days. Under these conditions, apply required irrigation to **cotton, pulses, jowar, maize, soybean** and **groundnut** crops to bring the soil moisture to its field capacity as the crops are now at critical stage for irrigation. Apply irrigation deepening upon the soil profile stored moisture in the above mentioned districts.
- Incidence of **tikka** disease in **groundnut** is reported in some places. Spray Mancozeb @ 2g/litre of water to control **tikka** disease in **groundnut**, if damage exceeds economic threshold level.
- Incidence of **spotted bollworm** is reported in **cotton**. For the control of **boll worms** spray the crops with 2 litre of Endosulfan or 1 litre of Monocrotophos per hectare at 10 days interval and stop two weeks before the first picking, if damage exceeds E.T.L.

Uttar Pradesh

Rain occurred at many places in **Gorakhpur, Varanasi Faizabad** divisions on 25th September and at a few places in **Allahabad** divisions on 25th September and in **Gorakhpur, Varanasi** divisions on 26th September. It was isolated in **Kanpur**, and **Lucknow** divisions on 25th September. Weather was mainly dry in remaining divisions of the State on 25th to 27th September.

Rain / thundershowers are likely to occur at isolated places over East U. P. and mainly dry over West U.P.

Advisories

- There was no significant rain in the State except in **Azamgarh, Ballia, Basti, Deoria, Farrukhabad, Gaziपुर, Gorakhpur, Sonbhadra, Varanasi** districts during last week. Rain / thundershowers are likely at isolated places over East UP and mainly dry weather will prevail over West UP for the next three days. Under the circumstance apply irrigation to **summer sugarcane, vegetables, kharif crops** and **mango** crops to bring the soil moisture to its field capacity. Apply irrigation in the above mentioned districts depending on soil profile stored moisture
- Continue weeding and hoeing, along with top dressing of nitrogen in **rice, maize, jowar, bajra, kharif pulses** and **vegetables** and **oilseeds**.
- Complete the sowing of **toria** using residual soil moisture.
- Monitor **sugarcane** for **borer** pests and to control **Agala borer** spray the solution of Endosulphon 35EC @ 1.25 litre / hectare in water if the population exceeds E.T.L.
- Monitor **pulse** crops for **leaf roller** attack. If the population crosses ETL, spray Endosulphan @ 1.5 litres/ha.
- Weather conditions are favourable for the attack of **anthracnose** disease in **mango**. Monitor mango trees and spray Copper oxy chloride @ 3 g/litre of water.

Himachal Pradesh

The monsoon has withdrawn from the State from 27th September. Rain occurred at isolated places during this week in the State.

Mainly dry weather is likely 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 **maize, moong, potato** and **early sown vegetable** crops to bring the soil moisture to field capacity.
- Conserve soil moisture wherever the crops are at maturity stage.
- Maintain 5 – 7 cm water in **rice** field where the crops are at grain formation stage.
- Continue land preparation and sowing of **Arcle peas** in the high hills, preparation of nursery of

cauliflower and cabbage in lower hills and transplanting of cauliflower and cabbage in mid hills.

- Weather is conducive for attack of Citrus leaf minor, if attack crosses economic threshold level, spray Nuvan @ 1ml per litres of water in a non rainy day and repeat spray if it persists.

Uttaranchal

Light to moderate rain was recorded at many places on 22nd September and at a few places on 21st September while the weather remained mainly dry during rest of the period. Sky remained mainly clear to generally cloudy.

Mainly dry weather is likely over the state.

Advisories

- There was no significant rainfall in the State during last week except in Champawat, Dehradun and Udam Singh Nagar districts. Mainly dry weather is likely to prevail over the state for next 3 days. Under the circumstances, apply irrigation to mango, apple, sugarcane and vegetable crops to bring the soil moisture to its field capacity. Apply irrigation depending upon the soil profile stored moisture in the above mentioned districts.
- Maintain 5 – 7 cm water in rice field.
- Carry out inter cultural operation, application of fertilizer and plant protection measures to mango, apple, sugarcane and rice crops.

Jammu & Kashmir

Weather remained mainly dry over J & K state.

Mainly dry weather is likely over the State.

Advisories

- Keep vigil against desert locust to prevent crop damage.
- Mainly dry weather prevailed over the State during last week and dry weather is likely to prevail in J & K State for the next three days. Under the circumstances, apply required irrigation to vegetables, pulses, rice and maize to bring the soil moisture to its field capacity.
- Monitor pulse crops for hairy caterpillar and jassid due to prevailing weather conditions. If it crosses economic threshold level, spray Malathion @ 0.05% to control the pest.
- Continue sowing of carrot, beet root and turnip for seed crop in Jammu division. Undertake transplanting of cabbage and knol-khol in Kashmir division.
- Continue sowing of toria crop in Jammu division and brown sarson in Kashmir division to utilize residual moisture. Before sowing, undertake ploughing followed by planking to conserve moisture.

Delhi

Light or moderate rain occurred on 22nd and 23rd at many places. Weather remained mainly dry on remaining days.

Mainly dry weather is likely over the State.

Advisories

- As there was deficient rainfall during last week and mainly dry weather is likely over the State for next three days, apply irrigation to early sown kharif vegetable crops, fodder crops, maize and bajra to bring the soil moisture to its field capacity.
- Maintain 5 – 7 cm water level in rice field.
- Prepare land and continue transplanting of 4 – 6 weeks old early varieties of cauliflower and cabbage

plants. Also undertake transplanting of **brinjal** and **chilly**.

- Also prepare nursery for **cabbage** varieties like Golden Aker, Pusa Ageti and mid time **cauliflower** varieties like Pusa Synthetic, Pusa Subhra and Pusa Himjyoti.
- Prepare land and perform sowing of Pusa Reshmi variety of **raddish**, Pusa Kesar variety of **carrot** and Pusa Kanchan variety of **turnip**.
- Prepare land and start sowing of **toria**. Select varieties from Type I, Sangam, T.L. – 15 and Ludhiana Composite etc.
- Monitor ergot disease of **bajra** and if noticed, remove the plants and burn them well outside the field.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Southwest monsoon was vigorous over the State on 25th September, active on 26th & weak on 27th September. Rain occurred at most places on 25th & 26th September and at isolated places on 27th September.

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

Advisories

- Rain occurred at most/many places over the State during last week and rainfall is likely to occur at isolated places in the State for the next three days. Under the circumstance, apply irrigation to plantation crops depending upon soil profile stored moisture.
- Continue intercultural operations and fertilizer application in **arecanut**, **coconut**, **pepper**, **rubber** and **banana**.
- Attack of **bunchy top** and **pseudostem weevil** is reported in **banana**. Eradicate the **bunchy top** affected plants. Spray Chlorpyrifos @ 2.5 ml/litre of water to control pseudo stem weevil.
- Attack of **rhinoceros beetle** and **red palm weevil** insects and **stem bleeding** disease is reported in **coconut**. Hook out the beetles from the affected palms and fill the leaf axils with Sevidol 8 G @ 25 gm and fine sand 200 gm. Use Pheromone trap for controlling red palm weevil. Cut stem bleeding affected region and paste with coal tar.

Tamilnadu

Rainfall occurred at many places on 25th September, at a few places on 26th September and at isolated places over the State on 27th September.

Rain / thundershowers are likely isolated over the State.

Advisories

- There was no significant rainfall in the state except in **Chennai**, **Kanyakumari**, **Sivagangai**, **Thiruvarur**, **Thiruvannamalai** and **Vellore** districts during last week and rain/ thundershowers is likely to occur at isolated places over the State for the next three days. Under the circumstances, apply required irrigation to **pulses**, **early/mid sugarcane** and **millets** to bring the soil moisture to its field capacity. Apply irrigation depending upon soil profile stored moisture in the above mentioned districts.
- Continue intercultural operations to keep the field weed free and application of fertilizers and pesticides to **early/mid sugarcane** and **kar rice**.
- Monitor **groundnut** for **red hairy caterpillar** and collect and destroy egg masses to prevent further spread of the pest.
- Complete harvesting **late season sugarcane**.

Karnataka

Monsoon was active on all the days over Coastal Karnataka. It was weak on 19th September over Interior Karnataka. Rainfall occurred at many places on 18th September, at a few places on 20th September & at

isolated places on 19th September over North Interior Karnataka. Over South Interior Karnataka, rainfall occurred at a few places on 18th & 20th September and at isolated places on 19th September.

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

Advisories

- There was no significant rainfall in the State except in **Uttar Kannada** in Coastal Karnataka, **Bidar** and **Koppal** in North Interior Karnataka and in **Kodagu** district in South Interior Karnataka during last week. Rain/thundershowers are likely at isolated places over Karnataka for the next three days. Under the circumstance, apply irrigation in **sugarcane, maize, jowar** and **groundnut** crops to bring the soil moisture to its field capacity. Apply irrigation to the crops depending upon soil profile stored moisture in the above mentioned districts.
- Weeding, application of fertilizers and pesticides and intercultural operations may be continued.
- **Wooly aphid** incidence in sugarcane is reported at **Mysore, Mandya, Hassan, Bidar & Bagalkote** districts. Release predators like *Dipha* sp to control the pest. Undertake inter-cropping with soyabean and pulses of short duration to reduce the incidence.

Andhra Pradesh

Nalagonda recorded very heavy rainfall of 13 cms on 25th September. Southwest monsoon has been active over coastal A.P. on 21st, and over Telagana on 21, 23 & 25th. Rain occurred at a few places over Telangana on 22,24,26 & 27th. Isolated rain occurred elsewhere over the state during the week.

Rain / thundershowers are likely to occur at a few places over north Coastal Andhra Pradesh and at isolated places over rest part of the State.

Advisories

- There was no significant rainfall in coastal AP and Rayalaseema except in **Chittoor** district and rain/thundershowers likely to occur at a few places over north coastal AP and at isolated places over south coastal AP and Rayalaseema. Under the circumstances, apply irrigation to **maize, groundnut, cotton, chilly** and **tur** to bring the soil moisture to its field capacity. Apply irrigation depending upon soil profile stored moisture in **Chittoor** district as there was excess rainfall during last week.
- There was excess/normal rainfall in all the districts in Telangana except in **Mehbubnagar** district and rain/thundershowers likely to occur at isolated places over Telangana for the next three days. Under the circumstances, apply irrigation depending upon soil profile stored moisture. Apply irrigation to bring the soil moisture to its field capacity in **Mehbubnagar** district.
- Continue intercultural operations, application of fertilizers and pesticides in the standing crops on a non rainy day in north coastal AP. Continue these operations in south coastal AP, Telangana and Rayalaseema.
- Attack of **sucking pests** is noticed in **cotton**. Monitor the crop continuously and if damage exceeds economic threshold level, spray Monocrotophos @ 1.6 ml/ litre of water on a non rainy day in north coastal AP. Continue spraying in south coastal AP, Telangana and Rayalaseema to control the pest.
- Attack of **blast** is reported in rice. Spray Tricyclozole @ 0.6 g/litre of water or Ediphenphos @ 1 ml/litre of water on a non rainy day in north coastal AP. Continue spraying in south coastal AP, Telangana and Rayalaseema to control the disease.

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

Assam

Light to moderate rain occurred at a few places on 25th September and at isolated places on 26th & 27th September with isolated heavy falls on 26th September over the State.

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

Advisories

- As there was no significant rainfall in the Cachar, Hailakandi, Darrang, Golghat, Karbi Analog, Jorhat, Kamrup, Nalbari, Karimganj, Lakhimpur, Sibsagar, and Sonitpur districts during last week and rain / thundershowers are likely at isolated places over the State for next three days, apply irrigation to bring the soil moisture to field capacity in the standing crops. Apply irrigation depending on soil profile stored moisture in the remaining districts as excess rain received in these districts.
- Maintain 3 – 5 cm water level in *Sali rice* field.
- Apply plant protection measures to *sali rice* when one adult of *rice hispa* per hill or one leaf is found damaged by *hispa*. Apply Monocrotophos 40 EC @ 1.5 ml per litre of water or Chloropyriphos 20 EC @ 2 ml per litre of water to control the insect. If attack of *Stem borer* is noticed apply Monocrotophos 40 EC @ 1.5 ml per litre of water.
- Land preparation and sowing of *early winter vegetables* may be continued.

West Bengal

The SW Monsoon was active over the districts of West Bengal. During the period heavy rain occurred at isolated places on 26th September over the districts of Sub Himalyan West Bengal, and apart from this rain occurred at many places on 25th September and at most places on 26th September. But during the said period heavy rain occurred at isolated places on 27th September, and apart from this rain occurred at many places on 25th September and at isolated places on 26th September over the districts of Gangetic West Bengal.

During the said period heavy rain at isolated places on 25th September occurred over the districts of the State.

Rain / thundershowers are likely at many places over Gangetic West Bengal and at isolated places over Sub Himalyan West Bengal. Increase in rainfall activity from 29th September.

Warning: Isolated heavy to very heavy rainfall is likely over Gangetic West Bengal.

Advisories

- As rain / thundershowers are likely at many places over Gangetic West Bengal and at isolated places over Sub Himalyan West Bengal, postpone irrigation to *sugarcane*, *green gram* and *groundnut*. Provide drainage for standing crops in Gangetic West Bengal. Apply irrigation depending on the soil profile stored moisture in Sub Himalyan West Bengal.
- Undertake intercultural operation in Sub-Himalyan West Bengal and after current spells of rain in Gangetic West Bengal to keep the field weed free.
- In *aman rice* apply 2nd top dressing of nitrogenous fertilizer @ 25 kg / ha for high yielding varieties and 20 kg / ha for medium duration varieties at 40 – 45 days after transplanting and 20 kg / ha for long duration varieties at 60 – 65 days after transplanting. Water may be drained out before the application of fertilizer and 3 – 5 cm water may be maintained in the field after 2 – 3 days. Application of fertilizers may be continued in Sub-Himalyan West Bengal and after current spells of rain in Gangetic West Bengal.
- Postpone intercultural operation and application of fertilizer and plant protection measures to the crops under prevailing weather condition in Gangetic West Bengal.

Bihar

Heavy to very heavy rain occurred at many places on 25th September. On rest days rain occurred almost all places.

Rain / thundershowers likely to occur at isolated places over the State. Increase in rainfall activity from 29th September.

Advisories

- There was excess rainfall in the State except *Begusarai* district during last week and rain / thundershowers are likely at isolated places for next three days. Under the circumstances, apply irrigation depending on the soil profile stored moisture to *vegetables*, *maize*, *pulses*, and *oilseed* crops. Apply irrigation to bring the soil moisture to field capacity in *Begusarai* district.
- Weeding and intercultural operations may done in rice and apply 25-30 kg/ha Nitrogen as top dressing.

Jharkhand

Weather remained mainly dry over the State.

Rain/thundershowers are likely at isolated places over the State. Increase in rainfall activity from 29th September.

Advisories

- There was excess rainfall during last week in the State and rain / thundershowers are likely at isolated places for next three days, apply required irrigation depending on the soil profile stored moisture to **vegetables, maize, and other** crops .
- Also, continue intercultural operation, application of fertilizer and plant protection measures.
- Continue weeding and top dressing in **rice**.
- Maintain 3-5cm of standing water in the field.
- Continue field preparation, sowing/transplanting of tomato, cabbage, cauliflower, brinjal, chilli, potato and pea.

Sikkim

Sky remained generally cloudy during the period. Moderate rain occurred at many places on 25th September. Very light to light rain occurred at a few places on the rest period over East Sikkim.

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

Advisories

- There was excess rainfall in the state during last week and rain / thunder showers are likely to occur at isolated places over the State for next three days. Under the circumstances, apply irrigation to **orange, large cardamom, ginger, kharif vegetables** and **rice** crops depending on the soil profile stored moisture.
- Continue intercultural operations, application of fertilizers and pesticides in **orange, vegetables** and **ginger**.
- Monitor **large cardamom** crop for **caterpillar infestation** as the weather conditions are favourable for the incidence. Collect and destroy manually to prevent further incidences. Also collect and destroy **chirkey** and **foorkey** affected plants.
- Maintain water level of 3-4 cm in **rice** field to enable maximum tillering.
- Monitor **orange** for **trunk borer** and plug the holes in case of damage. Also monitor **orange** for **fruit fly**. Keep bait made of 20 ml Malathion and 200 g molasses or gur in 2 litres of water to control **fruit fly** and prevent fruit drop.

Arunachal Pradesh

Sky remained mainly cloudy over the State during the week. Rain / thundershower occurred at most places on 22nd September, at many places on 24th September, at a few places on 23rd, 25th and 27th September and at one or two places on 21st and 26th September.

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

Advisories

- There was no significant rainfall in the State except in **Lohit** district during last week and rain / thundershowers are likely to occur at isolated places in the State for the next three days. Under these conditions, apply irrigation to new crop of **ginger** to bring the soil moisture to its field capacity. Apply irrigation depending on the soil profile stored moisture in **Lohit** district.
- Drain out the water 15 days before harvesting in **wet seeded rice** field and start harvesting of matured

crop.

- Field preparation for sowing of potato, wheat and mustard may be continued.

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

Gujarat

Rainfall occurred at few places over Saurashtra, Kutch, at isolated places over Gujarat region on 25th September. Rainfall occurred at isolated places over Gujarat region, Saurashtra, Kutch, Diu, Daman, Dadra Nagar Haveli on 26th September. Rainfall occurred at isolated places over Gujarat region, Saurashtra on 27th September.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rain in the State except Banaskantha, Amreli, Jamnagar, Kutch, and Rajkot districts during last week and mainly dry weather is likely over the state for next three days, apply irrigation to sugarcane, Kharif groundnut, Kharif bajra, Kharif maize, pre-monsoon irrigated cotton, Kharif cotton and castor to bring the soil moisture to field capacity. Apply irrigation depending on the soil profile stored moisture in the above mentioned districts.
- Maintain 3 – 5 cm water in rice fields.
- There is possibility of attack of stem borer in kharif rice. Monitor the crop for stem borer and if crosses economic threshold level, apply carbofuran 3 % @ 25 kg / ha or cartap hydrochloride 4% @ 20 kg / ha for the control of the insect. To control the sucking pest spray Monocrotophous 12 ml or DDVP 5 ml or trizophous 10 ml in 10 liter of water.
- If population of sucking pests like Aphid, Jassids, Thrips & Heliothis of cotton crosses economic threshold level, release chrysoperla eggs or first instar larvae @ 10000 / ha twice at the interval of 15 days.
- For monitoring & management the boll worms & heliothis of cotton hang 5 pheromance traps in one ha. Change the lures at an interval of 15 days. Destroy trapped moths every day. If boll worm population crosses economic threshold level, release parasite tricogamma @ 1.5 lakhs / ha 5 to 6 times as per requirement depending upon infestation found in field.
- If white fly population crosses economic threshold level in cotton, spray Neem oil @ 4 liter / ha. For control of top shoot borer of cotton spray endosulphan 35 EC @ 2 liter / ha if population crosses economic threshold level.
- Continue intercultural operation and application of fertilizer and plant protection measures to the crops under prevailing weather condition.

Chhattisgarh

Rain occurred at isolated places on 25th to 27th September in Bilaspur division and on 25th September in Bastar division. Weather was mainly dry from 25th to 27th September in Raipur division and on 26th and 27th September in Bastar division.

Isolated rain / thundershowers are likely over the State. Increase in rainfall activity over the State from tomorrow evening.

Advisories

- As there was no significant rainfall in except Sarguja district during last week and rain / thundershowers are likely to occur at isolated places over the State for next three days, apply irrigation to bring the soil to field capacity to Sugarcane, green gram, black gram, red gram, soybean, groundnut and vegetables. Apply irrigation depending on soil profile stored moisture in Sarguja district.
- Drain out water from the rice field and apply second split dose of N @ 25 – 30 kg / ha at 45 – 50 days after transplanting as top dressing. Maintain 3 – 5 cm water in the field after 2 – 3 days of fertilizer

application.

- Continue preparation of nursery for vegetables like **tomato, chilly, brinjal** etc. on the bed of 6-8 inch height.
- Continue sowing of **Niger seed** and **Kulthi** in Bastar division. For **Kulthi** prefer variety like A.K. 21, Marukulthi, B.K. 1 and for **Niger seed** I.G.P. 76, G.A.10, J.N.C. 6, B.N. 1.
- There is possibility of attack of **stem borer** and **gall midge** in **rice**. Monitor the crops and if crosses economic threshold level, thimet 10 G @ 10 kg / ha or carbofuran 3 G @ 25 kg / ha may be applied.
- There is possibility of attack of **leaf eating** or **leaf curl insects** in **pulses**. Monitor the crops and if crosses economic threshold level, Endosulphon 35 EC @ 1000 ml or quinalphos or methyl demeton 25 EC @ 800 ml / ha may be applied.

Maharashtra

Rainfall occurred at isolated places over Konkan, Madhya Maharashtra, Vidarbha and Marathwada.

Isolated rain / thundershowers are likely over Konkan, Goa & Vidarbha. Mainly dry weather over Madhya Maharashtra & Marathwada. Increase in rainfall activity over Vidarbha from evening of 29th September.

Advisories

- There was no significant rainfall in the State except **Goa, Ratnagiri, Sindhudurg, Ahmednagar, Dhule, Jalgaon, Kolhapur, Nasik, Jalgaon** and **Aurangabad** districts during last week and rain / thundershowers are likely at isolated places over Konkan & Goa and Vidarbha and mainly dry weather is likely to prevail over Madhya Maharashtra, and Marathwada. Under these conditions, apply irrigation to **Sugarcane, Jowar, Kharif groundnut, bajra, soybean, sunflower, kharif cotton, tur, moong** and **Cotton (irrigated)** crops. Apply irrigation depending on the soil profile stored moisture in the above mentioned districts as excess / normal rainfall is received during last week in these districts.
- Mild incidence of **White Woolly Aphids** in **Aurangabad, Latur, Kohlapur** and **Pune** and **Pyrilla, White fly** and **Mealy bug** in **Nashik** in sugarcane, **Stem borer** in **Raigad**, **Army worm, Leaf roller, Blue beetle** and **Hispa** in **Konkan** and **Goa, Raigad** and **Sindhudurga** and **Aphids** and **Army worm** in **Sangli** district & **Blight** and **blast** in **Nagpur** division in **Kharif** rice, **Stem borer, aphids** and **jassids** in **Satara** and **Sangli** dist. & **shoot fly** in **Amraoti** div. in **jowar, Leaf eating cater pillar, Rust, Leaf roller** in **Kolhapur** in **Groundnut, Leaf eating cater pillar** in **Kolhapur, Latur** and **Amraoti** div. and **Wardha** dist and **White fly, Jassids & Thrips** in **Nashik** division in **soybean, Leaf cater pillar** and **sap sucking isects** in **Latur** division in **sunflower, Aphids & Jassids** in **Aurangabad & Chandrapur** and **Vidarbha** div. and **Root rot** in **Nashik** in irrigated **cotton** and **Aphids** and **Jassids** in **Aurangabad** and **Vidarbha** division in **kharif** cotton, **leaf roller** in **Amravati** division in **tur** and **White fly, Jassids & Thrips** in **Nashik & Sap sucking insects, Leaf cater pillar** in **Latur** division in **moong** is reported.
- For the control of **White Woolly Aphids** in **sugarcane**, release 2500 eggs or larvae of **Krisoperla Karnea** or **Konobatra Aphidivora** parasite on the leaves or spray Endosulphan 1 ml plus Metasistox 1 ml mixed in 1 liter water.
- Monitor the **stem borer** population in **rice** and if crosses economic threshold level, use phorate 10G @ 10 kg or Quinalphos 5G @ 15 kg / ha.
- Monitor the **army worm** population in **rice** and if crosses economic threshold level, spray 25 % Cypermethrin @ 120 ml or 36 % Monocrotophos @ 700 ml / ha in 500 liter water.
- Monitor the **blast disease** in **rice** and if crosses economic threshold level, Blitox 50 (Copper oxychloride) @ 2.25 kg or Bavistin 50 WP @ 750 g or Hinosan @ 750 ml in 750 litre water / ha may be applied.
- Monitor the **stem borer, aphids** and **jassids** population in **jowar** and if crosses economic threshold level, spray 5 % Neem seed extract or 35 % endosulphon @ 14 ml or 30 % dimethoate @ 10 ml plus 10 ml sticker in 10 liter water. Monitor the **leaf roller** population in **groundnut** and if crosses economic threshold level, spray 36% WSC monocrotophos @ 700 ml or 25% WSC quinolphos @ 1000 ml / ha in 500 liter water.

- Monitor infestation of **rust** in **groundnut** & if exceeds economic threshold level, spray 75 WP Mancozeb 1 kg/ha. in 500 liter water in late sown crop at pod formation stage..

Madhya Pradesh

Rainfall occurred at isolated places in West M.P. from 25th to 27th September and in South East M. P. on 26th September. Mainly dry / dry weather prevailed over the state for remaining period.

Isolated rain / thundershowers are likely over East Madhya Pradesh and mainly dry weather is likely over West Madhya Pradesh.

Advisories

- There was no significant rainfall except **Badwani, Bhopal, Dewas, Dhar, Hosangabad, Jhabua, Mandsaur, Neemuch, Raisen,** and **Vidisha** districts and isolated rain / thundershowers are likely over East Madhya Pradesh and mainly dry weather is likely over West Madhya Pradesh. Under the circumstance, apply irrigation to **sugarcane, moong, kharif soybean, jowar, urad, tur, cotton and maize** crops to bring the soil moisture to field capacity. Apply irrigation depending on the soil profile stored moisture in the above mentioned districts. Maintain 3-5 cm water level in **Kharif rice** field.
- Conserve moisture wherever the **kharif** crops are at maturity stage.

Orissa

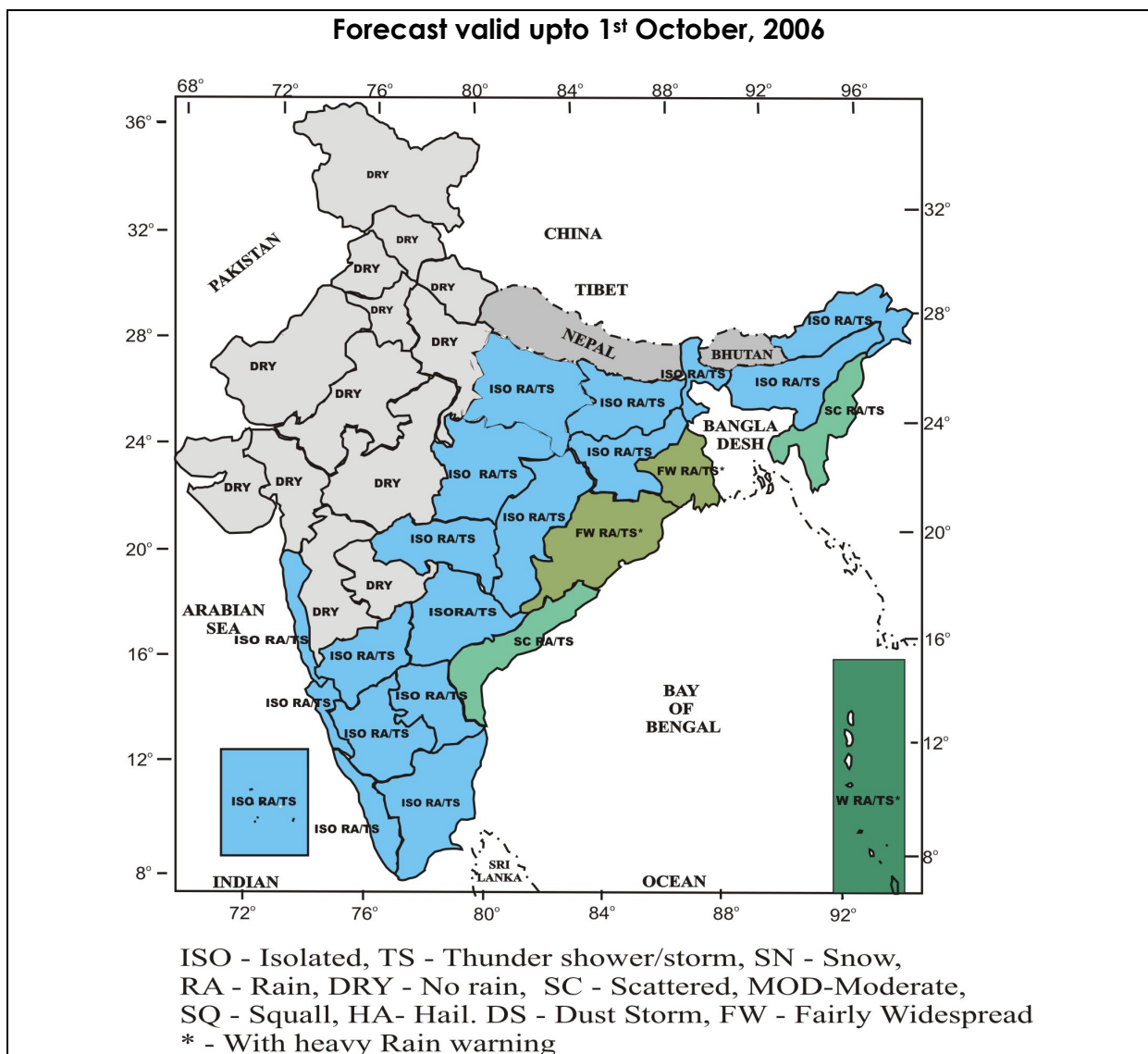
Rainfall occurred at isolated places over the State during the above period. Heavy falls occurred at isolated places over North Coastal Orissa on 25th and 26th September.

Rain / thundershowers are likely to occur at many places over the state. Increase in rainfall activity over the state from 29th September.

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

Advisories

- Rain / thunder showers are likely to occur at many places over the State, associated with isolated heavy to very heavy falls over the region for next 3 days. Under the circumstances, postpone irrigation, fertilizer application and plant protection measures to **vegetables, sugarcane, ground nut, pulses and jute** crops.
- Drain out excess water from the field.
- Maintain 3 – 5 cm water in the rice field wherever crops are at tillering stage.
- At five months stage of sugarcane crop perform propping by combining plants of two rows so that the crops do not lodge by wind.



Salient weather features for the week ending 27/09/06

WITHDRAWAL OF SOUTHWEST MONSOON

The southwest monsoon withdrew from some parts of Punjab and West Rajasthan on 21st, from some parts of Jammu division of Jammu & Kashmir, remaining parts Punjab, some more parts of West Rajasthan, most parts of Haryana (including Delhi & Chandigarh) and some parts of East Rajasthan on 25th and from remaining parts of Jammu & Kashmir, Haryana, Himachal Pradesh, Uttaranchal, some parts of West Uttar Pradesh, most parts of West Rajasthan and some more parts of East Rajasthan on 27th. Withdrawal line passed through Pilibhit, Bareilly, Dholpur, Sawai-Madhopur and Barmer as on 27th.

METEOROLOGICAL ANALYSIS

- Last week's well marked low pressure area over Gangetic West Bengal and adjoining Orissa and Jharkhand intensified into a depression and lay centred at 0830 hours IST of 21st over Jharkhand close to Jamshedpur. Moving northwestwards, the depression lay centred at about 50 km east of Ranchi at 0830 hours IST of 22nd. Moving then slowly northwards, it lay centred at 0830 hours IST of 23rd close to Dhanbad. Moving further slightly northwards, it weakened into a well marked low pressure area over Bihar and adjoining areas on 24th morning. It lay as a low pressure area over the same region on 25th morning, over Jharkhand and adjoining north Orissa and Gangetic West Bengal on 26th morning and became less marked in the same evening.
- Last week's low pressure area over east central Arabian Sea concentrated into a depression and lay centred at 0830 hours IST of 21st about 450 km southwest of Porbandar. Remaining practically

stationary, it intensified into a deep depression around noon of that day. Moving slightly northwards, it further intensified into a cyclonic storm (Mukda) and lay centred at 0830 hours IST of 22nd about 400 km southwest of Porbandar. It then moved in a northeasterly direction, further intensified into a severe cyclonic storm and lay centred at 0830 hours IST of 23rd over northeast & adjoining east-central Arabian Sea about 280 km southwest of Porbandar. Remaining practically stationary, it weakened into a cyclonic storm around midnight of 23rd and further weakened into a deep depression at 0830 hours IST of 24th. It weakened into a well marked low pressure area around 24th mid-night and lay as a low pressure area over northeast and adjoining east-central Arabian Sea thereafter.

- An off shore trough on sea level ran from south Gujarat coast to Kerala coast throughout the week except last day.
- A fresh low pressure area formed over east-central and adjoining northeast Bay of Bengal on 27th.

RAINFALL

Under the influence of the above systems:

- The monsoon was active/vigorous with isolated heavy to very heavy falls over Orissa and Chhattisgarh on first two days, over Gangetic West Bengal during 21-24th, over Sub-Himalayan West Bengal & Sikkim and Jharkhand during 21-25th and over Bihar during 22-26th. Fairly widespread rainfall with isolated heavy falls also occurred over Gangetic West Bengal and Sub-Himalayan West Bengal & Sikkim on 25th & 26th respectively.
- The monsoon was active/vigorous with isolated heavy to very heavy falls over Nagaland, Manipur, Mizoram & Tripura during 22-23rd and over Assam & Meghalaya on 22nd. Fairly widespread rainfall with isolated heavy falls also occurred over Assam & Meghalaya on 23rd and Nagaland, Manipur, Mizoram & Tripura on 25th.
- The monsoon was active on a few days over Kerala and on one day each over Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Telangana and Tamil Nadu during the week. However, fairly widespread rainfall with isolated heavy falls occurred over Coastal Karnataka, Kerala, Lakshadweep and Andaman & Nicobar Islands during most days of the week and over Konkan & Goa during first half of the week.
- Isolated heavy rainfall occurred over Saurashtra & Kutch on a few days of the week.
- The rainfall activity was subdued over remaining parts of the country where mainly scattered/isolated rainfall occurred during of the week.

RAINFALL DURING THE WEEK ENDING ON 27TH SEPTEMBER, 2006

Rainfall was excess/normal in 18 and deficient/scanty in 18 out of 36 meteorological subdivisions (Actual: 40.6 mm, Normal: 36.4 mm and Departure: +12%).

CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 27TH SEPTEMBER, 2006)

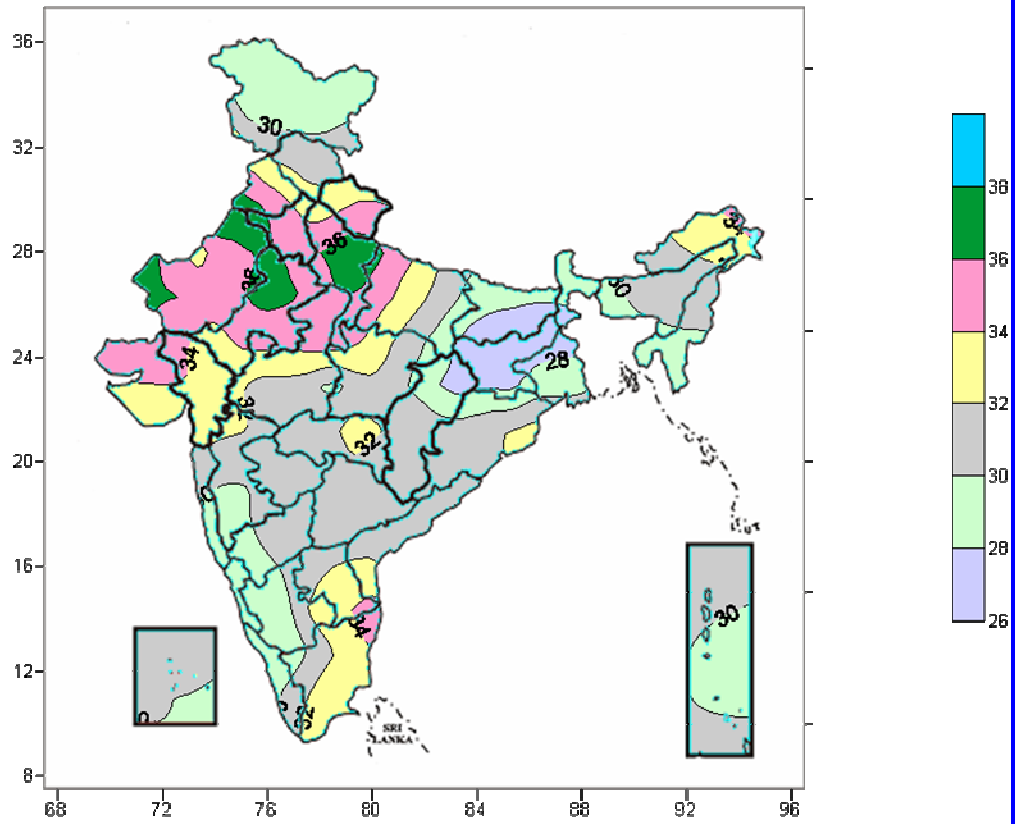
Rainfall was excess/normal in 26 and deficient in 10 out of 36 meteorological subdivisions. (Actual: 878.6 mm, Normal: 879.8 mm and Departure: 0%).

OUTLOOK FOR THE WEEK ENDING ON 4TH OCTOBER, 2006.

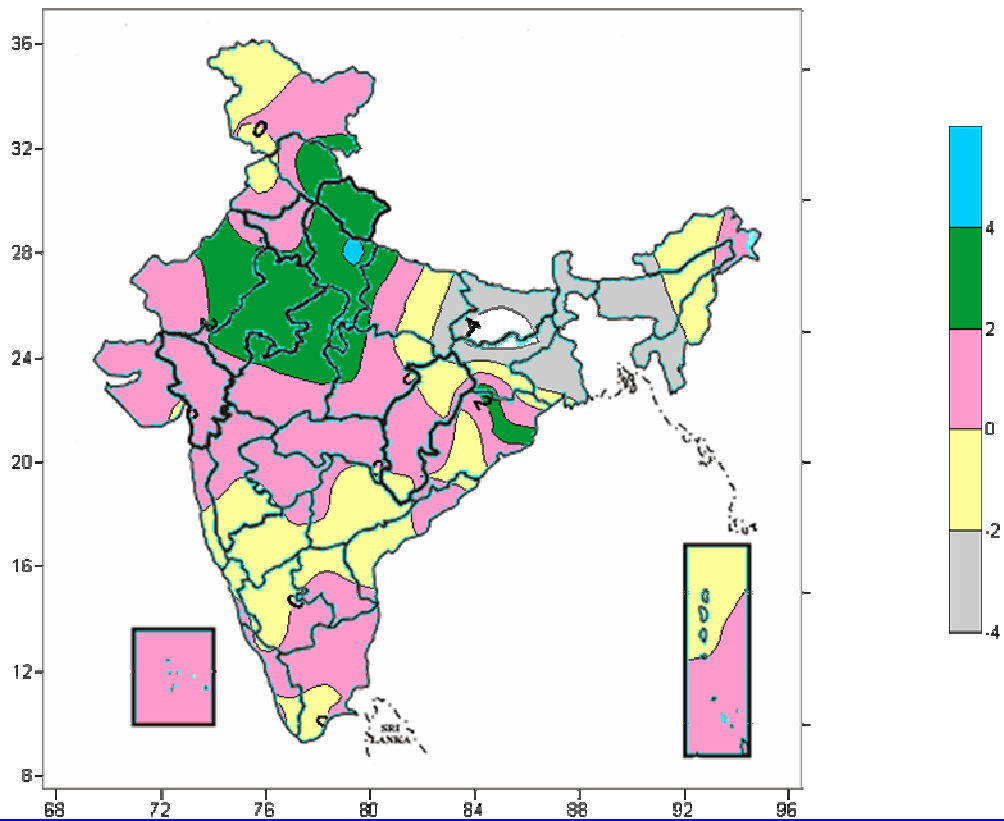
Conditions are favourable for further withdrawal of monsoon from some more parts of northwest India and parts of central India.

The low pressure area over east-central and adjoining northeast Bay of Bengal has concentrated into a depression and lay centered about 380 km southeast of Paradip at 1430 hours IST of 28th. The system is likely to move in a west-northwesterly direction and cross Orissa coast between Gopalpur and Paradip by tomorrow evening. Under its influence, increase in rainfall activity is likely over east & adjoining central India and north peninsular India during first half of the week and decrease thereafter.

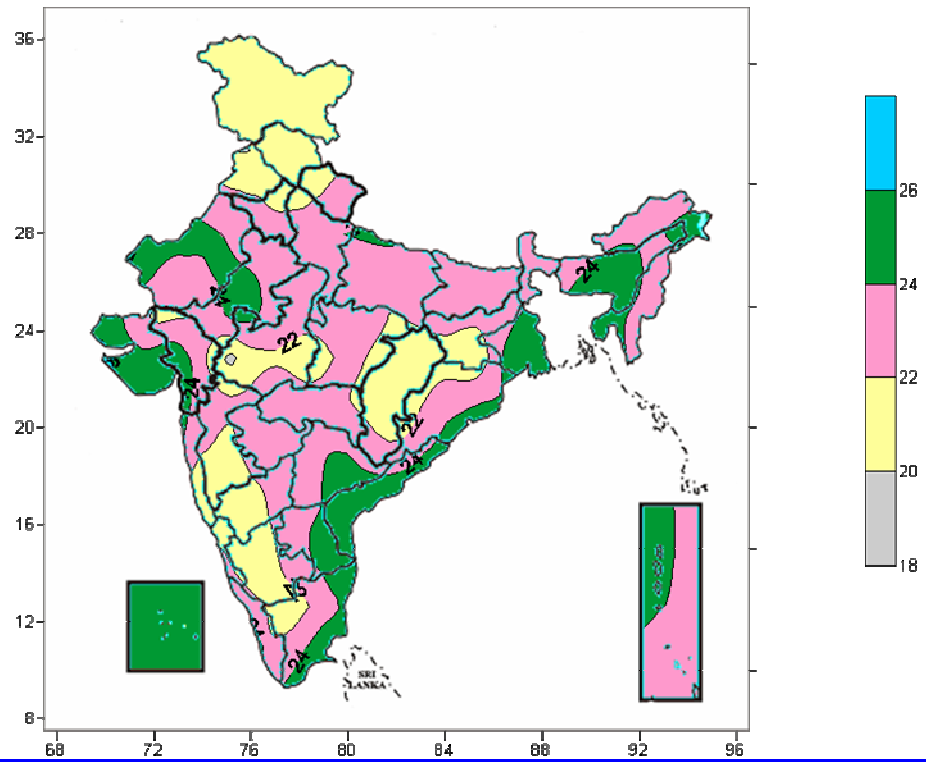
Actual mean maximum Temperature ($^{\circ}\text{C}$) in India for the week ending 27.09.06



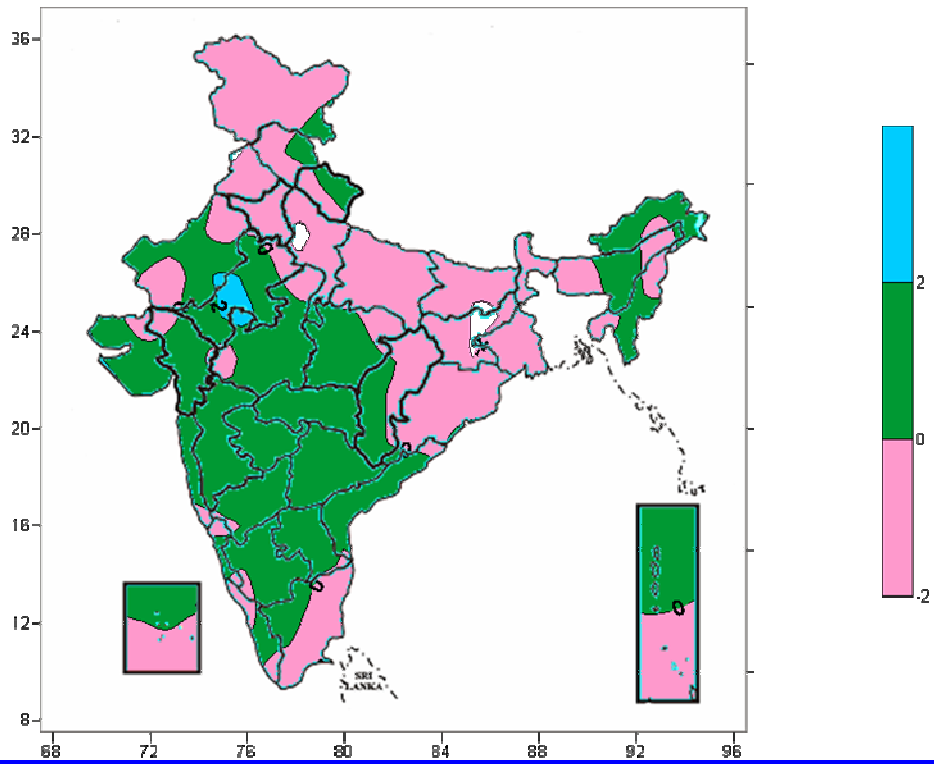
Maximum Temperature ($^{\circ}\text{C}$) Anomaly In India for the week ending 27.09.06



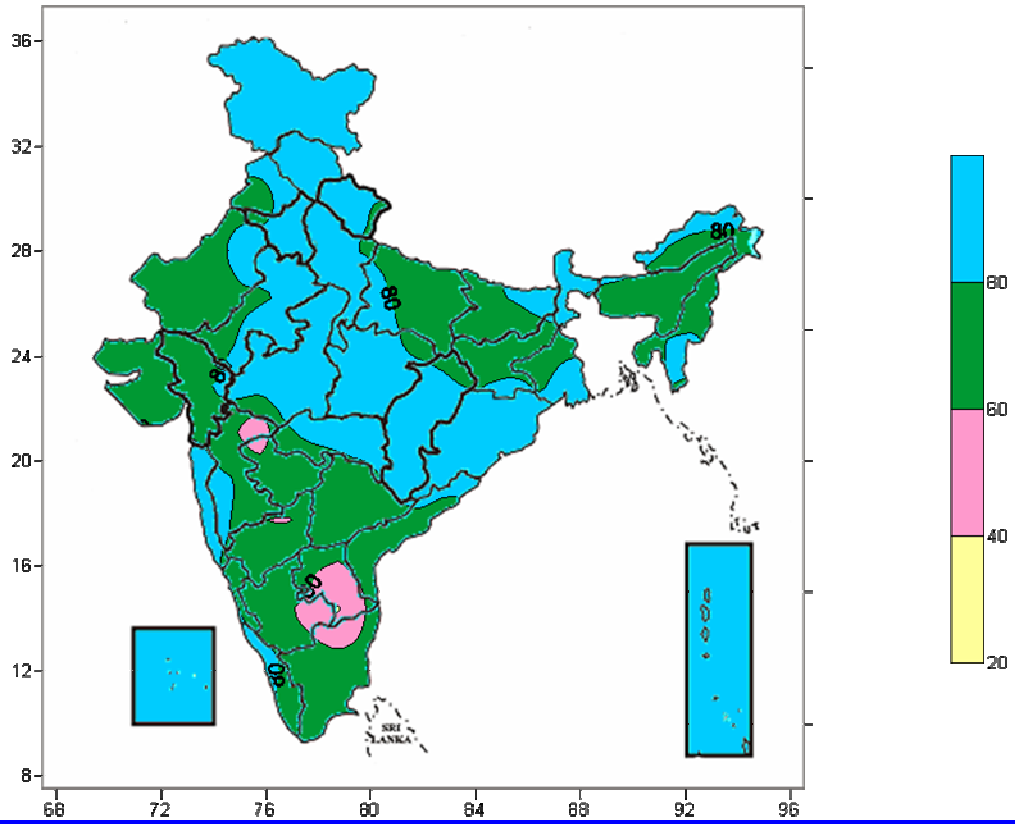
Actual mean Minimum Temperature ($^{\circ}\text{C}$) In India for the week ending 27.09.06



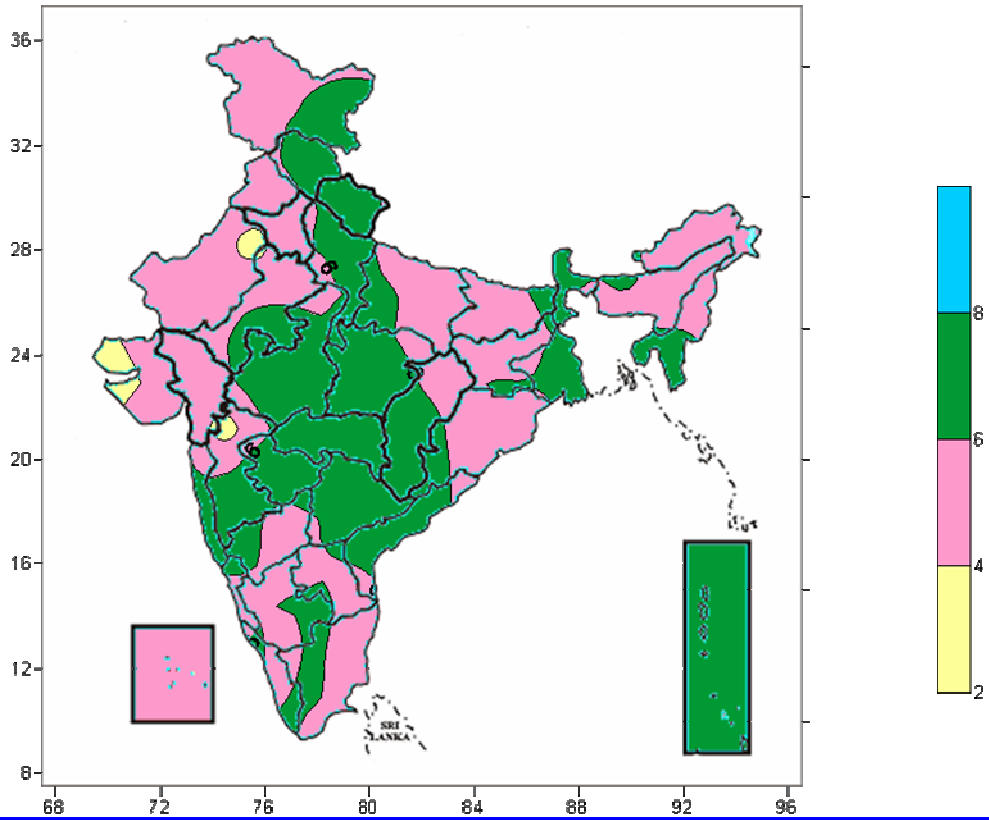
Minimum Temperature ($^{\circ}\text{C}$) Anomaly In India for the week ending 27.09.06



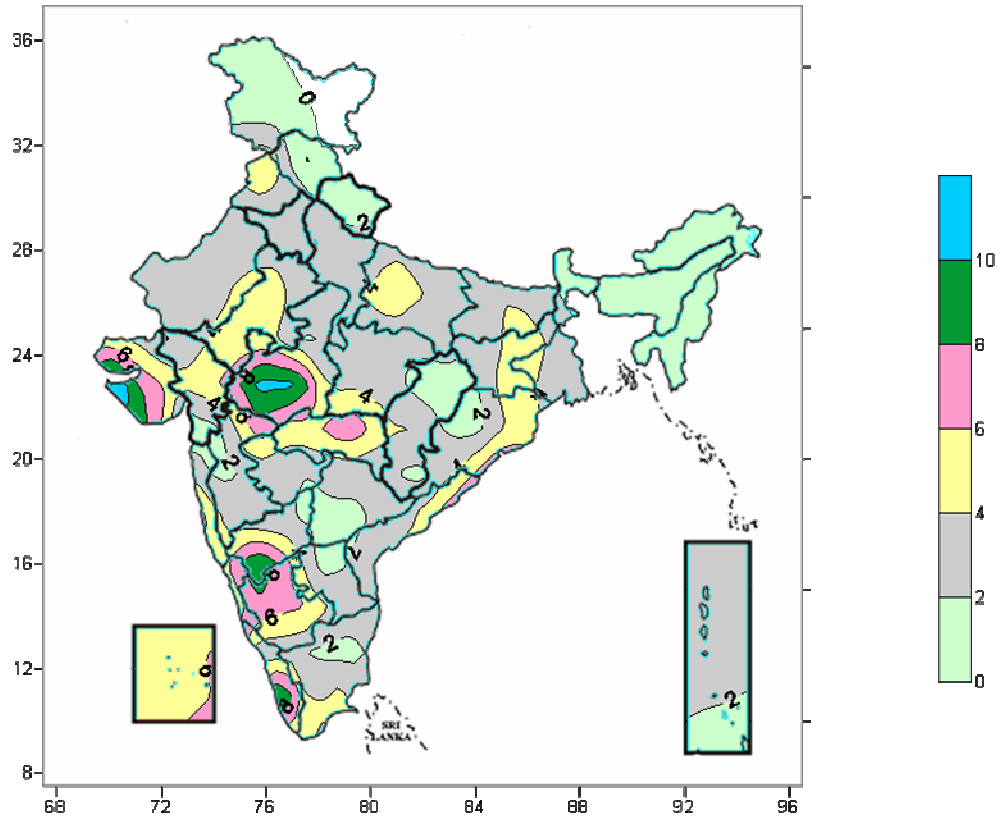
Relative humidity (%) over India for the week ending 27.09.06



Cloud amount (okta) over India for the week ending 27.09.06



Wind speed (knots) over India for the week ending 27.09.06



Desert Locust Forecasting



Rainfall (mm)							
Station Name	21.9.06	22.9.06	23.9.06	24.9.06	25.9.06	26.9.06	27.9.06
Amritsar	-	-	-	-	-	-	-
Barmer	-	-	-	-	-	-	11.1
Sriganganagar	-	-	-	-	-	-	-
Jaisalmer	-	-	-	-	-	1.6	-
Kota	-	-	-	-	-	-	-
Deesa	-	-	-	-	-	-	-
Churu	-	-	7.1	-	-	-	-

Temperature (degree celcius)							
Station Name	21.9.06	22.9.06	23.9.06	24.9.06	25.9.06	26.9.06	27.9.06
Amritsar							
Barmer							
Sriganganagar				Data			

Jaisalmer					Not			
Kota					Available			
Deesa								
Churu								

Wind														
Station Name	21.9.06		22.9.06		23.9.06		24.9.06		25.9.06		26.9.06		27.9.06	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	-	-	02	SE	05	WNW	15	NNW	-	-	04	S	-	-
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganga nagar	05	N	02	W	05	ENE	10	NNW	-	-	04	W	-	-
Jaisalmer	06	NNW	10	W	10	SW	05	SW	-	-	-	-	-	-
Kota	16	NW	05	NNW	15	NNW	10	NNW	-	-	15	NNW	-	-
Deesa	10	NNE	06	NNE	-	-	05	SE	06	S	03	S	-	-
Churu	06	N	09	WNW	05	NNW	10	NW	-	-	12	WNW	-	-

Heavy rains and flooding occurred last month along the **Indo-Pakistan** border (Rajasthan, **India** and Tharparkar, **Pakistan**) that will allow breeding conditions to remain favourable for several months. Solitarious populations are only present in Rajasthan and Tharparkar at the moment. Present weather conditions are conducive for development of locust in North & Northwestern belt of the country. Farmers are advised to monitor locust population and carry out anti locust operations, if the population of the pest crosses Economic Threshold Level (ETL).

CROP – STATE – STAGE

Delhi				
Toria	Vegetables (Brinjal, Chilly, Cauliflower and cabbage, raddish, carrot, and turnip)	Arhar	Rice	Green gram, black gram
Sowing	Nursery sowing/ Transplanting	Maturity	Grain formation	Maturity/harvesting
Bajra	Fodder (Mixed maize , Lobia)	Maize	Early sown vegetable crops	
Grain formation	Vegetative	Cob formation	Vegetative/ flowering/ fruiting/ harvesting	

Haryana				
Horticultural crop	Sugarcane	Paddy	Maize	Cotton
Fruiting	Vegetative	Grain development	Cob development	Boll development
Bajra	Groundnut	Kharif pulses		
Ear head maturity	Pod development	Pod formation/maturity		

Himachal Pradesh				
Rice	Maize	Apple	Summer vegetables (Tomato, brinjal, ladies finger)	Fodder crops
Grain formation/maturity	cob maturity/harvesting	Harvesting	Vegetative/flowering / fruiting / harvesting	Vegetative
Moong / Mash	Fruit plants	Potato	Summer vegetables Cauliflower, Cabbage	Aricle peas
Harvesting	New growth	Tuber formation/ maturity	Preparation of nursery (Lower hills)	Sowing (High hills)

			Transplanting (Mid hills)	
Jammu & Kashmir				
Vegetables crops	Rice	Maize	Kharif crops	Horticultural crops
Flowering/ fruiting	Grain formation	Grain development	Flowering/grain formation	Planting
Fodder crops (Maize, Bajra, MP Chari)	Flower crops	Toria	Brown Sarson	
Vegetative/cutting	Seed bed preparation for sowing	Sowing	Sowing	
Punjab				
Sugarcane	Paddy	Maize	Cotton	Kharif pulses
Vegetative	Grain development	Cob development	Boll development	Pod maturity
Groundnut				
Pod development				
Rajasthan				
Cotton	Groundnut	Bajra	Pulses	Soyabean
Boll formation	Pod formation	Ear head maturity	Pod maturity	Pod formation
Maize				
Cob maturity				
Uttar Pradesh				
	Kharif Pulses (Urad & Moong)	Sugarcane	Kharif Vegetables (Early sown)	
	Flowering	Vegetative	Fruiting/harvesting	
Mango	Kharif Maize, Jowar, Bajra	Kharif rice	Toria	Kharif Oilseeds
Harvesting	Grain formation/grain development	Panicle initiation/flowering	Sowing	Flowering
New Mango	Toria			
Active growth	Sowing			
Uttaranchal				
Rice	Mango/Litchi	Apple	Sugarcane	
Flowering/milking	Seedling	Maturity	Tillering/ grand growth	
	Millets (Ragi)	Pea & Potato		
	Flowering/grain formation	Field preparation/sowing		
Assam				
Maize	Sugarcane		Vegetables	Balck gram and Green gram
Harvesting	Cane maturity/harvesting		Land preparation	Vegetative
Sali rice	Arhar		Early winter vegetables	
Vegetative/tillering	Vegetative		sowing	
Arunachal Pradesh				
Wet seeded rice	Ginger	Potato	Wheat and Mustard	
Maturity/harvesting	Vegetative	Land preparation	Land preparation	
Bihar				
Fruits and Vegetables	Rice	Maize	Pulses and Oil seeds	
Vegetative	Panicle initiation/flowering	Flowering/cob formation	Seed formation/Maturity	
Jharkhand				
Rice	Upland crops (groundnut, urad)	Finger millet	Maize	
Vegetative	Vegetative/flowering	Vegetative/flowering	Cob formation	
Kharif vegetables (Tomato, Cabbage, Cauliflower, Brinjal, Chilli)	Early planted kharif vegetables	Timely sown Arhar	Pea & Tomato	
Transplanting	Early vegetative / vegetative	Maturity/harvesting	Sowing	
Sikkim				

Orange	Rice	Large Cardamom	Kharif vegetables	Ginger
Fruiting/harvesting	Flowering/grain formation	Maturity	End harvesting	Rhizome formation/maturity
Rabi vegetables				
Transplanting				

West Bengal

Aus rice	Sugarcane	Jute	Green Gram	Aman rice
Grain maturity	Vegetative	Harvesting	Pod formation/ early maturity	Tillering/Panicle initiation/ Flowering
Groundnut				
pegging/ pod formation				

Chattisgarh

Chilly, Brinjal, Ladies finger, Beans, Bottle gourd	Niger, Kulthi	Sugarcane	Kharif rice	Soybean
Vegetative / flowering / fruiting / harvesting	sowing	Vegetative	panicle initiation / flowering	Vegetative / flowering
Blackgram / Greengram	Groundnut	Red Gram	Tomato, chilli, brinjal	
Vegetative/flowering /pod formation	Vegetative / flowering/ pegging	Vegetative / flowering / pod formation	Vegetative/flowering /fruiting/harvesting	

Gujarat

Kharif Maize	Pre-monsoon irrigated Cotton	Kharif groundnut	Early Sown Rice	Sugarcane
Cob formation / cob maturity	Boll formation / maturity	Pod formation	Early tillering/tillering	Cane development
Kharif Cotton	Castor	Kharif bajra	Kharif Rice	
Vegetative/ square / boll formation	Vegetative	Grin formation / maturity	Active tillering/panicle initiation	

Maharashtra

Kharif Groundnut (Madhya Maharashtra, Marathwada & Vidarbha)	Tur (Madhya Maharashtra, Marathwada & Vidarbha)	Irrigated Cotton	Sugarcane (Seasonal)	Bajra (Madhya Maharashtra, Marthwada and Vidarbha)
pegging/ pod formation/ harvesting	Branching	Active vegetative/ flowering/ boll formation	Active vegetative / elongation	grain maturity/ harvesting
Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif sunflower (Madhya Maharashtra, Marathwada & Vidarbha)	Soyabean (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif rice (Konkan)	Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Flag leaf initiation / flowering	Head formation / maturity	pod maturity / harvesting	Flag leaf / panicle initiation / flowering (late varieties) Flowering / grain formation (medium varieties) Grain formation / grain maturity (early maturing)	Active tillering (in Vidarbha) Panicle initiation / flowering (in Madhya Maharashtra, Marathwada)
Moong (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif cotton (Madhya Maharashtra, Marathwada & Vidarbha)			
pod formation / early maturity	Active vegetative			

Madhya Pradesh

Sugarcane	Moong	Kharif crops (Jowar, urad, tur)	Kharif Soyabean	Kharif rice
Vegetative	Pod maturity /	pod formation/ grain	pod maturity	Flowring / grain

	harvesting	formation /maturity		formation
Maize	Cotton			
Cob formation / maturity	Boll formation			

Orissa

Vegetables	Earlier sown vegetables	Early sown Groundnut	Groundnut	Sugarcane
Sowing / transplanting	Flowering / fruiting / harvesting	Early vegetative / vegetative/ pod development	Sowing	Vegetative / tillering
Kharif rice	Early transplanted rice	Pulses	Early sown Pulses	jute
Transplanting	Early tillering / tillering / panicle initiation	Sowing	Vegetative / flowering / pod maturity	harvesting

Andhra Pradesh

Kharif rice	Kharif crops(Chillies/ Groundnut/ Chillies/ Tur)	Maize / Cotton		
tillering	Vegetative	Late vegetative		

Karnataka

Groundnut	Sugarcane (Ratoon crop & new crop)	Kharif crops (jowar, maize)	Kharif rice	Early sown rice
Grain formation/maturity	Tillering			Transplanting
Kharif cotton				
Flowering/boll formation				

Kerala

Rubber	Virippu Rice	Pepper		
Tapping	Maturity/harvesting	Berry development /maturity		

Tamil Nadu

Pulses	Millets	Summer irrigated cotton	Early & mid sugarcane	Late season sugarcane
Pod formation	Grain formation	Maturity / harvesting	Grand growth	Harvesting
Rice (Kuruvai)	Groundnut			
vegetative	Pod formation			